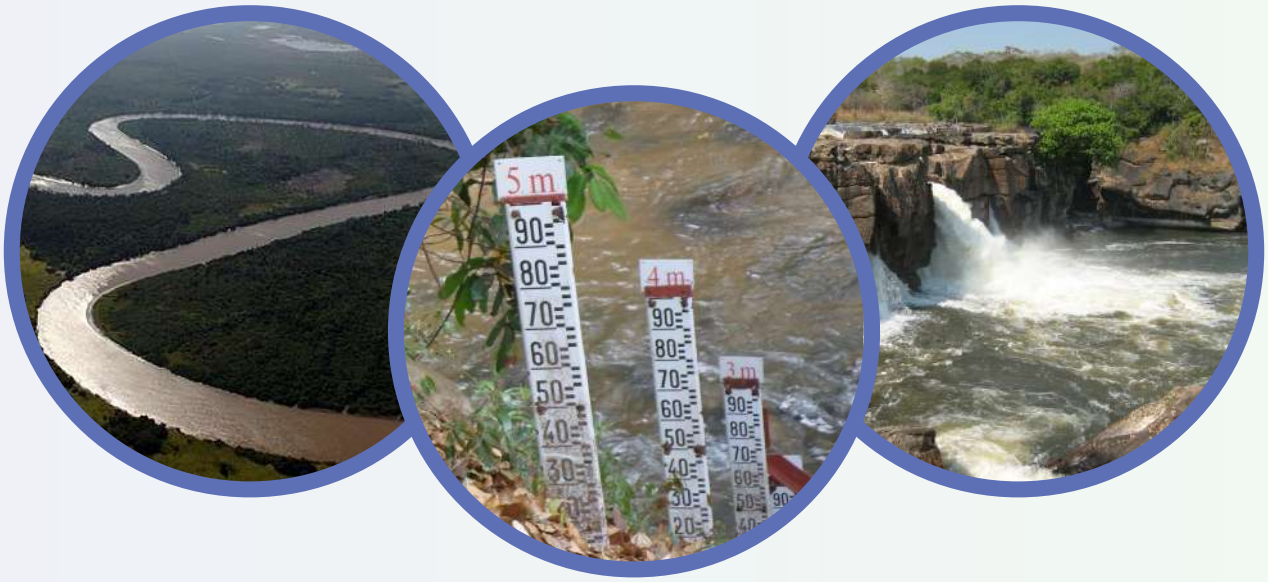
UNITED REPUBLIC OF TANZANIA

MINISTRY OF WATER



HYDROLOGICAL YEAR BOOK 2010 - 2019

RIVER FLOWS DATA

VOLUME I

MARCH, 2020

DODOMA

UNITED REPUBLIC OF TANZANIA



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ABBREVIATIONS

Lat	Latitude
Long	Longitude
A.D.Z.G.R.L	Auxiliary Datum Zero Gauge Reduced Level
B.M.M.S.L	Datum Bench Mark Above Mean Sea Level
M.A.M.S.L	Metres Above Mean Sea Level
M.S.L.Z.G.R.L	Mean Sea Level Zero Gauge Reduced Level
T.B.M	Temporary Bench Mark
B.M	Bench Mark
Sq km	Square Kilometre

PREFACE

1. GENERAL

The first Hydrological Year Book was published in 1963 covering the water years from November, 1950 - October, 1959. The second Hydrological Year Book was published in 1967 covering water years November, 1959 – October, 1965. The third Hydrological Year Book was published in 1976 covering water years January, 1965 – December, 1970. The fourth Hydrological Year Book covers the water years January, 1971 – December, 1980. This Book covers the calendar years January, 2010 – December, 2019.

The data published in this year book is in its most useful form and covers the Pangani, Wami/Ruvu, Rufiji, Ruvuma and Southern Coast Region, Lake Nyasa, Internal Drainage, Lake Rukwa, Lake Tanganyika and Lake Victoria basins.

2. NATIONAL NETWORK

The hydrological network designed to serve the whole country has not yet been fully implemented due to staff capacity and financial limitations. The Ministry of Water is addressing the capacity gap by deploying more staff to the Basin Water Boards, training of the same and optimizing their potential. The Ministry is also addressing the financial limitations through provision of more funds and supporting the Basin Water Boards to collect more revenues. On the other hand, the hydrological network in the country is being modernized by prioritizing key stations.

3. USE OF SOFTWARE

The volume of data included in the present publication has justified the use of software, namely HYDATA, AQUARIUS and Excel, for data processing in order to ensure good degree of accuracy.

4. UNITS

All units used in this Hydrological Year Book are in metric. The values of mean daily flows are in cubic meters per second and volumes are in million cubic meters.

5. DEFINITION OF TERMS

5.1 Cubic Meter per second (m3/sec)

Is the rate of discharge of a body of water whose cross-sectional area is one square meter and whose velocity is one meter per second.

5.2 Cubic meter per day (Cu.m-day)

Is the volume of water presented by a flow of one cubic meter per second maintained for 24 hours. It is equal to 86,400 cubic meters. The volume given in the book is in millions.

5.3 Rating curve

The relation of stage to discharge at a stream gauging station of which is determined by the condition of station control.

5.4 Station Control

Is the condition of downstream area from a gauging station that determines the stage discharge relations.

5.5 Catchment Area of a river at a gauging station

Is that area measured horizontally which is enclosed by an imaginary line, within which all rainfall would drain by

gravity into the river upstream of the station.

6. EXPLANATION OF DATA

The data presented as extremes, i.e. maximum and minimum discharges, in line with water levels are the records which covers the life period of the station. The data collected from gauging stations is the records of water levels and flow discharges as measured by various equipment such as current meter, ADC, Q-Liner and ADCP.

Water levels or stage are obtained by observing the water level as indicated on a set of staff gauges, several times a day. The basic stations with a few exceptions are provided with automatic water level recorders, which give a continuous record of fluctuations in level.

Rating curves are prepared from discharge measurements obtained at different stages from which the flow at any stage can be determined. Extensions to the rating curves outside the range of observed discharges have been made on the basis of values computed from hydraulic measurements, comparison with other stations and the logarithmic plotting of the stage-discharge observations.

The data presented is obtained from Primary (basic) and Secondary stations. Classification is based on the relative hydrological importance of the station, the accuracy and reliability of the records and the equipment used. For the Primary and Secondary stations the data is published: -

Details of the Stations:

a.) A description sheet giving location, catchment area, station details, duration of records and quality, extreme values and other notes where necessary;
b.) A map of the catchment area upstream of each station is provided; and
c.) Mean daily discharges for the period for which reliable data is available.

7. WATER RESOUCES CLASSIFICATION

The description sheet of each station gives records of water levels, discharges and quality. The quality of station and reliability of discharge is indicated by a digital code.

Figures in front of water levels have the following meaning: -

a.) First digit: Class of recording of water stage

1 indicates daily read gauge;
2 indicates pressure or other low accuracy sensor; and
3 indicates float recorders.

b.) Second digit: Quality and regularity of attendance at gauging station

0	1	2	3
bad	unqualified but average	good to excellent	professional level

c.) Third digit: Reliability of control

0 indicates very unstable, shifting;
1 indicates poor;
2 indicates average; and
3 indicates good to excellent permanent control.

8. NUMBERING OF GAUGING STATIONS

The system of allocating reference numbers to gauging stations remains unchanged. The reference allocated to a station consists of up to five numbers and letters, which denote the main drainage basin in which it is situated, the main river stem, the tributary or sub-catchment of the main river, if this is applicable; the station number within the sub-catchment; and suffix indicating whether it has replaced an older now disused station.

The main drainage basins of the country are located numbers as follows: -

- Indian Ocean Drainage;
- Internal Drainage to the Lake Eyasi, Lake Manyara, Lake Natron and Bubu Depression;
- Internal Drainage to Lake Rukwa;
- Atlantic Ocean Drainage;
- Mediterranean Drainage.

For example, the number of the station on the Ngerengere River at Konga is **1HA9A**, which means: -

1 -	Indian Ocean Drainage
H -	Ruvu Catchment
A -	Ngerengere Tributary
9 -	is the serial number of the station on the tributary
A -	this station replaces an old station

9. QUALITY CONTROL IN DATA COLLECTION

9.1 Stage Data

Procedures for collection of stage data was based on standard operation procedures in order to ensure the data are reliable and worth for decision-making. Some of the standard procedures followed include Draft Guidelines to Operational Hydrology Practices in Tanzania (2019); WMO Technical Regulations; Volume III- Hydrology, WMO-No.49 (2006); Manual on procedures in Operational Hydrology, Volume 2 (1979): Operation of Stream Gauging Stations; and Manual on procedures in Operational Hydrology, Volume 4: Stage – Discharge relation at Stream gauging Station (1979).

9.2 Cross section Data

Cross section survey are normally undertaken at least twice (2) a year. The survey can be extended up in each bank of a section control, including one through the point of zero flow (control site) and though the gauging site. The obtained cross section data were used in establishing, updating and validating rating curves. In this particular task, the cross-section were used to test the feasibility of extrapolation of rating curves.

9.3 Discharge

To ensure proper discharge data recorded are accurate and reliably replicate discharge measurements to check the accuracy of the person and instrument were made at the same site using different verticals and replicate measurement by measuring back through the same verticals by use of discharge measurement equipment.

10. DATA QUALITY CONTROL AND ASSURANCE

10.1 Stage Data

10.1.1 Removal of Outliers

An outlier is referred as a data point that differs significantly from other observations. This may be due to variability in the measurement or it may indicate experimental error; which may occur by chance in any distribution, but they often indicate either measurement error or heavy-tailed distribution. In this case, the recorded stage data were plotted and noisy data (outlier) were removed after checking and review of the data in comparison to real conditions.

10.1.2 Gap Filling

The gaps, which were observed in the recorded stages were mainly due to dis-functioning of gauges resulting from natural damage during high flow among other reasons. Therefore, a minimum of 10 days of gaps were filled based on linear interpolation and moving average methods. Gaps beyond 10 days remained unfilled.

10.1.3 Gauge Correction

Gauge correction was done after conducting several gauge check surveys, which is usually conducted after and before the rainy season around October, January – February and June – July. The obtained errors case by case from check survey computations were evenly distributed.

10.1.4 Approval and Acceptance

The above procedures of removing outliers, gap filling and gauge correction were checked. The methodologies and results obtained were checked at Basin level. The same were crossed and approved by the Ministry.

10.2 Rating curves

10.2.1 Development of Rating Curves

Rating curves define the relationship between stage and flow. This relationship is determined by performing many river gaugings over a wide range of flows and by using the stage and discharge values to define a continuous rating curve. The rating curves developed for different stations in this book were developed by selected and approved tools of HYDATA, AQUARIUS and Microsoft Excel. These tools were tested and checked using performance criteria such as confidence of determination (R^2), NSE, visual inspection and other statistical parameters. The performance of these tools was good and their R^2 and NSE were ranging from 0.88 to 0.96 and 0.9 to 0.99 respectively.

10.2.2 Rating Curve Extension/Extrapolation

Some of the station readings and measured flows used in the book were not covering the whole stage of the river. Extrapolation methods were applied with a great caution since its application depends on stability of gauging section control of the river in which the stable control at all stages leads to more reliable results.

LIST OF ALL RIVER GAUGING STATIONS IN TANZANIA

No.	Station Number	River	Location	Classification
1	1B4A	Umba	Mwakijembe	Primary
2	1B1A	Umba	Mlalo	Primary
3	1B5	Bombo	Kwamkole	Secondary
4	1BA1	Mbalamo	Kivingo	Secondary
5	1C1	Sigi	Lanconi	Secondary
6	1C2	Sigi	Miembeni	Secondary
7	1C4	Sigi	Kisiwani	Primary
8	1C5	Mkulumuzi	Upare	Secondary
9	1C6	Msimbazi	Lugongo	Secondary
10	1CA2	Muzi	Msakazi	Secondary
11	1D8C	Pangani	Nyumba ya Mungu Dam	Secondary
12	1D10	Pangani	Buiko	Secondary
13	1D14	Pangani	Korogwe	Primary
14	1D16	Pangani	Magunga	Secondary
15	1D17A	Pangani	Mnyuzi	Secondary
16	1D18	Pangani	Naururu	Secondary
17	1DA1	Luengera	Korogwe	Secondary
18	1DA3	Luengera	Magoma	Secondary
19	1DB2A	Saseni	Gulutu	Secondary
20	1DB17	Mkomazi	Gomba	Secondary
21	1DB18A	Hingilili	Ngulwi	Secondary
22	1DB19	Soni	Soni	Secondary
23	1DB20	Mkomazi	Makayo	Secondary
24	1DB22	Mkusu	Kibohero	Secondary
25	1DC11	Himo	Himo	Secondary
26	1DC2A	Ruvu	Kifaru	Primary
27	1DC5A	Rau	Moshi-Himo Road	Secondary
28	1DC6	Mue	Kahe/Taveta Railway Bridge	Secondary
29	1DC23	Miwaleni	Miwaleni Spring	Secondary

No.	Station Number	River	Location	Classification
30	1DC35	Njoro	Njoro Forest	Secondary
31	1DD1	Kikuletwa	TPC	Primary
32	1DD3	Karanga	Moshi/Arusha Road	Secondary
33	1DD5A	Weruweru	Moshi/Arusha Railway Bridge	Secondary
34	1DD8A	Kikafu	Moshi/Arusha Bridge	Secondary
35	1DD20A	Nduruma	New Moshi/Arusha Bridge	Secondary
36	1DD24A	Tengeru	Below Old Road Moshi/Arusha Bridge	Secondary
37	1DD26C	Usa	Dolly Sisal Estate	Secondary
38	1DD31A	Magdarisho	Above New Road Bridge	Secondary
39	1DD35	Usa	Usa	Secondary
40	1DD47A	Ngaresero	Usa	Secondary
41	1DD50	Malala	Above Old Road Bridge	Secondary
42	1DD54	Kikuletwa	Power Station	Secondary
43	1DD55	Kikuletwa	Karangai	Secondary
44	1DE	Themi	Njiro	Secondary
45	1DE11	Kikuletwa	Wahoga Chini	Secondary
46	1CA3	Kihuhwi	Longuza Forest	Secondary
47	1DC36	Lumi	Ungwasi	Secondary
48	1DE13	Makisoru	Manyire	Secondary
49	1DD56	Malala	Nkoavele	Secondary
50	1DD46B	Maji ya Chai	Maji ya Chai	Secondary
51	1CA2	Muzi	Msakazi	Secondary
52	1DD57	Nduruma	Nkoamala	Secondary
53	1DD58	Tengeru	Laketatu	Secondary
54	1DE12	Themi	Urangini	Secondary
55	1G1	Wami	Dakawa	Primary
56	1G2	Wami	Mandera	Primary
57	1G5A	Tami	Msowero	Secondary

No.	Station Number	River	Location	Classification
58	1G6	Kisangata	Mvumi	Secondary
59	1G8	Wami	Rudewa	Secondary
60	1GA1A	Lukigura	Kimamba	secondary
61	1GB1A	Diwale	Ngomeni	secondary
62	1GB2	Mkindo	Mkindo	Secondary
63	1GD16	Kinyasungwe	Kongwa	Secondary
64	1GD2	Mkondoa	Kilosa	Primary
65	1GD21	Kinyasungwe	Itiso	Secondary
66	1GD29	Mkondoa	Mbarahwe	Secondary
67	1GD35	Miyombo	Kivungu	Secondary
68	1GD36	Mkata	Mkata	Primary
69	1GD37	Great Kinyasun-gwe	Ikombo	Secondary
70	1H10	Ruvu	Mikula	Primary
71	1H3	Ruvu	Kidunda	Secondary
72	1H5	Ruvu	Kibungo	Primary
73	1H8A	Ruvu	Morogoro Road Bridge	Primary
74	1HA15	Ngerengere	Mgude	Secondary
75	1HA1A	Ngerengere	Utari Bridge	Secondary
76	1HA3	Ngerengere	Kingolwira	secondary
77	1HA7A	Mlali	Mlali	Secondary
78	1HA8A	Morogoro	Morogoro	Primary
79	1HA9A	Ngerengere	Konga	Secondary
80	1HB2	Mgeta	Mgeta	Primary
81	1HC2	Mvuha	Ngagama	secondary
82	1HC2A	Mvuha	Tulo School	Secondary
83	1J5	Kizinga	Buza	Secondary
84	1J6	Mzinga	Majimatitu	Secondary
85	IGA2	Mziha	Mziha	Secondary
86	1HA17	Mzinga	Mzinga	Secondary
87	1HA19	Lukulunge	Konga	Secondary

No.	Station Number	River	Location	Classification
88	1HB6	Mngazi	Vigolegole	Secondary
89	1GD22	Little Kinyasun-gwe	Chihanga	Secondary
90	1GD23	Little Kinyasun-gwe	Mayamaya	Secondary
91	1HD1	Mfizigo	Kibangile	Secondary
92	1HD2	Mfizigo	Lanzi	Secondary
93	1HB5	Mgeta	Duthumi	Secondary
94	1HA17	Mzinga	Mzinga	Secondary
95	1HA18	Ngerengere	Lukwambe	Secondary
96	1H11	Mbezi	Kalundwa	Secondary
97	1HC1	Mtombozi	Mtombozi	Secondary
98	1J11	Tenge	ToT Bridge	Secondary
99	1J12	Msimbazi	Kigogo Sambusa Bridge	Secondary
100	1K3B	Rufiji	Stiegler's Gorge	Primary
101	1K4A	Rufiji	Utete	Secondary
102	1K5	Rufiji	Mloka	Primary
103	1KA11A	Mbarali	Igawa	Primary
104	1KA12	Halali	Downstream Iyai	Primary
105	1KA15A	Ndembera	Ilongo	Primary
106	1KA16A	Lunwa	Igurusi	Primary
107	1KA21A	Little Ruaha	Ihimbu	Primary
108	1KA22	Mtitu	Mtitu	Primary
109	1KA27	Great Ruaha	Mkupule	Secondary
110	1KA2A	Little Ruaha	Ndiuka	Primary
111	1KA31	Little Ruaha	Mawande	Primary
112	1KA32A	Little Ruaha	Makalala	Primary
113	1KA33B	Ndembera	Madibira	Primary
114	1KA37A	Lukosi	Mtandika	Primary
115	IKA38A	Yovi	Yovi	Primary
116	1KA3A	Great Ruaha	Kidatu	Primary
117	1KA41	Kizigo	Ilangali	Secondary

No.	Station Number	River	Location	Classification
118	1KA42A	Kizigo	Chinugulu	Primary
119	1KA45A	Ipatagwa	Great North Road	Primary
120	1KA4A	Great Ruaha	Msosa	Primary
121	1KA50B	Mswiswi	Wilima	Primary
122	1KA51A	Umrobo	Great North Road	Primary
123	1KA57A	Mwega	Malolo	Secondary
124	1KA58A	Chabi	Chabi	Tertially
125	1KA59	Great Ruaha	Msembe	Primary
126	1KA5A	Great Ruaha	Tail race	Secondary
127	1KA62	Bubu	Chiboli	Secondary
128	1KA68A	Kioga	Itipingi	Primary
129	1KA70	Great Ruaha	Ngiriama	Primary
130	1KA71	Great Ruaha	Nyaluhanga	Primary
131	1KA77	Mbalali	Warumba	Primary
132	1KA7A	Chimala	Chitekelo	Primary
133	1KA8A	Great Ruaha	Salimwani	Primary
134	1KA9	Kimani	Great North Road	Primary
135	1KB14B	Lumemo	Kiburubutu	Primary
136	1KB15A	Mngeta	Upstream bridge	Primary
137	1KB16C	Furua	Malinyi	Primary
138	1KB17A	Kilombero	Swero	Primary
139	1KB18B	Ruhudji	Below Kifung'a Falls	Primary
140	1KB19A	Hagafiro	Hagafiro	Primary
141	1KB24	Sanje	Sanje	Primary
142	1KB27	Lwipa	Mbingu	Primary
143	1KB29	Luhombero	Luhombero	Primary
144	1KB2A	Kilombero	Ifakara Ferry	Primary
145	1KB30	Ruhuji	Idonja Falls	Primary
146	1KB31	Kigogo Ruaha	Lugema	Primary
147	1KB32	Kihansi	Lutaki	Primary
148	1KB33	Kihansi	D/S Kihansi Dam Road Bridge	Primary

No.	Station Number	River	Location	Classification
149	1KB34	Kihansi	Kihansi Dam Road Bridge	Primary
150	1KB35	Kihansi	TAZARA Railway Bridge	Secondary
151	1KB36	Mgugwe	Mgugwe	Primary
152	1KB37	Mkaja	JKT Chita	Primary
153	1KB4A	Kilombero	Ifwema	Primary
154	1KB8	Mpanga	Mpanga Mission	Primary
155	1KB9	Mnyera	Taweta	Primary
156	1KC3	Luwegu	D/S Mbarang'andu Confluence	Primary
157	1KC4	Luwegu	Nambecha	Secondary
158	1L3A	Zinga	Miguruwe	Secondary
159	1L5A	Matandu	Miguruwe	Primary
160	1M21	Mkundi	Makata	Special
161	1M22	Liwale	LIUWASA Intake	Special
162	1M23	Liwale	Mbaya Bridge	Special
163	1M24	Mihumu	Kibutuka	Special
164	1M2A	Mbwemkuru	Nachinga	Special
165	1M5	Mbwemkuru	Mitonono	Primary
166	1M6	Mbwemkuru	Singira	Primary
167	1M7	Mbwemkuru	Nahoro	Primary
168	1M8A	Mavuji	Mchakama	Primary
169	1N1	Lukuledi	Mkwaya	Primary
170	1N2A	Nyangao	Nyangao	Primary
171	1N3A	Lukuledi	Nanganga	Secondary
172	1N4A	Lukuledi	Mtua	Primary
173	1Q4	Muhuwesi	Muhuwesi	Primary
174	1Q6A	Lumesule	Ruanda	Primary
175	1Q7	Ruvuma	Muhiga	Primary
176	1Q10	Likonde	Ligowonga	Primary
177	1Q11	Msenjewe	Chiungo	Primary
178	1Q12	Mbangala	Mahinyo Hill	Primary
179	1Q13	Msanjesi	Mahundi	Primary

No.	Station Number	River	Location	Classification
180	1Q15	Ruvuma	Marumba	Primary
181	1Q16	Ruvuma	Litapwasi	Primary
182	1Q17	Miesi	Mikele	Secondary
183	1Q18	Lumeme	Mtua	Primary
184	1Q19	Lunyere	Liparamba	Primary
185	1Q20	Ruvuma	Mkenda	Primary
186	1RA1	Ruhekei	Nangombo	Primary
187	1RA3	Mbawa	Mkali	Primary
188	1RA4	Mnywamaji	Ngumbo	Primary
189	1RB10	Mwinamaji	Ruanda	Secondary
190	1RB11	Hanga	Ngadinda	Secondary
191	1RB1A	Rutukira	Rutukira	Secondary
192	1RB2	Ruhuhu	Masigira	Primary
193	1RB3	Ruhuhu	Kikonge	Primary
194	1RB5A	Rutukira	Litumbandyosi	Secondary
195	1RB6	Mngaka	Paradiso Road Bridge	Secondary
196	1RB7	Lumecha	Njoganjoga	Secondary
197	1RB9	Kitewaka	Maboga	Secondary
198	1RC10	Lufilyo	Lufilyo	Secondary
199	1RC11A	Rumakali	Mwakauta	Primary
200	1RC12A	Mgitule	Kidope	Secondary
201	1RC13	Lumbira	Lumbira	Primary
202	1RC14	Nkiwe	Kilondo	Primary
203	1RC15	Mchuchuma	Masasi	Primary
204	1RC10A	Lufilyo	Ipinda	Secondary
205	1RC2A	Kiwira	Ipyana	Primary
206	1RC3A	Mbaka	Mwaya	Primary
207	1RC5A	Kiwira	Kiwira	Seconday
208	1RC8A	Kiwira	Natural Bridge	Primary
209	1RD1A	Songwe	Kasumulu	Primary
210	1RD2	Itumba	Kushisankwa	Secondary

No.	Station Number	River	Location	Classification
211	1RD4	Songwe	Namwangwa	Seconday
212	1RD5	Songwe	Bupigu	Secondary
213	1RA2	Chiwindi	Mtupale	Primary
214	2A4	Penyinyi	Oldonyosambu	Primary
215	2C2A	Ngarenanyuki	Veterinary Dip	Primary
216	2C5	Maiteri	Namanga	Secondary
217	2H14	Makuyuni	Makuyuni	Primary
218	2H1A	Kirurumo	Mto wa Mbu Bridge	Primary
219	2H2A	Simba	Mto wa Mbu	Primary
220	2H3A	Mto wa Mbu	Mto wa Mbu	Primary
221	2H5B	Erri	Erri Road Bridge	Primary
222	2H22	Nambisi	Kwermusi	Primary
223	2H23	Magara	Dalta	Primary
224	2H24	Endabash	Endabash	Secondary
225	2K16	Ndurumo	Mgimba	Primary
226	2K17	Ntambalale	Kilabili	Primary
227	2K18	Manonga	Kagera	Primary
228	2K21	Nhumbu	Shinyanga Municipal	Primary
229	2K26	Usia	Usia	Tertially
230	2K32	Ndurumo	Iambi	Secondary
231	2K35	Tungu	Kabile	Secondary
232	2K40	Semu	Isengwa	Tertially
233	2K41	Mango	Sanjo	Tertially
234	2K42	Manonga	Ruyeye	Tertially
235	2K47	Hainu	Quamquam	Primary
236	2K6A	Kironda	Kirondatal	Secondary
237	2R15A	Mkondoa	Downstream Kondoa Irangi	Primary
238	2R1A	Bubu	Farkwa Road Bridge	Primary
239	2R23	Mponde	Upstream Mponde	Secondary
240	2R24	Bubu	Kinyika	Primary
241	2R25	Msemembo	Msemembo	Secondary

No.	Station Number	River	Location	Classification
242	2R26	Maduma	Downstream Makuru	Primary
243	2R27	Mkinki	Ndoroboni	Primary
244	2R28	Mkinki East	Mombose	Primary
245	2R29	Bubu	Thawi	Secondary
246	2R30	Kelema	Dalai	Primary
247	2R31	Sola	Kinyika	Tertially
248	2R4	Bubu	Bahi	Primary
249	2H25	Kou	Darakuta Ranch	Primary
250	3A14B	Mlowo	Great North Road	Primary
251	3A15	Lupa	Itigi Road	Primary
252	3A17A	Songwe	Galula	Primary
253	3A18	Lupa	Lupatingatinga	Primary
254	3A6A	Nzovwe	Great North Bridge	Secondary
255	3A7B	Ruanda	Great North Bridge	Secondary
256	3A8B	Myovizi	Great North Bridge	Secondary
257	3B15	Mtembwa	Chipoma	Secondary
258	3B16	Samvya	Yunga	Secondary
259	3B18	Mpemba	Kombe	Primary
260	3B2	Momba	Tontera	Primary
261	3B8	Mpemba	Great North Bridge	Secondary
262	3C8	Katuma	Sitalike	Primary
263	3CB2	Msadya	Kibaoni	Primary
264	3CC2	Mfwizi	Ntatumbila	Primary
265	3CC3	Mfwizi	Paramawe	Primary
266	3CD1	Muze	Muze	Primary
267	3CD2	Lwiche	Uzia	Primary
268	3D4	Rungwa	Itigi Road Bridge	Primary
269	3DA2	Musa	Msisi	Secondary
270	3E8	Luika	Gua	Primary
271	3E2A	Lukwate	Nkundahill	Primary
272	3E2A	Kikamba	Kapalala	Primary

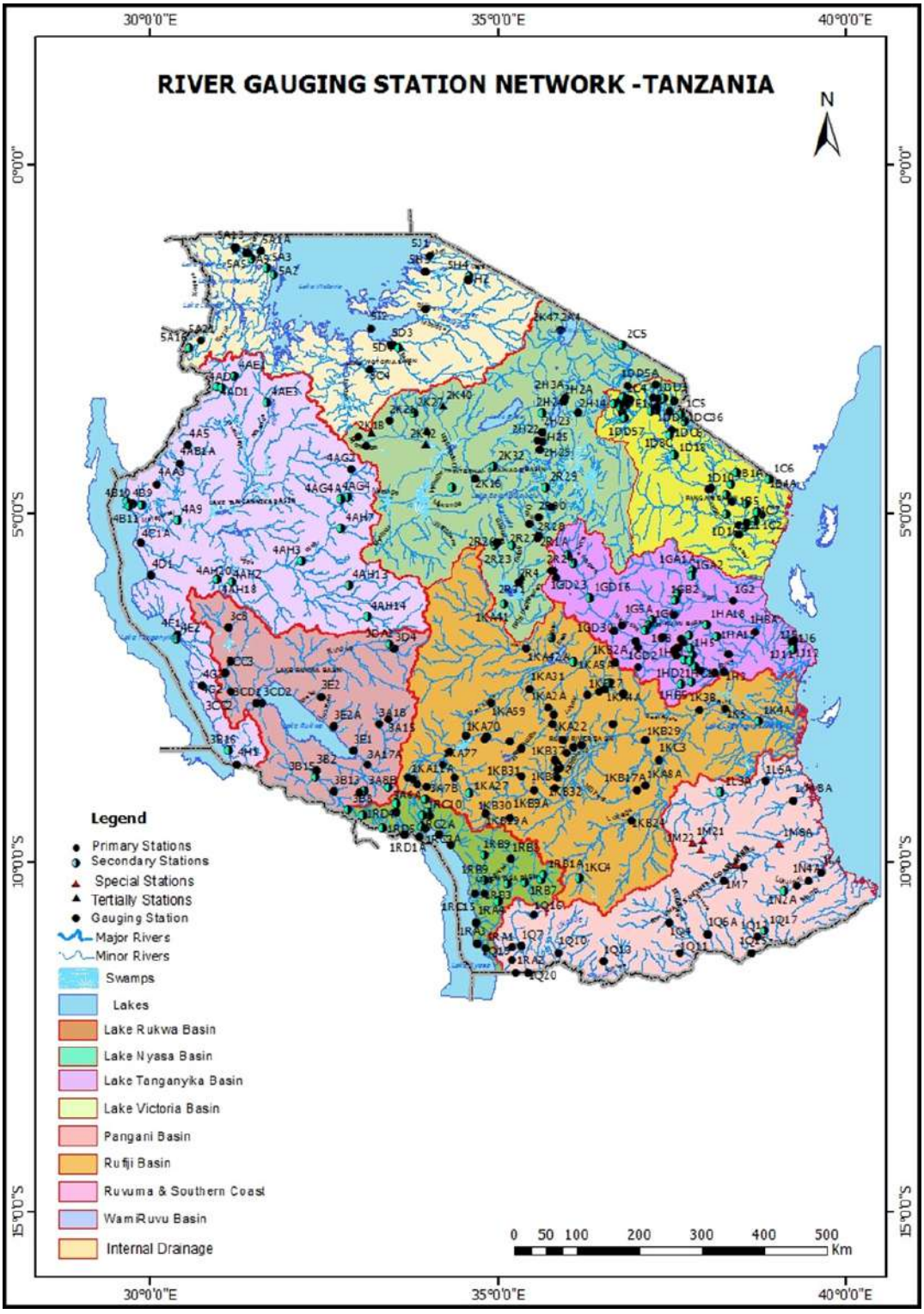
No.	Station Number	River	Location	Classification
273	4A5	Malagarasi	Taragi	Primary
274	4A9	Malagarasi	Mbelagule	Primary
275	4AA2	Ruchugi	Pwaga	Primary
276	4AA3	Ruchugi	Kidyama	Primary
277	4AB1A	Makere	Makere	Primary
278	4AD1	Luwiti	Nyarusange	Secondary
279	4AD2	Myowosi	Kanyoni	Secondary
280	4AE1	Mtundu	Nyakanazi	Secondary
281	4AE3	Nikonga	Msonga	Secondary
282	4AG2	Igombe	Ipala	Primary
283	4AG4	Nzubuka	Railway Bridge	Secondary
284	4AG4A	Igombe	Road Bridge	Secondary
285	4AH13	Uluwa	Ngonywa	Secondary
286	4AH14	Nkululu	Road Bridge	Secondary
287	4AH18	Mlawezi	Uvinza Road	Secondary
288	4AH21	Mijiungu	Magawe	Secondary
289	4AH2	Mtambo	Nsanda	Primary
290	4AH3	Wala	Saw Mill	secondary
291	4AH7	Wala	Pangale	Secondary
292	4B10	Luiche	Jimbi	Secondary
293	4B11	Mkuti	Mkuti	Secondary
294	4B9	Luiche	Simbo	Primary
295	4BA2A	Mungonya	Mungonya	Secondary
296	4BB1A	Kaseke	Kaseke	Secondary
297	4C1A	Lugufu	Sunuka	Primary
298	4D1	Luegele	Lubalisi	Primary
299	4E2	Ifume	Karema	Secondary
300	4F1	Msenguse	Ikola	Primary
301	4G2	Luamfi	Masolo	Primary
302	4G3	Samba	Masolo	Primary
303	4H1	Kalambo	Kapozwa	Primary

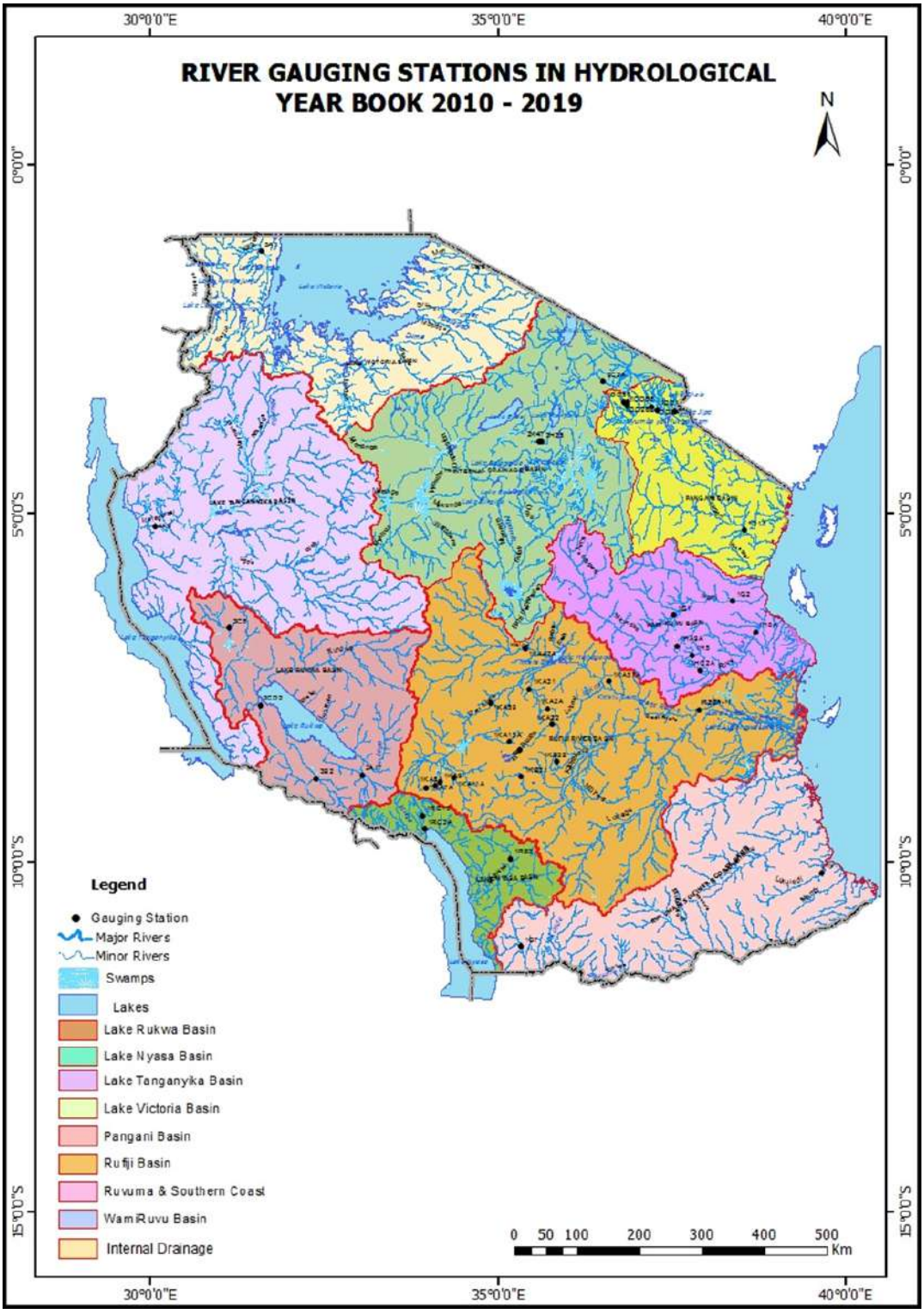
No.	Station Number	River	Location	Classification
304	5A1	Ngono	Kyaka Road Bridge	Primary
305	5A13	Kagera	Nyakanyasi	Secondary
306	5A15	Mwisa	Kyehara	Primary
307	5A16	Ruvuvu	Mwendwa Ferry	Primary
308	5A17	Ruvuvu	Kasharazi	Primary
309	5A2	Ngono	Muhutwe	Secondary
310	5A20	Kagera	Kakono-Tanesco	Secondary
311	5A3	Ngono	Kalebe Bridge	Secondary
312	5A5	West Ngono	Kyakakera	Secondary
313	5A9	Kagera	Kyaka ferry	Primary
314	5C4	Magogo	Mwanza/Shinyanga Bridge	Primary
315	5D2	Duma	Sayaka	Primary
316	5D3	Simiyu	Mwanza/Musoma Road Bridge	Primary
317	5D4	Simiyu	Lumeji	Secondary
318	5H2	Mara	Mara Mine	Primary
319	5H3	Mara	Kirumi Ferry	Primary
320	5H4	Mara	Nyansurura	Secondary
321	5I2	Mbalageti	Mwanza/Musoma Bridge	Primary
322	5I3	Grumet	Mwanza/Musoma Bridge	Primary
323	5J1	Mori	Utegi	Primary

LIST OF RIVER GAUGING STATIONS WITH DATA IN THIS HYDROLOGICAL YEAR BOOK

No.	Station Number	River	Location
Primary Stations			
1	1D17A	Pangani	Mnyuzi
2	1DC2A	Ruvu	Kifaru
3	1DD1	Kikuletwa	TPC
4	1DD26C	Usa	Dolly Sisal Estate
5	1DD50	Malala	Above Old Bridge
6	1DD55	Kikuletwa	Karangai
7	1G1	Wami	Dakawa
8	1G2	Wami	Mandera
9	1H5	Ruvu	Kibungo
10	1H8A	Ruvu	Morogoro Road Bridge
11	1HA9A	Ngerengere	Konga
12	1KA2A	Little Ruaha	Ndiuka
13	1KA7A	Chimala	Chitekelo
14	1KA8A	Great Ruaha	Salimwani
15	1KA9	Kimani	Great North Road
16	1KA11A	Mbarali	Igawa
17	1KA15A	Ndembera	Ilongo
18	1KA22	Mtitu	Mtitu
19	1KA31	Little Ruaha	Mawande
20	1KA42A	Kizigo	Chinugulu
21	1KA57A	Mwega	Malolo
22	1KA59	Great Ruaha	Msembe
23	IK3B	Rufiji	Stiegler's Gorge
24	1KB31	Kigogo Ruaha	Lugema
25	1KB32	Kihansi	Lutaki

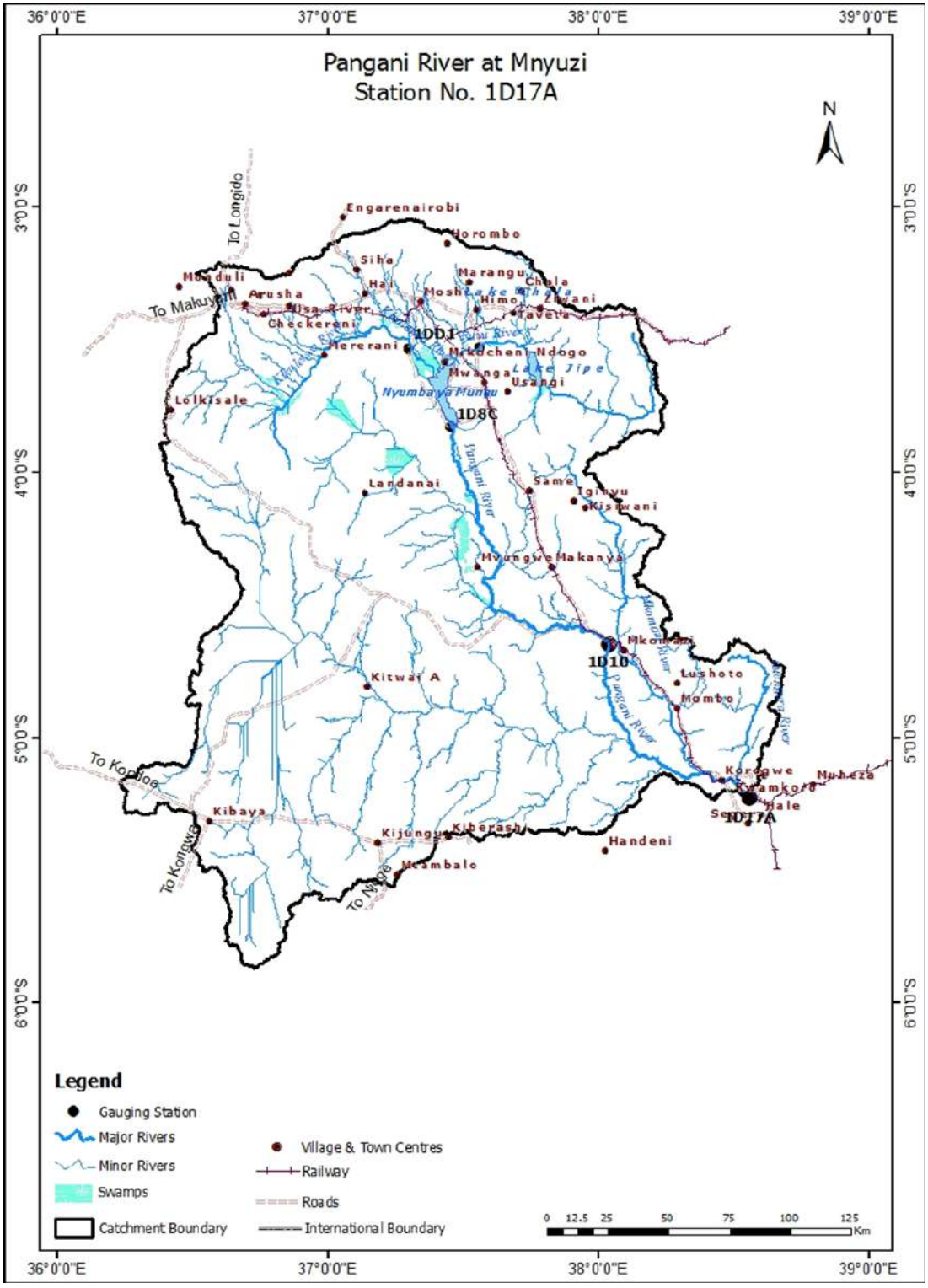
No.	Station Number	River	Location
26	1N1	Lukuledi	Mkwaya
27	1Q7	Ruvuma	Muhiga
28	1RB2	Ruhuhu	Masigira
29	1RC3A	Mbaka	Mwaya
30	1RC10	Lufilyo	Lufilyo
31	2C2A	Ngarenanyuki	Veterinary Dip
32	2K47	Hainu	Quamquam
33	2H25	Kou River	Darakuta Ranch
34	3A17A	Songwe	Galula
35	3B2	Momba	Tontera
36	3C8	Katuma	Sitalike
37	3CD2	Lwiche	Uzia
38	4A9	Malagarasi	Mbelagule
39	5A1	Ngono	Kyaka Road Bridge
Secondary Stations			
40	1HC2A	Mvuha	Tulo School
41	1KA32A	Little Ruaha	Makalala


RIVER GAUGING STATION NETWORK -TANZANIA
N
30°0'0"E
35°0'0"E
40°0'0"E
0°0'0"
5°0'0"S
10°0'0"S
15°0'0"S
Legend
Primary Stations
Secondary Stations
Special Stations
Tertiary Stations
Gauging Station
Major Rivers
Minor Rivers
Swamps
Lakes
Lake Rukwa Basin
Lake Nyasa Basin
Lake Tanganyika Basin
Lake Victoria Basin
Pangani Basin
Rufiji Basin
Ruvuma & Southern Coast
Wami Ruvu Basin
Internal Drainage
0 50 100 200 300 400 500
Km


RIVER GAUGING STATIONS IN HYDROLOGICAL YEAR BOOK 2010 - 2019
N
30°0'0"E
35°0'0"E
40°0'0"E
0°0'0"
5°0'0"S
10°0'0"S
15°0'0"S
Legend
Gauging Station
Major Rivers
Minor Rivers
Swamps
Lakes
Lake Rukwa Basin
Lake Nyasa Basin
Lake Tanganyika Basin
Lake Victoria Basin
Pangani Basin
Rufiji Basin
Ruvuma & Southern Coast
Wami Ruvu Basin
Internal Drainage
0 50 100 200 300 400 500
Km

PRIMARY STATIONS

Pangani River at Mnyuzi				
Station No: 1D17A			**Established:** 10/11/ 1967	
Coordinates:			**Altitude (m.a.m.s.l):** 280	
Lat: -5.2313	**Long:** 38.5561		**Catchment Area (km²):** 49,774	
Description of the Catchment:				
Being the most downstream station, the catchment is characterized with mountainous features, natural vegetation, agricultural activities and settlement.				
Station Details				
1. Staff Gauges	**Range: 0 – 4m**		**A.D.Z.G.R: 0.00mm**	
	Type of Gauges: Standard Vertical		**MSL.Z.G.L: -**	
2. Automatic Recorder	**Thalimedes – Float type**		**Date installed:** 2013	
3. Benchmark	Bolt embedded in concrete near 6 – 7m gauge			
BM Assumed Datum: 3.314		**N.M.M.S.L:** 310.64	**TBM:** –	
4. Control	Open channel downstream gauges			
5. Access	Accessible throughout the year, the station is located 10km from the Maguzoni village (Main road of Hale to Tanga)			
Records	**Period**		**Quality**	
Water Level:	01/2/2011 – 31/12/2019		1.2.2	
Discharge:	01/2/2011 – 31/12/2019		2.2.2	
Extremes:	**Max. Recorded**	157.736m³/sec	**On** 18/10/2019	**WL** 3.99m
	Min. Recorded	0.779m³/sec	**On** 19/03/2015	**WL** 0.05m
Remarks				


Pangani River at Mnyuzi
Station No. 1D17A
N
36°0'0"E
37°0'0"E
38°0'0"E
39°0'0"E
3°0'0"S
4°0'0"S
5°0'0"S
6°0'0"S
To Longido
To Makuyuni
To Kondoa
To Korogwe
To Ngage
Engarenairobi
Horombo
Sihia
Hai
Narangu
Chala
Moshi
Himo
Zawani
Taveta
Mbuguni
Arusha
Nsa River
Checkereni
Mererani
1DD1
Mkuchoni
Ndogo
Mwanga
Lake Jipe
Usangi
Nyumbaya Mumbu
Lolkisale
1D8C
Landanai
Same
Tgiuyu
Kisiwani
Mwungiwe Makanya
Mkomazi
1D10
Kitwai A
Lushoto
Mombo
Korogwe
Mhezia
Kwamkoro
Bale
1D17A
Kibaya
Kijungu
Kiberash
Handeni
Mkambalo
Legend
Gauging Station
Major Rivers
Minor Rivers
Swamps
Catchment Boundary
Village & Town Centres
Railway
Roads
International Boundary
0 12.5 25 50 75 100 125
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Year: 2011

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	10.790	-	-	18.707	25.957	12.489	10.506	9.044	14.616	15.150	11.007
2	-	10.825	-	-	18.947	24.174	12.269	10.613	8.837	14.389	14.768	10.259
3	-	11.039	-	-	18.987	22.003	12.196	9.804	8.837	14.616	13.825	9.943
4	-	11.039	-	-	19.027	20.442	11.977	9.734	8.769	14.882	13.413	9.699
5	-	10.861	-	-	19.268	19.954	11.941	10.189	8.329	14.882	13.042	9.699
6	-	11.004	-	-	19.389	19.591	11.905	10.506	8.060	14.616	12.306	9.908
7	-	10.825	-	-	19.873	19.028	11.687	10.790	8.026	14.238	11.869	9.943
8	-	10.790	-	-	20.117	18.628	11.651	11.039	8.026	13.600	11.147	10.013
9	-	10.790	-	-	21.301	18.071	11.651	11.111	8.026	13.974	10.754	10.471
10	-	10.790	-	-	23.296	17.714	11.651	11.290	8.060	14.351	10.259	10.719
11	-	10.825	-	-	27.252	17.438	11.651	11.111	8.295	16.470	9.943	10.506
12	-	11.039	-	-	28.725	17.359	11.651	11.111	8.565	26.812	9.699	10.259
13	-	11.075	-	-	27.940	17.046	11.651	11.326	8.837	30.994	9.699	10.188
14	-	11.075	-	-	28.376	16.499	11.651	11.398	9.077	40.612	9.908	9.943
15	-	11.111	-	-	29.031	16.188	11.687	11.615	9.111	48.206	10.226	9.699
16	-	11.326	-	-	29.120	16.111	11.905	11.615	9.111	51.835	11.980	9.699
17	-	11.471	-	-	27.550	15.879	11.977	11.398	9.077	53.871	12.711	9.908
18	-	12.087	-	-	26.987	15.802	12.232	11.326	8.871	52.481	14.355	9.943
19	-	11.977	-	-	26.815	15.571	12.489	11.111	8.837	47.617	16.190	9.978
20	-	11.941	-	-	27.550	15.303	12.525	11.075	8.702	46.788	16.305	10.188
21	-	11.905	-	-	27.636	13.863	12.525	11.039	7.729	46.449	15.265	10.259
22	-	11.687	-	-	27.333	13.190	12.489	10.825	6.747	44.822	14.389	10.506
23	-	11.651	-	-	28.082	13.116	12.124	10.790	7.941	36.151	14.012	10.719
24	-	11.651	-	-	34.857	13.079	11.148	10.790	11.772	28.651	13.712	10.506
25	-	11.651	-	-	38.153	12.857	10.577	10.790	13.377	25.530	13.413	10.084
26	-	11.651	-	-	36.720	12.820	10.471	10.790	14.428	24.384	13.116	9.009
27	-	11.651	-	-	35.161	12.820	10.259	10.754	15.803	22.252	12.894	9.044
28	-	11.651	-	-	33.708	12.783	10.224	10.541	15.302	20.199	13.116	13.817
29	-		-	-	32.089	12.562	10.224	10.506	14.958	19.671	13.339	37.929
30	-		-	-	29.560	12.525	10.224	10.506	14.882	19.270	12.859	50.874
31	-		-		27.681		10.259	10.295		16.893		60.809
Mean	-	11.292	-	-	26.750	16.612	11.592	10.848	9.848	27.875	12.789	14.049
Flow (MCM)	-	27.318	-	-	71.647	43.059	31.048	29.056	25.526	74.660	33.148	37.630
Maximum	-	12.087	-	-	38.153	25.957	12.525	11.615	15.803	53.871	16.305	60.809
Minimum	-	10.790	-	-	18.707	12.525	10.224	9.734	6.747	13.600	9.699	9.009
Runoff (mm)	-	0.549	-	-	1.439	0.865	0.624	0.584	0.513	1.500	0.666	0.756

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A **Year:** 2012
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	63.316	10.471	7.827	7.430	11.039	16.462	7.495	5.207	6.940	5.421	3.505	6.778
2	60.765	10.189	8.363	7.135	11.183	14.846	7.462	5.176	6.940	5.483	3.675	6.457
3	50.814	9.664	8.061	7.628	11.978	14.050	7.265	4.994	6.713	5.669	4.428	6.171
4	55.027	9.044	9.320	7.967	13.457	13.675	7.233	4.964	6.457	5.762	5.213	5.731
5	54.521	8.028	10.436	10.762	16.660	13.116	7.200	4.904	6.234	6.139	7.106	5.483
6	53.821	7.038	11.004	11.869	17.400	12.562	7.004	4.604	6.202	6.202	7.267	5.452
7	52.974	6.489	11.039	10.614	15.996	12.196	6.940	4.904	6.202	6.202	8.739	5.483
8	53.074	6.234	10.790	9.838	15.340	11.687	6.746	5.055	6.234	6.171	9.734	5.669
9	50.601	6.171	10.541	11.138	15.494	11.362	6.713	5.638	6.425	5.981	9.387	6.518
10	46.936	5.950	10.471	16.255	15.379	11.040	6.681	5.950	6.489	5.887	8.940	11.347
11	43.712	5.794	10.259	11.350	14.731	10.436	6.521	6.108	6.681	5.545	9.111	9.926
12	39.841	6.108	10.224	10.970	19.081	9.354	6.681	5.762	6.713	5.669	9.352	6.311
13	33.403	5.950	9.911	9.597	37.034	8.162	6.681	5.638	6.681	5.700	9.352	6.203
14	29.299	5.731	8.130	9.145	36.270	7.793	6.521	5.268	6.489	5.700	9.111	6.779
15	27.075	5.638	8.228	8.674	30.846	7.727	6.649	5.237	6.489	5.669	8.837	7.695
16	25.657	5.268	8.261	6.273	31.195	7.463	6.521	5.421	6.681	5.514	8.565	8.363
17	24.552	5.176	8.060	7.176	30.397	7.005	6.681	5.452	6.713	5.638	8.329	9.319
18	23.042	4.994	8.026	9.812	28.726	6.810	6.713	5.545	6.713	5.422	8.329	9.769
19	20.485	4.994	8.026	12.625	27.204	7.167	6.713	6.333	6.681	4.994	8.531	9.112
20	18.949	5.207	8.026	19.801	26.815	7.298	6.713	7.795	6.457	4.723	8.531	8.498
21	17.557	5.421	7.993	28.489	25.530	7.727	6.681	7.993	6.234	4.485	8.262	9.112
22	16.697	5.421	8.200	30.526	23.627	8.027	6.299	7.826	6.171	4.192	7.793	9.909
23	13.942	5.237	11.016	14.523	21.919	8.028	5.178	7.993	5.981	3.703	7.528	10.365
24	12.380	5.237	13.453	11.543	19.960	6.557	5.176	7.960	5.919	3.960	7.495	10.013
25	11.977	5.483	12.170	10.648	16.544	5.607	5.237	7.463	5.700	4.017	7.528	9.943
26	11.868	5.951	8.812	10.506	15.037	5.826	5.421	6.843	5.452	3.931	7.694	9.908
27	11.398	6.522	8.261	10.541	13.341	6.876	5.452	6.972	5.237	3.421	7.495	9.699
28	11.111	7.364	8.027	10.754	14.352	7.496	5.452	7.200	5.207	3.281	7.298	9.664
29	10.827	7.528	7.760	10.790	14.313	7.893	5.391	7.200	5.207	2.980	7.462	9.699
30	9.527		7.528	10.825	14.125	7.561	5.055	6.972	5.237	3.088	7.397	9.873
31	10.330		7.495		14.846		5.176	6.778		3.171		12.070
Mean	31.144	6.493	9.217	11.840	19.994	9.394	6.376	6.166	6.249	4.959	7.733	8.301
Flow (MCM)	83.417	16.269	24.686	30.690	53.553	24.348	17.077	16.516	16.198	13.282	20.044	22.232
Maximum	63.316	10.471	13.453	30.526	37.034	16.462	7.495	7.993	6.940	6.202	9.734	12.070
Minimum	9.527	4.994	7.495	6.273	11.039	5.607	5.055	4.604	5.207	2.980	3.505	5.452
Runoff (mm)	1.676	0.327	0.496	0.617	1.076	0.489	0.343	0.332	0.325	0.267	0.403	0.447

Flow (cumecs)

Annual Statistics

Maximum: 63.316 Minimum: 2.980 Mean: 10.656 cumecs

Total: 336.955 MCM Runoff: 6.770 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A **Year:** 2013
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	25.867	7.271	5.268	12.166	15.541	14.768	8.565	5.669	4.635	4.076	3.589	3.759
2	19.784	7.005	5.452	14.428	16.814	14.578	8.599	5.825	4.784	4.694	3.364	3.561
3	10.725	6.426	5.731	21.901	20.219	14.012	8.803	6.748	5.360	5.238	3.364	3.420
4	9.979	5.794	6.108	18.417	29.262	13.451	8.803	7.894	5.452	5.888	3.589	3.731
5	10.648	5.700	5.888	12.542	51.336	13.116	8.599	8.261	5.391	6.171	4.196	3.845
6	10.366	5.669	5.299	12.014	86.091	12.820	8.531	8.261	4.964	6.139	5.735	4.310
7	9.704	5.483	5.551	14.412	99.782	12.525	8.262	8.027	4.515	5.794	6.076	5.147
8	12.882	5.421	7.468	26.289	96.907	12.160	7.695	7.793	4.309	5.950	5.515	5.795
9	18.202	5.237	6.587	34.399	81.769	11.435	6.779	7.760	4.456	6.171	5.207	6.909
10	18.479	5.146	6.044	30.290	73.393	11.111	6.266	7.760	4.426	6.266	4.964	7.728
11	13.544	4.754	6.171	21.705	76.009	11.004	6.171	7.727	4.047	6.944	4.935	8.432
12	10.793	4.515	6.171	16.980	75.153	10.506	5.981	7.528	3.788	8.841	6.046	9.665
13	10.015	4.515	6.013	22.082	68.798	9.943	5.950	7.462	3.589	9.352	6.393	9.217
14	8.466	4.723	6.234	31.087	59.746	9.421	5.919	7.265	3.589	9.283	6.171	7.729
15	7.760	4.934	6.617	34.754	49.540	9.145	5.731	7.200	3.759	8.600	5.762	7.397
16	7.266	4.994	6.489	30.850	41.773	9.077	5.669	7.004	3.787	8.027	5.638	6.908
17	7.004	5.238	6.457	25.223	36.404	8.803	5.483	6.972	3.787	7.496	5.360	7.331
18	6.972	5.669	6.425	16.609	32.539	8.362	5.421	7.004	3.759	7.005	5.825	7.102
19	6.811	5.887	6.234	14.126	30.267	8.228	5.207	7.200	3.589	6.681	5.700	7.364
20	5.857	5.731	6.202	13.488	27.121	7.793	4.964	7.200	3.561	6.234	5.422	7.005
21	5.669	5.669	8.117	13.339	24.681	7.495	4.753	7.004	3.589	5.950	4.964	6.778
22	5.452	5.483	20.153	12.857	22.874	7.298	4.693	6.972	3.759	5.608	4.486	6.940
23	5.237	5.421	20.607	12.452	21.015	7.629	4.515	6.940	3.787	4.844	3.905	7.004
24	5.207	5.237	18.473	11.760	19.632	8.702	4.515	6.746	3.816	4.753	2.847	7.200
25	5.176	5.237	15.499	11.687	18.468	9.077	4.693	6.681	3.988	4.934	2.792	7.200
26	4.994	5.421	14.088	11.905	17.834	9.077	4.753	6.489	3.988	4.934	3.478	7.004
27	4.934	5.452	13.488	11.941	16.267	8.837	4.964	6.457	3.816	4.753	3.788	6.907
28	4.723	5.421	13.413	11.832	15.302	8.599	5.176	6.457	3.787	4.664	3.960	6.426
29	4.515		14.253	11.183	14.844	8.565	5.237	6.361	3.787	4.309	3.816	5.732
30	4.515		18.840	11.697	14.125	8.565	5.421	5.763	3.816	4.221	3.787	5.268
31	5.063		15.818		14.125		5.483	5.361		3.989		5.146
Mean	9.245	5.481	9.521	18.147	40.891	10.203	6.181	7.026	4.123	6.058	4.689	6.386
Flow (MCM)	24.763	13.259	25.502	47.037	109.523	26.447	16.555	18.817	10.686	16.227	12.154	17.104
Maximum	25.867	7.271	20.607	34.754	99.782	14.768	8.803	8.261	5.452	9.352	6.393	9.665
Minimum	4.515	4.515	5.268	11.183	14.125	7.298	4.515	5.361	3.561	3.989	2.792	3.420
Runoff (mm)	0.498	0.266	0.512	0.945	2.200	0.531	0.333	0.378	0.215	0.326	0.244	0.344

Flow (cumecs)

Annual Statistics

Maximum: 99.782 Minimum: 2.792 Mean: 10.663 cumecs

Total: 336.257 MCM Runoff: 6.756 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A **Year:** 2014
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.754	3.787	8.940	45.267	13.201	39.882	-	11.183	10.541	10.754	25.464	11.687
2	4.456	3.759	8.363	36.366	17.186	36.125	-	11.832	10.754	10.506	29.077	11.615
3	4.018	3.589	8.027	34.161	24.254	33.889	-	12.124	10.825	10.294	30.221	11.362
4	3.561	3.589	8.444	30.468	33.370	32.940	-	13.154	11.039	10.506	27.899	11.040
5	3.171	3.904	12.244	21.453	38.575	31.909	-	12.931	11.039	10.790	25.750	10.577
6	3.088	4.906	11.617	18.511	41.956	30.752	-	13.079	10.968	11.292	21.389	10.506
7	2.925	5.670	10.120	15.961	48.361	29.164	-	13.079	11.906	13.007	21.218	10.471
8	2.898	6.462	9.595	14.352	58.754	28.071	-	12.894	12.784	14.201	21.547	10.224
9	2.871	8.778	8.906	15.269	75.996	27.290	-	13.079	13.339	14.616	21.588	9.978
10	2.711	10.972	8.565	18.719	86.681	26.299	-	13.079	13.376	14.997	21.670	10.048
11	2.711	13.522	8.430	24.359	91.170	25.316	-	12.820	13.153	15.958	22.124	10.719
12	2.871	20.627	9.147	42.623	99.788	24.552	-	12.562	13.079	17.637	21.959	10.968
13	2.953	22.467	10.368	78.029	109.544	23.583	-	12.562	12.857	18.868	21.918	10.542
14	3.281	43.516	13.102	77.411	118.652	22.664	-	12.783	12.857	19.228	21.918	10.259
15	3.281	72.109	20.561	72.550	118.002	22.249	-	12.820	13.340	18.947	21.876	10.188
16	2.953	85.762	33.857	59.801	109.559	21.959	-	12.857	15.036	18.468	20.077	9.978
17	2.898	98.426	39.321	40.368	91.811	21.876	-	13.079	15.610	18.389	11.058	9.978
18	2.871	95.651	24.029	33.536	83.271	21.547	-	13.079	14.730	16.891	9.951	10.188
19	2.737	89.999	15.363	28.427	86.013	20.607	-	12.857	14.351	15.918	13.349	10.188
20	2.898	83.939	12.896	25.659	85.572	18.073	-	12.820	14.276	15.571	15.074	9.978
21	3.088	71.822	11.796	23.296	82.504	17.399	-	12.783	14.012	15.456	15.494	9.943
22	3.088	57.462	11.579	19.439	80.434	17.046	-	12.562	13.675	14.958	15.417	9.943
23	2.925	31.854	11.040	16.657	79.908	16.538	-	12.489	13.079	14.578	14.542	9.943
24	2.925	19.163	10.365	16.275	66.821	16.382	-	12.196	12.342	14.050	13.228	9.908
25	3.172	8.215	10.829	12.535	60.647	16.034	-	11.723	12.196	13.712	12.562	9.699
26	3.674	5.520	17.048	13.378	57.541	16.772	-	11.651	11.941	13.413	12.269	9.664
27	3.561	7.305	49.231	14.579	54.922	17.596	-	11.579	11.651	13.042	12.196	9.699
28	3.364	8.499	88.046	13.566	53.323	17.793	-	11.111	11.398	12.269	11.977	9.908
29	3.364		69.084	11.510	50.601	18.269	-	10.790	11.290	11.651	11.941	9.908
30	3.561		58.056	10.722	46.888	18.348	-	10.541	10.861	11.183	11.905	9.629
31	3.759		52.734		43.378		-	10.506		13.233		9.146
Mean	3.238	31.831	21.668	29.508	68.022	23.697	-	12.342	12.610	14.335	18.555	10.254
Flow (MCM)	8.674	77.006	58.035	76.485	182.190	61.424	-	33.057	32.686	38.395	48.095	27.465
Maximum	4.754	98.426	88.046	78.029	118.652	39.882	-	13.154	15.610	19.228	30.221	11.687
Minimum	2.711	3.589	8.027	10.722	13.201	16.034	-	10.506	10.541	10.294	9.951	9.146
Runoff (mm)	0.174	1.547	1.166	1.537	3.660	1.234	-	0.664	0.657	0.771	0.966	0.552

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A **Year:** 2015
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.974	9.077	8.565	11.111	28.507	56.206	14.125	13.937	11.941	11.111	11.039	20.605
2	9.560	8.633	8.531	10.790	27.221	54.231	14.578	14.238	12.196	11.111	11.075	19.995
3	9.664	8.565	8.295	10.506	21.285	46.896	14.844	13.244	12.196	11.326	11.075	19.591
4	9.699	8.531	8.060	10.259	32.377	41.396	14.692	7.971	11.977	11.398	11.111	18.868
5	9.978	8.329	7.993	9.608	65.914	34.443	14.920	3.953	11.941	11.615	11.326	17.401
6	10.506	8.261	7.793	5.528	68.578	31.642	15.226	3.767	11.977	11.615	11.326	15.919
7	11.040	8.060	7.760	2.503	65.807	30.088	15.571	9.291	12.196	11.470	11.255	14.997
8	11.435	8.026	7.793	4.713	70.636	28.551	16.072	6.793	12.196	11.978	12.160	14.654
9	12.123	7.993	8.027	6.364	74.831	27.940	16.111	8.217	11.977	12.673	12.746	14.616
10	12.196	7.793	8.028	7.201	71.592	26.859	15.763	12.724	11.941	12.599	12.894	14.578
11	11.977	7.727	5.931	7.794	62.151	24.935	14.959	13.637	11.905	12.857	13.376	14.238
12	11.796	7.528	1.569	8.498	53.729	22.957	14.541	13.413	11.615	13.639	13.712	13.451
13	10.897	7.495	-	8.941	51.487	21.424	15.379	13.227	11.147	15.380	13.974	13.005
14	10.506	7.462	-	9.839	50.156	20.809	15.494	13.600	11.111	14.730	14.049	13.637
15	10.224	7.298	-	10.153	49.714	19.552	15.264	13.450	11.362	14.389	14.313	14.050
16	9.978	7.629	-	9.978	46.709	17.913	15.226	13.339	11.651	14.390	14.540	14.578
17	9.908	8.805	-	9.978	36.611	17.399	15.187	12.894	11.905	13.265	14.656	15.074
18	9.699	9.734	-	10.118	30.141	17.085	14.920	12.783	11.977	12.783	16.579	16.580
19	9.664	9.421	1.148	9.769	26.562	16.811	14.654	12.636	12.196	12.306	17.914	18.790
20	9.629	9.388	3.877	9.908	23.086	16.733	14.578	13.079	12.196	12.232	20.283	20.159
21	9.421	10.863	6.306	10.013	20.973	16.460	14.351	13.376	11.977	12.196	22.833	22.543
22	9.737	11.042	7.696	10.758	21.342	16.111	14.276	13.376	11.905	12.014	24.850	25.022
23	11.618	9.287	8.914	13.275	22.456	15.571	14.012	13.116	11.651	12.196	25.871	27.595
24	10.472	8.430	11.912	16.898	22.872	15.149	13.749	12.820	11.362	12.232	24.426	27.464
25	10.188	8.565	14.183	19.513	22.747	14.503	13.674	12.562	11.111	12.159	23.709	25.574
26	9.943	8.769	20.591	20.973	21.671	14.882	13.413	12.489	11.039	11.723	23.919	23.334
27	9.699	8.599	25.449	20.524	20.972	15.187	13.153	12.232	10.861	11.615	24.129	21.549
28	9.629	8.565	25.591	19.310	20.645	15.187	13.079	11.977	11.075	11.398	23.625	19.713
29	9.387		17.676	19.327	20.850	14.882	12.894	11.941	11.326	11.326	23.040	18.271
30	9.180		12.755	26.318	24.486	14.351	13.079	11.905	11.326	11.075	21.424	16.540
31	9.318		11.651		40.363		13.227	11.723		10.861		15.303
Mean	10.260	8.567	-	11.682	39.241	24.205	14.549	11.733	11.708	12.312	16.908	18.313
Flow (MCM)	27.479	20.726	-	30.280	105.103	62.740	38.967	31.424	30.347	32.976	43.825	49.048
Maximum	12.196	11.042	-	26.318	74.831	56.206	16.111	14.238	12.196	15.380	25.871	27.595
Minimum	8.974	7.298	-	2.503	20.645	14.351	12.894	3.767	10.861	10.861	11.039	13.005
Runoff (mm)	0.552	0.416	-	0.608	2.112	1.260	0.783	0.631	0.610	0.663	0.880	0.985

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A **Year:** 2016
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	14.616	22.415	6.053	13.227	67.321	22.581	17.399	7.793	10.790	4.935	4.794	7.827
2	13.937	21.795	4.242	13.939	61.625	21.670	17.085	7.993	10.790	5.890	6.046	8.295
3	12.931	20.200	7.418	15.959	55.930	21.218	16.811	8.060	10.825	6.682	6.234	8.769
4	12.525	18.152	9.563	17.007	53.723	20.605	16.733	8.261	11.039	7.200	6.425	8.803
5	12.196	16.889	9.759	17.359	57.594	19.995	16.499	8.362	11.075	7.462	6.425	8.498
6	11.723	16.460	4.821	17.478	60.235	19.671	16.421	8.803	11.111	7.300	6.234	7.827
7	11.651	16.111	3.684	17.991	61.361	19.591	16.150	9.146	11.326	5.864	6.202	7.495
8	11.615	15.571	2.329	18.349	60.338	19.309	15.879	9.595	11.398	4.051	6.202	7.233
9	11.434	15.340	5.828	18.909	56.332	18.987	15.763	9.699	11.579	3.816	6.234	7.004
10	11.651	15.879	8.165	21.393	52.084	18.667	15.264	9.908	11.398	4.135	6.425	6.940
11	11.941	16.851	9.284	26.918	48.883	18.349	14.920	10.013	11.326	5.179	6.457	6.746
12	12.196	18.960	9.734	32.320	46.354	18.070	14.654	10.471	11.111	6.077	6.457	6.713
13	12.306	25.176	10.471	35.619	43.378	17.991	14.616	10.790	11.039	6.202	6.361	6.681
14	12.783	33.507	11.076	38.452	40.163	17.714	14.578	11.075	10.754	6.202	5.763	6.489
15	13.228	39.836	11.579	52.783	36.217	17.399	14.351	11.362	10.259	6.171	5.545	6.457
16	14.315	38.479	11.687	81.992	34.251	17.085	14.238	11.615	9.908	5.950	5.951	6.425
17	15.495	35.940	11.905	86.342	33.662	16.772	13.824	11.687	9.421	5.700	6.457	6.202
18	16.344	33.529	11.977	86.066	33.030	16.421	14.012	11.832	9.111	5.452	6.907	5.138
19	16.577	30.180	12.232	86.728	32.491	15.918	14.238	11.434	8.871	5.268	6.907	0.705
20	17.439	27.206	12.525	95.113	31.152	15.918	14.012	11.326	8.803	5.452	6.521	0.080
21	19.156	25.277	12.820	142.718	29.603	16.460	13.749	11.111	8.565	5.700	6.425	0.080
22	23.338	21.841	13.116	141.048	28.988	16.967	13.674	11.039	8.329	5.950	6.298	0.080
23	24.764	19.834	13.413	132.075	28.071	16.811	13.413	10.269	8.261	6.171	6.714	0.080
24	26.994	19.309	13.674	117.424	27.420	16.733	13.116	6.733	8.027	6.234	7.200	0.080
25	30.577	18.947	13.749	114.716	27.247	16.460	12.746	5.220	7.793	6.457	7.397	0.361
26	27.128	18.230	13.974	104.848	26.686	16.266	11.978	8.072	7.760	6.649	7.102	2.341
27	15.405	16.812	14.012	82.345	26.213	16.733	11.256	8.906	7.694	6.489	7.463	2.871
28	13.191	14.501	13.974	69.691	25.274	17.085	9.911	9.630	7.201	6.425	7.727	3.008
29	15.197	7.540	13.712	67.841	24.341	17.399	8.465	10.189	6.395	6.234	7.760	3.969
30	19.077		13.450	69.364	23.919	17.635	8.027	10.506	5.300	5.714	7.760	5.988
31	21.672		13.376		23.499		7.793	10.754		3.218		6.651
Mean	16.239	22.095	10.439	61.201	40.561	18.083	13.922	9.731	9.575	5.814	6.546	5.027
Flow (MCM)	43.494	55.362	27.959	158.632	108.638	46.870	37.288	26.063	24.819	15.572	16.968	13.464
Maximum	30.577	39.836	14.012	142.718	67.321	22.581	17.399	11.832	11.579	7.462	7.760	8.803
Minimum	11.434	7.540	2.329	13.227	23.499	15.918	7.793	5.220	5.300	3.218	4.794	0.080
Runoff (mm)	0.874	1.112	0.562	3.187	2.183	0.942	0.749	0.524	0.499	0.313	0.341	0.271

Flow (cumecs)

Annual Statistics

Maximum: 142.718 Minimum: 0.080 Mean: 18.269 cumecs

Total: 577.721 MCM Runoff: 11.607 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A **Year:** 2017
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.504	6.234	5.428	12.783	53.189	58.462	19.309	14.012	12.783	10.791	12.566	13.750
2	12.854	6.234	4.575	12.489	70.821	52.433	19.914	14.049	12.452	9.909	14.697	12.784
3	11.744	7.687	4.426	11.977	78.003	49.519	20.238	14.200	11.652	8.941	17.206	11.760
4	6.965	14.922	4.342	11.832	82.832	47.031	20.198	13.787	10.615	8.667	26.380	11.326
5	5.148	11.738	6.213	14.947	86.798	45.725	19.631	13.674	8.840	9.008	78.124	10.790
6	4.934	10.366	8.401	32.998	104.401	44.811	19.028	13.450	8.531	8.803	86.932	10.294
7	4.753	8.908	9.879	62.372	138.792	43.281	18.747	13.563	8.362	8.262	66.906	10.259
8	4.723	7.894	12.273	94.491	-	41.007	18.907	14.427	8.565	7.496	58.004	10.471
9	4.723	7.694	12.861	96.297	-	38.154	18.747	14.313	8.837	6.810	51.648	10.541
10	4.814	7.266	10.128	77.344	-	35.664	18.987	14.012	9.043	6.681	43.823	10.933
11	5.269	6.844	8.197	66.812	-	34.115	19.268	13.712	8.871	6.489	36.867	12.124
12	4.814	5.826	7.496	56.124	-	32.762	19.228	13.376	8.803	6.425	33.665	12.746
13	4.693	5.452	6.782	41.281	-	30.310	18.588	12.894	8.565	6.234	30.799	12.820
14	4.485	5.207	5.332	36.033	-	28.769	17.517	12.783	8.362	6.171	27.556	12.857
15	4.279	5.024	5.920	33.527	-	27.723	17.124	12.525	8.531	5.981	23.551	13.005
16	4.279	5.238	6.714	33.861	156.925	26.902	17.085	12.232	8.599	5.887	19.677	12.562
17	4.485	5.669	7.397	42.202	149.974	25.572	17.085	11.977	8.803	5.545	18.111	12.232
18	4.664	5.950	7.695	40.586	133.885	24.046	17.045	11.977	8.803	5.638	17.399	11.941
19	4.515	6.171	9.150	36.676	125.418	23.290	16.811	12.232	8.633	5.422	16.733	11.687
20	4.485	6.266	10.756	34.844	110.775	22.872	16.694	12.562	9.045	4.964	15.879	11.543
21	4.515	6.681	10.542	35.724	98.482	22.166	16.150	13.116	10.904	4.545	15.264	10.685
22	4.723	6.940	10.224	54.979	94.019	20.973	15.571	13.675	13.455	4.397	14.958	9.251
23	4.934	7.004	9.943	37.575	98.757	19.995	15.226	14.012	14.465	3.990	14.958	8.599
24	4.994	7.635	9.664	27.004	100.971	19.389	14.920	14.238	14.276	4.665	15.226	8.262
25	5.176	10.624	9.525	24.765	98.474	19.430	14.616	14.012	13.712	5.238	15.494	7.793
26	5.237	12.565	10.189	22.543	92.846	20.279	14.351	13.749	13.116	6.210	15.494	7.495
27	5.421	10.906	10.862	20.525	86.073	21.054	14.313	13.674	12.526	8.676	15.264	7.233
28	5.483	7.841	13.200	21.547	80.114	20.605	14.276	13.450	12.014	10.366	15.226	7.004
29	5.700		20.887	22.225	74.192	19.874	14.049	13.376	11.905	10.968	15.187	6.940
30	5.982		15.254	32.110	70.527	18.908	14.012	13.116	11.579	10.825	14.807	6.746
31	6.361		13.005		65.448		14.012	12.857		11.005		6.681
Mean	5.537	7.742	9.267	38.282	-	31.171	17.150	13.388	10.488	7.258	28.280	10.423
Flow (MCM)	14.831	18.730	24.819	99.228	-	80.794	45.934	35.859	27.186	19.441	73.302	27.917
Maximum	12.854	14.922	20.887	96.297	-	58.462	20.238	14.427	14.465	11.005	86.932	13.750
Minimum	4.279	5.024	4.342	11.832	-	18.908	14.012	11.977	8.362	3.990	12.566	6.681
Runoff (mm)	0.298	0.376	0.499	1.994	-	1.623	0.923	0.720	0.546	0.391	1.473	0.561

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A **Year:** 2018
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.489	8.261	7.430	58.259	59.381	40.584	33.485	36.259	25.913	24.509	63.291	29.033
2	6.489	8.027	7.364	51.056	80.774	43.424	36.768	35.938	24.976	24.340	51.759	28.071
3	6.910	7.793	8.164	43.910	95.152	42.282	38.757	35.846	24.298	24.552	44.291	27.723
4	8.675	7.760	9.948	39.928	94.299	40.676	40.254	35.526	23.961	24.594	40.678	27.636
5	11.152	7.793	11.872	36.264	91.611	38.804	43.043	35.160	23.877	24.636	37.598	27.333
6	12.343	7.960	13.340	32.498	93.625	36.491	43.948	34.796	23.583	24.891	35.847	27.030
7	12.269	7.793	14.276	30.932	94.298	33.709	43.470	34.432	23.290	24.891	34.025	26.987
8	12.379	7.727	15.074	45.986	91.890	32.940	43.327	34.114	23.206	24.594	32.044	27.030
9	13.718	7.495	16.656	55.280	90.886	32.088	42.994	33.979	22.955	24.298	30.840	27.290
10	16.620	7.233	18.197	52.432	94.247	30.221	42.661	33.391	22.914	24.256	29.867	27.376
11	17.006	6.972	22.680	48.980	102.634	28.857	42.566	33.030	22.955	24.214	29.470	27.723
12	16.577	6.746	27.949	49.420	109.418	27.095	42.281	32.940	23.206	23.961	29.426	28.201
13	16.772	6.713	31.610	52.534	112.495	20.765	42.044	32.625	23.248	23.877	29.382	27.766
14	16.967	6.681	38.675	59.791	111.272	28.711	40.770	32.356	23.290	23.625	29.604	27.636
15	16.460	6.489	41.005	68.905	109.242	31.195	39.643	32.625	23.541	23.583	32.855	27.376
16	15.611	6.457	41.807	76.442	106.068	31.954	38.896	32.895	23.457	23.541	36.034	27.290
17	13.714	6.489	42.186	79.513	102.227	30.929	38.570	32.670	22.664	23.248	39.693	27.074
18	13.413	6.811	43.094	83.052	97.916	30.131	38.756	32.580	22.249	23.039	41.808	27.333
19	13.376	7.595	48.496	87.835	86.249	29.558	38.523	32.267	21.959	23.499	43.663	27.680
20	13.190	7.528	49.669	90.441	77.157	29.734	38.523	31.864	21.918	23.583	47.130	28.071
21	13.154	7.528	43.771	87.396	64.582	29.822	38.849	31.240	21.959	23.625	49.861	28.638
22	11.726	7.694	37.056	78.615	57.091	30.043	39.129	30.840	22.166	23.919	49.468	28.769
23	10.542	7.528	32.636	66.498	53.224	29.778	38.896	30.485	21.918	24.341	48.100	29.075
24	9.769	7.495	38.442	62.905	52.428	29.426	38.803	30.043	21.711	26.009	46.886	29.338
25	9.629	7.462	41.383	58.912	50.599	29.119	38.430	29.207	22.207	32.150	43.950	29.163
26	9.387	7.265	44.496	55.825	49.812	29.075	37.735	29.031	22.622	38.633	41.668	29.382
27	9.145	7.233	59.996	53.778	48.344	29.207	36.995	28.725	23.248	45.299	38.573	29.382
28	9.111	7.265	91.815	47.619	46.354	30.043	36.351	28.376	23.877	48.796	35.894	29.119
29	9.043		89.853	47.564	43.711	30.485	36.305	28.027	24.214	59.097	33.483	29.031
30	8.599		74.806	49.428	40.818	31.107	36.581	27.593	24.298	71.173	31.688	28.769
31	8.329		65.192		38.990		36.581	26.686		72.065		-
Mean	11.889	7.350	36.417	58.400	78.929	31.942	39.482	32.114	23.189	30.543	39.296	-
Flow (MCM)	31.844	17.781	97.540	151.373	211.403	82.793	105.748	86.015	60.107	81.807	101.855	-
Maximum	17.006	8.261	91.815	90.441	112.495	43.424	43.948	36.259	25.913	72.065	63.291	-
Minimum	6.489	6.457	7.364	30.932	38.990	20.765	33.485	26.686	21.711	23.039	29.382	-
Runoff (mm)	0.640	0.357	1.960	3.041	4.247	1.663	2.125	1.728	1.208	1.644	2.046	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1D17A
Station Name: Pangani River at Mnyuzi
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 5:13:53 S **Longitude:** 38:33:22 E **Elevation:** 280.0 metres **Area:** 49774.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	19.027	29.524	91.597	18.031	15.763	17.085	14.731	136.426	70.798
2	-	-	-	19.389	32.182	71.788	17.991	15.959	17.045	16.112	122.395	74.937
3	-	-	-	20.650	28.294	62.065	17.675	18.312	16.772	17.281	106.905	76.975
4	-	-	-	24.222	27.117	47.212	17.085	18.947	16.499	18.438	90.806	74.354
5	-	-	-	27.639	27.333	42.663	16.460	19.108	16.421	23.985	78.498	67.534
6	-	-	-	28.681	27.985	40.394	15.879	19.914	16.111	30.680	73.284	62.198
7	-	-	-	29.075	30.938	38.478	15.571	20.564	15.609	36.452	75.955	52.099
8	-	-	-	29.251	37.578	36.445	15.456	20.849	15.456	47.484	77.675	46.174
9	-	-	-	28.420	47.241	33.619	14.883	20.523	14.958	97.580	80.331	38.258
10	-	-	-	27.723	52.149	32.356	14.087	19.833	14.692	141.126	91.104	37.776
11	-	-	-	27.290	63.232	31.909	13.749	20.157	14.882	-	115.132	51.671
12	-	-	-	26.643	74.989	31.329	13.674	19.995	14.958	-	132.556	52.429
13	-	-	-	25.956	121.432	29.559	13.450	19.914	15.264	-	124.222	48.981
14	-	-	-	25.358	138.796	28.376	13.450	19.591	15.763	-	119.178	46.210
15	-	-	-	25.273	150.273	27.290	13.637	18.948	15.802	157.549	111.961	42.239
16	-	-	-	25.230	150.825	25.914	13.450	18.110	15.532	156.923	76.357	38.619
17	-	-	-	24.933	150.453	24.341	13.450	17.714	15.226	157.611	66.336	38.013
18	-	-	-	24.594	150.393	23.290	13.674	17.438	14.958	157.987	58.209	37.503
19	-	-	-	24.467	141.729	22.581	13.674	17.359	14.996	156.737	53.773	37.920
20	-	-	-	25.701	126.970	21.959	13.488	17.085	15.341	148.708	52.730	39.833
21	-	-	-	27.769	120.597	21.588	13.863	16.733	14.692	119.544	58.560	43.283
22	-	-	-	29.780	115.594	21.382	15.150	16.188	14.276	103.161	61.823	46.160
23	-	-	-	27.942	111.622	21.630	16.072	15.840	13.749	93.915	62.955	46.933
24	-	-	-	27.031	110.459	20.361	16.421	15.648	13.413	107.972	61.619	46.793
25	-	-	-	26.643	113.430	19.389	16.460	16.150	13.190	144.735	57.795	52.986
26	-	-	-	26.299	119.006	18.987	16.421	16.733	13.376	-	55.073	59.220
27	-	-	-	25.913	125.108	18.667	16.188	17.085	13.450	-	52.379	62.698
28	-	-	-	25.273	123.029	18.349	16.111	17.281	13.712	-	48.751	62.956
29	-		-	24.636	114.719	18.070	15.840	16.889	13.974	-	42.431	65.859
30	-		-	24.981	108.842	18.031	15.571	17.045	14.087	155.490	59.847	70.693
31	-		-		100.580		15.571	17.085		147.124		38.814
Mean	-	-	-	25.860	92.659	31.987	15.241	18.025	15.043	-	80.169	52.610
Flow (MCM)	-	-	-	67.028	248.177	82.911	40.823	48.277	38.991	-	207.798	140.911
Maximum	-	-	-	29.780	150.825	91.597	18.031	20.849	17.085	-	136.426	76.975
Minimum	-	-	-	19.027	27.117	18.031	13.450	15.648	13.190	-	42.431	37.503
Runoff (mm)	-	-	-	1.347	4.986	1.666	0.820	0.970	0.783	-	4.175	2.831

Flow (cumecs)

Annual Statistics

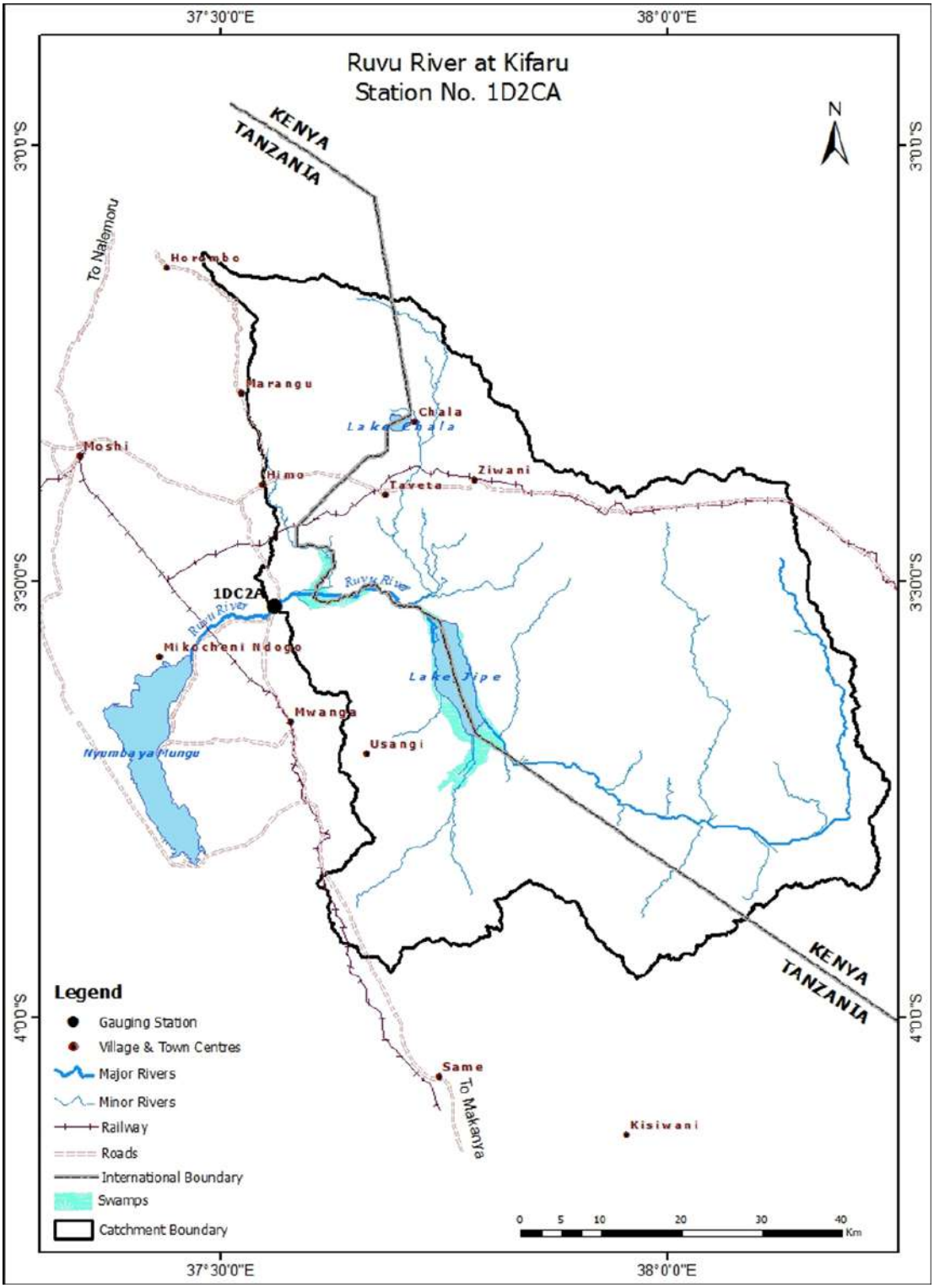
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ruvu River at Kifaru				
Station No: 1DC2A			Established: 27/11/ 1959	
Coordinates:			Altitude (m.a.m.s.l): 704	
Lat: -3.5286	Long: -3.5286		Catchment Area (km²): 4,447	
Description of the Catchment:				
Bush land, thicket, and very heavy forest Upstream on the Kenya side.				
Station Details				
1. Staff Gauges	Range: 0 – 4m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure Type Orpheus mini		Date installed: 2013	
3. Benchmark	Bolt embedded in concrete on the solid rock above 3-4m gauges			
BM Assumed Datum: 4.154m		N.M.M.S.L:	TBM: –	
4. Control	Open channel downstream gauges			
5. Access	Accessible throughout the year, the station is located 10km from the Maguzoni village (Main road of Hale to Tanga)			
Records	Period		Quality	
Water Level:	27/2/2010 –31/12/2019		1.2.2	
Discharge:	27/2/2010 –31/12/2019		2.2.2	
Extremes:	Max. Recorded	58.55m³/sec	On 28/04/2018	WL 3.73m
	Min. Recorded	1.2m³/sec	On 20/02/2012	WL 0.64m
Remarks				
Validity of Rating Curve on Gauge Height is extended to 3.730m on the following dates: 12/07/2002 to 31/12/2019				


Ruvu River at Kifaru
Station No. 1D2CA
37°30'0"E
38°0'0"E
3°0'0"S
3°30'0"S
4°0'0"S
N
KENYA
TANZANIA
To Najemoru
Horombo
Marangu
Chala
Lake Chala
Moshi
Himo
Taveta
Ziwani
1DC2A
Ruvu River
Mikocheni Ndogo
Lake Jipe
Mwanga
Usangi
Nyumbaya Mungu
Same
To Makanya
Kisiwani
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
International Boundary
Swamps
Catchment Boundary
0 5 10 20 30 40
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2010

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12.875	6.533	2.203	15.367	7.121	4.251	3.661	3.509	3.143	3.003	2.299	2.858
2	12.638	6.262	2.122	15.347	8.226	3.946	3.661	3.509	3.143	2.994	2.361	2.799
3	11.315	6.011	2.107	15.204	8.684	3.895	3.651	3.518	3.143	2.943	2.888	2.733
4	11.400	5.560	2.064	14.690	8.223	3.895	3.584	3.575	3.152	2.934	3.539	2.667
5	10.635	5.114	2.057	12.063	7.688	3.895	3.518	3.584	3.206	2.934	3.518	2.610
6	9.271	4.832	2.057	9.098	7.407	3.885	3.509	3.584	3.215	2.926	3.416	2.602
7	9.065	4.623	2.057	7.975	7.078	3.826	3.509	3.584	3.215	2.866	3.215	2.610
8	9.081	4.304	2.057	7.978	6.664	3.816	3.509	3.584	3.206	2.807	3.012	2.667
9	9.189	3.986	2.050	9.434	6.250	3.816	3.509	3.575	3.152	2.799	2.866	2.724
10	9.314	3.739	2.008	11.024	5.874	3.816	3.509	3.518	3.143	2.791	2.741	2.716
11	9.585	3.528	2.001	11.858	5.655	3.816	3.509	3.509	3.143	2.733	2.675	2.643
12	10.581	3.434	1.994	12.415	5.523	3.816	3.528	3.509	3.143	2.675	2.667	2.817
13	10.747	3.369	1.945	11.948	5.802	3.816	3.651	3.509	3.143	2.659	2.667	3.100
14	10.884	3.351	1.897	10.890	6.444	3.777	3.729	3.509	3.143	2.610	2.667	3.143
15	11.860	3.287	1.890	9.303	7.024	3.547	3.729	3.509	3.143	2.594	2.675	3.143
16	12.876	3.224	1.890	9.004	7.159	3.509	3.671	3.509	3.143	2.546	2.749	3.143
17	12.968	3.206	1.890	8.564	6.930	3.509	3.661	3.509	3.143	2.538	2.935	3.161
18	12.635	3.143	1.890	8.033	6.341	3.509	3.661	3.499	3.143	2.538	3.135	3.278
19	12.561	3.082	1.890	7.717	5.657	3.509	3.661	3.425	3.143	2.538	3.269	3.351
20	12.415	3.073	1.870	7.228	5.047	3.509	3.651	3.296	3.143	2.538	3.296	3.369
21	12.090	3.064	1.751	6.876	4.754	3.509	3.584	3.206	3.143	2.538	3.351	3.434
22	11.435	3.003	2.886	6.533	4.634	3.509	3.518	3.090	3.135	2.531	3.351	3.499
23	10.815	2.943	12.476	6.098	4.462	3.509	3.509	3.073	3.082	2.483	3.296	3.509
24	10.629	2.934	16.626	5.923	4.251	3.509	3.509	3.073	3.073	2.475	3.287	3.509
25	10.447	2.926	18.910	5.691	4.230	3.509	3.509	3.073	3.064	2.475	3.278	3.509
26	9.474	2.866	21.563	5.642	4.293	3.518	3.509	3.082	3.012	2.468	3.215	3.509
27	9.299	2.766	22.616	5.582	4.303	3.584	3.509	3.135	3.003	2.421	3.143	3.472
28	9.189	2.477	21.976	5.703	4.303	3.651	3.509	3.143	3.003	2.406	3.064	3.251
29	8.812		19.690	6.162	4.303	3.661	3.509	3.143	3.003	2.359	2.943	3.197
30	7.194		17.159	6.717	4.303	3.661	3.509	3.143	3.003	2.352	2.875	3.082
31	6.690		15.573		4.303		3.509	3.143		2.344		3.003
Mean	10.580	3.809	6.812	9.202	5.901	3.699	3.573	3.375	3.122	2.639	3.013	3.068
Flow (MCM)	28.337	9.214	18.245	23.852	15.806	9.589	9.569	9.040	8.094	7.069	7.810	8.218
Maximum	12.968	6.533	22.616	15.367	8.684	4.251	3.729	3.584	3.215	3.003	3.539	3.509
Minimum	6.690	2.477	1.751	5.582	4.230	3.509	3.509	3.073	3.003	2.344	2.299	2.602
Runoff (mm)	6.372	2.072	4.103	5.364	3.554	2.156	2.152	2.033	1.820	1.590	1.756	1.848

Flow (cumecs)

Annual Statistics

Maximum: 22.616 Minimum: 1.751 Mean: 4.899 cumecs

Total: 154.510 MCM Runoff: 34.745 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2011

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.934	-	1.890	1.976	2.546	2.594	2.001	1.890	2.057	2.115	2.232	11.036
2	2.866	-	1.890	1.884	2.538	2.491	2.001	1.890	2.057	2.115	2.224	10.934
3	2.783	-	1.890	1.843	2.531	2.475	2.001	1.897	2.057	2.115	2.180	11.122
4	2.611	-	1.890	1.836	2.475	2.468	2.001	1.945	2.057	2.115	2.173	10.987
5	2.491	-	1.890	1.823	2.406	2.413	2.001	1.994	2.057	2.107	2.173	9.813
6	2.475	-	1.890	1.744	2.299	2.359	1.994	2.001	2.057	2.050	2.173	8.581
7	2.475	-	1.890	1.731	2.232	2.344	1.952	1.994	2.057	1.959	2.173	8.091
8	2.468	-	1.890	1.731	2.180	2.299	1.945	1.959	2.057	1.945	2.173	7.632
9	2.421	-	1.890	1.731	2.173	2.291	1.945	1.994	2.064	1.952	2.173	7.146
10	2.406	-	1.890	1.731	2.195	2.291	1.945	2.001	2.107	2.001	2.173	6.996
11	2.352	-	1.890	1.731	2.384	2.284	1.945	2.001	2.115	2.050	2.173	6.877
12	2.299	-	1.890	1.731	2.776	2.232	1.945	2.001	2.115	2.057	2.173	6.139
13	2.284	-	1.890	1.731	3.047	2.180	1.938	2.001	2.115	2.093	2.187	5.382
14	2.232	-	1.890	1.791	3.143	2.165	1.897	2.001	2.115	2.345	2.284	5.252
15	2.180	-	1.904	2.160	3.197	2.122	1.890	2.001	2.115	2.563	2.360	5.080
16	2.173	-	1.994	2.137	3.143	2.115	1.890	2.001	2.115	2.539	2.476	4.821
17	2.165	-	2.050	1.891	3.082	2.107	1.890	2.001	2.115	2.483	2.586	4.569
18	2.115	-	2.072	1.932	3.073	2.064	1.890	2.001	2.115	2.475	2.602	4.387
19	2.050	-	2.173	1.945	3.073	2.057	1.890	2.001	2.115	2.483	2.602	4.210
20	1.945	-	2.276	1.945	3.073	2.057	1.890	2.001	2.115	2.531	2.602	3.986
21	1.850	-	2.291	1.938	3.073	2.057	1.890	2.001	2.115	2.538	2.594	3.807
22	1.850	-	2.291	1.897	3.064	1.950	1.890	2.001	2.115	2.538	2.546	3.604
23	1.938	-	2.306	1.897	3.003	1.434	1.890	2.008	2.115	2.531	2.838	3.509
24	1.994	-	2.413	1.938	2.943	1.902	1.890	2.050	2.115	2.483	4.988	3.434
25	1.994	-	2.539	1.945	2.934	2.001	1.890	2.057	2.115	2.475	6.653	3.360
26	1.952	-	2.659	1.945	2.934	2.001	1.890	2.057	2.115	2.460	8.619	3.287
27	1.945	-	2.741	1.988	2.917	2.001	1.890	2.057	2.115	2.367	9.553	3.215
28	1.938	1.890	2.866	2.293	2.799	2.001	1.890	2.057	2.115	2.352	10.265	3.143
29	1.897		3.012	2.611	2.683	2.001	1.890	2.057	2.115	2.344	11.158	3.073
30	1.890		3.109	2.602	2.667	2.001	1.890	2.057	2.115	2.291	11.260	3.012
31	1.890		2.584		2.659		1.890	2.057		2.239		2.994
Mean	2.221	-	2.185	1.936	2.750	2.159	1.924	2.001	2.097	2.281	3.879	5.790
Flow (MCM)	5.950	-	5.853	5.018	7.365	5.595	5.154	5.360	5.436	6.110	10.054	15.507
Maximum	2.934	-	3.109	2.611	3.197	2.594	2.001	2.057	2.115	2.563	11.260	11.122
Minimum	1.850	-	1.890	1.731	2.173	1.434	1.890	1.890	2.057	1.945	2.173	2.994
Runoff (mm)	1.338	-	1.316	1.128	1.656	1.258	1.159	1.205	1.222	1.374	2.261	3.487

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2012

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.951	1.542	1.434	1.482	4.282	4.558	3.777	3.003	3.012	2.475	2.136	2.791
2	2.994	1.530	1.434	1.488	4.076	4.387	3.661	3.003	2.994	2.475	2.284	2.733
3	3.003	1.530	1.434	1.530	3.985	4.230	3.518	3.003	2.943	2.475	2.406	2.675
4	2.994	1.524	1.440	1.604	3.975	4.137	3.434	3.003	2.934	2.475	2.507	2.659
5	2.926	1.488	1.476	1.910	4.164	4.056	3.360	3.003	2.926	2.475	2.792	2.719
6	2.816	1.482	1.482	2.726	5.388	3.975	3.278	3.003	2.866	2.475	3.047	3.569
7	2.799	1.488	1.488	3.599	5.776	3.895	3.161	2.994	2.807	2.468	3.135	4.839
8	2.799	1.530	1.524	4.315	5.559	3.816	3.135	2.934	2.799	2.421	3.143	5.241
9	2.791	1.573	1.530	5.701	5.287	3.738	3.082	2.875	2.791	2.413	3.244	5.206
10	2.724	1.579	1.524	4.849	5.080	3.671	3.073	2.866	2.741	2.406	3.919	4.723
11	2.603	1.579	1.482	4.356	4.876	3.651	3.073	2.866	2.733	2.352	4.378	4.160
12	2.483	1.567	1.446	4.282	5.034	3.594	3.073	2.866	2.733	2.299	4.678	3.759
13	2.406	1.482	1.476	4.128	5.464	3.584	3.073	2.866	2.733	2.291	4.744	3.528
14	2.299	1.399	1.482	3.876	6.039	3.575	3.073	2.866	2.733	2.291	5.348	3.425
15	2.224	1.387	1.488	3.501	7.165	3.509	3.073	2.866	2.724	2.291	5.838	3.278
16	2.129	1.387	1.524	3.100	8.211	3.443	3.073	2.858	2.675	2.284	5.667	3.099
17	2.107	1.387	1.530	2.875	9.067	3.425	3.073	2.841	2.667	2.239	5.417	3.064
18	2.057	1.387	1.530	2.783	9.158	3.369	3.073	3.065	2.659	2.232	4.901	3.003
19	2.008	1.382	1.530	3.013	8.912	3.360	3.073	3.260	2.610	2.232	4.378	2.926
20	1.994	1.347	1.530	3.315	8.459	3.351	3.073	3.287	2.602	2.232	4.251	2.816
21	1.945	1.342	1.530	3.351	8.004	3.296	3.073	3.305	2.602	2.232	3.877	2.791
22	1.891	1.342	1.530	3.458	7.618	3.324	3.073	3.406	2.594	2.224	3.380	2.733
23	1.837	1.342	1.530	4.660	7.079	3.585	3.064	3.369	2.546	2.180	3.013	2.667
24	1.790	1.359	1.530	6.041	6.494	3.856	3.012	3.360	2.538	2.173	2.750	2.627
25	1.777	1.464	1.524	6.211	6.173	3.905	3.003	3.351	2.538	2.173	2.619	2.733
26	1.738	1.470	1.488	5.924	6.010	3.945	3.003	3.278	2.538	2.173	2.602	2.849
27	1.725	1.405	1.482	5.464	5.691	3.797	3.003	3.161	2.538	2.173	2.643	2.866
28	1.686	1.428	1.482	5.023	5.535	3.547	3.003	3.135	2.531	2.173	2.884	2.962
29	1.679	1.434	1.482	4.722	5.276	3.528	3.003	3.082	2.483	2.173	2.866	3.657
30	1.673		1.482	4.419	5.000	3.661	3.003	3.073	2.475	2.165	2.807	4.368
31	1.623		1.482		4.743		3.003	3.064		2.122		4.494
Mean	2.273	1.454	1.494	3.790	6.051	3.726	3.144	3.062	2.702	2.299	3.588	3.386
Flow (MCM)	6.089	3.642	4.002	9.824	16.207	9.657	8.420	8.201	7.004	6.157	9.301	9.068
Maximum	3.003	1.579	1.530	6.211	9.158	4.558	3.777	3.406	3.012	2.475	5.838	5.241
Minimum	1.623	1.342	1.434	1.482	3.975	3.296	3.003	2.841	2.475	2.122	2.136	2.627
Runoff (mm)	1.369	0.819	0.900	2.209	3.645	2.172	1.893	1.844	1.575	1.385	2.092	2.039

Flow (cumecs)

Annual Statistics

Maximum: 9.158 Minimum: 1.342 Mean: 3.081 cumecs

Total: 97.419 MCM Runoff: 21.907 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2013

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.912	2.866	2.413	5.264	13.610	6.060	4.230	3.584	3.360	3.012	2.475	2.799
2	6.935	2.866	2.344	5.439	13.343	5.849	4.220	3.661	3.360	2.994	2.475	2.799
3	8.343	2.866	2.246	5.463	13.211	5.643	4.209	3.738	3.360	2.943	2.475	2.799
4	8.912	2.858	2.232	5.560	13.363	5.381	4.137	3.826	3.360	2.934	2.475	2.791
5	9.190	2.807	2.232	6.253	13.725	5.183	4.056	3.965	3.351	2.934	2.475	2.733
6	9.393	2.824	2.232	7.123	13.782	5.000	3.985	4.056	3.296	2.934	2.475	2.683
7	9.299	2.995	2.232	8.182	13.744	4.832	3.965	4.127	3.287	2.934	2.475	2.733
8	9.050	3.153	2.232	9.052	13.476	4.721	3.905	4.137	3.287	2.934	2.475	2.799
9	8.684	3.361	2.224	10.009	13.174	4.569	3.885	4.137	3.278	2.926	2.475	3.579
10	8.237	3.566	2.195	11.973	12.875	4.494	3.826	4.127	3.224	2.866	2.475	9.847
11	7.859	3.661	2.291	12.969	12.561	4.536	3.807	4.066	3.215	2.807	2.475	18.356
12	7.408	3.729	2.390	12.764	12.162	4.472	3.738	4.056	3.215	2.791	2.468	19.587
13	6.877	3.729	2.352	13.498	11.875	4.387	3.661	4.046	3.215	2.733	2.421	18.629
14	6.365	3.671	2.299	14.709	11.715	4.314	3.594	3.975	3.215	2.675	2.413	17.607
15	5.949	3.642	2.284	16.815	11.557	4.303	3.584	3.895	3.215	2.667	2.413	16.621
16	5.583	3.509	2.239	18.815	11.295	4.303	3.575	3.826	3.215	2.667	2.413	14.414
17	5.357	3.369	2.224	20.693	11.002	4.303	3.518	3.816	3.206	2.667	2.413	13.119
18	5.091	3.287	2.202	21.556	10.613	4.293	3.509	3.807	3.152	2.667	2.413	12.490
19	4.799	3.215	2.376	21.775	10.182	4.230	3.509	3.748	3.143	2.667	2.413	11.699
20	4.399	3.143	2.717	21.580	9.600	4.230	3.499	3.738	3.143	2.667	2.413	12.289
21	4.077	3.073	3.004	20.954	9.174	4.293	3.443	3.729	3.143	2.659	2.413	12.006
22	3.886	2.995	3.288	19.797	8.714	4.303	3.434	3.671	3.135	2.602	2.445	10.156
23	3.661	2.866	3.665	18.968	8.340	4.303	3.434	3.661	3.082	2.546	2.676	9.316
24	3.444	2.741	4.432	18.048	7.989	4.303	3.434	3.651	3.073	2.538	2.960	8.730
25	3.287	2.659	4.749	16.936	7.646	4.303	3.434	3.594	3.073	2.538	3.003	8.325
26	3.152	2.554	5.954	16.173	7.297	4.303	3.434	3.584	3.073	2.538	2.994	7.846
27	3.073	2.531	6.199	15.409	6.929	4.303	3.434	3.575	3.073	2.531	2.934	7.283
28	3.003	2.475	5.912	14.863	6.862	4.303	3.434	3.518	3.073	2.483	2.875	7.146
29	2.943		5.382	14.268	6.756	4.303	3.443	3.499	3.073	2.475	2.858	6.757
30	2.926		4.978	13.821	6.559	4.293	3.499	3.434	3.064	2.475	2.807	6.276
31	2.875		5.023		6.339		3.518	3.369		2.475		5.948
Mean	5.773	3.108	3.179	13.958	10.628	4.604	3.689	3.794	3.199	2.719	2.566	9.037
Flow (MCM)	15.463	7.518	8.514	36.178	28.466	11.933	9.881	10.162	8.291	7.282	6.651	24.206
Maximum	9.393	3.729	6.199	21.775	13.782	6.060	4.230	4.137	3.360	3.012	3.003	19.587
Minimum	2.875	2.475	2.195	5.264	6.339	4.230	3.434	3.369	3.064	2.475	2.413	2.683
Runoff (mm)	3.477	1.691	1.915	8.135	6.401	2.683	2.222	2.285	1.864	1.638	1.496	5.443

Flow (cumecs)

Annual Statistics

Maximum: 21.775 Minimum: 2.195 Mean: 5.521 cumecs

Total: 174.112 MCM Runoff: 39.153 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2014

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.655	2.475	6.876	10.815	7.310	6.559	4.645	3.816	3.305	3.509	3.143	5.563
2	5.392	2.468	6.455	10.985	7.091	6.339	4.569	3.895	3.287	3.499	3.161	7.195
3	5.264	2.406	6.048	10.883	6.875	6.073	4.547	3.965	3.287	3.443	3.287	8.091
4	5.091	2.291	5.655	10.747	6.729	5.948	4.472	3.975	3.287	3.481	3.406	8.105
5	4.921	2.180	5.299	10.612	7.038	5.849	4.398	3.975	3.296	3.808	3.360	7.974
6	4.809	2.136	5.091	10.429	7.806	5.751	4.387	3.975	3.360	4.066	3.287	7.745
7	4.645	2.278	4.932	9.985	8.948	5.642	4.387	3.975	3.425	3.915	3.224	7.505
8	4.472	2.719	4.932	9.695	10.118	5.475	4.377	3.965	3.434	3.816	3.206	7.759
9	4.314	3.155	5.057	9.409	10.714	5.369	4.314	3.905	3.434	3.729	3.152	8.061
10	4.220	3.634	5.000	8.958	11.019	5.287	4.293	3.895	3.425	3.594	3.143	8.090
11	4.137	3.986	4.888	8.608	11.191	5.275	4.230	3.895	3.369	3.518	3.152	7.960
12	4.046	4.454	4.613	8.473	10.748	5.264	4.209	3.895	3.351	3.518	3.206	7.646
13	3.905	5.314	4.149	8.443	10.215	5.194	4.148	3.895	3.352	3.575	3.215	7.324
14	3.816	5.925	3.768	8.354	9.695	5.183	4.137	3.895	3.730	3.584	3.215	7.091
15	3.748	6.275	3.594	8.339	9.175	5.183	4.127	3.895	4.087	3.584	3.215	6.875
16	3.719	6.173	3.509	8.310	8.579	5.171	4.066	3.895	4.127	3.584	3.206	6.663
17	3.594	6.212	3.434	8.134	8.018	5.102	4.056	3.895	4.066	3.584	3.161	6.455
18	3.500	6.624	3.360	8.105	7.674	5.091	4.046	3.895	4.056	3.575	3.206	6.224
19	3.369	7.013	3.287	8.105	7.533	5.091	3.985	3.895	4.046	3.509	3.224	5.814
20	3.287	8.079	3.206	8.105	7.421	5.079	3.975	3.895	3.985	3.434	3.278	5.196
21	3.215	8.473	3.082	8.105	7.324	5.000	3.965	3.885	3.975	3.369	3.287	4.668
22	3.152	8.774	3.012	8.090	7.352	4.910	3.905	3.826	3.965	3.360	3.278	4.325
23	3.126	8.805	3.003	7.988	7.632	4.843	3.895	3.816	3.905	3.351	3.224	4.138
24	3.012	8.683	3.168	7.888	7.816	4.899	3.885	3.807	3.885	3.296	3.215	3.985
25	2.934	8.458	4.393	7.873	7.660	4.910	3.826	3.738	3.816	3.287	3.215	3.895
26	2.866	8.178	5.911	7.859	7.533	4.899	3.816	3.651	3.738	3.278	3.215	3.826
27	2.799	7.674	7.334	7.759	7.407	4.832	3.816	3.528	3.661	3.224	3.215	3.797
28	2.724	7.297	8.795	7.659	7.200	4.820	3.807	3.509	3.584	3.206	3.215	3.652
29	2.611		9.425	7.631	7.010	4.809	3.748	3.509	3.518	3.152	3.307	3.444
30	2.539		9.823	7.519	6.956	4.732	3.738	3.499	3.509	3.143	4.067	3.305
31	2.483		10.248		6.769		3.748	3.425		3.143		3.296
Mean	3.786	5.434	5.205	8.796	8.211	5.286	4.114	3.822	3.642	3.488	3.256	5.989
Flow (MCM)	10.140	13.145	13.940	22.798	21.994	13.701	11.018	10.238	9.441	9.343	8.440	16.042
Maximum	5.655	8.805	10.248	10.985	11.191	6.559	4.645	3.975	4.127	4.066	4.067	8.105
Minimum	2.483	2.136	3.003	7.519	6.729	4.732	3.738	3.425	3.287	3.143	3.143	3.296
Runoff (mm)	2.280	2.956	3.135	5.127	4.946	3.081	2.478	2.302	2.123	2.101	1.898	3.607

Flow (cumecs)

Annual Statistics

Maximum: 11.191 Minimum: 2.136 Mean: 5.086 cumecs

Total: 160.384 MCM Runoff: 36.066 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2015

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.342	2.173	1.945	2.008	2.724	3.613	3.509	3.443	3.296	2.866	2.807	3.935
2	3.287	2.165	1.945	2.057	2.733	3.807	3.509	3.499	3.278	2.866	2.799	3.690
3	3.180	2.122	1.945	2.115	2.741	4.027	3.509	3.509	3.215	2.866	2.799	3.594
4	2.901	2.107	1.945	2.173	2.842	4.583	3.509	3.518	3.152	2.866	2.799	3.566
5	2.807	2.064	1.945	2.232	3.207	5.289	3.499	3.584	3.135	2.858	2.799	3.434
6	2.799	2.057	1.945	2.291	3.538	5.535	3.453	3.651	3.082	2.807	2.816	3.296
7	2.791	2.050	1.945	2.352	3.642	5.558	3.499	3.680	3.073	2.799	2.934	3.215
8	2.741	2.001	1.945	2.445	4.006	5.546	3.509	3.807	3.073	2.799	3.091	3.152
9	2.724	1.952	1.938	2.751	4.137	5.487	3.509	3.885	3.064	2.799	3.380	3.152
10	2.667	1.945	1.897	3.180	4.209	5.546	3.509	3.895	3.012	2.799	3.768	3.206
11	2.610	1.945	1.890	3.416	4.230	5.546	3.509	3.895	3.003	2.799	3.885	3.206
12	2.594	1.938	1.884	3.499	4.282	5.463	3.509	3.915	3.003	2.799	3.895	3.143
13	2.546	1.897	1.843	3.499	4.220	5.369	3.518	4.056	3.003	2.799	3.895	3.090
14	2.531	1.897	1.836	3.425	4.148	5.252	3.584	4.199	2.994	2.799	3.876	3.152
15	2.475	1.938	1.836	3.296	4.243	5.000	3.651	4.220	2.943	2.807	3.817	3.260
16	2.413	1.945	1.836	3.215	4.912	4.743	3.661	4.220	2.934	2.858	4.679	3.206
17	2.352	1.945	1.836	3.143	5.148	4.558	3.661	4.220	2.934	2.866	8.205	3.209
18	2.299	1.945	1.836	3.073	5.091	4.398	3.661	4.209	2.934	2.866	8.989	4.098
19	2.299	1.945	1.836	2.995	4.989	4.314	3.661	4.148	2.934	2.866	9.473	5.328
20	2.344	1.945	1.836	2.875	4.821	4.282	3.661	4.137	2.934	2.866	10.132	5.776
21	2.352	1.952	1.830	2.807	4.645	4.148	3.661	4.137	2.926	2.866	10.231	5.643
22	2.352	1.994	1.790	2.791	4.462	4.046	3.661	4.117	2.875	2.866	9.507	5.369
23	2.344	2.001	1.783	2.733	4.231	3.905	3.651	3.985	2.875	2.866	8.345	5.091
24	2.299	1.994	1.797	2.667	4.066	3.816	3.594	3.895	2.926	2.866	7.232	4.843
25	2.291	1.952	1.891	2.610	3.975	3.748	3.633	3.816	2.934	2.866	6.380	4.721
26	2.284	1.945	1.987	2.610	3.886	3.729	3.916	3.738	2.926	2.866	5.718	4.580
27	2.239	1.945	2.001	2.659	3.748	3.651	3.856	3.661	2.875	2.866	4.968	4.558
28	2.232	1.945	2.001	2.667	3.661	3.528	3.547	3.575	2.866	2.866	4.580	4.558
29	2.224		2.001	2.667	3.594	3.509	3.443	3.972	2.866	2.866	4.356	4.547
30	2.180		2.001	2.675	3.584	3.509	3.434	6.796	2.866	2.866	4.026	4.472
31	2.173		2.001		3.584		3.434	3.877		2.858		4.398
Mean	2.538	1.990	1.902	2.764	3.977	4.517	3.578	3.976	2.998	2.844	5.206	4.016
Flow (MCM)	6.797	4.813	5.093	7.165	10.653	11.708	9.583	10.650	7.770	7.618	13.494	10.756
Maximum	3.342	2.173	2.001	3.499	5.148	5.558	3.916	6.796	3.296	2.866	10.231	5.776
Minimum	2.173	1.897	1.783	2.008	2.724	3.509	3.434	3.443	2.866	2.799	2.799	3.090
Runoff (mm)	1.529	1.082	1.145	1.611	2.396	2.633	2.155	2.395	1.747	1.713	3.034	2.419

Flow (cumecs)

Annual Statistics

Maximum: 10.231 Minimum: 1.783 Mean: 3.359 cumecs

Total: 105.923 MCM Runoff: 23.819 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2016

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.366	2.602	2.483	2.239	18.605	6.249	4.293	3.594	3.296	2.799	2.602	5.126
2	4.210	2.602	2.475	2.299	18.247	6.035	4.230	3.584	3.287	2.807	2.563	4.755
3	3.996	2.594	2.475	2.406	17.826	5.776	4.220	3.575	3.287	2.858	2.352	4.483
4	3.886	2.546	2.468	2.491	17.936	5.654	4.209	3.518	3.287	2.858	2.468	4.303
5	3.738	2.538	2.421	2.693	17.982	5.546	4.137	3.509	3.287	2.807	2.547	4.158
6	3.594	2.523	2.413	3.057	16.554	5.357	4.056	3.509	3.287	2.799	2.352	4.137
7	3.509	2.421	2.413	3.352	16.026	5.114	3.985	3.509	3.278	2.799	3.152	4.057
8	3.425	2.367	2.413	3.585	15.715	4.989	3.975	3.509	3.224	2.799	8.180	3.586
9	3.296	2.406	2.413	3.847	15.551	4.832	3.975	3.509	3.215	2.799	8.749	3.509
10	3.206	2.413	2.413	4.305	15.449	4.732	3.965	3.509	3.215	2.799	7.412	3.509
11	3.082	2.421	2.406	4.811	14.843	4.645	3.905	3.509	3.206	2.799	7.132	3.509
12	3.003	2.483	2.359	5.265	13.939	4.569	3.895	3.509	3.152	2.799	6.664	3.490
13	2.934	2.594	2.344	5.643	13.063	4.558	3.895	3.509	3.143	2.799	6.212	3.379
14	2.866	2.659	2.299	5.936	12.434	4.536	3.895	3.509	3.143	2.791	6.148	3.333
15	2.799	2.659	2.291	6.148	11.840	4.387	3.895	3.509	3.135	2.741	6.148	3.153
16	2.733	2.610	2.284	6.378	11.192	4.230	3.905	3.509	3.082	2.733	6.148	3.021
17	2.667	2.610	2.239	6.756	10.731	4.137	3.975	3.509	3.064	2.733	6.148	3.003
18	2.610	2.659	2.232	7.078	10.231	4.066	4.046	3.509	3.012	2.733	6.148	3.003
19	2.610	2.667	2.232	7.296	9.839	4.046	4.056	3.509	3.003	2.733	6.148	3.003
20	2.659	2.667	2.224	7.407	9.520	3.985	4.056	3.509	2.994	2.733	6.148	3.003
21	2.667	2.667	2.180	7.421	8.974	3.985	4.056	3.509	2.943	2.733	6.148	3.003
22	2.659	2.667	2.173	7.621	8.593	4.046	4.046	3.499	2.934	2.733	6.148	3.003
23	2.610	2.667	2.173	9.191	8.340	4.066	3.975	3.434	2.926	2.724	5.794	3.003
24	2.602	2.667	2.165	11.787	8.105	4.137	3.905	3.148	2.875	2.675	3.911	3.003
25	2.594	2.667	2.122	14.222	7.859	4.209	3.895	2.103	2.866	2.667	4.201	3.003
26	2.546	2.659	2.115	16.410	7.547	4.230	3.885	3.139	2.866	2.667	4.303	3.003
27	2.538	2.602	2.115	17.783	7.310	4.293	3.826	3.360	2.866	2.667	4.303	3.003
28	2.538	2.546	2.115	18.247	7.091	4.303	3.807	3.360	2.866	2.667	4.523	3.003
29	2.538	2.531	2.122	18.470	6.875	4.303	3.748	3.360	2.858	2.667	5.783	3.003
30	2.546		2.173	18.740	6.663	4.303	3.729	3.360	2.807	2.659	5.300	3.003
31	2.594		2.224		6.455		3.661	3.351		2.610		3.003
Mean	3.020	2.576	2.289	7.763	11.979	4.644	3.971	3.421	3.080	2.748	5.195	3.437
Flow (MCM)	8.089	6.456	6.132	20.121	32.083	12.037	10.636	9.162	7.984	7.360	13.464	9.206
Maximum	4.366	2.667	2.483	18.740	18.605	6.249	4.293	3.594	3.296	2.858	8.749	5.126
Minimum	2.538	2.367	2.115	2.239	6.455	3.985	3.661	2.103	2.807	2.610	2.352	3.003
Runoff (mm)	1.819	1.452	1.379	4.525	7.215	2.707	2.392	2.060	1.795	1.655	3.028	2.070

Flow (cumecs)

Annual Statistics

Maximum: 18.740 Minimum: 2.103 Mean: 4.510 cumecs

Total: 142.625 MCM Runoff: 32.072 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2017

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.003	3.073	3.287	3.955	10.379	9.315	4.655	3.661	3.584	3.215	5.084	11.716
2	3.003	3.073	3.287	3.826	10.866	9.050	4.634	3.661	3.584	3.215	5.091	11.384
3	3.003	3.064	3.287	3.748	11.330	8.699	4.547	3.671	3.575	3.206	5.035	10.153
4	3.003	3.012	3.315	3.729	12.111	8.355	4.398	3.729	3.518	3.152	5.872	9.300
5	3.003	2.994	3.481	3.671	13.557	8.105	4.314	3.738	3.509	3.143	7.471	9.189
6	3.003	2.943	3.576	3.661	14.684	7.873	4.303	3.748	3.509	3.143	8.134	9.112
7	3.003	2.934	3.986	3.661	15.429	7.618	4.293	3.807	3.509	3.135	8.163	8.654
8	3.003	2.934	4.066	3.661	15.613	7.228	4.230	3.816	3.509	3.082	8.414	8.593
9	3.003	2.934	4.127	3.680	16.110	6.983	4.220	3.826	3.499	3.073	8.414	8.683
10	2.994	2.934	4.148	3.817	16.214	6.717	4.209	3.876	3.443	3.064	8.149	8.653
11	2.943	2.934	4.209	4.101	16.340	6.225	4.148	3.826	3.434	3.012	8.061	8.384
12	2.934	2.934	4.189	5.463	16.361	6.148	4.137	3.816	3.425	3.003	7.635	8.281
13	2.934	2.934	4.006	8.363	16.361	6.123	4.137	3.816	3.369	3.003	6.614	7.931
14	2.934	2.934	3.975	8.355	16.361	5.973	4.137	3.866	3.351	3.003	6.454	7.774
15	2.934	2.934	3.965	7.902	16.361	5.936	4.137	4.169	3.296	3.003	6.546	7.187
16	2.934	2.934	3.905	7.535	16.298	5.849	4.117	4.220	3.287	3.003	7.051	7.010
17	2.934	2.934	3.895	6.614	15.860	5.751	3.995	4.209	3.287	3.003	6.809	6.533
18	2.934	2.934	3.935	5.962	15.327	5.631	3.975	4.137	3.287	3.003	6.676	6.315
19	2.934	2.934	4.179	5.464	14.604	5.381	3.975	4.066	3.287	3.003	6.743	5.501
20	2.926	2.934	4.220	5.046	14.073	5.206	3.955	4.046	3.287	3.012	7.500	5.311
21	2.875	2.934	4.220	4.921	13.496	5.183	3.836	3.985	3.287	3.064	9.307	4.944
22	2.866	2.934	4.199	5.145	13.006	5.160	3.816	3.975	3.287	3.073	10.107	4.700
23	2.866	2.934	4.076	6.619	12.452	5.011	3.807	3.975	3.287	3.082	12.133	4.356
24	2.866	2.934	4.046	6.916	12.000	4.910	3.748	3.965	3.287	3.135	12.783	4.251
25	2.858	2.978	3.985	7.214	11.575	4.832	3.738	3.905	3.287	3.143	13.382	3.946
26	2.807	3.242	3.975	7.733	11.174	4.820	3.729	3.895	3.287	3.179	13.533	3.866
27	2.799	3.287	3.975	8.701	10.866	4.820	3.671	3.876	3.278	3.397	13.879	3.671
28	2.799	3.287	3.975	9.066	10.479	4.809	3.661	3.748	3.224	3.500	13.879	3.509
29	2.799		3.975	9.378	10.132	4.743	3.661	3.661	3.215	3.906	13.439	3.369
30	2.833		3.975	10.018	10.018	4.721	3.661	3.594	3.215	3.975	12.674	3.296
31	3.038		3.975		9.599		3.661	3.584		4.132		3.278
Mean	2.928	2.992	3.917	5.931	13.517	6.239	4.049	3.867	3.373	3.196	8.834	6.737
Flow (MCM)	7.843	7.238	10.490	15.373	36.205	16.172	10.844	10.357	8.744	8.559	22.899	18.045
Maximum	3.038	3.287	4.220	10.018	16.361	9.315	4.655	4.220	3.584	4.132	13.879	11.716
Minimum	2.799	2.934	3.287	3.661	9.599	4.721	3.661	3.584	3.215	3.003	5.035	3.278
Runoff (mm)	1.764	1.628	2.359	3.457	8.141	3.637	2.438	2.329	1.966	1.925	5.149	4.058

Flow (cumecs)

Annual Statistics

Maximum: 16.361 Minimum: 2.799 Mean: 5.465 cumecs

Total: 172.343 MCM Runoff: 38.755 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2018

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.224	2.858	2.413	25.288	49.695	17.237	7.533	5.805	3.895	3.003	3.416	3.269
2	3.206	2.807	2.659	24.788	48.572	16.679	7.421	4.988	3.895	2.994	3.369	3.144
3	3.152	2.799	4.678	23.856	46.803	16.027	7.310	4.921	3.895	2.943	3.342	3.012
4	3.143	2.799	7.702	22.942	45.714	15.408	7.200	4.899	3.895	2.934	3.224	2.934
5	3.161	2.799	8.793	21.728	44.354	14.983	7.077	4.832	3.895	2.934	3.143	2.866
6	3.269	2.799	10.005	21.073	43.051	14.308	6.889	4.820	3.885	2.943	3.073	2.807
7	3.296	2.791	10.697	20.619	42.285	13.918	6.540	4.809	3.826	2.994	3.003	2.791
8	3.351	2.741	10.248	19.982	40.982	13.477	5.306	4.732	3.816	3.003	2.943	2.741
9	3.342	2.733	9.760	19.726	39.398	13.024	6.152	4.645	3.807	3.003	2.934	2.733
10	3.233	2.724	9.051	19.633	37.813	12.598	6.249	4.569	3.719	3.003	2.934	2.741
11	3.215	2.675	8.927	20.218	36.295	12.288	6.148	4.547	3.537	3.003	2.926	2.791
12	3.215	2.667	8.835	21.363	34.935	11.982	6.048	4.472	3.509	2.994	2.875	2.799
13	3.215	2.659	9.087	21.097	33.326	11.592	5.948	4.398	3.509	2.943	2.858	2.807
14	3.215	2.610	10.946	21.001	32.204	11.278	5.837	4.377	3.499	2.934	2.799	2.875
15	3.206	2.594	12.735	21.752	32.204	10.900	5.667	4.314	3.434	2.926	2.741	2.986
16	3.143	2.546	14.531	22.144	33.481	10.613	5.558	4.293	3.360	2.866	2.724	3.003
17	3.082	2.538	16.199	22.021	35.914	10.346	5.463	4.220	3.296	2.807	2.675	3.012
18	3.073	2.538	18.033	22.453	36.326	10.083	5.369	4.148	3.278	2.799	2.667	3.064
19	3.073	2.538	20.483	27.143	35.155	9.823	5.275	4.137	3.215	2.799	2.667	3.126
20	3.073	2.538	22.074	34.475	33.176	9.599	5.194	4.127	3.143	2.791	2.683	3.550
21	3.064	2.531	23.965	39.140	30.726	9.535	5.183	4.066	3.082	2.733	2.799	4.353
22	3.012	2.483	26.280	41.563	28.657	9.346	5.183	4.046	3.073	2.675	2.970	5.408
23	3.003	2.475	25.900	42.112	26.146	9.283	5.183	3.985	3.073	2.667	3.334	5.703
24	3.003	2.475	26.195	42.774	24.867	9.066	5.183	3.975	3.064	2.667	3.604	6.060
25	3.003	2.468	27.038	46.127	23.856	8.820	5.183	3.975	3.012	2.700	3.926	5.948
26	2.994	2.421	27.949	51.533	22.967	8.578	5.183	3.975	2.994	2.900	3.975	5.764
27	2.943	2.413	27.949	54.367	21.851	8.340	6.122	3.965	2.943	2.960	3.935	5.654
28	2.934	2.413	28.116	56.481	20.834	8.105	12.572	3.905	2.934	3.117	3.671	5.558
29	2.934		28.200	53.308	19.728	7.873	13.782	3.895	2.943	3.170	3.444	5.463
30	2.926		27.341	51.177	18.674	7.660	13.593	3.895	2.994	3.333	3.305	5.380
31	2.875		25.874		17.915		11.455	3.895		3.369		5.369
Mean	3.115	2.623	16.538	31.063	33.481	11.426	6.865	4.375	3.414	2.933	3.132	3.862
Flow (MCM)	8.344	6.345	44.294	80.515	89.675	29.615	18.386	11.719	8.849	7.855	8.118	10.343
Maximum	3.351	2.858	28.200	56.481	49.695	17.237	13.782	5.805	3.895	3.369	3.975	6.060
Minimum	2.875	2.413	2.413	19.633	17.915	7.660	5.183	3.895	2.934	2.667	2.667	2.733
Runoff (mm)	1.876	1.427	9.960	18.105	20.165	6.660	4.135	2.635	1.990	1.766	1.826	2.326

Flow (cumecs)

Annual Statistics

Maximum: 56.481 Minimum: 2.413 Mean: 10.235 cumecs

Total: 322.784 MCM Runoff: 72.585 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DC2A **Year:** 2019

Station Name: Ruvu River at Kifaru

Time-Series Type: Flow (cumecs)

Latitude: 3:31:43 S Longitude: 37:33:32 E Elevation: 704.0 metres Area: 4447.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.357	3.215	2.619	1.904	3.351	9.616	5.183	3.738	3.895	3.287	8.973	19.167
2	5.264	3.188	2.716	1.938	3.490	9.190	5.091	3.748	3.895	3.287	8.942	21.003
3	5.102	3.021	2.758	1.945	3.518	9.348	5.000	3.807	3.885	3.287	8.927	22.095
4	5.000	2.934	2.909	1.945	3.584	8.505	4.910	3.826	3.816	3.315	8.790	22.342
5	4.888	2.866	2.926	1.952	3.651	8.428	4.821	3.885	3.758	3.481	8.488	22.070
6	4.645	2.799	2.875	1.994	3.780	8.296	4.732	3.895	3.807	3.547	8.310	21.972
7	4.409	2.724	2.849	2.001	4.529	7.902	4.655	3.895	3.807	3.777	7.989	21.653
8	4.293	2.611	2.741	2.001	4.822	7.660	4.645	3.895	3.748	3.856	7.632	21.386
9	4.148	2.546	2.667	2.001	5.526	7.505	4.634	3.895	3.738	4.097	7.214	20.810
10	4.056	2.531	2.602	2.001	6.176	7.214	4.558	3.905	3.738	4.158	6.849	19.983
11	3.975	2.475	2.539	2.001	6.904	6.983	4.472	3.965	3.738	4.282	6.429	19.517
12	3.886	2.413	2.475	2.008	7.173	6.782	4.398	3.975	3.729	4.303	6.403	18.968
13	3.729	2.352	2.413	2.050	7.297	6.637	4.377	3.975	3.671	4.388	6.186	17.237
14	3.528	2.299	2.352	2.050	7.918	6.390	4.314	3.975	3.651	4.934	6.148	11.772
15	3.453	2.284	2.299	2.008	8.192	6.351	4.293	3.975	3.594	5.206	6.173	16.326
16	3.509	2.239	2.291	2.001	8.296	6.351	4.230	3.965	3.584	5.547	6.326	16.956
17	3.584	2.232	2.276	2.001	8.624	6.326	4.220	3.905	3.584	5.951	6.339	17.064
18	3.642	2.224	2.187	2.001	8.493	6.148	4.209	3.895	3.566	6.933	6.262	17.345
19	3.584	2.180	2.165	2.001	11.490	5.960	4.148	3.895	3.453	7.660	6.237	17.497
20	3.518	2.173	2.122	1.994	11.592	5.849	4.127	3.895	3.425	7.688	6.161	18.180
21	3.518	2.173	2.107	1.952	11.964	5.739	4.066	3.895	3.369	7.201	6.186	18.403
22	3.584	2.173	2.064	1.945	12.270	5.570	4.046	3.895	3.351	6.716	6.416	18.247
23	3.651	2.180	2.043	1.952	12.360	5.475	3.985	3.905	3.296	6.520	6.696	17.914
24	3.651	2.247	1.959	1.994	12.036	5.463	3.965	3.965	3.278	6.199	8.382	17.606
25	3.594	2.390	1.945	2.001	11.839	5.463	3.895	3.985	3.224	6.212	9.994	17.519
26	3.575	2.429	1.945	2.001	11.609	5.439	3.826	4.046	3.224	6.664	11.831	17.367
27	3.518	2.531	1.945	2.037	11.556	5.299	3.807	4.046	3.278	7.315	13.519	18.025
28	3.499	2.594	1.938	2.277	11.417	5.275	3.748	3.985	3.287	8.614	14.485	18.403
29	3.434		1.897	2.533	11.123	5.275	3.738	3.965	3.287	9.457	14.882	18.425
30	3.351		1.897	3.084	10.663	5.264	3.738	3.905	3.287	9.519	15.688	18.291
31	3.233		1.931		10.380		3.738	3.895		9.205		9.134
Mean	3.941	2.501	2.337	2.052	8.246	6.723	4.309	3.916	3.565	5.697	8.429	18.473
Flow (MCM)	10.556	6.050	6.260	5.320	22.086	17.427	11.540	10.489	9.242	15.259	21.847	49.479
Maximum	5.357	3.215	2.926	3.084	12.360	9.616	5.183	4.046	3.895	9.519	15.688	22.342
Minimum	3.233	2.173	1.897	1.904	3.351	5.264	3.738	3.738	3.224	3.287	6.148	9.134
Runoff (mm)	2.374	1.360	1.408	1.196	4.966	3.919	2.595	2.359	2.078	3.431	4.913	11.126

Flow (cumecs)

Annual Statistics

Maximum: 22.342 Minimum: 1.897 Mean: 5.849 cumecs

Total: 184.461 MCM Runoff: 41.480 mm

Possible data flags

No data stored "-" Estimated values "e"

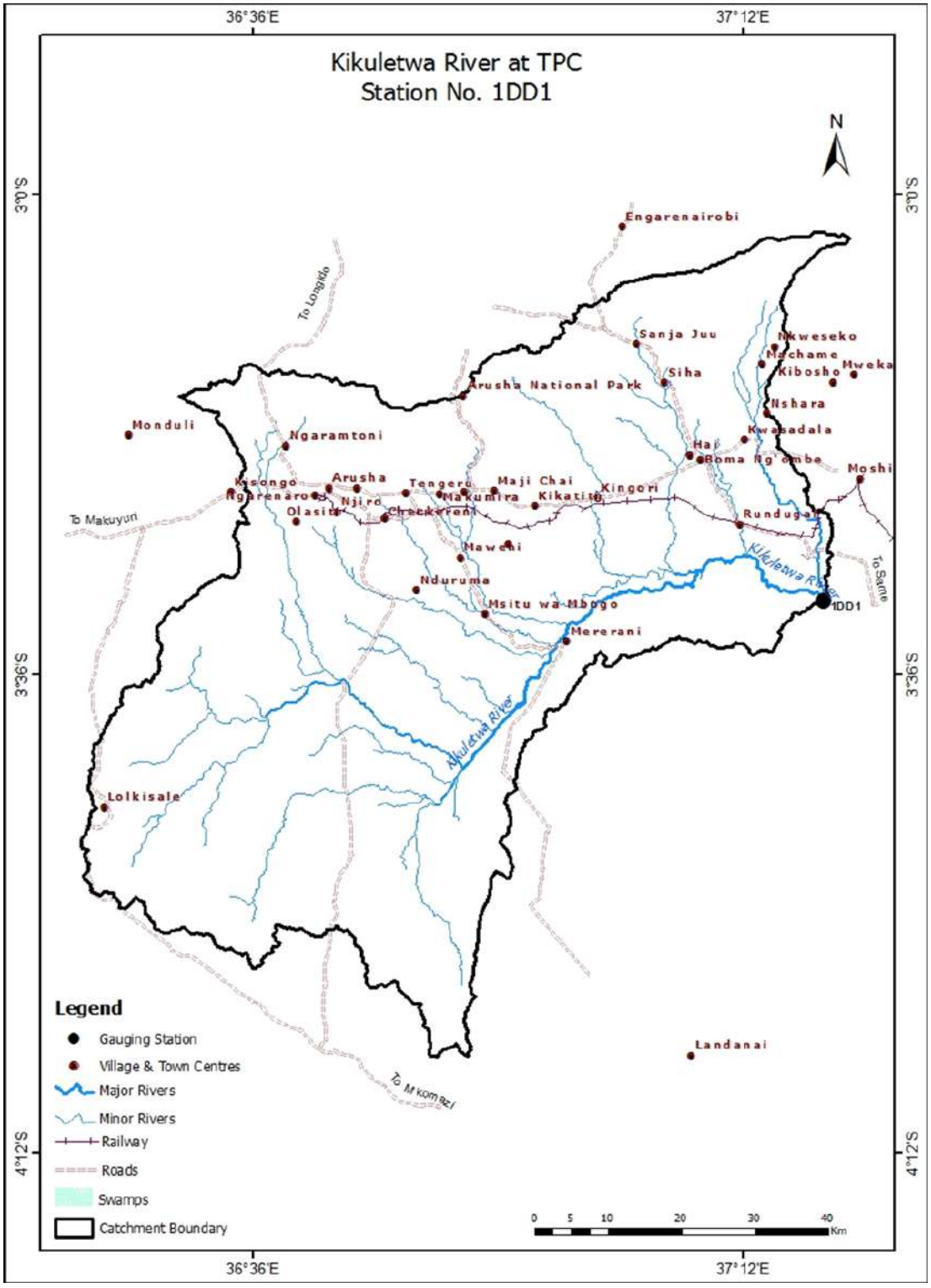
Kikuletwa River at TPC			
Station No: 1DD1		Established: 27/11/ 1959	
Coordinates:		Altitude (m.a.m.s.l): 709	
Lat: -3.5088	Long: 37.2986	Catchment Area (km²): 5,864	
Description of the Catchment:			
Mainly induced with vegetation, forest, and grass land thicket with some alpine desert.			

Station Details			
1. Staff Gauges	Range: 0 – 5m	A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical	MSL.Z.G.L: -	
2. Automatic Recorder	Thalimedes Float type	Date installed: 2013	
3. Benchmark	Bolt embedded in concrete on top of old foundation of water level recorder		
BM Assumed Datum: 3.790m	N.M.M.S.L:	TBM: –	
4. Control	Open channel downstream gauges		
5. Access	Accessible throughout the year, the station is located 24km from Moshi town to TPC		

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	3.2.1
Discharge:	01/01/2010 - 31/12/2019	2.2.1

Extremes:				
	Max. Recorded	247.21m³/sec	On 20/04/1995	WL 4.55m
	Min. Recorded	3.86m³/sec	On 31/12/2013	WL 0.64m

Remarks


Kikuletwa River at TPC
Station No. 1DD1
36°36'E
37°12'E
3°0'S
3°36'S
4°12'S
N
Engarenairobi
To Longido
Sanja Juu
Nkweseko
Machame
Kibosho
Mweka
Siha
Arusha National Park
Nshara
Monduli
Ngaramtoni
Kwasadala
Ha
Boma Ng'ombe
Moshi
Kisongo
Arusha
Tengero
Maji Chai
Kingori
Ngarenaro
Njiro
Makumira
Kikatiti
Olasiti
Chekereni
To Makuyuni
Rundugai
Maweni
Kikuletwa River
To Same
Nduruma
1DD1
Msitu wa Mbogo
Mererani
Kikuletwa River
Lolkisale
Landanai
To Mkomazi
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Swamps
Catchment Boundary
0 5 10 20 30 40
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2010
Station Name: Kikuletwa River at TPC
Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.043	12.153	13.243	28.224	-	40.472	22.038	14.673	13.193	12.083	11.826	11.641
2	14.014	12.200	12.671	20.099	-	39.031	21.765	14.208	12.979	11.943	11.618	11.364
3	12.932	12.623	12.718	-	-	38.173	21.140	13.746	12.434	11.896	11.641	11.044
4	12.989	11.873	12.153	23.637	-	37.353	21.112	13.964	12.599	11.757	11.250	11.182
5	16.838	11.687	12.253	34.405	-	37.447	20.734	14.037	12.434	11.780	11.204	12.154
6	17.803	11.456	14.656	29.804	-	37.510	21.112	14.207	11.989	11.989	11.387	11.457
7	16.954	11.827	12.675	28.130	-	36.444	20.870	14.378	11.943	11.595	11.687	11.251
8	16.725	12.766	13.003	35.955	-	35.260	19.851	14.354	12.106	11.480	11.710	13.931
9	16.677	13.098	12.529	57.555	-	34.365	19.531	13.989	12.340	11.989	11.572	22.385
10	21.793	12.529	12.106	46.518	31.400	33.139	19.452	13.602	12.812	11.919	11.502	18.287
11	37.945	12.106	11.873	43.743	59.359	32.712	19.109	14.062	12.955	11.757	11.204	18.245
12	31.995	11.734	12.294	58.452	56.779	32.197	18.872	13.891	12.482	11.850	11.044	19.004
13	24.983	11.643	11.827	52.892	55.206	31.233	18.662	13.940	12.083	12.529	11.158	18.037
14	20.078	12.956	11.733	56.888	-	29.802	18.374	13.771	12.529	12.388	11.296	16.627
15	16.456	12.719	11.687	54.612	-	28.212	17.648	14.281	12.293	11.780	12.083	14.334
16	14.238	11.550	17.338	60.046	55.248	28.007	17.056	14.183	11.919	12.341	12.957	12.837
17	16.424	11.318	-	-	51.948	28.065	16.852	13.843	11.641	12.200	14.233	12.434
18	16.017	11.228	50.138	50.455	48.377	27.396	16.980	13.698	11.919	11.457	14.428	12.013
19	15.241	12.294	44.544	44.544	45.866	27.280	16.979	13.940	12.223	11.250	13.650	12.129
20	14.796	13.460	45.642	45.642	42.935	27.280	16.699	13.867	12.036	11.502	13.843	12.364
21	14.476	18.636	38.824	38.824	40.889	27.136	15.841	14.013	11.480	11.548	13.289	11.897
22	14.476	14.422	36.540	36.540	43.029	26.186	15.266	14.134	11.549	11.548	12.836	11.250
23	13.843	13.099	39.736	39.736	55.202	25.557	15.216	13.843	11.757	11.572	12.294	11.021
24	13.265	11.920	40.183	40.183	60.329	25.472	15.390	13.601	12.059	11.687	11.780	11.090
25	12.907	11.733	36.824	36.824	52.858	24.510	15.515	13.265	12.106	11.526	11.503	11.734
26	12.860	11.687	34.459	34.459	47.373	24.509	15.241	13.098	12.059	11.250	11.067	12.317
27	12.860	11.456	36.445	36.445	44.217	24.509	15.142	13.217	11.896	11.318	10.998	11.874
28	12.860	11.921	18.723	18.723	48.717	24.228	14.845	13.241	12.529	11.250	10.998	11.296
29	12.812		-	-	49.423	23.502	14.771	13.265	12.458	11.479	11.044	12.107
30	12.529		-	-	45.967	23.057	14.599	13.361	12.153	11.410	11.364	11.182
31	12.434		-		43.262		14.476	13.122		11.572		11.182
Mean	16.621	12.432	-	-	-	30.335	17.779	13.832	12.232	11.730	11.949	13.215
Flow (MCM)	44.519	30.076	-	-	-	78.628	47.618	37.048	31.705	31.419	30.971	35.395
Maximum	37.945	18.636	-	-	-	40.472	22.038	14.673	13.193	12.529	14.428	22.385
Minimum	12.434	11.228	-	-	-	23.057	14.476	13.098	11.480	11.250	10.998	11.021
Runoff (mm)	7.592	5.129	-	-	-	13.409	8.120	6.318	5.407	5.358	5.282	6.036

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2011

Station Name: Kikuletwa River at TPC

Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12.247	11.757	11.136	15.895	18.766	25.961	15.390	12.129	13.051	11.758	12.130	12.860
2	12.153	11.549	11.920	15.019	28.051	24.173	15.191	12.106	11.968	12.623	11.434	12.176
3	11.967	11.250	11.688	14.697	23.967	23.390	15.043	12.036	11.113	12.107	11.943	12.036
4	11.136	11.295	11.090	13.989	20.553	23.780	15.117	11.618	10.998	11.388	11.803	12.863
5	10.998	11.044	11.044	13.218	17.858	24.174	14.820	11.572	10.998	10.862	11.896	14.924
6	10.998	10.998	11.272	13.627	16.750	25.872	14.648	11.710	10.998	10.726	11.850	16.346
7	10.998	10.998	11.044	14.872	16.981	24.850	14.746	11.803	11.113	11.367	11.479	15.168
8	10.998	11.021	11.182	14.706	18.910	22.673	14.673	12.247	11.804	12.933	12.355	14.623
9	11.252	11.135	12.107	23.691	23.373	21.303	14.845	12.341	12.036	13.027	16.003	14.233
10	12.696	11.021	11.182	33.322	29.920	20.627	14.379	11.688	12.742	13.844	13.515	13.388
11	12.317	10.998	10.998	19.415	-	20.251	14.673	11.641	12.648	14.870	11.758	15.046
12	11.757	11.067	10.998	15.343	41.692	19.426	14.306	11.342	11.366	16.431	11.548	14.208
13	11.410	11.410	10.998	14.550	44.256	19.135	13.386	11.944	11.021	24.117	11.548	14.037
14	11.364	11.067	10.998	14.697	39.683	18.114	13.217	12.506	10.998	27.342	11.502	14.232
15	11.410	11.228	10.998	14.306	34.955	17.493	13.122	11.320	10.998	44.149	11.295	14.403
16	11.641	12.840	11.044	13.482	32.961	17.364	13.361	11.641	10.998	34.142	11.711	13.554
17	11.410	14.652	11.411	13.771	29.184	17.031	13.217	11.733	10.998	29.609	12.130	13.409
18	11.550	16.270	12.060	12.815	29.835	16.826	12.907	11.733	10.998	23.218	12.529	14.208
19	12.483	14.584	13.463	11.758	32.719	16.903	12.860	11.733	10.998	19.536	12.270	13.940
20	11.504	11.601	19.741	13.348	29.157	17.493	12.860	11.780	10.975	19.003	13.448	13.170
21	11.044	11.021	19.047	16.351	27.368	17.415	12.860	12.013	10.839	18.349	17.400	13.074
22	10.998	11.021	13.982	16.122	26.876	17.287	12.860	11.803	10.839	17.185	15.970	13.410
23	10.998	11.135	12.907	22.642	28.868	17.544	12.860	11.966	10.975	16.777	14.552	14.453
24	10.998	11.021	12.860	19.891	34.188	17.364	12.812	12.317	10.998	15.317	13.386	13.941
25	10.998	10.998	12.907	17.930	33.906	16.929	12.481	11.734	11.044	14.355	14.457	14.625
26	10.998	10.998	13.217	23.501	30.819	17.107	12.129	11.090	11.457	13.266	17.086	13.555
27	10.998	10.998	13.433	18.761	29.290	16.801	11.943	11.021	12.154	12.529	17.675	13.514
28	10.998	10.998	13.458	16.447	36.776	16.395	11.989	11.250	11.205	13.050	15.869	17.538
29	11.044		12.647	15.820	34.741	15.991	12.387	11.897	11.112	12.718	14.331	21.665
30	11.272		12.670	18.301	31.326	15.615	12.317	12.482	10.976	12.458	13.602	23.563
31	11.158		13.295		29.302		12.270	13.003		12.176		19.705
Mean	11.413	11.642	12.477	16.743	-	19.510	13.538	11.845	11.347	17.137	13.283	14.770
Flow (MCM)	30.568	28.164	33.419	43.397	-	50.569	36.259	31.726	29.412	45.899	34.428	39.560
Maximum	12.696	16.270	19.741	33.322	-	25.961	15.390	13.003	13.051	44.149	17.675	23.563
Minimum	10.998	10.998	10.998	11.758	-	15.615	11.943	11.021	10.839	10.726	11.295	12.036
Runoff (mm)	5.213	4.803	5.699	7.401	-	8.624	6.183	5.410	5.016	7.827	5.871	6.746

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2012
Station Name: Kikuletwa River at TPC
Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	16.376	11.410	13.706	12.317	25.850	37.415	17.082	11.734	11.135	12.481	13.116	11.619
2	14.454	11.641	16.987	12.599	25.817	37.070	16.319	11.343	11.021	12.458	20.684	11.572
3	13.218	11.572	16.806	16.176	28.853	36.006	16.117	12.815	10.975	12.293	38.268	11.850
4	12.955	12.411	14.139	37.120	-	35.136	15.615	13.169	10.816	12.129	38.069	11.734
5	12.434	11.943	14.306	24.394	-	33.904	15.241	12.836	10.658	12.106	22.735	11.572
6	12.552	11.479	15.341	21.575	-	32.319	15.216	12.340	10.680	12.106	22.570	11.618
7	12.106	11.687	14.993	19.853	-	31.083	15.291	12.200	11.113	12.083	18.803	11.989
8	11.618	11.710	14.403	18.741	-	30.157	14.870	12.576	12.154	11.989	19.991	11.780
9	11.572	11.572	13.676	18.374	-	29.358	14.746	12.528	12.458	12.246	22.924	11.944
10	11.734	11.525	12.295	21.011	56.823	27.196	14.476	12.670	12.481	12.270	21.278	13.099
11	11.873	11.410	11.873	31.850	55.690	25.587	14.550	12.836	12.505	12.153	22.125	12.600
12	11.687	11.525	11.410	16.410	29.395	23.893	14.403	12.955	12.623	12.246	18.652	12.387
13	11.227	11.525	11.204	14.394	-	23.529	14.305	13.481	12.388	12.176	14.819	11.827
14	11.067	11.364	11.181	18.675	-	22.726	14.697	13.123	11.550	12.387	13.592	11.687
15	11.318	11.204	11.342	16.605	-	21.792	14.599	12.060	10.749	12.153	13.041	11.433
16	11.364	11.204	12.341	14.773	-	21.628	14.403	11.757	10.635	12.106	12.576	11.502
17	11.364	11.318	12.552	14.232	-	21.384	14.232	11.710	10.635	12.129	12.647	11.410
18	11.364	11.204	12.036	19.864	-	20.762	14.183	11.688	10.635	12.200	12.599	11.549
19	11.341	11.204	12.106	-	-	19.984	14.013	12.578	10.635	11.850	12.083	11.687
20	11.227	11.341	12.246	28.875	28.830	19.505	13.867	13.820	10.635	12.059	11.411	11.595
21	11.341	11.364	12.106	20.152	53.885	19.161	14.037	12.956	10.817	12.083	11.089	11.687
22	11.364	11.364	11.989	21.075	49.424	19.426	14.305	12.270	11.944	11.966	11.295	11.595
23	11.387	11.364	12.246	32.311	48.205	20.278	14.013	11.618	12.293	12.129	11.113	11.780
24	11.502	11.364	12.293	43.583	48.746	19.559	13.650	11.456	12.411	12.340	10.636	12.247
25	11.387	11.667	12.246	46.806	45.667	18.846	13.433	11.943	12.153	11.734	11.021	12.792
26	11.364	13.411	11.966	40.546	44.540	18.088	13.265	12.482	12.153	11.135	10.794	14.774
27	11.364	13.781	11.896	38.340	43.129	17.596	13.193	12.059	12.434	11.411	11.552	14.648
28	11.364	17.017	11.803	32.603	41.762	17.082	13.003	12.176	12.481	12.036	13.436	14.378
29	11.387	14.265	12.013	30.883	40.118	17.031	13.457	11.734	12.481	12.293	14.159	15.041
30	11.502		11.826	34.706	37.984	17.184	13.050	11.227	12.481	12.458	13.149	21.245
31	11.387		12.083		37.478		12.458	11.044		12.458		22.977
Mean	11.878	11.926	12.820	-	-	24.490	14.390	12.296	11.604	12.118	16.674	12.891
Flow (MCM)	31.813	29.881	34.336	-	-	63.477	38.542	32.934	30.078	32.457	43.220	34.527
Maximum	16.376	17.017	16.987	-	-	37.415	17.082	13.820	12.623	12.481	38.268	22.977
Minimum	11.067	11.204	11.181	-	-	17.031	12.458	11.044	10.635	11.135	10.636	11.410
Runoff (mm)	5.425	5.096	5.855	-	-	10.825	6.573	5.616	5.129	5.535	7.370	5.888

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2013

Station Name: Kikuletwa River at TPC

Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	21.205	16.042	10.590	30.084	40.645	12.956	7.256	6.000	5.406	5.559	4.466	4.556
2	25.941	16.120	10.635	26.403	-	12.458	6.910	6.117	5.312	5.826	4.430	4.556
3	27.572	13.848	10.590	16.322	29.826	11.920	6.830	6.492	5.199	5.463	4.430	4.448
4	24.413	12.506	10.365	18.214	55.524	11.365	6.610	7.256	5.320	5.069	4.484	4.430
5	19.176	11.664	10.613	13.384	61.365	10.839	6.729	6.670	5.433	5.013	4.885	4.430
6	17.315	11.548	10.794	13.844	31.001	10.477	6.971	6.610	5.077	5.013	6.218	4.823
7	18.663	11.525	10.794	24.570	-	10.275	6.810	6.991	5.013	4.995	10.611	6.902
8	17.857	11.364	10.217	36.352	-	10.075	6.352	7.173	5.013	4.848	6.121	5.357
9	15.768	11.135	7.180	20.687	28.206	9.742	6.510	7.235	5.013	4.593	5.069	6.951
10	14.747	10.748	5.304	27.689	48.997	9.413	6.471	7.358	5.013	4.448	5.069	13.231
11	14.648	10.953	10.937	56.147	47.805	9.216	6.000	6.690	5.013	4.430	4.665	11.971
12	13.892	10.907	8.420	30.070	43.139	9.021	5.961	6.512	5.013	4.430	5.381	11.945
13	13.481	10.410	9.646	-	38.463	8.699	6.156	5.522	5.013	4.430	8.988	13.803
14	13.361	10.590	6.591	44.344	36.325	8.443	5.961	5.577	5.013	4.430	5.588	15.999
15	12.907	10.635	4.925	-	31.334	8.592	5.826	5.653	5.013	4.430	4.503	13.565
16	12.506	10.658	4.112	-	27.434	8.231	5.219	5.903	5.013	4.430	4.448	15.481
17	11.434	10.794	4.023	27.208	24.008	8.062	4.940	6.019	5.013	4.430	4.574	11.935
18	11.572	10.816	4.164	37.063	23.781	8.146	5.125	5.787	5.013	4.430	4.683	12.944
19	11.227	10.816	15.389	30.497	22.369	8.020	5.162	5.634	5.013	4.430	4.574	9.177
20	11.712	10.748	-	25.566	20.979	7.874	5.237	5.615	5.013	4.430	4.448	6.558
21	10.345	10.433	22.366	23.809	19.691	7.874	5.653	5.653	5.013	4.430	4.430	5.445
22	10.164	10.907	9.332	23.203	19.268	8.041	5.482	5.845	5.013	4.430	4.430	5.164
23	10.568	10.975	8.401	26.342	17.804	8.252	5.407	5.634	5.032	4.430	4.430	4.307
24	10.635	10.816	8.471	23.205	17.184	7.874	5.807	5.501	5.162	4.430	4.430	4.306
25	10.590	10.794	10.598	31.114	16.572	7.604	5.615	5.558	5.256	4.430	4.430	4.502
26	10.365	11.411	9.265	27.933	15.890	7.791	5.350	5.350	5.051	4.430	4.430	4.323
27	10.568	10.456	10.035	24.148	15.740	7.687	5.388	5.274	5.013	4.430	4.430	4.270
28	10.636	10.320	8.194	23.641	15.341	7.625	5.788	5.051	5.013	4.430	4.430	4.181
29	11.783		7.937	23.557	14.624	8.084	5.463	5.032	4.995	4.430	4.430	4.252
30	13.658		8.637	25.017	14.086	7.937	5.125	5.143	4.977	4.466	4.448	4.146
31	16.399		12.679		13.868		5.483	5.200		4.647		4.094
Mean	14.681	11.427	-	-	-	9.086	5.922	6.002	5.082	4.649	5.065	7.486
Flow (MCM)	39.322	27.643	-	-	-	23.552	15.863	16.075	13.173	12.452	13.129	20.049
Maximum	27.572	16.120	-	-	-	12.956	7.256	7.358	5.433	5.826	10.611	15.999
Minimum	10.164	10.320	-	-	-	7.604	4.940	5.032	4.977	4.430	4.430	4.094
Runoff (mm)	6.706	4.714	-	-	-	4.016	2.705	2.741	2.246	2.123	2.239	3.419

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2014

Station Name: Kikuletwa River at TPC

Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.449	4.484	4.775	9.391	15.716	29.005	21.601	13.727	6.673	5.350	5.948	6.514
2	4.199	4.412	4.466	9.644	17.006	27.310	21.737	11.301	6.020	5.463	8.629	8.239
3	4.164	4.288	4.466	12.541	18.450	25.957	21.140	10.411	6.039	5.596	15.953	10.190
4	4.270	4.181	4.665	10.283	27.808	24.821	20.064	9.676	6.321	5.692	10.086	10.236
5	4.288	4.270	4.592	10.186	21.702	22.920	19.824	9.500	8.664	6.499	7.341	7.945
6	4.305	4.377	4.574	9.964	-	21.902	20.038	9.130	8.833	8.449	6.432	6.971
7	4.412	5.406	4.629	9.087	27.182	21.356	18.559	9.108	6.736	8.282	5.923	6.850
8	4.395	8.477	4.903	10.800	27.390	21.793	17.467	8.613	6.294	12.910	5.752	6.769
9	4.182	8.827	4.647	18.833	-	23.030	16.801	8.528	5.711	10.316	6.974	6.930
10	4.164	9.615	4.720	12.714	29.725	23.670	16.142	8.506	5.634	7.859	6.353	6.590
11	4.270	11.232	4.848	14.787	50.810	25.559	15.316	8.315	5.730	6.850	6.097	6.391
12	4.305	9.288	5.072	32.017	47.981	26.789	15.142	8.042	5.634	6.790	6.136	6.215
13	4.395	8.190	6.851	-	-	26.187	14.771	8.614	5.672	6.858	6.651	5.942
14	4.341	7.501	16.423	-	-	24.343	14.183	8.000	5.981	8.902	7.986	5.845
15	4.502	9.899	-	28.672	-	22.671	13.505	8.041	6.224	6.919	9.638	6.136
16	4.359	21.990	16.162	18.903	-	21.874	13.170	8.358	8.621	6.352	8.046	5.942
17	4.556	9.756	7.961	22.092	56.386	21.140	12.552	8.677	8.064	6.078	7.895	5.787
18	4.849	6.472	6.628	24.880	48.416	19.958	12.270	8.806	7.215	6.511	7.501	5.787
19	5.580	6.710	5.885	-	49.897	18.925	11.896	8.485	6.610	5.981	7.875	5.864
20	4.613	7.382	5.107	24.719	48.180	18.348	11.433	7.875	6.411	5.615	8.337	5.788
21	4.412	8.894	4.848	43.175	42.127	20.032	11.341	7.358	6.431	5.312	7.688	6.491
22	4.288	8.510	4.611	40.573	43.425	30.110	11.090	7.052	6.649	5.051	6.911	6.215
23	4.164	6.874	6.318	35.949	58.187	33.150	10.343	7.646	6.394	5.069	6.372	6.611
24	4.146	6.040	17.078	35.245	45.006	37.935	9.963	7.296	5.370	5.350	5.865	7.337
25	4.146	5.238	14.759	27.885	37.298	32.363	9.941	7.296	5.425	5.106	5.884	7.509
26	4.146	4.958	13.894	24.234	35.075	29.744	10.052	6.952	5.425	5.181	5.692	9.513
27	4.235	5.275	12.086	21.225	34.272	27.255	9.919	6.215	5.218	4.666	5.144	7.143
28	4.830	5.350	11.022	19.481	34.273	24.737	9.698	6.156	5.312	4.574	5.525	7.672
29	5.218		10.343	17.831	35.510	23.419	9.547	5.845	5.444	4.611	6.874	9.242
30	5.032		10.075	16.295	33.172	22.340	11.514	6.180	5.444	4.793	5.925	8.338
31	4.829		9.742		31.205		14.261	7.691		4.776		8.678
Mean	4.453	7.425	-	-	-	24.955	14.364	8.303	6.340	6.379	7.248	7.151
Flow (MCM)	11.927	17.962	-	-	-	64.683	38.473	22.240	16.433	17.087	18.786	19.153
Maximum	5.580	21.990	-	-	-	37.935	21.737	13.727	8.833	12.910	15.953	10.236
Minimum	4.146	4.181	-	-	-	18.348	9.547	5.845	5.218	4.574	5.144	5.787
Runoff (mm)	2.034	3.063	-	-	-	11.030	6.561	3.793	2.802	2.914	3.204	3.266

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2015

Station Name: Kikuletwa River at TPC

Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.065	4.503	4.720	8.190	13.786	47.202	11.873	7.999	5.406	5.768	6.099	5.539
2	6.653	4.996	4.756	7.399	-	43.728	11.710	7.853	5.463	5.653	5.483	5.444
3	5.789	4.665	4.977	7.176	13.615	38.593	11.433	7.749	5.577	5.768	5.577	5.312
4	5.331	4.665	4.995	8.573	26.267	36.038	11.525	7.958	5.482	5.903	5.596	5.181
5	5.712	4.502	4.884	10.311	38.000	35.479	11.479	7.874	5.482	5.865	5.482	5.143
6	5.372	4.665	4.848	19.705	38.269	32.716	11.227	7.874	5.596	5.520	5.463	5.032
7	6.653	4.611	4.774	11.501	42.793	30.666	12.248	8.063	5.596	5.501	5.463	5.013
8	6.196	4.683	4.977	8.787	-	28.097	13.003	8.485	5.463	6.314	5.444	5.013
9	6.019	4.592	5.051	12.905	-	26.130	12.248	8.656	5.331	9.370	5.368	5.013
10	5.672	4.592	5.256	11.991	-	24.370	11.113	8.528	5.312	6.333	5.596	5.013
11	5.809	4.701	5.125	16.771	-	22.948	10.658	8.337	5.331	5.672	6.249	5.013
12	6.812	4.701	4.793	14.513	-	21.493	10.477	8.062	5.444	5.884	9.141	5.013
13	5.963	4.592	4.848	12.133	-	20.439	10.365	7.999	5.444	5.884	8.048	5.956
14	5.826	4.989	4.848	12.981	-	19.930	9.787	7.791	5.312	5.672	6.957	11.471
15	5.295	7.327	4.756	13.084	-	19.532	9.413	7.255	5.218	5.768	8.685	9.751
16	4.648	7.299	4.848	19.481	-	19.241	9.195	7.031	5.425	5.884	9.636	10.244
17	4.448	12.777	4.866	17.150	-	18.480	8.870	6.870	5.444	5.768	24.168	8.435
18	4.448	10.300	4.903	13.275	-	16.803	8.528	6.709	5.312	5.634	18.837	8.050
19	5.090	6.826	5.125	11.829	-	16.268	8.380	6.550	5.199	5.634	14.973	7.236
20	8.038	5.277	5.218	19.296	29.754	16.344	9.131	6.391	5.331	5.749	14.398	6.473
21	6.108	4.885	5.501	-	54.268	16.142	8.635	6.273	5.577	5.730	9.292	5.446
22	5.257	5.464	5.237	21.555	50.618	15.565	8.464	6.372	5.634	5.501	7.156	5.162
23	4.557	5.294	5.293	13.836	46.641	14.845	8.063	6.352	5.749	5.444	6.373	5.050
24	4.556	4.903	5.503	29.281	52.402	14.427	7.895	6.136	5.768	5.350	5.730	5.125
25	4.556	4.738	6.712	-	49.800	14.183	7.999	6.175	5.768	5.444	5.692	5.032
26	4.430	4.720	7.092	44.217	45.901	13.843	7.999	5.981	5.787	5.425	5.369	5.013
27	4.323	4.720	6.710	-	43.001	13.506	7.874	6.078	5.903	5.200	5.523	5.013
28	4.412	4.720	6.235	25.140	39.991	12.576	7.874	6.214	5.922	5.162	6.752	5.051
29	4.430		6.347	-	38.840	12.106	7.999	6.214	5.922	5.181	6.550	5.256
30	4.412		9.403	14.547	40.408	11.803	8.020	6.078	5.903	5.274	6.059	5.199
31	4.323		9.066		43.593		8.020	5.865		5.332		5.256
Mean	5.458	5.525	5.538	-	-	22.450	9.726	7.154	5.537	5.761	8.039	5.998
Flow (MCM)	14.620	13.367	14.832	-	-	58.190	26.050	19.161	14.351	15.430	20.836	16.066
Maximum	8.065	12.777	9.403	-	-	47.202	13.003	8.656	5.922	9.370	24.168	11.471
Minimum	4.323	4.502	4.720	-	-	11.803	7.874	5.865	5.199	5.162	5.368	5.013
Runoff (mm)	2.493	2.279	2.529	-	-	9.923	4.442	3.268	2.447	2.631	3.553	2.740

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2016

Station Name: Kikuletwa River at TPC

Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.051	9.233	5.032	9.591	49.191	16.852	14.037	7.296	5.088	5.013	5.013	5.051
2	5.032	6.985	5.051	28.031	43.829	16.395	14.207	6.790	5.013	5.013	5.013	5.013
3	5.162	5.541	5.237	15.376	38.184	16.041	14.378	6.709	5.013	5.013	5.013	5.013
4	5.274	4.958	5.051	9.464	34.367	15.940	14.305	6.709	5.013	5.013	5.069	5.013
5	5.162	5.032	5.032	13.356	34.597	15.565	13.578	6.729	5.013	5.013	5.350	5.013
6	5.032	5.274	5.162	12.861	41.102	14.993	12.576	6.890	5.107	5.013	5.069	5.013
7	4.995	5.331	5.293	12.066	34.819	14.452	12.153	7.133	5.578	5.013	5.032	5.013
8	4.940	5.482	5.312	10.926	30.192	14.183	12.153	7.031	5.107	5.013	5.125	5.088
9	5.256	5.730	5.312	18.415	29.763	13.819	12.387	6.830	5.069	5.013	5.032	5.463
10	5.331	7.098	5.312	12.314	37.720	13.553	12.129	6.392	5.463	5.013	5.013	5.125
11	5.463	16.148	5.350	17.698	37.738	13.989	11.873	6.039	5.807	5.013	5.013	5.237
12	5.558	19.575	5.558	50.206	32.451	14.256	11.479	6.274	5.463	5.013	5.013	5.051
13	5.331	14.095	5.482	38.666	29.330	13.626	11.641	6.019	5.069	5.013	5.013	5.013
14	5.181	10.314	5.482	11.964	27.746	12.884	11.410	6.136	5.069	5.013	5.013	5.013
15	5.333	7.592	5.577	-	26.358	12.317	11.341	5.845	5.387	5.013	5.013	5.051
16	6.275	6.394	5.463	-	25.019	11.966	11.227	5.903	5.407	5.013	5.013	5.237
17	6.161	5.578	5.331	-	24.456	11.873	11.250	5.922	5.845	5.013	5.013	5.051
18	8.071	5.463	5.293	48.088	26.763	11.618	10.703	5.903	5.922	5.013	5.032	5.013
19	10.044	5.501	5.181	19.236	25.360	12.183	10.455	5.807	5.922	5.051	5.125	5.013
20	13.177	5.711	5.143	-	24.117	15.099	10.231	6.001	5.865	5.237	5.032	5.013
21	12.468	5.634	5.069	18.285	23.586	15.416	9.743	6.511	5.463	5.014	5.013	4.977
22	9.123	5.558	5.256	34.523	25.360	14.355	9.325	6.020	5.069	4.756	5.013	4.756
23	7.058	5.237	5.181	15.889	26.732	13.964	9.457	5.903	5.013	4.738	5.013	4.720
24	5.675	5.237	5.162	-	26.100	13.650	9.043	5.711	5.013	4.884	5.013	4.720
25	5.558	4.958	5.181	-	24.990	14.650	8.613	5.256	5.013	5.106	5.013	4.720
26	5.350	5.106	5.293	-	23.920	15.916	8.613	5.256	5.013	5.013	5.013	4.774
27	5.312	5.069	5.312	58.621	23.086	15.540	8.231	5.201	5.013	4.903	5.013	5.051
28	5.388	5.256	5.312	55.409	21.523	14.698	8.020	6.060	5.013	4.995	5.013	4.774
29	5.884	5.162	5.388	53.912	19.322	14.378	7.853	6.078	5.013	5.013	5.051	4.720
30	6.136		5.807	52.497	18.427	14.061	7.687	5.903	5.013	5.013	5.237	4.720
31	6.368		5.769		17.622		7.522	5.577		5.013		4.720
Mean	6.327	7.043	5.303	-	29.154	14.274	10.891	6.188	5.262	4.999	5.047	4.973
Flow (MCM)	16.947	17.647	14.203	-	78.085	36.999	29.171	16.575	13.639	13.390	13.082	13.319
Maximum	13.177	19.575	5.807	-	49.191	16.852	14.378	7.296	5.922	5.237	5.350	5.463
Minimum	4.940	4.958	5.032	-	17.622	11.618	7.522	5.201	5.013	4.738	5.013	4.720
Runoff (mm)	2.890	3.009	2.422	-	13.316	6.310	4.975	2.826	2.326	2.283	2.231	2.271

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2017

Station Name: Kikuletwa River at TPC

Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.756	6.098	4.924	4.756	-	33.753	15.615	14.792	7.646	6.550	6.610	7.275
2	4.958	5.577	4.720	4.611	-	33.518	15.043	12.539	7.687	6.590	8.132	7.398
3	4.866	5.788	6.019	5.632	-	39.331	14.796	10.548	7.791	6.750	22.023	6.991
4	4.738	6.078	13.572	11.104	-	35.241	14.550	9.545	7.625	6.333	50.250	7.092
5	4.720	5.502	10.032	8.298	-	31.327	14.086	9.566	7.895	6.411	37.286	6.750
6	4.720	5.069	9.769	1.838	-	29.564	14.061	9.632	7.646	6.730	31.144	6.550
7	4.720	5.013	7.797	-	-	29.033	14.354	9.108	7.771	7.072	22.400	6.491
8	4.720	5.013	6.952	8.909	-	27.949	14.257	8.935	6.731	6.710	19.385	7.897
9	4.774	4.977	5.907	13.612	-	26.674	13.338	9.195	6.752	6.293	14.646	13.583
10	5.051	4.756	4.923	20.478	-	25.814	12.884	9.325	7.981	6.254	11.371	12.004
11	4.774	4.774	5.088	18.028	-	24.735	12.670	9.108	8.063	6.391	10.590	8.859
12	4.720	5.051	4.995	14.023	-	24.594	12.411	9.151	7.317	6.510	9.964	7.688
13	4.756	4.774	4.756	12.506	-	23.586	11.827	8.935	7.113	6.391	9.610	6.971
14	4.940	4.720	4.774	11.618	-	22.231	11.733	9.021	6.630	6.273	9.457	6.890
15	4.756	4.720	5.032	11.227	-	21.683	11.733	9.000	6.550	6.391	9.111	6.951
16	4.830	4.720	4.665	11.962	-	21.411	11.618	8.741	6.570	6.490	10.617	6.650
17	5.389	4.720	4.701	22.161	-	20.897	10.976	8.677	6.750	6.293	9.568	6.830
18	4.830	5.503	5.137	-	-	19.851	11.067	8.570	7.174	6.352	9.986	6.750
19	4.774	9.651	7.330	24.080	-	19.321	10.681	8.677	7.358	6.293	10.052	6.118
20	5.051	5.765	5.416	22.603	-	17.959	10.388	8.698	7.293	6.490	9.698	6.372
21	4.774	4.977	5.088	26.421	-	17.287	9.897	8.741	10.832	6.431	9.664	5.962
22	4.720	4.756	4.774	23.845	-	17.210	10.276	8.957	10.099	6.550	12.284	6.372
23	4.720	8.981	4.756	20.365	-	17.236	10.591	8.677	9.458	6.770	9.468	6.098
24	4.774	33.971	4.903	18.506	60.897	17.313	9.699	8.231	8.360	7.174	9.596	6.691
25	5.032	14.517	4.593	18.374	55.207	16.827	9.435	7.979	7.338	6.670	11.789	7.235
26	4.647	6.614	5.183	18.722	50.718	16.445	9.544	7.666	7.133	6.750	9.661	6.991
27	4.592	6.097	5.923	22.209	47.468	16.471	9.500	8.063	6.750	7.092	9.260	6.491
28	4.701	6.139	5.787	27.521	45.005	16.852	9.130	7.895	6.570	6.870	8.550	6.530
29	4.868		5.577	-	41.732	16.471	9.195	7.812	6.550	6.590	7.895	6.510
30	5.887		5.218	-	39.415	16.294	9.216	7.667	6.550	6.590	7.522	6.254
31	6.650		5.106		36.823		10.056	8.147		6.790		6.039
Mean	4.910	6.940	5.917	-	-	23.229	11.762	9.084	7.533	6.576	13.920	7.203
Flow (MCM)	13.151	16.789	15.847	-	-	60.210	31.504	24.330	19.525	17.612	36.080	19.292
Maximum	6.650	33.971	13.572	-	-	39.331	15.615	14.792	10.832	7.174	50.250	13.583
Minimum	4.592	4.720	4.593	-	-	16.294	9.130	7.666	6.550	6.254	6.610	5.962
Runoff (mm)	2.243	2.863	2.703	-	-	10.268	5.372	4.149	3.330	3.003	6.153	3.290

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2018
Station Name: Kikuletwa River at TPC
Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.966	9.865	13.955	21.453	-	58.151	24.510	17.344	10.635	8.957	11.551	9.000
2	8.033	7.862	-	27.605	-	57.025	23.781	14.507	10.635	8.592	10.433	8.295
3	16.723	7.052	42.257	38.065	-	52.191	23.171	13.820	10.635	8.656	10.275	8.428
4	-	6.729	-	53.650	-	49.862	26.221	12.671	10.635	8.549	10.186	10.663
5	22.511	6.570	22.895	39.059	-	48.375	28.593	12.816	10.590	8.528	9.523	10.321
6	14.975	6.590	14.430	31.361	-	45.237	27.427	14.749	10.165	8.592	8.656	9.831
7	22.843	6.750	13.314	30.906	-	42.218	25.388	14.599	9.326	8.914	8.485	9.853
8	15.420	6.333	13.674	40.672	-	40.055	24.425	14.846	10.076	8.613	8.231	9.698
9	12.601	6.352	13.553	-	-	37.354	24.256	13.531	10.885	8.720	8.555	10.231
10	12.445	6.176	13.867	42.391	-	36.569	24.060	13.577	10.998	8.957	10.550	10.681
11	16.513	5.692	20.434	37.229	-	34.243	24.848	13.625	10.953	8.635	9.372	11.623
12	18.594	5.615	-	35.107	-	33.597	24.876	13.387	10.590	7.958	8.571	13.392
13	14.299	5.615	21.971	39.708	-	35.013	24.200	12.131	10.008	7.958	8.231	10.961
14	11.811	5.653	20.755	-	-	34.150	24.144	12.813	9.875	8.486	8.210	9.592
15	9.548	5.845	52.678	-	-	32.592	24.369	12.623	9.588	7.958	8.336	8.609
16	9.173	5.653	32.989	-	-	31.563	23.586	12.813	9.391	7.770	8.400	11.961
17	9.131	5.615	31.391	-	-	30.873	22.505	11.851	9.282	7.276	9.578	9.620
18	10.189	5.615	27.974	-	-	30.574	22.285	11.503	9.478	7.194	14.652	10.189
19	9.024	5.672	-	-	-	30.695	20.978	11.966	9.217	7.194	11.290	9.024
20	8.358	6.020	45.373	-	-	32.592	20.519	11.826	8.957	7.194	10.187	8.358
21	7.874	6.078	32.071	-	-	32.259	19.984	12.130	9.173	7.194	9.748	7.874
22	7.563	6.078	23.085	31.760	-	30.277	19.717	12.529	9.260	7.359	11.832	7.563
23	7.501	6.058	20.627	31.182	-	29.268	19.452	12.014	9.478	8.597	11.611	7.501
24	7.337	5.922	20.680	-	-	29.003	19.030	11.067	9.173	10.188	15.457	7.337
25	7.011	5.749	20.492	-	-	27.978	19.426	11.433	8.656	13.225	12.731	7.011
26	6.690	5.501	20.815	-	-	26.962	19.426	11.433	8.827	33.308	10.481	6.690
27	7.236	5.539	20.986	-	-	26.617	19.003	11.618	9.044	40.223	9.743	7.236
28	7.917	6.020	24.773	-	-	25.387	19.135	11.250	9.921	24.033	9.238	7.917
29	7.154		21.773	-	-	25.018	18.505	11.135	9.174	16.359	8.870	7.154
30	6.870		19.613	-	30.535	24.933	17.907	10.839	9.655	15.819	8.656	6.870
31	7.227		18.900		60.355		16.955	10.658		13.129		7.078
Mean	-	6.222	-	-	-	35.688	22.345	12.681	9.809	11.424	10.055	9.050
Flow (MCM)	-	15.052	-	-	-	92.503	59.848	33.964	25.426	30.597	26.062	24.240
Maximum	-	9.865	-	-	-	58.151	28.593	17.344	10.998	40.223	15.457	13.392
Minimum	-	5.501	-	-	-	24.933	16.955	10.658	8.656	7.194	8.210	6.690
Runoff (mm)	-	2.567	-	-	-	15.775	10.206	5.792	4.336	5.218	4.444	4.134

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD1 **Year:** 2019

Station Name: Kikuletwa River at TPC

Time-Series Type: Flow (cumecs)

Latitude: 3:30:32 S Longitude: 37:17:55 E Elevation: 709.0 metres Area: 5864.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.245	7.031	7.255	5.922	50.991	-	21.520	11.966	9.151	9.391	39.832	44.421
2	9.831	7.031	7.687	5.922	27.520	31.472	20.333	12.106	9.086	10.097	35.799	45.068
3	9.588	7.031	7.358	5.922	24.938	59.223	19.004	12.200	9.108	10.008	31.059	-
4	9.435	7.031	7.626	5.922	31.338	53.261	18.375	11.780	8.677	11.214	28.976	54.921
5	9.522	7.031	6.891	5.845	24.168	50.169	17.622	11.572	8.914	17.654	27.461	45.513
6	9.369	7.031	6.930	5.388	-	48.140	18.010	11.525	8.613	19.465	30.766	45.565
7	9.108	7.031	6.610	5.312	-	44.807	18.244	11.296	8.742	19.434	25.883	44.672
8	9.130	7.031	6.550	5.331	-	42.249	17.390	10.681	9.151	21.733	26.274	48.345
9	8.763	7.031	6.550	5.444	-	41.276	17.008	10.320	9.195	-	33.551	-
10	8.677	7.031	6.590	5.444	-	41.794	14.775	10.298	9.021	-	25.747	27.740
11	8.549	7.031	6.810	5.368	-	40.634	14.403	10.388	8.741	25.475	32.318	54.086
12	8.570	7.031	6.729	5.615	-	37.324	14.403	10.097	8.656	45.232	35.239	54.261
13	8.827	7.031	6.689	5.884	-	35.882	14.354	9.808	8.464	58.395	29.783	50.819
14	8.679	7.031	6.491	5.922	-	34.642	14.013	9.875	8.784	47.008	30.163	47.608
15	7.731	7.031	6.000	5.922	-	34.456	13.698	9.764	8.720	44.212	33.483	42.094
16	9.819	7.031	5.922	5.922	-	34.150	13.795	9.764	8.634	47.169	29.336	39.637
17	16.532	7.031	5.922	5.922	-	32.138	13.819	9.875	8.252	-	27.343	38.776
18	13.501	7.031	5.922	5.922	-	30.516	13.891	9.764	8.189	-	24.092	37.861
19	10.618	7.031	5.922	5.922	-	28.740	14.305	9.676	8.210	-	23.643	33.848
20	10.119	7.031	5.922	5.922	-	27.396	14.207	9.217	8.315	-	25.901	31.625
21	10.141	7.031	5.922	6.322	-	26.703	14.013	8.763	8.252	-	28.065	30.844
22	10.388	7.031	5.922	9.775	-	25.614	13.722	8.677	8.443	29.965	39.561	33.920
23	10.165	7.031	5.922	18.469	-	25.386	12.979	8.570	8.189	57.129	35.038	40.224
24	9.304	7.031	5.922	30.293	-	24.933	12.812	8.677	7.895	29.217	45.981	38.240
25	8.913	7.031	5.922	17.396	-	24.313	12.576	8.785	8.481	-	40.015	36.351
26	8.870	7.031	5.922	12.230	-	24.651	12.789	9.260	12.050	-	46.044	35.140
27	8.870	7.031	5.922	12.648	-	23.419	12.670	9.043	10.865	30.148	46.601	39.521
28	8.827	7.052	5.922	12.042	-	23.140	12.528	8.720	10.908	-	41.770	43.985
29	8.402		5.922	19.031	-	22.698	12.623	8.570	9.898	27.646	38.018	41.570
30	7.338		5.922	48.049	-	21.956	12.458	8.698	9.544	47.124	37.808	39.353
31	7.052		5.922		-		12.129	8.892		41.765		18.161
Mean	9.480	7.032	6.372	10.034	-	-	14.983	9.956	8.972	-	33.185	-
Flow (MCM)	25.391	17.012	17.066	26.009	-	-	40.130	26.665	23.254	-	86.016	-
Maximum	16.532	7.052	7.687	48.049	-	-	21.520	12.200	12.050	-	46.601	-
Minimum	7.052	7.031	5.922	5.312	-	-	12.129	8.570	7.895	-	23.643	-
Runoff (mm)	4.330	2.901	2.910	4.435	-	-	6.843	4.547	3.966	-	14.668	-

Flow (cumecs)

Annual Statistics

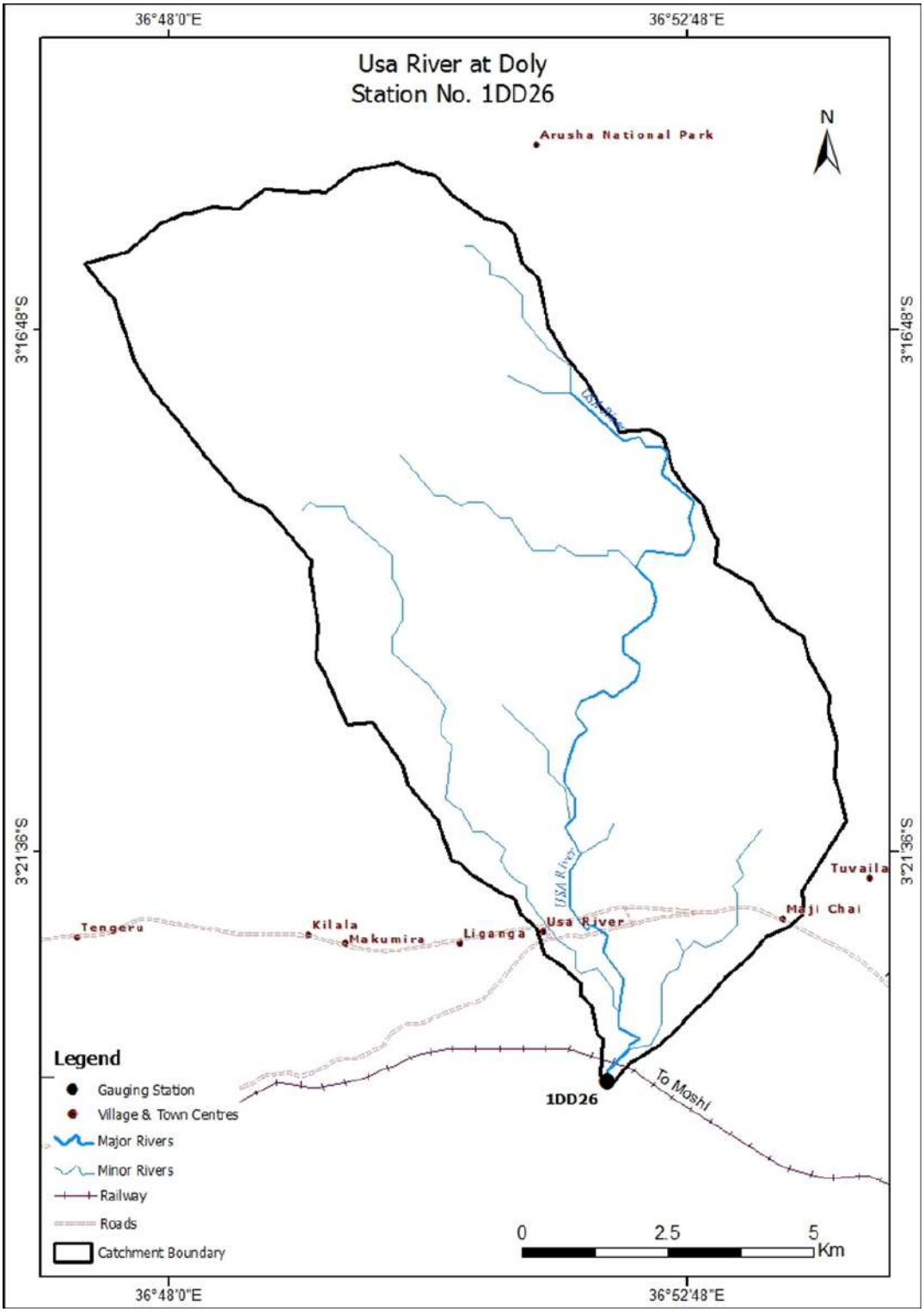
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Usa River at Dolly Sisal Estate				
Station No: 1DD26C			Established: 01/01/ 1978	
Coordinates:			Altitude (m.a.m.s.l): 1105	
Lat: -3.3954	Long: 36.8678		Catchment Area (km²): 96	
Description of the Catchment:				
Induced vegetation, forest, bush and rocks.				
Station Details				
1. Staff Gauges	Range:		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type orpheus mini		Date installed:	
3. Benchmark	Shaped flat bar set in concrete above the stone Post on the left bank			
BM Assumed Datum: 3.397m		N.M.M.S.L:	TBM: –	
4. Control	Open channel with rocky banks and bed			
5. Access	Accessible throughout the year, about 40.1km from Arusha town.			
Records	Period		Quality	
Water Level:	14/10/2015 - 31/12/2019		1.2.2	
Discharge:	14/10/2015 - 31/12/2019		2.2.2	
Extremes:	Max. Recorded	4.812m³/sec	On 30/04/2019	WL 1.30m
	Min. Recorded	0.248m³/sec	On 05/11/2012	WL 0.1m
Remarks				


Usa River at Doly
Station No. 1DD26
36°48'0"E
36°52'48"E
3°16'48"S
3°21'36"S
N
Arusha National Park
Tuvaila
Maji Chai
Usa River
Liganga
Kilala
Makumira
Tengeru
1DD26
To Moshi
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Catchment Boundary
0
2.5
5
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD26C **Year:** 2015
Station Name: Usa River at Dolly Sisal Estate
Time-Series Type: Flow (cumecs)

Latitude: 3:23:43 S Longitude: 36:52: 4 E Elevation: 1105.0 metres Area: 96.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	-	-	1.374	1.374
2	-	-	-	-	-	-	-	-	-	-	1.374	1.374
3	-	-	-	-	-	-	-	-	-	-	1.356	1.374
4	-	-	-	-	-	-	-	-	-	-	1.337	1.374
5	-	-	-	-	-	-	-	-	-	-	1.319	1.374
6	-	-	-	-	-	-	-	-	-	-	1.301	1.356
7	-	-	-	-	-	-	-	-	-	-	1.301	1.337
8	-	-	-	-	-	-	-	-	-	-	1.319	1.335
9	-	-	-	-	-	-	-	-	-	-	1.356	1.303
10	-	-	-	-	-	-	-	-	-	-	1.374	1.301
11	-	-	-	-	-	-	-	-	-	-	1.374	1.283
12	-	-	-	-	-	-	-	-	-	-	1.374	1.264
13	-	-	-	-	-	-	-	-	-	-	1.374	1.264
14	-	-	-	-	-	-	-	-	-	1.374	1.374	1.246
15	-	-	-	-	-	-	-	-	-	1.374	1.374	1.226
16	-	-	-	-	-	-	-	-	-	1.374	1.374	1.194
17	-	-	-	-	-	-	-	-	-	1.356	1.356	1.192
18	-	-	-	-	-	-	-	-	-	1.337	1.319	1.188
19	-	-	-	-	-	-	-	-	-	1.337	1.301	1.125
20	-	-	-	-	-	-	-	-	-	1.340	1.301	1.125
21	-	-	-	-	-	-	-	-	-	1.372	1.301	1.161
22	-	-	-	-	-	-	-	-	-	1.374	1.301	1.020
23	-	-	-	-	-	-	-	-	-	1.374	1.303	0.915
24	-	-	-	-	-	-	-	-	-	1.372	1.337	0.847
25	-	-	-	-	-	-	-	-	-	1.337	1.372	0.826
26	-	-	-	-	-	-	-	-	-	1.303	1.374	0.783
27	-	-	-	-	-	-	-	-	-	1.321	1.374	0.824
28	-	-	-	-	-	-	-	-	-	1.372	1.374	0.812
29	-		-	-	-	-	-	-	-	1.374	1.374	0.781
30	-		-	-	-	-	-	-	-	1.374	1.374	0.776
31	-		-		-		-	-		1.374		0.748
Mean	-	-	-	-	-	-	-	-	-	-	1.347	1.132
Flow (MCM)	-	-	-	-	-	-	-	-	-	-	3.492	3.033
Maximum	-	-	-	-	-	-	-	-	-	-	1.374	1.374
Minimum	-	-	-	-	-	-	-	-	-	-	1.301	0.748
Runoff (mm)	-	-	-	-	-	-	-	-	-	-	36.377	31.593

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD26C **Year:** 2016
Station Name: Usa River at Dolly Sisal Estate
Time-Series Type: Flow (cumecs)

Latitude: 3:23:43 S Longitude: 36:52: 4 E Elevation: 1105.0 metres Area: 96.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.750	0.671	0.586	0.781	1.333	0.845	0.845	0.845	0.847	1.013	0.814	0.845
2	0.824	0.618	0.556	0.789	1.843	0.900	0.845	0.830	0.876	0.951	0.843	0.843
3	0.845	0.557	0.525	0.758	1.753	1.257	0.845	0.843	0.910	0.977	0.845	0.814
4	0.841	0.527	0.529	0.718	1.640	0.895	0.828	0.845	0.914	0.985	0.845	0.812
5	0.783	0.523	0.588	1.103	1.566	0.910	0.812	0.845	0.895	1.013	0.845	0.812
6	0.776	0.512	0.677	-	1.468	0.881	0.814	0.828	0.878	1.015	0.828	0.812
7	0.748	0.525	0.723	1.351	1.374	0.876	0.843	0.812	0.895	1.015	0.812	0.814
8	0.746	0.527	0.742	1.068	1.372	0.847	0.845	0.812	0.929	1.013	0.797	0.843
9	0.762	0.538	0.900	0.934	1.335	0.845	0.845	0.828	0.944	0.983	0.809	0.845
10	0.740	0.529	0.830	0.877	1.233	0.845	0.828	0.845	0.881	0.998	0.828	0.845
11	0.873	0.581	0.781	0.881	1.188	0.845	0.812	0.845	0.845	1.015	0.845	0.845
12	0.754	0.527	0.772	1.215	1.125	0.845	0.812	0.845	0.847	1.013	0.845	0.845
13	0.685	0.495	0.687	1.227	1.121	0.828	0.812	0.845	0.876	0.983	0.845	0.828
14	0.681	0.510	0.681	1.199	1.119	0.812	0.795	0.845	0.878	0.981	0.845	0.812
15	0.724	0.525	0.681	1.099	1.083	0.812	0.781	0.845	0.878	0.983	0.845	0.812
16	0.898	0.525	0.681	1.278	1.018	0.814	0.795	0.845	0.878	1.011	0.845	0.812
17	0.845	0.533	0.786	1.513	0.964	0.839	0.809	0.828	0.881	0.964	0.845	0.814
18	0.814	0.593	0.919	1.801	0.895	0.785	0.814	0.812	0.925	0.895	0.830	0.847
19	0.791	0.527	0.793	1.468	0.860	0.826	0.843	0.812	0.914	0.847	0.843	0.910
20	0.687	0.527	0.734	1.484	0.832	0.845	0.845	0.812	0.927	0.845	0.812	0.908
21	0.679	0.554	0.744	1.520	0.843	0.845	0.843	0.812	0.898	0.845	0.812	0.830
22	0.651	0.559	0.685	1.490	0.814	0.843	0.814	0.814	0.876	0.843	0.843	0.814
23	0.633	0.598	0.691	1.574	0.814	0.816	0.814	0.843	0.866	0.814	0.814	0.843
24	0.618	0.584	0.860	1.480	0.843	0.843	0.843	0.845	0.927	0.812	0.814	0.845
25	0.602	0.557	0.781	0.379	0.843	0.845	0.845	0.845	0.946	0.814	0.843	0.845
26	0.586	0.571	0.695	1.808	0.814	0.845	0.845	0.845	0.946	0.843	0.845	0.843
27	0.586	0.586	0.837	1.513	0.812	0.843	0.845	0.845	0.946	0.843	0.845	0.814
28	0.571	0.678	0.889	1.370	0.828	0.797	0.845	0.845	0.949	0.814	0.845	0.812
29	0.555	1.264	0.807	1.614	0.845	0.812	0.845	0.845	0.996	0.812	0.845	0.814
30	0.571		0.808	1.489	0.860	0.845	0.845	0.845	1.015	0.812	0.845	0.843
31	0.592		0.778		0.847		0.845	0.845		0.812		0.843
Mean	0.716	0.580	0.734	-	1.106	0.856	0.829	0.835	0.906	0.921	0.834	0.834
Flow (MCM)	1.919	1.453	1.965	-	2.962	2.219	2.220	2.237	2.349	2.468	2.161	2.234
Maximum	0.898	1.264	0.919	-	1.843	1.257	0.845	0.845	1.015	1.015	0.845	0.910
Minimum	0.555	0.495	0.525	-	0.812	0.785	0.781	0.812	0.845	0.812	0.797	0.812
Runoff (mm)	19.989	15.138	20.472	-	30.854	23.114	23.123	23.302	24.471	25.706	22.512	23.272

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD26C **Year:** 2017
Station Name: Usa River at Dolly Sisal Estate
Time-Series Type: Flow (cumecs)

Latitude: 3:23:43 S Longitude: 36:52: 4 E Elevation: 1105.0 metres Area: 96.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.816	0.746	0.746	0.900	1.344	1.657	1.228	1.101	1.050	0.981	1.013	1.015
2	0.826	0.742	0.717	0.960	1.172	1.600	1.210	1.083	1.083	0.964	0.983	1.015
3	0.814	0.685	0.709	1.017	1.231	1.543	1.194	1.055	1.050	0.946	0.981	1.035
4	0.841	0.685	0.681	1.188	1.510	1.519	1.208	1.083	1.031	0.929	0.977	1.085
5	0.814	0.738	0.681	1.192	0.530	1.453	1.194	1.083	1.018	0.912	0.934	1.119
6	0.809	0.685	0.699	1.119	1.985	1.444	1.226	1.050	1.015	0.914	0.951	1.119
7	0.781	0.681	0.744	1.035	1.725	1.379	1.228	1.018	1.013	0.944	1.011	1.085
8	0.778	0.679	0.742	1.210	1.662	1.374	1.210	1.018	0.981	0.949	1.015	1.050
9	0.778	0.651	0.685	1.136	1.756	1.390	1.190	1.048	0.934	0.979	1.015	1.035
10	0.778	0.633	0.681	1.042	2.095	1.393	1.159	1.068	0.944	0.981	1.015	1.050
11	0.778	0.618	0.697	1.377	1.923	1.377	1.139	1.083	0.946	0.983	1.022	1.035
12	0.778	0.631	0.697	1.237	1.932	1.374	1.121	1.070	0.944	1.013	1.130	1.031
13	0.778	0.620	0.665	1.073	2.057	1.372	1.139	1.085	0.914	1.015	1.116	1.015
14	0.778	0.633	0.647	0.996	1.930	1.340	1.156	1.066	0.912	1.015	1.022	1.015
15	0.778	0.649	0.620	0.990	1.790	1.335	1.139	1.018	0.914	1.015	1.015	1.015
16	0.772	0.647	0.618	1.136	1.695	1.319	1.121	1.015	0.944	1.015	1.015	1.015
17	0.715	0.635	0.620	1.258	1.533	1.303	1.123	1.015	0.946	1.013	1.018	1.015
18	0.701	0.665	0.667	1.312	1.430	1.298	1.154	1.033	0.946	0.981	1.033	1.018
19	0.713	0.681	0.738	1.519	1.391	1.264	1.154	1.050	0.944	0.949	1.031	1.086
20	0.717	0.681	0.754	1.381	1.701	1.230	1.125	1.066	0.914	0.946	1.015	1.176
21	0.774	0.681	0.874	1.264	2.042	1.228	1.154	1.050	0.912	0.949	1.035	1.224
22	0.778	0.681	0.895	1.143	1.857	1.230	1.139	1.035	0.912	0.979	1.099	1.185
23	0.776	0.683	0.947	1.145	1.766	1.244	1.121	1.033	0.914	0.983	1.053	1.057
24	0.715	0.730	0.998	1.289	1.839	1.228	1.121	1.015	0.944	1.013	1.015	1.015
25	0.681	0.760	1.007	1.197	1.795	1.230	1.121	1.015	0.946	1.015	1.018	1.015
26	0.681	0.746	0.900	1.121	1.905	1.262	1.121	1.018	0.946	1.015	1.061	1.015
27	0.681	0.746	0.849	1.121	1.903	1.264	1.119	1.046	0.949	1.015	1.057	1.015
28	0.685	0.746	0.862	1.648	1.758	1.262	1.088	1.020	0.979	1.015	1.150	1.053
29	0.742		0.862	1.452	1.681	1.230	1.085	1.031	0.981	1.015	1.073	1.134
30	0.746		0.845	1.274	1.693	1.228	1.085	1.015	0.981	1.015	1.015	1.105
31	0.746		0.845		1.679		1.088	1.018		1.015		1.081
Mean	0.760	0.684	0.764	1.191	1.687	1.346	1.150	1.045	0.964	0.983	1.030	1.062
Flow (MCM)	2.035	1.655	2.047	3.087	4.519	3.488	3.081	2.800	2.498	2.633	2.669	2.845
Maximum	0.841	0.760	1.007	1.648	2.095	1.657	1.228	1.101	1.083	1.015	1.150	1.224
Minimum	0.681	0.618	0.618	0.900	0.530	1.228	1.085	1.015	0.912	0.912	0.934	1.015
Runoff (mm)	21.198	17.242	21.322	32.161	47.078	36.335	32.092	29.165	26.022	27.431	27.800	29.640

Flow (cumecs)

Annual Statistics

Maximum: 2.095 Minimum: 0.530 Mean: 1.056 cumecs

Total: 33.289 MCM Runoff: 346.761 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD26C **Year:** 2018
Station Name: Usa River at Dolly Sisal Estate
Time-Series Type: Flow (cumecs)

Latitude: 3:23:43 S Longitude: 36:52: 4 E Elevation: 1105.0 metres Area: 96.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.022	1.055	1.280	1.703	0.535	1.989	1.950	1.851	1.930	1.773	1.734	1.756
2	1.042	1.083	1.321	1.945	2.072	1.970	1.950	1.871	1.950	1.753	1.753	1.790
3	1.219	1.081	1.404	1.977	2.027	1.950	1.927	1.873	1.950	1.761	1.751	1.778
4	1.292	1.037	1.377	1.831	1.989	1.950	1.873	1.927	1.950	1.861	1.715	1.809
5	1.192	1.050	1.342	1.861	1.952	1.932	1.871	1.945	1.950	1.831	1.679	1.827
6	1.075	1.050	1.466	1.537	1.952	1.942	1.888	1.895	1.950	1.795	1.676	1.795
7	1.050	1.053	1.614	-	1.982	1.856	1.873	1.930	1.950	1.795	1.695	1.792
8	1.033	1.083	1.585	1.535	1.913	1.827	1.871	1.947	1.930	1.849	1.715	1.812
9	1.015	1.103	1.550	1.987	1.893	1.758	1.854	1.913	1.910	1.866	1.695	1.831
10	1.033	1.121	1.588	1.927	1.910	1.756	1.849	1.910	1.910	1.817	1.679	1.834
11	1.053	1.103	1.467	1.953	1.908	1.770	1.831	1.893	1.913	1.812	1.712	1.868
12	1.081	1.085	1.391	2.072	1.856	1.761	1.792	1.908	1.947	1.773	1.698	1.868
13	1.070	1.085	1.550	1.610	1.868	1.873	1.756	1.910	1.950	1.753	1.693	1.851
14	1.068	1.068	1.543	-	1.871	1.766	1.790	1.910	1.950	1.753	1.679	1.851
15	1.033	1.048	1.449	-	1.871	1.790	1.773	1.910	1.950	1.775	1.715	1.854
16	1.015	1.020	1.391	-	1.881	1.792	1.753	1.910	1.950	1.809	1.734	1.871
17	1.033	1.046	1.583	0.525	1.992	1.795	1.773	1.910	1.910	1.797	1.732	1.868
18	1.053	1.018	1.550	2.002	1.854	1.831	1.773	1.930	1.868	1.888	1.712	1.834
19	1.083	1.015	1.384	1.995	1.758	1.868	1.761	1.950	1.836	1.945	1.681	1.792
20	1.083	1.015	1.310	1.997	1.766	1.873	1.844	1.947	1.866	1.890	1.710	1.753
21	1.050	1.015	1.473	1.837	1.937	1.905	1.831	1.910	1.836	1.814	1.681	1.751
22	1.018	1.015	1.835	1.930	1.932	1.873	1.834	1.876	1.868	1.790	1.712	1.715
23	1.018	1.018	1.834	2.110	1.957	1.854	1.868	1.910	1.871	1.753	1.734	1.679
24	1.031	1.068	2.055	2.090	2.060	1.851	1.871	1.947	1.849	1.717	1.756	1.676
25	1.015	1.123	0.535	1.555	2.032	1.856	1.868	1.950	1.792	1.695	1.790	1.679
26	1.018	1.210	1.515	-	2.047	1.972	1.834	1.950	1.756	1.659	1.812	1.693
27	1.033	1.292	1.972	-	2.049	1.886	1.831	1.947	1.753	1.693	1.831	1.676
28	1.121	1.235	2.022	-	2.072	1.985	1.831	1.913	1.753	1.695	1.829	1.676
29	1.228		1.698	1.577	2.107	2.007	1.831	1.910	1.756	1.695	1.792	1.676
30	1.033		1.602	0.532	2.070	1.952	1.831	1.910	1.790	1.698	1.756	1.676
31	1.063		1.583		2.009		1.831	1.910		1.712		1.679
Mean	1.070	1.078	1.525	-	1.907	1.873	1.839	1.915	1.885	1.781	1.728	1.774
Flow (MCM)	2.866	2.609	4.084	-	5.108	4.855	4.926	5.130	4.885	4.771	4.480	4.753
Maximum	1.292	1.292	2.055	-	2.107	2.007	1.950	1.950	1.950	1.945	1.831	1.871
Minimum	1.015	1.015	0.535	-	0.535	1.756	1.753	1.851	1.753	1.659	1.676	1.676
Runoff (mm)	29.856	27.177	42.540	-	53.210	50.571	51.313	53.436	50.888	49.698	46.665	49.508

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD26C **Year:** 2019
Station Name: Usa River at Dolly Sisal Estate
Time-Series Type: Flow (cumecs)

Latitude: 3:23:43 S Longitude: 36:52: 4 E Elevation: 1105.0 metres Area: 96.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.693	1.374	1.298	1.176	1.415	-	1.337	1.264	1.192	1.335	1.724	1.930
2	1.676	1.372	1.305	1.253	1.773	0.538	1.335	1.264	1.192	1.287	1.664	1.965
3	1.671	1.340	1.442	1.176	2.033	2.148	1.303	1.264	1.190	1.434	1.712	1.913
4	1.585	1.335	1.231	1.123	2.015	2.092	1.301	1.264	1.159	1.662	1.785	1.873
5	1.559	1.303	1.188	1.085	1.920	2.049	1.298	1.264	1.156	1.526	1.758	1.873
6	1.545	1.301	1.141	1.035	1.899	2.024	1.285	1.264	1.156	1.361	1.857	1.910
7	1.562	1.301	1.351	1.022	2.045	1.952	1.301	1.246	1.174	1.287	2.002	1.947
8	1.562	1.283	1.199	1.168	2.034	1.913	1.301	1.226	1.192	1.285	1.952	1.947
9	1.543	1.264	1.099	1.283	1.555	1.908	1.319	1.194	1.212	1.361	1.930	1.913
10	1.505	1.264	1.020	1.435	-	1.873	1.337	1.174	1.242	1.419	1.910	1.910
11	1.486	1.267	1.015	1.409	-	1.878	1.335	1.156	1.197	1.287	1.888	1.930
12	1.486	1.298	1.086	1.533	-	1.962	1.303	1.174	1.226	1.303	1.834	1.908
13	1.486	1.301	1.194	1.550	-	1.950	1.301	1.192	1.228	1.414	1.871	1.795
14	1.486	1.301	1.292	1.640	-	1.950	1.301	1.192	1.228	1.540	1.932	1.797
15	1.486	1.301	1.217	1.671	-	1.930	1.301	1.192	1.210	1.619	2.007	1.930
16	1.486	1.301	1.165	1.578	-	1.890	1.303	1.192	1.192	1.708	1.995	2.042
17	1.486	1.301	1.253	1.510	-	1.851	1.315	1.192	1.190	1.829	2.002	1.995
18	1.484	1.298	1.224	1.451	-	1.807	1.267	1.174	1.159	1.737	1.972	1.987
19	1.446	1.267	1.132	1.432	-	1.720	1.264	1.156	1.163	1.874	2.012	1.987
20	1.379	1.267	1.235	1.524	-	1.710	1.264	1.156	1.255	1.758	2.044	1.932
21	1.374	1.298	1.181	1.609	-	1.640	1.264	1.174	1.212	1.851	1.989	1.890
22	1.374	1.301	1.154	1.552	-	1.600	1.264	1.192	1.192	1.864	1.930	1.873
23	1.374	1.298	1.183	1.633	-	1.562	1.264	1.192	1.192	1.960	1.856	1.834
24	1.377	1.249	1.349	1.671	-	1.484	1.264	1.192	1.174	1.869	1.868	1.795
25	1.423	1.228	1.473	1.581	-	1.379	1.264	1.192	1.159	1.985	1.829	1.861
26	1.379	1.228	1.534	1.451	-	1.374	1.264	1.174	1.190	1.945	1.802	1.812
27	1.374	1.233	1.360	1.660	-	1.374	1.264	1.156	1.192	1.868	2.000	1.839
28	1.473	1.280	1.299	1.712	-	1.372	1.264	1.156	1.194	1.812	2.012	2.004
29	1.372		1.230	1.716	-	1.347	1.264	1.174	1.264	1.739	1.967	2.044
30	1.372		1.192	-	-	1.386	1.264	1.192	1.335	1.638	1.913	1.975
31	1.374		1.141		-		1.264	1.192		1.609		1.930
Mean	1.480	1.291	1.232	-	-	-	1.290	1.200	1.201	1.618	1.901	1.914
Flow (MCM)	3.964	3.124	3.299	-	-	-	3.454	3.213	3.112	4.334	4.926	5.127
Maximum	1.693	1.374	1.534	-	-	-	1.337	1.264	1.335	1.985	2.044	2.044
Minimum	1.372	1.228	1.015	-	-	-	1.264	1.156	1.156	1.285	1.664	1.795
Runoff (mm)	41.290	32.538	34.366	-	-	-	35.981	33.473	32.417	45.148	51.316	53.407

Flow (cumecs)

Annual Statistics

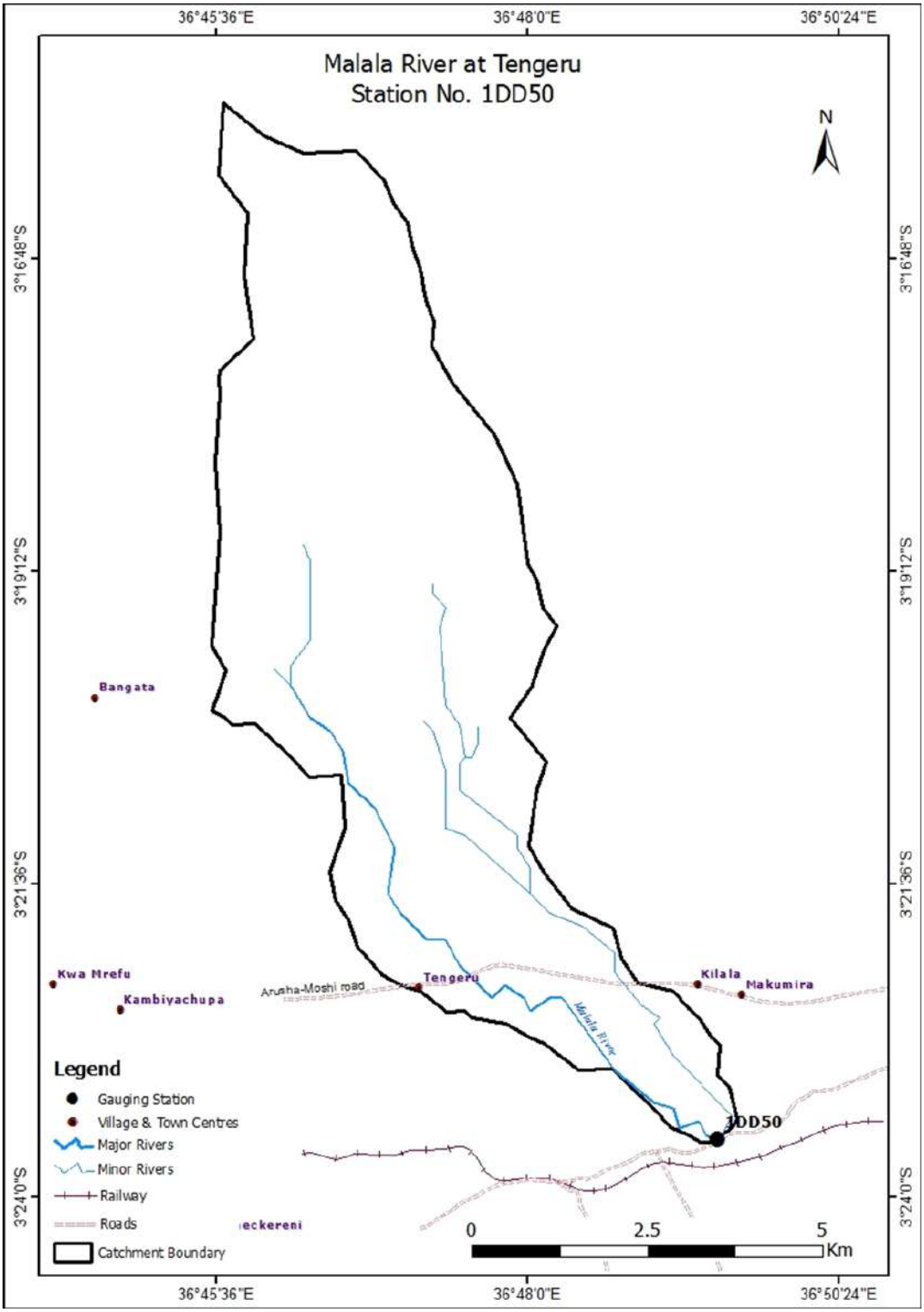
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Malala River at Above Old Road Bridge					
Station No: 1DD50			Established: 23/01/ 1962		
Coordinates:			Altitude (m.a.m.s.l): 1162		
Lat: -3.3927	Long: 36.8243		Catchment Area (km²): 46		
Description of the Catchment:					
Chiefly actively induced vegetation, forest, bush land and Rocks					
Station Details					
1. Staff Gauges	Range: 0 – 3m		A.D.Z.G.R: 0.00mm		
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -		
2. Automatic Recorder	Pressure type orpheus mini		Date installed: 2013		
3. Benchmark	Bolt set in concrete above the stone post on left bank				
BM Assumed Datum: 2.089m		N.M.M.S.L:		TBM: –	
4. Control	Open channel, there is a bridge downstream about 50m				
5. Access	Accessible throughout the year 15km from Arusha town through Old Moshi road				
Records	Period			Quality	
Water Level:	01/01/2010 - 31/12/2019			1.2.2	
Discharge:	01/01/2010 - 31/12/2019			2.2.2	
Extremes:	Max. Recorded	42.598m³/sec	On 02/04/2018	WL 2.00m	
	Min. Recorded	0.019m³/sec	On 18/12/2016	WL 0.1m	
Remarks					


Malala River at Tengeru
Station No. 1DD50
N
36°45'36"E
36°48'0"E
36°50'24"E
3°16'48"S
3°19'12"S
3°21'36"S
3°24'0"S
Bangata
Kwa Mrefu
Kambiyachupa
Arusha-Moshi road
Tengeru
Kilala
Makumira
Malala River
1DD50
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Catchment Boundary
0
2.5
5
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2010
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.098	0.839	0.839	2.321	2.148	2.662	2.386	1.473	1.380	1.170	1.080	1.080
2	2.064	0.839	0.839	2.185	3.480	2.662	2.377	1.473	1.366	1.170	1.080	1.080
3	1.862	0.839	0.839	4.015	2.566	3.346	2.135	1.473	1.366	1.170	1.080	1.080
4	1.829	0.839	0.839	3.579	1.914	3.280	2.098	1.473	1.366	1.170	1.080	1.080
5	1.783	0.839	0.839	3.992	1.951	2.254	2.098	1.473	1.366	1.170	1.080	1.080
6	1.516	0.839	0.839	1.905	2.646	2.098	2.064	1.473	1.366	1.170	1.080	1.080
7	1.473	0.839	0.839	1.619	2.125	2.098	1.862	1.473	1.366	1.170	1.080	1.080
8	1.473	0.839	0.839	-	1.632	2.098	1.829	1.473	1.366	1.170	1.080	1.080
9	1.473	0.839	0.858	1.839	1.737	2.098	1.829	1.473	1.366	1.170	1.080	1.080
10	1.473	0.839	0.975	3.004	1.591	2.031	1.783	1.473	1.366	1.170	1.058	1.080
11	1.446	0.839	0.956	1.910	-	1.646	1.516	1.473	1.366	1.170	0.925	1.080
12	1.291	0.839	0.736	1.421	-	1.586	1.473	1.473	1.366	1.170	0.848	1.080
13	1.265	0.839	0.702	1.341	-	1.586	1.473	1.473	1.366	1.170	0.839	1.080
14	1.265	0.839	0.702	1.150	-	1.586	1.473	1.473	1.366	1.170	0.839	1.080
15	1.265	0.839	0.702	0.949	2.032	1.586	1.473	1.473	1.366	1.170	0.971	1.080
16	1.265	0.839	0.702	0.649	3.372	1.586	1.473	1.473	1.366	1.170	2.115	1.080
17	1.230	0.839	0.702	-	3.250	1.557	1.473	1.473	1.366	1.170	3.462	1.080
18	1.027	0.839	0.702	-	4.065	1.380	1.473	1.473	1.366	1.170	2.560	1.080
19	0.995	0.839	0.702	-	3.452	1.243	1.473	1.473	1.366	1.170	1.595	1.080
20	0.995	0.839	0.702	-	2.642	1.027	1.473	1.473	1.366	1.170	1.446	1.048
21	0.995	0.839	0.702	2.266	2.377	0.995	1.473	1.473	1.341	1.158	1.291	0.868
22	0.995	0.839	0.702	4.320	1.085	0.995	1.473	1.473	1.194	1.091	1.265	0.839
23	0.995	0.839	0.702	3.892	-	1.050	1.473	1.473	1.170	1.080	1.265	0.839
24	0.995	0.839	0.765	3.518	-	1.409	1.473	1.473	1.170	1.080	1.242	0.839
25	0.975	0.839	1.175	3.572	-	1.473	1.473	1.473	1.170	1.080	1.102	0.839
26	0.858	0.839	1.182	4.264	2.148	1.473	1.473	1.473	1.170	1.080	1.080	0.839
27	0.839	0.839	1.246	4.442	3.600	1.473	1.473	1.473	1.170	1.080	1.080	0.839
28	0.839	0.839	1.825	3.923	3.466	1.473	1.473	1.473	1.170	1.080	1.080	0.839
29	0.839		2.458	-	3.466	1.473	1.473	1.473	1.170	1.080	1.080	0.839
30	0.839		2.534	-	3.466	1.595	1.473	1.473	1.170	1.080	1.080	0.839
31	0.839		2.415		3.346		1.473	1.460		1.080		0.839
Mean	1.261	0.839	1.018	-	-	1.761	1.659	1.473	1.308	1.141	1.265	0.994
Flow (MCM)	3.378	2.030	2.727	-	-	4.564	4.444	3.944	3.390	3.055	3.278	2.663
Maximum	2.098	0.839	2.534	-	-	3.346	2.386	1.473	1.380	1.170	3.462	1.080
Minimum	0.839	0.839	0.702	-	-	0.995	1.473	1.460	1.170	1.080	0.839	0.839
Runoff (mm)	73.431	44.127	59.272	-	-	99.208	96.613	85.745	73.693	66.423	71.259	57.889

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2011
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.839	0.914	0.995	1.460	-	2.064	1.473	1.366	0.995	1.040	1.080	1.366
2	0.839	0.914	0.995	1.473	1.814	1.862	1.473	1.366	0.995	2.438	1.080	1.366
3	0.839	0.914	0.995	1.473	2.908	1.829	1.473	1.366	0.995	1.936	1.080	1.366
4	0.839	0.914	0.995	1.473	2.141	1.829	1.473	1.366	0.995	1.690	1.080	1.380
5	0.839	0.914	0.995	1.487	1.752	1.829	1.473	1.366	0.995	1.501	1.102	1.460
6	0.839	0.914	0.995	1.543	2.002	1.829	1.473	1.366	0.995	1.473	1.242	1.473
7	0.839	0.905	0.995	1.393	3.887	1.829	1.473	1.354	0.995	1.473	1.265	1.473
8	0.839	0.848	0.995	1.354	2.686	1.829	1.473	1.278	0.995	1.473	1.265	1.473
9	0.839	0.839	0.995	1.266	2.181	1.813	1.473	1.265	0.995	1.446	1.304	1.446
10	0.839	0.839	0.995	1.182	1.811	1.720	1.473	1.265	0.995	1.291	1.544	1.291
11	0.858	0.839	0.995	1.170	-	1.704	1.473	1.265	0.995	1.265	1.586	1.265
12	0.975	0.821	0.995	1.170	1.404	1.704	1.460	1.265	0.995	1.265	1.615	1.265
13	0.995	0.718	0.995	1.170	2.596	1.704	1.380	1.265	0.995	1.265	1.814	1.265
14	0.995	0.702	0.995	1.170	2.554	1.704	1.366	1.265	0.995	1.456	1.944	1.265
15	0.995	0.702	0.995	1.170	2.554	1.704	1.366	1.265	0.995	2.815	1.960	1.265
16	0.995	0.819	0.995	1.170	2.554	1.704	1.366	1.253	0.995	2.967	1.977	1.331
17	0.995	1.633	0.995	1.170	2.554	1.704	1.366	1.182	0.995	2.323	2.081	1.754
18	0.995	1.548	1.050	1.170	2.554	1.704	1.366	1.170	0.995	2.082	2.098	1.813
19	0.984	1.139	1.437	1.170	2.554	1.704	1.366	1.170	0.995	1.862	2.098	1.720
20	0.924	1.080	1.660	1.170	2.554	1.689	1.366	1.170	0.975	1.754	2.098	1.689
21	0.914	1.080	1.600	1.170	2.554	1.600	1.366	1.170	0.858	1.331	2.098	1.572
22	0.914	1.069	1.586	1.170	2.554	1.586	1.366	1.170	0.839	1.265	2.098	1.393
23	0.914	1.005	1.586	1.147	2.554	1.586	1.366	1.147	0.839	1.265	2.098	1.341
24	0.914	0.995	1.586	1.016	2.554	1.586	1.366	1.016	0.839	1.242	2.153	1.194
25	0.914	0.995	1.557	0.995	2.495	1.586	1.366	0.995	0.839	1.102	2.330	1.170
26	0.914	0.995	1.393	0.995	2.153	1.571	1.366	0.995	0.839	1.080	1.498	1.170
27	0.914	0.995	1.366	0.995	2.098	1.487	1.366	0.995	0.839	1.080	1.366	1.170
28	0.914	0.995	1.366	1.027	2.098	1.473	1.366	0.995	0.839	1.080	1.366	1.170
29	0.914		1.366	1.230	2.098	1.473	1.366	0.995	0.839	1.080	1.366	1.170
30	0.914		1.366	1.695	2.098	1.473	1.366	0.995	0.839	1.080	1.366	1.170
31	0.914		1.380		2.098		1.366	0.995		1.080		1.170
Mean	0.908	0.966	1.200	1.241	-	1.696	1.408	1.197	0.943	1.532	1.635	1.368
Flow (MCM)	2.433	2.337	3.215	3.218	-	4.396	3.770	3.205	2.443	4.104	4.238	3.665
Maximum	0.995	1.633	1.660	1.695	-	2.064	1.473	1.366	0.995	2.967	2.330	1.813
Minimum	0.839	0.702	0.995	0.995	-	1.473	1.366	0.995	0.839	1.040	1.080	1.170
Runoff (mm)	52.888	50.797	69.886	69.948	-	95.567	81.963	69.678	53.119	89.219	92.140	79.672

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2012
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.170	0.839	-	-	-	-	-	-	-	-	-	-
2	1.170	0.839	-	-	-	-	-	-	-	-	-	-
3	1.170	0.839	-	-	-	-	-	-	-	-	-	-
4	1.170	0.839	-	-	-	-	-	-	-	-	-	-
5	1.170	0.839	-	-	-	-	-	-	-	-	-	-
6	1.170	0.839	-	-	-	-	-	-	-	-	-	-
7	1.170	0.839	-	-	-	-	-	-	-	-	-	-
8	1.170	0.839	-	-	-	-	-	-	-	-	-	-
9	1.170	0.839	-	-	-	-	-	-	-	-	-	-
10	1.147	0.839	-	-	-	-	-	-	-	-	-	-
11	1.016	0.839	-	-	-	-	-	-	-	-	-	-
12	0.995	0.839	-	-	-	-	-	-	-	-	-	-
13	0.995	0.839	-	-	-	-	-	-	-	-	-	-
14	0.995	0.839	-	-	-	-	-	-	-	-	-	-
15	0.995	0.839	-	-	-	-	-	-	-	-	-	-
16	0.995	0.839	-	-	-	-	-	-	-	-	-	-
17	0.995	0.839	-	-	-	-	-	-	-	-	-	-
18	0.995	0.839	-	-	-	-	-	-	-	-	-	-
19	0.995	0.839	-	-	-	-	-	-	-	-	-	-
20	0.995	0.839	-	-	-	-	-	-	-	-	-	-
21	0.995	0.839	-	-	-	-	-	-	-	-	-	-
22	0.995	0.839	-	-	-	-	-	-	-	-	-	-
23	0.995	0.839	-	-	-	-	-	-	-	-	-	-
24	0.995	0.839	-	-	-	-	-	-	-	-	-	-
25	0.995	0.839	-	-	-	-	-	-	-	-	-	-
26	0.975	0.839	-	-	-	-	-	-	-	-	-	-
27	0.858	0.839	-	-	-	-	-	-	-	-	-	-
28	0.839	0.839	-	-	-	-	-	-	-	-	-	-
29	0.839	0.839	-	-	-	-	-	-	-	-	-	-
30	0.839		-	-	-	-	-	-	-	-	-	-
31	0.839		-		-		-	-		-		-
Mean	1.026	0.839	-	-	-	-	-	-	-	-	-	-
Flow (MCM)	2.748	2.102	-	-	-	-	-	-	-	-	-	-
Maximum	1.170	0.839	-	-	-	-	-	-	-	-	-	-
Minimum	0.839	0.839	-	-	-	-	-	-	-	-	-	-
Runoff (mm)	59.738	45.703	-	-	-	-	-	-	-	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2013
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	0.640	0.640	3.327	-	2.395	1.265	0.914	0.839	0.768	0.702	0.843
2	-	0.640	0.640	2.330	-	2.395	1.265	0.914	0.839	0.768	0.702	1.856
3	-	0.640	0.640	2.060	2.116	2.395	1.265	0.945	0.839	0.768	0.702	1.816
4	-	0.640	0.640	3.052	4.031	2.286	1.265	1.137	0.839	0.768	0.736	1.489
5	-	0.640	0.663	2.219	2.206	1.679	1.265	1.170	0.830	0.768	1.049	1.255
6	-	0.640	0.822	2.003	-	1.586	1.265	1.170	0.777	0.768	1.713	1.007
7	-	0.663	0.905	2.680	-	1.586	1.265	1.147	0.768	0.768	1.829	0.858
8	-	0.795	0.914	1.786	-	1.586	1.265	1.016	0.768	0.760	1.813	0.830
9	-	0.718	1.159	2.392	-	1.586	1.265	0.995	0.768	0.710	1.662	0.866
10	-	0.702	3.073	2.019	-	1.544	1.265	0.995	0.768	0.702	1.317	1.429
11	-	0.702	3.142	4.056	-	1.304	1.265	0.995	0.768	0.702	1.265	1.370
12	-	0.702	1.468	2.030	-	1.265	1.265	0.995	0.768	0.702	1.230	1.708
13	-	0.702	1.071	-	-	1.265	1.265	0.995	0.768	0.702	1.007	1.489
14	-	0.702	0.868	2.205	4.410	1.265	1.242	0.995	0.768	0.702	0.849	1.279
15	-	0.702	0.839	2.265	4.319	1.265	1.091	0.995	0.768	0.702	0.769	1.182
16	-	0.702	0.839	-	4.144	1.265	1.005	0.995	0.768	0.702	0.710	1.170
17	-	0.702	0.839	4.065	4.115	1.265	0.995	0.995	0.768	0.702	0.702	1.170
18	-	0.702	0.839	3.836	4.031	1.265	0.995	0.995	0.768	0.702	0.702	1.126
19	-	0.702	0.868	3.518	3.545	1.265	0.995	0.995	0.768	0.702	0.702	0.878
20	-	0.702	1.204	3.466	3.466	1.265	0.995	0.995	0.768	0.702	0.702	0.839
21	0.760	0.702	2.283	3.466	3.466	1.265	0.995	0.975	0.768	0.702	0.702	0.805
22	0.710	0.702	1.997	3.600	3.466	1.265	0.984	0.858	0.768	0.702	0.702	0.612
23	0.702	0.702	1.094	4.414	3.417	1.265	0.924	0.839	0.768	0.702	0.702	0.582
24	0.710	0.702	0.858	4.349	3.079	1.265	0.914	0.839	0.768	0.702	0.702	0.582
25	0.743	0.694	0.839	4.007	2.764	1.265	0.914	0.839	0.768	0.702	0.702	0.582
26	0.655	0.647	0.839	3.200	2.721	1.265	0.914	0.839	0.768	0.702	0.702	0.582
27	0.632	0.640	1.119	3.077	2.721	1.265	0.914	0.839	0.768	0.702	0.702	0.568
28	0.596	0.640	3.204	3.010	2.721	1.265	0.914	0.839	0.768	0.702	0.702	0.490
29	0.632		2.713	2.617	2.679	1.265	0.914	0.839	0.768	0.702	0.702	0.477
30	0.640		3.502	2.916	2.435	1.265	0.914	0.839	0.768	0.702	0.702	0.477
31	0.640		3.647		2.395		0.914	0.839		0.702		0.477
Mean	-	0.684	1.425	-	-	1.479	1.096	0.959	0.780	0.719	0.929	0.990
Flow (MCM)	-	1.656	3.816	-	-	3.835	2.936	2.569	2.022	1.926	2.409	2.651
Maximum	-	0.795	3.647	-	-	2.395	1.265	1.170	0.839	0.768	1.829	1.856
Minimum	-	0.640	0.640	-	-	1.265	0.914	0.839	0.768	0.702	0.702	0.477
Runoff (mm)	-	35.994	82.961	-	-	83.364	63.833	55.845	43.953	41.863	52.367	57.641

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2014
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.477	0.477	0.839	1.409	1.829	2.243	2.406	0.995	0.839	0.702	0.640	0.760
2	0.477	0.477	0.839	1.473	1.862	2.243	1.595	0.995	0.839	0.702	0.640	0.768
3	0.477	0.477	0.839	1.409	2.064	2.243	1.473	0.995	0.839	0.702	0.640	0.768
4	0.477	0.477	0.839	1.050	2.064	2.225	1.473	0.995	0.839	0.702	0.640	0.768
5	0.477	0.477	0.821	0.995	1.947	2.116	1.473	0.995	0.839	0.702	0.640	0.768
6	0.477	0.477	0.718	0.995	2.458	2.098	1.473	0.995	0.839	0.702	0.640	0.795
7	0.477	0.477	0.702	0.995	2.495	2.064	1.473	0.995	0.839	0.702	0.640	0.945
8	0.477	0.477	0.702	1.326	2.119	1.862	1.460	0.995	0.839	0.702	0.640	0.858
9	0.477	0.477	0.702	3.622	1.862	1.829	1.367	0.995	0.839	0.702	0.640	0.830
10	0.477	0.477	0.702	2.057	1.829	1.829	1.278	0.995	0.839	0.702	0.640	0.777
11	0.477	0.477	0.702	1.408	1.829	1.829	1.265	0.984	0.821	0.702	0.640	0.768
12	0.477	0.490	0.702	1.358	1.914	1.829	1.265	0.924	0.718	0.702	0.640	0.768
13	0.477	0.598	0.775	1.850	2.820	1.829	1.265	0.914	0.702	0.702	0.640	0.768
14	0.477	0.770	1.273	1.878	-	1.829	1.265	0.914	0.702	0.694	0.640	0.768
15	0.477	0.612	1.341	2.029	2.116	1.798	1.265	0.905	0.819	0.647	0.640	0.760
16	0.477	0.582	1.150	1.862	3.946	1.615	1.265	0.848	1.589	0.640	0.640	0.710
17	0.477	0.582	0.878	2.031	3.890	1.631	1.265	0.839	1.296	0.640	0.640	0.702
18	0.477	0.582	0.839	3.554	3.836	1.895	1.265	0.839	0.997	0.640	0.761	0.702
19	0.477	0.997	0.839	-	3.518	1.845	1.265	0.839	0.795	0.640	1.653	0.686
20	0.477	-	0.839	-	3.441	1.829	1.265	0.839	0.768	0.640	1.829	0.596
21	0.477	3.628	0.839	1.404	3.292	1.951	1.265	0.839	0.768	0.640	1.754	0.582
22	0.477	2.481	0.839	2.596	3.423	2.751	1.230	0.839	0.760	0.640	1.296	0.582
23	0.477	1.406	0.839	2.534	4.187	2.895	1.027	0.839	0.710	0.640	0.997	0.582
24	0.477	1.208	0.946	2.455	3.090	2.895	0.995	0.839	0.702	0.640	0.787	0.582
25	0.477	0.888	1.613	2.617	2.895	2.895	0.995	0.839	0.702	0.640	0.710	0.582
26	0.477	0.839	1.296	2.247	2.852	2.852	0.995	0.839	0.702	0.640	0.702	0.582
27	0.477	0.839	1.027	1.879	2.556	2.596	0.995	0.839	0.702	0.640	0.702	0.582
28	0.477	0.839	0.995	1.829	2.281	2.554	0.995	0.839	0.702	0.640	0.702	0.582
29	0.477		0.995	1.829	2.243	2.554	0.995	0.839	0.702	0.640	0.702	0.582
30	0.477		0.995	1.829	2.243	2.554	0.995	0.839	0.702	0.640	0.710	0.582
31	0.477		1.050		2.243		0.995	0.839		0.640		0.582
Mean	0.477	-	0.919	-	-	2.173	1.278	0.904	0.825	0.668	0.806	0.699
Flow (MCM)	1.277	-	2.460	-	-	5.632	3.422	2.421	2.138	1.788	2.089	1.872
Maximum	0.477	-	1.613	-	-	2.895	2.406	0.995	1.589	0.702	1.829	0.945
Minimum	0.477	-	0.702	-	-	1.615	0.995	0.839	0.702	0.640	0.640	0.582
Runoff (mm)	27.768	-	53.482	-	-	122.427	74.385	52.634	46.486	38.880	45.413	40.691

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2015
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.582	0.527	0.527	-	2.010	1.829	1.829	0.839	0.702	0.625	0.582	0.527
2	0.582	0.527	0.527	2.148	3.074	1.829	1.829	0.839	0.702	0.632	0.582	0.527
3	0.582	0.527	0.527	1.867	2.422	1.829	1.754	0.839	0.702	0.589	0.582	0.527
4	0.582	0.527	0.527	-	1.237	1.829	1.331	0.839	0.702	0.582	0.582	0.527
5	0.582	0.527	0.527	1.015	-	1.829	1.230	0.839	0.702	0.582	0.582	0.527
6	0.582	0.527	0.527	1.862	-	1.829	1.027	0.839	0.702	0.582	0.582	0.521
7	0.582	0.527	0.527	1.754	3.748	1.829	0.995	0.839	0.702	0.582	0.655	0.483
8	0.582	0.527	0.527	1.557	3.466	1.829	0.995	0.839	0.702	0.582	1.122	0.477
9	0.582	0.527	0.527	3.022	3.466	1.829	0.995	0.839	0.702	0.582	0.956	0.477
10	0.582	0.527	0.527	2.725	3.393	1.829	0.995	0.839	0.702	0.582	0.905	0.477
11	0.582	0.527	0.527	2.839	2.964	1.829	0.995	0.839	0.702	0.582	0.848	0.471
12	0.582	0.527	0.521	1.895	2.895	1.829	0.995	0.839	0.702	0.582	0.839	0.481
13	0.582	0.527	0.483	1.881	2.895	1.829	0.995	0.839	0.686	0.582	0.813	0.764
14	0.582	0.527	0.477	-	2.895	1.829	0.995	0.839	0.596	0.582	0.663	0.718
15	0.582	0.527	0.477	3.218	2.895	1.829	0.995	0.839	0.582	0.582	0.640	0.694
16	0.582	0.527	0.477	3.710	2.895	1.829	0.975	0.839	0.582	0.582	0.640	0.647
17	0.582	0.527	0.477	3.576	2.895	1.829	0.858	0.839	0.582	0.582	0.640	0.632
18	0.582	0.527	0.477	1.937	2.895	1.829	0.839	0.839	0.582	0.582	0.640	0.589
19	0.655	0.527	0.477	1.704	2.895	1.829	0.839	0.839	0.582	0.582	0.640	0.582
20	1.168	0.527	0.477	1.704	2.895	1.829	0.839	0.839	0.582	0.582	0.640	0.582
21	1.141	0.527	0.477	1.704	2.852	1.829	0.839	0.839	0.582	0.582	0.640	0.575
22	0.532	0.527	0.477	1.704	2.596	1.829	0.839	0.839	0.582	0.582	0.640	0.534
23	0.562	0.527	0.477	1.704	2.554	1.829	0.839	0.839	0.575	0.582	0.640	0.527
24	0.575	0.527	0.558	1.937	2.458	1.829	0.839	0.821	0.534	0.582	0.640	0.527
25	0.534	0.527	1.093	3.284	1.914	1.829	0.839	0.718	0.527	0.582	0.625	0.527
26	0.527	0.527	0.846	2.052	1.829	1.829	0.839	0.702	0.527	0.582	0.541	0.527
27	0.527	0.527	0.563	1.829	1.829	1.829	0.839	0.702	0.527	0.582	0.527	0.527
28	0.527	0.527	0.527	1.829	1.829	1.829	0.839	0.702	0.527	0.582	0.527	0.527
29	0.527		0.853	1.829	1.829	1.829	0.839	0.702	0.527	0.582	0.527	0.527
30	0.527		1.605	1.829	1.829	1.829	0.839	0.702	0.541	0.582	0.527	0.527
31	0.527		-		1.829		0.839	0.702		0.582		0.521
Mean	0.606	0.527	-	-	-	1.829	1.017	0.808	0.621	0.585	0.665	0.551
Flow (MCM)	1.624	1.276	-	-	-	4.741	2.724	2.164	1.611	1.566	1.725	1.476
Maximum	1.168	0.527	-	-	-	1.829	1.829	0.839	0.702	0.632	1.122	0.764
Minimum	0.527	0.527	-	-	-	1.829	0.839	0.702	0.527	0.582	0.527	0.471
Runoff (mm)	35.311	27.735	-	-	-	103.065	59.223	47.049	35.017	34.053	37.495	32.081

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2016
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.477	0.640	0.477	-	3.466	1.473	1.265	0.839	0.640	0.527	0.477	0.477
2	0.436	0.640	0.477	1.638	3.466	1.473	1.265	0.839	0.640	0.527	0.477	0.477
3	0.430	0.640	0.477	0.888	3.441	1.473	1.265	0.839	0.640	0.527	0.477	0.477
4	0.430	0.640	0.477	0.888	3.292	1.473	1.265	0.839	0.640	0.527	0.477	0.477
5	0.430	0.625	0.477	1.173	3.268	1.473	1.265	0.839	0.640	0.527	0.477	0.477
6	0.430	0.791	0.477	1.027	3.244	1.446	1.230	0.839	0.640	0.527	0.477	0.477
7	0.430	2.498	0.477	0.995	3.101	1.291	1.027	0.839	0.640	0.527	0.471	0.477
8	0.430	0.778	0.518	0.995	2.988	1.265	0.995	0.839	0.640	0.527	0.436	0.477
9	0.430	0.527	0.755	0.995	2.477	1.265	1.016	0.839	0.640	0.527	0.430	0.471
10	0.430	0.541	0.612	1.016	2.395	1.253	1.147	0.839	0.640	0.527	0.430	0.436
11	0.436	0.618	0.568	1.379	2.357	1.182	1.170	0.839	0.625	0.527	0.430	0.430
12	0.471	0.589	0.484	2.896	2.135	1.170	1.170	0.839	0.541	0.534	0.430	0.430
13	0.477	0.582	0.436	2.010	2.081	1.170	1.170	0.839	0.527	0.575	0.430	0.430
14	0.477	0.582	0.430	2.238	1.977	1.170	1.137	0.830	0.527	0.582	0.430	0.430
15	0.477	0.568	0.430	-	1.944	1.170	0.945	0.777	0.527	0.582	0.430	0.430
16	0.477	0.490	0.436	-	1.829	1.170	0.914	0.768	0.527	0.582	0.430	0.430
17	0.518	0.477	0.471	3.164	1.720	1.170	0.914	0.768	0.527	0.582	0.430	-
18	0.772	0.477	0.477	2.455	1.704	1.170	0.914	0.768	0.527	0.582	0.442	-
19	0.744	0.477	0.477	2.520	1.704	1.438	0.914	0.768	0.527	0.568	0.508	-
20	0.887	0.477	0.477	3.324	1.704	3.165	0.924	0.760	0.527	0.490	0.483	-
21	0.924	0.477	0.477	3.369	1.704	1.893	0.964	0.710	0.527	0.477	0.471	-
22	0.928	0.477	0.477	2.789	1.704	1.394	0.858	0.702	0.527	0.477	0.436	-
23	0.628	0.477	0.477	1.298	1.689	1.278	0.839	0.702	0.527	0.477	0.436	-
24	0.575	0.477	0.477	-	1.600	1.265	0.839	0.694	0.527	0.477	0.471	-
25	0.534	0.477	0.477	-	1.571	1.265	0.839	0.647	0.527	0.477	0.477	-
26	0.527	0.477	0.477	2.029	1.487	1.265	0.839	0.640	0.527	0.477	0.477	-
27	0.527	0.477	0.477	3.890	1.473	1.265	0.839	0.640	0.527	0.477	0.477	-
28	0.541	0.477	0.477	3.754	1.473	1.265	0.839	0.640	0.527	0.477	0.477	-
29	0.625	0.477	0.477	3.975	1.473	1.265	0.839	0.640	0.527	0.477	0.477	-
30	0.640		0.477	3.545	1.473	1.265	0.839	0.640	0.527	0.477	0.477	-
31	0.640		0.882		1.473		0.839	0.640		0.477		-
Mean	0.554	0.619	0.502	-	2.175	1.376	1.009	0.763	0.569	0.520	0.458	-
Flow (MCM)	1.484	1.550	1.344	-	5.825	3.567	2.703	2.043	1.474	1.393	1.188	-
Maximum	0.928	2.498	0.882	-	3.466	3.165	1.265	0.839	0.640	0.582	0.508	-
Minimum	0.430	0.477	0.430	-	1.473	1.170	0.839	0.640	0.527	0.477	0.430	-
Runoff (mm)	32.261	33.706	29.223	-	126.625	77.541	58.768	44.403	32.035	30.280	25.819	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2017
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.839	0.387	-	-	-	4.115	3.518	3.268	3.077	2.873
2	-	-	0.839	0.387	1.733	-	-	4.115	3.466	3.268	3.077	2.895
3	-	-	0.839	0.387	1.733	-	-	4.115	3.466	3.268	1.539	2.895
4	-	-	0.839	0.387	-	-	-	4.115	3.466	3.268	-	2.895
5	-	-	0.839	0.387	-	-	-	4.115	3.466	3.268	-	2.895
6	-	-	0.839	0.632	-	-	-	4.115	3.466	3.268	-	2.895
7	-	-	0.839	2.892	-	-	-	4.115	3.466	3.268	-	2.895
8	-	-	0.839	2.994	-	-	-	4.115	3.466	3.268	-	2.895
9	-	-	0.848	2.633	-	-	-	4.115	3.466	3.268	2.148	2.895
10	-	-	0.905	-	-	-	-	4.115	3.466	3.268	3.575	2.895
11	-	-	0.914	2.115	-	-	-	4.115	3.466	3.268	3.292	2.895
12	-	-	0.914	1.501	-	-	-	4.115	3.466	3.268	3.268	2.895
13	-	-	0.914	1.460	-	-	-	4.086	3.466	3.268	3.268	2.895
14	-	-	0.914	1.380	-	-	-	3.917	3.466	3.268	3.268	2.895
15	-	-	0.914	1.366	-	-	2.296	3.890	3.466	3.268	3.268	2.873
16	-	-	0.914	1.421	-	-	4.592	3.890	3.466	3.244	3.268	2.742
17	-	-	0.905	1.818	-	-	4.592	3.890	3.466	3.101	3.268	2.721
18	-	-	0.848	2.102	-	-	4.592	3.890	3.466	3.077	3.220	2.721
19	-	-	0.839	1.990	-	-	4.592	3.890	3.466	3.077	2.941	2.721
20	-	-	0.839	-	-	-	4.562	3.890	3.717	3.077	2.895	2.721
21	-	-	0.839	-	-	-	4.349	3.890	-	3.077	2.895	2.721
22	-	-	0.839	3.059	-	-	4.144	3.890	2.296	3.077	2.895	2.721
23	-	-	0.839	2.303	-	-	4.115	3.890	4.473	3.077	2.895	2.721
24	-	1.341	0.946	2.116	-	-	4.115	3.890	3.784	3.077	2.873	2.721
25	-	1.194	1.572	2.098	-	-	4.115	3.890	3.674	3.077	2.742	2.721
26	-	1.170	1.067	2.064	-	-	4.115	3.890	3.647	3.077	2.721	2.721
27	-	1.126	0.858	1.862	-	-	4.115	3.890	3.467	3.077	2.721	2.721
28	-	0.878	0.775	2.141	-	-	4.115	3.890	3.292	3.077	2.721	2.721
29	-		0.435	-	-	-	4.115	3.890	3.268	3.077	2.721	2.721
30	-		0.387	2.235	-	-	4.115	3.890	3.268	3.077	2.742	2.721
31	-		0.387		-		4.115	3.836		3.077		2.721
Mean	-	-	0.849	-	-	-	-	3.982	-	3.176	-	2.804
Flow (MCM)	-	-	2.275	-	-	-	-	10.666	-	8.506	-	7.512
Maximum	-	-	1.572	-	-	-	-	4.115	-	3.268	-	2.895
Minimum	-	-	0.387	-	-	-	-	3.836	-	3.077	-	2.721
Runoff (mm)	-	-	49.449	-	-	-	-	231.869	-	184.905	-	163.295

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2018
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.721	2.895	2.895	1.733	-	3.917	2.243	1.586	1.170	0.830	0.878	1.482
2	2.721	2.895	2.895	-	-	3.836	2.243	1.586	1.170	0.839	0.839	1.586
3	2.834	2.895	2.895	-	-	3.493	2.363	1.586	1.170	0.839	0.821	1.586
4	3.522	2.895	2.895	0.854	-	3.292	2.973	1.586	1.170	0.839	0.718	1.586
5	3.492	2.895	2.895	1.587	-	3.268	2.233	1.586	1.170	0.839	0.702	1.586
6	3.518	2.895	2.895	2.593	-	3.268	2.098	1.586	1.170	0.839	0.702	1.586
7	3.782	2.895	2.895	2.340	-	3.244	2.098	1.586	1.170	0.839	0.702	1.586
8	3.518	2.895	2.895	2.894	-	3.101	2.098	1.586	1.147	0.839	0.702	1.586
9	3.466	2.895	2.895	-	-	3.077	2.098	1.586	1.016	0.839	0.702	1.586
10	3.466	2.895	2.895	-	-	3.077	2.098	1.586	0.984	0.839	0.702	1.586
11	3.441	2.895	3.064	-	-	3.077	2.098	1.586	0.924	0.839	0.702	1.586
12	3.292	2.895	4.039	2.206	-	3.077	2.098	1.557	0.914	0.839	0.702	1.571
13	3.268	2.895	3.598	3.975	-	3.077	2.098	1.393	0.914	0.839	0.702	1.487
14	3.244	2.895	3.674	4.065	-	3.077	2.098	1.366	0.914	0.839	0.702	1.473
15	3.078	2.895	3.835	-	-	3.077	2.098	1.366	0.905	0.839	0.702	1.473
16	2.918	2.895	3.700	-	-	3.077	2.098	1.354	0.848	0.839	0.702	1.473
17	2.873	2.895	3.674	-	-	3.032	2.098	1.278	0.839	0.839	0.702	1.473
18	2.742	2.895	3.674	-	-	2.764	2.098	1.265	0.839	0.839	0.702	1.473
19	2.721	2.895	3.700	-	-	2.721	2.098	1.265	0.839	0.839	0.702	1.386
20	2.721	2.895	3.862	-	-	2.721	2.064	1.265	0.839	0.839	0.702	0.893
21	2.721	2.895	3.862	-	-	2.721	1.862	1.265	0.839	0.839	0.710	0.711
22	2.721	2.895	3.700	-	-	2.721	1.829	1.265	0.830	0.910	0.769	0.647
23	2.721	2.895	3.674	-	-	2.659	1.829	1.265	0.777	1.346	0.830	0.640
24	2.721	2.895	3.674	-	-	2.301	1.829	1.253	0.768	1.206	0.839	0.640
25	2.721	2.895	3.647	-	-	2.243	1.829	1.182	0.768	1.182	0.839	0.618
26	2.721	2.895	3.492	-	-	2.243	1.798	1.170	0.768	1.241	0.839	0.496
27	2.721	2.895	3.466	-	-	2.243	1.615	1.170	0.768	1.182	0.839	0.477
28	2.721	2.895	3.466	-	4.380	2.243	1.586	1.170	0.768	1.170	0.839	0.477
29	2.742		3.466	-	4.144	2.243	1.586	1.170	0.768	1.170	0.839	0.477
30	2.873		3.466	-	4.115	2.243	1.586	1.170	0.777	1.170	0.922	0.477
31	2.895		3.466		4.086		1.586	1.170		1.126		0.483
Mean	3.020	2.895	3.392	-	-	2.905	2.014	1.381	0.932	0.946	0.758	1.167
Flow (MCM)	8.088	7.004	9.085	-	-	7.529	5.394	3.698	2.415	2.533	1.966	3.126
Maximum	3.782	2.895	4.039	-	-	3.917	2.973	1.586	1.170	1.346	0.922	1.586
Minimum	2.721	2.895	2.895	-	-	2.243	1.586	1.170	0.768	0.830	0.702	0.477
Runoff (mm)	175.835	152.262	197.506	-	-	163.666	117.260	80.395	52.490	55.060	42.732	67.960

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD50 **Year:** 2010
Station Name: Malala River at Above Old Road Bridge
Time-Series Type: Flow (cumecs)

Latitude: 3:23:34 S Longitude: 36:49:28 E Elevation: 1162.0 metres Area: 46.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.521	0.527	0.477	0.748	1.303	2.941	1.091	0.640	0.527	0.387	2.064	2.243
2	0.527	0.527	0.477	0.598	1.147	2.895	1.080	0.647	0.527	0.387	1.862	2.363
3	0.527	0.527	0.477	0.490	1.016	2.895	1.080	0.686	0.527	0.387	1.813	3.060
4	0.527	0.527	0.477	0.477	1.016	2.895	1.080	0.647	0.527	0.193	1.720	2.766
5	0.527	0.527	0.477	0.477	1.379	2.895	1.080	0.640	0.527	-	1.704	2.555
6	0.527	0.527	0.477	0.477	1.391	2.895	1.080	0.640	0.527	0.575	1.660	2.657
7	0.527	0.527	0.477	0.477	-	2.895	1.080	0.640	0.527	0.888	1.382	4.286
8	0.527	0.527	0.477	0.477	1.408	2.895	1.080	0.640	0.527	1.087	1.194	4.592
9	0.527	0.527	0.477	0.558	2.212	2.895	1.080	0.640	0.527	2.914	1.170	4.562
10	0.527	0.527	0.477	1.150	2.116	2.895	1.080	0.640	0.527	2.482	1.385	2.205
11	0.527	0.527	0.477	1.208	2.410	2.895	1.080	0.640	0.527	2.067	2.821	-
12	0.527	0.527	0.477	0.888	3.749	2.895	1.080	0.640	0.527	1.757	2.344	4.234
13	0.527	0.527	0.477	0.797	4.412	2.895	1.080	0.640	0.527	2.626	2.082	4.115
14	0.527	0.527	0.477	0.563	4.060	2.852	1.080	0.640	0.527	3.833	1.862	4.115
15	0.527	0.527	0.477	0.527	4.326	2.596	1.080	0.640	0.527	2.505	1.798	4.115
16	0.527	0.521	0.477	0.527	3.376	2.440	1.080	0.640	0.527	1.825	1.615	4.086
17	0.527	0.483	0.477	0.527	2.919	1.803	1.080	0.640	0.509	2.783	1.571	3.917
18	0.527	0.477	0.477	0.527	2.742	1.704	1.080	0.640	0.403	3.674	1.487	3.890
19	0.527	0.477	0.477	0.527	2.933	1.660	1.048	0.640	0.387	-	1.473	3.890
20	0.527	0.477	0.477	0.527	4.161	1.407	0.868	0.640	0.387	2.121	1.647	3.917
21	0.527	0.477	0.477	0.527	3.376	1.366	0.839	0.625	0.387	3.353	2.783	4.058
22	0.527	0.477	0.477	0.688	2.941	1.366	0.813	0.541	0.387	2.766	2.521	3.890
23	0.527	0.477	0.477	1.810	2.852	1.366	0.663	0.527	0.387	2.516	1.914	3.727
24	0.527	0.477	0.477	1.206	2.750	1.366	0.640	0.527	0.387	2.190	2.010	3.835
25	0.527	0.477	0.471	1.221	3.766	1.366	0.640	0.527	0.632	2.482	3.031	3.674
26	0.527	0.477	0.436	2.227	4.232	1.366	0.640	0.527	2.532	3.181	2.200	3.492
27	0.527	0.477	0.430	2.438	3.946	1.366	0.640	0.527	1.060	2.520	2.417	1.733
28	0.527	0.477	0.430	1.839	3.809	1.366	0.640	0.527	0.629	2.357	2.208	-
29	0.527		0.430	1.456	3.343	1.341	0.640	0.527	0.415	2.135	2.455	1.811
30	0.527		0.430	2.065	3.268	1.182	0.640	0.527	0.387	2.098	2.281	3.492
31	0.527		0.475		3.220		0.640	0.527		2.098		1.733
Mean	0.527	0.506	0.469	0.934	-	2.187	0.929	0.605	0.577	-	1.949	-
Flow (MCM)	1.412	1.223	1.257	2.422	-	5.668	2.488	1.622	1.497	-	5.052	-
Maximum	0.527	0.527	0.477	2.438	-	2.941	1.091	0.686	2.532	-	3.031	-
Minimum	0.521	0.477	0.430	0.477	-	1.182	0.640	0.527	0.387	-	1.170	-
Runoff (mm)	30.695	26.597	27.324	52.642	-	123.213	54.083	35.250	32.539	-	109.834	-

Flow (cumecs)

Annual Statistics

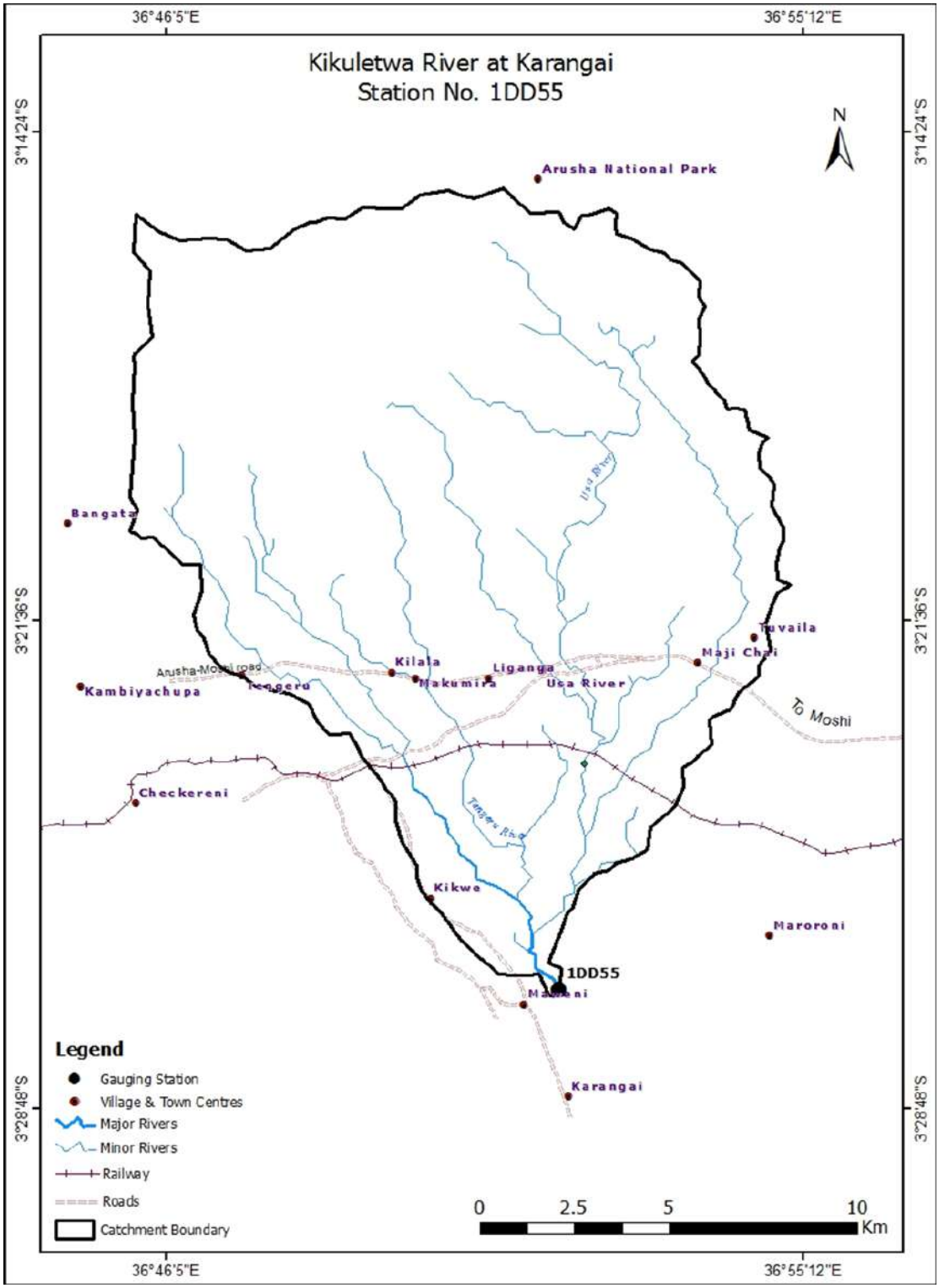
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Kikuletwa River at Karangai				
Station No: 1DD55			Established: 01/12/ 1975	
Coordinates:			Altitude (m.a.m.s.l): 1016	
Lat: -3.451	Long: 36.8618		Catchment Area (km²): 246	
Description of the Catchment:				
Induced vegetation, forest, bushland and rock				
Station Details				
1. Staff Gauges	Range: 0 – 5m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type orpheus mini		Date installed:	
3. Benchmark	Bolt set in concrete post on the riverbank			
BM Assumed Datum: 5.637m		N.M.M.S.L: -	TBM: –	
4. Control	Open channel with Rocks and Stone on the right side of the river			
5. Access	Accessible throughout the year, about 36km from Arusha town via Mererani road			
Records	Period		Quality	
Water Level:	01/01/2010 - 31/12/2019		1.2.2	
Discharge:	01/01/2010 - 31/12/2019		1.2.2	
Extremes:	Max. Recorded	297.731m³/sec	On 02/04/2018	WL 4.18m
	Min. Recorded	0.123m³/sec	On 18/12/2016	WL 0.38m
Remarks				


Kikuletwa River at Karangai
Station No. 1DD55
36°46'5"E
36°55'12"E
3°14'24"S
3°21'36"S
3°28'48"S
N
Arusha National Park
Bangata
Kambiyachupa
Arusha-Moshi road
Kilala
Liganga
Makumira
Usa River
Tuvaila
Maji Chai
To Moshi
Checkereni
Kikwe
Maroroni
1DD55
Karangai
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Catchment Boundary
0
2.5
5
10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2010
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.866	0.945	1.452	6.288	7.156	3.972	2.962	2.286	1.755	1.286	0.978	0.987
2	1.060	0.917	1.340	9.010	6.636	3.943	2.953	2.279	1.794	1.146	0.983	0.967
3	1.149	0.885	1.186	19.527	9.168	3.884	2.890	2.265	1.749	1.169	0.922	1.029
4	1.335	0.846	1.171	9.414	6.724	4.009	2.824	2.071	1.749	1.141	0.922	1.024
5	1.504	0.764	1.151	3.994	6.209	3.819	2.824	2.058	1.749	1.126	0.953	0.990
6	1.559	0.745	1.357	2.844	5.480	3.865	2.824	2.012	1.755	0.967	0.933	0.986
7	1.684	0.631	1.770	2.264	4.883	3.819	2.879	1.999	1.800	0.953	1.054	0.953
8	3.416	0.824	1.741	3.961	4.829	3.933	2.824	1.997	1.794	0.953	1.054	0.983
9	3.015	1.055	1.515	16.353	4.462	3.755	2.759	2.003	1.708	0.953	0.996	0.978
10	2.638	1.125	1.345	6.557	4.351	3.924	2.759	2.036	1.702	0.920	1.104	0.858
11	2.359	1.000	1.301	3.664	4.337	3.737	2.705	2.622	1.743	0.885	1.213	0.850
12	2.483	0.986	1.300	3.101	4.298	3.641	2.690	2.610	1.702	0.909	1.159	0.854
13	2.231	0.925	1.251	2.701	4.782	3.576	2.626	2.170	1.653	0.854	1.256	0.885
14	1.962	0.908	1.210	3.227	6.821	3.505	2.520	2.251	1.653	0.850	1.339	0.917
15	1.836	0.790	1.109	3.594	4.880	3.440	2.512	2.071	1.653	0.823	1.469	0.983
16	1.575	0.782	1.090	5.527	4.206	3.557	2.505	2.051	1.653	0.850	1.725	0.967
17	1.385	0.728	0.992	8.544	4.048	3.440	2.345	1.958	1.613	0.917	1.636	1.085
18	1.262	0.728	0.953	15.435	4.108	3.431	2.279	1.952	1.647	0.953	2.247	1.065
19	1.223	0.772	0.917	16.486	4.166	3.362	2.279	1.945	1.568	0.925	1.677	1.141
20	1.208	0.977	0.922	11.580	3.972	3.290	2.279	1.855	1.515	0.974	1.568	1.262
21	1.239	1.665	0.983	7.202	3.933	3.290	2.238	1.849	1.509	0.926	1.509	1.379
22	1.109	1.999	1.001	5.276	3.876	3.223	2.282	1.849	1.468	0.958	1.468	1.329
23	0.992	1.943	1.226	4.628	4.802	3.161	2.323	1.849	1.431	1.020	1.431	1.146
24	0.992	1.749	1.746	4.581	4.771	3.282	2.279	1.843	1.415	1.025	1.395	1.176
25	1.020	1.659	2.217	4.143	4.818	3.351	2.279	1.762	1.337	1.025	1.487	1.149
26	0.958	1.590	2.455	4.039	4.618	3.299	2.335	1.794	1.301	1.025	1.262	1.213
27	0.953	1.463	2.447	3.752	4.607	3.351	2.394	1.749	1.296	0.995	1.141	1.241
28	0.929	1.328	1.710	4.047	4.724	3.299	2.352	1.755	1.296	0.986	1.126	1.141
29	0.982		4.698	10.298	4.298	3.282	2.447	1.836	1.296	0.953	0.996	1.136
30	0.953		5.996	8.238	4.327	3.095	2.398	1.755	1.296	0.953	0.987	1.094
31	0.925		6.401		4.186		2.379	1.749		0.925		0.983
Mean	1.510	1.097	1.805	7.009	4.983	3.551	2.547	2.009	1.587	0.979	1.266	1.057
Flow (MCM)	4.044	2.655	4.834	18.168	13.347	9.204	6.821	5.381	4.113	2.622	3.283	2.830
Maximum	3.416	1.999	6.401	19.527	9.168	4.009	2.962	2.622	1.800	1.286	2.247	1.379
Minimum	0.866	0.631	0.917	2.264	3.876	3.095	2.238	1.749	1.296	0.823	0.922	0.850
Runoff (mm)	16.438	10.791	19.652	73.853	54.256	37.416	27.726	21.875	16.719	10.658	13.344	11.503

Flow (cumecs)

Annual Statistics

Maximum: 19.527 Minimum: 0.631 Mean: 2.450 cumecs

Total: 77.262 MCM Runoff: 314.074 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2011
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.858	0.978	0.566	1.480	2.008	2.040	1.327	1.257	1.131	1.149	2.033	2.993
2	0.850	0.987	0.606	1.586	1.522	1.949	1.272	1.215	1.065	8.863	1.936	2.721
3	0.815	0.925	0.577	1.914	1.187	1.849	1.334	1.220	1.060	1.776	1.586	2.759
4	0.728	0.885	0.509	2.181	1.000	1.813	1.334	1.256	1.060	1.480	1.557	2.871
5	0.724	0.853	0.485	1.845	0.925	1.926	1.296	1.291	1.060	1.568	1.456	2.631
6	0.720	0.819	0.482	2.912	1.144	1.762	1.272	1.291	1.070	1.777	1.177	2.231
7	0.673	0.793	0.482	2.661	3.790	1.690	1.415	1.220	1.171	2.385	0.930	2.051
8	0.703	0.781	0.479	2.608	1.878	1.480	1.474	1.210	1.171	2.797	0.823	1.843
9	0.793	0.699	0.457	2.238	6.556	1.457	1.601	1.141	1.136	4.384	0.819	1.577
10	0.912	0.672	0.424	2.167	6.217	1.307	1.568	1.136	1.136	4.331	0.846	1.526
11	0.929	0.733	0.497	2.049	13.465	1.262	1.557	1.104	1.146	4.082	0.842	1.653
12	1.064	0.858	0.509	1.762	5.899	1.256	1.553	1.136	1.251	4.357	0.732	1.782
13	1.242	0.876	0.515	1.696	4.586	1.267	1.520	1.176	1.246	4.560	0.728	1.580
14	1.286	1.200	0.577	1.521	2.571	1.344	1.509	1.181	1.141	4.410	0.752	1.584
15	1.205	1.414	0.584	1.457	2.281	1.384	1.468	1.286	1.094	3.941	0.699	1.361
16	1.001	2.003	1.050	1.272	3.290	1.430	1.431	1.296	0.992	3.317	0.728	1.384
17	0.921	1.800	1.323	1.246	2.382	1.390	1.390	1.291	0.987	3.231	0.815	1.404
18	0.850	1.521	1.447	1.113	2.359	1.379	1.457	1.220	0.987	3.290	0.823	1.225
19	0.815	1.457	1.317	1.144	2.607	1.384	1.431	1.215	0.987	3.362	1.131	1.220
20	0.711	1.307	1.469	1.281	2.492	1.349	1.420	1.176	0.987	3.353	4.699	1.291
21	0.760	1.301	1.574	1.365	2.644	1.339	1.345	1.136	0.987	3.231	4.416	1.267
22	0.768	1.324	1.741	2.249	2.622	1.340	1.345	1.136	0.953	3.205	3.917	1.329
23	0.881	1.083	1.782	2.753	2.674	1.379	1.390	1.104	0.917	3.026	4.003	1.252
24	0.855	1.046	1.647	4.635	3.658	1.305	1.504	1.104	0.917	3.018	3.727	1.141
25	0.781	0.798	1.518	6.521	2.564	1.294	1.472	1.176	0.922	2.962	3.576	1.073
26	0.676	0.717	1.630	5.478	2.447	1.256	1.426	1.251	0.978	2.890	3.514	1.099
27	0.661	0.594	3.161	4.093	2.553	1.291	1.463	1.291	0.889	2.824	3.367	1.139
28	0.587	0.584	2.621	3.427	4.538	1.296	1.457	1.291	0.823	2.816	3.148	1.176
29	0.584		1.763	3.015	3.592	1.262	1.307	1.186	0.811	2.690	2.962	1.241
30	0.583		1.486	2.561	2.901	1.256	1.262	1.171	0.721	2.512	2.953	1.109
31	0.896		1.468		2.498		1.291	1.136		2.380		1.099
Mean	0.833	1.036	1.121	2.408	3.253	1.458	1.416	1.203	1.027	3.225	2.023	1.633
Flow (MCM)	2.232	2.506	3.002	6.241	8.713	3.779	3.792	3.223	2.661	8.637	5.244	4.373
Maximum	1.286	2.003	3.161	6.521	13.465	2.040	1.601	1.296	1.251	8.863	4.699	2.993
Minimum	0.583	0.584	0.424	1.113	0.925	1.256	1.262	1.104	0.721	1.149	0.699	1.073
Runoff (mm)	9.072	10.188	12.203	25.368	35.420	15.361	15.416	13.100	10.817	35.111	21.317	17.776

Flow (cumecs)

Annual Statistics

Maximum: 13.465 Minimum: 0.424 Mean: 1.720 cumecs

Total: 54.229 MCM Runoff: 220.443 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2012
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.131	-	-	-	-	-	-	-	-	-	-	-
2	1.094	-	-	-	-	-	-	-	-	-	-	-
3	0.962	-	-	-	-	-	-	-	-	-	-	-
4	0.916	-	-	-	-	-	-	-	-	-	-	-
5	0.850	-	-	-	-	-	-	-	-	-	-	-
6	0.827	-	-	-	-	-	-	-	-	-	-	-
7	0.876	-	-	-	-	-	-	-	-	-	-	-
8	0.842	-	-	-	-	-	-	-	-	-	-	-
9	0.707	-	-	-	-	-	-	-	-	-	-	-
10	0.665	-	-	-	-	-	-	-	-	-	-	-
11	0.609	-	-	-	-	-	-	-	-	-	-	-
12	0.587	-	-	-	-	-	-	-	-	-	-	-
13	0.606	-	-	-	-	-	-	-	-	-	-	-
14	0.613	-	-	-	-	-	-	-	-	-	-	-
15	0.635	-	-	-	-	-	-	-	-	-	-	-
16	0.587	-	-	-	-	-	-	-	-	-	-	-
17	0.613	-	-	-	-	-	-	-	-	-	-	-
18	0.668	-	-	-	-	-	-	-	-	-	-	-
19	0.665	-	-	-	-	-	-	-	-	-	-	-
20	0.658	-	-	-	-	-	-	-	-	-	-	-
21	0.613	-	-	-	-	-	-	-	-	-	-	-
22	0.609	-	-	-	-	-	-	-	-	-	-	-
23	0.584	-	-	-	-	-	-	-	-	-	-	-
24	0.535	-	-	-	-	-	-	-	-	-	-	-
25	0.535	-	-	-	-	-	-	-	-	-	-	-
26	0.580	-	-	-	-	-	-	-	-	-	-	-
27	0.606	-	-	-	-	-	-	-	-	-	-	-
28	0.603	-	-	-	-	-	-	-	-	-	-	-
29	0.492	-	-	-	-	-	-	-	-	-	-	-
30	0.482		-	-	-	-	-	-	-	-	-	-
31	0.474		-		-		-	-		-		-
Mean	0.685	-	-	-	-	-	-	-	-	-	-	-
Flow (MCM)	1.834	-	-	-	-	-	-	-	-	-	-	-
Maximum	1.131	-	-	-	-	-	-	-	-	-	-	-
Minimum	0.474	-	-	-	-	-	-	-	-	-	-	-
Runoff (mm)	7.455	-	-	-	-	-	-	-	-	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2013
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.000	1.401	-	-	-	-	-	-	1.613	1.420	0.978	0.559
2	0.000	1.474	-	-	-	-	-	-	1.474	1.381	0.922	0.606
3	0.000	1.463	-	-	-	-	-	-	1.457	1.350	0.917	0.606
4	0.000	1.350	-	-	-	-	-	-	1.312	1.379	0.922	0.563
5	0.000	1.334	-	-	-	-	-	-	1.334	1.300	0.953	0.613
6	0.000	1.307	-	-	-	-	-	-	1.307	1.256	0.949	0.692
7	0.000	1.420	-	-	-	-	-	-	1.420	1.256	0.889	0.720
8	0.000	1.457	-	-	-	-	-	-	1.457	1.291	0.880	0.748
9	0.000	1.356	-	-	-	-	-	-	1.356	1.257	0.850	1.257
10	0.000	1.384	-	-	-	-	-	-	1.384	1.181	0.823	0.822
11	0.000	1.379	-	-	-	-	-	-	1.379	1.171	0.850	1.542
12	0.000	1.305	-	-	-	-	-	-	1.305	1.141	0.880	1.559
13	0.000	1.169	-	-	-	-	-	-	1.334	1.215	0.846	1.645
14	0.001	0.002	-	-	-	-	-	-	1.340	1.251	0.790	3.714
15	0.870	0.000	-	-	-	-	-	-	1.334	1.176	0.786	3.858
16	1.020	0.000	-	-	-	-	-	-	1.296	1.136	0.760	1.091
17	0.978	0.000	-	-	-	-	-	-	1.301	1.136	0.782	0.929
18	0.858	0.000	-	-	-	-	-	-	1.376	1.099	0.764	1.048
19	0.789	0.000	-	-	-	-	-	-	1.340	1.060	0.815	1.343
20	0.724	0.000	-	-	-	-	-	-	1.262	1.065	0.815	1.177
21	0.717	0.000	-	-	-	-	-	-	1.251	1.094	0.760	1.566
22	0.581	0.000	-	-	-	-	-	-	1.215	1.092	0.752	1.326
23	0.398	0.000	-	-	-	-	-	-	1.220	1.060	0.699	1.493
24	0.316	0.000	-	-	-	-	-	-	1.262	0.992	0.672	1.457
25	0.295	0.000	-	-	-	-	-	-	1.294	0.987	0.661	1.317
26	0.283	0.000	-	-	-	-	-	-	1.291	0.987	0.613	1.374
27	0.176	0.000	-	-	-	-	-	-	1.267	0.958	0.638	1.257
28	0.000	0.000	-	-	-	-	-	-	1.340	0.978	0.635	1.210
29	0.000		-	-	-	-	-	-	1.384	0.922	0.584	1.131
30	0.000		-	-	-	-	-	-	1.420	0.922	0.556	0.996
31	0.006		-		-		-	-		0.953		0.987
Mean	0.258	0.636	-	-	-	-	-	-	1.344	1.144	0.791	1.265
Flow (MCM)	0.692	1.538	-	-	-	-	-	-	3.484	3.064	2.051	3.388
Maximum	1.020	1.474	-	-	-	-	-	-	1.613	1.420	0.978	3.858
Minimum	0.000	0.000	-	-	-	-	-	-	1.215	0.922	0.556	0.559
Runoff (mm)	2.814	6.252	-	-	-	-	-	-	14.163	12.457	8.338	13.770

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2014
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.958	0.479	0.728	1.923	2.677	5.641	4.410	3.317	2.445	2.058	1.553	1.641
2	0.949	0.460	0.756	1.895	2.800	5.312	4.206	3.478	2.412	2.006	1.515	1.586
3	0.889	0.463	0.752	1.771	2.775	5.138	4.268	3.240	2.405	1.952	1.468	1.782
4	0.913	0.460	0.699	1.515	2.962	5.366	4.258	3.214	2.559	1.958	1.431	1.788
5	0.917	0.543	0.687	1.396	3.205	5.218	4.186	3.152	2.467	2.044	1.431	1.659
6	0.913	0.470	0.868	1.365	3.218	5.250	4.118	3.095	2.447	1.958	1.509	1.647
7	0.854	0.451	0.797	1.666	3.441	4.872	4.099	3.022	2.398	1.901	1.548	1.677
8	0.823	0.671	0.845	2.035	3.157	4.787	3.962	3.010	2.337	1.849	1.463	2.891
9	0.815	0.594	0.819	2.288	3.532	4.876	3.952	2.962	2.337	1.806	1.307	2.148
10	0.786	0.601	0.842	4.989	5.095	4.665	3.869	2.899	2.394	1.806	1.301	2.098
11	0.813	0.741	0.760	2.097	5.173	4.909	3.733	2.882	2.454	1.895	1.370	1.801
12	0.813	0.653	0.724	2.834	5.105	5.266	3.718	2.879	2.398	1.895	1.323	1.607
13	0.732	0.737	0.699	11.229	8.498	5.126	3.514	2.887	1.988	1.806	1.624	1.474
14	0.720	0.684	0.676	2.084	8.526	5.143	3.557	2.887	2.283	1.849	1.565	1.468
15	0.645	0.854	0.720	2.066	6.522	5.332	3.380	2.824	3.727	1.901	1.526	1.457
16	0.638	0.986	0.672	2.872	5.282	4.887	3.362	2.759	2.607	1.852	1.607	1.312
17	0.683	1.054	0.709	3.168	5.691	4.928	3.294	2.705	2.913	1.843	1.737	1.376
18	0.616	1.034	0.627	10.127	5.467	5.003	3.222	2.697	2.824	1.800	1.702	1.340
19	0.609	1.144	0.752	16.184	5.202	4.705	3.282	2.743	2.690	1.749	1.653	1.296
20	0.609	1.284	0.789	2.423	6.560	4.669	3.223	2.649	2.520	1.708	1.659	1.296
21	0.657	1.246	0.815	2.379	5.130	4.618	3.103	2.751	2.447	1.696	1.696	1.291
22	0.616	1.078	0.854	5.238	5.598	4.683	3.205	2.751	2.335	1.613	1.613	1.220
23	0.613	1.085	1.056	4.085	6.162	4.734	3.038	2.642	2.231	1.607	1.607	1.220
24	0.638	0.906	2.559	3.652	5.605	4.522	3.022	2.634	2.316	1.647	1.641	1.256
25	0.612	0.904	1.993	4.765	5.796	4.441	3.078	2.626	3.299	1.653	1.526	1.256
26	0.584	0.790	2.145	3.536	5.183	4.512	3.078	2.520	2.106	1.613	1.509	1.286
27	0.580	0.756	2.214	3.828	5.311	4.669	2.970	2.572	2.058	1.601	1.507	1.225
28	0.535	0.724	1.976	3.496	5.595	4.597	3.030	2.626	2.104	1.520	1.474	1.291
29	0.532		1.806	3.240	5.171	4.511	3.148	2.505	2.064	1.515	1.474	1.262
30	0.506		1.674	3.131	5.289	4.441	3.240	2.293	2.058	1.515	1.520	1.251
31	0.460		1.629		5.385		3.534	2.286		1.515		1.177
Mean	0.711	0.781	1.085	3.776	5.004	4.894	3.550	2.823	2.454	1.778	1.529	1.519
Flow (MCM)	1.903	1.888	2.907	9.787	13.402	12.685	9.509	7.560	6.361	4.763	3.962	4.068
Maximum	0.958	1.284	2.559	16.184	8.526	5.641	4.410	3.478	3.727	2.058	1.737	2.891
Minimum	0.460	0.451	0.627	1.365	2.677	4.441	2.970	2.286	1.988	1.515	1.301	1.177
Runoff (mm)	7.737	7.676	11.817	39.785	54.479	51.566	38.655	30.734	25.858	19.364	16.107	16.535

Flow (cumecs)

Annual Statistics

Maximum: 16.184 Minimum: 0.451 Mean: 2.492 cumecs
Total: 78.585 MCM Runoff: 319.450 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2015
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.916	0.684	0.770	5.406	7.862	3.484	2.270	1.775	1.356	1.174	0.948	1.134
2	0.894	0.639	0.770	4.735	15.610	3.484	2.222	1.840	1.360	1.178	0.974	1.118
3	0.952	0.632	0.744	5.916	4.358	3.477	2.173	1.806	1.397	1.153	1.093	1.178
4	1.037	0.610	0.715	1.547	3.890	3.319	2.173	1.806	1.405	1.205	1.181	1.240
5	1.034	0.589	0.715	6.036	8.632	3.304	2.132	1.806	1.395	1.149	1.127	1.178
6	0.986	0.586	0.693	4.532	5.092	3.246	2.132	1.806	1.360	1.140	1.122	1.143
7	1.015	0.589	0.683	4.077	5.626	3.186	2.216	1.806	1.329	1.109	1.242	1.118
8	1.072	0.611	0.636	3.857	7.005	3.229	2.264	1.764	1.320	1.081	1.214	2.266
9	1.041	0.629	0.636	3.436	5.693	3.134	2.270	1.720	1.291	1.077	1.268	2.468
10	0.978	0.569	0.594	3.151	4.574	3.126	2.222	1.720	1.356	1.049	1.518	1.446
11	0.948	0.560	0.602	3.174	4.389	3.070	2.173	1.720	1.325	1.049	1.267	1.252
12	0.916	0.519	0.541	2.899	4.218	3.011	2.173	1.684	1.286	1.080	1.277	1.182
13	0.912	0.498	0.525	2.577	4.424	3.011	2.126	1.679	1.286	1.200	1.170	1.249
14	0.859	0.544	0.630	2.384	4.746	2.956	2.078	1.674	1.282	1.244	1.054	1.379
15	0.831	1.313	0.662	3.063	4.100	2.899	2.078	1.636	1.249	1.182	1.101	1.547
16	0.831	1.090	0.687	11.500	4.175	2.791	2.072	1.601	1.223	1.182	1.026	1.351
17	0.879	1.011	0.715	5.367	4.001	2.687	1.985	1.596	1.251	1.210	1.314	1.272
18	0.855	0.951	0.712	3.953	3.918	2.728	1.945	1.591	1.282	1.140	1.432	1.525
19	0.827	0.948	0.665	2.898	3.805	2.674	1.946	1.554	1.282	1.019	1.322	1.440
20	0.797	0.944	0.665	2.834	3.726	2.581	1.935	1.554	1.249	1.011	1.289	1.397
21	0.770	0.916	0.738	4.723	3.553	2.523	1.895	1.520	1.219	1.007	1.322	1.286
22	0.741	0.942	0.766	4.026	3.492	2.471	1.933	1.515	1.214	0.982	1.317	1.182
23	0.718	0.916	0.725	3.252	3.432	2.427	1.900	1.549	1.214	1.007	1.285	1.174
24	0.718	0.885	0.986	2.895	3.477	2.414	1.895	1.515	1.244	0.951	1.214	1.109
25	0.744	0.834	4.232	2.655	3.484	2.369	1.895	1.442	1.249	0.948	1.113	1.047
26	0.766	0.823	4.097	2.812	3.484	2.369	1.857	1.437	1.214	0.974	1.105	1.038
27	0.773	0.797	4.621	3.275	3.477	2.369	1.846	1.437	1.149	0.951	1.079	0.986
28	0.823	0.773	7.637	3.064	3.363	2.320	1.806	1.432	1.144	0.948	1.138	0.973
29	0.796		4.982	6.012	3.266	2.270	1.812	1.365	1.144	0.948	1.138	0.867
30	0.718		4.983	3.291	3.469	2.270	1.846	1.360	1.144	0.974	1.055	0.932
31	0.712		6.352		3.484		1.806	1.329		0.951		0.771
Mean	0.866	0.764	1.725	3.978	4.769	2.840	2.035	1.614	1.274	1.073	1.190	1.266
Flow (MCM)	2.321	1.849	4.621	10.312	12.772	7.361	5.449	4.324	3.302	2.875	3.085	3.391
Maximum	1.072	1.313	7.637	11.500	15.610	3.484	2.270	1.840	1.405	1.244	1.518	2.468
Minimum	0.712	0.498	0.525	1.547	3.266	2.270	1.806	1.329	1.144	0.948	0.948	0.771
Runoff (mm)	9.434	7.517	18.783	41.917	51.919	29.923	22.152	17.575	13.423	11.686	12.541	13.784

Flow (cumecs)

Annual Statistics

Maximum: 15.610 Minimum: 0.498 Mean: 1.950 cumecs

Total: 61.482 MCM Runoff: 249.926 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2016
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.885	6.567	8.780	1.935	2.126	1.644	1.608	-	0.888	0.907
2	-	-	0.855	3.864	5.611	1.895	2.126	1.949	1.960	-	0.859	0.804
3	-	-	0.797	2.428	4.103	1.900	2.126	1.645	1.565	-	0.852	0.983
4	-	-	0.745	1.935	3.799	1.941	2.030	1.554	1.628	-	0.855	1.140
5	-	-	0.715	1.866	3.741	1.979	1.820	1.554	1.477	-	0.859	0.993
6	-	-	0.684	1.883	3.737	1.941	1.846	1.636	1.430	-	0.903	0.970
7	-	-	0.639	1.720	3.539	1.900	1.889	1.795	1.402	-	0.812	0.944
8	-	-	0.632	1.567	3.407	1.941	1.883	1.768	1.397	-	0.823	0.923
9	-	1.013	0.619	2.282	3.209	1.935	1.801	1.757	1.356	-	0.825	1.038
10	-	1.003	1.095	1.795	3.955	1.900	2.140	1.607	1.263	-	0.881	1.015
11	-	2.002	0.982	2.577	3.379	2.019	1.941	1.554	1.356	-	0.885	1.063
12	-	1.782	0.888	5.401	3.133	1.985	1.849	1.554	1.351	-	0.896	1.042
13	-	1.506	0.852	2.502	3.125	1.939	1.849	1.575	1.223	-	1.055	0.960
14	-	1.258	0.748	3.340	3.068	1.900	1.769	1.777	1.244	-	0.931	0.944
15	-	1.174	0.765	9.541	2.899	1.900	1.806	1.565	1.214	-	0.974	0.886
16	-	0.985	0.768	10.012	2.733	1.979	1.895	1.520	1.182	-	0.944	0.827
17	-	0.827	0.738	5.607	2.581	1.941	1.895	1.510	1.214	-	0.859	0.808
18	-	0.738	0.664	3.142	2.477	1.906	1.889	1.514	1.340	-	0.905	0.966
19	-	0.667	0.693	3.776	2.458	2.281	1.775	1.487	1.263	-	1.413	0.911
20	-	0.687	0.766	7.648	2.325	4.438	1.759	1.520	1.244	-	1.050	0.741
21	-	0.684	0.738	9.058	2.319	2.569	1.684	1.694	1.178	-	0.952	0.693
22	-	0.639	0.687	4.269	2.282	2.432	1.679	1.521	1.113	-	0.804	0.748
23	-	0.632	0.633	3.291	2.406	2.458	1.654	1.402	1.138	-	0.765	0.793
24	-	0.589	0.501	9.195	2.375	2.282	1.862	1.430	1.186	-	1.093	0.741
25	-	0.586	0.425	23.651	2.320	2.325	1.650	1.402	1.382	-	1.223	0.789
26	-	0.583	0.375	5.609	2.228	2.464	1.554	1.430	1.265	-	1.071	0.779
27	-	1.033	0.757	5.516	2.216	2.414	1.554	1.489	1.176	-	1.101	0.796
28	-	1.101	0.628	4.382	2.173	2.193	1.589	1.748	1.173	-	0.990	0.718
29	-	0.956	0.632	6.377	2.173	2.198	1.599	2.354	1.200	-	0.894	0.738
30	-		0.667	7.456	2.080	2.048	1.677	1.577	1.408	-	0.916	0.745
31	-		0.710		1.946		1.757	1.554		-		0.797
Mean	-	-	0.719	5.275	3.115	2.165	1.822	1.616	1.331	-	0.943	0.878
Flow (MCM)	-	-	1.925	13.673	8.344	5.611	4.879	4.328	3.451	-	2.443	2.350
Maximum	-	-	1.095	23.651	8.780	4.438	2.140	2.354	1.960	-	1.413	1.140
Minimum	-	-	0.375	1.567	1.946	1.895	1.554	1.402	1.113	-	0.765	0.693
Runoff (mm)	-	-	7.827	55.583	33.920	22.807	19.834	17.592	14.028	-	9.931	9.554

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2017
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.896	0.838	0.919	0.881	3.623	3.304	2.314	1.720	1.397	1.114	1.182	-
2	0.779	0.844	0.748	0.807	4.280	3.163	2.220	1.720	1.397	1.114	1.308e	-
3	0.745	0.738	0.888	0.848	4.295	3.562	2.226	1.720	1.365	1.047	-	-
4	0.741	0.626	3.050	0.800	6.259	3.378	2.319	1.720	1.360	1.047	-	-
5	0.715	0.731	1.253	0.748	14.752	3.363	2.363	1.720	1.356	1.105	-	-
6	0.662	0.642	1.027	1.246	6.148	3.363	2.276	1.684	1.322	1.077	-	-
7	0.664	0.616	1.059	6.999	8.348	3.355	2.270	1.644	1.327	1.015	-	-
8	0.731	0.709	0.952	3.740	12.965	3.302	2.228	1.639	1.325	1.011	-	-
9	0.642	0.374	0.907	4.618	17.611	3.251	2.210	1.639	1.286	1.011	-	-
10	0.636	0.351	0.833	6.548	6.456	3.243	2.084	1.628	1.286	1.011	-	-
11	0.591	0.371	0.837	3.996	9.147	3.236	2.084	1.520	1.317	0.980	-	-
12	0.586	0.609	0.903	1.947	10.018	3.163	2.167	1.515	1.291	0.948	-	-
13	0.611	0.697	0.745	1.645	6.515	3.562	2.126	1.515	1.282	0.948	-	-
14	0.639	0.656	0.717	1.400	5.676	3.370	2.078	1.560	1.249	0.978	-	-
15	0.724	0.598	0.741	1.245	5.626	3.302	2.038	1.699	1.219	0.984	-	-
16	0.616	0.484	0.687	1.195	5.222	3.243	2.026	1.565	1.214	1.003	-	-
17	0.610	0.514	0.589	1.700	5.117	3.134	1.985	1.559	1.214	0.951	-	-
18	0.613	0.504	0.582	3.424	4.979	3.119	1.935	1.591	1.214	0.951	-	-
19	0.601	0.807	0.779	2.691	4.877	3.011	1.844	1.554	1.240	1.011	-	-
20	0.611	0.805	0.718	5.960	4.750	2.954	1.736	1.520	1.433	1.045	-	-
21	0.519	0.741	0.715	5.444	5.069	2.805	1.759	1.560	4.351	1.014	-	-
22	0.679	0.656	0.705	5.692	5.356	2.728	1.725	1.628	2.101	0.984	-	-
23	0.693	0.590	0.566	2.436	5.167	2.680	1.833	1.520	1.769	1.010	-	-
24	0.753	1.821	0.606	1.997	4.751	2.635	1.731	1.510	1.710	1.003	-	-
25	0.634	1.007	1.021	1.939	4.476	2.674	1.720	1.470	1.511	1.013	-	-
26	0.371	1.097	6.101	2.184	4.328	2.674	1.684	1.445	1.263	1.678	-	-
27	0.389	1.075	1.534	2.268	4.134	2.633	1.679	1.510	1.240	1.131	-	-
28	0.424	1.071	1.220	2.471	3.993	2.628	1.684	1.470	1.118	1.109	-	-
29	0.766		1.075	2.835	3.927	2.574	1.753	1.402	1.113	1.113	-	-
30	0.759		1.075	3.555	3.839	2.473	1.720	1.397	1.161	1.144	-	-
31	0.900		1.034		3.446		1.720	1.397		1.174		-
Mean	0.655	0.735	1.116	2.775	6.295	3.063	1.985	1.572	1.448	1.056	-	-
Flow (MCM)	1.754	1.777	2.988	7.194	16.861	7.939	5.317	4.211	3.752	2.827	-	-
Maximum	0.900	1.821	6.101	6.999	17.611	3.562	2.363	1.720	4.351	1.678	-	-
Minimum	0.371	0.351	0.566	0.748	3.446	2.473	1.679	1.397	1.113	0.948	-	-
Runoff (mm)	7.130	7.226	12.147	29.242	68.539	32.271	21.613	17.119	15.254	11.493	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2018
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	1.157	-	-	-	-	-	-	-	3.191
2	-	-	-	1.231	-	-	-	-	-	-	-	3.243
3	-	-	-	-	-	-	-	-	-	-	-	3.186
4	-	-	-	-	-	-	-	-	-	-	-	3.014
5	-	-	-	-	-	-	-	-	-	-	-	2.851
6	-	-	-	-	-	-	-	-	-	-	-	2.844
7	-	-	-	-	-	-	-	-	-	-	-	2.791
8	-	-	-	-	-	-	-	-	-	-	-	2.735
9	-	-	-	-	-	-	-	-	-	-	-	2.735
10	-	-	-	-	-	-	-	-	-	-	-	3.186
11	-	-	-	-	-	-	-	-	-	-	-	3.524
12	-	-	-	-	-	-	-	-	-	-	-	3.141
13	-	-	-	-	-	-	-	-	-	-	-	2.970
14	-	-	-	-	-	-	-	-	-	-	-	2.997
15	-	-	-	-	-	-	-	-	-	-	-	2.858
16	-	-	-	-	-	-	-	-	-	-	-	2.899
17	-	-	-	-	-	-	-	-	-	-	-	3.004
18	-	-	-	-	-	-	-	-	-	-	-	3.037
19	-	-	3.022	-	-	-	-	-	-	-	-	3.612
20	-	-	2.756	-	-	-	-	-	-	-	-	3.112
21	-	-	2.810	-	-	-	-	-	-	-	-	2.852
22	-	-	2.379	-	-	-	-	-	-	-	-	2.733
23	-	-	2.056	-	-	-	-	-	-	-	-	2.674
24	-	-	1.552	-	-	-	-	-	-	-	-	2.490
25	-	-	1.472	-	-	-	-	-	-	-	-	2.574
26	-	-	1.393	-	-	-	-	-	-	-	-	2.674
27	-	-	1.322	-	-	-	-	-	-	-	-	2.674
28	-	-	1.331	-	-	-	-	-	-	-	-	2.530
29	-		1.400	-	-	-	-	-	-	-	3.140	2.471
30	-		1.320	-	-	-	-	-	-	-	3.236	2.477
31	-		1.244		-		-	-		-		2.568
Mean	-	-	-	-	-	-	-	-	-	-	-	2.892
Flow (MCM)	-	-	-	-	-	-	-	-	-	-	-	7.745
Maximum	-	-	-	-	-	-	-	-	-	-	-	3.612
Minimum	-	-	-	-	-	-	-	-	-	-	-	2.471
Runoff (mm)	-	-	-	-	-	-	-	-	-	-	-	31.486

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1DD55 **Year:** 2019
Station Name: Kikuletwa River at Karangai
Time-Series Type: Flow (cumecs)

Latitude: 3:27: 4 S Longitude: 36:51:43 E Elevation: 1016.0 metres Area: 246.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.568	1.941	1.803	2.132	4.836	5.735	3.184	2.574	2.471	1.883	4.330	7.362
2	2.477	1.952	1.711	2.167	3.472	5.726	3.184	2.477	2.421	2.933	4.320	5.666
3	2.471	2.108	2.381	2.144	3.215	5.656	3.126	2.515	2.369	2.267	4.269	7.228
4	2.471	2.032	2.562	2.302	3.609	5.558	3.026	2.522	2.326	2.080	4.161	5.626
5	2.471	1.946	2.413	2.181	4.162	5.147	3.119	2.483	2.314	2.374	3.511	5.356
6	2.471	1.941	2.197	2.120	7.326	5.174	3.126	2.568	2.270	4.906	3.243	5.860
7	2.471	1.935	2.173	2.066	12.809	5.052	3.070	2.568	2.270	2.859	3.141	13.776
8	2.427	1.862	2.126	1.820	8.120	4.970	2.963	2.522	2.270	2.475	3.229	7.426
9	2.421	1.586	2.027	1.740	4.583	4.823	3.054	2.477	2.276	6.556	3.178	9.919
10	2.414	1.754	1.895	2.391	4.584	4.679	3.019	2.471	2.357	5.156	3.806	7.917
11	2.369	1.725	1.775	2.089	6.847	4.546	2.956	2.469	2.276	5.075	5.112	6.767
12	2.326	1.715	1.759	2.124	8.086	4.529	2.906	2.461	2.222	3.992	4.999	5.932
13	2.314	1.647	1.684	2.032	10.743	4.407	2.956	2.471	2.173	5.633	4.390	6.078
14	2.264	1.679	1.639	1.878	8.415	4.381	2.949	2.464	2.173	11.524	4.029	6.165
15	2.245	1.674	1.631	1.575	7.223	4.134	2.899	2.375	2.132	4.923	4.811	7.195
16	3.004	1.633	1.694	1.510	6.133	3.993	2.851	2.369	2.120	4.218	4.520	6.915
17	2.729	2.132	1.907	1.365	5.337	3.927	2.844	2.369	2.038	4.386	4.077	6.494
18	2.530	2.120	1.652	1.291	5.623	3.862	2.844	2.413	2.032	8.364	3.854	6.307
19	2.477	1.952	1.631	1.317	7.109	3.742	2.798	2.369	2.032	21.474	3.647	6.058
20	2.412	1.941	1.559	1.327	7.422	3.726	2.784	2.276	1.988	11.587	3.896	5.895
21	2.197	1.903	1.525	1.400	6.605	3.616	2.735	2.270	1.941	9.783	3.992	7.612
22	2.445	1.897	1.557	2.314	5.438	3.600	2.689	2.270	1.903	6.397	6.607	11.786
23	2.369	1.908	1.596	7.693	6.293	3.492	2.676	2.282	1.897	5.570	5.096	7.807
24	2.270	2.108	1.674	2.637	5.977	3.484	2.628	2.440	1.860	5.842	7.806	7.247
25	2.185	2.126	1.639	2.090	6.336	3.477	2.674	2.804	2.098	7.371	5.811	6.907
26	2.276	2.155	1.626	1.911	11.861	3.370	2.635	2.687	4.635	10.688	5.771	7.386
27	2.427	1.947	1.525	2.021	8.321	3.355	2.628	2.674	3.547	6.486	5.279	8.131
28	2.015	1.817	1.482	2.798	7.043	3.243	2.667	2.530	2.190	6.169	5.276	8.209
29	1.985		1.549	8.841	6.527	3.184	2.633	2.471	1.941	5.366	6.465	15.005
30	1.946		1.680	2.082	5.926	3.184	2.680	2.471	1.812	4.841	7.280	8.513
31	1.941		2.269		5.745		2.674	2.471		4.468		5.226
Mean	2.367	1.898	1.817	2.379	6.636	4.259	2.870	2.470	2.278	6.053	4.664	7.541
Flow (MCM)	6.340	4.591	4.868	6.165	17.775	11.039	7.688	6.617	5.905	16.213	12.088	20.198
Maximum	3.004	2.155	2.562	8.841	12.809	5.735	3.184	2.804	4.635	21.474	7.806	15.005
Minimum	1.941	1.586	1.482	1.291	3.215	3.184	2.628	2.270	1.812	1.883	3.141	5.226
Runoff (mm)	25.774	18.662	19.787	25.063	72.255	44.876	31.250	26.897	24.006	65.905	49.138	82.105

Flow (cumecs)

Annual Statistics

Maximum: 21.474 Minimum: 1.291 Mean: 3.769 cumecs

Total: 118.872 MCM Runoff: 483.219 mm

Possible data flags

No data stored "-" Estimated values "e"

Wami River at Dakawa

Station No: 1G1		**Established:** 14/11/1953	
Coordinates:		**Altitude (m.a.m.s.l):** 360	
Lat: -6.4468	**Long: 37.5334**	**Catchment Area (km²):** 5,117	
Description of the Catchment:			
Mountains especially upstream (60%) and the remaining part is semi-arid about 40%			

Station Details

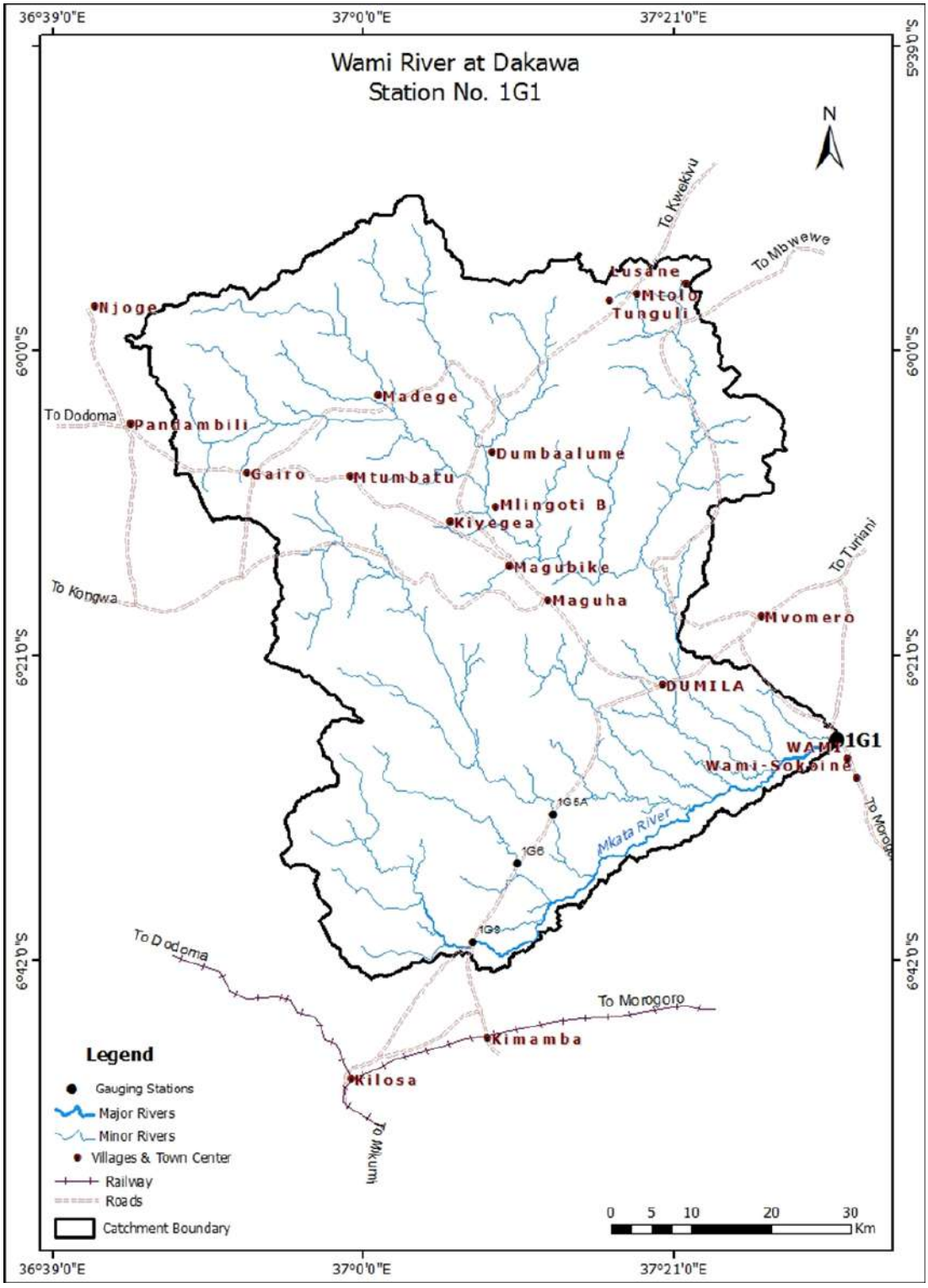
1. Staff Gauges	**Range: 0 – 6m**		**A.D.Z.G.R: 0.00mm**	
	Type of Gauges: Standard Vertical		**MSL.Z.G.L: -**	
2. Automatic Recorder	**Thalimedes float type**		**Date installed:**	
3. Benchmark	Bolt embedded in concrete near 6.00 gauge			
BM Assumed Datum: 4.816m		**N.M.M.S.L: -**	**TBM: –**	
4. Control	Open channel downstream gauges, the channel is stable due to present of bridge			
5. Access	Accessible throughout the year, the station is located 50km from Morogoro town via Morogoro - Dodoma road			

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	1.2.2
Discharge:	01/01/2010 - 31/12/2019	1.2.2

Extremes:	**Max. Recorded**	297.731m³/sec	**On** 02/04/2018	**WL** 4.18m
	Min. Recorded	0.123m³/sec	**On** 18/12/2016	**WL** 0.38m

Remarks

The river is a meandering type with high sinuosity. The longitudinal slope of Wami at Dakawa is low and suspended sediments dominate sediment load.


Wami River at Dakawa
Station No. 1G1
N
36°39'0"E
37°0'0"E
37°21'0"E
6°0'0"S
6°21'0"S
6°42'0"S
To Kwekivu
To Mbwewe
Lusane
Mtolo
Tunguli
Njoge
Madege
To Dodoma
Pandambili
Dumbaalume
Gairo
Mtumbatu
Mlingoti B
Kiyegea
Magubike
To Kongwa
Maguha
To Turiani
Mvomero
DUMILA
1G1
WAMI
Wami-Sokoine
To Morogoro
1G5A
Mkata River
1G6
1G8
To Dodoma
To Morogoro
Kimamba
Kilosa
To Mikumi
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Railway
Roads
Catchment Boundary
0 5 10 20 30
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.105	15.794	24.764	15.596	41.119	15.449	6.395	3.852	1.253	1.907	1.797	2.223
2	5.710	13.099	18.361	13.341	48.297	15.185	6.937	3.565	1.175	1.917	1.797	2.219
3	8.723	11.122	15.000	12.721	51.180	14.919	6.789	3.473	1.261	1.806	1.785	2.185
4	16.798	10.081	18.835	12.896	49.958	14.291	6.522	3.384	1.241	1.869	1.826	2.136
5	27.866	9.892	22.813	17.816	49.970	13.515	6.225	3.311	1.170	1.792	1.781	2.189
6	39.100	11.379	25.470	26.873	48.396	12.513	5.894	3.301	1.148	1.794	1.769	2.086
7	52.580	12.593	25.085	34.668	45.110	12.077	5.763	3.286	1.020	1.785	1.734	2.136
8	61.751	15.223	20.279	40.093	43.870	11.733	6.038	3.197	0.892	1.838	1.649	2.547
9	70.161	15.354	17.642	39.535	47.747	11.389	6.478	3.207	0.814	1.856	1.650	2.522
10	85.137	13.150	19.264	38.528	49.159	11.232	6.478	3.367	0.652	1.794	1.753	2.699
11	91.575	13.338	20.320	36.640	46.978	11.242	6.067	3.435	0.624	1.831	1.842	2.928
12	112.069	13.998	19.069	34.506	41.412	11.577	4.625	3.326	0.693	1.813	1.905	4.018
13	142.742	15.273	19.316	33.071	34.384	11.477	4.423	3.219	0.621	1.778	1.896	6.730
14	113.680	14.647	20.008	33.480	31.158	11.005	4.156	3.088	0.531	1.764	1.842	5.579
15	109.958	13.545	16.803	34.074	29.216	10.719	4.136	2.847	0.515	1.703	1.796	5.637
16	92.295	12.769	13.307	33.652	24.143	10.819	4.302	2.542	0.493	1.652	1.882	5.839
17	77.998	10.426	12.233	38.580	19.982	11.355	4.372	2.351	0.494	1.677	1.965	6.573
18	66.097	7.842	13.054	44.394	17.586	13.286	4.122	2.159	0.608	1.561	2.080	8.580
19	61.467	6.890	13.685	43.391	14.947	10.772	3.501	1.874	0.768	1.387	2.251	8.202
20	57.679	8.154	13.490	41.525	12.993	9.907	3.543	1.579	0.704	1.253	2.241	6.617
21	52.675	10.962	13.200	39.454	14.032	9.392	3.646	1.283	0.571	1.152	2.283	6.665
22	43.915	17.321	12.702	38.658	14.155	8.112	3.466	1.417	0.482	1.369	2.295	7.183
23	33.207	21.564	12.154	41.063	14.946	7.461	3.259	1.673	0.358	1.368	2.664	4.467
24	25.764	26.527	11.459	41.448	16.702	7.260	3.069	1.696	0.264	1.246	2.719	3.661
25	26.115	29.353	10.524	38.022	17.640	6.975	3.026	1.703	0.209	1.041	2.708	5.321
26	26.264	24.523	10.874	36.852	17.753	6.733	3.083	1.630	0.216	0.971	2.567	6.208
27	32.763	27.797	12.335	39.091	17.654	6.815	3.023	1.533	0.215	1.644	2.470	6.301
28	40.506	30.525	13.604	37.593	17.422	6.733	2.892	1.528	0.217	1.790	2.392	7.945
29	32.769		15.747	33.312	17.486	6.446	2.624	1.530	0.329	1.880	2.341	9.910
30	27.123		18.533	35.453	16.940	5.528	2.478	1.522	1.039	1.790	2.239	10.240
31	19.809		19.591		15.827		3.203	1.444		1.776		10.048
Mean	53.594	15.469	16.759	33.544	29.941	10.531	4.533	2.494	0.686	1.639	2.064	5.213
Flow (MCM)	143.545	37.424	44.887	86.947	80.193	27.295	12.142	6.681	1.778	4.390	5.350	13.962
Maximum	142.742	30.525	25.470	44.394	51.180	15.449	6.937	3.852	1.261	1.917	2.719	10.240
Minimum	5.710	6.890	10.524	12.721	12.993	5.528	2.478	1.283	0.209	0.971	1.649	2.086
Runoff (mm)	28.053	7.314	8.772	16.992	15.672	5.334	2.373	1.306	0.347	0.858	1.046	2.729

Flow (cumecs)

Annual Statistics

Maximum: 142.742 Minimum: 0.209 Mean: 14.706 cumecs

Total: 463.754 MCM Runoff: 90.630 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1 **Year:** 2011
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.915	3.339	11.927	87.663	99.909	32.300	10.414	1.737	2.963	-	2.556	-
2	8.733	3.239	9.576	89.916	88.583	27.593	10.189	1.165	2.784	-	2.629	-
3	6.371	3.098	6.028	85.829	75.515	24.313	10.131	1.346	2.723	-	3.160	-
4	4.979	2.983	3.622	86.254	62.321	21.780	10.169	1.379	2.606	-	3.626	-
5	3.939	3.237	2.257	85.918	55.266	20.088	9.997	1.519	2.487	-	3.285	-
6	4.205	3.214	0.862	75.800	48.818	18.878	9.984	2.445	2.460	-	3.620	-
7	5.008	2.712	1.814	69.350	45.197	18.505	9.870	2.672	2.386	-	5.524	-
8	7.375	2.666	8.661	65.650	39.369	17.148	9.807	2.857	2.324	-	4.175	-
9	15.265	3.167	15.773	67.044	35.251	16.058	9.756	2.777	2.345	-	3.330	-
10	16.717	2.688	26.043	75.969	34.810	15.371	9.675	2.869	2.154	-	3.949	-
11	19.101	2.800	25.443	89.804	47.074	14.961	9.041	2.755	1.978	-	4.271	-
12	20.736	3.077	23.891	88.617	55.016	14.496	6.623	2.755	1.761	-	4.490	-
13	17.777	5.938	22.186	78.950	54.797	13.803	6.441	2.892	1.632	-	4.580	-
14	17.012	14.141	21.098	65.494	52.075	13.476	6.315	2.915	1.504	-	4.446	-
15	18.308	12.687	20.524	56.849	49.447	12.868	6.030	2.869	1.379	-	4.574	-
16	18.306	8.992	19.906	52.704	46.671	12.593	6.370	2.578	1.282	-	4.455	-
17	18.342	9.510	19.162	51.981	43.783	12.460	7.065	2.456	1.304	-	4.141	-
18	20.131	10.383	18.430	51.661	41.518	12.272	8.395	2.805	1.267	-	3.196	-
19	19.712	11.985	18.538	52.393	40.473	11.914	8.449	3.280	1.245	-	2.778	-
20	18.193	15.867	21.120	55.126	40.880	11.553	6.102	3.272	1.175	-	2.732	-
21	17.395	19.177	33.479	62.460	44.072	11.310	5.534	3.033	1.238	-	2.732	-
22	16.615	18.240	51.106	72.513	46.693	11.083	6.084	2.927	1.203	-	2.710	-
23	15.158	15.625	69.671	93.352	47.097	11.130	5.996	2.938	1.151	-	2.578	-
24	12.833	14.178	76.507	105.054	48.895	11.566	5.450	3.057	1.144	-	2.554	-
25	11.490	14.391	73.709	100.900	50.504	11.310	5.361	2.962	1.272	-	2.517	-
26	9.800	13.614	69.534	106.583	48.510	11.010	5.902	3.081	1.457	-	2.370	-
27	7.239	12.839	70.500	119.084	45.634	11.284	5.883	3.129	1.417	-	2.306	-
28	4.848	12.593	73.771	113.353	43.459	10.911	5.600	3.322	1.613	-	2.331	-
29	3.557		76.983	103.558	41.928	10.812	5.668	3.671	2.109	-	2.677	-
30	3.359		82.416	99.429	38.826	10.629	5.415	3.996	2.429	-	2.764	-
31	3.316		86.585		34.990		5.778	3.883		-		-
Mean	12.120	8.799	34.230	80.309	49.916	15.116	7.532	2.753	1.826	-	3.369	-
Flow (MCM)	32.463	21.287	91.681	208.160	133.694	39.180	20.174	7.373	4.734	-	8.731	-
Maximum	20.736	19.177	86.585	119.084	99.909	32.300	10.414	3.996	2.963	-	5.524	-
Minimum	3.316	2.666	0.862	51.661	34.810	10.629	5.361	1.165	1.144	-	2.306	-
Runoff (mm)	6.344	4.160	17.917	40.680	26.127	7.657	3.943	1.441	0.925	-	1.706	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	123.951	10.270	21.797	10.010	8.296	7.953	3.709	1.039	4.037	1.764	0.224	1.272
2	64.045	10.010	22.123	9.940	9.884	7.450	3.565	1.165	3.995	1.722	0.341	1.515
3	50.773	10.010	24.712	9.556	10.010	7.933	3.186	1.346	3.940	1.355	0.601	2.045
4	40.180	10.010	20.513	10.104	10.010	7.891	2.946	1.379	3.877	0.889	0.771	3.315
5	36.104	9.969	21.872	12.801	10.010	7.669	2.915	1.519	3.557	0.727	1.079	3.669
6	45.866	9.666	23.821	13.118	11.189	6.917	2.915	2.445	3.479	0.800	1.227	3.526
7	40.971	8.825	36.855	12.773	18.872	5.423	2.915	2.672	3.277	1.449	2.496	3.161
8	37.593	8.017	48.433	16.209	20.352	5.517	2.915	2.857	2.951	1.915	3.241	3.081
9	37.006	7.150	59.644	19.953	19.168	5.073	2.915	2.777	2.823	2.053	3.479	2.950
10	29.624	6.504	54.516	21.945	16.647	4.161	2.915	2.869	2.743	2.106	3.429	2.997
11	29.309	5.556	48.403	21.502	15.436	3.047	2.915	2.755	2.732	2.345	2.987	2.985
12	32.894	5.086	48.917	19.948	20.374	2.732	2.915	2.755	2.673	2.386	2.892	2.834
13	33.855	4.548	52.206	17.099	24.839	2.578	2.915	2.892	2.282	2.386	2.728	2.836
14	31.480	4.239	52.753	15.166	26.431	2.556	2.531	2.915	1.906	2.376	2.475	3.553
15	29.945	3.911	44.951	12.545	25.526	2.396	0.683	2.869	1.609	2.284	2.004	5.115
16	33.395	3.475	37.715	10.253	23.982	1.513	0.432	2.578	1.983	2.096	1.778	8.349
17	49.802	3.101	36.070	9.419	23.568	1.307	0.310	2.456	2.561	2.057	1.644	6.100
18	53.872	2.745	37.038	8.178	22.302	0.900	0.222	2.805	2.672	1.991	1.577	3.645
19	57.648	2.492	35.030	7.623	20.847	1.005	0.208	3.280	2.580	1.839	1.577	2.986
20	58.141	2.386	34.172	8.887	19.265	2.495	0.215	3.272	2.617	1.269	1.688	2.985
21	59.018	2.314	31.072	9.915	18.127	3.131	0.362	3.033	2.694	0.824	2.068	2.915
22	57.343	3.381	25.448	9.984	16.326	3.663	0.389	2.927	2.455	0.804	2.057	2.725
23	52.348	8.716	21.162	9.651	12.338	3.772	0.524	2.938	1.743	0.656	1.917	2.144
24	45.020	4.639	18.964	7.907	10.256	3.037	1.325	3.057	1.652	0.577	1.764	2.426
25	35.800	7.485	17.625	8.208	10.010	2.915	0.469	2.962	1.755	0.297	1.599	2.762
26	27.067	14.342	15.516	9.275	10.010	2.915	0.339	3.081	1.769	0.254	1.590	2.688
27	22.058	24.847	13.980	8.208	9.946	3.037	0.354	3.129	1.717	0.244	1.414	2.312
28	18.869	27.789	14.295	7.461	9.206	3.745	0.235	3.322	1.525	0.249	0.828	2.016
29	16.195	22.996	13.915	7.205	6.708	3.591	0.352	3.671	1.480	0.283	0.770	2.133
30	14.122		12.108	7.226	5.632	3.736	0.310	3.996	1.678	0.216	1.331	2.574
31	12.108		10.270		7.665		0.315	4.043		0.210		2.269
Mean	41.174	8.430	30.835	11.736	15.265	4.002	1.588	2.736	2.559	1.304	1.786	3.093
Flow (MCM)	110.281	21.123	82.590	30.419	40.887	10.373	4.252	7.327	6.632	3.492	4.629	8.285
Maximum	123.951	27.789	59.644	21.945	26.431	7.953	3.709	4.043	4.037	2.386	3.479	8.349
Minimum	12.108	2.314	10.270	7.205	5.632	0.900	0.208	1.039	1.480	0.210	0.224	1.272
Runoff (mm)	21.552	4.128	16.140	5.945	7.990	2.027	0.831	1.432	1.296	0.683	0.905	1.619

Flow (cumecs)

Annual Statistics

Maximum: 123.951 Minimum: 0.208 Mean: 10.376 cumecs
Total: 328.103 MCM Runoff: 64.120 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1 **Year:** 2013
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.355	0.550	1.488	28.170	18.999	9.750	0.312	0.719	0.206	0.867	0.573	0.195
2	2.733	1.557	0.796	32.252	32.555	9.794	0.750	0.853	0.205	0.954	0.453	0.213
3	5.075	6.594	0.260	33.731	40.895	9.725	0.750	1.303	0.196	0.988	0.333	0.356
4	4.278	7.697	0.206	37.501	41.809	9.500	0.275	1.722	0.194	1.105	0.239	0.507
5	4.339	5.972	0.207	41.341	40.370	9.221	0.206	1.826	0.217	1.209	0.201	0.592
6	5.919	5.167	0.207	46.292	40.408	7.518	0.201	1.790	0.376	1.803	0.227	0.670
7	10.046	4.788	0.207	52.781	36.858	7.572	0.362	1.844	0.342	2.295	0.233	0.815
8	10.074	4.267	0.207	65.376	32.218	6.374	1.478	1.907	0.325	2.675	0.233	1.644
9	9.946	3.692	0.337	85.421	26.850	5.824	0.909	1.935	0.280	3.032	0.233	4.785
10	9.116	2.992	1.184	77.594	25.030	4.834	0.841	2.047	0.233	4.428	0.233	8.431
11	6.070	2.228	0.737	60.598	19.095	3.634	0.288	2.057	0.201	4.272	0.233	6.813
12	4.106	1.452	5.981	56.956	16.538	2.758	0.248	1.928	0.225	3.850	0.227	5.272
13	3.519	0.492	14.345	53.732	15.639	2.538	0.476	1.447	0.211	3.609	0.196	3.379
14	3.227	0.293	12.903	59.450	15.226	1.938	0.384	1.006	0.193	3.402	0.195	1.842
15	3.093	0.270	9.341	85.874	14.630	1.880	0.529	0.739	0.191	3.214	0.223	2.183
16	2.950	0.211	4.841	91.064	14.096	2.334	0.733	0.675	0.191	3.105	0.356	2.830
17	2.974	0.319	1.420	67.863	13.228	3.881	1.759	0.670	0.192	3.021	0.320	2.067
18	2.830	1.497	2.630	57.122	11.525	3.993	1.782	0.660	0.199	2.962	0.207	1.542
19	2.668	3.353	0.883	47.819	10.261	3.017	1.644	0.583	0.233	2.655	0.194	0.998
20	2.519	5.980	1.708	41.633	10.447	2.811	1.561	0.449	0.395	2.397	0.194	0.591
21	3.467	9.250	8.668	33.376	10.087	3.857	1.433	0.313	0.447	2.223	0.191	0.437
22	4.864	14.150	13.798	27.668	9.594	2.501	1.268	0.236	0.451	2.058	0.191	0.275
23	4.825	32.305	17.952	25.130	9.851	1.940	1.147	0.196	0.451	1.844	0.191	0.254
24	4.192	29.740	18.728	21.222	9.908	1.502	1.040	0.191	0.451	1.628	0.191	0.476
25	2.920	11.880	18.745	19.822	9.889	1.914	0.933	0.191	0.479	1.325	0.191	1.501
26	1.298	4.803	23.858	19.354	9.782	1.080	0.794	0.210	0.655	0.820	0.191	3.127
27	2.254	1.608	28.799	22.057	9.769	1.107	0.641	0.323	0.686	0.711	0.191	3.304
28	1.954	1.671	33.865	21.057	9.558	0.575	0.559	0.260	0.707	0.665	0.191	2.691
29	0.883		31.783	19.223	9.106	0.380	0.515	0.201	0.831	0.601	0.194	2.534
30	0.276		26.635	16.408	9.396	0.476	0.460	0.207	0.853	0.592	0.195	3.798
31	0.254		23.919		9.637		0.486	0.204		0.592		4.492
Mean	4.033	5.885	9.891	44.930	18.815	4.141	0.799	0.926	0.361	2.094	0.241	2.213
Flow (MCM)	10.802	14.237	26.493	116.457	50.393	10.733	2.139	2.479	0.935	5.608	0.624	5.928
Maximum	10.074	32.305	33.865	91.064	41.809	9.794	1.782	2.057	0.853	4.428	0.573	8.431
Minimum	0.254	0.211	0.206	16.408	9.106	0.380	0.201	0.191	0.191	0.592	0.191	0.195
Runoff (mm)	2.111	2.782	5.178	22.759	9.848	2.098	0.418	0.484	0.183	1.096	0.122	1.159

Flow (cumecs)

Annual Statistics

Maximum: 91.064 Minimum: 0.191 Mean: 7.861 cumecs

Total: 247.891 MCM Runoff: 48.445 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.175	44.684	14.571	157.551	42.946	24.771	13.260	-	-	1.635	0.225	1.453
2	3.247	33.404	9.928	158.139	38.846	22.283	13.260	-	-	1.602	0.222	2.259
3	2.551	12.671	8.806	182.056	39.601	12.933	13.217	-	-	1.395	0.213	5.738
4	1.923	8.202	6.034	174.159	38.306	19.301	12.897	-	-	1.260	0.241	16.758
5	1.385	5.215	8.834	119.629	35.992	20.507	12.370	-	-	1.161	0.517	24.025
6	1.023	5.576	11.953	75.360	34.680	19.669	11.488	-	-	1.147	1.245	17.837
7	1.424	11.388	13.811	111.371	39.072	18.978	10.204	-	-	1.175	1.364	18.649
8	3.547	19.232	16.461	108.427	40.885	18.961	10.010	-	-	1.357	1.320	18.425
9	5.598	25.821	20.087	95.668	42.496	18.249	10.010	-	-	1.457	1.612	16.680
10	5.033	34.540	27.245	86.167	46.419	17.823	10.010	-	-	1.610	1.912	17.119
11	4.261	56.373	31.706	86.682	49.209	17.564	10.010	-	-	1.635	2.572	13.490
12	3.510	60.371	38.424	103.789	54.621	16.804	10.010	-	-	1.635	2.880	11.704
13	2.828	38.498	46.891	150.032	66.171	16.260	10.010	-	-	1.635	2.892	10.857
14	2.316	13.457	80.884	195.719	120.548	16.065	10.010	-	-	1.635	2.755	8.544
15	2.569	11.836	260.390	185.311	221.616	15.456	10.010	-	-	1.635	2.732	8.055
16	3.631	13.471	327.110	94.672	205.589	14.563	10.010	-	-	1.635	2.732	7.721
17	2.229	18.968	326.086	72.958	174.942	14.428	10.010	-	-	1.602	2.528	5.767
18	1.540	27.715	308.418	134.920	212.411	14.354	10.010	-	-	1.373	1.485	5.140
19	1.511	33.619	273.914	125.704	192.735	13.876	10.010	-	-	1.095	1.705	4.811
20	3.467	40.956	232.720	120.068	171.800	13.534	10.010	-	-	0.840	1.755	4.215
21	8.682	46.827	200.720	118.817	157.089	13.181	10.010	-	-	0.612	1.635	4.044
22	29.138	51.728	175.774	112.036	141.851	13.045	10.010	-	-	0.511	1.512	4.536
23	239.046	60.719	87.771	118.490	95.244	13.096	10.010	-	-	0.387	1.441	4.625
24	170.308	72.744	46.370	112.784	44.436	13.726	10.010	-	-	0.264	1.386	4.625
25	149.087	113.402	20.279	123.736	29.757	15.236	10.010	-	-	0.206	1.379	4.625
26	141.136	77.937	20.745	121.840	42.343	15.196	10.010	-	-	0.199	1.379	4.625
27	115.076	59.119	78.707	113.525	90.277	14.459	10.010	-	-	0.199	1.364	4.686
28	112.715	48.065	107.133	98.699	102.815	13.912	10.010	-	-	0.200	1.274	5.793
29	82.104		126.891	95.698	110.730	13.766	10.010	-	-	0.206	1.260	9.915
30	54.220		132.804	85.923	97.340	13.332	10.010	-	-	0.210	1.274	12.423
31	49.564		136.003		31.129		10.010	-		0.225		12.447
Mean	38.995	37.376	103.144	121.331	90.706	16.178	10.546	-	-	1.024	1.560	9.406
Flow (MCM)	104.444	90.421	276.261	314.490	242.948	41.932	28.247	-	-	2.742	4.044	25.193
Maximum	239.046	113.402	327.110	195.719	221.616	24.771	13.260	-	-	1.635	2.892	24.025
Minimum	1.023	5.215	6.034	72.958	29.757	12.933	10.010	-	-	0.199	0.213	1.453
Runoff (mm)	20.411	17.671	53.989	61.460	47.479	8.195	5.520	-	-	0.536	0.790	4.923

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1 **Year:** 2015
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	25.895	7.481	14.971	59.685	74.793	10.822	-	-	-	-	1.488	3.472
2	28.344	6.925	31.636	58.196	63.372	15.935	-	-	-	-	1.520	2.974
3	23.349	7.583	32.389	55.932	59.740	16.371	-	-	-	-	1.618	2.892
4	16.158	9.469	19.364	52.028	58.464	15.212	-	-	-	-	1.635	2.711
5	12.692	9.965	17.479	47.154	58.681	-	-	-	-	-	1.715	2.439
6	13.111	10.010	25.285	37.681	61.553	-	-	-	-	-	4.252	2.514
7	13.461	10.138	33.382	28.961	70.163	-	-	-	-	-	13.175	2.858
8	14.081	10.627	26.573	24.814	70.864	-	-	-	-	-	11.262	2.915
9	19.283	7.509	15.192	23.605	99.617	-	-	-	-	-	6.181	2.847
10	20.544	4.411	15.809	22.008	84.706	-	-	-	-	1.504	4.656	2.315
11	22.744	2.727	18.284	20.436	74.447	-	-	-	-	1.504	4.402	1.495
12	23.223	1.532	13.959	17.999	69.478	-	-	-	-	1.504	4.242	1.379
13	20.946	1.364	9.854	18.101	65.067	-	-	-	-	1.504	3.841	1.379
14	20.135	1.159	7.905	18.306	62.267	-	-	-	-	1.504	3.014	1.379
15	22.485	0.504	6.501	20.806	58.710	-	-	-	-	1.504	2.732	3.048
16	18.941	0.255	6.613	32.783	56.729	-	-	-	-	1.504	3.156	12.145
17	19.099	0.340	5.341	38.631	51.535	-	-	-	-	1.504	7.259	19.906
18	21.966	0.459	5.359	38.177	43.410	-	-	-	-	1.504	7.306	21.682
19	26.959	2.653	7.380	34.458	37.182	-	-	-	-	1.504	3.382	19.352
20	29.309	4.265	10.016	27.733	34.178	-	-	-	-	1.504	2.834	19.774
21	31.321	4.121	11.352	22.147	31.454	-	-	-	-	1.504	2.903	21.585
22	24.515	3.197	11.872	18.360	25.518	-	-	-	-	1.504	2.783	21.863
23	23.699	3.799	15.923	16.741	21.334	-	-	-	-	1.504	1.884	32.712
24	16.618	3.799	23.116	21.343	20.146	-	-	-	-	1.504	0.909	21.855
25	14.549	3.263	33.593	35.092	18.932	-	-	-	-	1.504	0.496	12.591
26	14.548	4.704	41.445	53.953	16.910	-	-	-	-	1.504	0.549	14.405
27	14.803	5.484	45.288	77.051	16.307	-	-	-	-	1.488	1.245	20.932
28	15.571	6.538	50.257	109.568	15.337	-	-	-	-	1.394	1.551	22.879
29	16.582		56.602	93.191	13.395	-	-	-	-	1.379	2.889	15.496
30	16.009		59.550	83.687	12.002	-	-	-	-	1.379	4.151	10.334
31	12.120		61.877		10.270		-	-		1.394		6.755
Mean	19.776	4.796	23.683	40.288	46.986	-	-	-	-	-	3.634	10.674
Flow (MCM)	52.969	11.602	63.432	104.426	125.847	-	-	-	-	-	9.420	28.588
Maximum	31.321	10.627	61.877	109.568	99.617	-	-	-	-	-	13.175	32.712
Minimum	12.120	0.255	5.341	16.741	10.270	-	-	-	-	-	0.496	1.379
Runoff (mm)	10.351	2.267	12.396	20.408	24.594	-	-	-	-	-	1.841	5.587

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.097	135.509	18.068	19.536	-	20.888	13.082	6.496	0.207	0.203	0.199	0.195
2	3.037	124.087	17.614	37.125	-	20.888	12.762	6.496	0.207	0.203	0.199	0.195
3	2.915	127.688	16.225	42.104	-	20.888	12.621	6.496	0.207	0.203	0.199	0.195
4	3.633	158.985	14.580	36.111	-	20.888	12.203	6.685	0.207	0.203	0.199	0.195
5	8.896	153.083	13.417	45.487	-	20.672	12.133	7.854	0.209	0.203	0.199	0.195
6	12.296	154.061	10.472	54.505	-	19.265	13.165	8.055	0.204	0.203	0.199	0.195
7	16.542	170.753	10.270	59.905	-	18.144	19.558	7.953	0.204	0.224	0.199	0.198
8	23.081	166.723	12.144	77.570	-	17.051	19.685	7.072	0.209	0.356	0.199	0.230
9	30.704	162.788	14.516	112.773	-	16.970	19.182	5.376	0.207	0.339	0.200	0.317
10	37.631	180.994	17.298	157.495	-	17.331	16.748	5.123	0.206	0.325	0.210	0.314
11	39.419	186.229	17.916	209.735	-	16.575	13.149	5.466	0.203	0.280	0.210	0.214
12	40.105	161.858	13.859	192.123	-	15.678	8.804	7.665	0.203	0.239	0.204	0.200
13	39.306	149.327	14.547	164.922	-	15.029	8.055	8.055	0.203	0.227	0.203	0.210
14	36.642	129.381	16.819	132.075	-	14.503	8.055	7.665	0.203	0.196	0.202	0.210
15	30.903	109.982	18.350	117.315	-	14.428	8.055	5.466	0.203	0.191	0.199	0.201
16	39.957	98.143	16.819	120.821	-	14.391	8.055	5.123	0.203	0.191	0.199	0.202
17	49.634	95.853	14.620	153.226	-	14.096	7.665	5.123	0.203	0.192	0.199	0.205
18	56.725	90.295	13.585	158.842	-	13.513	5.466	4.969	0.203	0.199	0.198	0.216
19	60.626	82.083	12.870	155.980	-	12.798	4.825	3.942	0.203	0.206	0.195	0.232
20	61.668	74.905	11.558	139.134	-	12.869	3.567	3.037	0.203	0.206	0.195	0.351
21	64.065	72.598	10.204	132.028	-	13.987	5.821	2.858	0.203	0.203	0.195	0.287
22	86.644	65.046	9.884	99.596	-	14.391	5.632	2.423	0.203	0.202	0.195	0.233
23	124.483	58.812	8.781	68.416	-	14.428	7.665	1.752	0.203	0.199	0.195	0.197
24	115.474	55.393	11.604	103.858	-	14.428	8.055	1.418	0.203	0.199	0.195	0.198
25	129.797	50.870	25.263	134.074	-	14.354	8.055	1.379	0.203	0.199	0.195	0.199
26	115.586	44.745	38.624	165.354	-	13.840	8.055	1.307	0.203	0.199	0.195	0.199
27	113.805	32.851	29.913	180.649	-	13.332	7.665	0.852	0.203	0.199	0.195	0.199
28	113.128	27.572	34.047	184.121	-	13.188	5.239	0.496	0.203	0.199	0.195	0.199
29	132.874	21.842	25.840	159.191	-	12.727	3.669	0.451	0.203	0.199	0.195	0.199
30	137.286		15.666	135.985	-	12.551	4.162	0.418	0.203	0.199	0.195	0.199
31	141.840		11.567		-		6.153	0.237		0.199		0.199
Mean	60.413	108.361	16.675	118.335	-	15.803	9.581	4.442	0.204	0.219	0.198	0.218
Flow (MCM)	161.810	271.508	44.664	306.725	-	40.962	25.662	11.898	0.529	0.586	0.514	0.585
Maximum	141.840	186.229	38.624	209.735	-	20.888	19.685	8.055	0.209	0.356	0.210	0.351
Minimum	2.915	21.842	8.781	19.536	-	12.551	3.567	0.237	0.203	0.191	0.195	0.195
Runoff (mm)	31.622	53.060	8.728	59.942	-	8.005	5.015	2.325	0.103	0.114	0.100	0.114

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1 **Year:** 2017
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.199	3.914	46.718	78.481	133.351	53.898	15.501	5.123	0.191	0.195	0.203	0.313
2	0.199	3.799	58.868	73.646	127.981	49.543	14.557	5.123	0.193	0.197	0.206	0.206
3	0.198	13.129	60.396	67.793	137.029	45.719	13.493	5.123	0.205	0.209	0.207	0.207
4	0.195	24.003	53.920	63.716	130.625	45.595	12.308	5.123	0.211	0.211	0.206	0.205
5	0.195	33.464	60.671	59.064	118.991	43.852	12.133	5.188	0.210	0.207	0.200	0.195
6	0.195	29.607	62.402	59.312	120.167	42.438	11.997	5.583	0.203	0.206	0.199	0.208
7	0.194	15.328	63.605	72.144	130.624	37.636	11.053	5.650	0.197	0.200	0.203	0.211
8	0.191	11.102	57.204	103.496	140.379	35.137	10.138	5.650	0.202	0.200	0.204	0.208
9	0.191	8.011	49.902	122.308	139.822	33.441	10.010	5.633	0.203	0.206	0.221	0.222
10	0.191	4.198	45.856	117.957	138.836	30.944	9.946	5.516	0.204	0.206	0.436	0.436
11	0.277	1.517	43.739	89.017	130.169	28.596	9.556	5.367	0.209	0.200	0.660	0.660
12	1.060	0.437	47.646	78.081	142.909	26.773	9.355	4.914	0.206	0.199	1.065	1.065
13	2.152	0.314	46.120	79.436	186.205	24.383	8.777	3.478	0.200	0.199	1.175	1.175
14	2.357	0.214	45.204	60.562	202.187	23.022	8.390	3.033	0.199	0.199	0.376	0.378
15	2.284	0.201	47.581	52.909	190.420	21.961	8.097	2.927	0.199	0.199	0.202	0.216
16	2.250	0.215	32.741	51.875	156.990	21.465	8.055	2.804	0.199	0.199	0.194	0.205
17	0.859	0.204	29.633	58.191	134.217	21.211	8.055	2.148	0.199	0.199	0.194	0.198
18	0.258	0.196	35.458	66.346	120.679	21.254	7.854	1.917	0.199	0.199	0.191	0.205
19	0.214	0.199	35.935	84.310	120.835	21.229	6.685	1.790	0.199	0.199	0.191	0.207
20	0.201	0.203	40.080	105.028	114.817	20.001	6.496	1.790	0.199	0.199	0.191	0.207
21	0.198	0.207	48.183	143.498	108.660	19.045	6.496	1.898	0.198	0.199	0.191	0.205
22	0.195	0.841	49.555	196.685	92.255	18.167	6.496	1.916	0.195	0.199	0.219	0.221
23	0.195	7.999	41.429	198.469	71.806	17.156	6.459	1.916	0.195	0.198	0.432	0.432
24	0.194	15.092	38.114	164.511	62.048	16.003	6.242	1.767	0.195	0.195	0.673	0.673
25	0.191	27.371	34.459	147.826	58.776	16.011	6.206	0.909	0.195	0.195	1.391	1.391
26	0.191	25.086	35.983	160.879	58.262	16.932	6.206	0.496	0.195	0.195	1.618	1.618
27	0.191	15.616	40.091	141.537	57.472	17.800	6.136	0.451	0.198	0.195	1.635	1.635
28	0.194	33.414	45.522	145.353	55.098	18.142	5.685	0.451	0.198	0.195	1.643	1.643
29	0.195		67.284	145.905	54.716	17.293	5.383	0.418	0.195	0.195	1.653	1.653
30	0.198		84.494	140.562	54.716	15.857	5.155	0.236	0.195	0.195	1.234	1.231
31	0.596		84.312		54.690		5.123	0.196		0.199		0.301
Mean	0.529	9.853	49.455	104.297	114.378	27.350	8.647	3.050	0.199	0.199	0.580	0.578
Flow (MCM)	1.417	23.836	132.460	270.337	306.351	70.891	23.159	8.168	0.517	0.534	1.504	1.549
Maximum	2.357	33.464	84.494	198.469	202.187	53.898	15.501	5.650	0.211	0.211	1.653	1.653
Minimum	0.191	0.196	29.633	51.875	54.690	15.857	5.123	0.196	0.191	0.195	0.191	0.195
Runoff (mm)	0.277	4.658	25.886	52.831	59.869	13.854	4.526	1.596	0.101	0.104	0.294	0.303

Flow (cumecs)

Annual Statistics

Maximum: 202.187 Minimum: 0.191 Mean: 26.593 cumecs
Total: 838.636 MCM Runoff: 163.892 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1 **Year:** 2018
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.198	48.033	0.221	43.230	42.430	12.720	3.728	1.457	0.191	0.191	0.202	0.195
2	0.199	36.108	0.513	33.121	43.828	13.528	3.596	1.386	0.191	0.192	0.204	0.195
3	0.198	27.359	1.317	30.724	53.406	14.407	3.415	1.307	0.191	0.198	0.208	0.195
4	0.192	19.208	2.130	31.850	50.834	14.133	3.630	0.894	0.191	0.199	0.197	0.195
5	0.191	16.063	3.885	32.919	42.754	13.529	5.655	0.744	0.191	0.199	0.198	0.199
6	0.760	12.883	6.007	33.512	37.956	12.322	5.908	0.597	0.191	0.199	0.199	0.206
7	6.419	10.819	9.561	34.519	35.683	12.308	6.595	0.493	0.191	0.199	0.200	0.211
8	8.207	8.794	14.039	35.549	32.452	13.050	7.938	0.455	0.191	0.199	0.210	0.211
9	19.509	6.844	19.896	36.812	27.473	11.153	8.561	0.451	0.191	0.199	0.211	0.210
10	34.139	4.960	25.193	39.931	26.353	9.648	7.938	0.421	0.191	0.199	0.211	0.200
11	44.660	1.708	34.716	55.492	30.662	9.261	6.648	0.254	0.191	0.199	0.207	0.200
12	48.027	0.828	44.292	60.435	35.090	8.886	6.189	0.210	0.191	0.199	0.205	0.207
13	58.049	0.507	51.767	62.763	38.015	8.433	5.787	0.203	0.191	0.199	0.196	0.193
14	63.756	0.237	55.797	65.440	43.525	8.222	5.243	0.203	0.191	0.199	0.195	0.321
15	62.291	0.199	63.399	71.619	51.666	8.076	4.078	0.203	0.191	0.199	0.195	1.456
16	71.211	0.200	79.257	97.337	57.249	7.953	3.741	0.203	0.191	0.199	0.195	2.188
17	128.394	0.206	96.856	113.782	55.516	7.236	3.714	0.203	0.191	0.199	0.195	3.894
18	142.354	0.207	112.789	125.309	49.821	6.407	3.611	0.203	0.191	0.202	0.195	7.800
19	133.803	0.207	115.257	136.305	45.698	5.943	3.035	0.203	0.191	0.203	0.195	10.144
20	157.835	0.207	127.581	136.667	38.680	5.634	3.105	0.203	0.191	0.203	0.195	12.173
21	178.087	0.211	112.843	124.712	32.858	5.206	3.264	0.203	0.191	0.203	0.194	14.964
22	166.031	0.211	96.461	113.514	30.683	4.467	3.178	0.215	0.191	0.203	0.191	21.950
23	137.274	0.210	81.618	105.841	30.212	3.549	2.893	0.278	0.191	0.203	0.191	40.862
24	115.362	0.204	74.771	99.127	30.044	2.875	2.453	0.211	0.191	0.204	0.191	41.753
25	106.613	0.203	70.705	94.759	26.669	2.148	1.947	0.198	0.191	0.210	0.191	35.098
26	83.572	0.203	65.565	77.562	21.933	1.944	1.637	0.193	0.191	0.211	0.191	26.338
27	61.776	0.206	64.944	55.211	16.393	2.091	1.410	0.201	0.191	0.211	0.191	18.608
28	62.157	0.205	65.028	49.413	17.092	2.877	1.451	0.202	0.191	0.207	0.191	16.521
29	72.458		65.836	47.173	16.255	3.559	1.892	0.199	0.191	0.204	0.191	13.149
30	80.537		62.270	44.261	14.504	3.863	1.835	0.198	0.191	0.208	0.194	8.414
31	75.465		50.922		12.506		1.636	0.192		0.201		5.282
Mean	68.378	7.044	54.046	69.630	35.104	7.848	4.055	0.406	0.191	0.201	0.197	9.146
Flow (MCM)	183.144	17.041	144.758	180.480	94.024	20.341	10.861	1.087	0.494	0.538	0.512	24.497
Maximum	178.087	48.033	127.581	136.667	57.249	14.407	8.561	1.457	0.191	0.211	0.211	41.753
Minimum	0.191	0.199	0.221	30.724	12.506	1.944	1.410	0.192	0.191	0.191	0.191	0.193
Runoff (mm)	35.791	3.330	28.290	35.271	18.375	3.975	2.123	0.212	0.097	0.105	0.100	4.787

Flow (cumecs)

Annual Statistics

Maximum: 178.087 Minimum: 0.191 Mean: 21.354 cumecs
Total: 673.416 MCM Runoff: 131.604 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G1
Station Name: Wami River at Dakawa
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 6:26:48 S Longitude: 37:32: 0 E Elevation: 360.0 metres Area: 5117.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.779	9.478	30.244	13.262	18.832	54.099	6.496	3.932	2.732	1.043	9.889	56.724
2	3.011	3.527	31.584	12.069	17.355	48.080	6.388	3.932	2.732	0.999	9.566	58.061
3	2.783	7.663	28.936	10.594	16.876	41.987	5.754	3.932	2.732	1.058	8.314	58.872
4	1.963	8.187	29.355	9.632	15.848	35.112	5.583	3.877	2.732	1.453	7.694	62.154
5	1.371	6.616	31.488	10.546	16.378	29.747	5.188	3.506	2.732	1.618	6.410	62.705
6	0.852	5.754	33.476	19.196	20.935	27.519	5.155	3.154	2.688	1.610	6.279	63.262
7	0.459	5.650	42.255	32.572	34.034	21.966	5.383	3.081	2.429	1.593	6.872	72.394
8	0.219	5.650	50.905	30.494	50.931	20.274	5.195	2.938	2.345	2.495	8.041	79.557
9	0.191	5.650	53.582	17.483	60.929	19.761	2.985	2.915	2.087	3.321	9.763	80.390
10	0.321	5.650	54.861	14.953	59.685	19.129	3.428	2.915	1.935	4.218	15.201	79.570
11	1.438	5.650	52.775	14.578	58.464	18.225	7.322	2.915	1.916	6.260	24.955	72.463
12	1.998	5.567	47.099	14.151	59.423	17.139	8.139	2.915	1.916	16.726	35.221	62.714
13	2.830	4.824	39.600	12.144	71.366	13.794	8.561	2.804	1.916	43.492	44.477	58.872
14	3.303	3.146	33.499	10.181	74.445	10.472	8.139	2.167	1.880	48.634	50.171	58.168
15	8.470	1.909	29.460	9.095	66.735	10.010	7.854	2.066	1.669	26.365	46.485	56.491
16	41.037	1.652	23.674	7.981	64.501	10.010	6.685	2.066	1.669	34.616	38.556	51.621
17	55.985	1.513	14.239	6.507	59.202	9.946	6.496	2.066	1.810	31.894	31.314	48.787
18	58.222	0.842	8.559	5.632	58.600	9.569	6.459	2.066	1.443	26.452	27.933	52.851
19	58.982	0.670	5.916	7.878	60.228	9.506	6.207	2.066	1.379	20.910	24.406	54.324
20	62.571	0.583	4.139	9.419	60.775	9.506	5.925	2.066	1.379	22.758	11.866	54.063
21	61.050	0.764	3.689	9.852	62.988	9.506	5.684	2.066	1.379	20.378	10.010	54.145
22	60.093	3.291	3.352	8.980	71.660	9.506	5.583	2.047	1.377	18.935	10.010	57.716
23	56.643	4.574	3.301	8.160	73.899	9.506	5.188	1.953	1.368	22.136	11.572	58.941
24	49.999	6.800	3.301	8.268	71.660	9.506	5.123	2.047	1.367	25.249	25.795	63.681
25	41.208	11.710	3.252	9.419	62.988	9.506	4.969	2.066	1.367	28.343	53.602	76.324
26	37.352	12.982	3.059	10.206	60.503	9.506	4.075	2.106	1.367	30.258	57.848	78.610
27	33.677	16.927	3.931	12.144	58.600	9.506	3.932	2.388	1.367	24.400	54.065	75.641
28	28.646	28.028	6.873	14.286	58.181	9.356	3.932	2.688	1.367	17.997	49.375	87.971
29	23.927		10.535	16.540	57.230	8.067	3.932	2.732	1.367	16.307	55.960	130.302
30	17.324		12.629	22.518	56.683	6.685	3.932	2.732	1.319	12.436	57.900	137.466
31	14.304		14.061		56.378		3.932	2.732		10.257		70.919
Mean	23.678	6.259	23.020	12.958	52.784	17.550	5.601	2.675	1.859	16.910	26.985	68.895
Flow (MCM)	63.418	15.142	61.658	33.587	141.377	45.490	15.001	7.166	4.818	45.292	69.945	184.529
Maximum	62.571	28.028	54.861	32.572	74.445	54.099	8.561	3.932	2.732	48.634	57.900	137.466
Minimum	0.191	0.583	3.059	5.632	15.848	6.685	2.985	1.953	1.319	0.999	6.279	48.787
Runoff (mm)	12.394	2.959	12.050	6.564	27.629	8.890	2.932	1.400	0.942	8.851	13.669	36.062

Flow (cumecs)

Annual Statistics

Maximum: 137.466 Minimum: 0.191 Mean: 21.598 cumecs

Total: 681.112 MCM Runoff: 133.108 mm

Possible data flags

No data stored "-" Estimated values "e"

Wami River at Mandera

Station No: 1G2		**Established:** 09/06/1954
Coordinates:		**Altitude (m.a.m.s.l):** 75
Lat: -6.2464	**Long: 38.3874**	**Catchment Area (km²):** 40,165

Description of the Catchment:

Confined channel with stable river banks due to bedrock pavement

Station Details

1. Staff Gauges	**Range: 0 – 5m**	**A.D.Z.G.R: 0.00mm**
	Type of Gauges: Standard Vertical	**MSL.Z.G.L: -**
2. Automatic Recorder	**Thalimedes float type**	**Date installed:**
3. Benchmark	Bolt embedded in concrete near gauges 4 - 5m	

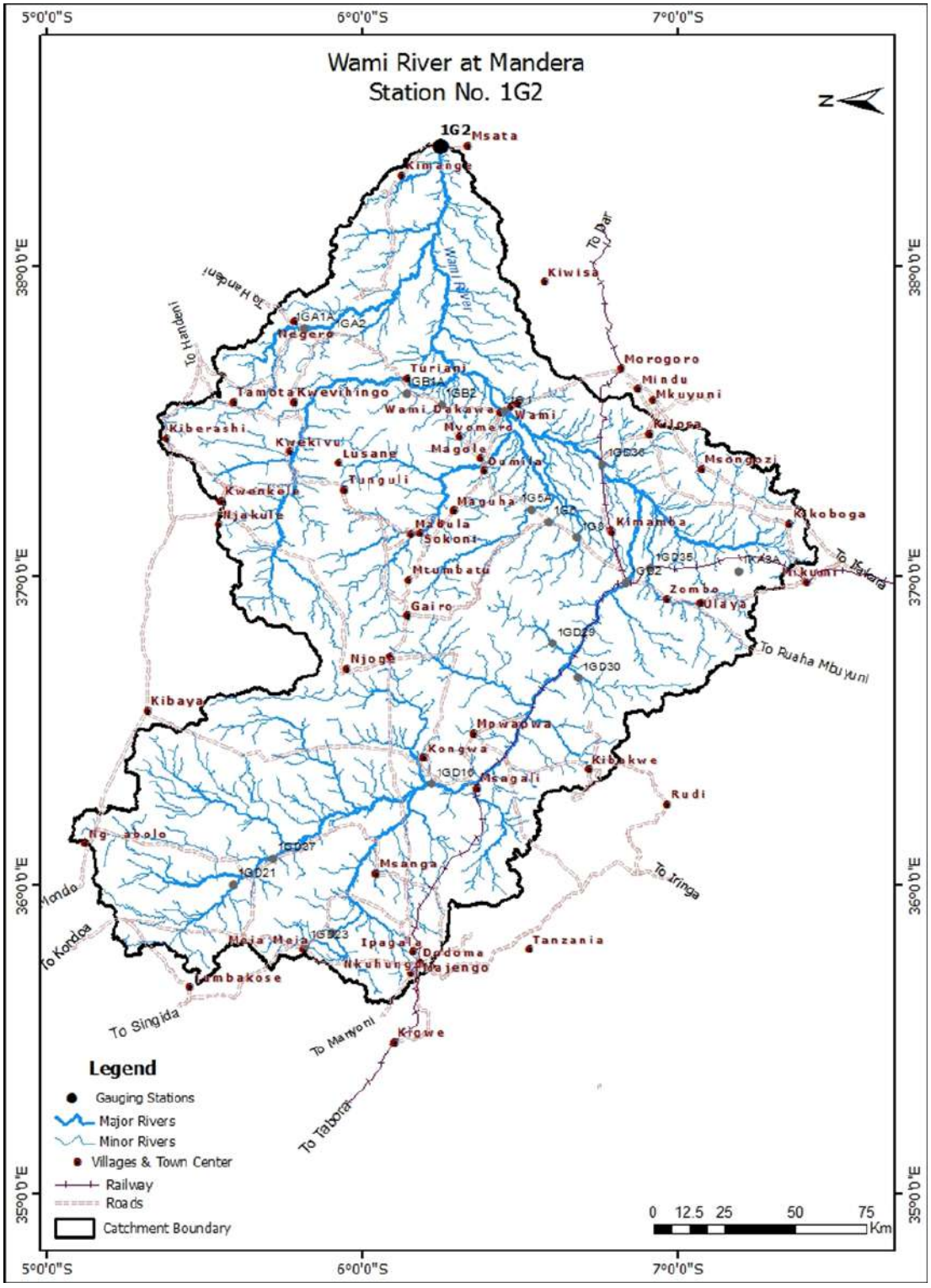
BM Assumed Datum: 3.933m	**N.M.M.S.L:** -	**TBM:** –

4. Control	61m downstream of the gauge is permanent formed by rock outcrop and reeds.
5. Access	Accessible throughout the year, the station is located 184km from Morogoro town via Tanga – Arusha road

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	1.2.2
Discharge:	01/01/2010 - 31/12/2019	1.2.2

Extremes:	**Max. Recorded**	-	**On** 02/04/2018	**WL** 4.95m
	Min. Recorded	-	**On** 18/12/2016	**WL** 0.44m

Remarks


Wami River at Mandera
Station No. 1G2
N
5°0'0"S
6°0'0"S
7°0'0"S
35°0'0"E
36°0'0"E
37°0'0"E
38°0'0"E
1G2
Msata
Kimange
Wami River
To Par
Kiwisa
To Handeni
1GA1A
1GA2
Negero
Morogoro
Mindu
Mkuyuni
Turiani
1GB1A
1GB2
Tamota
Kwevihingo
Wami Dakawa
Wami
Kiberashi
Mvomero
Kidosa
Kwekivu
Lusanga
Magole
Dumila
1GD36
Msongozi
Kwenkala
Tunguli
Manguha
1G5A
1G3
Kimamba
Kikoboga
Ilakulo
Mabula
Sokoni
1GD35
1K43A
To Kilosa
Mtumbatu
1G2
Nkumi
Zombo
Gairo
Ulaya
1GD29
To Ruaha Mbuyuni
Njoge
1GD30
Kibaya
Mpwapwa
Kongwa
Kibakwe
1GD16
Msagali
Rudi
Ng'aboolo
1GD27
1GD21
Msanga
To Iringa
Yonda
To Kondoa
Meja Meja
1GD23
Ipagala
Dodoma
Tanzania
Nkuhungu
Majengo
Tumbakose
To Singida
To Manyoni
Kigwe
To Tabora
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Railway
Roads
Catchment Boundary
0 12.5 25 50 75
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	53.274	71.730	74.223	177.350	170.434	118.767	35.351	19.710	8.797	-	9.830	15.000
2	50.793	54.857	76.674	153.243	192.469	111.693	34.067	20.228	8.688	-	9.263	14.505
3	44.864	46.469	81.941	130.111	200.534	97.986	33.508	20.437	8.688	-	8.141	13.797
4	58.043	40.611	78.704	118.186	203.672	88.154	35.931	21.073	8.725	-	8.689	12.974
5	59.305	38.902	79.881	115.305	208.342	83.349	36.218	21.180	8.384	-	9.001	11.766
6	71.240	37.720	93.434	116.732	235.466	78.252	35.064	21.180	8.706	-	10.205	11.853
7	116.781	35.656	108.925	121.191	245.175	74.004	33.090	21.397	8.526	-	10.763	16.774
8	143.294	66.405	113.108	150.617	248.272	67.984	31.721	22.714	8.277	-	10.763	17.798
9	163.373	105.655	99.062	178.718	255.504	64.260	29.859	22.714	8.207	-	10.420	17.750
10	190.350	104.670	115.711	196.290	219.987	61.058	28.822	21.185	7.998	-	10.381	16.997
11	227.462	79.188	125.030	186.027	205.491	57.950	28.822	19.711	7.964	-	9.697	14.660
12	252.056	61.136	100.441	174.611	204.066	54.753	29.466	19.402	7.946	-	8.890	14.385
13	290.227	54.942	90.597	167.478	201.345	51.294	28.695	18.897	7.826	-	8.562	15.637
14	209.090	50.940	89.621	157.442	182.725	51.827	27.438	19.402	7.691	-	8.455	22.770
15	-	49.524	80.344	149.066	164.347	52.368	24.899	19.816	7.556	-	8.376	21.183
16	-	50.226	73.559	140.341	156.752	54.376	23.051	21.724	7.472	-	10.638	18.740
17	-	49.524	72.675	126.170	147.781	54.194	22.269	21.939	7.657	-	12.377	17.094
18	-	48.867	70.774	110.866	130.743	58.351	22.824	21.181	7.724	-	14.196	14.660
19	511.240	40.324	58.972	104.344	111.446	64.470	22.936	20.333	7.947	-	16.574	14.361
20	254.594	37.927	52.380	129.089	99.782	61.870	22.824	19.505	8.102	-	17.127	14.385
21	208.952	28.789	49.352	159.962	90.876	54.036	22.380	18.697	8.190	-	17.702	14.870
22	187.592	36.595	47.625	170.050	80.569	49.187	23.390	17.908	7.930	11.978	17.798	17.525
23	161.721	46.900	45.432	142.680	74.445	45.436	22.053	17.233	7.473	11.828	17.847	18.987
24	130.072	82.445	49.484	132.808	71.177	43.785	20.649	17.138	7.290	11.678	18.189	17.946
25	95.166	96.661	75.617	124.329	84.459	42.335	21.181	17.138	7.144	11.636	18.436	16.997
26	75.383	88.490	68.097	132.221	123.154	39.980	21.830	17.138	6.934	11.487	17.847	14.660
27	73.990	33.684	86.406	146.129	121.113	37.698	21.181	-	6.902	11.257	17.413	14.361
28	75.383	71.236	106.000	142.887	108.638	37.107	20.437	-	6.870	10.743	17.079	14.361
29	92.198		123.470	134.353	99.769	40.138	20.332	-	6.681	10.621	16.891	14.935
30	101.648		126.121	145.550	95.897	37.704	20.332	-	6.650	10.340	15.921	19.170
31	86.310		142.814		107.843		20.228	-		10.044		21.009
Mean	-	57.503	85.693	144.472	156.202	61.146	26.479	-	7.832	-	12.916	16.191
Flow (MCM)	-	139.110	229.519	374.470	418.372	158.489	70.921	-	20.299	-	33.477	43.365
Maximum	-	105.655	142.814	196.290	255.504	118.767	36.218	-	8.797	-	18.436	22.770
Minimum	-	28.789	45.432	104.344	71.177	37.107	20.228	-	6.650	-	8.141	11.766
Runoff (mm)	-	3.463	5.714	9.323	10.416	3.946	1.766	-	0.505	-	0.833	1.080

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2011

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	22.094	19.965	36.874	353.325	-	129.915	46.251	52.904	-	36.096	23.716	24.008
2	24.066	18.339	35.194	309.719	348.520	112.922	43.848	22.200	-	32.709	23.038	22.266
3	25.530	17.847	31.718	-	544.405	105.859	42.955	21.980	-	48.333	21.331	19.653
4	26.014	17.798	27.760	-	381.744	96.384	42.234	21.980	-	57.869	20.954	18.585
5	23.331	17.702	24.598	-	313.183	88.248	41.048	22.255	18.584	49.234	20.216	17.896
6	20.816	17.080	37.542	-	237.972	82.494	39.651	21.926	-	40.309	19.391	-
7	19.636	16.610	65.219	329.624	167.306	82.841	37.531	21.384	-	34.860	18.585	-
8	44.598	20.578	75.010	308.258	134.411	81.208	42.407	20.321	-	29.224	17.896	21.781
9	248.802	48.087	52.413	-	122.663	77.545	76.049	19.903	-	27.358	17.798	27.435
10	144.189	23.212	38.918	-	122.364	72.445	41.054	20.590	-	44.858	-	36.817
11	123.241	17.849	50.601	-	130.017	67.639	33.771	23.441	-	73.161	-	46.806
12	120.488	17.222	60.194	551.342	143.775	64.844	32.029	24.760	-	83.572	-	60.432
13	109.711	17.702	67.755	492.454	171.968	62.224	31.959	23.719	-	91.826	46.618	116.147
14	119.756	22.472	64.036	498.869	178.368	58.695	31.085	22.478	-	97.775	27.474	107.555
15	118.568	55.843	63.320	437.980	185.039	55.757	29.583	21.871	-	95.587	32.233	111.818
16	114.166	57.287	62.834	491.723	198.948	50.923	28.171	21.061	-	94.948	36.647	100.134
17	87.426	49.533	55.419	418.662	202.268	49.067	27.358	20.320	21.554	93.312	50.781	121.183
18	80.441	45.250	49.821	319.076	187.676	48.202	25.652	20.320	24.893	86.103	67.825	105.358
19	68.204	43.603	62.580	251.803	177.100	47.261	24.409	20.848	26.627	73.046	67.766	88.003
20	64.842	42.314	81.175	234.879	171.157	47.522	24.880	20.268	23.275	64.048	57.442	189.778
21	62.531	49.932	104.810	255.827	163.058	45.350	26.619	19.800	21.819	59.880	45.490	294.265
22	56.517	114.796	124.040	518.377	167.604	53.710	25.892	19.339	20.220	51.490	37.784	229.717
23	51.993	140.422	135.403	-	173.116	64.677	24.237	18.684	20.300	45.020	33.365	236.802
24	48.985	108.153	194.083	-	175.818	61.047	25.292	18.535	35.324	39.973	29.849	327.332
25	45.923	65.953	475.574	-	175.274	56.879	25.113	18.238	75.815	36.427	28.047	540.516
26	41.374	48.875	431.496	-	177.831	56.780	24.700	-	87.411	34.617	26.498	429.465
27	38.290	43.933	415.728	-	186.710	55.386	24.525	-	62.864	33.494	24.762	253.456
28	33.795	41.692	464.887	-	178.583	49.953	23.946	-	45.006	30.182	23.774	204.142
29	28.827		318.724	-	164.301	49.503	24.180	-	41.915	27.360	23.149	204.613
30	25.599		-	-	153.857	48.722	53.620	-	41.452	26.315	22.425	256.741
31	22.768		-		143.182		366.750	-		24.412		317.419
Mean	66.533	42.859	-	-	-	67.467	44.735	-	-	53.658	-	-
Flow (MCM)	178.202	103.684	-	-	-	174.874	119.819	-	-	143.718	-	-
Maximum	248.802	140.422	-	-	-	129.915	366.750	-	-	97.775	-	-
Minimum	19.636	16.610	-	-	-	45.350	23.946	-	-	24.412	-	-
Runoff (mm)	4.437	2.581	-	-	-	4.354	2.983	-	-	3.578	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	333.543	48.700	114.522	52.605	34.947	51.803	29.877	-	-	-	-	12.273
2	338.741	45.289	111.435	46.483	40.182	69.163	27.828	-	-	-	-	11.088
3	302.617	42.677	98.781	40.481	45.966	66.991	25.980	-	-	-	-	9.201
4	252.773	40.002	94.934	37.879	47.986	57.434	25.141	-	-	-	-	9.123
5	210.008	36.540	112.957	47.537	51.975	52.397	25.382	-	-	-	-	10.638
6	170.151	33.526	135.412	77.233	70.251	49.204	23.293	-	-	-	-	11.888
7	157.813	32.829	149.771	76.251	76.697	45.458	22.064	-	-	-	-	13.487
8	151.751	31.064	139.760	78.276	81.499	42.520	20.662	-	-	-	-	12.718
9	144.527	29.873	95.507	81.965	83.604	39.231	20.242	-	-	-	-	11.128
10	138.147	28.838	164.313	85.030	83.604	37.567	18.911	-	-	-	-	9.843
11	126.778	27.578	207.195	83.374	81.271	35.371	18.115	-	-	-	-	9.196
12	116.211	25.263	244.314	78.507	78.584	33.246	17.919	-	-	-	-	11.196
13	115.375	24.672	213.934	74.904	104.466	32.838	17.731	-	-	-	-	17.991
14	130.431	23.178	235.594	73.139	171.526	37.284	19.935	24.221	-	-	-	13.894
15	140.674	22.064	200.096	71.636	258.523	39.083	19.620	20.054	-	-	-	50.717
16	144.848	20.558	171.119	62.919	258.998	34.667	18.711	18.021	-	-	-	51.702
17	152.769	19.620	172.876	53.888	206.178	32.280	17.343	16.680	16.492	-	-	46.685
18	166.511	18.809	156.169	47.317	162.190	31.736	16.585	-	-	-	-	35.114
19	184.210	18.115	143.277	44.637	133.932	30.136	-	-	-	-	-	22.970
20	192.089	17.919	127.106	40.636	109.853	29.742	-	-	-	-	-	17.079
21	201.437	17.340	113.399	48.328	95.457	28.838	-	-	-	-	-	15.850
22	230.455	17.150	103.265	66.453	82.483	28.075	-	-	-	-	9.724	15.532
23	253.889	16.585	89.943	67.821	72.957	28.456	-	28.458	-	-	9.121	14.234
24	225.924	17.694	78.987	56.552	67.194	27.201	-	25.524	-	-	8.288	12.850
25	182.704	29.089	77.028	44.850	74.727	27.951	-	20.692	-	-	8.825	11.632
26	140.082	57.570	100.820	39.388	65.355	29.877	16.680	17.635	-	-	9.795	9.962
27	107.495	76.535	121.164	37.714	57.997	31.736	17.823	-	-	-	13.933	9.268
28	86.580	77.012	119.148	36.530	51.156	32.142	-	-	-	-	14.424	9.230
29	73.412	98.416	97.412	35.366	47.305	32.828	-	-	-	-	13.860	9.650
30	64.519		74.395	34.366	47.643	31.872	-	-	-	-	18.830	12.419
31	56.491		61.533		47.133		-	-		-		27.347
Mean	170.741	34.293	133.102	57.402	93.279	38.237	-	-	-	-	-	17.287
Flow (MCM)	457.311	85.925	356.501	148.786	249.838	99.111	-	-	-	-	-	46.302
Maximum	338.741	98.416	244.314	85.030	258.998	69.163	-	-	-	-	-	51.702
Minimum	56.491	16.585	61.533	34.366	34.947	27.201	-	-	-	-	-	9.123
Runoff (mm)	11.386	2.139	8.876	3.704	6.220	2.468	-	-	-	-	-	1.153

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2013

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	34.818	27.721	16.328	312.804	75.404	35.363	13.412	8.605	8.863	5.960	6.259	13.142
2	37.981	17.201	13.447	283.944	96.709	33.379	13.574	8.426	8.026	6.822	7.237	11.990
3	41.315	12.438	13.361	223.544	138.514	32.070	12.713	8.641	7.152	19.753	8.291	11.539
4	58.280	9.540	31.601	196.726	162.996	30.462	12.009	9.007	7.085	99.985	9.534	10.894
5	25.093	8.714	30.207	170.220	168.038	28.516	11.665	9.840	6.893	85.682	8.974	11.282
6	32.680	8.863	12.169	171.778	180.852	26.710	11.687	10.836	6.719	61.903	7.619	14.555
7	42.904	10.480	8.977	209.303	189.419	23.975	12.009	12.234	6.409	52.873	6.783	16.214
8	92.421	12.142	21.827	277.112	194.565	22.948	11.666	14.388	6.256	44.291	6.258	15.665
9	69.789	11.966	14.762	294.913	181.878	21.139	11.391	17.411	6.136	34.140	5.842	15.232
10	81.413	12.313	11.530	291.076	151.727	20.081	10.894	18.968	6.017	31.884	6.073	12.111
11	60.380	11.629	17.485	322.318	131.820	19.006	10.955	19.931	5.871	40.542	8.002	10.935
12	41.141	9.961	49.988	398.460	114.555	18.604	11.058	18.221	5.569	23.766	8.897	11.101
13	26.257	8.971	71.727	-	100.990	18.754	10.791	20.562	5.331	16.470	8.516	12.118
14	18.039	8.356	113.411	605.908	93.997	18.160	10.350	18.267	5.099	15.218	8.179	12.052
15	17.032	7.767	139.750	374.956	87.827	17.721	9.475	13.552	4.794	15.072	8.356	11.350
16	17.032	7.039	96.485	270.794	76.828	17.336	9.838	12.184	4.524	14.635	7.719	10.955
17	17.032	6.532	64.710	248.639	71.507	16.956	9.588	11.455	4.498	13.692	6.598	10.649
18	16.845	6.257	52.874	249.077	67.379	16.628	9.569	10.792	4.587	12.447	6.062	10.569
19	15.440	6.047	46.645	239.026	59.928	16.628	9.838	10.113	4.676	11.944	5.871	11.651
20	13.989	6.107	45.892	226.887	52.854	16.677	10.150	9.305	4.689	11.475	5.569	18.082
21	17.467	7.058	75.049	213.693	49.020	15.354	10.468	8.932	4.664	11.059	5.331	32.715
22	23.762	10.027	68.352	201.201	46.705	15.023	10.750	8.677	4.511	10.214	5.086	51.835
23	20.260	14.966	71.355	198.148	43.968	14.467	10.750	8.641	4.485	8.954	4.716	56.067
24	15.866	37.424	108.988	190.991	40.614	14.587	10.488	8.605	-	8.623	4.601	59.234
25	13.938	56.935	145.161	166.405	38.842	14.088	10.288	8.355	-	8.355	5.589	92.647
26	13.380	56.160	137.745	141.303	36.307	13.253	9.974	8.144	-	8.041	8.959	75.010
27	12.747	40.393	120.159	114.671	34.859	12.778	9.512	8.428	-	7.597	11.295	51.945
28	12.348	25.524	138.113	93.207	33.447	13.002	8.988	9.270	-	7.496	12.380	40.842
29	15.087		166.507	81.976	33.518	13.183	8.786	10.350	-	7.168	12.555	31.371
30	39.906		221.722	76.687	35.363	13.229	8.659	10.670	5.415	6.350	12.249	21.783
31	39.016		303.014		36.376		8.641	10.055		6.062		21.115
Mean	31.731	16.376	78.366	-	91.187	19.669	10.643	11.705	-	22.854	7.647	25.376
Flow (MCM)	84.988	39.617	209.895	-	244.236	50.983	28.506	31.352	-	61.212	19.820	67.967
Maximum	92.421	56.935	303.014	-	194.565	35.363	13.574	20.562	-	99.985	12.555	92.647
Minimum	12.348	6.047	8.977	-	33.447	12.778	8.641	8.144	-	5.960	4.601	10.569
Runoff (mm)	2.116	0.986	5.226	-	6.081	1.269	0.710	0.781	-	1.524	0.493	1.692

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	35.549	103.836	132.228	-	197.365	107.100	66.537	43.916	-	-	0.721	4.141
2	34.181	100.406	114.304	-	196.809	104.231	67.356	45.666	-	-	4.922	9.152
3	32.723	92.715	84.949	-	193.585	101.301	67.030	46.209	43.582	-	27.972	13.055
4	31.014	84.527	65.999	-	169.779	98.912	63.952	45.461	42.398	-	20.522	32.511
5	29.677	116.153	80.782	-	143.949	95.580	62.279	45.325	39.817	-	21.904	50.503
6	28.749	116.372	88.677	-	188.136	102.238	60.629	45.123	38.554	-	19.429	51.845
7	27.835	103.789	92.455	-	202.664	91.354	59.773	43.982	37.683	-	14.551	45.249
8	26.520	80.177	141.768	-	250.409	88.671	58.769	43.850	37.559	-	9.625	35.082
9	24.677	91.043	219.691	291.307	384.229	87.920	58.615	41.810	40.187	-	8.373	28.282
10	23.337	108.833	261.971	254.036	-	86.803	58.462	40.708	57.061	2.130	7.340	26.780
11	21.939	128.468	256.887	307.251	-	84.125	57.470	40.580	60.629	1.778	7.063	24.581
12	21.807	156.202	224.290	210.147	251.521	85.415	56.637	40.580	57.721	1.292	5.266	22.045
13	26.680	115.171	193.464	-	303.811	88.584	55.063	40.516	50.135	0.991	4.416	18.499
14	34.091	150.175	184.516	-	218.628	83.674	54.099	39.942	47.518	0.780	3.983	14.539
15	32.963	141.676	268.529	-	198.486	82.214	54.396	38.741	45.735	0.944	6.469	12.053
16	29.192	126.360	-	-	193.824	78.632	51.765	38.553	46.617	2.438	9.684	11.382
17	27.835	117.545	301.550	-	191.900	75.905	50.257	38.805	67.129	3.237	9.237	12.218
18	26.883	137.075	302.628	-	188.216	74.949	48.772	40.453	76.182	2.229	4.991	13.259
19	27.624	267.866	314.204	-	184.975	73.745	48.003	41.353	68.980	1.421	2.855	12.230
20	29.459	299.519	292.005	-	177.122	69.848	47.102	40.708	57.814	1.068	1.976	9.603
21	29.688	199.414	256.656	-	168.012	68.349	46.895	40.580	52.287	0.739	1.590	8.544
22	25.550	175.406	222.839	-	162.661	74.251	46.346	40.452	46.161	0.394	1.317	8.977
23	29.697	174.089	206.262	-	168.970	90.334	45.461	39.687	41.880	0.186	0.880	14.137
24	80.344	172.792	225.454	-	145.155	87.464	45.461	39.560	39.626	0.144	0.752	17.153
25	182.842	163.680	-	159.593	134.158	83.123	46.278	39.371	38.242	0.807	0.680	19.276
26	231.286	151.872	-	268.203	128.236	80.863	46.346	38.179	-	3.413	0.598	21.047
27	200.114	136.146	-	226.562	122.120	76.522	45.801	37.621	-	3.039	0.448	19.827
28	155.952	130.041	-	207.464	116.680	73.144	44.920	37.559	-	1.397	0.408	15.388
29	119.956		-	198.900	115.176	71.191	44.718	37.559	-	0.707	0.587	12.998
30	114.323		-	197.782	114.111	67.853	44.182	-	-	0.416	1.296	15.921
31	112.217		-		111.471		43.383	-		0.408		31.369
Mean	59.829	140.762	-	-	-	84.476	53.121	-	-	-	6.662	20.376
Flow (MCM)	160.246	340.532	-	-	-	218.963	142.280	-	-	-	17.267	54.574
Maximum	231.286	299.519	-	-	-	107.100	67.356	-	-	-	27.972	51.845
Minimum	21.807	80.177	-	-	-	67.853	43.383	-	-	-	0.408	4.141
Runoff (mm)	3.990	8.478	-	-	-	5.452	3.542	-	-	-	0.430	1.359

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2015

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	41.191	13.482	0.852	71.616	154.320	31.633	5.422	0.530	0.305	-	-	14.901
2	43.916	12.112	4.685	75.650	169.059	31.748	6.397	0.300	0.300	-	-	14.196
3	43.982	8.588	3.847	79.699	177.905	33.773	8.008	0.262	0.262	-	-	12.092
4	44.001	5.987	12.676	83.405	174.522	35.439	8.002	0.228	0.228	-	-	9.194
5	36.293	5.128	23.779	87.138	155.328	30.863	7.571	0.223	0.223	-	3.900	6.965
6	26.891	4.040	20.060	70.075	149.248	27.523	7.671	0.214	0.214	-	7.870	5.176
7	22.375	4.790	20.631	55.122	180.692	24.934	8.912	0.163	0.163	-	1.956	4.029
8	21.515	5.442	22.485	49.000	203.704	22.326	10.281	-	-	-	9.322	3.537
9	19.856	5.633	26.850	43.272	196.546	20.312	10.941	-	-	-	28.971	2.891
10	21.569	5.203	22.650	37.717	186.016	18.179	18.943	-	-	-	9.267	4.632
11	24.432	4.252	14.026	30.664	155.409	15.931	18.940	-	-	-	14.536	31.956
12	26.573	3.256	12.132	24.804	139.043	14.351	14.634	-	-	-	37.352	114.966
13	28.650	2.547	13.172	21.331	134.039	13.347	11.205	-	-	-	44.495	243.077
14	31.587	1.712	13.423	26.130	132.187	13.213	9.454	-	-	-	12.420	82.486
15	28.920	1.701	8.905	65.646	157.854	12.868	8.075	-	-	-	30.051	21.895
16	30.459	8.695	5.859	129.475	147.323	10.865	7.061	-	-	-	20.696	17.227
17	27.275	25.797	7.024	126.229	122.453	10.387	6.477	-	-	-	13.974	34.848
18	22.624	18.111	3.369	98.124	104.408	9.405	5.809	-	-	-	27.840	46.055
19	21.051	11.202	2.248	68.670	88.300	8.686	5.205	-	-	-	49.401	36.372
20	24.350	3.834	2.065	57.512	71.694	7.763	4.867	-	-	-	45.510	36.069
21	30.063	2.249	3.139	75.749	60.224	7.402	4.421	-	-	-	32.369	39.658
22	37.586	1.815	14.431	45.124	49.381	7.097	5.343	-	-	-	25.440	54.771
23	36.533	1.041	36.112	47.719	43.013	6.525	5.152	-	-	-	15.697	48.917
24	30.989	1.022	54.512	58.686	36.787	6.036	4.840	-	-	-	10.987	51.461
25	25.612	0.803	62.609	70.223	32.612	5.584	5.152	-	-	-	7.790	45.214
26	21.723	0.465	66.294	78.383	33.185	5.204	5.528	-	-	-	6.481	36.367
27	17.675	0.339	66.292	86.854	33.653	5.125	5.502	-	-	-	5.729	29.301
28	14.593	0.304	65.565	104.946	31.020	4.968	4.920	-	-	-	7.516	26.506
29	13.437		61.418	134.972	28.589	4.942	4.093	-	-	-	11.349	29.941
30	13.842		60.097	143.282	28.265	4.994	3.077	-	-	-	13.896	31.634
31	13.887		67.378		30.344		2.420	-		-		36.951
Mean	27.208	5.698	25.761	71.574	109.907	15.048	7.559	-	-	-	-	37.848
Flow (MCM)	72.874	13.785	68.998	185.520	294.376	39.003	20.246	-	-	-	-	101.372
Maximum	44.001	25.797	67.378	143.282	203.704	35.439	18.943	-	-	-	-	243.077
Minimum	13.437	0.304	0.852	21.331	28.265	4.942	2.420	-	-	-	-	2.891
Runoff (mm)	1.814	0.343	1.718	4.619	7.329	0.971	0.504	-	-	-	-	2.524

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	29.656	234.802	20.278	270.968	360.575	25.752	14.638	3.789	0.898	-	-	-
2	17.216	258.173	20.090	324.003	349.646	24.435	13.360	3.441	0.782	-	-	-
3	13.119	279.263	18.402	328.272	318.834	23.639	11.975	3.112	0.640	-	-	-
4	11.575	294.421	16.453	336.339	292.674	23.443	10.672	2.801	0.528	-	-	-
5	11.287	287.209	13.681	331.131	269.998	22.858	9.597	2.543	0.513	-	-	-
6	17.613	272.691	12.870	321.186	262.250	22.569	9.373	2.438	0.513	-	-	0.445
7	26.662	279.562	14.273	308.618	257.637	21.335	8.939	1.978	0.513	-	-	0.648
8	27.884	283.524	19.148	296.447	261.131	20.965	8.867	1.539	0.485	-	27.124	0.272
9	23.882	279.073	27.384	298.991	256.083	23.154	8.867	1.435	0.329	-	26.111	0.212
10	29.001	267.823	50.979	302.578	223.939	23.249	8.796	2.140	0.294	-	18.498	0.841
11	38.986	273.011	68.719	308.429	142.190	21.431	8.376	2.472	0.233	-	8.563	3.100
12	55.579	283.204	48.700	313.120	124.721	20.409	8.107	2.580	0.244	-	12.370	4.062
13	41.835	293.914	42.221	325.615	107.395	19.146	6.937	2.994	0.353	-	18.481	3.893
14	36.043	301.727	37.610	337.244	94.198	18.353	6.687	2.876	0.253	-	19.340	2.356
15	19.283	287.290	30.109	289.569	78.446	17.664	6.269	3.154	0.294	-	-	1.568
16	28.745	246.718	26.643	54.396	69.137	16.905	5.863	3.701	-	-	-	1.280
17	112.764	200.176	23.165	34.812	61.529	15.677	5.751	3.744	-	-	-	0.876
18	119.768	153.070	19.531	60.122	55.391	14.826	5.419	3.441	-	-	-	0.278
19	97.374	124.592	14.897	84.166	50.708	15.068	5.365	3.152	-	-	-	0.114
20	96.191	105.111	12.829	90.412	46.922	21.422	5.365	3.152	-	-	-	0.131
21	117.591	103.235	12.142	103.649	42.222	28.737	5.419	3.398	-	-	-	0.719
22	129.542	99.542	10.637	128.212	39.641	27.743	5.751	3.398	-	-	-	3.968
23	155.560	89.015	8.946	157.306	36.900	25.659	5.751	3.112	-	-	-	5.369
24	147.232	78.070	8.003	179.555	34.963	22.291	5.314	2.730	-	-	-	6.272
25	128.585	67.749	8.885	180.448	33.897	20.412	4.591	2.103	-	-	-	6.878
26	121.063	57.833	12.147	181.702	32.735	18.531	4.201	2.134	-	-	-	5.485
27	147.065	48.333	16.825	225.015	30.247	17.921	4.107	1.764	-	-	-	4.365
28	162.249	34.303	20.700	293.414	28.168	18.704	3.878	1.461	-	-	-	2.852
29	176.435	25.645	22.720	301.262	28.709	17.500	4.107	0.985	-	-	-	3.121
30	202.017		20.187	306.488	26.376	15.199	4.154	0.800	-	-	-	2.143
31	273.164		45.834		25.957		4.107	0.800		-		2.989
Mean	84.354	193.417	23.387	235.782	130.426	20.833	7.116	2.554	-	-	-	-
Flow (MCM)	225.933	484.624	62.641	611.148	349.334	54.000	19.060	6.840	-	-	-	-
Maximum	273.164	301.727	68.719	337.244	360.575	28.737	14.638	3.789	-	-	-	-
Minimum	11.287	25.645	8.003	34.812	25.957	14.826	3.878	0.800	-	-	-	-
Runoff (mm)	5.625	12.066	1.560	15.216	8.697	1.344	0.475	0.170	-	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2 **Year:** 2017
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.869	2.618	26.434	168.584	310.918	77.245	-	-	-	-	-	-
2	11.105	8.750	31.707	188.648	324.073	77.410	-	-	-	-	-	-
3	7.078	2.424	44.315	196.441	327.618	78.297	-	-	-	-	-	-
4	4.870	2.338	69.726	179.949	314.069	73.852	-	-	-	-	-	-
5	2.856	7.375	67.961	182.190	299.570	75.924	-	-	-	-	-	-
6	1.435	21.718	67.139	-	311.820	74.712	-	-	-	-	-	-
7	0.569	36.482	77.186	393.754	331.922	69.953	-	-	-	-	-	-
8	0.255	27.507	100.386	324.799	328.006	65.827	-	-	-	-	-	-
9	-	16.058	114.029	301.307	484.572	61.217	-	-	-	-	-	-
10	-	12.382	90.469	249.197	413.521	52.895	-	-	-	-	-	-
11	-	8.764	75.289	235.180	-	47.751	-	-	-	-	-	-
12	-	6.239	65.274	235.481	-	43.866	-	-	-	-	-	-
13	-	4.064	71.301	225.968	-	43.066	-	-	-	-	-	-
14	-	2.718	97.302	178.682	-	43.862	-	-	-	-	-	-
15	-	2.055	98.247	138.961	-	44.195	-	-	-	-	-	-
16	-	-	91.064	130.177	-	42.481	-	-	-	-	-	-
17	0.260	-	84.536	124.458	-	38.636	-	-	-	-	-	-
18	0.048	-	57.941	124.776	499.638	36.835	-	-	-	-	-	-
19	0.017	-	114.128	155.538	317.112	35.922	-	-	-	-	-	-
20	0.233	-	118.133	190.176	288.488	-	-	-	-	-	-	-
21	0.582	-	105.608	232.246	261.836	-	-	-	-	-	-	-
22	0.350	0.365	97.569	282.915	239.949	-	-	-	-	-	-	-
23	-	5.671	89.559	293.620	219.081	-	-	-	-	-	-	-
24	-	32.363	104.277	290.770	196.627	-	-	-	-	-	-	-
25	-	20.327	158.570	304.704	178.105	-	-	-	-	-	-	-
26	-	17.977	186.444	304.862	162.967	-	-	-	-	-	-	-
27	-	22.314	132.380	302.117	145.328	-	-	-	-	-	-	-
28	-	26.380	137.931	302.997	118.653	-	-	-	-	-	-	-
29	-		183.093	321.253	104.595	-	-	-	-	-	-	-
30	-		187.622	316.144	93.288	-	-	-	-	-	-	-
31	19.937		165.520		84.994		-	-		-		-
Mean	-	-	100.359	-	-	-	-	-	-	-	-	-
Flow (MCM)	-	-	268.803	-	-	-	-	-	-	-	-	-
Maximum	-	-	187.622	-	-	-	-	-	-	-	-	-
Minimum	-	-	26.434	-	-	-	-	-	-	-	-	-
Runoff (mm)	-	-	6.692	-	-	-	-	-	-	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 6:14:47 S | Longitude: 38:23:15 E | Elevation: 75.0 metres | Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	133.198	-	-	-	-	-	-	-
18	-	-	-	-	121.451	-	-	-	-	-	-	-
19	-	-	-	-	107.749	-	-	-	-	-	-	-
20	-	-	-	-	89.597	-	-	-	-	-	-	61.222
21	-	-	-	-	73.418	-	-	-	-	-	-	61.696
22	-	-	-	-	70.596	-	-	-	-	-	-	66.131
23	-	-	-	-	83.344	-	-	-	-	-	-	76.421
24	-	-	-	-	92.501	-	-	-	-	-	-	80.207
25	-	-	-	-	74.795	-	-	-	-	-	-	84.414
26	-	-	-	-	60.805	-	-	-	-	-	-	68.312
27	-	-	-	-	53.357	-	-	-	-	-	-	51.183
28	-	-	-	-	47.098	-	-	-	-	-	-	43.634
29	-		-	-	41.856	-	-	-	-	-	-	-
30	-		-	-	40.747	-	-	-	-	-	-	-
31	-		-		-		-	-		-		-
Mean	-	-	-	-	-	-	-	-	-	-	-	-
Flow (MCM)	-	-	-	-	-	-	-	-	-	-	-	-
Maximum	-	-	-	-	-	-	-	-	-	-	-	-
Minimum	-	-	-	-	-	-	-	-	-	-	-	-
Runoff (mm)	-	-	-	-	-	-	-	-	-	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1G2
Station Name: Wami River at Mandera
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 6:14:47 S Longitude: 38:23:15 E Elevation: 75.0 metres Area: 40165.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	16.854	16.056	1.114	80.384	104.639	12.433	1.518	0.161	6.221	71.404	190.170
2	-	12.549	18.560	13.440	100.569	95.470	10.578	1.348	-	3.205	60.885	192.668
3	-	9.277	20.123	84.913	114.222	87.640	9.769	1.322	-	6.788	50.281	186.864
4	-	6.995	23.243	35.295	105.033	78.945	8.962	1.388	-	7.493	43.172	161.227
5	-	6.028	26.997	30.566	75.553	63.318	8.263	1.818	-	7.913	-	136.722
6	-	4.967	38.357	49.747	72.676	51.854	7.175	1.952	-	15.645	-	124.080
7	-	3.963	87.558	60.972	91.775	47.729	6.797	1.757	-	35.297	-	116.001
8	-	4.166	81.995	67.641	121.233	41.426	6.614	1.532	-	59.303	-	122.642
9	-	6.427	58.823	54.342	171.130	37.742	6.705	1.336	-	96.699	65.388	133.317
10	-	7.142	38.791	41.212	201.242	34.118	6.374	1.202	-	82.654	95.500	140.511
11	-	8.310	37.740	23.215	298.339	30.690	6.314	0.978	-	119.455	125.214	147.544
12	-	11.038	41.477	21.602	306.017	24.653	6.285	0.894	-	240.090	144.331	156.597
13	-	13.526	42.256	24.170	250.673	20.132	6.081	0.935	-	159.374	145.829	161.098
14	-	11.914	37.598	25.630	270.095	17.739	5.769	0.874	-	-	116.241	146.899
15	-	7.583	28.290	26.768	285.660	15.645	5.090	0.778	-	-	90.733	123.203
16	-	5.036	19.793	27.507	251.861	13.975	4.984	0.568	-	-	79.586	102.028
17	12.544	3.366	11.626	28.848	198.691	15.729	4.984	0.296	-	233.433	76.481	95.148
18	54.515	2.271	5.774	26.879	182.913	17.822	4.984	0.195	-	223.914	73.383	89.303
19	94.853	1.484	3.253	24.323	197.050	16.557	4.984	0.129	-	211.843	62.568	97.084
20	94.899	1.102	1.976	21.328	241.677	15.670	4.907	0.069	-	186.774	43.940	122.233
21	83.222	0.734	0.904	18.519	220.644	15.091	4.432	0.054	-	142.655	-	161.532
22	80.124	0.945	0.297	17.018	189.057	15.475	4.215	0.053	-	106.588	-	205.512
23	81.561	1.812	-	19.043	179.210	14.809	4.099	0.387	-	92.921	-	268.245
24	82.193	3.294	-	19.260	168.637	13.519	3.561	0.226	-	151.156	-	317.934
25	79.700	4.923	-	18.972	158.738	12.809	3.391	0.158	-	207.580	-	316.286
26	69.060	6.325	-	14.714	153.155	12.809	2.908	0.096	-	408.585	59.677	255.276
27	55.370	8.276	-	16.953	157.107	13.706	2.756	0.018	-	-	81.819	217.653
28	36.723	12.995	-	20.044	154.757	16.099	2.294	0.013	-	398.906	116.875	220.960
29	24.929		0.592	26.340	145.109	16.722	1.999	0.145	6.126	180.256	134.859	233.836
30	22.313		2.082	47.557	123.159	14.867	1.771	0.241	11.464	124.887	157.265	268.810
31	20.081		2.624		113.046		1.641	0.174		90.665		151.423
Mean	-	6.547	-	30.264	173.529	32.580	5.520	0.724	-	-	-	172.994
Flow (MCM)	-	15.837	-	78.445	464.781	84.447	14.785	1.940	-	-	-	463.346
Maximum	-	16.854	-	84.913	306.017	104.639	12.433	1.952	-	-	-	317.934
Minimum	-	0.734	-	1.114	72.676	12.809	1.641	0.013	-	-	-	89.303
Runoff (mm)	-	0.394	-	1.953	11.572	2.103	0.368	0.048	-	-	-	11.536

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ruvu River at Kibungo

Station No: 1H5		**Established:** 08/10/1952	
Coordinates:		**Altitude (m.a.m.s.l):** 229	
Lat: -7.024	**Long: 37.7994**	**Catchment Area (km²):** 420	
Description of the Catchment:			
Irregular fan shape with steep slopes, confined channel without a floodplain and are covered with dense forests			

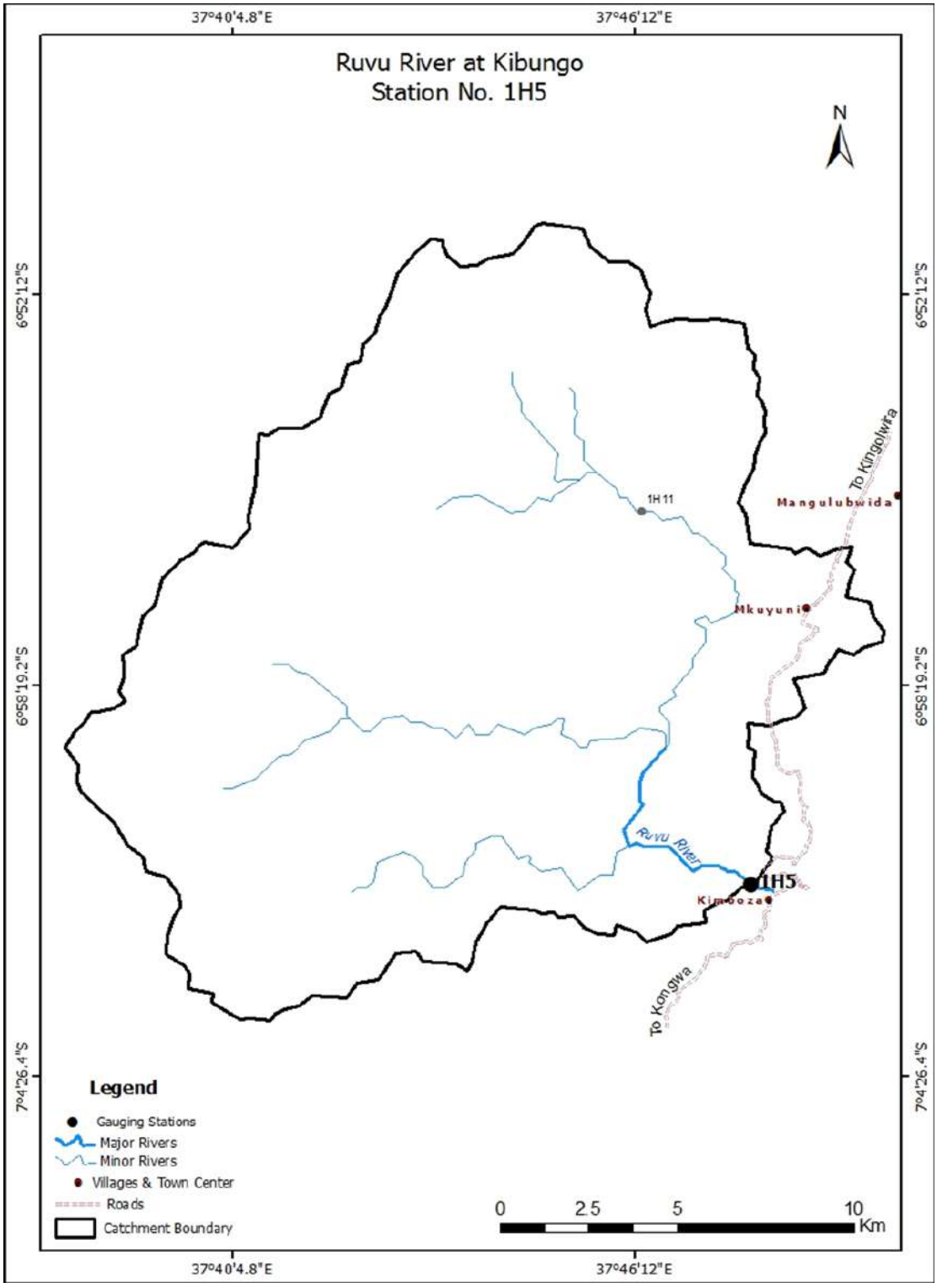
Station Details

1. Staff Gauges	**Range: 0 – 9m**		**A.D.Z.G.R: 0.00mm**	
	Type of Gauges: Standard Vertical		**MSL.Z.G.L: -**	
2. Automatic Recorder	**Thalimedes float type**		**Date installed: 2013**	
3. Benchmark	Bolt embedded in concrete near 9.00m gauge			
BM Assumed Datum: 3.933m		**N.M.M.S.L: -**	**TBM: –**	
4. Control	Low stage – boulder (gravel bar), medium and high stage – bridge structure			
5. Access	Accessible throughout the year, the station is located 75km from Morogoro town to Kisaki road			

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	1.2.2
Discharge:	01/01/2010 - 31/12/2019	1.2.2

Extremes:	**Max. Recorded**	633.18m³/sec	**On** 16/04/1957	**WL** 7.721m
	Min. Recorded	3.64m³/sec	**On** 26/10/2012	**WL** 0.28m

Remarks


Ruvu River at Kibungo
Station No. 1H5
N
37°40'4.8"E
37°46'12"E
6°52'12"S
6°58'19.2"S
7°4'26.4"S
1H11
Mangulubwida
To Kinguluwa
Mkuyuni
Ruvu River
1H5
Kimboza
To Kongwa
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Catchment Boundary
0
2.5
5
10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.399	5.235	7.509	13.681	40.867	12.580	7.381	4.960	3.894	3.403	3.362	3.348
2	8.263	4.988	9.300	13.682	49.658	11.838	7.112	5.002	3.906	3.421	2.866	3.264
3	7.550	4.974	19.588	19.731	39.321	11.389	6.846	5.341	4.075	3.276	2.705	3.276
4	9.491	5.114	11.661	34.020	33.699	11.186	6.629	5.804	4.538	3.252	2.717	3.373
5	8.883	5.527	10.513	37.342	30.821	10.911	6.568	5.284	3.972	3.252	2.853	3.121
6	8.195	6.485	14.871	28.708	26.249	10.620	6.415	5.170	3.716	3.228	2.958	3.156
7	7.462	10.950	34.826	27.156	32.389	10.331	6.537	5.072	3.666	3.085	3.422	3.300
8	8.129	16.410	26.991	19.728	32.874	10.046	6.355	4.974	3.530	3.062	3.264	3.784
9	9.010	9.356	17.574	17.275	75.723	9.869	6.144	4.933	3.579	3.062	3.062	4.872
10	9.843	6.895	13.618	15.081	38.402	10.441	6.114	4.767	3.604	3.062	2.899	7.222
11	12.215	7.053	12.389	14.028	26.387	11.319	6.114	4.726	3.666	3.038	3.807	5.835
12	13.129	10.241	11.785	13.357	22.244	9.732	6.099	4.672	3.616	2.899	10.148	4.791
13	10.238	9.301	12.994	13.553	19.929	9.223	5.995	4.781	3.654	2.876	10.863	7.924
14	8.832	7.483	10.343	21.596	18.093	9.086	5.891	4.563	3.517	2.876	6.895	5.061
15	8.029	6.538	9.605	16.451	16.329	9.017	5.876	4.523	3.530	2.876	5.814	4.580
16	7.493	6.311	9.944	15.706	15.655	8.711	5.951	4.496	3.742	2.970	7.730	4.103
17	7.112	7.554	13.556	30.872	14.692	8.594	6.340	4.336	3.704	3.793	7.842	3.845
18	6.846	10.352	10.548	27.505	14.107	8.193	6.040	4.309	3.716	5.101	5.816	3.643
19	6.598	12.577	9.328	30.521	13.493	8.110	5.862	4.309	3.855	3.423	4.977	3.470
20	6.385	9.713	8.746	38.224	12.926	8.012	5.672	4.283	3.767	2.945	4.797	3.445
21	6.324	12.394	9.276	26.145	13.329	7.946	5.642	4.126	3.517	3.086	4.674	3.938
22	6.219	15.454	8.984	25.531	17.565	7.654	5.613	4.100	3.395	2.945	4.445	7.189
23	6.568	12.807	9.484	22.248	19.095	7.589	5.440	4.100	3.310	3.086	4.089	7.891
24	6.204	10.302	9.431	29.910	15.929	7.805	5.412	4.100	3.298	3.128	3.909	6.125
25	6.249	9.467	9.658	19.692	15.533	9.421	5.383	4.100	3.274	4.331	3.707	7.231
26	6.400	8.847	9.362	18.043	13.694	8.001	5.213	4.074	3.131	3.785	4.261	8.009
27	6.100	8.443	10.072	18.469	14.253	7.589	5.184	3.919	3.107	3.229	3.808	8.161
28	5.672	7.703	15.962	35.583	22.632	7.365	5.156	3.894	3.107	3.144	3.556	23.286
29	5.440		13.921	45.611	18.271	7.222	4.988	3.894	3.107	3.074	3.458	12.029
30	5.462		11.489	42.576	14.576	7.159	4.960	3.894	3.149	3.038	3.433	10.483
31	5.688		10.740		13.474		4.960	3.894		2.981		8.496
Mean	7.659	8.874	12.712	24.401	24.265	9.232	5.932	4.529	3.588	3.249	4.605	6.073
Flow (MCM)	20.514	21.468	34.047	63.247	64.991	23.929	15.888	12.130	9.300	8.703	11.935	16.265
Maximum	13.129	16.410	34.826	45.611	75.723	12.580	7.381	5.804	4.538	5.101	10.863	23.286
Minimum	5.440	4.974	7.509	13.357	12.926	7.159	4.960	3.894	3.107	2.876	2.705	3.121
Runoff (mm)	48.842	51.115	81.065	150.588	154.740	56.974	37.829	28.882	22.143	20.720	28.417	38.726

Flow (cumecs)

Annual Statistics

Maximum: 75.723 Minimum: 2.705 Mean: 9.593 cumecs

Total: 302.529 MCM Runoff: 720.308 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.123	4.631	4.416	33.575	20.236	16.192	9.898	9.101	5.285	16.316	6.846	6.675
2	6.325	4.536	4.349	30.388	21.599	15.427	9.713	9.223	5.398	12.771	6.598	6.384
3	6.784	4.523	4.496	23.873	18.920	14.935	9.556	9.069	5.017	10.732	6.370	6.158
4	6.864	4.496	4.536	22.746	16.891	15.324	9.399	8.915	4.850	9.887	6.279	6.068
5	5.675	4.336	5.475	24.640	15.325	15.324	9.157	8.678	4.726	9.851	6.430	6.218
6	7.655	4.444	10.164	31.555	14.469	15.346	9.003	8.526	4.577	9.605	6.370	6.158
7	23.594	5.158	6.822	52.911	15.527	14.069	8.850	8.376	4.726	14.560	6.524	6.310
8	13.844	4.742	10.793	40.297	24.959	13.277	8.630	8.160	4.822	47.810	7.384	7.160
9	12.432	5.186	7.800	31.949	22.521	13.101	8.579	8.110	4.740	22.506	6.524	6.310
10	10.125	4.619	5.634	24.956	35.844	12.598	8.462	7.995	5.015	17.747	6.493	6.279
11	10.403	4.664	5.184	20.778	44.793	12.235	8.345	7.881	7.045	19.189	7.354	7.159
12	15.828	6.059	4.961	29.935	36.506	11.800	8.295	7.832	5.709	20.207	8.480	8.452
13	14.654	6.175	4.795	45.662	47.174	11.371	8.097	7.637	5.355	20.517	13.682	13.682
14	14.009	6.893	5.977	40.776	25.728	11.057	8.047	7.589	12.686	20.214	12.659	12.659
15	14.807	6.524	15.377	52.034	25.037	10.783	7.932	7.477	42.854	17.055	12.241	12.241
16	10.916	5.630	36.387	41.440	54.281	10.619	7.818	7.365	18.272	14.695	14.420	14.420
17	9.037	5.575	52.629	39.943	38.949	10.475	7.770	7.317	9.941	13.376	11.317	11.317
18	8.244	6.990	23.255	32.846	37.747	10.313	7.576	7.127	9.020	12.445	9.020	9.020
19	7.510	7.751	35.775	52.834	34.950	10.297	7.543	7.095	7.786	11.745	8.746	8.746
20	6.986	13.426	48.073	78.073	43.304	11.559	7.527	7.080	7.366	10.785	7.623	7.623
21	6.599	8.288	43.534	64.775	42.541	11.484	7.415	6.970	6.554	10.082	7.016	7.016
22	6.264	6.297	41.871	59.878	46.589	11.710	7.304	6.861	9.289	10.296	6.643	6.643
23	6.099	5.585	47.887	54.151	40.196	19.847	7.288	6.845	30.502	9.624	6.460	6.460
24	5.877	5.312	23.847	59.451	39.107	15.062	7.288	6.845	22.018	8.848	6.752	6.752
25	5.643	5.170	18.913	47.446	47.768	12.506	7.256	6.814	17.512	8.409	6.939	6.939
26	5.165	4.961	17.165	40.784	28.105	11.446	7.067	6.629	13.640	8.111	6.144	6.144
27	3.527	4.740	17.456	35.372	23.897	11.021	7.292	6.850	13.184	7.767	5.890	5.890
28	3.149	4.536	15.548	40.853	21.544	10.476	8.701	8.230	10.936	7.589	5.758	5.758
29	3.426		13.832	26.281	20.055	9.940	7.886	7.431	10.589	7.365	6.220	6.220
30	4.629		12.523	21.492	18.537	9.702	7.193	6.753	13.180	7.222	7.033	10.763
31	4.740		14.883		17.333		7.160	6.237		7.080		38.413
Mean	8.643	5.759	18.205	40.056	30.337	12.643	8.131	7.646	10.753	13.690	7.874	8.904
Flow (MCM)	23.150	13.932	48.761	103.826	81.254	32.771	21.777	20.478	27.872	36.669	20.409	23.849
Maximum	23.594	13.426	52.629	78.073	54.281	19.847	9.898	9.223	42.854	47.810	14.420	38.413
Minimum	3.149	4.336	4.349	20.778	14.469	9.702	7.067	6.237	4.577	7.080	5.758	5.758
Runoff (mm)	55.118	33.171	116.097	247.206	193.461	78.026	51.849	48.758	66.362	87.306	48.592	56.784

Flow (cumecs)

Annual Statistics

Maximum: 78.073 Minimum: 3.149 Mean: 14.387 cumecs

Total: 453.701 MCM Runoff: 1080.241 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	42.515	8.458	6.597	7.047	8.360	14.217	9.291	5.875	5.047	4.269	3.406	40.231
2	25.414	7.865	6.567	6.938	9.217	9.617	8.897	5.699	4.876	4.047	3.480	34.753
3	20.444	7.190	6.278	7.616	15.134	10.731	8.811	5.670	4.780	3.957	3.972	15.643
4	18.486	7.556	6.628	10.036	15.206	10.510	8.643	5.656	4.766	4.099	5.177	9.884
5	17.453	7.604	6.490	9.244	19.260	9.974	8.192	5.554	4.739	4.151	7.374	8.128
6	16.001	7.348	7.794	8.432	20.442	9.674	7.912	5.453	4.549	4.282	4.511	8.043
7	15.364	6.985	13.253	10.554	12.265	9.499	7.766	5.453	4.388	4.151	3.829	8.208
8	14.367	7.189	8.957	10.909	17.775	9.256	7.620	5.540	4.549	4.125	3.856	7.752
9	13.551	7.141	7.112	10.494	15.493	9.102	7.411	5.686	4.725	4.099	5.785	6.723
10	12.925	7.094	6.720	9.157	13.532	8.948	7.363	6.430	4.657	3.944	12.298	7.461
11	12.443	6.906	7.112	8.515	14.654	8.915	7.252	6.248	4.686	3.944	6.477	7.350
12	12.043	6.844	7.996	10.337	26.153	9.852	7.141	6.354	6.077	4.086	4.444	6.651
13	12.024	6.659	7.333	9.243	31.040	8.950	7.094	5.730	9.692	4.008	4.021	8.686
14	12.195	6.597	6.907	8.475	31.877	8.441	6.906	5.354	6.506	3.829	3.778	9.379
15	11.836	6.414	7.269	8.029	28.057	8.192	6.844	5.211	5.185	3.715	4.695	8.613
16	11.333	6.384	9.904	7.049	24.218	8.175	6.659	5.113	4.863	3.615	9.564	9.734
17	10.969	6.384	8.079	7.291	20.633	8.443	6.597	5.085	4.589	3.529	8.069	7.872
18	12.756	6.384	10.380	9.352	17.703	9.379	6.414	5.029	4.589	3.516	7.516	7.208
19	11.670	6.384	8.821	10.656	15.709	8.914	6.384	5.822	4.891	3.541	5.507	8.395
20	11.519	6.384	7.790	10.675	14.208	8.609	6.384	9.442	5.198	3.665	4.973	7.385
21	10.710	6.384	10.187	9.191	13.120	7.962	6.368	7.192	4.808	3.541	4.631	6.265
22	10.116	6.384	12.151	8.828	12.558	7.750	6.263	5.877	4.562	3.492	4.190	6.521
23	9.797	6.384	9.425	8.744	12.170	8.983	6.158	5.454	4.441	3.345	4.312	6.369
24	9.517	6.384	9.954	8.779	9.356	13.537	6.143	5.240	4.348	3.297	5.472	6.053
25	9.239	6.384	12.804	8.112	10.604	12.068	6.143	5.183	4.335	3.153	5.472	5.890
26	8.965	6.384	10.627	9.018	10.930	12.696	6.143	5.015	4.335	3.153	4.287	5.670
27	8.727	6.384	10.511	8.162	12.179	13.794	6.113	5.015	4.335	3.346	4.101	5.497
28	8.659	6.384	9.312	7.383	11.500	11.232	5.934	5.183	4.308	3.640	8.866	5.850
29	8.458	6.414	8.359	8.800	11.780	9.869	5.905	5.197	4.151	3.516	39.220	7.161
30	8.424		7.896	9.379	13.070	9.326	5.905	5.173	4.151	3.345	47.465	7.146
31	8.441		7.492		23.586		5.905	5.450		3.333		5.142
Mean	13.431	6.802	8.603	8.881	16.509	9.887	6.986	5.690	4.904	3.733	8.025	9.538
Flow (MCM)	35.974	17.042	23.043	23.021	44.219	25.628	18.711	15.240	12.712	9.999	20.801	25.545
Maximum	42.515	8.458	13.253	10.909	31.877	14.217	9.291	9.442	9.692	4.282	47.465	40.231
Minimum	8.424	6.384	6.278	6.938	8.360	7.750	5.905	5.015	4.151	3.153	3.406	5.142
Runoff (mm)	85.651	40.577	54.865	54.811	105.282	61.018	44.549	36.285	30.266	23.808	49.525	60.822

Flow (cumecs)

Annual Statistics

Maximum: 47.465 Minimum: 3.153 Mean: 8.582 cumecs

Total: 271.398 MCM Runoff: 646.187 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5 **Year:** 2013
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.212	8.159	1.609	39.152	68.985	9.940	4.317	3.294	2.074	34.429	4.300	6.768
2	3.641	5.137	1.541	30.645	46.323	10.599	4.282	3.198	2.021	77.486	4.177	16.643
3	3.552	3.535	1.470	26.936	37.845	9.534	4.247	3.088	1.864	53.963	4.372	12.578
4	3.333	2.867	1.795	35.873	35.841	8.876	4.038	3.074	1.838	50.726	5.199	8.149
5	3.128	2.468	3.519	41.320	35.528	8.487	3.970	3.720	1.864	33.913	6.192	6.603
6	4.605	2.265	3.701	92.646	30.949	8.126	3.767	4.557	2.034	24.106	5.796	5.793
7	3.607	2.194	3.889	56.464	30.210	7.794	3.733	5.798	2.115	18.771	4.553	6.214
8	3.661	1.997	3.355	33.751	24.134	7.596	3.717	4.682	1.981	18.643	4.039	7.882
9	3.453	1.862	5.976	29.313	21.539	7.401	3.601	3.971	2.008	15.164	3.868	10.685
10	2.709	1.757	5.274	31.056	20.216	7.081	3.486	3.953	1.864	14.982	3.767	8.842
11	2.627	1.663	6.731	35.999	19.910	6.744	3.470	3.701	1.838	18.200	3.851	7.298
12	5.079	1.601	15.670	28.435	18.957	6.455	3.454	3.246	1.826	16.683	3.818	6.732
13	12.075	1.570	17.131	28.661	17.489	6.414	3.341	2.965	1.737	13.267	3.487	8.520
14	9.226	1.589	10.169	26.706	16.225	6.393	3.229	2.754	1.650	11.099	3.245	6.942
15	5.394	1.619	6.778	22.021	15.379	6.251	3.214	2.724	1.614	10.060	3.198	5.971
16	4.130	2.064	5.877	19.136	14.369	6.110	3.214	2.694	1.470	9.603	3.135	5.462
17	4.109	2.699	7.279	17.423	14.453	6.050	3.182	2.519	1.470	9.179	3.277	5.602
18	4.985	1.976	6.996	17.393	12.987	5.792	2.996	2.490	1.589	8.466	3.074	8.714
19	6.172	1.638	11.302	21.430	12.143	5.616	2.965	2.462	1.494	7.642	2.799	7.754
20	4.133	1.787	19.679	24.390	11.271	5.480	2.965	2.293	1.589	7.081	2.904	7.772
21	3.247	3.756	34.823	19.197	10.919	5.422	2.996	2.455	1.494	6.703	2.754	7.108
22	2.862	5.627	39.038	19.107	10.424	5.194	3.151	3.743	1.614	6.850	2.694	6.593
23	2.630	3.263	37.447	17.562	10.132	5.156	2.996	4.320	1.767	5.893	2.519	7.781
24	2.428	2.090	28.058	20.192	9.627	5.118	2.950	3.426	2.481	5.461	2.609	13.817
25	2.268	1.753	22.054	31.180	9.248	4.895	2.843	2.860	1.998	5.529	5.551	15.098
26	2.150	1.609	18.467	23.952	9.038	4.839	2.739	2.505	1.651	7.674	20.685	9.075
27	2.123	1.543	21.381	19.641	9.633	4.711	2.724	2.293	1.470	8.181	23.793	6.788
28	2.058	1.524	37.935	17.659	14.882	4.602	2.694	2.293	1.446	5.924	12.524	6.330
29	2.220		33.826	16.916	17.645	4.675	2.915	2.448	1.446	5.175	7.662	6.189
30	3.710		30.762	28.109	12.315	4.549	5.198	2.377	4.744	4.858	5.876	5.519
31	6.733		54.865		10.846		4.032	2.251		4.567		4.931
Mean	4.041	2.558	16.077	29.075	20.305	6.530	3.433	3.166	1.868	16.783	5.524	8.070
Flow (MCM)	10.822	6.187	43.061	75.364	54.386	16.926	9.195	8.481	4.843	44.952	14.318	21.614
Maximum	12.075	8.159	54.865	92.646	68.985	10.599	5.198	5.798	4.744	77.486	23.793	16.643
Minimum	2.058	1.524	1.470	16.916	9.038	4.549	2.694	2.251	1.446	4.567	2.519	4.931
Runoff (mm)	25.767	14.732	102.527	179.437	129.490	40.299	21.893	20.192	11.531	107.028	34.090	51.461

Flow (cumecs)

Annual Statistics

Maximum: 92.646 Minimum: 1.446 Mean: 9.786 cumecs

Total: 308.607 MCM Runoff: 734.780 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 7: 1:25 S | Longitude: 37:48:34 E | Elevation: 203.0 metres | Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.619	2.995	2.264	16.017	53.742	16.358	11.018	5.889	7.058	4.003	-	10.602
2	4.457	2.782	2.574	18.222	48.959	16.539	10.447	5.909	6.598	3.799	37.823	27.713
3	4.298	2.752	5.531	21.274	45.533	15.632	10.033	6.474	5.950	3.732	26.247	29.012
4	4.037	2.723	6.324	25.521	59.844	15.120	9.744	6.270	5.562	5.772	21.068	22.866
5	3.799	2.547	14.048	19.359	51.746	14.952	9.984	5.869	7.128	18.825	17.544	19.019
6	3.749	3.755	11.590	25.664	56.937	14.422	9.984	5.770	7.017	10.658	19.118	15.466
7	3.632	11.131	10.572	22.224	-	14.925	9.649	5.536	7.784	6.588	15.942	13.119
8	3.485	5.277	26.787	44.461	-	13.656	9.270	5.459	16.779	5.772	18.791	12.298
9	3.423	3.343	19.667	29.840	84.187	12.849	8.897	5.230	9.724	5.193	19.285	11.094
10	4.145	3.025	18.522	34.661	62.758	13.294	8.530	5.192	6.769	5.345	16.116	11.269
11	3.344	3.137	34.152	46.243	50.830	19.921	8.169	5.307	5.989	4.821	14.618	10.843
12	2.933	3.887	23.171	-	44.749	20.643	7.858	5.890	5.518	5.533	14.700	10.326
13	2.949	3.200	20.605	-	47.337	15.674	7.814	5.326	5.230	10.690	19.992	9.555
14	2.812	2.797	18.147	92.576	41.442	13.709	7.858	5.441	5.487	6.791	16.336	10.083
15	3.010	3.022	20.067	66.950	37.191	13.331	8.080	6.190	7.920	5.347	13.658	9.345
16	3.292	4.540	21.117	83.077	33.744	12.167	7.771	6.311	11.544	4.657	13.277	10.452
17	3.134	4.344	19.120	57.100	30.253	11.650	7.250	5.615	9.133	4.316	11.986	8.972
18	3.056	7.821	15.080	44.705	27.874	11.370	7.378	5.655	6.404	5.287	11.370	8.485
19	3.324	4.821	14.153	37.599	26.292	10.892	7.164	6.376	5.537	13.438	10.596	8.354
20	3.293	3.817	11.458	43.154	23.840	15.639	7.079	5.086	5.192	13.683	9.697	10.185
21	7.161	3.716	9.938	-	24.334	44.432	6.826	4.619	4.894	10.278	9.840	10.553
22	32.199	3.987	9.317	87.911	22.971	26.514	6.784	4.457	4.655	16.208	13.920	8.515
23	10.829	3.326	9.844	86.216	22.010	19.492	6.742	4.333	4.710	12.433	13.763	9.371
24	10.547	2.965	13.663	94.909	20.446	17.105	6.494	4.280	4.674	10.876	13.505	11.097
25	6.442	2.576	9.775	67.395	19.781	15.954	6.412	4.072	4.949	8.363	10.075	10.911
26	4.951	2.504	9.186	70.368	19.756	14.786	6.168	4.003	4.765	6.892	8.806	9.740
27	4.458	2.404	15.428	79.228	19.078	13.386	6.128	3.799	4.583	11.084	8.463	8.911
28	4.055	2.305	36.249	58.548	18.287	12.506	6.088	5.454	4.316	38.589	7.859	10.206
29	3.749		19.414	49.402	17.848	12.036	6.135	15.422	4.072	17.122	7.465	10.424
30	3.404		14.989	44.111	18.906	11.599	7.645	9.346	4.037	12.093	7.271	9.700
31	3.228		17.162		17.153		6.581	7.250		30.227		11.483
Mean	5.220	3.768	15.481	-	-	16.018	7.935	5.866	6.466	10.271	-	12.257
Flow (MCM)	13.981	9.115	41.465	-	-	41.520	21.253	15.711	16.760	27.511	-	32.829
Maximum	32.199	11.131	36.249	-	-	44.432	11.018	15.422	16.779	38.589	-	29.012
Minimum	2.812	2.305	2.264	-	-	10.892	6.088	3.799	4.037	3.732	-	8.354
Runoff (mm)	33.288	21.703	98.725	-	-	98.857	50.602	37.406	39.904	65.502	-	78.164

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5 **Year:** 2015
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	13.524	5.117	7.547	20.451	17.653	21.161	5.315	5.289	4.213	2.875	14.734	20.127
2	11.815	4.894	4.566	19.282	16.984	16.135	4.900	4.967	4.213	2.725	17.073	17.758
3	9.725	4.601	4.282	25.555	15.782	13.984	4.736	5.250	4.023	2.666	10.193	16.429
4	9.131	4.351	3.784	27.838	19.505	12.718	4.577	6.742	4.040	2.520	8.333	15.015
5	8.104	4.315	4.145	35.843	35.075	11.831	4.421	12.081	3.719	2.681	13.053	13.823
6	7.770	4.280	5.045	24.744	30.036	11.068	4.269	10.412	3.455	2.785	47.705	12.565
7	8.170	4.072	4.355	19.941	37.654	10.595	4.122	8.761	3.326	2.710	20.359	11.401
8	7.814	4.020	3.667	18.216	37.739	10.057	3.978	8.465	3.294	2.666	13.750	10.723
9	8.103	3.900	3.261	16.421	29.686	9.672	3.837	7.084	3.231	2.506	27.614	10.158
10	8.398	3.749	3.025	14.981	25.531	9.435	3.700	6.291	3.390	2.578	22.983	9.724
11	14.712	3.534	2.964	15.325	23.595	9.106	3.815	5.732	3.310	2.681	30.427	9.321
12	11.302	3.485	2.782	19.732	25.671	8.874	5.247	5.614	3.168	2.666	21.057	9.652
13	9.018	3.372	2.723	18.355	23.515	8.553	5.478	5.326	2.966	2.492	24.766	9.510
14	8.037	3.324	2.547	29.896	21.985	8.326	5.325	4.949	2.982	2.435	23.116	9.040
15	7.487	3.666	2.864	23.438	19.861	8.013	5.061	4.856	3.231	2.266	26.101	8.948
16	7.121	3.668	5.399	18.939	18.681	7.814	4.875	4.637	3.074	2.211	71.716	9.629
17	6.826	4.371	7.624	16.882	17.679	7.638	4.637	4.565	2.936	2.076	33.473	10.218
18	6.847	4.309	7.265	15.124	16.611	7.443	5.084	4.316	2.815	2.211	23.455	12.528
19	7.699	5.943	5.608	15.692	15.662	7.143	7.728	4.072	2.710	2.238	20.616	9.458
20	10.460	4.416	11.778	13.985	14.258	6.952	5.670	4.020	2.666	2.266	17.055	8.331
21	9.773	3.783	21.095	13.276	13.384	6.805	4.766	3.900	2.492	2.435	14.600	10.633
22	10.775	3.534	21.093	12.716	13.141	6.784	4.626	3.782	2.463	2.463	12.987	24.061
23	8.680	3.469	23.420	12.964	13.632	6.763	5.956	3.765	2.435	2.463	12.564	13.366
24	7.082	3.292	29.028	17.457	15.636	6.618	4.899	3.732	2.266	2.435	11.376	9.539
25	6.494	3.356	34.925	27.678	14.565	6.473	4.369	3.592	2.266	2.502	14.031	8.649
26	6.270	3.404	31.176	26.642	12.983	6.412	4.280	3.912	2.435	3.780	36.764	8.106
27	5.988	3.518	15.462	22.585	13.089	6.168	4.072	3.937	2.492	2.837	74.694	7.708
28	5.790	3.757	30.112	19.159	12.666	6.088	5.392	4.204	2.666	2.539	39.058	7.382
29	5.498		50.515	19.455	14.712	6.031	13.532	6.732	2.695	3.563	27.042	7.819
30	5.192		31.716	18.117	17.600	6.815	8.759	4.624	2.725	7.111	23.484	7.062
31	4.967		23.286		20.632		6.358	4.040		21.132		7.104
Mean	8.341	3.982	13.131	20.023	20.168	9.049	5.283	5.473	3.057	3.339	25.139	11.154
Flow (MCM)	22.341	9.634	35.170	51.899	54.018	23.456	14.151	14.658	7.923	8.943	65.161	29.876
Maximum	14.712	5.943	50.515	35.843	37.739	21.161	13.532	12.081	4.213	21.132	74.694	24.061
Minimum	4.967	3.292	2.547	12.716	12.666	6.031	3.700	3.592	2.266	2.076	8.333	7.062
Runoff (mm)	53.192	22.937	83.737	123.570	128.613	55.846	33.693	34.900	18.863	21.294	155.145	71.133

Flow (cumecs)

Annual Statistics

Maximum: 74.694 Minimum: 2.076 Mean: 10.678 cumecs
Total: 336.750 MCM Runoff: 801.786 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 7: 1:25 S | Longitude: 37:48:34 E | Elevation: 203.0 metres | Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.872	17.678	7.888	23.487	57.879	12.503	7.834	4.036	2.346	4.337	1.262	2.208
2	7.340	32.512	4.317	25.442	51.504	12.086	7.593	3.831	2.318	3.090	1.153	2.086
3	7.691	20.284	4.037	20.647	48.122	11.674	7.725	3.798	2.304	2.590	1.121	2.213
4	22.730	17.757	3.550	21.811	47.503	11.267	7.206	3.764	2.221	2.417	1.089	4.001
5	80.973	17.637	4.320	32.246	56.552	10.890	6.866	3.649	2.396	2.235	1.344	3.472
6	30.717	17.097	7.462	71.447	43.728	11.336	6.782	4.105	3.490	2.194	1.762	2.918
7	17.255	13.858	4.530	60.876	38.112	14.719	6.534	4.070	3.073	2.073	2.083	2.604
8	14.492	14.548	3.437	38.679	40.215	11.692	6.451	4.126	2.692	1.824	5.358	3.123
9	12.757	28.366	3.040	36.034	32.054	10.202	6.207	5.081	2.560	1.773	3.528	5.898
10	15.054	16.668	2.811	34.821	28.781	9.910	6.127	4.513	2.517	2.002	2.379	4.215
11	12.521	21.901	2.751	30.402	26.769	9.862	5.887	3.934	2.346	3.687	2.256	3.082
12	11.275	23.699	2.710	29.460	25.151	9.670	5.828	4.122	2.318	2.308	3.830	4.290
13	10.232	17.562	3.344	29.222	23.002	9.315	5.690	3.950	2.291	1.711	1.996	3.238
14	10.266	14.927	2.479	30.956	22.698	8.965	5.554	3.781	2.126	1.515	3.477	2.405
15	12.681	13.223	2.655	39.431	21.822	8.757	5.574	3.565	2.072	1.491	9.039	2.520
16	10.958	12.139	5.133	56.733	20.933	8.551	5.848	3.532	1.914	1.468	6.817	4.492
17	12.940	11.495	7.319	49.832	20.161	8.257	6.067	3.500	1.888	1.329	4.719	4.882
18	12.725	10.966	6.966	42.122	20.417	8.606	5.691	3.306	1.888	2.103	6.768	3.225
19	11.712	10.352	7.872	44.884	19.053	16.687	5.286	3.274	1.888	7.056	12.647	2.562
20	16.173	12.195	27.668	40.848	18.138	49.540	5.191	3.243	1.862	3.765	9.021	2.182
21	13.407	12.250	23.399	43.080	17.411	20.166	4.966	3.055	1.710	2.200	8.261	1.964
22	13.012	9.704	20.728	38.892	16.957	13.203	4.892	3.009	1.685	1.811	6.506	3.174
23	19.532	9.081	23.046	-	16.461	10.724	4.654	2.902	1.685	1.673	4.719	2.725
24	15.377	8.597	28.661	46.022	16.172	9.743	5.242	2.796	1.685	1.515	3.634	2.361
25	14.370	8.190	34.536	68.165	15.601	9.577	9.207	2.781	1.661	1.491	3.275	2.318
26	14.320	7.724	33.701	46.571	15.146	10.645	5.617	2.781	1.515	1.468	3.024	2.291
27	12.730	7.615	31.709	64.892	14.865	9.602	4.892	2.781	1.515	1.329	2.781	2.297
28	14.492	8.012	29.255	71.428	14.365	8.781	4.672	2.766	3.429	1.318	2.575	3.884
29	12.085	7.617	30.007	66.450	13.516	8.257	4.600	2.662	14.779	1.352	2.517	7.582
30	17.023		26.339	65.543	13.462	8.033	4.350	2.560	8.380	1.164	2.332	8.394
31	15.839		24.030		12.953		4.105	2.517		1.153		9.411
Mean	16.114	14.609	13.539	-	26.758	12.107	5.908	3.477	2.819	2.176	4.042	3.613
Flow (MCM)	43.161	36.604	36.262	-	71.669	31.382	15.823	9.313	7.306	5.827	10.478	9.678
Maximum	80.973	32.512	34.536	-	57.879	49.540	9.207	5.081	14.779	7.056	12.647	9.411
Minimum	6.872	7.615	2.479	-	12.953	8.033	4.105	2.517	1.515	1.153	1.089	1.964
Runoff (mm)	102.764	87.152	86.338	-	170.640	74.720	37.674	22.174	17.395	13.874	24.948	23.043

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.105	4.135	10.519	23.711	64.348	22.300	10.055	8.449	4.636	7.301	12.103	49.654
2	9.269	3.387	10.797	25.442	69.815	24.878	9.694	7.532	4.600	6.970	10.436	55.970
3	9.035	3.700	8.696	20.647	63.830	27.912	9.409	10.129	4.385	4.545	13.236	54.654
4	12.252	6.669	7.818	21.844	60.998	21.703	9.670	20.747	4.349	5.218	15.064	47.056
5	8.167	4.823	6.649	32.462	93.249	19.830	9.766	11.615	4.314	3.992	15.786	13.992
6	5.973	3.376	8.699	71.492	-	19.401	9.175	8.018	4.105	3.533	15.481	7.027
7	5.117	2.783	8.543	60.876	-	18.456	8.780	7.036	4.087	3.338	22.221	8.376
8	5.033	2.389	11.433	38.679	-	18.113	8.597	6.493	4.174	3.669	14.935	9.326
9	6.898	2.375	10.927	36.034	86.188	17.700	8.528	6.047	4.087	4.586	11.811	15.716
10	5.990	2.140	8.052	34.821	74.183	16.981	8.257	5.848	4.105	3.785	9.700	15.373
11	6.050	2.072	7.207	30.402	49.445	16.271	8.167	5.710	4.262	3.387	8.691	10.647
12	4.951	1.901	13.370	29.460	-	15.944	7.900	5.671	3.968	3.040	7.950	9.036
13	4.565	1.811	19.257	29.222	48.130	16.280	7.834	5.574	3.781	2.811	9.321	8.462
14	3.969	1.849	15.775	30.956	74.649	15.801	7.680	6.301	3.565	2.766	7.931	7.443
15	3.566	1.710	16.906	39.431	63.186	15.431	7.506	9.775	3.500	2.662	6.578	7.014
16	3.387	2.163	18.114	56.733	58.191	16.296	7.333	7.120	3.306	2.560	5.888	6.887
17	3.164	5.116	16.758	49.832	82.504	14.480	7.183	6.208	3.243	2.531	5.574	7.056
18	3.009	3.979	16.273	42.122	69.107	13.679	7.120	5.987	3.182	2.431	5.496	7.176
19	2.796	3.903	23.346	44.884	57.692	13.625	6.866	5.809	4.188	2.332	5.266	10.377
20	2.662	7.669	19.662	40.848	49.356	12.768	6.824	6.586	5.915	2.318	5.324	13.335
21	2.531	5.566	17.011	43.080	43.720	12.112	6.845	8.766	5.977	2.318	7.147	13.149
22	2.375	8.621	19.765	38.892	40.734	11.674	6.908	8.766	4.066	2.291	14.132	10.196
23	2.606	6.196	18.069	-	43.050	11.368	6.554	6.687	3.533	2.099	8.669	7.929
24	3.073	9.307	17.362	46.022	38.818	12.042	6.451	6.370	3.275	4.620	6.973	7.270
25	2.519	6.823	16.886	68.165	34.756	14.263	6.207	5.750	3.055	21.442	6.150	6.637
26	2.305	7.165	15.811	46.571	31.556	12.198	6.167	5.400	2.993	13.394	5.401	6.720
27	2.436	8.308	16.309	64.892	29.285	11.292	6.167	5.210	2.811	8.502	5.574	6.330
28	4.158	9.890	26.472	71.428	27.519	10.865	6.127	4.966	3.245	7.547	5.362	5.868
29	3.555		36.157	66.450	26.449	10.494	5.887	4.910	5.803	10.886	5.750	5.535
30	7.038		47.348	66.195	24.339	10.273	5.848	4.781	4.234	11.273	11.183	5.229
31	8.025		28.575		23.049		6.240	4.654		9.639		5.196
Mean	5.019	4.637	16.728	-	-	15.814	7.605	7.191	4.025	5.413	9.504	14.343
Flow (MCM)	13.442	11.217	44.804	-	-	40.991	20.369	19.260	10.432	14.497	24.636	38.416
Maximum	12.252	9.890	47.348	-	-	27.912	10.055	20.747	5.977	21.442	22.221	55.970
Minimum	2.305	1.710	6.649	-	-	10.273	5.848	4.654	2.811	2.099	5.266	5.196
Runoff (mm)	32.005	26.707	106.676	-	-	97.597	48.497	45.857	24.838	34.517	58.656	91.468

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.040	7.269	9.757	19.301	44.830	22.202	19.300	8.766	12.418	6.193	5.995	10.186
2	9.575	6.846	5.884	36.962	47.928	22.096	20.658	8.674	8.269	8.739	5.698	10.299
3	6.782	6.493	4.960	38.232	46.977	21.385	20.179	8.401	6.421	6.928	5.582	13.541
4	8.108	6.167	10.315	38.602	38.095	20.839	16.925	8.311	6.770	6.215	5.123	12.316
5	15.578	5.868	5.935	29.442	35.939	19.892	15.739	8.042	12.108	6.296	5.011	9.713
6	10.218	5.710	4.351	27.055	32.451	18.961	17.728	7.976	15.707	6.378	4.789	8.584
7	12.105	5.671	4.421	24.572	34.919	18.490	21.348	7.821	13.679	6.015	4.716	8.020
8	13.618	5.535	4.911	29.091	29.331	18.074	18.383	7.624	10.545	5.855	5.797	7.689
9	9.601	5.362	5.253	37.199	27.413	17.564	16.048	7.342	8.363	5.915	13.533	7.960
10	15.635	5.097	9.590	34.891	33.179	17.300	14.488	7.256	8.034	5.698	9.369	9.805
11	57.170	4.910	9.958	30.867	34.614	16.942	13.582	7.043	10.471	5.620	9.431	9.561
12	25.299	4.672	10.619	40.313	32.382	16.541	13.097	7.343	8.281	5.389	11.385	9.561
13	14.448	4.841	16.228	37.097	31.281	16.030	12.672	7.800	7.045	5.312	7.126	10.462
14	12.842	5.951	22.007	36.760	40.523	15.726	12.226	7.214	6.625	5.085	5.995	12.361
15	18.942	5.157	17.720	40.060	67.295	15.327	11.684	6.980	6.297	5.011	5.757	11.285
16	15.711	4.528	29.116	45.625	66.953	15.017	11.378	6.916	5.975	4.826	6.075	9.497
17	13.170	4.209	21.282	44.550	39.010	14.514	10.875	6.666	5.679	5.105	6.341	11.344
18	12.477	3.933	18.011	44.523	34.104	14.486	10.652	6.624	5.681	5.699	7.348	14.051
19	12.139	3.765	21.847	62.361	40.655	13.772	10.578	6.583	7.063	5.582	6.324	13.582
20	13.413	4.054	18.106	96.126	34.147	13.339	10.283	6.337	10.597	4.974	12.508	13.596
21	15.501	3.599	16.886	75.041	54.595	14.100	10.186	6.296	13.956	4.997	41.271	18.931
22	17.460	3.403	13.615	-	43.236	13.366	9.895	6.276	8.141	6.301	23.090	41.462
23	13.277	3.290	11.523	71.796	32.783	12.725	9.799	6.135	5.568	5.957	20.878	-
24	11.120	3.243	11.092	53.170	30.511	12.461	9.513	6.240	6.039	6.152	36.572	38.298
25	9.960	3.102	10.950	55.533	27.864	12.226	9.466	7.563	7.003	11.794	26.389	20.598
26	9.316	3.609	16.267	40.584	26.991	11.838	9.419	6.711	7.189	13.288	18.208	17.156
27	8.758	5.166	17.774	35.451	25.965	11.479	9.137	6.015	11.319	11.142	16.739	14.659
28	8.213	5.673	20.965	32.944	24.041	11.429	9.067	5.698	8.160	8.705	21.865	13.582
29	7.724		23.620	30.328	22.817	11.429	8.951	5.659	6.813	9.025	12.819	13.070
30	7.506		18.887	32.263	21.806	12.596	9.067	5.738	6.156	7.457	10.504	12.410
31	7.355		16.778		21.359		9.044	7.152		6.502		10.834
Mean	13.550	4.897	13.827	-	36.258	15.738	12.947	7.071	8.546	6.715	12.408	-
Flow (MCM)	36.293	11.847	37.034	-	97.113	40.793	34.678	18.939	22.150	17.985	32.161	-
Maximum	57.170	7.269	29.116	-	67.295	22.202	21.348	8.766	15.707	13.288	41.271	-
Minimum	6.782	3.102	4.351	-	21.359	11.429	8.951	5.659	5.568	4.826	4.716	-
Runoff (mm)	86.412	28.208	88.175	-	231.222	97.127	82.567	45.093	52.739	42.821	76.575	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H5
Station Name: Ruvu River at Kibungo
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 7: 1:25 S Longitude: 37:48:34 E Elevation: 203.0 metres Area: 420.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.576	9.992	11.076	8.633	42.070	24.680	9.537	6.337	4.553	3.564	12.305	55.579
2	5.698	9.490	10.979	10.614	29.470	23.303	9.585	6.604	4.580	3.864	11.838	40.710
3	5.582	11.268	12.390	13.778	30.181	22.629	9.301	6.687	4.460	6.647	11.479	31.368
4	5.123	23.919	10.340	20.113	32.990	22.228	9.090	6.176	4.318	11.608	11.634	27.868
5	5.011	23.153	9.490	15.241	48.392	22.175	8.951	5.856	4.362	42.774	12.726	24.957
6	4.789	13.921	9.044	11.117	47.369	22.175	9.021	5.836	4.568	21.864	12.525	23.195
7	4.716	10.412	8.447	9.635	52.501	22.175	8.789	5.935	4.213	11.487	16.879	22.496
8	5.797	12.630	8.379	10.656	38.736	22.175	8.835	5.816	4.125	12.288	34.047	21.542
9	13.533	20.225	8.469	12.046	34.583	22.175	8.560	5.659	4.177	32.123	92.931	28.116
10	9.369	16.616	8.154	12.071	49.908	22.175	8.334	5.523	4.328	46.704	78.821	66.861
11	9.431	14.686	7.711	11.384	52.015	22.175	8.042	5.485	4.971	42.021	50.765	43.354
12	11.385	12.599	7.645	13.238	48.058	22.175	7.953	5.350	4.790	-	34.858	32.160
13	7.126	11.279	7.602	12.566	40.822	22.175	7.711	5.198	4.296	63.689	27.881	27.293
14	5.995	10.480	7.299	16.320	34.662	22.175	7.843	5.048	4.043	32.980	24.459	24.456
15	5.757	10.040	6.980	12.130	31.089	21.757	8.154	4.974	3.863	24.319	22.180	22.605
16	6.075	9.633	6.770	10.432	29.814	19.265	8.311	5.274	3.855	21.188	20.199	21.177
17	6.341	9.160	6.480	9.538	31.866	18.688	8.176	5.198	3.923	25.143	18.937	21.176
18	7.348	9.090	6.317	9.160	36.493	18.515	8.042	5.048	3.729	28.291	18.196	21.024
19	6.324	9.090	6.256	9.469	34.744	18.465	8.154	4.918	3.643	23.485	17.904	23.579
20	12.508	9.352	5.995	10.955	32.692	18.294	8.065	4.881	3.606	24.787	16.707	24.398
21	41.271	10.755	5.816	11.815	30.478	17.310	7.365	4.770	3.541	24.294	16.198	23.362
22	23.090	9.708	5.679	10.311	31.065	12.258	6.980	4.734	3.458	20.773	15.869	27.206
23	20.878	9.475	5.620	9.968	34.881	11.201	6.812	4.679	3.464	18.690	15.928	33.414
24	36.572	13.698	5.389	9.467	31.217	10.850	6.770	5.304	3.477	19.008	16.100	27.947
25	26.389	12.093	5.350	8.928	30.084	10.676	6.624	6.991	3.605	23.544	23.913	31.416
26	18.208	20.082	5.486	9.105	30.568	10.825	6.480	5.768	3.988	19.711	19.314	35.192
27	16.739	17.389	6.748	12.782	29.784	10.900	6.459	6.863	3.746	17.136	20.650	28.670
28	21.865	12.460	9.407	15.567	29.307	10.284	6.439	5.321	3.782	16.130	29.111	33.475
29	12.819		8.792	13.383	27.254	9.895	6.317	4.890	4.423	14.906	45.361	27.833
30	10.504		8.132	20.021	26.505	9.799	6.296	4.697	3.527	13.963	-	25.573
31	10.234		8.311		27.458		6.296	4.607		13.098		13.934
Mean	12.357	12.953	7.760	12.015	35.712	18.119	7.848	5.498	4.047	-	-	29.417
Flow (MCM)	33.096	31.337	20.784	31.142	95.650	46.965	21.020	14.725	10.490	-	-	78.791
Maximum	41.271	23.919	12.390	20.113	52.501	24.680	9.585	6.991	4.971	-	-	66.861
Minimum	4.716	9.090	5.350	8.633	26.505	9.799	6.296	4.607	3.458	-	-	13.934
Runoff (mm)	78.800	74.611	49.485	74.149	227.737	111.821	50.049	35.059	24.976	-	-	187.598

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ruvu River at Morogoro Road Bridge

Station No: 1H8A		**Established:** 18/11/1958
Coordinates:		**Altitude (m.a.m.s.l):** 229
Lat: -6.6929	**Long: 38.7081**	**Catchment Area (km²):** 14,449
Description of the Catchment:		
The catchment area has mountains especially upstream (10%) and about 90% is woodland		

Station Details

1. Staff Gauges	**Range: 0 – 7m**	**A.D.Z.G.R: 0.00mm**
	Type of Gauges: Standard Vertical	**MSL.Z.G.L: -**
2. Automatic Recorder	**Thalimedes float type**	**Date installed: 2013**
3. Benchmark	Bolt embedded in concrete near gauges 6 - 7m	

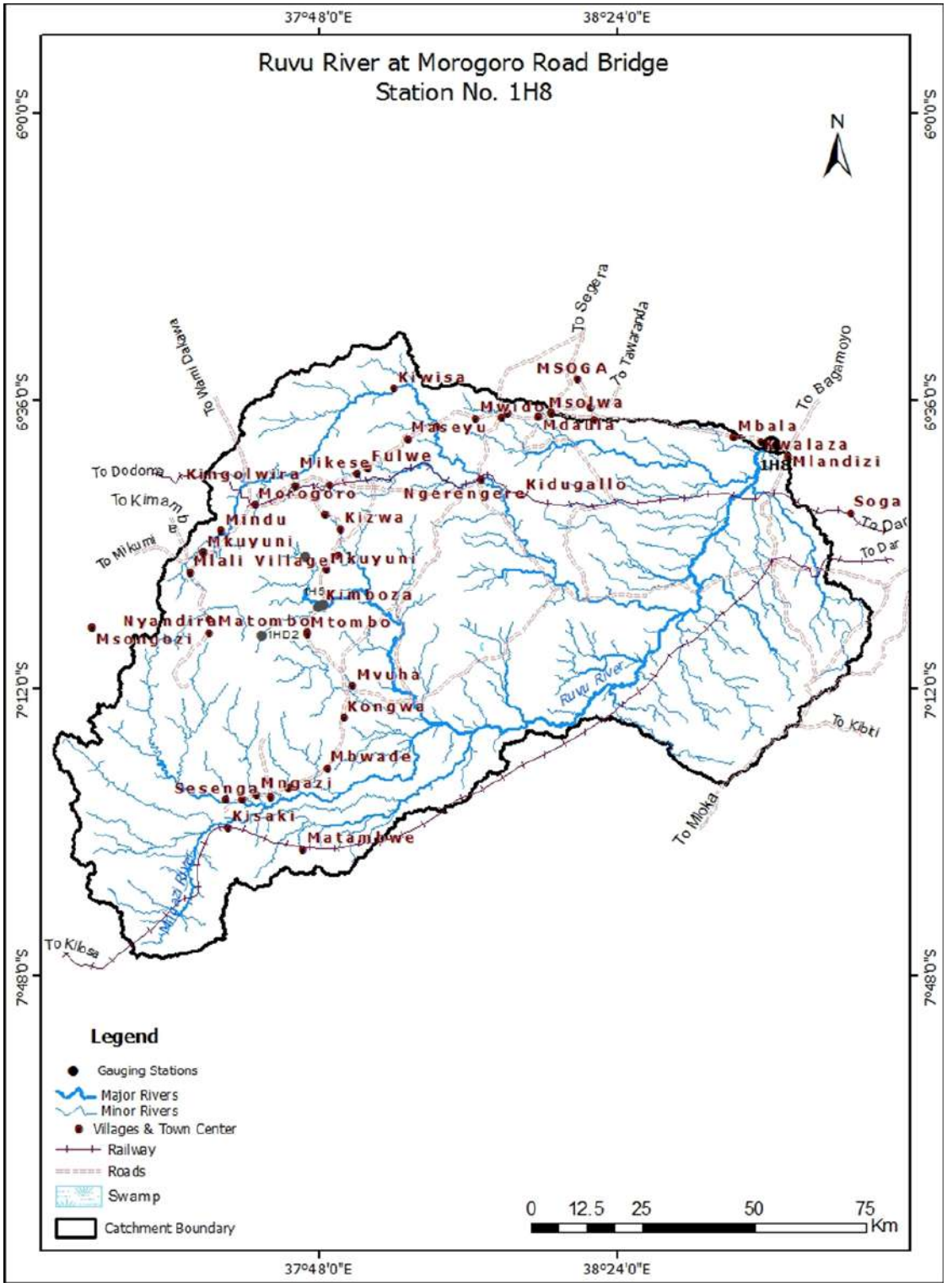
BM Assumed Datum: 6.77m	**N.M.M.S.L:** -	**TBM:** –

4. Control	Low stage - Weir, medium and high stage – bridge structure
5. Access	Accessible throughout the year, the station is located 140km from Morogoro town to Ruvu village along Morogoro to Dar es salaam road

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	1.2.2
Discharge:	01/01/2010 - 31/12/2019	1.2.2

Extremes:	**Max. Recorded**	-	**On** 15/04/2014	**WL** 8.688m
	Min. Recorded	0.98m³/sec	**On** 30/01/1961	**WL** 0.97m

Remarks


Ruvu River at Morogoro Road Bridge
Station No. 1H8
37°48'0"E
38°24'0"E
6°0'0"S
6°36'0"S
7°12'0"S
7°48'0"S
N
To Segera
To Tawanda
To Bagamoyo
To Dodoma
To Kimamba
To Mikumi
To Kibiti
To Mloka
To Kilosa
MSOGA
Kiwisa
Mwidu
Msolwa
Mdaula
Mbala
Mwalaza
Mlandizi
1H8
Maseyu
Mikese
Fulwe
Kingolwira
Morogoro
Ngerengere
Kidugallo
Soga
Mindu
Kizwa
Mkuyuni
Mlali Village
Mkuyuni
1H5
Kimboza
Nyandira
Matombo
Mtombo
1HD2
Msongozi
Mvuha
Kongwa
Mbwade
Sesenga
Mngazi
Kisaki
Matamkwe
Ruvu River
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Railway
Roads
Swamp
Catchment Boundary
0 12.5 25 50 75
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	49.194	22.571	30.178	39.686	129.241	47.368	-	-	-	-	5.756	10.477
2	52.643	20.410	28.268	36.721	125.046	45.139	-	-	-	-	3.457	9.687
3	43.483	19.473	27.012	42.372	122.872	43.204	-	-	-	-	2.631	9.245
4	34.816	20.055	30.021	45.187	124.052	41.890	-	-	-	-	1.931	8.490
5	32.988	20.477	34.641	58.814	128.332	40.930	-	-	-	-	1.321	7.859
6	39.289	20.090	41.247	67.499	131.987	40.013	-	-	-	-	1.737	7.111
7	44.970	22.229	46.365	64.800	135.046	37.390	-	-	-	-	1.929	6.582
8	57.677	30.244	48.019	49.739	135.046	36.589	-	-	-	-	1.175	6.486
9	61.672	35.578	51.717	74.010	132.131	35.155	-	-	-	-	1.242	7.910
10	59.925	43.175	64.808	76.021	129.720	33.885	-	-	-	-	1.151	12.627
11	40.383	42.673	72.767	64.584	128.713	33.541	-	-	-	-	1.009	22.693
12	55.079	34.976	68.131	57.866	132.325	33.314	-	-	-	-	0.890	23.049
13	68.337	28.885	58.480	54.434	128.960	32.016	-	-	-	-	0.907	22.950
14	77.819	26.422	49.085	53.077	119.578	31.013	-	-	-	-	1.133	24.549
15	83.631	26.759	42.763	61.823	105.515	29.995	-	-	-	-	1.318	25.060
16	88.839	26.265	38.173	72.109	89.669	29.288	-	-	-	-	4.617	22.172
17	89.053	24.764	35.288	77.471	80.664	28.614	-	-	-	-	20.710	21.465
18	78.235	23.806	34.436	81.389	71.704	27.813	-	-	-	-	25.986	20.520
19	56.137	24.250	38.738	85.541	65.384	27.153	-	-	-	-	25.136	17.345
20	43.249	27.463	42.805	82.135	60.615	26.550	-	-	-	-	22.854	15.412
21	36.574	30.198	38.018	77.710	57.911	26.083	-	-	-	-	21.396	14.121
22	33.106	37.444	33.863	83.103	56.893	25.541	-	-	-	1.532	19.420	13.295
23	30.410	40.486	31.708	83.371	59.546	25.259	-	-	-	2.103	17.360	13.461
24	28.030	42.395	30.958	75.987	65.018	24.877	-	-	-	2.582	16.028	12.722
25	26.084	46.300	29.519	78.835	69.713	24.471	-	-	-	2.733	15.706	14.129
26	25.311	43.470	29.260	84.546	65.859	24.018	-	-	-	4.197	15.536	18.040
27	24.928	37.584	29.112	103.515	63.400	23.370	-	-	-	4.707	15.366	19.624
28	24.877	33.522	29.125	124.457	58.304	-	-	-	-	3.209	15.011	20.326
29	24.915		30.434	132.084	57.243	-	-	-	-	2.395	13.339	18.639
30	24.815		40.240	131.260	55.160	-	-	-	-	2.347	11.329	17.534
31	22.951		43.064		50.808		-	-		3.106		18.229
Mean	47.078	30.427	40.266	74.005	94.724	-	-	-	-	-	9.579	15.542
Flow (MCM)	126.094	73.610	107.848	191.821	253.709	-	-	-	-	-	24.830	41.628
Maximum	89.053	46.300	72.767	132.084	135.046	-	-	-	-	-	25.986	25.060
Minimum	22.951	19.473	27.012	36.721	50.808	-	-	-	-	-	0.890	6.486
Runoff (mm)	8.727	5.094	7.464	13.276	17.559	-	-	-	-	-	1.718	2.881

Flow (cumecs)

Annual Statistics

Maximum : - Minimum : - Mean : - cumecs

Total : - Runoff : - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2011
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	19.791	16.614	20.633	107.230	273.987	103.968	34.002	17.778	11.248	28.054	16.350	15.135
2	21.999	15.685	18.890	94.235	281.457	94.444	32.775	17.622	10.859	25.831	15.898	14.822
3	21.706	14.885	17.204	90.252	275.321	86.250	31.541	17.423	10.782	23.422	15.536	14.284
4	21.708	14.263	16.285	92.989	259.035	78.945	30.544	17.113	10.363	23.072	15.219	14.325
5	19.813	13.976	15.919	99.853	240.839	71.395	29.396	16.894	9.102	18.241	15.051	14.989
6	18.682	13.091	15.749	108.826	182.139	65.269	28.856	16.567	8.207	22.529	14.988	14.552
7	18.095	12.077	15.010	119.285	133.845	63.174	28.214	16.242	7.618	21.182	14.655	14.099
8	20.997	11.247	16.391	124.669	125.526	63.247	26.630	16.026	7.110	19.997	14.100	14.018
9	29.472	11.130	26.128	128.666	117.209	63.321	26.603	15.727	6.714	19.070	13.854	13.813
10	44.703	11.130	34.840	131.406	105.915	60.720	26.109	15.536	5.880	18.183	13.378	13.730
11	54.635	11.130	44.368	134.851	104.349	57.847	25.465	15.366	5.599	18.965	12.722	16.815
12	61.698	11.406	44.760	136.855	105.724	52.730	24.674	15.198	5.817	28.003	12.116	18.647
13	59.197	13.463	39.145	138.740	109.344	50.134	23.918	15.051	6.132	30.104	11.718	27.229
14	52.499	16.456	29.845	154.808	109.792	48.152	23.494	14.988	5.600	30.351	11.365	40.292
15	49.073	21.117	26.448	184.384	108.669	45.717	23.245	14.738	5.416	30.405	12.607	44.348
16	49.170	26.778	30.738	203.543	106.479	43.645	22.851	14.696	5.942	30.736	15.425	49.415
17	47.594	29.099	59.932	213.685	105.013	42.014	22.312	14.676	6.100	31.904	21.741	52.696
18	46.585	29.317	57.889	219.201	104.217	41.086	21.899	14.531	8.710	32.663	24.423	47.320
19	45.851	27.577	55.615	219.924	103.687	38.859	21.465	14.386	19.926	30.988	24.826	42.269
20	40.340	28.670	51.968	219.924	104.839	37.478	20.820	14.345	19.976	28.698	24.648	43.080
21	34.360	27.260	66.780	218.482	109.345	36.353	20.536	14.222	18.186	26.892	24.021	47.780
22	30.880	28.564	73.536	206.386	111.421	35.620	20.206	14.181	16.506	26.057	22.120	64.203
23	28.244	31.127	79.340	183.655	115.114	35.183	19.972	14.038	14.823	25.056	21.273	89.602
24	25.881	32.662	86.906	176.730	117.138	35.124	19.623	13.875	14.718	23.869	20.302	104.904
25	23.621	31.461	93.200	183.468	115.986	35.535	19.276	13.648	14.243	22.680	18.866	108.582
26	22.361	28.435	97.549	215.961	112.789	38.319	19.069	13.048	16.936	21.538	17.358	103.868
27	21.754	25.219	101.233	239.914	106.350	40.531	18.840	12.478	31.690	20.560	16.415	104.884
28	21.561	22.026	103.821	250.777	107.639	40.076	18.386	12.317	36.220	19.624	15.770	111.804
29	21.230		106.482	254.365	109.342	36.710	18.160	11.837	30.646	18.637	15.494	123.220
30	18.686		112.153	261.103	109.657	36.295	17.980	11.837	28.293	17.358	15.114	127.519
31	18.479		116.501		109.480		17.823	12.157		16.632		121.716
Mean	32.602	20.567	54.041	170.472	138.118	52.605	23.699	14.792	13.312	24.236	16.912	52.708
Flow (MCM)	87.321	49.755	144.743	441.864	369.934	136.351	63.477	39.618	34.505	64.912	43.835	141.174
Maximum	61.698	32.662	116.501	261.103	281.457	103.968	34.002	17.778	36.220	32.663	24.826	127.519
Minimum	18.095	11.130	15.010	90.252	103.687	35.124	17.823	11.837	5.416	16.632	11.365	13.730
Runoff (mm)	6.043	3.443	10.017	30.581	25.603	9.437	4.393	2.742	2.388	4.493	3.034	9.771

Flow (cumecs)

Annual Statistics

Maximum : 281.457 Minimum : 5.416 Mean : 51.172 cumecs
Total : 1613.757 MCM Runoff : 111.686 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2012
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	111.388	27.206	29.210	71.855	38.675	52.079	31.428	15.887	11.130	7.345	-	10.365
2	107.594	26.084	27.185	64.066	38.555	50.868	30.848	15.780	11.130	7.261	-	12.206
3	108.445	25.004	24.779	59.897	39.342	53.280	29.154	15.610	11.052	6.730	-	14.305
4	111.830	24.648	23.099	59.649	41.302	59.335	27.867	15.367	10.533	6.452	-	15.799
5	115.757	24.244	21.875	63.983	42.952	56.556	27.127	15.093	10.060	6.388	-	18.737
6	116.633	23.643	22.171	65.418	44.971	50.381	26.342	14.728	9.668	6.179	-	21.834
7	110.979	22.827	28.487	59.583	55.035	46.009	25.696	14.531	9.593	6.021	-	28.426
8	101.653	21.779	57.499	58.545	64.919	44.088	25.106	14.376	9.464	5.785	-	30.932
9	89.499	21.153	101.393	59.968	70.660	42.389	24.598	14.284	9.263	5.568	-	33.174
10	77.508	20.725	116.502	63.292	74.189	40.839	23.768	14.212	8.774	5.537	-	34.720
11	66.517	20.230	112.568	69.578	78.740	39.190	23.444	14.181	8.488	5.537	-	34.778
12	57.905	19.903	101.891	79.528	86.984	37.658	23.171	14.059	8.417	5.476	-	32.526
13	49.752	19.116	90.645	92.169	103.070	35.913	23.369	14.038	8.277	5.054	-	29.645
14	45.976	18.567	106.753	99.280	110.070	34.633	22.950	14.172	8.941	4.642	-	27.191
15	43.613	18.318	107.461	101.457	115.391	33.343	21.755	14.895	10.985	4.556	-	23.402
16	42.794	17.935	104.618	91.623	116.215	32.464	20.844	14.490	13.257	4.356	-	23.770
17	41.766	17.290	99.161	72.291	115.020	32.015	20.536	14.151	14.398	4.159	-	25.363
18	40.439	16.784	89.228	57.813	115.801	30.793	20.206	13.966	13.367	4.131	-	26.031
19	41.273	16.502	83.065	51.848	117.277	29.451	19.995	13.172	12.681	4.145	-	24.778
20	44.955	15.941	77.276	49.800	119.224	29.044	19.786	12.762	11.723	4.243	-	22.780
21	49.410	15.727	74.071	47.952	122.122	28.694	19.438	12.721	9.803	4.230	-	21.370
22	52.351	15.621	71.533	38.469	125.425	28.613	19.046	12.721	8.918	3.589	-	20.655
23	50.342	15.072	68.692	37.796	127.660	28.346	18.522	12.803	8.506	3.469	13.834	21.346
24	44.736	14.717	65.596	44.804	121.761	27.601	17.980	13.552	8.417	3.377	13.215	20.255
25	40.815	14.676	66.336	43.741	98.918	26.969	17.445	15.116	8.206	3.287	11.603	19.323
26	37.245	15.909	68.052	41.891	80.784	26.655	16.960	15.610	8.136	3.274	10.821	18.773
27	35.098	19.525	65.966	40.439	68.916	27.825	16.762	15.304	7.858	3.274	10.099	17.713
28	33.145	23.111	68.597	39.462	59.381	32.475	16.719	14.522	7.413	3.274	8.955	17.092
29	31.653	26.822	78.595	38.977	54.951	32.888	16.545	13.574	7.345	3.274	9.063	16.588
30	29.996		82.412	38.886	53.028	31.680	16.242	12.622	7.345	3.274	9.613	16.177
31	28.615		78.265		52.722		16.048	11.326		3.274		15.536
Mean	63.216	19.968	71.386	60.135	82.389	37.402	21.926	14.181	9.772	4.747	-	22.438
Flow (MCM)	169.317	50.033	191.201	155.871	220.671	96.947	58.726	37.983	25.328	12.715	-	60.099
Maximum	116.633	27.206	116.502	101.457	127.660	59.335	31.428	15.887	14.398	7.345	-	34.778
Minimum	28.615	14.676	21.875	37.796	38.555	26.655	16.048	11.326	7.345	3.274	-	10.365
Runoff (mm)	11.718	3.463	13.233	10.788	15.272	6.710	4.064	2.629	1.753	0.880	-	4.159

Flow (cumecs)

Annual Statistics

Maximum : - Minimum : - Mean : - cumecs
Total : - Runoff : - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2013
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	14.843	13.528	19.245	118.993	124.572	49.385	19.984	11.169	8.119	2.384	17.114	22.865
2	14.141	17.775	16.572	121.327	120.789	48.860	19.484	11.247	7.721	0.142	16.415	23.037
3	14.141	19.603	15.200	127.668	117.948	45.143	19.276	12.365	7.127	4.814	15.813	21.803
4	14.780	17.983	14.121	133.831	119.831	42.546	19.218	14.357	6.828	16.426	15.356	20.999
5	15.950	18.116	13.399	137.200	123.962	40.792	18.898	14.635	6.615	30.311	14.926	22.389
6	22.028	19.116	12.722	147.859	131.523	39.950	18.138	13.822	6.116	51.184	14.873	24.372
7	23.869	18.364	12.077	171.474	165.621	38.301	17.734	12.601	6.005	62.516	14.915	24.106
8	22.631	17.402	11.922	196.616	227.531	37.033	17.545	12.458	5.801	69.829	14.769	23.360
9	21.496	16.265	14.353	211.784	247.852	35.388	17.400	12.864	5.645	66.837	14.624	21.192
10	19.409	15.368	17.704	216.672	239.510	33.843	16.982	13.327	5.461	57.940	14.926	21.814
11	23.460	14.573	20.590	217.874	239.127	32.395	16.404	14.192	5.371	51.546	14.666	27.782
12	21.976	14.017	22.888	218.961	242.269	31.652	15.919	14.738	4.500	51.778	14.141	28.347
13	20.798	13.050	28.553	233.228	236.145	30.791	15.727	14.510	4.356	48.173	13.637	26.429
14	19.209	11.799	38.270	292.925	215.072	30.364	15.695	14.069	4.356	45.572	12.783	23.005
15	18.341	10.822	34.391	340.657	164.664	29.886	15.599	13.700	4.356	46.491	12.197	21.708
16	17.982	9.985	39.044	337.967	127.208	29.058	15.377	12.803	4.328	42.948	11.502	20.114
17	19.815	9.503	47.027	322.617	107.281	28.093	15.166	12.217	4.145	37.791	11.149	20.407
18	21.804	8.849	48.523	292.622	93.397	27.127	14.801	11.620	4.007	33.253	10.879	19.197
19	22.020	10.885	41.700	277.447	83.661	26.616	14.541	11.169	3.789	30.177	10.098	18.465
20	21.681	14.059	36.332	267.644	77.298	26.031	14.376	10.936	3.457	28.135	9.520	18.081
21	22.288	12.505	35.725	251.978	72.323	25.030	14.284	10.552	2.996	26.564	9.317	18.548
22	22.680	12.237	45.280	225.234	67.552	24.307	14.191	10.267	2.677	25.697	9.063	22.581
23	20.848	13.502	65.384	199.648	63.433	23.818	14.059	9.502	2.463	23.846	8.348	21.312
24	19.256	15.941	75.754	173.638	60.313	23.159	14.028	8.865	2.593	22.302	8.488	20.808
25	17.870	21.279	79.807	150.888	55.231	22.900	13.946	8.259	2.291	21.023	8.171	21.477
26	16.873	28.182	84.448	134.150	52.233	22.336	13.804	8.206	1.883	20.289	7.755	21.613
27	15.729	27.426	92.491	130.899	50.317	21.959	13.679	8.670	1.747	19.670	7.396	19.593
28	14.719	23.290	99.196	127.496	48.380	21.429	13.377	10.309	2.481	18.773	7.345	21.400
29	13.957		105.425	123.062	47.528	20.939	13.027	10.763	3.329	17.813	7.856	23.384
30	13.689		113.427	122.567	48.610	20.465	12.479	9.709	3.723	17.478	12.721	22.328
31	13.336		115.251		49.054		11.541	8.367		17.411		20.093
Mean	18.762	15.908	45.704	200.831	123.233	30.987	15.699	11.686	4.476	32.552	12.025	22.020
Flow (MCM)	50.252	38.485	122.413	520.554	330.068	80.317	42.049	31.300	11.602	87.187	31.170	58.978
Maximum	23.869	28.182	115.251	340.657	247.852	49.385	19.984	14.738	8.119	69.829	17.114	28.347
Minimum	13.336	8.849	11.922	118.993	47.528	20.465	11.541	8.206	1.747	0.142	7.345	18.081
Runoff (mm)	3.478	2.663	8.472	36.027	22.844	5.559	2.910	2.166	0.803	6.034	2.157	4.082

Flow (cumecs)

Annual Statistics

Maximum : 340.657 Minimum : 0.142 Mean : 44.490 cumecs
Total : 1403.046 MCM Runoff : 97.103 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	18.887	16.634	16.394	297.580	272.788	78.674	53.972	22.105	14.263	14.038	22.679	20.190
2	17.892	15.643	15.770	263.401	261.752	76.680	50.838	21.681	14.595	13.750	24.095	22.761
3	16.841	14.864	15.515	250.668	253.217	74.924	47.597	22.288	16.457	12.702	23.726	20.436
4	15.464	14.161	14.729	229.045	242.779	71.615	45.171	22.802	19.120	12.216	31.223	20.636
5	14.718	13.575	14.243	193.411	239.377	66.249	43.141	21.827	19.472	11.797	43.231	27.820
6	14.603	12.859	15.322	146.898	243.033	63.795	41.394	21.345	19.069	11.560	51.638	41.614
7	14.100	14.751	17.941	134.903	256.979	61.834	39.950	21.153	18.545	11.188	48.831	36.393
8	13.750	15.901	18.070	129.149	275.988	59.504	38.887	21.058	17.723	11.326	40.773	33.105
9	12.622	21.231	18.398	123.983	275.585	57.419	37.687	20.583	17.467	13.384	36.548	29.209
10	11.640	16.296	19.944	123.884	258.654	55.796	36.382	20.206	17.400	18.313	35.564	38.833
11	10.975	15.315	25.072	156.803	243.926	54.208	35.532	19.949	17.791	17.482	33.979	36.464
12	10.362	20.008	42.471	342.771	233.274	52.808	34.460	19.461	21.718	15.964	38.400	34.519
13	9.706	26.790	54.424	826.537	233.894	51.052	33.513	19.069	21.672	15.031	39.527	32.161
14	8.882	23.154	58.573	912.795	246.501	51.595	32.634	18.703	19.673	14.274	35.978	29.292
15	8.810	20.444	71.819	832.207	275.367	56.255	31.847	18.385	18.364	13.936	33.943	27.590
16	8.471	20.191	98.758	390.112	284.616	58.389	30.681	18.250	17.401	13.471	35.536	25.762
17	8.189	17.111	189.534	293.315	251.382	54.611	29.940	17.689	16.709	13.563	37.272	24.890
18	7.979	16.697	202.348	283.505	233.663	50.405	29.315	17.467	15.963	14.459	34.395	24.245
19	7.498	16.986	160.360	309.644	219.947	47.481	28.829	17.467	16.162	13.904	31.474	23.743
20	7.093	19.478	117.875	327.175	204.063	45.683	28.186	17.600	18.778	12.623	29.847	24.636
21	6.844	20.998	89.387	301.011	173.193	44.262	27.390	17.600	18.955	11.503	27.949	24.023
22	6.828	25.133	77.992	285.777	141.812	43.030	26.733	17.400	17.959	11.252	26.318	21.493
23	7.044	27.052	62.477	292.979	131.412	43.006	26.135	16.938	16.764	14.055	24.790	21.011
24	7.895	24.503	50.666	293.805	125.429	50.031	25.670	16.588	15.792	18.720	23.482	21.538
25	9.975	22.669	48.803	278.134	119.417	66.514	25.132	16.350	15.335	19.191	23.172	20.255
26	16.333	21.025	70.570	262.278	112.929	76.181	24.851	15.898	14.780	22.051	24.422	19.727
27	20.725	19.337	111.843	255.008	105.201	75.262	24.471	15.578	14.274	20.894	23.794	20.208
28	21.609	17.670	240.216	259.042	98.722	68.387	24.043	15.536	14.202	19.729	22.363	21.816
29	21.575		324.445	279.334	91.559	62.042	23.494	15.451	14.202	18.253	20.869	22.817
30	19.709		306.854	278.908	86.896	57.670	23.085	14.843	14.181	16.884	20.113	28.583
31	18.073		285.938		83.040		22.728	14.171		17.290		34.298
Mean	12.745	18.946	92.153	311.802	202.464	59.179	33.022	18.563	17.160	14.994	31.531	26.776
Flow (MCM)	34.136	45.833	246.823	808.191	542.281	153.391	88.447	49.718	44.478	40.159	81.728	71.718
Maximum	21.609	27.052	324.445	912.795	284.616	78.674	53.972	22.802	21.718	22.051	51.638	41.614
Minimum	6.828	12.859	14.243	123.884	83.040	43.006	22.728	14.171	14.181	11.188	20.113	19.727
Runoff (mm)	2.363	3.172	17.082	55.934	37.531	10.616	6.121	3.441	3.078	2.779	5.656	4.964

Flow (cumecs)

Annual Statistics

Maximum : 912.795 Minimum : 6.828 Mean : 69.945 cumecs
Total : 2205.771 MCM Runoff : 152.659 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2015
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	19.345	10.783	97.589	99.344	52.458	22.805	15.567	10.659	5.288	4.998	65.489
2	-	-	10.022	98.178	105.612	52.209	22.445	16.539	10.740	5.117	5.279	70.745
3	-	17.991	10.137	95.549	111.304	53.036	21.999	18.756	12.473	4.968	6.031	61.323
4	-	17.522	11.949	89.540	115.774	54.748	21.894	18.082	11.911	4.870	6.545	54.118
5	-	17.367	14.505	78.140	119.662	53.870	22.177	17.271	10.814	4.753	8.434	47.643
6	-	16.905	16.624	72.724	124.622	49.839	21.975	16.926	10.430	4.811	14.418	42.964
7	-	16.687	16.938	77.390	130.246	47.132	21.789	16.686	10.367	4.968	17.847	36.839
8	-	15.771	16.427	85.570	146.528	44.529	21.412	17.964	10.165	5.320	17.819	33.031
9	-	15.125	17.882	92.907	152.268	42.875	21.045	19.597	9.790	6.473	19.920	30.910
10	-	14.604	18.647	97.276	147.686	41.381	21.847	19.688	9.384	7.750	34.090	29.106
11	-	14.100	19.060	100.055	141.458	39.207	23.225	19.272	8.935	7.770	38.854	27.178
12	-	13.863	17.360	96.557	141.852	37.732	23.564	18.973	8.683	7.486	39.181	25.480
13	-	12.927	15.816	79.894	145.275	36.467	22.854	18.450	8.839	7.037	43.204	24.250
14	-	11.938	14.235	67.848	146.558	34.909	22.083	17.323	9.104	6.522	43.440	24.314
15	-	11.208	13.679	65.181	151.154	33.491	20.111	16.780	8.767	6.424	43.488	28.803
16	-	10.898	12.722	69.649	168.205	32.480	19.425	16.023	8.153	6.211	39.637	27.487
17	-	10.267	12.949	71.546	181.653	31.657	19.011	15.525	8.036	5.666	40.969	31.144
18	-	9.947	15.360	75.972	192.434	30.623	18.669	15.334	7.885	5.439	41.898	42.572
19	-	10.176	19.088	81.810	197.553	29.755	18.231	14.810	7.793	5.287	45.503	36.042
20	-	12.240	24.328	81.943	198.091	29.131	17.871	14.609	7.759	5.157	52.645	31.595
21	-	14.958	36.838	75.687	195.645	28.530	17.374	14.335	7.565	4.812	52.410	27.824
22	-	17.684	37.570	66.981	179.653	28.102	17.212	13.959	7.170	4.502	47.708	27.874
23	-	17.559	54.444	64.102	147.014	27.439	17.197	13.804	6.882	4.284	42.078	25.662
24	-	15.710	66.450	53.608	107.258	26.469	17.168	13.559	6.630	4.163	36.953	24.494
25	-	14.708	76.585	49.701	81.023	25.890	16.941	13.149	6.467	3.914	32.883	24.928
26	-	13.924	82.889	50.137	69.170	25.025	16.577	12.781	6.413	3.734	30.323	29.385
27	-	12.744	88.302	56.502	63.310	24.619	16.338	12.269	6.178	3.494	28.629	28.774
28	-	11.522	91.803	72.233	60.201	24.399	16.166	11.750	5.873	3.381	28.798	26.453
29	-		93.194	83.755	58.106	23.846	15.773	11.343	5.686	3.243	38.268	22.961
30	-		94.920	91.411	56.226	23.224	15.503	11.083	5.511	3.570	53.580	22.114
31	-		95.517		54.668		15.468	10.748		4.816		21.494
Mean	-	-	36.356	77.981	128.695	36.169	19.553	15.579	8.502	5.201	31.861	33.968
Flow (MCM)	-	-	97.375	202.127	344.697	93.750	52.371	41.727	22.037	13.930	82.584	90.979
Maximum	-	-	95.517	100.055	198.091	54.748	23.564	19.688	12.473	7.770	53.580	70.745
Minimum	-	-	10.022	49.701	54.668	23.224	15.468	10.748	5.511	3.243	4.998	21.494
Runoff (mm)	-	-	6.739	13.989	23.856	6.488	3.625	2.888	1.525	0.964	5.716	6.297

Flow (cumecs)

Annual Statistics

Maximum : - Minimum : - Mean : - cumecs
Total : - Runoff : - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2016
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	20.770	65.319	37.038	37.196	338.247	35.208	23.026	20.637	10.802	5.300	3.059	10.859
2	20.219	63.122	36.065	36.763	342.855	31.853	46.653	18.670	10.521	5.331	2.909	9.732
3	19.961	71.678	34.438	40.952	369.196	30.706	49.619	17.880	10.306	7.061	2.950	8.855
4	20.032	77.950	33.263	57.101	360.587	29.474	48.565	17.516	10.130	13.471	2.754	7.695
5	20.818	79.875	32.611	81.927	334.053	28.870	47.542	17.228	10.067	14.427	2.602	6.984
6	22.018	81.197	32.583	87.505	309.563	28.129	46.043	16.506	9.842	12.262	2.476	6.374
7	23.906	84.769	33.284	88.101	291.589	27.739	44.814	16.404	9.805	11.091	2.633	5.701
8	35.112	84.025	36.354	76.423	275.409	27.431	43.735	16.477	9.805	9.077	2.625	4.661
9	49.421	78.453	42.002	113.055	265.450	26.365	42.530	16.347	9.817	7.765	2.681	4.260
10	55.882	75.073	45.237	124.506	256.612	25.547	42.312	15.931	9.942	6.495	2.794	5.051
11	64.950	77.307	51.640	131.870	241.669	25.120	44.127	15.533	10.268	5.545	3.047	5.109
12	49.936	93.373	58.282	136.795	224.328	24.620	41.774	15.476	10.432	5.239	4.114	4.980
13	35.093	106.175	63.382	148.106	207.090	24.141	40.619	15.476	10.649	5.199	3.886	5.475
14	33.341	129.551	70.838	169.767	183.880	23.375	39.773	15.476	10.483	5.060	5.287	6.624
15	35.175	137.109	68.296	223.534	157.672	22.839	38.752	15.455	10.018	4.798	5.918	7.274
16	31.548	134.760	57.837	275.805	135.618	22.504	37.692	15.300	9.119	6.058	5.291	7.397
17	28.666	134.761	51.040	288.570	118.840	21.944	36.526	15.090	8.745	6.330	5.223	7.262
18	28.784	143.524	48.594	285.408	105.233	21.326	35.364	14.985	8.531	6.534	8.351	7.217
19	32.023	148.502	48.599	282.620	94.749	21.110	34.226	15.160	8.272	6.150	16.980	7.375
20	38.218	131.973	46.462	282.261	86.429	20.888	32.970	14.563	7.993	5.453	17.457	6.808
21	56.797	106.582	43.225	282.620	81.879	20.738	32.696	14.090	7.330	5.150	16.833	6.753
22	78.722	78.501	40.214	284.777	78.891	20.564	33.567	13.967	7.083	4.592	17.853	7.330
23	90.235	64.364	37.913	291.374	74.480	20.430	34.369	13.832	6.994	4.358	19.508	6.885
24	97.287	56.453	36.467	331.407	70.643	20.266	36.282	13.756	6.983	5.959	20.984	6.161
25	101.516	50.432	35.421	346.739	65.793	19.837	48.113	13.593	6.972	7.231	20.339	5.331
26	102.365	46.820	35.334	328.944	63.049	19.250	49.294	13.290	6.972	6.626	18.419	5.209
27	95.484	43.580	36.116	308.427	61.049	19.028	45.675	12.581	7.175	5.295	16.301	5.209
28	86.183	41.145	39.130	305.844	58.636	18.974	40.350	12.271	6.088	4.458	15.029	5.130
29	78.655	38.704	41.155	333.462	56.540	18.952	35.314	11.912	5.636	3.908	13.966	4.620
30	82.177		38.626	338.247	54.668	19.799	33.500	11.294	5.452	3.444	12.802	4.371
31	80.028		36.880		50.474		31.243	11.021		3.211		4.836
Mean	52.107	87.072	43.494	204.004	174.683	23.901	39.905	15.088	8.741	6.544	9.169	6.372
Flow (MCM)	139.564	218.167	116.495	528.777	467.871	61.951	106.882	40.411	22.657	17.528	23.766	17.067
Maximum	102.365	148.502	70.838	346.739	369.196	35.208	49.619	20.637	10.802	14.427	20.984	10.859
Minimum	19.961	38.704	32.583	36.763	50.474	18.952	23.026	11.021	5.452	3.211	2.476	4.260
Runoff (mm)	9.659	15.099	8.063	36.596	32.381	4.288	7.397	2.797	1.568	1.213	1.645	1.181

Flow (cumecs)

Annual Statistics

Maximum : 369.196 Minimum : 2.476 Mean : 55.923 cumecs
Total : 1768.430 MCM Runoff : 122.391 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2017
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.748	3.871	40.676	101.910	275.597	138.716	52.508	28.027	20.206	14.004	37.117	20.734
2	13.183	9.103	49.879	110.880	272.404	134.343	50.634	26.474	19.972	13.759	36.895	21.138
3	17.954	15.394	62.382	121.653	295.211	126.677	48.874	25.593	19.623	13.537	40.020	20.153
4	19.075	17.274	69.595	128.342	333.057	119.746	47.757	25.593	19.299	14.107	48.058	19.600
5	18.001	17.940	67.606	132.997	365.986	117.730	46.748	26.160	19.230	15.180	61.189	20.168
6	17.025	18.718	61.275	129.967	370.470	117.114	44.755	26.083	19.069	16.626	82.214	20.931
7	15.768	23.769	56.826	156.445	369.463	119.479	43.392	27.398	18.840	16.415	87.294	20.308
8	16.420	25.848	53.176	182.586	371.784	121.081	42.326	31.018	18.296	15.742	82.216	20.214
9	16.745	25.381	58.642	198.338	380.201	118.180	41.208	30.793	17.623	15.261	76.373	20.505
10	15.724	20.585	75.417	201.190	443.463	113.929	40.500	28.484	17.779	14.891	63.206	21.177
11	13.035	17.787	88.186	192.356	840.616	106.727	39.250	26.474	17.048	14.628	49.465	21.602
12	13.638	14.564	98.749	191.513	912.795	98.813	39.443	25.490	17.048	14.025	41.051	23.556
13	13.489	11.725	103.477	198.508	912.795	93.690	43.697	24.699	17.558	13.592	38.606	29.153
14	11.665	10.108	99.357	217.709	837.227	85.964	37.261	24.094	16.029	13.682	39.717	30.363
15	12.104	8.856	96.611	230.300	422.524	81.718	35.941	23.668	16.070	13.709	36.827	27.680
16	9.802	7.798	103.114	254.082	351.442	79.414	35.154	23.295	16.393	13.476	30.201	24.890
17	8.974	6.725	112.289	273.638	348.883	75.544	34.661	23.246	15.770	11.934	26.956	22.986
18	9.670	5.344	123.579	283.752	339.051	72.267	35.126	24.398	15.367	10.757	25.124	20.918
19	9.276	4.689	133.878	314.928	313.811	70.359	33.259	26.162	15.072	10.501	24.851	19.910
20	8.890	4.477	137.844	330.835	282.268	67.959	32.211	25.799	15.009	10.223	24.514	19.669
21	7.924	7.778	130.062	343.407	252.123	66.000	31.707	24.548	14.842	9.526	23.206	19.538
22	7.556	11.194	121.493	345.256	232.096	62.222	31.289	23.718	14.510	-	22.085	19.996
23	6.898	14.018	119.695	345.256	221.155	60.438	31.012	23.172	14.181	-	22.720	21.068
24	5.971	18.647	117.869	345.256	205.736	58.687	30.626	22.361	14.952	-	22.695	24.940
25	6.395	25.530	117.221	345.256	191.184	57.150	30.241	24.234	17.095	-	22.377	26.779
26	5.641	32.657	115.455	345.256	183.164	54.101	29.207	30.950	17.312	45.436	22.991	24.807
27	4.479	43.407	114.065	345.256	179.409	49.305	28.775	24.158	16.459	44.521	23.927	22.462
28	4.036	41.159	113.760	345.256	175.969	57.431	28.079	22.605	15.750	42.741	24.010	21.163
29	3.620		112.685	345.256	161.327	58.749	27.628	21.923	14.512	37.456	23.486	19.958
30	3.288		103.152	334.975	147.658	54.746	26.629	21.297	14.079	33.120	22.160	19.269
31	3.409		95.589		144.605		27.364	20.607		33.208		18.795
Mean	10.529	16.584	95.278	246.412	359.144	87.943	37.008	25.243	16.833	-	39.385	22.078
Flow (MCM)	28.201	40.119	255.191	638.700	961.932	227.947	99.124	67.610	43.631	-	102.086	59.135
Maximum	19.075	43.407	137.844	345.256	912.795	138.716	52.508	31.018	20.206	-	87.294	30.363
Minimum	3.288	3.871	40.676	101.910	144.605	49.305	26.629	20.607	14.079	-	22.085	18.795
Runoff (mm)	1.952	2.777	17.662	44.204	66.574	15.776	6.860	4.679	3.020	-	7.065	4.093

Flow (cumecs)

Annual Statistics

Maximum : - Minimum : - Mean : - cumecs
Total : - Runoff : - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2018
Station Name: Ruvu River at Ruvu Morogoro Road Bridge
Time-Series Type: Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	18.552	43.200	37.753	101.962	348.501	80.731	31.123	22.434	-	-	-	24.347
2	18.567	39.913	50.267	110.975	330.752	76.137	30.653	21.899	-	-	-	22.240
3	18.742	37.510	62.810	121.997	314.505	71.841	30.625	21.369	-	-	-	20.705
4	18.671	35.534	70.041	128.735	301.373	69.254	30.985	21.106	-	-	-	19.048
5	23.851	34.153	68.048	135.018	292.567	66.501	32.667	20.773	-	-	-	18.408
6	40.895	32.514	61.700	144.326	284.718	59.126	36.274	20.583	-	-	-	18.340
7	49.395	30.426	57.239	162.327	262.687	61.475	39.374	20.536	-	-	-	18.318
8	37.718	28.992	53.579	186.749	254.109	60.753	37.987	20.300	-	-	-	18.137
9	37.851	27.717	59.060	202.987	251.029	59.753	36.530	19.532	-	-	-	17.801
10	46.427	26.864	75.824	205.867	253.342	56.865	37.836	18.386	-	-	-	17.467
11	53.283	25.963	88.289	196.944	240.916	52.186	38.585	18.453	-	-	-	17.224
12	64.691	24.717	98.801	195.709	223.827	49.935	37.182	18.340	-	-	-	16.741
13	87.906	24.035	103.529	200.832	219.444	47.497	35.243	18.182	-	-	-	16.263
14	104.257	23.295	99.409	222.149	226.507	46.585	33.943	18.115	-	-	-	16.199
15	114.667	22.654	96.663	235.254	241.438	45.490	32.606	17.801	-	-	-	17.160
16	119.940	21.996	103.206	259.247	268.237	44.723	31.290	17.489	-	-	-	18.684
17	122.716	21.899	112.623	278.970	290.952	43.203	30.160	17.445	-	-	15.536	20.067
18	123.062	21.923	123.966	289.166	281.473	42.076	29.153	17.422	-	-	15.557	20.725
19	118.364	22.068	134.277	320.588	268.175	40.961	28.587	17.246	-	-	15.684	20.963
20	111.134	22.117	138.863	336.616	254.125	40.255	27.734	16.872	-	-	15.663	21.525
21	99.935	21.981	130.457	349.281	240.414	39.068	26.655	16.285	-	-	15.304	29.667
22	84.461	20.233	121.877	-	219.979	38.495	26.290	16.069	-	-	14.593	36.042
23	80.921	19.223	120.078	-	196.907	37.092	25.825	15.984	-	-	14.304	47.261
24	90.394	18.273	118.249	-	161.227	36.117	24.979	15.621	-	-	14.655	65.632
25	100.258	17.675	117.600	-	134.931	35.561	24.623	15.706	-	-	15.488	78.482
26	105.666	17.452	115.832	-	124.769	34.893	24.094	15.791	-	-	20.470	85.179
27	106.216	17.275	114.440	-	119.450	34.172	23.668	15.388	-	-	27.445	90.885
28	91.523	19.479	114.135	-	103.327	33.342	23.270	15.051	-	-	31.032	91.808
29	68.099		113.020	-	102.819	32.803	22.900	14.863	-	-	36.222	73.308
30	54.447		103.244	-	93.933	32.099	22.703	14.717	-	-	31.582	56.578
31	47.857		95.641		87.521		22.654	-		-		47.203
Mean	72.918	25.681	95.501	-	225.611	48.966	30.200	-	-	-	-	34.916
Flow (MCM)	195.304	62.129	255.789	-	604.278	126.921	80.888	-	-	-	-	93.520
Maximum	123.062	43.200	138.863	-	348.501	80.731	39.374	-	-	-	-	91.808
Minimum	18.552	17.275	37.753	-	87.521	32.099	22.654	-	-	-	-	16.199
Runoff (mm)	13.517	4.300	17.703	-	41.821	8.784	5.598	-	-	-	-	6.472

Flow (cumecs)

Annual Statistics

Maximum : - Minimum : - Mean : - cumecs
Total : - Runoff : - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1H8A **Year:** 2010
Station Name: Ruvu River at Ruvu Morogoro Road Bridge9**Time-Series Type:** Flow (cumecs)

Latitude : 6:41:41 S Longitude : 38:42:28 E Elevation : 229.0 metres Area : 14449.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	39.815	28.649	22.064	20.527	27.725	147.097	28.355	16.894	12.926	10.494	71.325	103.818
2	36.504	28.276	33.146	24.297	33.384	128.081	27.796	16.762	13.708	7.838	67.738	110.740
3	33.606	26.435	38.296	29.246	43.216	112.959	26.838	16.741	12.267	8.570	65.082	120.879
4	30.219	23.755	33.984	31.430	55.398	101.295	26.057	16.741	11.365	10.801	49.270	131.338
5	28.561	22.687	31.237	34.153	62.831	93.673	25.439	16.712	10.808	10.465	44.174	141.177
6	28.239	22.068	29.714	43.873	71.329	85.480	24.936	16.523	10.211	11.655	42.545	180.108
7	29.099	23.412	28.285	47.562	81.435	76.148	24.429	16.386	9.773	13.061	41.860	224.264
8	27.894	31.652	27.057	48.774	95.782	71.426	24.060	16.242	10.441	18.034	44.967	235.300
9	26.557	31.917	27.030	48.379	110.684	65.310	23.718	16.206	12.164	32.706	51.528	231.332
10	23.673	28.577	27.725	48.609	133.230	61.044	23.743	16.084	13.961	51.382	66.711	222.448
11	23.943	26.796	28.587	49.203	163.857	57.914	24.152	15.820	14.243	80.553	86.670	183.856
12	24.296	28.719	29.788	47.790	182.856	54.366	23.876	15.536	13.798	107.983	109.717	146.861
13	25.491	31.340	31.737	46.715	224.077	51.845	23.122	15.240	12.102	134.698	127.857	125.936
14	24.498	29.303	30.418	48.125	251.320	48.974	22.255	14.912	9.399	188.185	139.739	114.882
15	23.519	26.694	27.951	53.035	258.241	47.268	21.553	14.842	8.810	216.899	167.120	120.430
16	23.943	24.811	25.580	53.573	249.077	46.165	20.812	14.703	8.500	220.814	195.766	124.670
17	25.221	23.413	23.334	52.892	248.233	44.884	20.441	14.593	8.210	232.011	194.319	117.754
18	35.834	21.844	20.873	50.773	263.727	42.204	20.269	14.531	6.981	274.552	152.585	110.384
19	53.170	20.695	19.179	45.645	279.604	39.951	20.512	14.428	7.930	313.337	125.318	111.009
20	62.978	19.763	17.907	37.629	300.039	38.255	20.214	14.093	7.904	297.378	105.339	119.330
21	68.284	19.231	16.698	31.810	326.451	36.944	20.003	14.038	7.720	240.165	91.279	112.734
22	63.475	18.424	15.920	27.713	330.633	35.359	19.840	13.763	7.628	122.045	86.099	106.794
23	60.361	18.553	15.184	27.152	319.314	33.942	19.515	12.188	7.617	198.363	76.489	104.841
24	57.223	19.624	14.731	27.152	300.841	33.599	19.345	13.518	7.594	212.258	67.976	113.124
25	49.691	19.957	14.531	27.021	281.935	32.634	19.716	13.447	7.413	206.425	64.410	128.811
26	44.128	19.215	14.345	25.981	262.787	31.708	19.863	12.776	7.121	220.754	59.282	139.866
27	40.238	18.462	14.093	24.296	240.345	30.847	19.177	12.437	7.076	225.768	53.161	158.357
28	34.736	18.216	14.181	23.868	223.258	30.132	18.341	12.437	7.076	206.919	52.723	169.177
29	31.018		14.656	23.693	214.409	29.288	17.846	12.680	7.166	152.554	59.834	174.684
30	29.099		16.803	24.149	198.114	28.533	17.342	12.721	8.162	124.042	91.096	179.602
31	28.828		22.842		167.055		16.967	12.721		97.071		88.915
Mean	36.585	24.017	23.480	37.502	193.587	57.911	21.953	14.733	9.669	137.025	88.399	143.659
Flow (MCM)	97.990	58.103	62.889	97.206	518.503	150.105	58.798	39.460	25.062	367.008	229.131	384.776
Maximum	68.284	31.917	38.296	53.573	330.633	147.097	28.355	16.894	14.243	313.337	195.766	235.300
Minimum	23.519	18.216	14.093	20.527	27.725	28.533	16.967	12.188	6.981	7.838	41.860	88.915
Runoff (mm)	6.782	4.021	4.352	6.728	35.885	10.389	4.069	2.731	1.735	25.400	15.858	26.630

Flow (cumecs)

Annual Statistics

Maximum : 330.633 Minimum : 6.981 Mean : 65.710 cumecs
Total : 2072.231 MCM Runoff : 143.417 mm

Possible data flags

No data stored "-" Estimated values "e"

Ngerengere River at Konga

Station No: 1HA9A		**Established:** 25/03/1954	
Coordinates:		**Altitude (m.a.m.s.l):** 531	
Lat: -6.8895	**Long: 37.5878**	**Catchment Area (km²):** 21	
Description of the Catchment:			
Catchment area has sedimentation problems due to human activities upstream the gauging station			

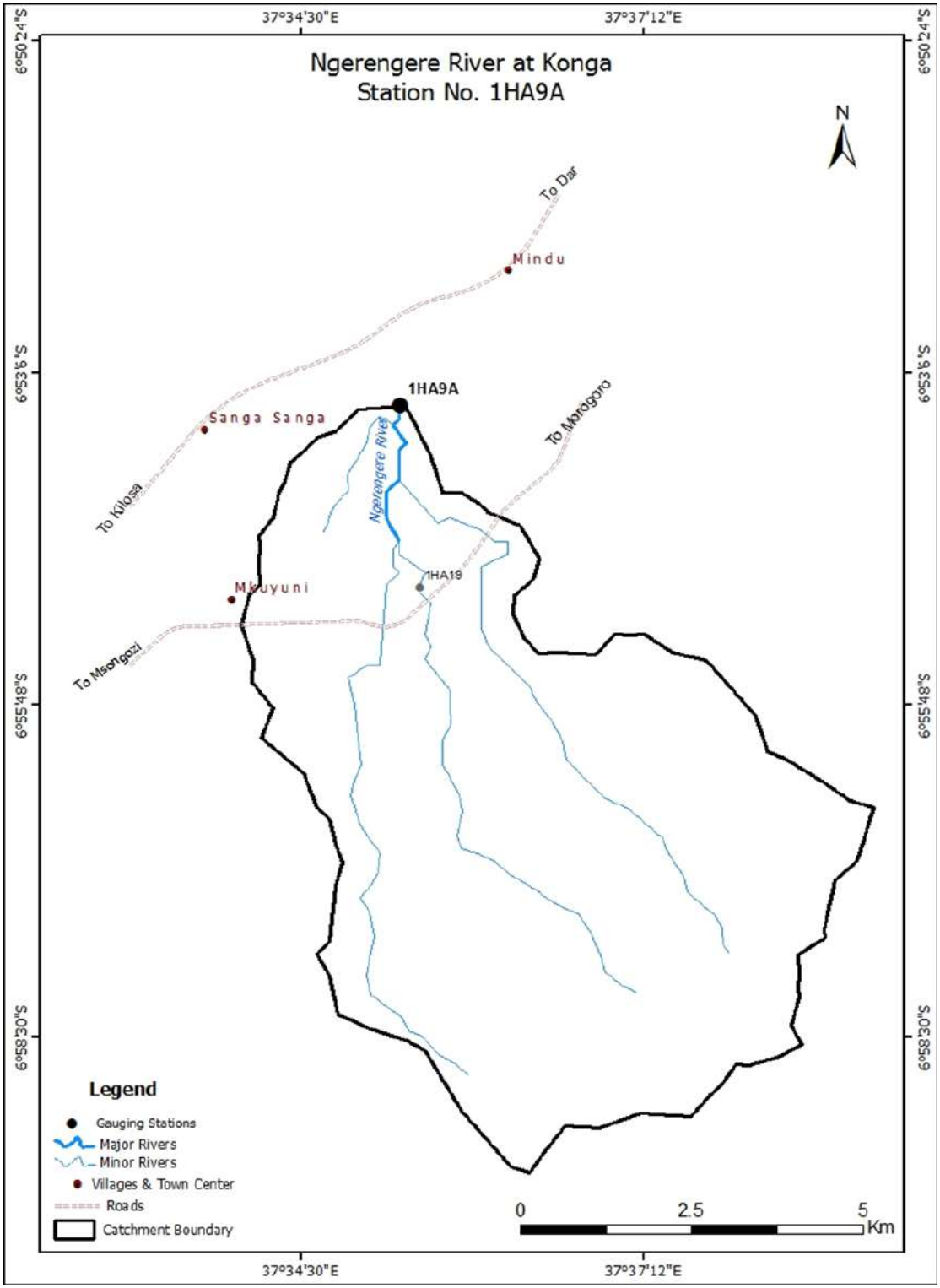
Station Details

1. Staff Gauges	**Range: 0 – 6m**	**A.D.Z.G.R: 0.00mm**	
	Type of Gauges: Standard Vertical	**MSL.Z.G.L: -**	
2. Automatic Recorder	**Thalimedes float type**	**Date installed: 2013**	
3. Benchmark	Bolt embedded in concrete near to gauges 5 – 6m		
BM Assumed Datum: 5.60m	**N.M.M.S.L: -**	**TBM: –**	
4. Control	Open Channel		
5. Access	Accessible throughout the year, the station is located 30kms from Morogoro town to Mzumbe via Mzinga road		

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	1.2.2
Discharge:	01/01/2010 - 31/12/2019	2.2.2

Extremes:	**Max. Recorded**	105.819m³/sec	**On** 12/04/2014	**WL** 3.61m
	Min. Recorded	-	**On** 27/11/1970	**WL** 0.03m

Remarks


Ngerengere River at Konga
Station No. 1HA9A
N
37°34'30"E
37°37'12"E
6°50'24"S
6°53'6"S
6°55'48"S
6°58'30"S
To Dar
Mindu
1HA9A
Sanga Sanga
To Kilosa
To Morogoro
Ngerengere River
1HA19
Mkuyuni
To Msongozi
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Catchment Boundary
0
2.5
5
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.212	0.228	0.121	10.455	49.143	22.556	0.385	0.208	0.127	0.121	0.063	0.031
2	0.233	0.425	0.127	17.032	43.102	21.039	0.363	0.212	0.130	0.121	0.061	0.023
3	0.208	0.110	0.263	21.044	38.824	18.665	0.353	0.242	0.171	0.104	0.048	0.021
4	0.189	0.078	0.165	30.588	34.141	16.745	0.321	0.269	0.174	0.101	0.046	0.021
5	0.242	0.086	0.133	25.683	35.177	15.726	0.311	0.251	0.153	0.101	0.046	0.021
6	0.292	0.121	3.143	32.694	43.353	15.237	0.282	0.273	0.146	0.098	0.048	0.024
7	0.253	0.143	14.631	29.926	39.115	14.342	0.278	0.273	0.127	0.083	0.061	0.079
8	0.428	0.127	3.338	23.337	36.340	13.448	0.278	0.246	0.124	0.083	0.063	0.337
9	0.334	0.124	0.213	22.188	48.602	13.042	0.278	0.237	0.124	0.098	0.061	0.158
10	0.501	0.124	0.178	17.114	37.417	12.758	0.273	0.212	0.124	0.098	0.048	0.124
11	0.444	0.124	0.150	15.930	32.114	12.636	0.251	0.212	0.124	0.085	0.048	0.118
12	0.327	0.137	0.127	14.994	30.503	12.150	0.269	0.233	0.124	0.096	0.101	0.239
13	0.278	0.213	0.124	13.817	27.904	9.266	0.246	0.212	0.124	0.083	0.370	11.420
14	0.251	0.157	0.121	20.591	25.926	0.798	0.242	0.208	0.124	0.080	0.138	3.625
15	0.264	0.127	0.104	16.298	24.733	0.726	0.242	0.204	0.124	0.080	0.100	0.242
16	0.217	0.121	0.101	16.717	23.213	0.665	0.246	0.185	0.124	0.083	0.223	0.174
17	0.204	0.107	0.101	32.038	21.941	0.607	0.269	0.200	0.124	0.098	0.256	0.127
18	0.181	0.124	0.101	27.493	20.875	0.551	0.246	0.181	0.124	0.098	0.161	0.101
19	0.174	0.143	0.101	25.391	18.175	0.505	0.242	0.178	0.124	0.083	0.124	0.081
20	0.153	0.127	0.104	25.268	16.745	0.492	0.242	0.178	0.124	0.080	0.101	0.065
21	0.146	0.127	0.121	22.967	17.236	0.449	0.242	0.178	0.124	0.080	0.083	0.073
22	0.127	0.146	0.124	23.584	24.204	0.408	0.242	0.178	0.124	0.080	0.076	0.131
23	0.124	0.146	0.137	18.870	34.225	0.433	0.237	0.178	0.124	0.080	0.051	0.104
24	0.118	0.127	0.217	19.524	31.743	0.629	0.212	0.178	0.124	0.080	0.046	0.097
25	0.088	0.124	0.178	15.890	25.681	0.629	0.208	0.174	0.124	0.080	0.048	0.179
26	0.098	0.124	0.130	15.442	22.721	0.433	0.208	0.153	0.124	0.080	0.059	0.131
27	0.101	0.124	0.162	24.518	24.289	0.396	0.208	0.150	0.121	0.078	0.048	3.461
28	0.101	0.124	0.485	54.245	38.497	0.358	0.208	0.150	0.104	0.067	0.046	17.853
29	0.098		0.725	54.316	31.414	0.321	0.212	0.150	0.101	0.076	0.045	4.566
30	0.083		0.330	60.465	26.421	0.327	0.233	0.150	0.104	0.065	0.034	0.412
31	0.094		0.309		24.199		0.212	0.146		0.063		0.380
Mean	0.212	0.142	0.850	24.947	30.580	6.878	0.259	0.200	0.127	0.087	0.090	1.433
Flow (MCM)	0.567	0.345	2.278	64.663	81.905	17.828	0.695	0.536	0.329	0.234	0.234	3.838
Maximum	0.501	0.425	14.631	60.465	49.143	22.556	0.385	0.273	0.174	0.121	0.370	17.853
Minimum	0.083	0.078	0.101	10.455	16.745	0.321	0.208	0.146	0.101	0.063	0.034	0.021
Runoff (mm)	27.019	16.413	108.474	3079.206	3900.227	848.936	33.077	25.502	15.690	11.147	11.133	182.754

Flow (cumecs)

Annual Statistics

Maximum: 60.465 Minimum: 0.021 Mean: 5.484 cumecs

Total: 172.940 MCM Runoff: 8235.232 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A **Year:** 2011
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.283	0.033	0.067	25.845	27.780	24.199	0.672	0.358	0.127	0.551	13.083	0.659
2	0.213	0.031	0.074	21.081	29.058	23.254	0.657	0.353	0.127	0.499	13.326	0.468
3	0.174	0.022	0.051	24.858	26.709	22.967	0.607	0.317	0.143	0.438	13.367	0.307
4	0.133	0.015	0.046	23.213	25.186	23.829	0.558	0.308	0.127	0.332	13.367	0.000
5	0.140	0.020	0.055	22.556	24.281	25.885	0.551	0.462	0.124	0.311	13.367	0.234
6	0.142	0.023	0.105	22.885	24.035	23.008	0.544	0.467	0.124	0.278	13.408	0.450
7	0.364	0.031	0.085	24.651	23.706	20.220	0.505	0.538	0.121	4.301	13.814	0.375
8	0.235	0.033	0.173	21.941	26.380	17.888	0.492	0.525	0.099	22.111	14.464	0.353
9	0.212	0.031	0.110	18.829	29.719	17.235	0.449	0.375	0.072	19.402	9.583	3.625
10	0.237	0.023	0.083	15.686	35.714	16.664	0.413	0.317	0.096	21.081	0.549	16.381
11	0.242	0.023	0.078	15.891	35.921	16.297	0.443	0.282	0.101	26.627	0.792	4.268
12	0.237	0.112	0.063	23.257	32.734	15.930	0.443	0.273	0.098	30.462	3.699	0.823
13	0.208	6.567	0.050	27.203	31.039	15.319	0.408	0.246	0.115	35.591	14.182	0.742
14	0.178	0.208	0.089	24.035	29.429	14.708	0.396	0.242	3.351	27.700	19.894	0.718
15	0.150	0.101	0.368	23.994	28.481	14.302	0.363	0.242	14.100	22.599	16.135	0.658
16	0.127	3.364	4.443	21.655	31.246	13.773	0.358	0.242	3.518	17.440	18.012	0.552
17	0.124	17.160	17.115	27.864	31.742	13.651	0.353	0.242	0.262	15.156	14.506	0.455
18	0.121	3.862	7.380	30.175	31.742	13.367	0.321	0.233	0.178	14.261	12.799	0.408
19	0.101	10.573	18.179	43.280	31.618	13.083	0.316	0.185	0.127	13.123	9.338	4.213
20	0.083	20.102	25.228	57.890	30.668	13.327	0.316	0.178	0.104	12.474	0.735	21.785
21	0.078	4.465	25.352	25.644	29.140	14.831	0.316	0.178	0.101	12.353	0.614	30.958
22	0.065	0.324	17.687	44.076	27.903	14.343	0.311	0.178	0.107	12.109	0.545	31.825
23	0.061	0.210	17.970	58.038	28.729	16.379	0.278	0.178	9.905	9.266	0.450	23.957
24	0.048	0.134	15.564	50.310	35.259	14.017	0.255	0.174	56.491	0.806	0.369	14.793
25	0.046	0.121	18.788	41.773	31.536	12.799	0.307	0.153	20.411	0.798	0.353	9.460
26	0.046	0.101	19.238	37.828	32.196	12.434	0.307	0.150	3.682	3.813	0.321	4.357
27	0.046	0.083	21.859	33.686	32.155	12.312	0.246	0.146	0.726	13.448	0.307	17.727
28	0.045	0.078	19.810	31.122	28.811	3.651	0.235	0.127	0.672	13.651	0.280	16.461
29	0.034		20.138	29.182	27.120	0.790	0.376	0.124	0.657	13.448	0.505	19.483
30	0.033		21.039	27.903	25.926	0.726	0.396	0.127	0.607	13.570	0.784	17.603
31	0.033		24.570		25.350		0.363	0.143		13.123		16.460
Mean	0.137	2.423	9.544	29.878	29.397	15.373	0.405	0.260	3.882	12.617	7.765	8.405
Flow (MCM)	0.366	5.862	25.562	77.445	78.738	39.846	1.085	0.696	10.063	33.793	20.126	22.512
Maximum	0.364	20.102	25.352	58.038	35.921	25.885	0.672	0.538	56.491	35.591	19.894	31.825
Minimum	0.033	0.015	0.046	15.686	23.706	0.726	0.235	0.124	0.072	0.278	0.280	0.000
Runoff (mm)	17.450	279.142	1217.243	3687.840	3749.406	1897.448	51.662	33.166	479.207	1609.194	958.403	1072.006

Flow (cumecs)

Annual Statistics

Maximum: 58.038 Minimum: 0.000 Mean: 10.007 cumecs

Total: 315.587 MCM Runoff: 15027.965 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	14.790	0.185	0.127	0.121	0.410	33.234	0.781	0.217	0.242	0.118	0.021	15.609
2	13.692	0.174	0.124	0.104	3.504	25.187	0.718	0.156	0.205	0.104	0.024	9.752
3	12.718	0.156	3.272	3.093	17.739	23.747	0.614	0.000	0.153	0.101	0.144	0.721
4	3.683	0.178	16.139	15.934	33.940	22.597	0.558	0.181	0.127	0.098	7.140	0.464
5	0.734	0.200	3.789	13.896	36.294	19.933	0.551	0.242	0.124	0.083	0.404	0.332
6	0.665	0.193	3.524	3.620	40.110	17.521	0.544	0.237	0.124	0.080	0.210	0.327
7	0.614	0.255	15.933	0.559	36.792	16.664	0.505	0.212	0.127	0.080	0.128	0.391
8	0.599	0.213	3.860	0.444	29.513	16.297	0.518	0.208	0.146	0.088	0.094	0.386
9	0.538	0.181	0.369	0.332	26.132	16.011	0.628	0.294	0.146	0.137	0.254	0.283
10	0.420	0.185	0.317	0.327	23.953	15.930	0.558	9.676	0.130	0.127	10.137	0.229
11	0.396	0.221	0.297	0.380	27.502	15.685	0.505	9.727	0.178	0.121	3.315	0.283
12	0.363	0.154	0.375	0.317	47.356	15.604	0.492	0.557	0.373	0.104	0.258	0.219
13	0.358	0.107	0.317	0.246	55.151	15.278	0.449	0.449	0.231	0.098	0.154	0.365
14	0.353	0.098	0.251	0.208	52.145	14.668	0.408	0.408	0.181	0.083	0.104	0.380
15	0.337	0.083	0.242	0.181	41.691	14.058	0.396	0.391	0.178	0.080	0.111	0.445
16	6.236	0.080	0.237	0.185	36.211	13.732	0.358	0.327	0.174	0.080	0.306	0.271
17	31.467	0.086	0.212	3.271	32.858	13.692	0.321	0.311	0.153	0.080	0.287	0.237
18	16.965	0.115	0.212	14.712	30.503	13.692	0.316	0.273	0.146	0.078	0.273	0.221
19	3.894	0.107	0.246	3.338	28.769	13.651	0.316	0.296	0.127	0.065	0.238	0.264
20	0.782	0.121	0.317	0.213	27.079	13.367	0.311	9.548	0.124	0.061	0.185	0.238
21	0.665	0.124	0.391	0.181	25.227	13.002	0.282	10.109	0.124	0.048	0.174	0.185
22	0.565	0.130	0.402	0.178	23.952	12.555	0.273	0.567	0.124	0.045	0.147	0.174
23	0.538	0.171	0.453	0.174	23.459	13.286	0.246	0.403	0.124	0.036	0.104	0.150
24	0.450	3.191	0.717	0.153	26.475	14.993	0.233	0.327	0.124	0.047	0.081	0.127
25	0.364	14.875	0.361	0.150	43.532	13.327	0.206	0.311	0.124	0.061	0.063	0.121
26	0.317	3.379	0.217	0.146	22.781	13.002	0.323	0.287	0.124	0.065	0.048	0.101
27	0.278	0.213	0.181	0.124	24.488	14.383	0.283	0.317	0.124	0.076	0.046	0.083
28	0.251	0.178	0.171	0.107	25.309	14.098	0.251	0.347	0.121	0.063	4.150	0.078
29	0.264	0.150	0.130	0.179	24.158	9.550	0.278	0.317	0.104	0.047	24.785	0.067
30	0.221		0.124	0.583	25.811	0.806	0.307	0.282	0.104	0.033	25.107	0.081
31	0.229		0.124		40.946		0.273	0.273		0.023		0.101
Mean	3.669	0.879	1.724	2.115	30.122	15.652	0.413	1.524	0.153	0.078	2.616	1.054
Flow (MCM)	9.827	2.204	4.617	5.483	80.680	40.569	1.106	4.082	0.396	0.208	6.782	2.824
Maximum	31.467	14.875	16.139	15.934	55.151	33.234	0.781	10.109	0.373	0.137	25.107	15.609
Minimum	0.221	0.080	0.124	0.104	0.410	0.806	0.206	0.000	0.104	0.023	0.021	0.067
Runoff (mm)	467.967	104.929	219.839	261.078	3841.887	1931.863	52.685	194.403	18.872	9.920	322.940	134.479

Flow (cumecs)

Annual Statistics

Maximum: 55.151 Minimum: 0.000 Mean: 5.000 cumecs

Total: 158.112 MCM Runoff: 7529.163 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2013

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.121	33.200	0.000	11.199	44.777	0.036	0.000	0.000	0.000	3.079	0.000	0.000
2	0.124	22.318	0.000	0.398	27.546	0.036	0.000	0.000	0.000	20.002	0.000	0.000
3	0.124	12.809	0.000	0.000	20.098	0.051	0.000	0.000	0.000	42.571	0.000	0.000
4	0.121	0.056	0.000	0.000	18.381	0.016	0.000	0.000	0.000	33.822	0.000	0.000
5	0.123	0.000	0.000	10.758	25.681	0.003	0.000	0.000	0.000	12.279	0.000	0.000
6	0.244	0.000	0.000	3.387	23.503	0.000	0.000	0.000	0.000	0.441	0.000	0.000
7	0.209	0.000	0.000	0.155	16.503	0.000	0.000	0.000	0.000	0.204	0.000	0.000
8	0.153	0.000	0.032	0.104	14.139	0.000	0.000	0.000	0.000	0.046	0.000	0.000
9	0.121	0.000	0.000	0.104	13.286	0.000	0.000	0.000	0.000	0.019	0.000	0.000
10	0.086	0.000	0.000	0.124	9.419	0.000	0.000	0.000	0.000	0.085	0.000	0.000
11	0.078	0.000	0.000	0.150	0.742	0.000	0.000	0.000	0.000	0.022	0.000	0.000
12	0.067	0.000	0.000	0.174	0.644	0.000	0.000	0.000	0.000	0.042	0.000	0.000
13	0.058	0.000	0.000	0.178	0.463	0.000	0.000	0.000	0.000	0.004	0.000	0.000
14	0.000	0.000	0.000	0.164	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.081	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.018	0.174	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.090	0.000	0.003	0.127	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.096	0.000	0.000	0.101	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.048	0.000	0.001	0.081	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.013	0.018	0.019	0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.096	0.002	0.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	3.505	0.000	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	18.301	0.001	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	18.342	2.988	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	3.545	16.059	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.202	3.656	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	15.966	0.056	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	29.688	0.013	0.274	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.032		9.414	3.385	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.012		18.995	24.517	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	6.619		18.952		0.061		0.000	0.000		0.000		0.000
Mean	0.267	2.451	4.421	2.590	7.003	0.005	0.000	0.000	0.000	3.633	0.000	0.000
Flow (MCM)	0.716	5.930	11.842	6.713	18.756	0.012	0.000	0.000	0.000	9.730	0.000	0.000
Maximum	6.619	33.200	29.688	24.517	44.777	0.051	0.000	0.000	0.000	42.571	0.000	0.000
Minimum	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Runoff (mm)	34.114	282.367	563.889	319.651	893.152	0.586	0.000	0.000	0.000	463.336	0.000	0.000

Flow (cumecs)

Annual Statistics

Maximum: 44.777 Minimum: 0.000 Mean: 1.697 cumecs

Total: 53.532 MCM Runoff: 2549.136 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.181	0.178	0.178	30.628	18.869	17.031	13.976	12.961	3.556	13.002	17.562	14.627
2	0.237	0.174	0.184	23.298	18.706	16.949	13.773	12.718	13.245	12.758	16.827	14.383
3	0.212	0.150	0.561	20.424	21.614	16.908	13.936	12.434	13.083	12.718	16.256	13.976
4	0.208	0.127	0.494	20.097	26.750	16.623	13.732	12.393	12.799	15.044	15.726	13.367
5	0.208	0.124	0.371	20.998	28.027	16.337	13.692	12.515	13.042	27.169	15.685	12.758
6	0.212	3.394	0.567	20.793	27.986	16.256	13.692	13.245	13.651	17.976	16.052	12.434
7	0.237	17.484	3.878	20.424	29.848	16.011	13.692	13.326	16.012	14.830	16.745	12.393
8	0.237	14.303	15.768	23.625	44.562	15.930	13.692	13.083	18.256	14.342	16.297	12.393
9	0.212	3.499	14.464	28.852	41.150	15.685	13.692	13.002	16.745	14.058	15.726	12.353
10	0.204	0.499	17.741	28.688	33.728	15.767	13.692	12.758	15.400	14.342	15.604	12.109
11	0.181	0.408	34.770	42.012	30.049	16.460	13.692	12.677	14.627	16.501	15.319	12.109
12	0.181	0.363	26.713	-	28.028	16.215	13.692	12.434	13.773	17.807	15.237	12.312
13	0.204	0.353	30.216	49.076	32.197	15.441	13.692	12.353	13.408	16.419	16.419	12.109
14	0.208	0.327	24.078	36.630	30.379	15.278	13.651	12.069	13.896	15.319	16.582	12.069
15	0.204	0.394	26.792	25.436	27.080	15.034	13.408	6.422	17.113	14.424	16.337	12.028
16	0.181	0.675	20.836	28.647	23.788	14.952	13.367	12.353	17.847	14.261	16.174	3.619
17	0.207	0.726	18.706	22.805	22.187	14.668	13.326	12.636	17.480	15.278	15.400	0.848
18	0.399	0.726	18.256	18.706	20.916	14.342	13.083	12.393	16.419	14.464	14.993	0.798
19	0.358	0.733	17.929	15.971	19.933	14.017	13.042	12.069	15.930	14.017	14.627	0.781
20	0.283	0.750	17.562	15.405	19.360	14.996	13.042	3.619	15.319	13.732	14.098	0.733
21	0.310	0.573	16.868	25.148	19.442	21.779	13.042	0.856	14.708	13.692	14.017	0.726
22	0.750	0.499	15.808	26.463	18.992	18.339	13.083	0.848	14.383	13.651	13.976	0.726
23	0.734	0.449	15.604	31.413	18.910	17.235	13.286	0.798	14.302	13.408	13.732	0.726
24	0.658	0.408	15.441	25.228	18.869	16.909	13.083	0.781	14.058	13.326	13.611	0.726
25	0.552	0.396	15.930	24.775	18.665	17.766	13.123	0.726	13.976	13.123	13.123	0.726
26	0.433	0.353	16.297	24.240	18.828	16.093	13.570	0.672	13.692	13.245	13.002	0.718
27	0.261	0.283	17.277	26.216	18.624	14.790	13.367	0.657	13.408	13.286	12.758	0.672
28	0.212	0.238	20.835	20.590	18.542	14.342	13.083	0.614	13.367	15.890	12.718	0.696
29	0.208		20.929	19.524	18.297	14.058	13.042	0.614	13.326	14.668	12.718	9.290
30	0.204		37.920	19.237	18.174	14.017	13.002	0.657	13.083	12.921	13.002	12.759
31	0.181		27.950		17.602		12.799	0.665		13.206		15.360
Mean	0.292	1.735	16.481	-	24.197	16.008	13.421	7.914	14.330	14.802	15.011	7.785
Flow (MCM)	0.783	4.198	44.144	-	64.809	41.492	35.946	21.198	37.144	39.647	38.908	20.850
Maximum	0.750	17.484	37.920	-	44.562	21.779	13.976	13.326	18.256	27.169	17.562	15.360
Minimum	0.181	0.124	0.178	-	17.602	14.017	12.799	0.614	3.556	12.718	12.718	0.672
Runoff (mm)	37.297	199.891	2102.072	-	3086.127	1975.793	1711.716	1009.418	1768.747	1887.945	1852.765	992.865

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2015

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	16.052	0.499	6.568	17.930	23.377	20.834	13.692	0.368	0.368	0.316	0.414	13.367
2	13.489	0.492	0.704	19.647	23.254	20.547	13.651	0.449	0.449	0.316	0.408	12.758
3	12.961	0.449	0.650	21.121	25.728	20.219	13.408	0.408	0.408	0.316	0.449	9.549
4	12.353	0.408	0.572	20.301	41.778	19.892	13.326	0.402	0.402	0.316	0.512	0.750
5	3.561	0.402	0.645	19.565	47.806	19.524	13.083	0.402	0.402	0.316	4.592	0.672
6	0.726	0.414	6.600	18.951	44.392	18.910	13.652	0.402	0.402	0.311	19.813	0.657
7	0.665	0.486	0.697	18.624	38.741	18.256	16.868	0.402	0.402	0.282	16.176	0.607
8	0.614	0.480	0.607	18.583	36.419	17.684	14.709	0.396	0.396	0.278	18.420	0.545
9	0.606	0.375	0.551	18.583	31.371	17.562	13.733	0.363	0.363	0.278	17.521	0.455
10	4.774	0.358	0.499	18.542	27.615	17.276	13.408	0.358	0.358	0.278	17.194	0.408
11	21.248	0.358	0.455	18.706	25.433	16.949	13.326	0.363	0.363	0.278	16.541	0.426
12	15.769	0.363	0.443	20.507	24.692	16.664	13.042	0.396	0.396	0.273	15.278	0.546
13	13.976	0.396	0.408	16.747	22.023	16.582	12.758	0.402	0.402	0.246	13.854	0.387
14	13.042	0.402	0.408	13.896	21.818	16.297	12.677	0.402	0.402	0.242	13.408	4.710
15	12.150	0.402	0.475	17.522	21.736	16.011	12.434	0.402	0.402	0.242	14.835	23.466
16	3.610	0.408	4.134	17.847	20.875	15.930	12.393	0.402	0.402	0.242	22.846	19.239
17	0.790	0.449	16.828	17.072	19.974	15.848	9.476	0.402	0.402	0.242	19.279	17.154
18	0.733	0.519	16.012	17.153	19.605	16.786	0.568	0.402	0.402	0.242	17.602	13.612
19	0.726	0.680	15.442	18.379	19.524	16.745	0.622	0.402	0.402	0.233	16.460	3.587
20	0.726	0.614	20.343	18.501	19.237	15.522	0.815	0.402	0.402	0.178	14.505	0.614
21	0.718	0.551	20.918	18.133	18.951	15.278	0.814	0.396	0.396	0.125	13.448	0.558
22	0.672	0.505	27.618	18.869	18.992	14.993	11.988	0.363	0.363	0.091	13.002	0.544
23	0.657	0.492	23.551	19.483	19.605	14.708	12.069	0.358	0.358	0.121	12.353	0.499
24	0.614	0.455	38.290	21.824	20.424	14.668	12.069	0.358	0.358	0.153	3.561	0.449
25	0.606	0.443	32.157	34.186	20.547	14.627	12.109	0.353	0.353	0.218	3.650	0.402
26	0.599	0.408	30.009	28.730	20.588	14.383	12.353	0.321	0.321	0.373	13.937	0.358
27	0.558	0.402	36.877	25.268	20.916	14.302	12.393	0.321	0.321	0.616	17.562	0.312
28	0.551	0.468	25.850	21.982	21.408	14.058	12.799	0.347	0.347	0.614	17.194	0.238
29	0.544		18.380	21.203	21.244	13.976	15.197	0.321	0.321	0.599	15.645	0.157
30	0.505		16.460	21.285	21.162	13.732	11.530	0.237	0.316	0.551	14.139	0.121
31	0.499		15.116		20.916		0.000	0.000		0.493		0.118
Mean	5.003	0.453	12.202	19.971	25.166	16.625	10.999	0.365	0.379	0.303	12.820	4.105
Flow (MCM)	13.400	1.095	32.682	51.766	67.405	43.093	29.459	0.976	0.983	0.810	33.229	10.996
Maximum	21.248	0.680	38.290	34.186	47.806	20.834	16.868	0.449	0.449	0.616	22.846	23.466
Minimum	0.499	0.358	0.408	13.896	18.951	13.732	0.000	0.000	0.316	0.091	0.408	0.118
Runoff (mm)	638.099	52.156	1556.298	2465.025	3209.756	2052.053	1402.815	46.496	46.821	38.587	1582.346	523.601

Flow (cumecs)

Annual Statistics

Maximum: 47.806 Minimum: 0.000 Mean: 9.033 cumecs

Total: 284.852 MCM Runoff: 13564.378 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.391	4.185	0.402	0.516	33.147	15.604	14.627	0.505	0.358	3.756	0.160	0.178
2	0.645	19.324	3.319	6.576	32.692	15.319	14.058	0.492	0.358	0.673	0.229	0.178
3	0.464	4.639	14.221	0.689	32.072	15.034	13.692	0.455	0.353	0.545	0.347	0.181
4	3.717	0.558	14.627	0.565	31.287	14.952	13.408	0.443	0.321	0.414	10.232	0.204
5	17.564	0.505	14.058	3.958	29.883	14.708	13.326	0.408	0.327	0.358	9.460	0.204
6	16.827	0.492	14.465	16.951	29.058	14.830	13.042	0.396	0.391	0.317	0.742	0.181
7	15.563	0.449	18.665	16.378	28.151	15.685	12.758	3.981	0.402	0.278	0.644	0.178
8	14.098	3.324	18.338	16.786	27.368	15.075	12.677	17.812	0.402	0.246	0.452	0.181
9	13.083	13.856	17.521	16.623	26.214	14.668	12.434	3.904	0.391	0.326	0.293	0.213
10	12.434	3.951	16.338	16.256	25.515	14.302	12.353	0.316	0.327	6.709	0.242	0.269
11	9.289	0.699	15.237	15.971	24.693	13.773	12.069	0.321	3.782	0.621	0.212	0.282
12	0.667	12.758	13.814	17.684	21.695	13.692	3.610	0.353	17.036	0.340	0.201	0.311
13	0.468	13.245	13.042	19.769	21.121	13.611	0.798	0.347	3.777	0.246	0.157	0.327
14	0.397	12.718	12.434	22.858	20.588	13.083	0.781	0.287	0.282	0.212	0.150	0.380
15	0.354	14.147	12.069	42.196	20.219	12.758	0.733	0.282	0.278	0.204	0.153	0.322
16	0.533	24.001	3.610	37.291	19.851	12.718	0.726	0.311	0.273	0.178	0.182	0.278
17	0.643	5.508	0.790	42.521	19.278	12.677	0.718	0.316	0.246	0.150	0.273	0.242
18	0.607	0.680	0.726	38.575	18.869	12.515	0.665	0.321	0.242	0.175	4.478	0.212
19	0.565	0.665	0.658	36.999	18.338	12.961	0.614	0.353	0.246	0.520	19.977	0.204
20	0.599	0.657	0.565	32.156	18.215	14.019	0.606	0.358	0.273	0.505	16.909	0.181
21	0.599	0.607	0.544	27.286	17.888	19.361	0.652	0.358	0.278	0.443	14.831	0.178
22	0.551	0.558	3.966	27.089	17.317	17.031	9.492	0.358	0.278	0.358	3.648	0.133
23	0.499	0.551	17.605	44.231	16.949	15.767	12.353	3.895	0.278	0.283	0.420	0.000
24	0.449	0.544	17.643	38.412	16.664	15.645	12.069	18.791	0.278	0.238	0.353	0.000
25	0.408	0.505	16.704	29.349	16.623	15.808	3.610	20.219	0.282	0.185	0.287	0.000
26	0.402	0.492	16.256	26.379	16.541	16.786	0.782	20.301	0.311	0.178	0.264	0.000
27	0.402	0.455	15.523	28.069	16.052	16.745	0.672	22.272	0.411	0.178	0.186	0.000
28	0.396	0.443	13.936	32.777	15.971	15.522	0.607	31.124	10.443	0.174	0.153	0.000
29	0.363	0.408	3.814	39.779	15.930	15.278	0.558	28.985	14.830	0.153	0.153	0.000
30	0.363		0.540	34.928	15.685	14.993	0.551	5.323	13.408	0.150	0.174	0.000
31	0.391		0.492		15.645		0.544	0.358		0.150		0.000
Mean	3.669	4.859	10.062	24.321	21.920	14.831	6.309	5.934	2.362	0.621	2.865	0.162
Flow (MCM)	9.826	12.176	26.950	63.039	58.710	38.441	16.898	15.893	6.122	1.664	7.427	0.434
Maximum	17.564	24.001	18.665	44.231	33.147	19.361	14.627	31.124	17.036	6.709	19.977	0.380
Minimum	0.354	0.408	0.402	0.516	15.645	12.515	0.544	0.282	0.242	0.150	0.150	0.000
Runoff (mm)	467.926	579.801	1283.332	3001.850	2795.735	1830.525	804.686	756.813	291.541	79.253	353.675	20.646

Flow (cumecs)

Annual Statistics

Maximum: 44.231 Minimum: 0.000 Mean: 8.160 cumecs

Total: 258.026 MCM Runoff: 12286.930 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12.590	13.733	14.302	25.927	34.347	31.081	24.446	22.515	21.859	19.074	14.220	12.474
2	15.808	13.367	14.302	24.281	34.678	32.321	24.199	22.515	21.859	17.725	15.197	12.636
3	14.098	13.164	14.017	23.624	35.673	34.596	24.117	22.556	21.859	16.704	15.971	12.474
4	14.505	13.570	13.732	23.295	41.151	32.817	23.870	22.802	21.818	16.297	18.256	12.718
5	14.342	13.286	13.651	22.644	51.436	32.610	23.829	22.802	21.572	15.971	19.033	13.002
6	14.017	12.515	13.326	35.511	57.032	31.948	23.788	22.556	21.572	15.563	19.769	12.839
7	13.732	12.393	13.246	35.797	50.684	30.585	23.542	22.515	21.777	14.749	18.011	3.666
8	13.976	12.353	15.564	33.852	46.181	30.089	23.542	22.515	21.531	14.383	16.419	9.185
9	15.523	12.109	14.220	39.904	41.896	29.759	23.747	22.474	21.244	14.302	15.685	3.991
10	14.790	9.176	13.448	35.757	43.105	29.470	23.542	22.228	21.203	14.058	15.278	14.912
11	14.342	0.281	13.408	42.812	57.118	29.388	23.459	22.187	21.203	13.976	14.749	14.098
12	14.058	0.208	13.733	37.498	57.954	29.223	23.213	22.228	21.080	13.732	14.830	13.083
13	14.017	0.204	14.220	31.701	45.560	29.677	23.131	22.638	20.301	13.692	15.523	12.393
14	13.976	0.181	14.017	34.639	40.650	29.677	22.885	23.706	19.974	13.692	13.936	3.643
15	13.732	0.178	14.874	42.729	38.948	29.140	22.843	24.076	20.138	13.692	13.367	0.734
16	13.651	0.223	21.000	42.603	37.620	28.769	22.843	23.788	19.892	13.651	13.042	0.687
17	13.326	0.511	18.543	43.684	39.072	28.480	22.843	23.213	19.565	13.367	12.758	0.750
18	12.758	0.387	21.162	40.651	37.579	28.233	22.802	22.885	19.319	13.042	12.677	0.628
19	12.434	0.333	21.162	36.174	36.501	26.750	22.556	22.843	19.605	12.596	12.393	0.599
20	12.393	5.947	21.900	48.601	34.596	25.062	22.515	24.531	20.056	3.609	9.306	0.558
21	12.393	32.337	21.695	47.306	33.768	24.774	22.515	33.481	19.605	0.806	0.806	0.544
22	9.446	18.474	23.542	51.101	34.306	25.104	22.515	27.617	19.237	12.028	0.781	0.505
23	0.389	15.278	23.419	54.737	39.114	28.563	22.474	24.117	19.115	12.393	0.726	0.492
24	0.311	17.684	27.741	38.622	37.537	29.264	22.228	23.213	20.097	13.490	0.665	0.455
25	0.273	15.645	20.386	39.695	35.755	28.110	22.187	22.844	20.506	18.216	0.614	0.443
26	0.229	14.708	17.684	41.813	35.093	25.227	22.187	22.515	20.465	17.684	0.606	0.408
27	0.335	14.342	16.908	40.401	37.621	24.569	22.187	22.474	19.728	16.623	0.614	0.386
28	0.629	14.098	18.953	38.989	34.761	24.774	22.187	23.706	18.174	15.726	3.508	0.279
29	12.921		27.289	38.823	33.106	24.774	22.187	22.638	17.888	15.237	12.961	0.319
30	14.424		33.769	35.962	32.196	24.528	22.228	21.941	17.888	14.464	12.758	7.713
31	14.302		29.018		31.907		22.474	21.859		14.302		0.459
Mean	11.088	9.882	18.524	37.638	40.224	28.645	23.003	23.354	20.338	14.027	11.149	5.389
Flow (MCM)	29.698	23.906	49.613	97.557	107.736	74.249	61.610	62.552	52.715	37.571	28.897	14.435
Maximum	15.808	32.337	33.769	54.737	57.954	34.596	24.446	33.481	21.859	19.074	19.769	14.912
Minimum	0.229	0.178	13.246	22.644	31.907	24.528	22.187	21.859	17.888	0.806	0.606	0.279
Runoff (mm)	1414.172	1138.362	2362.543	4645.572	5130.295	3535.666	2933.820	2978.657	2510.237	1789.075	1376.063	687.389

Flow (cumecs)

Annual Statistics

Maximum: 57.954 Minimum: 0.178 Mean: 20.272 cumecs

Total: 639.287 MCM Runoff: 30442.246 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A **Year:** 2010
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.464	0.544	19.858	16.582	22.187	20.097	12.353	0.499	0.327	0.237	0.607	5.866
2	0.673	0.551	14.549	17.521	22.187	18.951	12.272	0.499	0.391	0.212	0.493	0.506
3	0.659	0.551	3.627	17.113	22.146	17.929	13.164	0.492	0.408	0.204	0.380	0.386
4	9.525	0.544	0.582	20.384	21.859	17.072	13.042	0.455	0.443	0.185	0.391	0.414
5	13.976	0.499	0.345	20.015	21.572	16.908	12.718	0.461	0.488	0.213	0.358	0.525
6	13.692	0.449	0.278	21.162	21.490	16.664	12.434	0.531	0.760	0.269	0.317	0.499
7	13.286	0.432	3.446	22.149	21.244	16.582	12.555	0.518	9.168	0.278	0.282	0.516
8	14.017	0.552	17.935	32.201	21.203	16.297	13.489	0.586	0.688	0.278	0.278	6.584
9	13.042	0.426	23.545	40.278	21.572	15.971	13.367	0.551	0.659	0.282	0.278	0.750
10	6.949	0.408	15.282	34.307	23.665	15.685	13.083	0.505	6.600	0.311	0.273	0.665
11	15.075	0.443	20.042	32.366	23.254	15.563	13.164	0.499	0.682	0.316	0.242	0.607
12	14.465	0.455	43.574	44.396	22.844	15.197	13.895	0.492	0.500	0.311	0.212	0.558
13	3.628	0.499	27.668	35.758	22.515	15.767	13.976	0.455	0.364	0.282	0.208	0.551
14	12.961	0.544	21.859	35.548	22.228	15.360	13.692	0.449	0.283	0.273	0.204	0.558
15	13.326	0.551	23.378	39.446	22.187	15.034	13.408	0.449	0.242	0.246	0.178	0.599
16	13.083	0.558	27.121	38.450	22.146	14.952	13.326	0.443	0.212	0.242	0.150	0.614
17	13.083	0.599	21.289	36.833	21.859	14.668	13.042	0.408	0.208	0.246	0.133	0.657
18	13.245	0.614	14.101	34.678	21.531	14.342	12.758	0.402	0.204	0.260	0.251	0.672
19	12.799	0.657	18.099	35.962	21.203	14.058	12.677	0.402	0.181	0.182	9.298	0.710
20	12.677	0.665	27.701	36.501	20.916	13.936	12.434	0.408	0.239	0.125	3.530	0.672
21	12.393	0.665	21.206	33.355	20.875	13.408	12.353	0.443	0.675	0.263	0.533	0.665
22	12.069	0.672	17.807	37.538	21.285	13.123	12.069	0.449	0.615	12.176	0.499	0.680
23	3.602	0.710	16.582	34.803	23.665	13.286	3.610	0.443	0.499	4.005	0.499	0.773
24	0.719	0.651	17.035	32.899	23.501	13.042	0.790	0.408	0.403	5.025	0.492	0.798
25	0.559	0.512	26.217	30.626	22.844	12.758	0.733	0.402	0.327	25.522	0.455	0.848
26	0.444	0.461	27.039	28.935	22.228	12.718	0.718	0.402	0.316	24.036	0.455	0.856
27	0.365	0.432	22.434	24.981	21.859	12.677	0.658	0.391	0.316	17.890	0.480	0.848
28	0.567	3.782	20.465	23.501	21.531	12.434	0.565	0.322	0.311	16.542	0.414	0.782
29	0.599		18.665	22.597	21.203	12.393	0.544	0.287	0.278	13.896	5.848	0.672
30	0.551		17.398	22.228	20.875	12.393	0.505	0.311	0.246	9.460	28.785	0.600
31	0.511		16.908		20.547		0.499	0.316		0.735		0.525
Mean	7.839	0.658	18.259	30.104	21.942	14.975	9.480	0.441	0.901	4.339	1.884	0.999
Flow (MCM)	20.996	1.592	48.905	78.029	58.771	38.816	25.392	1.182	2.336	11.621	4.883	2.675
Maximum	15.075	3.782	43.574	44.396	23.665	20.097	13.976	0.586	9.168	25.522	28.785	6.584
Minimum	0.365	0.408	0.278	16.582	20.547	12.393	0.499	0.287	0.181	0.125	0.133	0.386
Runoff (mm)	999.797	75.811	2328.831	3715.662	2798.599	1848.392	1209.148	56.268	111.231	553.382	232.546	127.358

Flow (cumecs)

Annual Statistics

Maximum: 44.396 Minimum: 0.125 Mean: 9.318 cumecs

Total: 293.868 MCM Runoff: 13993.705 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HA9A
Station Name: Ngerengere River at Konga
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 6:54:25 S Longitude: 37:35:56 E Elevation: 531.0 metres Area: 21.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.593	0.150	0.179	0.174	42.398	32.072	15.645	9.298	0.634	9.703	38.740	37.289
2	0.586	0.124	0.386	0.198	34.186	31.618	15.604	0.720	0.790	15.046	38.076	36.625
3	0.462	0.104	0.540	4.236	25.764	30.379	15.319	0.513	0.733	33.039	38.949	36.087
4	0.402	0.101	0.335	20.634	31.454	28.769	15.034	0.408	0.726	50.814	45.017	35.714
5	0.358	0.098	0.335	17.400	32.655	27.162	14.993	0.369	0.718	58.626	39.779	35.341
6	0.321	0.083	10.232	12.921	47.438	25.844	14.952	0.408	0.680	41.405	41.357	35.217
7	0.311	0.080	3.473	6.503	59.210	24.857	14.708	0.480	0.742	34.430	47.431	37.206
8	0.273	0.078	0.331	12.596	47.392	24.199	14.627	0.449	9.217	34.018	50.267	35.093
9	0.213	0.065	0.194	12.677	41.274	23.870	14.383	0.408	3.602	44.269	60.171	35.757
10	0.178	0.065	0.171	12.434	38.207	23.747	14.342	0.402	0.749	49.809	61.301	42.563
11	0.150	0.078	0.130	12.393	54.988	23.213	14.342	0.396	0.781	64.364	54.274	37.082
12	0.127	0.080	0.121	12.393	58.496	22.720	14.302	0.369	0.781	-	46.681	35.382
13	0.121	0.080	0.104	12.677	53.522	21.613	14.017	0.396	0.733	53.653	45.057	34.761
14	0.131	0.080	0.098	14.383	45.724	20.875	13.692	0.402	0.726	49.974	44.682	34.347
15	5.450	0.080	0.083	14.708	43.185	20.260	13.408	0.402	0.726	46.098	44.308	33.768
16	27.503	0.080	0.078	15.727	40.318	19.851	13.367	0.402	0.726	44.724	43.767	33.727
17	15.290	0.083	0.065	20.016	46.057	19.278	13.367	0.396	0.726	47.181	43.684	35.175
18	3.532	0.098	0.063	18.215	48.556	18.910	13.326	0.398	0.718	45.349	43.434	34.140
19	0.519	0.104	0.061	16.909	44.100	18.542	13.042	0.608	0.680	43.227	41.688	34.720
20	0.449	0.150	0.047	15.726	40.941	18.011	12.758	0.558	0.718	43.601	39.944	33.809
21	0.408	0.340	0.034	14.993	39.613	17.888	12.758	0.505	0.718	40.691	39.612	33.106
22	0.402	0.244	0.033	14.342	46.891	17.602	13.002	0.492	0.672	40.941	39.737	32.775
23	0.391	0.137	0.033	13.733	41.232	17.276	13.002	0.455	0.665	41.356	43.310	32.775
24	0.322	3.963	0.033	13.367	43.310	16.990	12.758	3.475	0.665	43.270	43.268	33.023
25	0.278	20.719	0.031	13.002	43.684	16.949	12.718	14.628	0.672	51.686	41.938	32.982
26	0.242	11.007	0.023	13.124	46.181	16.868	12.677	13.936	0.718	44.933	40.235	32.486
27	0.208	0.663	0.053	16.909	42.230	16.337	12.434	10.269	0.718	42.728	39.653	32.486
28	0.181	0.360	0.317	17.521	36.875	15.971	12.393	0.000	0.665	42.062	39.737	33.106
29	0.178		0.252	19.977	34.554	15.685	12.393	0.000	0.614	41.564	43.060	33.933
30	0.178		0.182	29.932	33.644	15.645	12.393	0.000	0.660	40.442	41.107	33.975
31	0.174		0.156		32.527		12.353	0.000		39.653		16.780
Mean	1.933	1.404	0.586	13.994	42.471	21.433	13.681	1.985	1.089	-	44.009	34.233
Flow (MCM)	5.178	3.395	1.570	36.272	113.755	55.555	36.643	5.317	2.823	-	114.071	91.690
Maximum	27.503	20.719	10.232	29.932	59.210	32.072	15.645	14.628	9.217	-	61.301	42.563
Minimum	0.121	0.065	0.023	0.174	25.764	15.645	12.353	0.000	0.614	-	38.076	16.780
Runoff (mm)	246.566	161.685	74.765	1727.260	5416.903	2645.489	1744.896	253.206	134.408	-	5431.947	4366.197

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Little Ruaha River at Ndiuka

Station No: 1KA2A		**Established:** 01/12/1964	
Coordinates:		**Altitude (m.a.m.s.l):** 1,540	
Lat: -7.7879	**Long: 35.7194**	**Catchment Area (km²):** 2,907	
Description of the Catchment:			
Mainly woodland, grassland Upstream and vegetation			

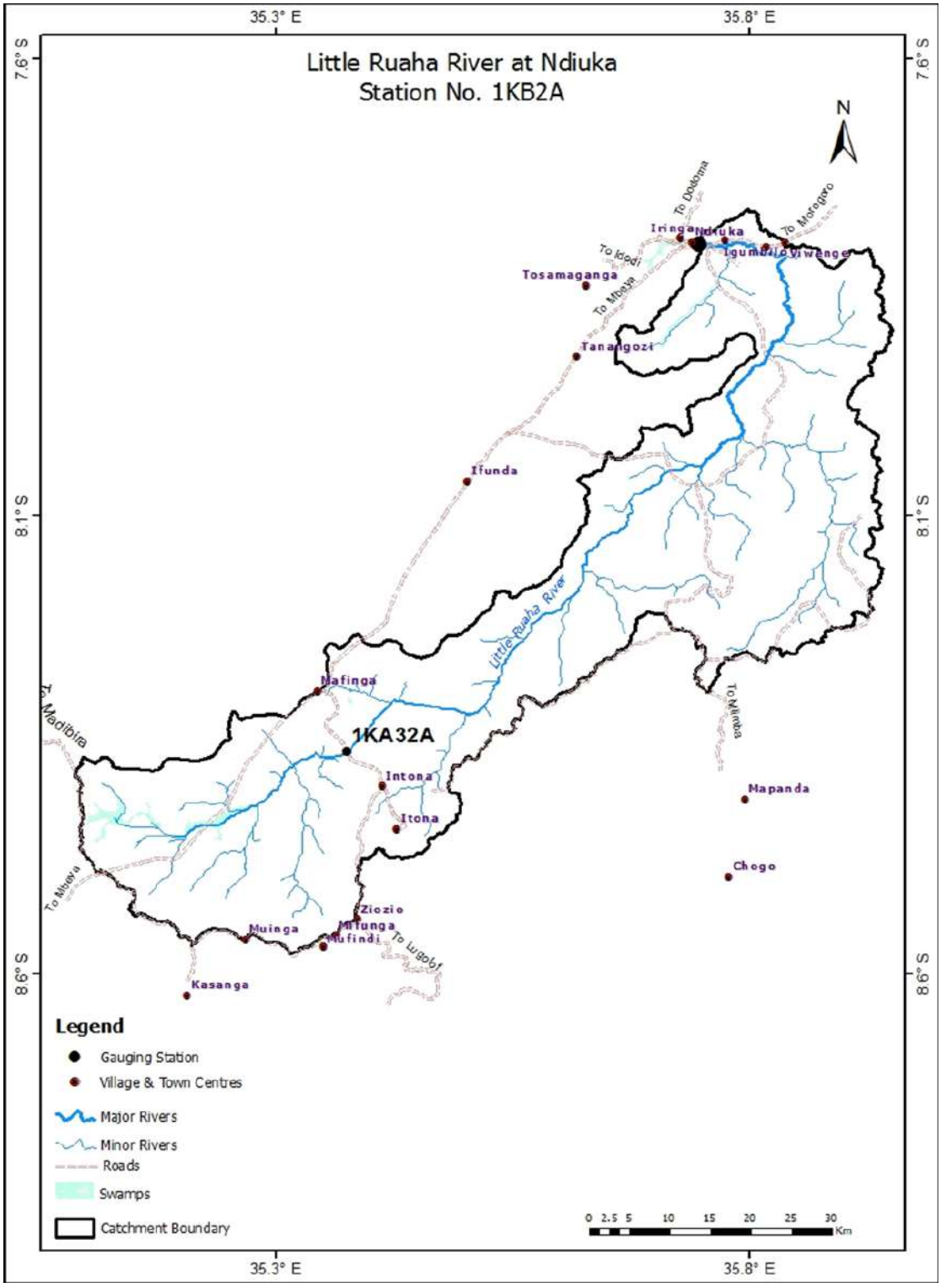
Station Details

1. Staff Gauges	**Range: 0 – 4m**	**A.D.Z.G.R: 0.00mm**	
	Type of Gauges: Standard Vertical	**MSL.Z.G.L: -**	
2. Automatic Recorder	**Thalimedes float type**	**Date installed: 2013**	
3. Benchmark	Bolt embedded into concrete block		
BM Assumed Datum: 5.921m	**N.M.M.S.L:** 6.319m	**TBM:** –	
4. Control	Permanent consists of rock outcrops in the riverbed with stable banks covered by active vegetation		
5. Access	Accessible throughout the year, 5kms from Iringa town near to Iringa Urban Water Supply and Sanitation intake on Iringa/Mbeya road		

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	3.2.2
Discharge:	01/01/2010 - 31/12/2019	2.2.2

Extremes:	**Max. Recorded**	72.728m³/sec	**On** 17/03/1995	**WL** 4.72m
	Min. Recorded	2.16m³/sec	**On** 27/10/1997	**WL** 0.2m

Remarks


Little Ruaha River at Ndiuka
Station No. 1KB2A
35.3° E
35.8° E
7.6° S
8.1° S
8.6° S
N
To Dodoma
To Morogoro
To Idodi
To Mbeya
Iringa
Ndiuka
Igumbilo
Viwange
Tosamaganga
Tanangozi
Ifunda
Little Ruaha River
Mafinga
1KA32A
To Mafinga
To Mlandaa
Intona
Itona
Mapanda
Chogo
To Mbeya
Ziozio
Mufunga
Muinga
Mufindi
To Lugoba
Kasanga
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Swamps
Catchment Boundary
0 2.5 5 10 15 20 25 30
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	28.822	47.337	44.417	46.043	36.414	22.440	15.090	12.123	9.381	6.655	3.779	3.121
2	30.860	45.285	45.769	44.813	36.493	21.669	15.038	12.057	9.373	6.710	3.665	3.116
3	32.327	41.138	46.838	43.224	36.334	20.821	15.406	12.043	9.267	6.710	3.609	3.116
4	33.139	39.154	51.589	42.358	36.233	21.107	15.415	12.039	9.259	6.703	3.464	3.211
5	34.685	41.651	55.587	42.134	35.895	20.522	15.151	12.137	9.259	6.490	3.354	3.781
6	36.335	42.880	55.739	41.592	34.774	20.264	14.890	12.260	9.252	6.197	3.310	3.545
7	37.168	44.040	55.470	41.076	33.821	20.121	14.872	12.279	9.131	5.977	3.249	6.403
8	40.776	44.243	55.247	40.398	32.531	19.752	14.872	12.100	8.853	6.044	3.204	8.744
9	42.868	44.309	53.871	40.212	31.140	19.459	14.777	11.910	8.637	5.839	3.204	9.536
10	44.660	44.354	38.764	39.122	30.493	19.347	14.336	11.806	8.210	5.602	3.160	8.838
11	47.266	42.797	45.286	38.603	29.926	19.055	14.189	11.695	8.129	5.854	3.160	8.939
12	45.946	43.093	54.820	37.893	29.478	18.831	14.181	12.612	8.071	6.125	3.204	8.615
13	45.427	41.753	55.799	36.166	29.139	18.478	14.112	12.485	8.071	5.511	3.160	7.300
14	45.439	41.370	55.611	35.094	28.959	18.256	14.035	11.334	8.056	5.322	3.121	6.347
15	47.004	40.468	55.023	35.603	28.621	17.998	13.847	11.161	7.853	5.315	3.249	6.086
16	47.846	38.868	54.641	35.626	28.148	17.448	13.762	11.029	7.839	5.108	3.504	5.484
17	46.059	39.550	54.711	34.975	27.543	17.093	13.643	10.628	7.839	4.985	4.330	5.149
18	43.856	39.041	55.132	34.774	26.918	16.931	13.635	10.582	7.825	4.963	4.498	5.019
19	41.054	38.316	54.234	34.118	25.798	16.858	13.626	10.512	7.616	4.870	4.152	5.009
20	39.840	37.606	48.773	34.040	24.559	16.858	13.508	10.260	7.502	4.757	4.110	4.541
21	39.066	36.980	52.804	35.098	24.317	16.858	13.499	10.240	7.438	4.621	3.908	4.480
22	35.573	38.117	52.050	35.333	23.826	16.840	13.431	10.136	7.381	4.615	4.060	4.910
23	34.952	40.562	51.560	35.221	23.617	16.516	13.364	10.001	7.367	4.565	5.578	7.214
24	36.799	43.738	50.874	34.796	23.229	16.400	13.355	9.987	7.106	4.501	5.699	7.297
25	35.750	45.427	50.019	32.806	23.091	16.025	13.229	9.817	6.938	4.419	5.284	7.488
26	40.070	45.186	49.905	32.127	23.368	15.998	13.095	9.748	6.931	4.367	4.952	7.495
27	46.765	44.357	51.161	31.800	23.319	15.980	12.953	9.748	6.924	4.488	4.572	8.606
28	49.315	44.165	52.465	33.322	23.219	15.653	12.703	9.687	6.772	4.608	4.273	10.157
29	47.467		50.864	33.731	23.081	15.432	12.561	9.607	6.710	4.461	3.933	9.030
30	48.001		48.018	35.031	23.071	15.292	12.421	9.509	6.655	4.182	3.397	8.239
31	47.919		47.003		23.041		12.181	9.442		3.941		7.667
Mean	41.066	41.992	51.421	37.238	28.400	18.143	13.909	10.999	7.988	5.307	3.871	6.403
Flow (MCM)	109.992	101.588	137.726	96.520	76.066	47.028	37.254	29.460	20.706	14.213	10.035	17.149
Maximum	49.315	47.337	55.799	46.043	36.493	22.440	15.415	12.612	9.381	6.710	5.699	10.157
Minimum	28.822	36.980	38.764	31.800	23.041	15.292	12.181	9.442	6.655	3.941	3.121	3.116
Runoff (mm)	37.837	34.946	47.377	33.203	26.167	16.177	12.815	10.134	7.123	4.889	3.452	5.899

Flow (cumecs)

Annual Statistics

Maximum: 55.799 Minimum: 3.116 Mean: 22.228 cumecs

Total: 700.985 MCM Runoff: 241.137 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A **Year:** 2011
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.856	11.639	29.548	34.700	25.665	14.405	9.694	7.166	6.385	3.950	2.059	2.177
2	6.382	12.306	27.296	31.833	25.287	14.035	9.633	6.944	6.470	3.914	2.068	2.089
3	5.991	13.391	26.187	31.562	24.761	13.711	9.618	6.849	6.185	3.543	2.076	2.192
4	5.543	13.598	27.076	30.354	25.808	13.448	9.503	7.031	6.165	3.401	2.085	2.253
5	5.137	13.316	28.148	31.714	25.644	13.491	9.320	7.043	6.098	3.094	2.094	2.055
6	5.914	14.951	27.938	31.107	24.600	13.491	9.146	7.043	5.169	3.121	2.102	2.062
7	6.994	15.321	29.044	30.237	23.431	13.364	9.011	6.987	4.876	3.116	2.101	2.158
8	8.148	18.767	30.429	31.616	21.623	13.221	8.778	6.931	4.801	3.110	2.315	3.292
9	8.841	21.432	29.505	32.236	22.362	12.902	8.667	6.931	4.584	3.034	2.364	11.065
10	11.620	25.683	27.013	32.074	21.834	12.694	8.667	6.918	4.602	3.303	2.192	19.495
11	12.879	27.792	25.363	33.101	21.756	12.487	8.763	6.724	4.516	4.273	2.118	14.596
12	11.988	30.402	23.438	33.553	22.205	12.117	8.667	6.655	4.424	4.309	2.113	13.509
13	13.476	35.167	22.844	34.586	21.138	11.896	8.644	6.538	4.418	4.140	2.108	11.970
14	14.396	34.340	21.268	34.981	19.922	11.587	8.437	6.327	4.673	4.279	2.040	12.486
15	14.027	30.425	20.541	31.912	19.365	11.514	8.422	6.201	4.364	4.394	2.043	19.212
16	13.869	25.398	20.241	29.256	18.841	11.506	8.422	6.098	4.321	4.224	2.426	19.666
17	17.345	22.197	23.529	29.743	18.330	11.393	8.422	6.061	4.321	4.134	2.897	19.478
18	19.469	21.007	27.915	29.581	17.961	11.321	8.422	6.029	4.310	4.062	2.635	19.789
19	19.440	31.489	25.928	30.616	17.796	11.241	8.415	5.960	4.287	3.849	2.916	19.960
20	19.077	43.861	29.503	33.654	17.357	11.017	8.312	5.913	4.177	2.872	2.647	20.017
21	20.769	40.830	33.150	35.413	16.867	10.949	8.305	5.858	3.900	2.611	2.543	22.206
22	20.021	29.996	34.674	37.333	16.579	10.640	8.305	5.745	3.763	2.477	2.272	28.405
23	19.786	26.459	35.805	36.674	16.355	10.613	8.261	5.686	3.663	2.348	2.045	27.763
24	17.771	27.752	34.763	37.538	16.517	10.502	8.357	5.634	3.669	2.277	2.171	25.167
25	16.904	26.259	34.031	37.027	16.813	10.502	7.660	5.552	3.847	2.232	2.340	24.237
26	16.409	26.902	32.412	35.457	16.292	10.610	7.659	5.428	4.087	2.182	3.052	24.187
27	16.759	29.985	30.903	34.252	15.945	10.588	7.664	5.277	4.168	2.044	2.101	23.968
28	17.687	30.897	30.321	31.466	15.715	10.369	7.570	5.212	4.074	2.028	2.150	20.508
29	15.842		30.994	30.216	15.503	10.119	7.508	5.212	3.944	2.033	2.202	18.008
30	13.937		34.832	26.735	15.231	9.871	7.481	5.110	3.940	2.042	2.192	17.722
31	10.851		37.711		15.047		7.276	4.992		2.051		17.594
Mean	13.359	25.056	28.785	32.684	19.760	11.854	8.484	6.195	4.607	3.176	2.282	15.138
Flow (MCM)	35.781	60.615	77.099	84.718	52.924	30.725	22.724	16.594	11.941	8.506	5.916	40.546
Maximum	20.769	43.861	37.711	37.538	25.808	14.405	9.694	7.166	6.470	4.394	3.052	28.405
Minimum	5.137	11.639	20.241	26.735	15.047	9.871	7.276	4.992	3.663	2.028	2.040	2.055
Runoff (mm)	12.308	20.851	26.522	29.143	18.206	10.569	7.817	5.708	4.108	2.926	2.035	13.948

Flow (cumecs)

Annual Statistics

Maximum: 43.861 Minimum: 2.028 Mean: 14.282 cumecs

Total: 450.388 MCM Runoff: 154.932 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 7:47:16 S | Longitude: 35:43: 9 E | Elevation: 1540.0 metres | Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	17.585	16.931	29.521	36.799	22.925	14.198	9.518	6.820	4.820	2.632	5.177	2.308
2	17.567	16.714	28.653	39.597	22.430	14.181	9.503	6.710	4.858	2.522	5.377	2.217
3	17.157	16.552	27.752	40.645	21.990	14.112	9.442	6.607	4.814	2.507	5.516	1.934
4	16.429	16.301	25.522	41.570	21.970	14.035	9.313	6.600	4.615	2.363	5.380	1.881
5	14.769	16.283	25.312	38.835	21.970	13.830	9.146	6.572	4.375	2.353	5.309	1.876
6	16.185	16.364	23.342	38.535	22.363	13.440	9.139	6.192	4.266	2.353	5.054	1.699
7	19.554	17.751	22.597	39.968	22.873	13.095	9.078	6.165	4.134	2.353	3.801	1.548
8	18.303	18.441	22.973	38.382	22.372	12.694	8.913	6.111	4.080	2.348	3.004	1.508
9	17.731	18.795	24.348	44.635	21.737	12.429	8.883	5.951	4.033	2.318	2.524	1.446
10	16.932	19.497	25.706	34.931	20.963	12.240	8.704	5.792	4.021	2.308	2.263	1.504
11	16.034	19.837	28.140	34.506	20.216	12.141	8.437	5.739	3.850	2.197	2.042	2.465
12	14.598	21.437	29.649	33.984	19.941	11.733	8.422	5.732	3.750	2.114	1.964	3.682
13	12.947	22.421	30.217	33.178	20.608	11.571	8.422	5.693	3.663	1.996	1.870	5.150
14	12.852	23.419	31.759	31.823	20.723	11.450	8.305	5.726	3.658	2.000	1.778	6.783
15	14.035	24.468	34.530	30.708	20.369	11.377	8.180	5.542	3.640	2.148	1.688	9.081
16	14.089	24.649	36.337	30.504	19.299	11.073	8.071	5.529	3.406	2.304	1.598	8.787
17	18.145	23.979	41.318	30.633	18.907	10.882	7.955	5.529	3.469	2.463	1.510	8.453
18	20.713	21.505	47.408	33.817	18.385	10.874	7.839	5.529	3.474	2.625	1.424	9.519
19	21.465	20.633	47.883	35.110	17.961	10.874	7.688	5.529	3.474	2.790	1.339	9.697
20	22.696	17.190	49.298	34.339	17.814	10.874	7.767	5.523	3.463	2.957	1.275	9.810
21	22.511	18.511	46.034	34.017	16.976	10.882	7.666	5.432	3.305	3.128	1.348	8.609
22	19.504	25.390	42.871	33.411	16.364	10.985	7.552	5.373	3.282	3.302	1.173	11.562
23	15.718	28.047	40.261	30.774	15.777	10.810	7.438	5.309	3.039	3.478	1.989	10.215
24	16.185	32.196	38.627	29.543	15.309	10.621	7.325	5.129	2.941	3.657	3.710	12.398
25	15.750	28.603	35.481	28.065	15.082	10.502	7.254	5.117	2.936	3.838	5.041	11.936
26	15.714	28.785	34.411	26.600	14.863	10.495	7.057	5.104	2.855	4.022	3.933	10.748
27	15.714	30.763	40.135	24.521	14.664	10.487	7.050	4.927	2.774	4.209	3.200	9.534
28	15.732	32.477	39.272	26.177	14.551	10.307	7.205	4.914	2.764	4.397	2.727	9.888
29	15.998	29.980	39.088	23.880	14.846	9.995	7.261	4.914	2.684	4.589	2.333	10.876
30	16.436		41.183	23.394	14.794	9.740	7.155	4.914	2.611	4.782	2.277	9.208
31	16.976		39.265		14.525		6.987	4.908		4.978		9.154
Mean	16.969	22.342	34.480	33.429	18.825	11.731	8.151	5.665	3.635	2.969	2.921	6.628
Flow (MCM)	45.449	55.980	92.352	86.649	50.421	30.406	21.831	15.174	9.422	7.951	7.571	17.753
Maximum	22.696	32.477	49.298	44.635	22.925	14.198	9.518	6.820	4.858	4.978	5.516	12.398
Minimum	12.852	16.283	22.597	23.394	14.525	9.740	6.987	4.908	2.611	1.996	1.173	1.446
Runoff (mm)	15.634	19.257	31.769	29.807	17.345	10.460	7.510	5.220	3.241	2.735	2.604	6.107

Flow (cumecs)

Annual Statistics

Maximum: 49.298 | Minimum: 1.173 | Mean: 13.979 | cumecs

Total: 442.043 MCM | Runoff: 152.061 mm

Possible data flags

No data stored "-" | Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2013

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.713	20.544	20.897	39.376	25.359	15.143	10.236	7.509	5.523	2.860	1.477	3.420
2	7.657	19.670	21.330	39.411	24.609	14.881	10.119	7.666	5.419	2.849	1.340	3.577
3	9.515	17.120	20.886	39.330	24.277	14.855	10.003	7.731	5.181	2.774	1.250	3.681
4	14.068	17.410	20.303	39.679	24.117	14.474	9.933	7.839	5.060	3.003	1.235	4.080
5	13.094	16.870	18.889	42.560	23.946	14.232	9.810	7.940	4.870	3.509	1.198	3.815
6	11.805	16.233	17.847	43.283	23.866	13.788	9.740	7.846	4.757	3.652	0.750	3.704
7	12.185	16.133	16.701	43.247	23.846	13.567	9.633	7.832	4.621	3.658	1.417	3.739
8	12.525	16.916	36.331	42.884	23.627	13.347	9.610	7.731	4.615	3.532	1.565	3.663
9	16.736	16.257	38.387	48.734	24.207	12.911	9.373	7.666	4.615	3.418	1.355	3.526
10	12.702	15.569	42.602	48.155	23.106	12.752	9.093	7.545	4.615	3.249	1.181	3.440
11	13.217	15.519	44.537	43.575	21.475	12.570	9.018	7.445	4.596	3.160	1.164	3.655
12	15.439	15.172	43.297	42.501	21.349	12.495	8.958	7.431	4.333	3.072	1.099	5.171
13	14.169	14.814	43.724	39.771	21.339	12.429	8.905	7.268	4.224	2.936	0.983	4.934
14	16.311	17.266	43.200	39.157	21.194	12.421	8.838	7.106	4.134	2.722	0.971	5.881
15	13.522	20.455	41.019	38.649	20.877	10.570	8.719	7.029	4.080	2.512	0.916	5.636
16	12.129	19.649	40.247	37.266	20.359	11.848	8.652	6.820	4.021	2.277	0.901	6.893
17	10.863	18.818	37.884	35.851	20.045	11.896	8.541	6.613	3.850	2.123	0.859	5.488
18	9.996	16.916	35.386	34.495	19.545	11.587	8.430	6.545	3.756	2.108	0.850	5.042
19	11.209	16.387	40.185	33.321	18.450	11.385	8.422	6.429	3.698	2.040	0.807	4.685
20	14.213	16.834	37.379	33.885	18.200	11.265	8.364	6.388	3.566	2.030	0.709	6.351
21	16.475	17.073	40.229	32.587	18.432	11.241	8.297	6.490	3.480	1.960	0.673	6.664
22	14.812	16.837	46.576	31.053	18.311	11.009	8.188	6.490	3.474	1.895	0.624	5.787
23	15.078	17.264	50.289	29.981	17.887	10.882	8.078	6.477	3.429	1.915	0.617	5.155
24	16.943	16.745	47.983	28.758	17.576	10.898	7.962	6.286	3.384	1.820	0.571	6.282
25	14.550	16.091	45.524	28.705	17.230	11.233	7.940	6.273	3.384	1.661	0.592	7.410
26	14.047	18.804	44.561	28.779	16.922	11.249	7.846	6.219	3.372	1.652	0.613	8.806
27	14.712	19.448	42.421	28.379	16.714	11.065	7.832	6.158	3.210	1.593	0.716	11.255
28	15.965	16.818	39.631	27.771	16.427	10.874	7.731	6.051	3.077	1.648	0.494	15.713
29	16.139		38.903	26.743	15.918	10.747	7.666	5.851	2.985	1.589	0.504	12.199
30	18.267		38.684	26.397	15.459	10.440	7.609	5.686	2.936	1.584	0.593	11.450
31	19.789		38.580		15.362		7.595	5.536		1.548		12.726
Mean	13.737	17.273	36.594	36.476	20.324	12.268	8.747	6.900	4.075	2.463	0.934	6.253
Flow (MCM)	36.793	41.786	98.013	94.546	54.435	31.800	23.427	18.481	10.563	6.597	2.421	16.747
Maximum	19.789	20.544	50.289	48.734	25.359	15.143	10.236	7.940	5.523	3.658	1.565	15.713
Minimum	7.657	14.814	16.701	26.397	15.362	10.440	7.595	5.536	2.936	1.548	0.494	3.420
Runoff (mm)	12.657	14.374	33.716	32.524	18.725	10.939	8.059	6.357	3.634	2.269	0.833	5.761

Flow (cumecs)

Annual Statistics

Maximum: 50.289 Minimum: 0.494 Mean: 13.837 cumecs

Total: 436.361 MCM Runoff: 150.107 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	16.144	21.573	22.579	53.740	43.117	23.229	16.154	11.134	7.388	4.418	3.646	3.880
2	13.988	20.727	20.543	54.746	41.969	22.676	15.982	11.121	7.445	4.146	3.480	4.056
3	12.236	22.756	19.488	60.505	41.392	22.215	15.811	10.945	7.488	4.128	3.233	6.622
4	13.150	23.282	19.860	56.784	40.923	21.883	15.640	10.747	7.438	4.134	3.350	8.366
5	12.454	29.643	22.125	53.917	40.549	21.436	15.470	10.605	7.502	4.218	3.116	8.217
6	12.855	29.344	23.805	51.114	40.351	21.107	15.301	10.385	7.609	4.272	2.770	7.318
7	15.746	26.054	24.413	51.769	40.188	20.665	15.131	10.291	7.731	4.321	2.517	7.002
8	17.562	32.544	22.806	55.829	40.281	20.331	14.963	10.011	7.940	4.321	2.734	6.253
9	17.546	26.548	24.338	54.416	40.351	19.846	14.795	9.995	7.897	4.321	2.335	5.139
10	16.235	23.192	25.955	51.286	40.142	19.733	14.627	9.987	7.832	4.321	2.338	4.673
11	18.828	21.574	24.460	50.376	39.550	19.374	14.461	9.810	7.738	4.273	2.272	4.873
12	17.314	20.427	28.011	49.594	38.846	19.205	14.294	9.641	7.846	3.606	2.080	4.105
13	20.544	21.766	33.477	48.915	37.299	18.990	14.128	9.740	7.984	3.474	1.915	3.833
14	21.169	21.552	30.498	48.214	35.292	18.682	13.963	9.740	6.884	3.389	1.594	3.526
15	21.098	20.571	33.193	47.540	32.323	18.109	13.799	9.633	6.552	3.372	1.801	3.389
16	29.932	19.020	34.041	47.198	30.720	17.740	13.635	9.625	6.422	3.193	1.722	3.339
17	30.097	17.552	36.008	46.286	30.536	17.512	13.471	9.625	6.178	2.876	1.526	3.294
18	26.947	17.248	34.552	45.789	30.848	17.275	13.308	9.618	6.111	2.855	1.526	3.249
19	22.002	17.021	31.954	45.874	29.915	17.021	13.146	9.526	5.951	2.949	1.712	3.250
20	22.235	17.303	36.006	46.713	29.086	16.994	12.984	9.602	5.831	4.722	1.698	3.964
21	21.062	16.625	44.792	51.297	28.621	16.786	12.823	9.366	5.627	7.246	1.694	5.242
22	19.051	18.244	46.529	53.663	28.064	16.525	12.663	9.026	5.335	5.449	1.784	6.330
23	19.756	22.574	42.099	53.828	27.823	16.615	12.503	8.615	5.225	5.009	4.060	8.741
24	21.270	21.895	36.193	54.679	26.919	17.375	12.343	8.415	5.219	4.726	3.601	9.998
25	29.272	19.840	33.680	53.082	26.608	17.430	12.184	8.254	5.219	4.714	3.171	12.907
26	31.380	18.665	31.196	52.389	25.992	17.275	12.026	8.188	5.161	4.701	3.050	14.987
27	29.894	20.620	37.265	52.254	25.654	16.849	11.869	8.180	4.977	4.528	2.658	14.609
28	30.322	22.522	45.488	48.522	25.599	16.346	11.712	8.078	4.958	4.419	2.967	24.681
29	30.280		38.116	46.663	24.630	16.597	11.555	8.049	4.901	3.705	3.430	24.989
30	29.483		53.300	44.898	24.107	16.296	11.400	7.681	4.708	3.658	3.030	20.548
31	25.970		54.476		23.776		11.245	7.495		3.658		17.618
Mean	21.478	21.810	32.621	51.063	33.273	18.737	13.658	9.456	6.503	4.165	2.560	8.355
Flow (MCM)	57.527	52.763	87.372	132.354	89.119	48.567	36.581	25.326	16.857	11.156	6.636	22.377
Maximum	31.380	32.544	54.476	60.505	43.117	23.229	16.154	11.134	7.984	7.246	4.060	24.989
Minimum	12.236	16.625	19.488	44.898	23.776	16.296	11.245	7.495	4.708	2.855	1.526	3.249
Runoff (mm)	19.789	18.150	30.056	45.530	30.657	16.707	12.584	8.712	5.799	3.838	2.283	7.698

Flow (cumecs)

Annual Statistics

Maximum: 60.505 Minimum: 1.526 Mean: 18.640 cumecs

Total: 587.829 MCM Runoff: 202.212 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A **Year:** 2015
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	16.437	25.594	32.959	32.399	33.003	14.612	9.810	7.488	5.222	2.727	3.105	4.334
2	14.969	26.633	33.498	32.040	32.428	14.699	9.748	7.381	5.168	2.642	2.324	4.140
3	14.069	28.562	32.230	29.683	27.920	14.258	9.687	7.275	5.110	2.642	2.272	4.159
4	15.018	30.493	34.776	27.876	25.594	13.660	9.625	7.212	5.021	2.690	2.272	3.162
5	14.969	26.173	36.291	30.761	25.350	13.465	9.625	7.155	5.015	2.758	2.232	2.743
6	14.942	23.407	34.462	32.827	27.626	12.928	9.625	7.099	5.002	2.648	2.182	2.519
7	15.160	22.442	34.584	34.118	27.542	12.761	9.564	7.043	4.820	2.517	2.006	2.303
8	15.100	23.757	36.300	34.408	26.516	12.678	9.503	7.043	4.708	2.443	1.914	2.118
9	14.198	26.043	39.852	32.542	26.269	12.446	9.442	7.043	4.431	2.473	1.773	2.564
10	14.098	29.406	39.516	31.443	25.522	12.363	9.373	7.043	4.315	2.504	1.820	4.248
11	20.812	30.121	39.759	30.354	25.145	12.223	9.199	6.980	4.230	2.535	2.475	6.816
12	29.807	25.613	38.891	29.883	24.339	12.018	8.965	6.820	4.218	2.566	4.297	6.999
13	23.593	24.836	39.999	29.938	23.299	11.668	8.831	6.717	4.128	2.598	5.219	7.247
14	21.738	21.285	38.136	27.158	22.451	11.571	8.667	6.710	4.039	2.629	5.143	4.971
15	24.237	21.835	34.889	27.490	20.600	11.450	8.593	6.710	4.027	2.661	4.726	9.490
16	23.947	29.321	33.299	27.569	20.102	11.337	8.430	6.707	3.944	2.692	4.390	10.081
17	21.819	29.745	33.879	28.495	19.733	11.345	8.422	6.635	3.932	2.724	1.930	11.419
18	18.251	30.289	36.470	27.376	19.000	10.898	8.422	6.536	3.838	2.756	2.291	11.442
19	16.391	30.070	36.413	26.218	18.339	10.755	8.364	6.437	3.652	2.788	2.065	11.273
20	16.310	33.050	35.126	24.884	17.212	10.747	8.305	6.339	3.395	2.820	2.497	12.359
21	26.746	36.141	35.437	24.267	17.003	10.739	8.305	6.241	3.288	2.852	5.129	15.366
22	21.173	39.795	36.007	23.260	16.858	10.628	8.305	6.144	3.160	2.884	8.181	17.585
23	20.145	33.883	36.346	24.832	16.642	10.558	8.297	6.047	3.039	2.917	7.825	18.661
24	30.329	31.410	35.067	25.563	16.364	10.495	8.195	5.951	3.028	2.949	8.104	16.071
25	35.682	32.981	36.302	27.188	16.248	10.487	8.166	5.855	2.985	2.982	7.479	14.553
26	26.798	32.936	36.280	27.510	15.741	10.299	7.861	5.759	2.803	3.014	5.893	14.045
27	24.378	32.859	35.243	27.147	15.582	10.011	7.832	5.664	2.407	3.047	5.425	13.813
28	23.290	32.619	34.718	26.908	15.424	9.987	7.717	5.569	2.690	3.080	5.161	13.771
29	25.729		33.201	27.690	15.160	9.879	7.509	5.475	2.700	3.113	4.746	13.686
30	28.791		30.983	31.383	15.073	9.871	7.445	5.382	2.839	3.146	4.182	12.128
31	27.992		32.466		14.863		7.488	5.288		3.179		11.075
Mean	21.191	28.975	35.593	28.774	21.385	11.695	8.688	6.508	3.905	2.773	3.969	9.198
Flow (MCM)	56.758	70.096	95.332	74.581	57.279	30.312	23.269	17.431	10.122	7.428	10.287	24.636
Maximum	35.682	39.795	39.999	34.408	33.003	14.699	9.810	7.488	5.222	3.179	8.181	18.661
Minimum	14.069	21.285	30.983	23.260	14.863	9.871	7.445	5.288	2.407	2.443	1.773	2.118
Runoff (mm)	19.525	24.113	32.794	25.656	19.704	10.427	8.005	5.996	3.482	2.555	3.539	8.475

Flow (cumecs)

Annual Statistics

Maximum: 39.999 Minimum: 1.773 Mean: 15.221 cumecs

Total: 480.013 MCM Runoff: 165.123 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	11.550	27.510	29.747	48.068	42.051	20.198	14.189	9.810	6.938	3.991	1.735	1.203
2	12.118	28.034	27.949	54.911	40.880	19.752	13.975	9.633	6.827	3.985	1.801	0.951
3	12.695	25.963	27.625	54.759	38.822	19.666	13.771	9.435	6.820	4.027	1.731	0.979
4	13.279	26.528	26.279	58.373	37.222	19.638	13.567	9.139	6.820	3.897	1.625	2.596
5	13.870	37.315	25.593	60.090	35.580	19.243	13.356	8.958	6.813	3.844	1.643	3.951
6	14.469	39.402	25.552	61.510	34.506	19.168	13.112	8.838	6.662	3.751	1.434	5.232
7	15.075	43.457	25.046	59.385	34.251	18.515	13.070	8.711	6.504	3.658	1.499	5.361
8	15.689	37.509	23.857	57.722	33.039	18.459	12.711	8.607	6.490	3.566	1.548	5.093
9	16.310	33.888	23.120	56.676	32.105	18.247	12.561	8.779	6.382	3.474	1.652	4.553
10	16.937	31.641	23.140	55.816	31.345	18.007	12.429	8.898	6.266	3.384	1.694	3.945
11	17.572	29.648	23.341	54.603	30.119	17.612	12.297	8.838	6.205	3.294	1.694	3.491
12	18.213	32.721	27.823	52.906	29.478	17.430	12.174	8.778	6.064	3.227	1.620	3.384
13	18.861	28.537	31.407	51.523	28.959	17.157	12.157	8.719	6.004	2.876	1.544	3.299
14	19.516	26.420	29.917	50.774	28.190	17.075	12.035	8.659	5.878	2.855	1.441	3.205
15	20.177	32.130	30.409	50.015	27.157	16.912	11.904	8.659	5.536	2.849	1.446	3.121
16	20.844	30.816	33.081	49.829	26.609	16.561	11.774	8.652	5.335	2.769	1.477	3.210
17	21.581	31.367	30.679	50.139	25.992	16.167	11.644	8.607	5.322	2.690	1.406	3.266
18	24.495	32.039	34.032	49.953	25.624	16.052	11.522	8.779	5.251	2.679	1.380	4.021
19	29.858	33.386	37.836	48.853	24.842	15.732	11.498	8.898	5.034	2.606	1.499	5.669
20	30.882	39.975	36.836	48.619	24.277	15.644	11.273	8.838	5.110	2.517	1.446	5.696
21	28.478	45.696	38.686	49.112	23.876	15.511	11.241	8.771	4.971	2.394	1.441	4.884
22	23.577	40.463	41.123	49.359	23.468	15.564	11.017	8.667	4.901	2.353	1.450	4.450
23	24.964	36.358	39.712	50.194	23.150	15.564	10.993	8.659	4.720	2.353	1.575	4.670
24	29.921	35.962	38.447	55.178	22.834	15.415	10.882	8.659	4.615	2.313	1.544	5.111
25	26.271	34.339	37.693	53.718	22.597	15.038	10.866	8.659	4.473	2.232	1.411	4.821
26	24.360	32.258	41.487	48.660	22.489	14.872	10.715	8.659	4.504	2.192	1.337	4.467
27	22.559	31.455	40.247	45.683	22.107	14.733	10.158	8.586	4.376	1.999	1.231	4.808
28	22.235	30.805	39.689	43.426	21.766	14.733	10.119	7.560	4.230	1.805	1.074	5.187
29	24.707	30.375	39.829	42.382	21.215	14.664	10.104	7.381	4.170	1.805	1.038	5.056
30	28.238		41.592	42.228	20.484	14.508	9.887	7.226	4.080	1.773	1.030	3.987
31	28.954		42.571		20.284		9.871	7.191		1.763		3.768
Mean	20.912	33.310	32.721	51.816	28.236	16.928	11.835	8.653	5.577	2.868	1.482	3.982
Flow (MCM)	56.009	83.462	87.640	134.306	75.627	43.877	31.698	23.177	14.455	7.683	3.840	10.665
Maximum	30.882	45.696	42.571	61.510	42.051	20.198	14.189	9.810	6.938	4.027	1.801	5.696
Minimum	11.550	25.963	23.120	42.228	20.284	14.508	9.871	7.191	4.080	1.763	1.030	0.951
Runoff (mm)	19.267	28.711	30.148	46.201	26.016	15.094	10.904	7.973	4.972	2.643	1.321	3.669

Flow (cumecs)

Annual Statistics

Maximum: 61.510 Minimum: 0.951 Mean: 18.193 cumecs

Total: 575.313 MCM Runoff: 197.906 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.920	22.865	35.249	40.748	39.621	18.617	11.986	8.422	5.951	3.210	1.810	4.045
2	3.873	21.540	39.841	41.839	30.519	18.395	11.709	8.422	5.693	3.204	1.848	3.844
3	4.469	19.263	40.900	40.762	27.992	18.099	11.450	8.422	5.529	3.199	2.065	3.704
4	8.349	20.908	41.487	39.863	26.568	17.722	11.321	8.349	5.523	3.121	2.234	3.216
5	7.334	22.453	41.992	41.196	25.940	17.157	11.249	8.078	5.425	3.072	2.291	2.898
6	6.994	25.493	43.058	36.293	26.094	16.705	11.145	7.846	5.328	2.985	2.348	2.990
7	6.404	25.267	46.269	33.899	25.842	16.150	11.233	7.279	5.315	2.936	2.358	3.116
8	5.335	24.898	47.711	32.177	30.779	15.785	11.017	7.660	5.213	2.855	2.450	3.155
9	5.315	21.736	49.201	32.707	35.106	15.503	11.001	7.724	5.021	2.774	2.207	3.121
10	5.654	29.419	52.442	37.177	35.346	15.292	11.001	7.724	4.870	2.769	2.143	3.368
11	9.673	34.072	48.199	39.341	33.222	15.090	10.993	7.724	4.814	2.769	1.972	4.576
12	9.300	26.111	45.366	45.717	33.101	15.012	10.874	7.774	4.807	2.769	1.957	10.347
13	8.226	20.423	44.717	39.879	33.002	14.942	10.731	7.789	4.720	2.727	1.991	10.107
14	8.653	13.486	44.429	36.158	31.998	14.863	10.385	7.832	4.658	2.637	1.924	7.274
15	9.498	16.869	45.620	44.797	30.752	14.716	10.244	7.724	4.473	2.522	1.843	6.045
16	12.318	15.532	45.801	35.721	28.528	14.336	10.088	7.623	4.412	2.517	1.768	5.027
17	14.238	14.952	44.014	33.722	27.137	14.189	9.541	7.666	4.278	2.471	1.689	4.510
18	14.631	14.067	40.352	32.226	26.064	14.181	9.503	7.717	4.218	2.353	1.553	4.333
19	12.052	15.274	40.072	31.942	24.995	14.104	9.503	7.659	4.128	2.232	1.521	4.761
20	10.574	15.921	41.183	32.972	24.117	13.898	9.503	7.495	4.027	2.113	1.648	5.060
21	11.936	18.847	42.353	37.912	23.866	13.643	9.427	7.388	3.809	1.996	1.741	4.709
22	14.371	23.132	47.161	40.302	23.737	13.499	9.207	7.395	3.797	1.848	1.987	4.327
23	14.320	24.580	45.321	41.557	23.250	13.297	9.146	7.538	3.844	1.805	2.074	4.224
24	14.527	23.957	40.098	40.760	22.942	13.103	9.131	7.495	3.838	1.768	2.108	4.322
25	14.207	23.530	31.859	40.356	22.735	13.019	9.018	7.424	3.750	1.731	1.996	5.345
26	13.794	25.152	29.238	39.366	22.352	12.827	8.898	7.106	3.663	1.731	1.916	6.532
27	19.403	29.664	33.116	36.835	22.256	12.686	8.778	6.862	3.652	1.726	3.151	6.752
28	21.195	33.918	36.316	35.278	20.552	12.446	8.667	6.504	3.571	1.661	2.967	9.415
29	22.522		38.995	37.004	19.979	12.421	8.600	6.381	3.514	1.661	4.196	9.721
30	19.286		39.203	36.022	19.723	12.289	8.533	6.226	3.339	1.731	4.541	8.380
31	22.338		40.469		19.009		8.430	6.104		1.801		9.842
Mean	11.442	22.262	42.001	37.818	27.004	14.800	10.075	7.528	4.506	2.409	2.210	5.454
Flow (MCM)	30.647	53.856	112.496	98.023	72.328	38.360	26.984	20.162	11.680	6.454	5.728	14.607
Maximum	22.522	34.072	52.442	45.717	39.621	18.617	11.986	8.422	5.951	3.210	4.541	10.347
Minimum	3.873	13.486	29.238	31.942	19.009	12.289	8.430	6.104	3.339	1.661	1.521	2.898
Runoff (mm)	10.542	18.526	38.698	33.720	24.880	13.196	9.282	6.936	4.018	2.220	1.971	5.025

Flow (cumecs)

Annual Statistics

Maximum: 52.442 Minimum: 1.521 Mean: 15.626 cumecs
Total: 492.769 MCM Runoff: 169.511 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.085	35.468	21.452	-	28.653	12.117	8.541	6.827	4.176	2.430	2.443	2.612
2	11.662	36.901	30.524	-	28.379	11.904	8.541	6.710	4.122	2.358	5.072	2.421
3	11.201	34.950	33.433	-	27.939	11.701	8.541	6.552	4.033	2.394	7.353	3.211
4	11.813	29.569	31.378	-	27.469	11.506	8.489	6.483	3.991	2.435	7.253	4.345
5	17.683	28.108	30.730	-	27.271	11.201	8.474	6.334	4.033	2.430	6.640	6.163
6	19.828	30.646	28.287	-	26.825	10.993	8.422	6.205	4.039	2.368	5.222	6.956
7	17.853	29.768	26.661	-	26.547	10.810	8.422	5.957	4.122	2.507	4.064	10.191
8	15.992	32.777	27.332	-	26.217	10.621	8.384	5.838	4.207	2.517	3.403	10.390
9	14.131	38.399	26.953	-	26.094	10.322	8.300	5.542	5.342	2.517	3.029	8.470
10	12.903	37.297	25.074	-	25.481	10.236	8.129	5.380	5.412	2.517	2.764	7.364
11	12.911	32.347	25.514	-	24.862	9.850	7.962	5.004	5.232	2.486	2.522	8.707
12	13.702	31.714	29.539	-	24.680	9.956	7.955	5.174	5.193	2.507	2.435	9.518
13	20.932	28.313	30.914	-	22.990	9.879	7.947	5.219	4.776	2.389	2.353	9.008
14	24.615	25.902	34.576	-	19.960	9.871	7.839	5.219	4.425	2.272	2.277	11.137
15	23.500	23.115	38.365	-	19.290	9.864	7.724	5.219	4.034	2.197	2.257	12.100
16	22.049	20.114	42.954	-	18.729	9.633	7.552	5.161	3.698	2.187	2.011	11.709
17	22.283	19.253	-	51.813	19.714	9.503	7.388	5.015	3.474	2.069	1.910	11.194
18	22.450	18.210	-	51.261	19.356	9.503	7.381	4.914	3.255	1.811	1.735	12.505
19	22.548	17.441	-	52.345	18.775	9.503	7.381	4.820	3.088	1.661	1.661	12.703
20	21.971	16.499	-	54.247	18.277	9.442	7.381	4.807	3.188	1.550	1.625	13.528
21	22.020	15.795	-	53.625	15.347	9.381	7.381	4.720	3.121	1.770	1.652	14.174
22	21.119	15.538	-	51.770	14.951	9.381	7.381	4.714	3.066	1.661	1.657	14.571
23	23.519	15.803	-	45.532	14.664	9.328	7.325	4.714	2.941	1.763	1.746	15.041
24	24.505	16.454	-	37.786	14.525	9.305	7.261	4.714	2.817	1.805	4.061	20.726
25	26.498	16.696	-	34.565	14.517	9.086	7.141	4.714	2.764	1.805	5.568	21.824
26	30.368	16.769	-	32.663e	14.250	8.499	6.841	4.714	2.648	1.853	5.315	21.660
27	31.565	19.135	-	30.045	14.044	8.757	6.820	4.702	2.559	2.069	5.003	18.363
28	29.213	19.431	-	28.474	13.712	8.555	6.988	4.619	2.517	2.187	4.101	15.312
29	29.937		-	28.264	13.415	8.541	7.155	4.516	2.517	2.148	3.350	14.209
30	32.021		-	28.811	12.970	8.541	7.148	4.327	2.476	2.064	2.987	12.911
31	34.529		-		12.553		7.036	4.230		2.846		12.043
Mean	21.142	25.086	-	-	20.402	9.926	7.717	5.260	3.709	2.180	3.449	11.454
Flow (MCM)	56.627	60.688	-	-	54.644	25.729	20.670	14.089	9.613	5.838	8.940	30.678
Maximum	34.529	38.399	-	-	28.653	12.117	8.541	6.827	5.412	2.846	7.353	21.824
Minimum	10.085	15.538	-	-	12.553	8.499	6.820	4.230	2.476	1.550	1.625	2.421
Runoff (mm)	19.480	20.877	-	-	18.797	8.851	7.110	4.847	3.307	2.008	3.075	10.553

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA2A
Station Name: Little Ruaha River at Ndiuka
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 7:47:16 S Longitude: 35:43: 9 E Elevation: 1540.0 metres Area: 2907.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.957	30.956	43.449	45.609	29.787	24.257	13.839	9.987	6.931	4.814	3.006	9.538
2	10.166	31.077	46.980	46.544	30.871	23.786	13.643	9.887	6.765	4.610	2.627	9.664
3	10.677	30.144	42.633	44.825	32.652	23.309	13.575	9.933	6.600	4.315	2.559	9.710
4	12.414	34.353	42.619	44.743	32.596	22.608	13.474	9.926	6.497	4.152	2.481	8.982
5	13.900	34.507	42.193	42.952	32.520	22.019	13.112	9.810	6.483	4.357	2.512	8.198
6	10.895	27.987	41.980	44.693	32.904	21.214	13.019	9.740	6.381	4.529	2.517	6.857
7	10.488	31.372	42.204	44.058	35.082	20.713	12.827	9.564	6.273	4.902	2.517	6.300
8	11.992	42.978	42.051	43.200	37.310	20.140	12.694	9.381	6.111	5.015	2.517	6.381
9	14.976	43.556	43.271	42.677	37.060	19.667	13.753	9.267	5.957	5.252	2.517	6.538
10	18.820	42.987	43.977	41.184	36.776	19.224	12.605	9.191	6.112	5.146	2.533	6.634
11	22.629	42.762	43.331	40.959	36.549	19.037	12.363	9.018	6.273	5.364	2.801	7.191
12	23.977	41.627	41.817	40.830	37.322	18.487	12.223	8.898	6.059	7.797	2.930	9.580
13	24.408	42.808	41.318	40.247	37.755	18.117	11.969	8.778	5.792	9.247	2.849	12.018
14	24.086	42.488	45.769	39.261	37.447	17.741	10.045	9.257	5.732	10.096	2.648	11.623
15	24.787	40.417	43.155	38.259	36.583	17.430	11.391	9.322	5.588	10.465	2.512	10.513
16	27.282	32.305	41.077	36.178	35.266	17.202	11.514	8.615	5.464	8.877	2.389	9.499
17	27.771	32.835	38.778	34.518	34.217	16.867	11.393	8.364	5.277	8.772	2.163	11.768
18	29.538	30.989	36.674	33.046	32.532	16.633	11.321	8.290	5.219	7.940	2.040	12.659
19	32.576	28.855	36.165	31.703	31.291	16.292	11.257	8.078	5.123	6.671	2.134	14.978
20	27.681	29.480	35.347	32.536	30.601	16.078	11.313	7.962	5.110	6.111	2.676	16.064
21	26.107	31.981	33.832	34.395	30.054	15.777	11.201	7.890	5.015	5.687	3.117	23.505
22	25.675	31.665	37.449	34.506	29.340	15.432	11.057	7.724	4.965	5.226	2.749	33.220
23	25.024	29.161	35.089	34.284	28.811	15.292	10.874	7.616	4.920	4.902	2.476	34.547
24	24.208	26.008	35.636	34.228	28.358	15.143	10.714	7.552	4.908	4.528	2.369	31.999
25	25.604	33.299	36.675	33.048	27.865	14.820	10.616	7.502	4.820	4.363	2.834	32.394
26	26.880	38.479	38.847	31.736	27.230	14.724	10.502	7.538	4.814	4.092	4.757	39.758
27	27.772	37.153	42.172	29.959	26.784	14.525	10.369	7.388	4.814	4.021	5.779	43.475
28	28.748	35.774	41.253	29.414	26.217	14.327	10.182	7.381	4.814	3.803	5.997	41.275
29	28.800		40.049	29.659	25.726	14.181	10.112	7.367	4.814	3.606	5.918	44.864
30	30.030		40.188	29.979	25.298	14.035	10.003	7.162	4.814	3.305	7.851	46.456
31	32.053		42.789		24.619		9.995	7.043		3.155		34.236
Mean	22.288	34.929	40.605	37.641	31.852	17.969	11.708	8.562	5.615	5.649	3.159	19.369
Flow (MCM)	59.695	84.500	108.757	97.566	85.313	46.576	31.359	22.933	14.553	15.130	8.188	51.877
Maximum	32.576	43.556	46.980	46.544	37.755	24.257	13.839	9.987	6.931	10.465	7.851	46.456
Minimum	10.166	26.008	33.832	29.414	24.619	14.035	9.995	7.043	4.814	3.155	2.040	6.300
Runoff (mm)	20.535	29.068	37.412	33.562	29.348	16.022	10.788	7.889	5.006	5.205	2.817	17.845

Flow (cumecs)

Annual Statistics

Maximum: 46.980 Minimum: 2.040 Mean: 19.946 cumecs

Total: 629.003 MCM Runoff: 216.375 mm

Possible data flags

No data stored "-" Estimated values "e"

Chimala River at Chitekelo

Station No: 1KA7A		**Established:** 11/01/1954
Coordinates:		**Altitude (m.a.m.s.l):** 1,907
Lat: -8.9204	**Long: 33.9762**	**Catchment Area (km²):** 168

Description of the Catchment:

Mainly forest in the upper area wooded grassland and grassland in the lower Catchment.

Station Details

1. Staff Gauges	**Range: 0 – 3m**	**A.D.Z.G.R: 0.00mm**
	Type of Gauges: Standard Vertical	**MSL.Z.G.L: -**
2. Automatic Recorder	**Thalimedes float type**	**Date installed: 2013**
3. Benchmark	Nail in concrete beacon	

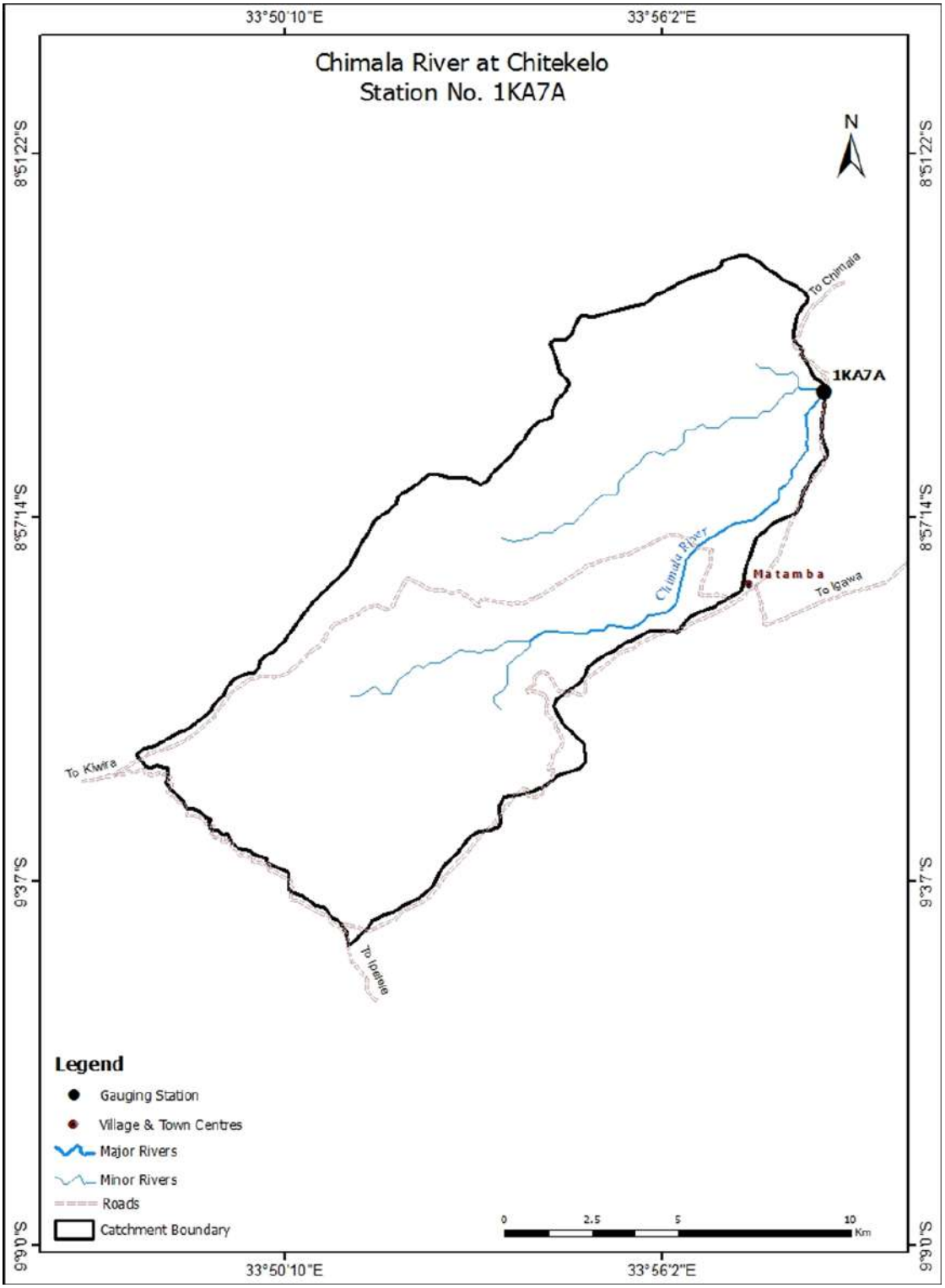
BM Assumed Datum: 5.808m	**N.M.M.S.L: -**	**TBM: –**

4. Control	Permanent consists of rock right across
5. Access	Accessible throughout the year about 275km from Iringa town to Matamba village, Mbeya road

Records	**Period**	**Quality**
Water Level:	01/01/2010 - 31/12/2019	1.2.3
Discharge:	01/01/2010 - 31/12/2019	2.2.3

Extremes:	**Max. Recorded**	13.272m³/sec	**On** 07/1/2010	**WL** 1.42m
	Min. Recorded	0.070m³/sec	**On** 14/12/2005	**WL** 0.012m

Remarks


Chimala River at Chitekelo
Station No. 1KA7A
33°50'10"E
33°56'2"E
8°51'22"S
8°57'14"S
9°3'7"S
9°9'0"S
N
1KA7A
To Chimala
Chimala River
Matamba
To Igawa
To Kiwira
To Ipelele
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Catchment Boundary
0
2.5
5
10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.875	5.455	5.166	6.999	3.091	2.312	1.654	1.196	0.904	0.731	0.687	0.736
2	5.656	5.348	5.099	6.960	3.154	2.312	1.647	1.196	0.904	0.731	0.690	0.731
3	5.993	5.454	4.831	7.500	3.000	2.312	1.647	1.196	0.904	0.731	0.670	0.731
4	7.075	5.738	4.718	7.392	2.919	2.242	1.652	1.189	0.904	0.731	0.650	0.731
5	9.553	5.765	5.026	7.121	2.919	2.171	1.647	1.101	0.904	0.731	0.650	0.770
6	9.275	5.550	5.844	6.454	2.840	2.171	1.586	1.095	0.904	0.731	0.655	1.303
7	14.093	5.441	5.903	6.112	2.761	2.171	1.526	1.095	0.904	0.731	0.725	1.158
8	10.556	6.409	6.073	5.875	2.761	2.171	1.526	1.095	0.904	0.731	0.731	1.189
9	9.173	6.271	5.903	5.656	2.761	2.126	1.526	1.095	0.904	0.731	0.731	1.303
10	8.150	5.660	5.657	5.441	2.761	2.037	1.526	1.095	0.882	0.731	0.731	1.616
11	6.947	5.550	5.269	5.230	2.761	2.034	1.526	1.095	0.859	0.731	0.731	1.278
12	6.916	5.765	5.643	4.921	2.684	2.034	1.526	1.095	0.837	0.731	0.864	1.101
13	7.454	5.550	6.184	4.619	2.608	2.034	1.526	1.095	0.815	0.731	0.945	0.999
14	8.424	5.230	6.099	4.423	2.608	1.967	1.526	1.095	0.815	0.690	0.778	0.860
15	13.645	4.921	5.643	4.326	2.608	1.900	1.468	1.070	0.815	0.650	0.731	0.815
16	14.031	4.619	5.074	4.326	2.608	1.900	1.410	1.021	0.815	0.650	0.731	0.815
17	12.751	4.520	5.178	4.139	2.533	1.900	1.410	0.997	0.815	0.650	0.731	0.815
18	10.641	4.631	4.632	3.951	2.458	1.900	1.410	0.997	0.815	0.650	0.731	0.826
19	9.173	6.843	4.338	3.956	2.458	1.900	1.410	0.997	0.815	0.650	0.768	0.939
20	8.150	5.115	4.232	3.900	2.458	1.900	1.410	0.997	0.815	0.650	0.736	0.927
21	7.151	4.997	4.220	3.769	2.458	1.900	1.355	0.997	0.815	0.650	0.758	1.674
22	6.242	5.159	4.148	3.724	2.458	1.900	1.301	0.997	0.815	0.650	1.060	1.159
23	5.740	9.815	4.366	3.635	2.385	1.892	1.301	0.951	0.815	0.690	0.860	1.052
24	5.151	7.394	5.070	3.504	2.312	1.779	1.301	0.904	0.815	0.731	0.736	1.141
25	5.217	6.271	7.463	3.332	2.312	1.771	1.301	0.904	0.815	0.731	0.731	1.638
26	5.458	5.862	7.860	3.247	2.312	1.771	1.301	0.904	0.794	0.731	0.731	1.236
27	5.683	5.441	7.750	3.164	2.312	1.771	1.301	0.904	0.772	0.731	0.731	1.385
28	5.848	5.431	7.407	3.081	2.312	1.771	1.301	0.904	0.751	0.731	0.731	1.145
29	5.806		6.916	3.081	2.312	1.771	1.248	0.904	0.731	0.690	0.731	1.003
30	6.156		6.498	3.081	2.312	1.764	1.196	0.904	0.731	0.650	0.768	0.997
31	5.765		7.210		2.312		1.196	0.904		0.652		1.022
Mean	7.992	5.722	5.659	4.764	2.598	1.986	1.441	1.032	0.837	0.701	0.750	1.068
Flow (MCM)	21.405	13.841	15.156	12.348	6.959	5.148	3.859	2.764	2.168	1.877	1.944	2.859
Maximum	14.093	9.815	7.860	7.500	3.154	2.312	1.654	1.196	0.904	0.731	1.060	1.674
Minimum	5.151	4.520	4.148	3.081	2.312	1.764	1.196	0.904	0.731	0.650	0.650	0.731
Runoff (mm)	127.413	82.390	90.216	73.502	41.425	30.645	22.969	16.451	12.906	11.171	11.569	17.020

Flow (cumecs)

Annual Statistics

Maximum: 14.093 Minimum: 0.650 Mean: 2.879 cumecs

Total: 90.792 MCM Runoff: 540.428 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2011

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.441	2.341	2.761	8.391	5.114	2.458	2.034	1.410	0.855	0.888	0.574	0.882
2	1.526	2.242	2.761	8.276	5.035	2.458	2.034	1.410	0.818	0.899	0.574	0.795
3	1.573	2.171	2.761	7.658	4.919	2.458	2.034	1.410	0.815	0.818	0.574	0.731
4	2.226	2.102	2.761	7.392	4.919	2.458	2.034	1.410	0.815	0.754	0.574	0.731
5	1.674	1.967	3.544	7.270	4.907	2.458	1.967	1.410	0.815	0.710	0.574	0.817
6	1.475	1.836	4.326	7.148	4.619	2.385	1.900	1.355	0.815	0.678	0.574	0.860
7	1.541	1.771	4.326	7.520	4.244	2.312	1.900	1.301	0.815	0.658	0.574	0.815
8	1.756	1.771	4.522	8.263	4.137	2.312	1.900	1.301	0.815	0.650	0.574	0.900
9	1.709	1.771	4.822	8.422	4.125	2.312	1.900	1.248	0.815	0.650	0.583	1.156
10	1.647	1.709	6.991	8.276	3.951	2.312	1.900	1.196	0.815	0.652	0.720	2.112
11	1.647	1.647	8.770	8.276	3.769	2.312	1.836	1.196	0.810	0.667	0.690	1.150
12	1.709	1.774	9.724	8.276	3.602	2.242	1.771	1.196	0.736	0.650	0.650	1.372
13	1.709	1.836	11.525	8.540	3.504	2.171	1.771	1.196	0.731	0.647	0.650	1.107
14	1.586	1.709	12.251	8.801	3.406	2.171	1.771	1.189	0.731	0.595	0.650	1.107
15	1.468	1.717	10.943	8.520	3.257	2.171	1.740	1.101	0.731	0.574	0.650	1.222
16	1.355	1.926	10.467	8.019	3.247	2.171	1.678	1.095	0.731	0.574	0.650	1.010
17	1.355	2.404	9.901	7.290	3.247	2.171	1.647	1.095	0.731	0.574	0.650	1.035
18	1.528	2.644	8.849	6.674	3.164	2.171	1.647	1.095	0.731	0.574	0.650	1.515
19	1.586	3.167	8.826	6.439	3.081	2.171	1.647	1.046	0.731	0.574	0.650	1.727
20	1.526	4.317	7.150	6.213	3.000	2.171	1.647	1.021	0.731	0.574	0.650	1.363
21	1.581	4.055	6.908	5.660	2.919	2.102	1.647	1.021	0.731	0.574	0.682	1.152
22	2.324	3.860	6.674	5.230	2.919	2.034	1.616	0.997	0.731	0.574	0.682	1.095
23	2.173	3.669	6.644	5.555	2.840	2.034	1.556	0.997	0.731	0.574	0.650	1.095
24	1.967	3.439	6.468	5.875	2.761	2.034	1.526	0.997	0.731	0.574	0.687	1.282
25	1.836	3.493	6.439	5.751	2.761	2.034	1.526	0.971	0.710	0.574	1.257	1.804
26	1.771	3.321	6.439	5.455	2.761	2.034	1.526	0.907	0.690	0.574	1.149	1.771
27	1.771	3.010	6.325	5.334	2.761	2.034	1.526	0.904	0.678	0.574	1.220	1.836
28	1.709	2.840	6.225	5.230	2.684	2.034	1.493	0.904	0.658	0.612	0.938	1.900
29	1.709		6.630	5.125	2.608	2.034	1.414	0.904	0.650	0.612	0.865	2.870
30	1.771		6.703	5.022	2.608	2.034	1.410	0.904	0.665	0.574	0.901	2.897
31	1.813		7.527		2.533		1.410	0.870		0.574		2.975
Mean	1.692	2.518	6.805	6.997	3.529	2.208	1.723	1.131	0.752	0.637	0.715	1.390
Flow (MCM)	4.533	6.092	18.227	18.135	9.452	5.724	4.614	3.029	1.949	1.706	1.854	3.722
Maximum	2.324	4.317	12.251	8.801	5.114	2.458	2.034	1.410	0.855	0.899	1.257	2.975
Minimum	1.355	1.647	2.761	5.022	2.533	2.034	1.410	0.870	0.650	0.574	0.574	0.731
Runoff (mm)	26.982	36.262	108.496	107.949	56.265	34.070	27.467	18.030	11.601	10.153	11.038	22.157

Flow (cumecs)

Annual Statistics

Maximum: 12.251 Minimum: 0.574 Mean: 2.508 cumecs

Total: 79.097 MCM Runoff: 470.814 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 8:55:13 S | Longitude: 33:58:34 E | Elevation: 1907.0 metres | Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.953	3.228	4.071	4.619	3.771	2.458	1.771	1.410	0.997	0.815	1.177	0.904
2	9.206	3.021	3.648	4.423	3.504	2.385	1.771	1.410	0.997	0.815	1.196	0.904
3	8.447	2.919	3.428	4.426	3.417	2.312	1.771	1.355	0.997	0.815	1.145	0.904
4	7.719	2.909	3.593	6.339	3.417	2.312	1.771	1.301	0.997	0.815	1.095	0.904
5	6.705	2.771	3.680	7.165	3.930	2.312	1.771	1.301	0.997	0.815	1.095	0.860
6	6.099	2.761	3.680	8.007	4.105	2.312	1.771	1.301	0.997	0.815	1.046	0.815
7	5.973	2.761	3.803	8.405	3.769	2.312	1.771	1.301	0.997	0.815	0.997	0.815
8	5.590	2.684	4.303	8.438	3.680	2.242	1.709	1.301	0.997	0.815	1.010	0.815
9	5.643	2.608	4.411	8.637	3.504	2.171	1.647	1.248	0.997	0.815	1.084	0.815
10	5.861	2.637	4.326	8.260	3.417	2.171	1.647	1.196	0.951	0.815	0.951	0.815
11	5.563	2.891	4.326	7.658	3.417	2.171	1.647	1.196	0.904	0.815	0.904	0.856
12	5.230	2.684	4.326	7.150	3.332	2.171	1.647	1.196	0.904	0.815	0.904	1.801
13	5.022	2.608	4.326	6.674	3.332	2.162	1.647	1.196	0.904	0.815	0.904	1.841
14	4.708	2.533	4.423	6.311	3.417	2.042	1.647	1.196	0.904	0.815	0.904	1.349
15	4.267	2.458	4.619	5.889	3.417	2.034	1.647	1.196	0.904	0.815	0.904	1.107
16	4.387	2.458	4.718	6.518	3.332	2.034	1.647	1.196	0.904	0.815	0.922	1.120
17	4.148	2.467	4.718	7.950	3.247	2.034	1.647	1.196	0.904	0.815	1.177	1.440
18	4.044	2.523	4.619	8.703	3.164	2.034	1.586	1.196	0.904	0.815	1.050	1.355
19	3.860	2.458	4.520	8.941	3.081	1.967	1.526	1.196	0.904	0.815	0.904	1.413
20	3.769	2.458	4.893	8.704	3.081	1.900	1.526	1.196	0.904	0.815	0.904	1.468
21	3.769	2.590	8.475	8.148	3.000	1.900	1.526	1.189	0.904	0.815	0.951	1.355
22	3.680	2.542	7.658	7.400	2.840	1.900	1.526	1.101	0.904	0.815	0.997	1.314
23	3.591	2.542	7.255	6.674	2.761	1.900	1.526	1.095	0.904	0.815	0.997	1.454
24	3.526	2.684	6.660	6.102	2.761	1.900	1.526	1.095	0.904	0.815	0.997	1.583
25	3.571	3.089	5.903	5.643	2.761	1.900	1.526	1.095	0.904	0.821	0.997	1.594
26	3.417	3.504	5.656	5.230	2.684	1.900	1.526	1.095	0.904	0.899	0.997	1.468
27	3.332	3.504	5.548	4.819	2.608	1.900	1.526	1.095	0.904	0.904	1.097	1.355
28	3.247	3.332	5.441	4.520	2.608	1.900	1.475	1.095	0.860	0.904	1.145	1.301
29	3.164	3.343	5.230	4.244	2.542	1.836	1.461	1.095	0.815	0.904	1.046	1.301
30	3.081		5.022	4.044	2.523	1.771	1.410	1.095	0.815	0.904	0.951	1.248
31	3.081		4.819		2.458		1.410	1.046		0.922		1.209
Mean	4.924	2.792	4.906	6.668	3.190	2.078	1.613	1.199	0.926	0.833	1.015	1.209
Flow (MCM)	13.189	6.996	13.141	17.283	8.543	5.387	4.321	3.212	2.401	2.231	2.631	3.239
Maximum	9.206	3.504	8.475	8.941	4.105	2.458	1.771	1.410	0.997	0.922	1.196	1.841
Minimum	3.081	2.458	3.428	4.044	2.458	1.771	1.410	1.046	0.815	0.815	0.904	0.815
Runoff (mm)	78.506	41.640	78.222	102.877	50.852	32.063	25.718	19.117	14.292	13.282	15.660	19.280

Flow (cumecs)

Annual Statistics

Maximum: 9.206 | Minimum: 0.815 | Mean: 2.613 | cumecs

Total: 82.625 MCM | Runoff: 491.816 mm

Possible data flags

No data stored "-" | Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2013

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.454	2.341	2.761	8.391	5.114	2.458	2.034	1.410	0.855	0.888	0.574	0.882
2	1.526	2.242	2.761	8.276	5.035	2.458	2.034	1.410	0.818	0.899	0.574	0.795
3	1.573	2.171	2.761	7.658	4.919	2.458	2.034	1.410	0.815	0.818	0.574	0.731
4	2.226	2.102	2.761	7.392	4.919	2.458	2.034	1.410	0.815	0.754	0.574	0.731
5	1.674	1.967	3.544	7.270	4.907	2.458	1.967	1.410	0.815	0.710	0.574	0.817
6	1.475	1.836	4.326	7.148	4.619	2.385	1.900	1.355	0.815	0.678	0.574	0.860
7	1.541	1.771	4.326	7.520	4.244	2.312	1.900	1.301	0.815	0.658	0.574	0.815
8	1.756	1.771	4.522	8.263	4.137	2.312	1.900	1.301	0.815	0.650	0.574	0.900
9	1.709	1.771	4.822	8.422	4.125	2.312	1.900	1.248	0.815	0.650	0.583	1.156
10	1.647	1.709	6.991	8.276	3.951	2.312	1.900	1.196	0.815	0.652	0.720	2.112
11	1.647	1.647	8.770	8.276	3.769	2.312	1.836	1.196	0.810	0.667	0.690	1.150
12	1.709	1.774	9.724	8.276	3.602	2.242	1.771	1.196	0.736	0.650	0.650	1.372
13	1.709	1.836	11.525	8.540	3.504	2.171	1.771	1.196	0.731	0.647	0.650	1.107
14	1.586	1.709	12.251	8.801	3.406	2.171	1.771	1.189	0.731	0.595	0.650	1.107
15	1.468	1.717	10.943	8.520	3.257	2.171	1.740	1.101	0.731	0.574	0.650	1.222
16	1.355	1.926	10.467	8.019	3.247	2.171	1.678	1.095	0.731	0.574	0.650	1.010
17	1.355	2.404	9.901	7.290	3.247	2.171	1.647	1.095	0.731	0.574	0.650	1.035
18	1.528	2.644	8.849	6.674	3.164	2.171	1.647	1.095	0.731	0.574	0.650	1.515
19	1.586	3.167	8.826	6.439	3.081	2.171	1.647	1.046	0.731	0.574	0.650	1.727
20	1.526	4.317	7.150	6.213	3.000	2.171	1.647	1.021	0.731	0.574	0.650	1.363
21	1.581	4.055	6.908	5.660	2.919	2.102	1.647	1.021	0.731	0.574	0.682	1.152
22	2.324	3.860	6.674	5.230	2.919	2.034	1.616	0.997	0.731	0.574	0.682	1.095
23	2.173	3.669	6.644	5.555	2.840	2.034	1.556	0.997	0.731	0.574	0.650	1.095
24	1.967	3.439	6.468	5.875	2.761	2.034	1.526	0.997	0.731	0.574	0.687	1.282
25	1.836	3.493	6.439	5.751	2.761	2.034	1.526	0.971	0.710	0.574	1.257	1.804
26	1.771	3.321	6.439	5.455	2.761	2.034	1.526	0.907	0.690	0.574	1.149	1.771
27	1.771	3.010	6.325	5.334	2.761	2.034	1.526	0.904	0.678	0.574	1.220	1.836
28	1.709	2.840	6.225	5.230	2.684	2.034	1.493	0.904	0.658	0.612	0.938	1.900
29	1.709		6.630	5.125	2.608	2.034	1.414	0.904	0.650	0.612	0.865	2.870
30	1.771		6.703	5.022	2.608	2.034	1.410	0.904	0.665	0.574	0.901	2.897
31	1.813		7.527		2.533		1.410	0.870		0.574		2.608
Mean	1.693	2.518	6.805	6.997	3.529	2.208	1.723	1.131	0.752	0.637	0.715	1.378
Flow (MCM)	4.534	6.092	18.227	18.135	9.452	5.724	4.614	3.029	1.949	1.706	1.854	3.691
Maximum	2.324	4.317	12.251	8.801	5.114	2.458	2.034	1.410	0.855	0.899	1.257	2.897
Minimum	1.355	1.647	2.761	5.022	2.533	2.034	1.410	0.870	0.650	0.574	0.574	0.731
Runoff (mm)	26.989	36.262	108.496	107.949	56.265	34.070	27.467	18.030	11.601	10.153	11.038	21.968

Flow (cumecs)

Annual Statistics

Maximum: 12.251 Minimum: 0.574 Mean: 2.507 cumecs
Total: 79.067 MCM Runoff: 470.635 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.460	3.860	4.743	10.613	5.441	2.458	2.025	1.410	1.186	0.815	0.736	1.101
2	2.242	3.602	4.619	10.721	5.334	2.458	1.909	1.410	1.147	0.815	0.805	1.355
3	2.036	3.591	4.423	9.915	5.230	2.458	1.900	1.410	1.115	0.815	0.736	2.558
4	1.828	3.504	4.220	9.224	4.921	2.385	1.900	1.410	1.095	0.815	0.731	3.487
5	1.725	3.332	4.235	8.801	4.619	2.312	1.900	1.403	1.095	0.815	0.731	2.124
6	1.828	3.257	4.232	8.520	4.423	2.312	1.900	1.308	1.095	0.807	0.731	2.059
7	1.779	3.321	3.962	9.004	4.139	2.312	1.836	1.301	1.095	0.796	0.731	2.460
8	2.002	3.247	4.115	8.755	3.860	2.312	1.771	1.301	1.097	0.753	0.731	1.878
9	1.733	3.237	3.974	10.325	3.758	2.312	1.771	1.301	1.112	0.737	0.731	1.701
10	1.701	3.123	3.951	10.003	3.602	2.312	1.771	1.301	1.046	0.775	0.731	1.534
11	1.654	3.975	4.435	9.239	3.591	2.312	1.771	1.301	0.997	0.731	0.725	1.468
12	1.590	5.074	4.819	8.818	3.504	2.312	1.771	1.301	0.951	0.731	0.677	1.410
13	2.048	5.205	6.055	8.537	3.417	2.312	1.771	1.301	0.904	0.731	0.720	1.355
14	2.677	5.991	7.722	8.148	3.417	2.312	1.771	1.298	0.904	0.729	0.722	1.301
15	2.881	5.269	7.197	7.642	3.332	2.312	1.771	1.251	0.904	0.711	0.690	1.291
16	2.713	5.217	6.674	7.150	3.247	2.242	1.709	1.245	0.904	0.722	0.650	1.129
17	3.041	5.022	6.439	6.674	3.164	2.171	1.647	1.199	0.904	0.741	0.690	1.114
18	2.841	4.922	6.931	6.439	3.000	2.171	1.647	1.196	0.904	0.849	0.736	1.232
19	2.990	6.357	7.500	6.325	2.919	2.171	1.647	1.196	0.904	0.877	0.768	1.095
20	2.881	6.879	7.392	6.325	2.919	2.171	1.647	1.196	0.904	1.090	0.731	1.145
21	2.980	6.674	7.532	6.556	2.840	2.162	1.639	1.170	0.904	1.132	0.738	1.235
22	4.342	6.325	8.199	6.790	2.761	2.042	1.534	1.120	0.904	1.046	0.891	1.251
23	4.295	6.098	9.343	6.908	2.761	2.034	1.526	1.095	0.904	0.991	1.149	1.206
24	4.769	5.917	9.430	6.908	2.761	2.034	1.526	1.095	0.904	0.866	1.301	1.173
25	4.921	6.368	10.449	6.923	2.684	2.034	1.526	1.095	0.903	0.794	1.052	1.196
26	4.810	5.795	10.341	6.998	2.608	2.034	1.526	1.095	0.887	0.751	0.951	1.237
27	4.338	5.441	10.305	6.570	2.608	2.034	1.497	1.095	0.873	0.731	0.904	1.652
28	4.610	5.204	10.198	6.213	2.608	2.034	1.467	1.095	0.859	0.731	0.928	1.362
29	4.718		10.577	5.875	2.608	2.034	1.439	1.095	0.837	0.731	1.172	1.377
30	4.436		10.503	5.656	2.533	2.034	1.410	1.095	0.815	0.731	1.095	1.558
31	4.220		10.467		2.458		1.410	1.101		0.731		2.349
Mean	3.003	4.850	6.935	7.886	3.454	2.220	1.688	1.232	0.969	0.809	0.823	1.561
Flow (MCM)	8.043	11.734	18.574	20.440	9.250	5.753	4.522	3.299	2.510	2.168	2.132	4.181
Maximum	4.921	6.879	10.577	10.721	5.441	2.458	2.025	1.410	1.186	1.132	1.301	3.487
Minimum	1.590	3.123	3.951	5.656	2.458	2.034	1.410	1.095	0.815	0.711	0.650	1.095
Runoff (mm)	47.875	69.843	110.561	121.668	55.062	34.247	26.917	19.637	14.943	12.903	12.692	24.888

Flow (cumecs)

Annual Statistics

Maximum: 10.721 Minimum: 0.650 Mean: 2.952 cumecs
Total: 93.107 MCM Runoff: 554.209 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2015

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.799	3.081	2.771	5.637	4.632	2.919	2.136	1.526	1.048	0.815	0.815	1.050
2	1.586	3.081	2.899	4.099	4.520	2.840	2.097	1.497	1.042	0.815	0.860	2.366
3	1.468	5.193	2.771	4.173	4.423	2.761	2.038	1.439	1.000	0.815	1.215	1.995
4	1.410	3.738	3.057	4.232	4.423	2.761	2.034	1.410	0.997	0.815	1.413	1.701
5	1.410	3.175	2.871	4.232	4.423	2.761	2.000	1.410	0.997	0.815	1.198	1.483
6	1.496	3.081	3.210	4.137	4.314	2.761	1.966	1.410	0.997	0.813	0.999	1.355
7	2.661	3.164	2.892	4.232	4.148	2.752	1.933	1.410	0.997	0.757	0.860	1.248
8	2.460	5.331	2.761	4.830	4.055	2.617	1.900	1.407	0.997	0.767	0.815	1.289
9	2.242	4.427	2.761	5.334	4.032	2.608	1.900	1.355	0.997	0.733	0.860	1.211
10	2.102	3.860	2.983	5.758	3.939	2.608	1.900	1.304	0.994	0.731	0.860	1.321
11	2.042	3.591	2.939	6.627	3.780	2.608	1.900	1.301	0.953	0.731	0.773	1.410
12	2.162	3.428	2.919	7.844	3.769	2.533	1.900	1.274	0.947	0.731	0.690	1.355
13	2.102	3.417	2.919	7.891	3.769	2.458	1.900	1.245	0.907	0.731	0.650	1.376
14	2.115	3.417	2.879	7.891	3.769	2.458	1.892	1.199	0.904	0.731	0.690	1.925
15	2.997	3.332	2.835	8.231	3.769	2.458	1.779	1.196	0.904	0.731	0.773	2.105
16	2.684	3.247	2.776	7.798	3.680	2.458	1.771	1.196	0.904	0.731	1.697	2.273
17	2.533	3.343	3.038	7.286	3.504	2.417	1.771	1.196	0.904	0.731	2.024	4.861
18	2.533	3.482	4.762	7.028	3.385	2.317	1.771	1.196	0.904	0.731	0.869	3.277
19	2.533	3.257	4.436	6.790	3.114	2.312	1.771	1.196	0.904	0.731	0.600	2.763
20	2.458	3.257	4.232	6.556	3.247	2.312	1.771	1.145	0.904	0.710	0.574	2.694
21	2.458	3.311	4.137	6.325	3.247	2.312	1.771	1.095	0.904	0.670	0.574	2.919
22	2.533	3.081	4.355	6.098	3.247	2.312	1.717	1.095	0.860	0.650	0.574	2.901
23	2.627	2.929	6.335	5.862	3.247	2.277	1.701	1.095	0.815	0.650	0.574	2.533
24	2.909	2.919	3.951	5.561	3.164	2.241	1.647	1.095	0.815	0.650	0.647	2.251
25	3.061	2.929	3.951	5.534	3.081	2.241	1.647	1.095	0.815	0.650	0.980	2.102
26	2.939	2.990	3.849	5.335	3.081	2.210	1.647	1.095	0.815	0.650	1.248	2.034
27	3.135	2.840	3.602	5.230	3.081	2.206	1.643	1.095	0.815	0.650	1.525	2.068
28	3.795	2.761	3.591	5.125	3.000	2.206	1.616	1.095	0.815	0.688	1.993	2.807
29	3.504		3.602	5.022	2.919	2.206	1.586	1.095	0.815	0.713	1.411	3.000
30	3.332		3.746	4.920	2.919	2.202	1.530	1.095	0.815	0.731	1.063	2.919
31	3.164		3.743		2.919		1.526	1.091		0.773		3.000
Mean	2.460	3.417	3.470	5.854	3.632	2.471	1.812	1.237	0.916	0.730	0.994	2.181
Flow (MCM)	6.588	8.265	9.294	15.173	9.729	6.405	4.853	3.313	2.376	1.956	2.577	5.840
Maximum	3.795	5.331	6.335	8.231	4.632	2.919	2.136	1.526	1.048	0.815	2.024	4.861
Minimum	1.410	2.761	2.761	4.099	2.919	2.202	1.526	1.091	0.815	0.650	0.574	1.050
Runoff (mm)	39.214	49.198	55.323	90.317	57.909	38.124	28.885	19.721	14.140	11.640	15.338	34.764

Flow (cumecs)

Annual Statistics

Maximum: 8.231 Minimum: 0.574 Mean: 2.431 cumecs
Total: 76.668 MCM Runoff: 456.357 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.010	7.750	4.044	3.504	4.220	3.024	2.213	1.503	0.997	0.904	0.876	0.821
2	3.061	7.270	3.780	3.353	3.952	2.991	2.192	1.485	0.997	0.903	0.837	0.916
3	3.566	6.790	3.680	3.580	3.905	2.959	2.164	1.462	0.997	0.887	0.815	1.139
4	5.624	6.900	3.504	3.876	3.877	2.935	2.136	1.439	0.997	0.873	0.815	1.275
5	5.392	6.805	3.417	8.617	3.850	2.911	2.109	1.416	0.997	0.846	0.821	1.086
6	7.580	6.325	3.406	13.389	3.814	2.879	2.094	1.404	0.997	0.824	1.067	1.486
7	7.641	6.086	3.257	14.857	3.778	2.848	2.067	1.382	0.997	0.815	1.142	1.649
8	7.550	6.829	3.247	14.816	3.743	2.817	2.040	1.360	0.974	0.815	0.998	1.356
9	6.793	5.246	3.164	12.759	3.723	2.799	2.013	1.339	0.936	0.815	0.910	1.152
10	8.350	5.441	3.081	11.246	3.688	2.769	1.993	1.322	0.913	0.815	0.899	1.095
11	9.558	5.441	3.228	10.045	3.653	2.738	1.973	1.306	0.904	0.815	0.821	1.095
12	11.511	5.481	3.021	10.173	3.617	2.707	1.947	1.285	0.904	0.815	0.815	1.093
13	14.047	6.101	2.840	10.432	3.591	2.684	1.920	1.264	0.904	0.815	0.821	1.074
14	14.155	7.615	2.761	9.531	3.565	2.661	1.895	1.243	0.904	0.815	0.854	1.044
15	11.856	5.441	2.983	9.325	3.530	2.630	1.880	1.231	0.904	0.815	0.815	1.010
16	9.813	6.446	2.860	8.802	3.495	2.600	1.855	1.211	0.904	0.815	0.815	1.013
17	15.637	5.634	2.684	8.276	3.461	2.571	1.829	1.196	0.904	0.840	0.815	1.085
18	10.494	5.851	2.533	7.907	3.442	2.554	1.803	1.196	0.904	0.901	0.838	1.024
19	8.176	5.939	2.458	7.750	3.408	2.525	1.784	1.196	0.904	0.879	1.114	0.997
20	7.270	8.189	2.458	7.270	3.374	2.495	1.765	1.196	0.904	0.818	0.957	0.997
21	6.790	7.671	2.458	6.790	3.340	2.465	1.740	1.196	0.904	0.815	0.904	0.997
22	6.870	7.750	2.458	6.325	3.314	2.443	1.715	1.192	0.904	0.815	0.904	0.997
23	7.385	7.485	2.458	5.876	3.289	2.421	1.696	1.145	0.904	0.815	0.895	0.951
24	6.751	6.805	2.458	5.441	3.255	2.392	1.677	1.098	0.904	0.815	0.874	0.904
25	6.112	6.325	2.679	5.035	3.222	2.363	1.653	1.095	0.904	0.815	0.871	0.904
26	6.198	5.767	2.694	4.819	3.189	2.335	1.628	1.095	0.904	0.815	0.846	0.904
27	6.398	5.230	2.608	4.705	3.171	2.319	1.605	1.095	0.904	0.815	0.824	0.860
28	7.316	4.819	2.627	4.436	3.139	2.291	1.591	1.093	0.904	0.815	0.815	0.815
29	7.412	4.424	3.032	4.232	3.106	2.262	1.568	1.074	0.907	0.815	0.815	0.871
30	8.808		3.034	4.232	3.074	2.234	1.544	1.044	0.924	0.815	0.815	1.040
31	8.148		3.497		3.055		1.520	1.000		0.821		1.108
Mean	8.041	6.340	2.981	7.713	3.511	2.621	1.858	1.244	0.930	0.832	0.880	1.057
Flow (MCM)	21.537	15.885	7.984	19.993	9.404	6.793	4.977	3.332	2.412	2.229	2.282	2.830
Maximum	15.637	8.189	4.044	14.857	4.220	3.024	2.213	1.503	0.997	0.904	1.142	1.649
Minimum	3.010	4.424	2.458	3.353	3.055	2.234	1.520	1.000	0.904	0.815	0.815	0.815
Runoff (mm)	128.197	94.555	47.524	119.005	55.974	40.434	29.628	19.832	14.356	13.270	13.583	16.848

Flow (cumecs)

Annual Statistics

Maximum: 15.637 Minimum: 0.815 Mean: 3.167 cumecs
Total: 100.162 MCM Runoff: 596.200 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.329	2.382	2.619	5.401	3.680	2.608	2.004	1.301	0.777	0.574	0.533	0.786
2	1.274	2.171	3.522	5.023	3.591	2.608	1.969	1.301	0.733	0.574	0.501	0.769
3	2.319	2.102	4.294	4.921	3.591	2.570	1.933	1.301	0.731	0.574	0.501	0.733
4	1.577	2.034	2.506	4.844	3.591	2.528	1.900	1.301	0.731	0.574	0.653	0.731
5	1.355	2.102	2.852	4.806	3.504	2.462	1.900	1.301	0.731	0.574	0.695	0.731
6	1.301	2.171	3.469	4.718	3.417	2.458	1.900	1.300	0.731	0.574	0.683	0.731
7	1.245	2.102	3.674	4.712	3.332	2.421	1.887	1.265	0.731	0.574	0.729	0.932
8	1.164	1.967	3.504	4.479	3.247	2.385	1.872	1.258	0.731	0.574	0.738	1.386
9	1.194	1.913	3.332	4.423	3.164	2.380	1.834	1.201	0.731	0.574	0.782	1.386
10	1.196	2.097	3.247	4.423	3.081	2.317	1.775	1.196	0.731	0.574	0.652	1.790
11	1.272	2.910	3.247	4.232	3.081	2.312	1.771	1.196	0.731	0.555	0.611	2.253
12	1.304	2.533	3.247	4.044	3.081	2.312	1.771	1.170	0.731	0.524	0.576	1.516
13	1.294	2.251	3.164	3.939	3.102	2.312	1.771	1.160	0.729	0.574	0.537	1.294
14	1.202	2.171	3.164	3.780	3.311	2.312	1.771	1.135	0.700	0.607	0.501	1.101
15	1.361	2.102	3.268	3.680	3.247	2.312	1.771	1.095	0.652	0.576	0.501	1.003
16	1.468	2.025	4.120	3.504	3.164	2.310	1.771	1.095	0.650	0.616	0.501	1.029
17	1.355	1.901	4.478	3.433	3.081	2.264	1.770	1.095	0.650	0.760	0.501	2.250
18	1.248	1.779	4.429	3.719	3.000	2.206	1.322	1.095	0.650	0.708	0.501	4.445
19	1.145	1.779	4.435	3.848	2.919	2.090	1.589	1.093	0.650	0.581	0.501	4.359
20	1.863	1.959	4.435	4.219	2.914	1.130	1.647	1.058	0.650	0.569	0.501	3.684
21	1.768	1.959	4.706	4.256	2.840	2.074	1.647	1.000	0.641	0.506	0.515	2.993
22	1.586	1.852	4.806	4.044	2.766	2.104	1.586	0.997	0.610	0.501	0.710	2.243
23	1.468	2.064	4.619	3.951	2.761	2.097	1.526	0.997	0.576	0.501	0.690	1.853
24	1.355	2.237	4.914	3.951	2.761	2.038	1.526	0.951	0.574	0.537	0.655	1.709
25	1.248	2.165	5.023	3.951	2.761	2.034	1.514	0.904	0.574	0.537	0.650	1.687
26	1.248	1.909	4.632	3.951	2.684	2.034	1.485	0.904	0.574	0.519	0.645	2.055
27	1.248	2.170	4.607	3.951	2.608	2.034	1.450	0.904	0.574	0.519	0.839	1.772
28	1.248	2.286	4.619	3.951	2.608	2.034	1.421	0.860	0.574	0.501	0.999	1.773
29	1.282		4.557	3.860	2.608	2.032	1.410	0.815	0.574	0.501	0.882	1.869
30	1.864		4.793	3.769	2.608	2.008	1.379	0.815	0.574	0.501	0.837	3.296
31	2.738		4.948		2.608		1.304	0.844		0.506		3.303
Mean	1.436	2.110	3.975	4.193	3.055	2.226	1.683	1.094	0.666	0.562	0.638	1.854
Flow (MCM)	3.847	5.105	10.647	10.867	8.183	5.770	4.508	2.930	1.727	1.506	1.653	4.965
Maximum	2.738	2.910	5.023	5.401	3.680	2.608	2.004	1.301	0.777	0.760	0.999	4.445
Minimum	1.145	1.779	2.506	3.433	2.608	1.130	1.304	0.815	0.574	0.501	0.501	0.731
Runoff (mm)	22.898	30.390	63.375	64.686	48.707	34.346	26.836	17.438	10.279	8.967	9.837	29.552

Flow (cumecs)

Annual Statistics

Maximum: 5.401 Minimum: 0.501 Mean: 1.958 cumecs
Total: 61.738 MCM Runoff: 367.490 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.936	4.461	2.850	4.328	5.279	2.533	1.900	1.410	0.859	0.888	0.574	0.882
2	2.229	4.232	2.919	4.423	4.975	2.458	1.900	1.410	0.818	0.899	0.574	0.795
3	2.331	4.044	3.218	4.326	4.424	2.458	1.900	1.410	0.815	0.818	0.574	0.731
4	2.723	3.860	3.102	4.232	4.055	2.449	1.900	1.410	0.815	0.754	0.574	0.731
5	2.684	3.769	2.921	4.137	3.951	2.321	1.900	1.414	0.815	0.710	0.574	0.817
6	2.617	3.796	2.761	4.044	3.951	2.312	1.900	1.453	0.815	0.678	0.574	0.860
7	2.608	5.555	2.840	4.273	3.860	2.312	1.892	1.311	0.815	0.658	0.574	0.815
8	2.533	5.919	3.168	5.087	3.769	2.312	1.779	1.301	0.815	0.650	0.574	0.900
9	2.376	5.049	3.332	5.584	3.769	2.312	1.771	1.301	0.815	0.650	0.583	1.156
10	2.241	4.619	3.995	6.542	3.758	2.312	1.771	1.301	0.815	0.652	0.720	2.112
11	2.346	4.244	4.707	6.775	3.602	2.312	1.771	1.301	0.810	0.667	0.690	1.150
12	3.608	4.044	4.532	6.790	3.591	2.312	1.771	1.301	0.736	0.650	0.650	1.372
13	4.491	3.860	4.607	7.274	3.504	2.312	1.771	1.298	0.731	0.647	0.650	1.107
14	4.932	3.680	4.508	7.409	3.417	2.312	1.771	1.248	0.731	0.595	0.650	1.107
15	4.831	3.504	4.338	7.377	3.417	2.303	1.771	1.199	0.731	0.574	0.650	1.222
16	4.211	3.321	4.314	7.407	3.417	2.180	1.771	1.196	0.731	0.574	0.650	1.010
17	4.268	3.010	4.243	7.500	3.428	2.171	1.771	1.196	0.731	0.574	0.650	1.035
18	4.369	2.919	4.375	7.746	3.569	2.171	1.709	1.196	0.731	0.574	0.650	1.515
19	4.332	2.831	5.154	11.399	3.428	2.171	1.647	1.196	0.731	0.574	0.650	1.727
20	4.411	2.617	6.474	11.784	3.406	2.171	1.647	1.196	0.731	0.574	0.650	1.363
21	4.255	2.551	7.501	11.902	3.257	2.171	1.647	1.145	0.731	0.574	0.682	1.152
22	5.246	2.600	6.340	12.818	3.247	2.171	1.647	1.095	0.731	0.574	0.682	1.095
23	4.550	2.705	5.889	12.265	3.247	2.162	1.639	1.095	0.731	0.574	0.650	1.095
24	5.468	3.133	5.643	11.507	3.164	2.042	1.534	1.046	0.731	0.574	0.687	1.282
25	7.541	2.990	5.348	10.191	3.000	2.034	1.526	0.997	0.710	0.574	1.257	1.804
26	6.704	2.840	5.230	8.942	2.840	2.034	1.526	0.951	0.690	0.574	1.149	1.771
27	6.392	2.850	5.022	7.946	2.761	2.034	1.526	0.904	0.678	0.574	1.220	1.836
28	5.876	2.919	4.819	6.189	2.761	2.025	1.526	0.904	0.658	0.612	0.938	1.900
29	5.561		4.718	5.875	2.684	1.909	1.526	0.904	0.650	0.612	0.865	2.870
30	5.441		4.607	5.861	2.608	1.900	1.519	0.904	0.665	0.574	0.901	2.897
31	5.191		4.244		2.608		1.417	0.901		0.574		2.608
Mean	4.171	3.640	4.443	7.398	3.508	2.223	1.711	1.190	0.752	0.637	0.715	1.378
Flow (MCM)	11.172	8.806	11.899	19.175	9.396	5.761	4.584	3.187	1.949	1.706	1.854	3.691
Maximum	7.541	5.919	7.501	12.818	5.279	2.533	1.900	1.453	0.859	0.899	1.257	2.897
Minimum	2.229	2.551	2.761	4.044	2.608	1.900	1.417	0.901	0.650	0.574	0.574	0.731
Runoff (mm)	66.499	52.416	70.827	114.137	55.926	34.290	27.284	18.973	11.603	10.153	11.038	21.968

Flow (cumecs)

Annual Statistics

Maximum: 12.818 Minimum: 0.574 Mean: 2.647 cumecs
Total: 83.480 MCM Runoff: 496.903 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA7A
Station Name: Chimala River at Chitekelo
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 8:55:13 S Longitude: 33:58:34 E Elevation: 1907.0 metres Area: 168.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.460	4.044	3.962	2.919	5.241	3.164	1.771	1.301	0.904	0.655	0.650	1.095
2	2.242	3.860	4.113	3.010	5.875	3.081	1.771	1.301	0.904	0.650	0.650	1.174
3	2.036	3.758	3.951	3.343	5.656	3.076	1.767	1.274	0.901	0.650	0.690	1.245
4	1.828	3.613	5.548	3.658	5.548	3.000	1.710	1.222	0.840	0.651	0.731	1.145
5	1.725	3.718	3.835	3.680	5.548	2.924	1.661	1.196	0.815	0.657	0.731	1.046
6	1.828	3.685	3.691	3.780	5.441	2.919	1.647	1.196	0.815	0.652	0.731	1.046
7	1.779	3.849	3.848	3.939	5.217	2.914	1.647	1.196	0.815	0.667	0.731	1.095
8	2.002	3.939	3.680	3.951	4.844	2.840	1.647	1.196	0.815	0.650	0.731	1.120
9	1.733	3.780	3.591	3.951	4.806	2.766	1.586	1.196	0.815	0.650	0.731	1.720
10	1.701	4.007	3.493	3.951	4.619	2.759	1.526	1.170	0.821	0.650	0.731	2.078
11	1.654	7.147	3.257	3.945	4.508	2.709	1.526	1.130	1.009	0.650	0.731	1.438
12	1.590	6.647	3.247	3.958	4.338	2.646	1.526	1.104	0.960	0.650	0.731	1.152
13	2.048	6.225	3.332	4.546	4.326	2.598	1.526	1.095	0.899	0.650	0.731	1.095
14	2.677	6.098	3.332	4.067	4.232	2.467	1.526	1.095	0.778	0.650	0.731	1.152
15	2.881	5.972	3.247	3.951	4.137	2.458	1.526	1.095	0.690	0.650	0.731	1.308
16	2.713	5.765	3.247	3.951	4.125	2.458	1.526	1.095	0.650	0.659	0.731	1.774
17	3.041	5.548	3.247	3.951	3.962	2.449	1.526	1.095	0.650	0.709	0.758	2.287
18	2.841	5.243	3.247	3.951	3.948	2.321	1.525	1.095	0.650	0.741	1.108	2.128
19	2.990	5.243	3.247	4.127	3.889	2.312	1.502	1.093	0.650	0.882	0.957	2.306
20	2.881	5.617	3.205	4.137	3.814	2.308	1.467	1.076	0.655	0.861	0.902	2.852
21	2.980	5.801	3.122	4.055	3.769	2.210	1.424	1.060	0.725	0.795	0.866	3.257
22	4.342	4.436	3.081	4.049	3.769	2.171	1.410	1.021	0.731	0.731	0.837	3.321
23	4.295	4.107	3.000	3.609	3.724	2.162	1.410	0.997	0.731	0.731	0.883	3.290
24	4.769	4.226	2.919	3.959	3.635	2.042	1.410	0.997	0.731	0.731	1.975	5.079
25	4.921	4.411	2.914	4.358	3.591	2.034	1.410	0.997	0.731	0.731	1.452	6.159
26	4.810	5.911	2.805	4.675	3.580	1.967	1.410	0.997	0.731	0.731	1.355	5.760
27	4.338	4.614	2.761	4.326	3.428	1.900	1.410	0.988	0.731	0.731	1.355	4.187
28	4.610	4.044	2.761	4.326	3.406	1.896	1.410	0.978	0.731	0.733	1.248	3.951
29	4.718		2.761	4.326	3.257	1.807	1.355	0.964	0.731	0.656	1.242	3.951
30	4.436		2.771	4.338	3.247	1.771	1.301	0.927	0.725	0.650	1.152	4.462
31	4.232		2.909		3.247		1.301	0.904		0.650		3.034
Mean	3.003	4.832	3.359	3.960	4.282	2.471	1.521	1.098	0.778	0.694	0.919	2.474
Flow (MCM)	8.044	11.690	8.997	10.263	11.468	6.405	4.075	2.942	2.016	1.858	2.383	6.627
Maximum	4.921	7.147	5.548	4.675	5.875	3.164	1.771	1.301	1.009	0.882	1.975	6.159
Minimum	1.590	3.613	2.761	2.919	3.247	1.771	1.301	0.904	0.650	0.650	0.650	1.046
Runoff (mm)	47.881	69.586	53.551	61.090	68.260	38.124	24.254	17.512	12.000	11.057	14.183	39.449

Flow (cumecs)

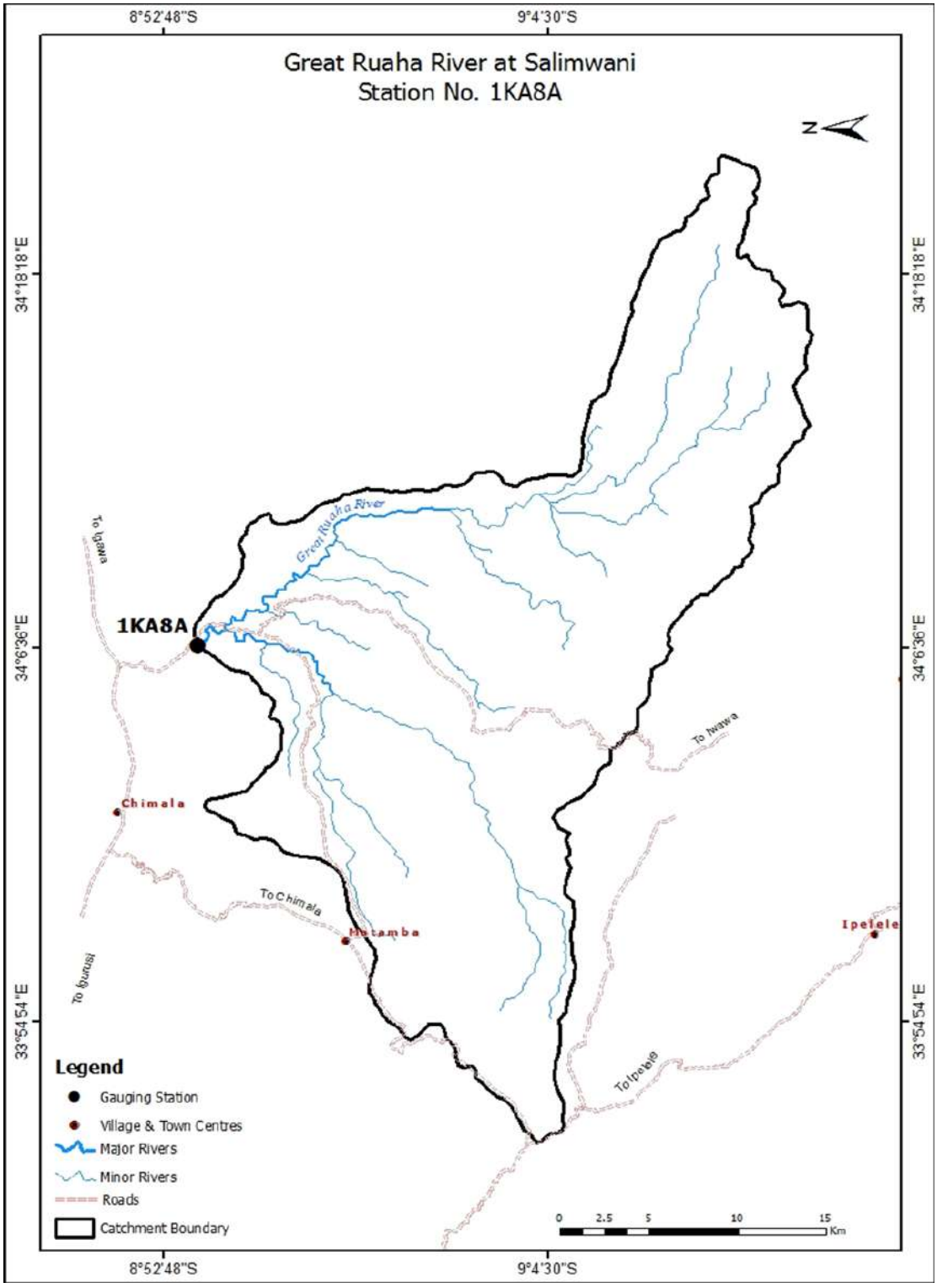
Annual Statistics

Maximum: 7.147 Minimum: 0.650 Mean: 2.449 cumecs
Total: 77.241 MCM Runoff: 459.765 mm

Possible data flags

No data stored "-" Estimated values "e"

Great Ruaha River at Salimwani				
Station No: 1KA8			Established: 16/12/1964	
Coordinates:			Altitude (m.a.m.s.l): 1,152	
Lat: -8.8972	Long: 34.1112		Catchment Area (km²): 785	
Description of the Catchment:				
Scattered settlement, woodland upstream, some wooded grassland and cultivation				
Station Details				
1. Staff Gauges	Range: 0 – 5m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2013	
3. Benchmark	Nail in concrete beacon			
BM Assumed Datum: 7.690m		N.M.M.S.L: -	TBM: –	
4. Control	Permanent consists of rock boulders across the stream			
5. Access	Accessible throughout the year, 45km from Rujewa town to the station			
Records	Period		Quality	
Water Level:	01/01/2010 - 31/12/2019		2.2.3	
Discharge:	01/01/2010 - 31/12/2019		2.2.2	
Extremes:	Max. Recorded	409.570m³/sec	On 20/12/1997	WL 4m
	Min. Recorded	1.020m³/sec	On 18/11/1991	WL 0.2m
Remarks				


Great Ruaha River at Salimwani
Station No. 1KA8A
N
8°52'48"S
9°4'30"S
34°18'18"E
34°6'36"E
33°54'54"E
1KA8A
Great Ruaha River
To Iringa
Chimala
To Chimala
Mtamba
To Iwawa
Ipetele
To Ipetele
To Igurusi
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Catchment Boundary
0 2.5 5 10 15
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	30.341	27.506	35.050	29.584	11.141	6.404	4.340	3.304	2.430	2.017	1.699	1.661
2	32.196	25.304	45.133	26.520	11.588	6.300	4.331	3.265	2.430	1.975	1.661	1.661
3	38.968	24.025	45.959	25.600	11.225	6.129	4.331	3.226	2.430	1.975	1.661	1.661
4	48.048	31.576	49.794	24.194	10.955	5.961	4.261	3.188	2.430	1.975	1.657	1.657
5	45.909	31.239	44.669	22.477	10.528	5.925	4.191	3.150	2.430	1.975	1.593	1.616
6	43.108	33.378	44.960	21.727	9.823	5.771	4.191	3.113	2.424	1.975	1.588	2.340
7	50.278	32.046	44.291	20.785	9.757	5.675	4.122	3.075	2.341	1.970	1.588	2.758
8	56.207	37.679	41.227	21.047	9.405	5.579	4.053	3.039	2.335	1.898	1.588	3.499
9	45.820	44.231	38.875	20.248	9.047	5.432	4.053	3.002	2.335	1.893	1.588	3.515
10	38.014	38.018	44.403	19.098	8.814	5.411	4.053	2.966	2.335	1.893	1.588	3.190
11	33.604	33.137	41.312	18.658	8.585	5.268	4.053	2.929	2.335	1.893	1.625	4.457
12	31.238	30.776	36.218	18.297	8.250	5.248	3.986	2.894	2.328	1.893	1.661	2.925
13	32.603	27.470	35.429	17.866	7.936	5.107	3.919	2.858	2.327	1.893	1.661	2.298
14	56.826	25.692	37.641	17.194	7.922	5.019	3.911	2.823	2.327	1.888	1.661	2.065
15	99.650	25.767	34.371	17.148	7.816	4.940	3.796	2.788	2.327	1.818	1.661	1.899
16	77.166	24.304	30.639	17.194	7.687	4.940	3.788	2.754	2.327	1.813	1.666	1.813
17	56.430	25.370	28.664	17.471	7.482	4.930	3.780	2.719	2.321	1.813	1.731	1.813
18	44.511	30.018	26.537	17.219	7.290	4.796	3.667	2.685	2.241	1.813	1.815	1.955
19	38.159	33.926	26.641	18.046	7.177	4.786	3.652	2.652	2.235	1.813	1.898	3.858
20	32.894	35.951	26.801	18.021	6.978	4.786	3.542	2.628	2.235	1.813	1.924	3.767
21	29.879	33.411	26.436	16.792	6.879	4.711	3.534	2.627	2.235	1.813	1.961	5.001
22	26.305	33.788	29.703	15.417	6.879	4.635	3.534	2.577	2.191	1.813	2.851	4.322
23	25.659	41.515	29.146	14.679	6.879	4.626	3.473	2.527	2.146	1.813	2.444	3.979
24	26.539	33.339	29.586	13.896	6.783	4.497	3.412	2.527	2.146	1.813	2.148	4.603
25	29.509	29.679	31.478	13.140	6.735	4.488	3.412	2.527	2.146	1.813	1.934	5.756
26	27.853	27.638	33.028	12.673	7.228	4.488	3.412	2.527	2.141	1.775	1.780	4.092
27	29.584	27.397	31.255	12.231	6.978	4.482	3.412	2.478	2.065	1.736	1.736	4.777
28	30.690	30.797	39.884	11.905	6.807	4.475	3.412	2.430	2.059	1.736	1.736	3.387
29	28.632		40.407	11.260	7.091	4.475	3.411	2.430	2.059	1.736	1.699	2.603
30	30.340		35.872	11.089	7.403	4.466	3.382	2.430	2.059	1.736	1.661	2.431
31	31.913		32.554		6.545		3.343	2.430		1.736		2.335
Mean	40.286	31.249	36.063	18.049	8.246	5.125	3.799	2.793	2.272	1.855	1.782	3.022
Flow (MCM)	107.903	75.598	96.592	46.784	22.085	13.284	10.174	7.480	5.890	4.970	4.619	8.095
Maximum	99.650	44.231	49.794	29.584	11.588	6.404	4.340	3.304	2.430	2.017	2.851	5.756
Minimum	25.659	24.025	26.436	11.089	6.545	4.466	3.343	2.430	2.059	1.736	1.588	1.616
Runoff (mm)	137.456	96.303	123.047	59.597	28.134	16.922	12.961	9.528	7.503	6.331	5.885	10.313

Flow (cumecs)

Annual Statistics

Maximum: 99.650 Minimum: 1.588 Mean: 12.879 cumecs
Total: 406.137 MCM Runoff: 517.372 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A **Year:** 2011
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.335	6.325	12.849	54.356	16.431	7.277	4.476	3.389	2.327	2.059	23.076	18.021
2	2.335	7.118	11.782	43.516	15.907	7.089	4.475	3.311	2.321	2.059	25.048	17.821
3	2.274	6.681	11.243	39.659	15.224	6.978	4.466	3.232	2.241	2.059	24.998	17.652
4	2.081	6.119	11.023	35.506	14.517	6.783	4.340	3.153	2.235	2.076	24.890	17.515
5	2.389	5.840	11.613	33.316	13.602	6.592	4.322	3.077	2.235	2.344	24.247	17.414
6	2.976	6.984	13.840	31.209	12.953	6.404	4.199	3.001	2.235	2.948	23.402	17.331
7	4.194	7.129	13.487	34.966	12.113	6.220	4.191	2.927	2.230	3.408	22.801	17.653
8	4.719	7.023	15.684	40.853	11.940	6.118	4.122	2.854	2.152	2.733	22.680	38.236
9	4.219	8.749	26.830	38.526	12.268	5.962	4.053	2.782	2.146	2.214	22.538	78.537
10	4.152	12.337	24.250	35.353	12.748	5.951	4.053	2.731	2.146	2.103	22.116	101.059
11	4.850	11.491	20.529	35.600	12.362	5.950	4.053	2.729	2.141	2.059	21.298	113.004
12	7.394	10.301	18.119	34.544	13.414	5.936	4.045	2.678	2.065	2.059	21.081	121.275
13	7.706	9.425	16.595	35.442	12.096	5.847	3.927	2.627	2.059	2.059	20.943	129.238
14	10.426	10.176	14.925	41.354	11.379	5.760	3.919	2.627	2.059	2.059	20.737	142.742
15	15.416	9.273	17.584	44.621	10.956	5.664	3.919	2.620	2.059	2.059	20.670	145.944
16	12.173	8.489	20.954	46.621	10.429	5.422	3.919	2.533	2.059	2.059	22.979	154.607
17	17.943	9.339	23.823	41.123	10.044	5.268	3.911	2.527	2.059	2.059	25.306	223.082
18	15.520	11.100	22.816	35.843	9.782	5.177	3.796	2.527	2.059	2.059	27.394	243.067
19	11.371	14.404	25.996	32.196	9.498	5.087	3.788	2.527	2.059	2.059	26.685	248.084
20	9.068	17.769	47.155	28.416	10.062	4.950	3.788	2.521	2.017	2.012	24.782	270.480
21	7.814	22.991	46.965	25.892	9.182	4.950	3.788	2.436	1.975	1.893	22.926	303.376
22	6.714	21.598	43.289	24.247	8.828	5.077	3.780	2.430	1.975	1.818	21.882	338.907
23	6.143	17.792	41.103	22.703	8.699	4.950	3.667	2.430	1.975	1.775	21.458	366.138
24	6.051	15.031	34.428	21.987	8.472	4.863	3.659	2.424	1.975	1.736	21.305	366.686
25	6.120	14.599	31.464	21.516	8.346	4.786	3.659	2.341	1.975	1.736	21.361	345.825
26	6.007	13.758	37.864	20.451	8.031	4.711	3.597	2.335	1.975	1.699	20.825	330.393
27	6.501	13.409	36.100	19.269	7.700	4.626	3.534	2.335	1.975	1.661	20.578	282.791
28	5.773	14.235	38.805	18.141	7.607	4.497	3.534	2.335	1.975	1.625	20.205	232.568
29	5.280		39.537	17.495	7.587	4.488	3.473	2.331	1.975	1.588	19.443	210.871
30	5.117		34.590	16.787	7.482	4.487	3.412	2.327	2.017	1.585	18.444	177.091
31	5.455		36.449		7.469		3.412	2.327		2.443		167.837
Mean	6.791	11.410	25.861	32.384	10.875	5.596	3.912	2.659	2.090	2.068	22.537	169.524
Flow (MCM)	18.189	27.604	69.266	83.938	29.128	14.504	10.478	7.122	5.417	5.539	58.415	454.053
Maximum	17.943	22.991	47.155	54.356	16.431	7.277	4.476	3.389	2.327	3.408	27.394	366.686
Minimum	2.081	5.840	11.023	16.787	7.469	4.487	3.412	2.327	1.975	1.585	18.444	17.331
Runoff (mm)	23.170	35.164	88.237	106.928	37.106	18.476	13.348	9.072	6.901	7.056	74.414	578.412

Flow (cumecs)

Annual Statistics

Maximum: 366.686 Minimum: 1.585 Mean: 24.642 cumecs
Total: 777.116 MCM Runoff: 989.956 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	63.463	14.292	66.273	19.871	18.217	7.709	5.177	3.919	2.595	2.344	3.339	3.862
2	50.224	13.602	62.549	18.660	17.153	7.708	5.087	3.919	2.650	2.365	5.508	3.521
3	40.721	13.121	63.312	19.947	15.590	7.691	4.950	3.853	2.710	2.387	6.876	2.952
4	35.369	12.526	68.257	22.917	14.848	7.586	4.940	3.788	2.772	2.408	4.387	2.494
5	30.018	11.940	44.233	37.292	16.453	7.379	4.863	3.780	2.829	2.430	3.303	2.331
6	25.749	12.077	38.622	45.562	16.102	7.264	4.786	3.667	2.888	2.452	2.757	2.336
7	23.096	12.325	43.680	52.498	15.907	7.076	4.777	3.659	2.947	2.474	3.002	2.555
8	24.691	13.371	76.452	46.761	15.396	6.892	4.645	3.652	3.007	2.496	3.536	2.880
9	24.690	13.240	83.625	47.801	15.035	6.867	4.626	3.542	3.073	2.518	3.741	3.235
10	36.387	12.654	60.075	48.863	14.700	6.698	4.497	3.534	3.140	2.541	3.017	3.615
11	31.676	12.231	46.174	42.435	14.233	6.592	4.488	3.527	3.202	2.567	2.494	7.854
12	26.403	11.940	40.423	37.083	13.720	6.485	4.487	3.420	3.266	2.586	2.331	8.189
13	25.800	11.780	34.417	33.908	12.953	6.323	4.476	3.412	3.330	2.612	2.327	7.316
14	24.336	11.621	32.174	31.170	12.269	6.311	4.475	3.412	3.396	2.632	2.327	6.666
15	24.217	11.414	30.204	31.000	12.077	6.300	4.466	3.412	3.467	2.658	2.327	5.534
16	23.623	11.744	27.203	33.013	11.762	6.140	4.340	3.382	3.540	2.678	2.327	5.322
17	24.131	12.959	26.138	34.281	11.243	6.129	4.331	2.971	3.608	2.705	2.327	7.119
18	28.744	17.562	28.994	32.913	10.955	6.118	4.331	2.942	3.657	2.729	2.358	5.936
19	30.078	18.498	32.608	33.451	10.689	5.962	4.322	2.888	3.620	2.753	3.327	4.223
20	26.957	20.740	37.390	32.420	10.428	5.950	4.199	2.834	2.915	2.776	4.054	3.848
21	25.570	24.980	35.385	30.861	10.171	5.936	4.191	2.834	2.444	2.800	5.538	4.458
22	23.766	24.492	32.012	28.416	9.919	5.935	4.191	2.828	2.335	2.824	3.658	5.795
23	22.039	19.474	29.421	25.508	9.614	5.847	4.191	2.736	2.328	2.849	2.785	6.150
24	20.924	16.934	27.172	24.651	8.857	5.760	4.182	2.729	2.327	2.873	2.809	6.474
25	19.235	17.128	27.880	23.429	8.799	5.749	4.062	2.729	2.327	2.897	2.571	7.055
26	17.155	43.747	32.655	20.357	8.585	5.600	4.053	2.678	2.327	2.922	2.347	7.254
27	15.590	54.394	26.150	18.732	8.374	5.589	4.053	2.627	2.327	2.861	2.331	6.858
28	14.358	45.914	27.830	18.284	8.249	5.505	4.053	2.620	2.327	3.401	2.358	7.652
29	12.849	54.069	25.892	18.299	8.125	5.411	4.053	2.533	2.327	4.066	3.379	8.045
30	12.069		23.766	18.282	7.936	5.268	3.986	2.527	2.328	4.858	4.286	6.225
31	13.797		21.756		7.816		3.919	2.542		4.560		5.426
Mean	26.378	19.682	40.410	30.956	12.135	6.393	4.426	3.190	2.867	2.839	3.258	5.264
Flow (MCM)	70.651	49.314	108.235	80.237	32.501	16.570	11.854	8.544	7.431	7.605	8.444	14.099
Maximum	63.463	54.394	83.625	52.498	18.217	7.709	5.177	3.919	3.657	4.858	6.876	8.189
Minimum	12.069	11.414	21.756	18.282	7.816	5.268	3.919	2.527	2.327	2.344	2.327	2.331
Runoff (mm)	90.002	62.821	137.879	102.213	41.403	21.108	15.101	10.885	9.466	9.688	10.756	17.960

Flow (cumecs)

Annual Statistics

Maximum: 83.625 Minimum: 2.327 Mean: 13.150 cumecs
Total: 415.827 MCM Runoff: 529.716 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2013

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.983	10.813	19.223	47.313	20.373	7.678	5.087	3.919	3.060	2.360	1.893	2.738
2	8.787	21.329	17.342	47.066	19.765	7.495	4.950	3.919	3.033	2.646	1.853	2.437
3	17.866	20.254	16.212	41.897	19.996	7.469	4.940	3.919	3.007	2.552	1.813	2.276
4	21.183	17.820	17.528	39.216	19.243	7.277	4.930	3.919	2.980	2.756	1.813	2.373
5	17.597	16.592	20.745	45.555	18.682	7.089	4.796	3.919	2.954	2.804	1.813	4.408
6	19.781	15.374	19.028	42.382	18.117	6.978	4.777	3.919	2.928	2.979	1.813	4.706
7	24.075	14.058	26.122	43.750	17.518	6.867	4.645	3.919	2.903	2.814	1.813	3.336
8	29.348	12.696	34.446	70.947	16.923	6.698	4.635	3.911	2.877	4.535	1.809	5.461
9	28.711	11.507	47.690	62.863	15.590	6.592	4.562	3.796	2.852	3.938	1.741	7.142
10	24.462	10.690	51.508	63.513	14.397	6.497	4.488	3.788	2.826	2.785	1.736	6.607
11	24.581	10.833	80.146	65.110	13.895	6.404	4.488	3.780	2.801	2.577	1.736	7.792
12	19.691	17.980	82.698	60.552	13.279	6.311	4.482	3.660	2.776	2.389	2.259	7.283
13	16.154	15.733	104.827	55.087	12.527	6.300	4.475	3.542	2.751	2.335	2.534	6.132
14	13.733	14.773	106.491	48.261	12.231	6.140	4.475	3.527	2.727	2.322	2.288	8.598
15	12.169	14.075	77.476	46.875	12.208	6.040	4.403	3.420	2.702	2.196	2.065	6.972
16	10.369	13.756	62.710	41.846	11.010	5.950	4.331	3.412	2.678	2.146	1.939	9.747
17	9.514	17.322	51.657	36.969	11.590	5.936	4.322	3.412	2.654	2.146	1.898	7.353
18	9.960	15.740	63.914	33.461	11.090	5.924	4.199	3.412	2.629	2.146	1.975	6.805
19	10.215	16.864	54.612	32.277	10.591	5.771	4.191	3.411	2.606	2.152	2.054	14.162
20	20.629	21.132	48.661	32.351	10.428	5.675	4.182	3.391	2.582	2.185	2.017	9.145
21	19.584	26.055	62.477	29.684	10.155	5.589	4.062	3.362	2.558	2.146	1.934	7.104
22	16.114	23.348	76.331	26.458	9.782	5.573	4.053	3.334	2.535	2.103	1.888	6.944
23	13.047	33.393	61.143	24.632	9.540	5.348	4.053	3.306	2.511	2.059	1.818	6.712
24	11.643	26.736	52.432	22.396	9.510	5.332	4.053	3.278	2.488	2.059	1.823	7.823
25	10.956	24.549	62.740	23.008	9.299	5.332	4.053	3.250	2.465	2.059	2.137	7.438
26	10.349	22.341	53.667	25.090	9.165	5.332	4.053	3.222	2.442	2.059	2.943	8.180
27	10.592	32.717	41.938	22.922	9.046	5.295	4.053	3.195	2.419	2.059	5.181	12.688
28	11.195	21.844	41.265	21.517	8.930	5.258	3.986	3.167	2.397	2.017	3.318	11.155
29	9.295		39.042	19.919	8.671	5.258	3.919	3.140	2.374	1.975	5.886	16.159
30	7.513		37.443	19.540	8.045	5.177	3.919	3.113	2.352	1.934	3.328	29.623
31	7.779		54.143		7.721		3.919	3.086		1.893		23.675
Mean	15.222	18.583	51.150	39.749	12.881	6.153	4.370	3.527	2.696	2.423	2.304	8.483
Flow (MCM)	40.770	44.956	137.001	103.028	34.501	15.948	11.706	9.447	6.987	6.491	5.972	22.721
Maximum	29.348	33.393	106.491	70.947	20.373	7.678	5.087	3.919	3.060	4.535	5.886	29.623
Minimum	4.983	10.690	16.212	19.540	7.721	5.177	3.919	3.086	2.352	1.893	1.736	2.276
Runoff (mm)	51.936	57.269	174.523	131.246	43.950	20.316	14.912	12.035	8.901	8.269	7.608	28.944

Flow (cumecs)

Annual Statistics

Maximum: 106.491 Minimum: 1.736 Mean: 13.962 cumecs

Total: 440.298 MCM Runoff: 560.890 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	19.877	22.561	23.964	57.019	24.897	8.570	5.589	4.191	3.173	2.392	2.449	3.824
2	17.332	21.657	31.500	45.474	22.893	8.374	5.579	4.191	3.109	2.381	2.346	6.121
3	15.233	19.697	30.338	45.231	22.011	8.249	5.432	4.191	3.052	2.370	2.368	4.616
4	13.999	18.059	28.276	45.425	21.792	8.125	5.422	4.182	3.052	2.360	2.252	8.707
5	12.415	19.058	27.990	51.464	22.048	7.922	5.411	4.053	3.019	2.349	2.175	14.506
6	15.179	22.265	26.425	62.899	20.503	7.723	5.268	3.927	3.207	2.338	2.130	14.832
7	13.487	20.587	31.419	56.960	19.293	7.700	5.248	3.919	3.109	2.290	2.086	13.154
8	12.774	21.132	29.648	52.673	18.513	7.677	5.097	3.911	3.067	2.252	2.018	11.801
9	17.231	23.282	31.480	48.362	17.846	7.495	4.959	3.796	3.269	2.211	2.023	10.263
10	24.788	24.368	32.118	46.665	16.284	7.469	5.009	3.780	3.110	2.165	2.120	8.936
11	22.922	26.858	28.638	44.181	15.224	7.290	4.930	3.667	2.895	2.057	2.052	7.888
12	21.914	28.462	25.894	41.596	14.397	7.264	4.796	3.659	2.834	2.013	1.980	6.466
13	20.733	49.386	23.425	41.024	13.720	7.089	4.711	3.659	2.782	2.013	1.970	5.270
14	19.994	99.987	22.806	39.083	12.696	6.978	4.626	3.659	2.723	2.008	1.933	4.298
15	18.425	47.380	21.755	35.426	12.233	6.867	4.497	3.652	2.633	1.905	1.868	3.539
16	23.492	33.288	20.144	31.763	12.233	6.698	4.488	3.542	2.620	1.859	1.864	3.169
17	22.396	29.253	29.319	29.619	12.231	6.592	4.488	3.534	2.533	1.915	1.846	2.751
18	21.651	26.831	38.467	30.422	12.047	6.485	4.488	3.534	2.527	3.626	2.067	2.500
19	22.916	26.549	43.463	36.591	11.639	6.232	4.488	3.527	2.524	3.254	2.057	2.959
20	20.880	25.600	44.230	33.931	11.362	6.129	4.487	3.420	2.513	3.089	2.052	3.929
21	18.600	24.500	51.304	31.505	10.972	6.129	4.476	3.412	2.502	3.032	2.140	5.530
22	22.190	29.974	105.901	39.148	10.722	6.040	4.475	3.404	2.491	2.976	3.195	5.773
23	41.386	31.004	97.860	65.889	10.758	5.951	4.475	3.300	2.480	2.889	2.836	5.861
24	39.205	29.785	104.859	54.083	10.076	5.950	4.466	3.292	2.468	2.834	2.931	5.697
25	37.695	26.927	73.317	49.353	10.028	5.936	4.340	3.283	2.457	2.739	4.922	5.160
26	37.776	24.460	62.446	43.877	9.798	5.935	4.331	3.224	2.446	2.640	3.039	5.968
27	35.313	22.480	66.347	38.529	9.633	5.847	4.331	3.109	2.435	2.423	2.698	8.604
28	31.384	21.931	63.065	34.484	9.284	5.760	4.331	3.045	2.424	2.252	2.748	15.309
29	26.932		65.044	30.373	8.945	5.675	4.322	2.999	2.414	2.170	4.357	18.399
30	24.220		121.544	27.438	8.799	5.589	4.199	3.192	2.403	2.110	3.334	22.173
31	22.618		73.058		8.599		4.191	3.237		2.331		20.836
Mean	23.063	29.190	47.614	43.016	14.241	6.858	4.740	3.596	2.742	2.427	2.462	8.350
Flow (MCM)	61.772	70.617	127.530	111.498	38.144	17.776	12.697	9.633	7.108	6.501	6.381	22.364
Maximum	41.386	99.987	121.544	65.889	24.897	8.570	5.589	4.191	3.269	3.626	4.922	22.173
Minimum	12.415	18.059	20.144	27.438	8.599	5.589	4.191	2.999	2.403	1.859	1.846	2.500
Runoff (mm)	78.691	89.957	162.459	142.036	48.590	22.644	16.174	12.271	9.055	8.281	8.129	28.489

Flow (cumecs)

Annual Statistics

Maximum: 121.544 Minimum: 1.846 Mean: 15.692 cumecs
Total: 494.854 MCM Runoff: 630.388 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2015

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	19.584	22.636	14.030	8.926	22.576	8.112	7.315	6.716	6.151	5.636	5.135	5.170
2	18.980	23.327	12.912	8.489	23.779	8.000	7.295	6.697	6.133	5.619	5.120	6.077
3	18.127	23.015	20.151	8.299	22.035	7.887	7.275	6.678	6.115	5.602	5.104	5.322
4	17.304	21.529	24.644	8.001	20.456	7.866	7.255	6.659	6.098	5.586	5.089	4.369
5	16.788	22.344	21.701	7.721	19.493	7.845	7.236	6.641	6.080	5.569	5.073	5.253
6	16.444	29.960	20.044	7.709	18.474	7.824	7.216	6.622	6.063	5.553	5.058	5.048
7	15.358	26.715	18.070	7.834	17.616	7.803	7.196	6.604	6.045	5.536	5.042	4.074
8	14.187	36.468	19.975	9.686	16.829	7.783	7.177	6.585	6.028	5.520	5.027	3.105
9	18.040	78.856	19.618	11.214	16.295	7.762	7.157	6.567	6.010	5.504	5.011	3.391
10	20.972	51.859	19.082	12.827	15.453	7.741	7.137	6.548	5.993	5.487	4.996	4.456
11	17.823	32.698	22.266	12.268	14.741	7.720	7.118	6.530	5.976	5.471	4.981	6.646
12	30.092	27.588	22.588	11.478	14.186	7.700	7.098	6.511	5.958	5.455	4.965	5.894
13	21.608	25.292	25.084	10.757	13.988	7.679	7.079	6.493	5.941	5.438	4.950	7.134
14	18.700	28.752	21.875	10.140	12.809	7.659	7.059	6.475	5.924	5.422	4.935	9.820
15	16.612	24.124	20.044	9.752	12.233	7.638	7.040	6.456	5.907	5.406	4.920	14.082
16	14.398	21.699	17.982	9.219	12.042	7.618	7.021	6.438	5.889	5.390	4.905	15.058
17	15.309	20.834	16.917	11.487	11.408	7.597	7.001	6.420	5.872	5.374	4.889	22.058
18	15.735	20.247	19.592	16.024	11.478	7.577	6.982	6.402	5.855	5.357	4.874	18.284
19	14.724	19.606	17.814	17.601	11.337	7.556	6.963	6.383	5.838	5.341	4.859	16.130
20	15.684	19.630	16.484	18.761	11.090	7.536	6.943	6.365	5.821	5.325	4.844	14.466
21	19.261	18.474	15.985	20.788	10.846	7.516	6.924	6.347	5.804	5.309	4.829	17.793
22	16.997	17.596	15.672	19.987	10.710	7.496	6.905	6.329	5.787	5.293	4.814	16.487
23	15.717	16.327	15.179	22.222	10.487	7.475	6.886	6.311	5.770	5.277	4.799	15.397
24	17.209	15.249	12.421	21.087	10.267	7.455	6.867	6.293	5.753	5.261	4.784	16.468
25	20.072	14.930	12.233	20.065	10.136	7.435	6.848	6.275	5.736	5.246	4.770	16.251
26	18.005	16.731	11.974	19.465	9.907	7.415	6.829	6.257	5.719	5.230	4.658	15.421
27	16.677	16.144	11.464	18.709	9.668	7.395	6.810	6.239	5.703	5.214	5.358	15.555
28	20.833	15.366	10.969	18.109	9.241	7.375	6.791	6.222	5.686	5.198	13.337	16.861
29	26.200		10.591	19.368	8.724	7.355	6.772	6.204	5.669	5.182	9.474	19.466
30	25.912		10.037	21.097	8.401	7.335	6.753	6.186	5.652	5.167	6.203	22.334
31	24.038		9.571		8.286		6.734	6.168		5.151		25.477
Mean	18.625	25.286	16.999	13.970	13.709	7.638	7.022	6.439	5.899	5.391	5.427	12.043
Flow (MCM)	49.886	61.171	45.530	36.210	36.719	19.799	18.808	17.247	15.291	14.439	14.066	32.257
Maximum	30.092	78.856	25.084	22.222	23.779	8.112	7.315	6.716	6.151	5.636	13.337	25.477
Minimum	14.187	14.930	9.571	7.709	8.286	7.335	6.734	6.168	5.652	5.151	4.658	3.105
Runoff (mm)	63.549	77.925	58.000	46.127	46.776	25.222	23.959	21.971	19.479	18.394	17.919	41.092

Flow (cumecs)

Annual Statistics

Maximum: 78.856 Minimum: 3.105 Mean: 11.537 cumecs

Total: 363.845 MCM Runoff: 463.497 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	28.911	108.984	25.562	30.915	35.176	9.668	6.113	4.758	3.830	2.740	2.121	2.125
2	32.648	115.108	23.442	29.947	33.083	9.241	6.113	4.758	3.791	2.689	2.516	2.423
3	36.702	87.659	22.508	42.281	30.074	8.919	6.103	4.758	3.752	2.631	2.381	4.073
4	41.087	81.405	23.111	63.920	26.833	8.722	5.961	4.690	3.714	2.686	2.322	3.048
5	45.818	77.049	22.733	162.422	24.091	8.696	5.951	4.622	3.676	2.692	2.378	3.112
6	49.081	74.815	21.768	135.458	22.562	8.515	5.941	4.622	3.638	2.697	2.384	3.118
7	58.472	59.177	20.668	106.447	21.000	8.502	5.802	4.622	3.601	2.733	2.488	5.116
8	39.555	51.935	19.722	79.128	19.584	8.489	5.782	4.622	3.563	2.692	2.439	4.513
9	43.092	49.124	19.000	66.893	19.000	8.299	5.645	4.622	3.527	2.692	2.341	3.327
10	40.301	45.039	18.495	60.929	18.669	8.099	5.626	4.555	3.490	2.645	2.312	3.293
11	43.093	42.449	18.299	56.760	18.430	7.915	5.492	4.488	3.453	2.599	2.460	3.293
12	120.539	39.461	17.976	53.129	17.329	7.818	5.482	4.488	3.417	2.599	2.457	3.181
13	93.957	39.552	18.070	50.495	18.610	7.794	5.407	4.488	3.381	2.599	2.378	2.878
14	74.456	57.381	18.687	45.893	17.265	7.697	5.337	4.488	3.346	2.599	2.335	2.566
15	57.540	52.567	19.318	41.052	15.544	8.423	5.365	4.488	3.310	2.599	2.335	2.501
16	51.670	48.947	19.963	37.943	14.479	7.549	5.332	4.423	3.275	2.599	2.313	2.672
17	47.649	46.578	20.044	34.232	13.813	7.321	5.332	4.357	3.240	2.599	2.265	2.886
18	45.888	44.359	19.201	32.144	12.487	7.160	5.323	4.357	3.206	2.599	2.252	2.807
19	107.364	43.296	18.628	31.483	14.394	7.059	5.193	4.349	3.171	2.554	2.258	2.697
20	37.818	41.195	17.786	32.594	12.950	6.968	5.184	4.237	3.137	2.509	2.713	2.640
21	38.190	38.650	16.933	31.109	12.102	6.957	5.184	4.229	3.103	2.498	4.646	2.514
22	47.321	36.848	15.619	34.863	11.844	6.802	5.112	4.229	3.070	2.324	2.906	2.457
23	37.895	34.034	16.471	43.095	11.589	6.704	5.040	4.166	3.036	2.265	2.422	2.419
24	50.787	33.498	18.481	41.583	11.322	6.617	5.040	4.103	3.003	2.252	2.304	2.359
25	53.959	32.113	20.652	36.416	10.967	6.531	5.031	4.103	2.970	2.252	2.257	2.330
26	44.125	31.107	22.992	33.110	10.725	6.435	4.906	4.041	2.938	2.249	2.270	2.257
27	41.270	30.069	24.324	33.834	10.501	6.288	4.898	3.980	2.905	2.204	2.239	2.251
28	38.799	28.633	22.865	30.435	10.369	6.278	4.898	3.980	2.873	2.172	2.165	2.221
29	37.377	29.300	22.348	28.574	10.237	6.278	4.889	3.972	2.841	2.169	2.132	2.168
30	42.245		26.505	29.297	10.035	6.195	4.767	3.866	2.810	2.141	2.130	2.095
31	66.638		24.452		9.907		4.758	3.858		2.093		2.071
Mean	51.427	51.736	20.536	51.213	16.935	7.598	5.387	4.365	3.302	2.496	2.431	2.820
Flow (MCM)	137.743	129.629	55.004	132.743	45.358	19.694	14.429	11.692	8.559	6.685	6.300	7.552
Maximum	120.539	115.108	26.505	162.422	35.176	9.668	6.113	4.758	3.830	2.740	4.646	5.116
Minimum	28.911	28.633	15.619	28.574	9.907	6.195	4.758	3.858	2.810	2.093	2.121	2.071
Runoff (mm)	175.468	165.132	70.069	169.100	57.780	25.088	18.381	14.894	10.904	8.516	8.026	9.621

Flow (cumecs)

Annual Statistics

Maximum: 162.422 Minimum: 2.071 Mean: 18.354 cumecs
Total: 580.390 MCM Runoff: 739.351 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.571	20.892	11.559	53.837	12.712	7.890	4.758	3.293	2.599	2.170	2.013	4.101
2	3.578	24.866	14.610	53.341	12.233	7.721	4.758	3.293	2.599	2.170	2.033	3.473
3	5.135	22.769	17.830	66.017	12.233	7.614	4.750	3.240	2.594	2.170	2.396	3.273
4	4.905	20.235	16.896	57.870	12.217	7.519	4.630	3.187	2.515	2.170	4.033	2.988
5	4.716	18.745	19.732	45.719	11.988	7.426	4.622	3.187	2.509	2.170	3.075	2.792
6	4.610	20.538	22.591	37.869	11.972	7.333	4.555	3.187	2.509	2.178	2.646	2.697
7	5.236	18.616	22.486	32.431	10.771	7.241	4.488	3.187	2.509	2.265	2.428	2.815
8	5.108	16.302	20.865	28.851	9.570	7.149	4.480	3.180	2.465	2.211	2.320	4.659
9	4.920	19.368	20.365	25.774	9.563	7.059	4.365	3.089	2.421	2.170	2.572	4.190
10	5.062	18.141	21.890	23.260	9.466	6.968	4.357	3.083	2.421	2.170	2.509	3.823
11	4.977	19.027	21.987	21.362	9.452	6.880	4.357	3.083	2.421	2.175	2.460	3.320
12	5.022	18.370	21.257	19.701	9.342	6.780	4.349	3.083	2.421	2.247	2.341	3.193
13	5.360	12.643	19.023	18.364	9.146	6.628	4.237	3.058	2.416	2.313	2.318	3.135
14	7.078	12.208	19.125	17.916	9.132	6.531	4.229	3.032	2.341	3.049	2.152	3.054
15	9.099	11.787	21.552	17.282	9.119	6.446	4.221	3.032	2.335	2.607	2.020	2.985
16	8.288	11.478	21.770	25.870	8.945	6.362	4.111	3.029	2.335	2.304	2.013	2.932
17	7.401	11.370	24.423	25.662	9.119	6.195	4.103	2.985	2.333	2.211	1.992	2.880
18	6.541	11.079	30.350	24.453	9.119	6.032	4.103	2.982	2.296	2.148	1.940	2.813
19	8.106	10.621	29.198	23.853	8.932	5.871	4.095	2.982	2.273	2.088	1.933	2.780
20	5.630	10.340	27.572	23.775	8.919	5.714	3.987	2.932	2.252	2.018	1.868	2.734
21	8.141	9.772	33.673	23.389	8.919	5.626	4.012	2.883	2.252	1.992	1.864	3.254
22	11.601	14.375	69.096	23.031	8.814	5.487	3.977	2.883	2.252	1.940	1.864	3.434
23	10.810	18.378	50.249	23.476	8.709	5.397	3.866	2.877	2.252	1.937	1.908	5.533
24	10.017	17.637	44.030	23.294	8.606	5.198	3.859	2.792	2.252	1.933	2.298	5.473
25	9.172	16.546	38.358	23.147	8.502	5.175	3.800	2.786	2.252	1.868	2.704	5.333
26	8.633	12.475	33.897	22.321	8.502	5.049	3.741	2.739	2.252	1.864	2.709	5.324
27	10.831	12.233	36.317	21.962	8.401	5.040	3.741	2.692	2.247	1.873	2.896	5.058
28	10.718	12.200	33.286	21.597	8.299	4.969	3.517	2.692	2.175	2.004	3.295	6.235
29	12.184		31.134	21.212	8.199	4.898	3.293	2.692	2.170	2.013	3.610	14.535
30	12.316		49.089	20.189	8.099	4.828	3.293	2.645	2.170	2.013	4.401	12.421
31	13.376		43.780		8.001		3.293	2.599		2.013		12.233
Mean	7.456	15.822	28.645	28.894	9.581	6.301	4.127	2.981	2.361	2.144	2.487	4.628
Flow (MCM)	19.971	38.276	76.722	74.894	25.661	16.332	11.054	7.983	6.120	5.742	6.446	12.396
Maximum	13.376	24.866	69.096	66.017	12.712	7.890	4.758	3.293	2.599	3.049	4.401	14.535
Minimum	2.571	9.772	11.559	17.282	8.001	4.828	3.293	2.599	2.170	1.864	1.864	2.697
Runoff (mm)	25.440	48.759	97.735	95.406	32.689	20.805	14.082	10.170	7.797	7.314	8.212	15.791

Flow (cumecs)

Annual Statistics

Maximum: 69.096 Minimum: 1.864 Mean: 9.619 cumecs

Total: 303.341 MCM Runoff: 386.421 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12.184	28.636	26.022	25.518	34.521	21.792	6.362	4.241	4.793	5.373	6.019	5.316
2	10.819	32.215	28.696	27.444	35.397	21.428	6.267	4.259	4.812	5.393	6.041	5.103
3	8.754	37.575	30.988	26.181	34.688	21.549	6.123	4.276	4.831	5.413	6.063	5.355
4	7.819	46.244	29.267	25.292	34.090	21.380	6.032	4.293	4.849	5.433	6.085	6.291
5	9.364	38.476	27.101	29.386	32.655	20.506	5.951	4.310	4.868	5.453	6.107	6.436
6	9.650	41.919	25.230	27.505	32.302	20.062	5.951	4.327	4.887	5.474	6.128	6.536
7	20.992	42.634	23.937	25.345	31.359	19.494	5.951	4.345	4.906	5.494	6.150	8.072
8	14.068	68.980	28.419	23.909	30.827	18.343	5.871	4.362	4.925	5.514	6.172	8.542
9	10.409	95.604	33.611	21.581	30.766	17.271	5.792	4.380	4.943	5.535	6.195	8.863
10	10.287	61.182	41.262	18.857	29.881	15.524	5.792	4.397	4.962	5.555	6.217	9.845
11	12.614	40.647	50.689	16.492	29.400	13.319	5.792	4.414	4.982	5.576	6.239	9.351
12	34.370	31.364	62.110	14.968	30.099	10.317	5.714	4.432	5.001	5.596	6.261	8.585
13	58.913	29.893	94.562	16.963	30.400	8.598	5.635	4.450	5.020	5.617	6.134	7.794
14	59.506	25.408	111.752	33.272	30.247	7.746	5.635	4.467	5.039	5.638	7.861	8.677
15	45.820	22.038	89.163	38.131	29.132	7.697	5.635	4.485	5.058	5.658	6.307	11.348
16	42.835	19.567	68.883	42.780	27.907	7.531	5.635	4.503	5.077	5.679	5.056	12.430
17	46.114	18.473	30.781	54.041	26.236	7.426	5.635	4.521	5.097	5.700	4.435	18.757
18	55.662	17.640	30.245	100.085	26.152	7.241	5.597	4.538	5.116	5.721	4.271	23.156
19	51.756	16.913	76.091	90.713	25.716	7.149	5.520	4.556	5.136	5.742	4.395	28.963
20	49.752	15.737	118.888	138.317	24.827	7.149	5.482	4.574	5.155	5.763	4.622	28.575
21	49.340	18.140	89.772	96.681	24.217	7.149	5.407	4.592	5.175	5.784	4.858	30.779
22	49.802	20.159	78.818	80.954	24.034	7.059	5.332	4.610	5.194	5.805	4.874	38.266
23	53.718	21.994	79.368	46.710	23.775	6.968	5.332	4.628	5.214	5.826	4.441	37.234
24	49.695	22.334	79.834	58.995	23.210	6.968	5.332	4.647	5.233	5.848	5.105	36.601
25	37.118	23.422	48.623	57.450	23.185	6.880	5.258	4.665	5.253	5.869	4.702	34.392
26	33.432	21.123	20.871	51.796	22.983	6.791	5.175	4.683	5.273	5.890	4.407	31.894
27	32.306	18.702	16.624	48.838	22.781	6.780	5.040	4.701	5.293	5.912	4.198	30.250
28	30.828	23.384	15.804	43.236	22.581	6.628	4.898	4.720	5.313	5.933	4.342	27.535
29	29.671		19.083	39.654	22.184	6.606	4.632	4.738	5.333	5.955	4.237	25.552
30	28.378		22.782	35.371	21.987	6.457	4.358	4.756	5.353	5.976	4.408	24.328
31	26.628		22.581		21.987		4.229	4.775		5.998		22.111
Mean	32.019	32.157	49.092	45.215	27.727	11.660	5.528	4.505	5.070	5.681	5.411	18.288
Flow (MCM)	85.761	77.795	131.488	117.198	74.263	30.223	14.806	12.065	13.140	15.217	14.025	48.984
Maximum	59.506	95.604	118.888	138.317	35.397	21.792	6.362	4.775	5.353	5.998	7.861	38.266
Minimum	7.819	15.737	15.804	14.968	21.987	6.457	4.229	4.241	4.793	5.373	4.198	5.103
Runoff (mm)	109.250	99.102	167.501	149.297	94.602	38.501	18.861	15.370	16.739	19.385	17.867	62.400

Flow (cumecs)

Annual Statistics

Maximum: 138.317 Minimum: 4.198 Mean: 20.196 cumecs
Total: 636.907 MCM Runoff: 811.346 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA8A
Station Name: Great Ruaha River at Salimwani
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1152.0 metres Area: 785.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	21.965	47.817	21.212	24.230	24.244	10.606	6.118	4.758	3.878	3.146	4.099	5.165
2	24.011	45.450	21.164	24.073	25.336	10.472	6.113	4.757	3.851	3.174	4.133	4.829
3	23.340	41.309	20.503	23.415	27.076	10.267	6.072	4.735	3.823	3.202	4.167	4.304
4	21.626	38.727	20.270	23.262	26.543	10.122	5.991	4.703	3.796	3.231	4.201	3.980
5	20.317	38.469	19.721	24.022	27.353	9.808	5.951	4.672	3.769	3.259	4.235	3.859
6	19.879	36.916	18.980	23.581	25.541	9.681	5.871	4.641	3.742	3.288	4.270	3.734
7	19.379	35.975	18.321	23.185	23.578	9.556	5.792	4.610	3.715	3.317	4.304	3.526
8	19.334	35.959	18.409	22.581	22.935	9.363	5.787	4.579	3.689	3.346	4.339	3.450
9	19.022	47.013	19.949	22.011	21.798	9.241	5.713	4.548	3.662	3.375	4.374	3.299
10	18.649	42.682	19.799	22.000	20.667	9.227	5.640	4.517	3.636	3.405	4.409	3.240
11	18.454	70.079	20.515	23.454	20.270	9.039	5.597	4.487	3.609	3.435	4.445	3.234
12	22.574	61.173	20.796	23.831	19.498	8.906	5.520	4.456	3.583	3.464	4.480	3.788
13	25.396	47.790	20.704	24.217	18.342	8.709	5.477	4.426	3.557	3.494	4.516	4.651
14	24.859	42.525	22.371	23.571	19.708	8.413	5.411	4.396	3.531	3.525	4.552	6.161
15	25.269	41.211	21.321	23.187	20.317	8.199	5.369	4.366	3.403	3.555	4.588	7.105
16	25.799	40.163	20.667	23.287	20.085	7.904	5.332	4.336	3.293	3.586	4.625	7.058
17	37.139	38.762	20.468	24.230	19.654	7.614	5.332	4.307	3.293	3.616	4.661	5.278
18	44.244	36.114	20.189	24.008	18.364	7.426	5.327	4.277	3.266	3.647	4.698	6.456
19	69.353	34.689	19.993	23.762	18.277	7.241	5.262	4.248	3.236	3.678	4.735	9.928
20	71.542	32.821	19.810	24.374	17.955	7.059	5.221	4.218	3.190	3.710	4.772	26.454
21	82.132	30.313	19.515	24.191	17.470	6.968	5.180	4.189	3.187	3.741	4.809	54.898
22	74.734	27.962	18.672	23.684	17.260	6.880	5.112	4.160	3.187	3.773	4.847	45.374
23	84.617	25.560	18.476	23.198	16.971	6.786	5.044	4.132	3.183	3.805	4.885	46.152
24	98.649	23.623	21.049	22.806	16.607	6.704	5.004	4.103	3.138	3.837	4.923	55.747
25	171.720	22.781	21.286	24.439	15.848	6.612	4.964	4.074	3.131	3.869	4.961	47.250
26	136.378	22.209	22.160	25.497	15.672	6.457	4.898	4.046	3.086	3.901	4.999	67.145
27	101.706	21.938	23.084	24.864	15.327	6.435	4.832	4.018	3.083	3.934	5.038	44.370
28	80.114	21.260	22.856	24.599	14.227	6.288	4.793	3.989	3.083	3.967	5.077	49.365
29	61.090		23.543	24.564	12.318	6.273	4.758	3.961	3.091	3.999	5.116	51.708
30	54.220		24.010	23.671	11.605	6.195	4.758	3.933	3.118	4.033	5.155	68.028
31	51.532		24.427		10.984		4.758	3.906		4.066		44.722
Mean	50.614	37.546	20.782	23.727	19.414	8.148	5.387	4.340	3.427	3.593	4.614	22.395
Flow (MCM)	135.565	90.831	55.662	61.499	51.998	21.120	14.429	11.625	8.883	9.623	11.959	59.984
Maximum	171.720	70.079	24.427	25.497	27.353	10.606	6.118	4.758	3.878	4.066	5.155	68.028
Minimum	18.454	21.260	18.321	22.000	10.984	6.195	4.758	3.906	3.083	3.146	4.099	3.234
Runoff (mm)	172.695	115.709	70.907	78.343	66.240	26.905	18.380	14.809	11.315	12.259	15.234	76.412

Flow (cumecs)

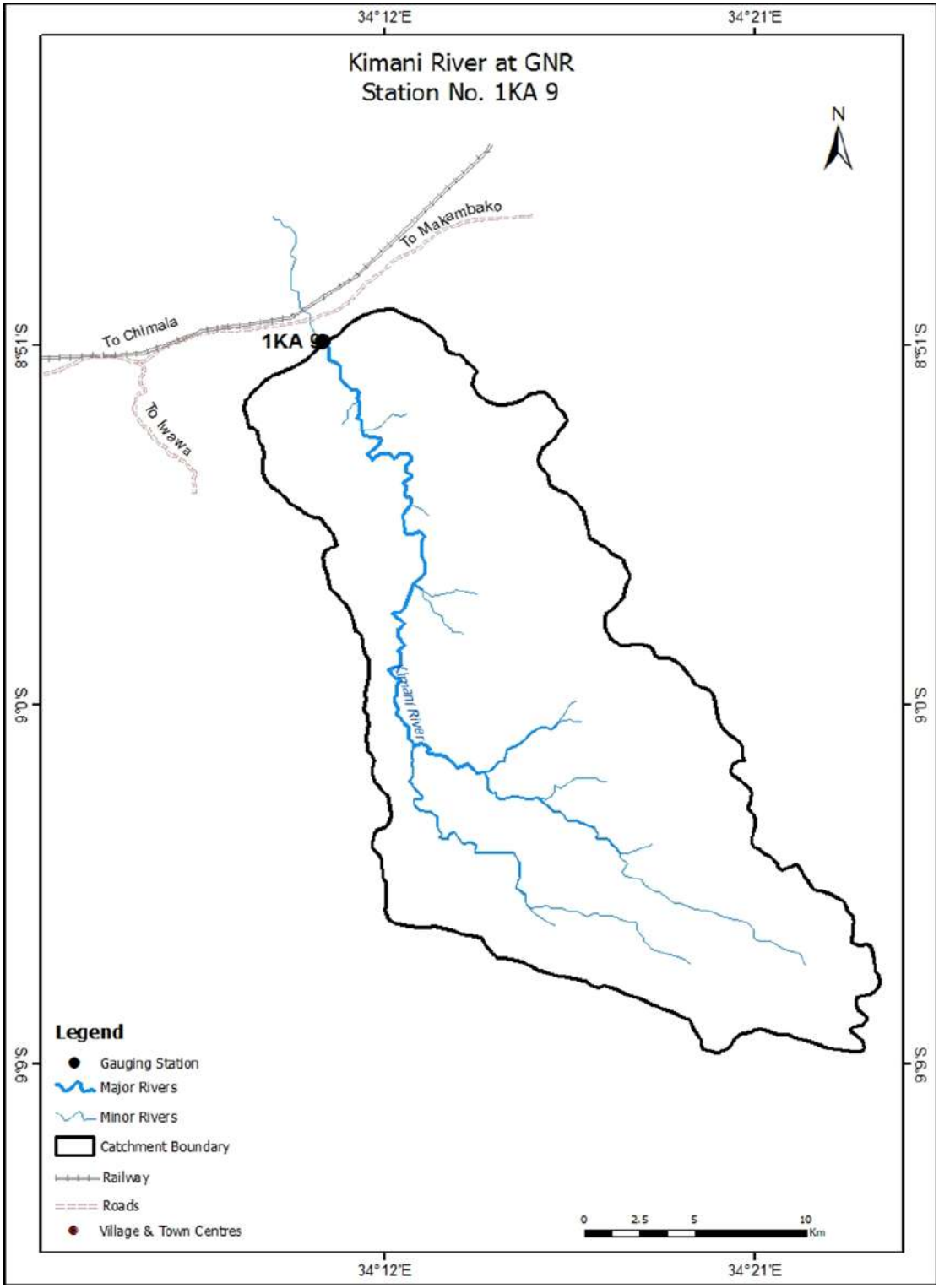
Annual Statistics

Maximum: 171.720 Minimum: 3.083 Mean: 16.999 cumecs
Total: 536.079 MCM Runoff: 682.903 mm

Possible data flags

No data stored "-" Estimated values "e"

Kimani River at Great North Road				
Station No: 1KA9			Established: December 1954	
Coordinates:			Altitude (m.a.m.s.l): 1,079	
Lat: -8.8487	Long: 34.1747		Catchment Area (km²): 451	
Description of the Catchment:				
Mostly covered by woodland				
Station Details				
1. Staff Gauges	Range: 0 – 4m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2013	
3. Benchmark	Nail in concrete beacon			
BM Assumed Datum: 3.505m		N.M.M.S.L: -	TBM: –	
4. Control	Permanent with rock bed and banks			
5. Access	Accessible throughout the year, 35km from Rujewa town to the station			
Records	Period		Quality	
Water Level:	01/01/2010 - 31/12/2019		1.2.2	
Discharge:	01/01/2010 - 31/12/2019		2.2.2	
Extremes:	Max. Recorded	604.143m³/sec	On 28/12/1971	WL 3.95m
	Min. Recorded	0.113m³/sec	On 20/11/2017	WL 0.205m
Remarks				


Kimani River at GNR
Station No. 1KA 9
34°12'E
34°21'E
8°51'S
9°0'S
N
To Makambako
To Chimala
To Iwawa
1KA 9
Kimani River
Legend
Gauging Station
Major Rivers
Minor Rivers
Catchment Boundary
Railway
Roads
Village & Town Centres
0 2.5 5 10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2010
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.052	15.864	20.934	9.101	4.138	1.150	1.175	0.839	0.613	0.466	0.273	0.280
2	7.286	31.979	26.190	8.636	4.250	1.189	1.205	0.954	0.612	0.464	0.277	0.274
3	7.159	15.116	25.454	8.527	4.119	1.951	1.229	0.950	0.671	0.459	0.277	0.264
4	7.330	13.534	23.616	8.319	3.995	1.995	1.153	0.912	0.676	0.452	0.273	0.251
5	7.442	13.317	27.164	8.208	3.765	1.958	1.077	0.833	0.642	0.451	0.273	0.248
6	8.503	13.065	55.982	8.007	3.653	1.944	1.075	0.809	0.599	0.397	0.277	0.375
7	8.422	12.567	30.110	7.495	3.586	1.906	1.075	0.794	0.601	0.417	0.274	0.791
8	7.863	12.173	17.591	6.853	3.504	1.872	1.059	0.780	0.593	0.405	0.280	0.723
9	7.453	14.602	15.090	6.500	3.404	1.820	1.073	0.762	0.581	0.389	0.267	1.366
10	7.919	15.995	16.277	6.263	3.321	1.786	1.054	0.748	0.579	0.376	0.287	2.066
11	8.796	15.674	19.079	6.660	3.275	1.770	1.053	0.732	0.573	0.402	0.321	2.704
12	8.661	12.841	24.736	6.197	3.202	1.658	1.060	0.734	0.568	0.381	0.300	2.623
13	8.919	16.045	26.553	5.864	3.167	1.584	1.040	0.734	0.559	0.373	0.288	2.440
14	12.595	75.038	23.403	5.646	3.174	1.574	1.033	0.732	0.551	0.374	0.281	1.414
15	54.995	14.672	23.867	5.466	4.054	1.533	1.033	0.736	0.540	0.397	0.271	1.160
16	22.429	11.659	24.097	5.269	3.747	1.491	1.012	0.722	0.544	0.385	0.252	0.543
17	18.797	12.102	19.140	5.828	3.366	1.524	1.010	0.710	0.548	0.384	0.242	0.488
18	18.283	12.565	18.302	8.763	3.297	1.491	0.991	0.713	0.533	0.377	0.282	1.616
19	17.837	12.045	18.641	8.767	3.272	1.400	0.971	0.693	0.537	0.373	0.278	3.938
20	12.129	11.301	19.912	6.605	3.202	1.394	0.942	0.692	0.540	0.362	0.280	2.563
21	11.433	11.091	19.690	6.239	3.167	1.392	0.920	0.684	0.502	0.344	0.560	3.818
22	12.469	10.692	16.003	5.572	3.063	1.373	0.915	0.676	0.510	0.353	0.976	4.056
23	12.144	10.277	20.933	5.356	2.436	1.344	0.915	0.695	0.507	0.361	0.869	2.751
24	11.468	10.080	20.986	4.943	2.362	1.311	0.897	0.709	0.494	0.375	0.801	3.160
25	11.747	12.043	32.957	4.767	2.383	1.288	0.890	0.689	0.487	0.367	0.447	3.350
26	15.355	11.623	13.801	4.661	2.356	1.252	0.897	0.674	0.487	0.352	0.337	3.267
27	14.870	17.949	12.543	4.509	2.304	1.230	0.872	0.650	0.475	0.335	0.323	1.813
28	12.704	19.627	13.043	4.192	2.253	1.216	0.835	0.641	0.463	0.302	0.309	1.567
29	13.172		11.833	4.061	2.205	1.202	0.821	0.663	0.452	0.288	0.294	1.563
30	14.673		11.280	3.982	1.711	1.175	0.813	0.650	0.447	0.279	0.283	1.375
31	14.761		11.820		1.228		0.809	0.633		0.273		1.104
Mean	13.054	16.269	21.323	6.375	3.128	1.526	0.997	0.740	0.550	0.378	0.358	1.740
Flow (MCM)	34.963	39.358	57.113	16.524	8.377	3.955	2.670	1.982	1.424	1.012	0.929	4.661
Maximum	54.995	75.038	55.982	9.101	4.250	1.995	1.229	0.954	0.676	0.466	0.976	4.056
Minimum	7.052	10.080	11.280	3.982	1.228	1.150	0.809	0.633	0.447	0.273	0.242	0.248
Runoff (mm)	77.523	87.269	126.636	36.640	18.575	8.769	5.921	4.395	3.158	2.244	2.060	10.335

Flow (cumecs)

Annual Statistics

Maximum: 75.038 Minimum: 0.242 Mean: 5.537 cumecs
Total: 174.599 MCM Runoff: 387.138 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2011
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.085	3.695	5.730	27.136	6.357	2.773	1.337	0.783	0.578	0.436	0.240	0.320
2	1.061	3.919	4.856	16.155	6.304	2.727	1.309	0.758	0.575	0.450	0.236	0.304
3	0.854	3.812	4.738	13.080	6.339	2.680	1.297	0.757	0.538	0.443	0.237	0.367
4	0.790	2.922	4.747	13.355	5.957	2.557	1.273	0.741	0.533	0.432	0.239	0.289
5	0.750	2.790	4.608	11.493	5.670	2.488	1.253	0.740	0.531	0.439	0.244	0.273
6	0.746	2.757	4.872	11.449	5.482	2.463	1.232	0.742	0.504	0.450	0.315	0.261
7	0.758	2.705	2.855	12.061	5.389	2.396	1.202	0.738	0.498	0.478	0.325	0.251
8	1.424	2.653	3.990	12.096	5.142	2.308	1.200	0.731	0.489	0.440	0.666	0.421
9	0.753	2.593	4.116	11.271	4.867	2.253	1.141	0.730	0.488	0.423	0.371	1.162
10	0.801	2.535	4.005	12.041	4.677	2.217	1.106	0.715	0.493	0.412	0.346	1.167
11	2.379	2.488	3.898	13.252	4.358	2.127	1.096	0.726	0.476	0.436	0.438	1.294
12	2.697	2.478	3.749	11.822	4.733	2.072	1.076	0.764	0.453	0.429	0.409	4.001
13	2.498	2.583	3.653	17.176	4.863	1.996	1.067	0.720	0.453	0.434	0.385	7.794
14	5.550	2.104	3.586	13.059	5.424	1.949	1.054	0.676	0.454	0.410	0.374	6.810
15	4.818	1.635	3.507	13.145	4.801	1.944	1.045	0.650	0.446	0.396	0.356	6.280
16	3.467	1.366	3.449	12.741	4.726	2.229	1.015	0.634	0.447	0.384	0.337	6.071
17	3.152	1.333	3.354	8.081	4.691	1.900	0.991	0.629	0.445	0.379	0.337	2.943
18	3.737	1.284	3.311	6.590	4.884	1.763	0.990	0.644	0.437	0.376	0.336	1.318
19	3.932	1.354	3.369	12.042	4.459	1.597	0.992	0.629	0.436	0.375	0.287	1.407
20	3.924	4.693	6.792	10.877	4.266	1.505	0.973	0.609	0.458	0.402	0.433	3.227
21	3.468	6.032	14.554	9.916	4.116	1.470	0.962	0.608	0.448	0.362	0.806	12.322
22	2.472	6.952	21.242	9.322	4.005	1.460	0.948	0.618	0.497	0.339	0.375	13.344
23	1.680	6.510	29.873	10.771	3.923	1.464	0.898	0.622	0.490	0.334	0.404	23.258
24	1.708	6.280	23.228	11.510	3.851	1.493	0.881	0.622	0.482	0.309	0.404	18.507
25	1.356	6.215	17.591	10.361	3.207	1.469	0.900	0.614	0.458	0.322	0.385	10.931
26	1.108	6.354	15.090	7.988	3.105	1.456	0.883	0.612	0.445	0.333	0.378	9.947
27	0.912	5.989	16.277	7.544	3.014	1.455	0.837	0.598	0.440	0.310	0.374	9.291
28	0.837	5.768	19.079	7.253	2.889	1.434	0.656	0.588	0.433	0.279	0.443	2.714
29	0.788		24.736	7.292	2.968	1.419	0.864	0.581	0.448	0.268	0.502	2.453
30	0.700		26.553	6.405	2.898	1.393	0.857	0.578	0.443	0.258	0.557	3.423
31	0.678		23.826		2.821		0.826	0.580		0.249		25.952
Mean	1.964	3.636	10.169	11.576	4.522	1.949	1.037	0.669	0.477	0.380	0.385	5.745
Flow (MCM)	5.260	8.795	27.236	30.005	12.112	5.051	2.779	1.792	1.237	1.018	0.997	15.388
Maximum	5.550	6.952	29.873	27.136	6.357	2.773	1.337	0.783	0.578	0.478	0.806	25.952
Minimum	0.678	1.284	2.855	6.405	2.821	1.393	0.656	0.578	0.433	0.249	0.236	0.251
Runoff (mm)	11.663	19.502	60.390	66.531	26.856	11.199	6.161	3.973	2.743	2.258	2.211	34.120

Flow (cumecs)

Annual Statistics

Maximum: 29.873 Minimum: 0.236 Mean: 3.542 cumecs
Total: 111.713 MCM Runoff: 247.701 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2012
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	30.977	9.872	50.469	8.887	7.387	3.167	1.900	0.962	0.639	0.557	0.587	0.444
2	25.988	10.120	35.435	8.666	7.089	3.174	1.871	0.949	0.628	0.530	0.625	0.500
3	27.392	9.908	31.934	9.007	7.008	4.054	1.830	0.932	0.609	0.517	0.876	0.507
4	55.982	9.613	40.756	16.592	6.941	3.747	1.789	0.922	0.608	0.489	0.624	0.443
5	32.641	8.890	32.415	15.855	6.691	3.359	1.750	0.896	0.618	0.384	0.609	0.433
6	23.228	8.624	29.873	22.409	6.365	3.189	1.738	0.911	0.622	0.486	0.607	0.419
7	17.591	8.349	30.493	22.434	6.275	3.128	1.719	0.884	0.622	0.463	0.598	0.407
8	14.384	8.517	29.884	30.602	6.215	3.121	1.693	0.909	0.613	0.453	0.588	0.418
9	7.377	8.385	25.146	19.210	6.292	3.017	1.726	0.861	0.598	0.449	0.581	0.436
10	6.520	8.340	21.153	18.273	5.123	2.898	1.654	0.859	0.588	0.444	0.578	0.481
11	6.280	7.747	18.522	31.744	4.861	2.821	1.612	0.827	0.581	0.446	0.578	0.481
12	6.559	7.585	15.788	23.552	4.767	2.773	1.565	0.785	0.578	0.432	0.548	0.986
13	12.114	7.263	14.629	12.513	4.680	2.727	1.519	0.770	0.580	0.436	0.512	0.721
14	9.874	7.089	13.573	11.127	4.735	2.684	1.483	0.776	0.580	0.450	0.515	0.682
15	7.460	7.141	12.586	10.816	4.765	2.603	1.448	0.772	0.557	0.443	0.523	0.705
16	9.994	6.978	10.965	10.708	4.519	2.490	1.429	0.766	0.524	0.431	0.545	1.185
17	10.114	7.727	11.604	12.410	4.419	2.463	1.403	0.754	0.512	0.417	0.525	0.760
18	9.613	6.772	11.541	11.999	4.266	2.396	1.379	0.741	0.515	0.407	0.466	0.776
19	8.890	5.911	12.063	11.282	4.055	2.308	1.328	0.740	0.523	0.395	0.451	0.766
20	8.568	7.443	15.452	10.925	3.875	2.253	1.296	0.731	0.545	0.383	0.449	0.754
21	8.882	8.439	14.748	10.541	3.764	2.220	1.230	0.720	0.529	0.374	0.444	0.740
22	8.555	8.876	13.957	10.277	3.858	2.159	1.128	0.714	0.517	0.380	0.446	0.737
23	8.212	12.419	17.263	9.935	3.749	2.127	1.086	0.716	0.505	0.447	0.432	0.731
24	6.431	19.938	11.910	9.873	3.653	2.132	1.072	0.726	0.490	0.498	0.436	0.724
25	6.416	14.790	9.584	9.211	3.586	2.075	1.061	0.772	0.486	0.570	0.450	0.703
26	5.854	14.935	13.323	8.681	3.504	2.044	1.045	0.839	0.466	0.494	0.451	0.713
27	5.698	20.613	12.390	8.349	3.404	1.997	1.018	0.814	0.497	0.463	0.451	0.716
28	5.543	19.213	13.061	8.534	3.321	1.977	0.991	0.776	0.483	0.453	0.564	0.726
29	5.796	18.744	9.187	8.488	3.275	1.949	0.990	0.722	0.469	0.453	0.563	0.772
30	5.227		9.247	8.012	3.202	1.944	0.992	0.692	0.554	0.444	0.413	0.839
31	5.391		13.603		3.170		0.973	0.660		0.456		0.813
Mean	13.018	10.353	19.437	13.697	4.800	2.633	1.410	0.803	0.555	0.453	0.534	0.662
Flow (MCM)	34.867	25.941	52.061	35.503	12.857	6.825	3.777	2.151	1.437	1.213	1.385	1.773
Maximum	55.982	20.613	50.469	31.744	7.387	4.054	1.900	0.962	0.639	0.570	0.876	1.185
Minimum	5.227	5.911	9.187	8.012	3.170	1.944	0.973	0.660	0.466	0.374	0.413	0.407
Runoff (mm)	77.310	57.519	115.434	78.720	28.509	15.134	8.375	4.770	3.187	2.690	3.072	3.931

Flow (cumecs)

Annual Statistics

Maximum: 55.982 Minimum: 0.374 Mean: 5.696 cumecs
Total: 180.133 MCM Runoff: 399.407 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2013
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.810	2.304	3.002	23.758	7.782	3.749	1.520	1.005	0.701	0.591	0.373	0.377
2	0.843	2.269	2.684	18.353	7.791	3.653	1.502	1.004	0.715	0.592	0.360	0.373
3	0.838	2.558	2.625	13.030	7.377	3.586	1.505	0.992	0.719	0.637	0.339	0.363
4	1.156	3.918	2.554	12.632	7.023	3.504	1.511	0.964	0.675	0.627	0.336	0.434
5	1.058	4.293	2.573	13.053	6.992	3.404	1.526	0.952	0.649	0.610	0.347	0.381
6	1.077	4.706	3.839	12.869	6.822	3.298	1.491	0.935	0.626	0.616	0.345	0.378
7	3.451	4.747	3.850	11.519	6.510	3.200	1.263	0.913	0.628	0.598	0.334	0.343
8	5.299	4.608	3.749	13.076	6.280	3.096	1.181	0.905	0.596	0.588	0.332	0.308
9	4.865	4.905	4.253	11.528	6.215	2.884	1.136	0.893	0.606	0.581	0.392	0.584
10	5.635	4.883	16.680	11.770	6.354	2.773	1.219	0.884	0.618	0.580	0.458	2.921
11	4.368	4.852	33.834	17.951	5.989	2.686	1.214	0.886	0.622	0.577	0.416	2.585
12	4.726	6.169	19.116	12.221	5.754	2.606	1.162	0.854	0.622	0.538	0.391	2.339
13	4.216	6.253	40.625	11.264	5.543	2.432	1.130	0.838	0.614	0.523	0.479	2.305
14	2.494	5.989	30.544	9.922	5.392	2.304	1.111	0.851	0.612	0.505	0.446	2.274
15	1.680	5.754	21.985	9.322	5.154	2.244	1.140	0.889	0.598	0.509	0.409	2.227
16	1.979	5.593	13.009	10.426	5.052	2.080	1.141	0.882	0.588	0.464	0.412	2.241
17	2.565	6.223	12.943	11.459	5.796	1.993	1.127	0.867	0.580	0.453	0.791	3.411
18	2.612	6.053	18.333	10.113	6.460	1.908	1.100	0.851	0.557	0.449	0.374	3.398
19	2.574	5.090	21.766	4.836	5.600	1.886	1.107	0.803	0.546	0.444	0.311	3.141
20	2.562	5.337	50.388	6.792	4.864	1.840	1.083	0.777	0.529	0.446	0.305	3.123
21	2.357	10.132	32.974	7.329	4.797	1.651	1.061	0.769	0.517	0.432	0.282	3.070
22	2.190	11.729	32.145	8.999	4.738	1.607	1.048	0.773	0.505	0.436	0.322	3.013
23	2.158	8.918	29.103	16.272	4.747	1.578	1.073	0.787	0.490	0.450	0.666	2.898
24	2.108	8.344	23.875	9.899	4.608	1.562	1.075	0.776	0.494	0.443	0.371	2.847
25	2.084	8.565	23.880	6.344	4.872	1.543	1.054	0.755	0.590	0.432	0.346	3.131
26	2.249	11.102	24.097	4.933	4.459	1.682	1.053	0.740	0.583	0.438	0.438	3.121
27	2.269	8.584	21.971	5.635	4.266	1.668	1.047	0.737	0.568	0.431	0.410	3.216
28	2.786	7.823	44.165	4.350	4.116	1.591	1.032	0.731	0.544	0.417	0.409	7.237
29	2.914		19.614	4.324	4.005	1.509	1.022	0.724	0.524	0.406	0.407	15.452
30	3.390		13.293	4.926	3.923	1.542	1.015	0.701	0.517	0.385	0.385	20.515
31	2.411		28.096		3.891		1.022	0.693		0.374		14.294
Mean	2.636	6.132	19.405	10.630	5.586	2.369	1.183	0.843	0.591	0.502	0.400	3.623
Flow (MCM)	7.061	14.835	51.975	27.553	14.962	6.139	3.168	2.258	1.532	1.345	1.036	9.703
Maximum	5.635	11.729	50.388	23.758	7.791	3.749	1.526	1.005	0.719	0.637	0.791	20.515
Minimum	0.810	2.269	2.554	4.324	3.891	1.509	1.015	0.693	0.490	0.374	0.282	0.308
Runoff (mm)	15.656	32.894	115.244	61.094	33.176	13.613	7.025	5.007	3.397	2.983	2.296	21.514

Flow (cumecs)

Annual Statistics

Maximum: 50.388 Minimum: 0.282 Mean: 4.492 cumecs
Total: 141.650 MCM Runoff: 314.079 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2014
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	13.882	11.739	51.188	31.400	10.358	3.821	2.147	2.087	0.924	0.665	0.563	0.842
2	13.752	11.388	35.992	56.470	9.935	3.687	2.147	2.147	0.902	0.665	0.560	0.894
3	13.746	13.520	14.984	32.641	9.873	3.729	2.090	2.090	0.902	0.662	0.519	0.877
4	13.366	14.668	13.385	24.887	9.211	3.586	2.034	2.034	0.902	0.616	0.517	1.615
5	13.137	10.717	13.218	47.870	8.681	3.516	1.979	1.979	0.902	0.613	0.517	1.570
6	12.552	11.601	12.854	52.696	8.349	3.438	1.925	1.925	0.902	0.613	0.514	2.139
7	11.739	11.232	12.188	41.207	8.517	3.438	1.925	1.925	0.898	0.613	0.475	7.081
8	11.388	11.792	10.900	29.354	8.453	3.557	1.918	1.918	0.842	0.610	0.470	3.347
9	12.582	12.585	32.057	31.203	9.360	3.285	1.826	1.826	0.839	0.588	0.433	2.314
10	12.168	12.808	19.728	50.193	9.177	3.135	1.820	1.820	0.839	0.566	0.431	2.119
11	14.106	20.884	15.090	32.641	8.676	3.181	1.820	1.820	0.835	0.563	0.428	1.684
12	15.149	21.698	16.262	23.228	8.169	3.126	1.721	1.721	0.782	0.563	0.394	1.401
13	15.776	23.773	18.977	17.591	7.106	3.062	1.622	1.622	0.778	0.563	0.392	1.268
14	14.721	25.999	24.736	15.090	6.525	2.982	1.616	1.622	0.778	0.563	0.389	1.189
15	20.427	22.840	26.591	16.277	6.280	2.919	1.534	1.616	0.778	0.563	0.357	1.080
16	18.607	21.166	24.193	19.079	6.215	3.035	1.528	1.534	0.778	0.563	0.355	1.004
17	8.465	16.119	23.992	24.736	6.354	2.911	1.528	1.528	0.778	0.570	0.355	0.936
18	12.339	14.763	27.164	26.050	5.990	2.715	1.528	1.528	0.778	0.658	0.357	0.943
19	8.405	13.952	55.982	16.216	5.746	2.639	1.528	1.528	0.774	0.665	0.389	1.526
20	17.482	13.803	32.641	24.420	5.505	2.631	1.522	1.522	0.724	0.672	0.392	1.506
21	15.610	14.241	23.931	16.424	5.336	2.518	1.444	1.444	0.720	0.767	0.407	1.224
22	22.955	20.644	27.213	16.319	5.214	2.455	1.438	1.438	0.720	0.724	0.664	1.422
23	31.874	19.668	22.871	20.840	4.851	2.440	1.438	1.438	0.720	0.720	0.941	1.438
24	29.925	15.824	19.749	18.172	4.708	2.385	1.432	1.432	0.720	0.716	0.850	1.432
25	25.146	14.837	20.258	15.299	4.379	2.377	1.357	1.357	0.720	0.668	0.907	1.695
26	21.153	16.282	40.464	14.329	4.635	2.271	1.351	1.351	0.692	0.662	0.946	1.369
27	18.733	40.283	25.906	13.928	4.779	2.264	1.351	1.351	0.665	0.616	0.679	2.087
28	18.576	28.323	28.608	13.709	4.300	2.256	1.346	1.346	0.665	0.610	0.672	2.140
29	15.665		14.954	12.615	4.255	2.154	1.273	1.273	0.665	0.566	0.774	2.177
30	12.957		19.020	12.098	4.013	2.147	1.268	1.268	0.665	0.563	0.835	3.927
31	12.701		25.305		3.917		1.318	1.244		0.563		3.608
Mean	16.099	17.398	24.206	25.566	6.738	2.922	1.638	1.637	0.786	0.624	0.549	1.866
Flow (MCM)	43.121	42.090	64.834	66.267	18.046	7.574	4.387	4.384	2.038	1.670	1.424	4.999
Maximum	31.874	40.283	55.982	56.470	10.358	3.821	2.147	2.147	0.924	0.767	0.946	7.081
Minimum	8.405	10.717	10.900	12.098	3.917	2.147	1.268	1.244	0.665	0.563	0.355	0.842
Runoff (mm)	95.611	93.325	143.757	146.934	40.013	16.794	9.727	9.720	4.519	3.703	3.158	11.084

Flow (cumecs)

Annual Statistics

Maximum: 56.470 Minimum: 0.355 Mean: 8.336 cumecs
Total: 262.878 MCM Runoff: 582.879 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2015
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.818	6.915	8.291	7.552	6.073	2.483	1.414	1.386	0.870	0.435	0.240	9.337
2	2.631	6.346	8.230	7.147	5.721	2.388	1.356	1.356	0.861	0.452	0.236	9.613
3	2.400	6.186	8.145	5.889	5.496	2.296	1.351	1.351	0.844	0.449	0.240	8.890
4	2.477	5.934	7.209	4.853	5.325	2.191	1.343	1.343	0.821	0.430	0.240	8.568
5	3.881	5.076	6.912	4.552	5.152	2.094	1.338	1.338	0.790	0.404	0.203	8.882
6	3.812	4.888	6.566	4.529	5.466	2.086	1.267	1.267	0.757	0.451	0.312	8.596
7	3.286	4.368	6.361	5.770	4.722	2.027	1.171	1.171	0.741	0.488	0.466	8.350
8	2.894	4.911	5.370	7.192	4.540	2.020	1.148	1.148	0.753	0.441	0.828	8.254
9	2.298	17.801	4.927	7.594	4.401	1.978	1.114	1.114	0.784	0.423	1.403	6.461
10	2.133	12.681	6.091	6.959	4.213	1.928	1.098	1.087	0.797	0.413	0.346	6.421
11	1.981	11.912	10.123	7.229	4.104	1.922	1.086	1.075	0.796	0.436	0.438	5.854
12	3.324	11.109	8.017	8.706	4.196	1.875	1.075	1.075	0.798	0.429	0.412	5.693
13	16.687	8.464	7.192	12.627	4.049	1.869	1.073	1.057	0.780	0.435	0.385	5.570
14	3.692	9.268	7.130	9.297	3.976	1.816	1.041	1.039	0.790	0.412	0.375	5.825
15	5.917	8.795	6.685	9.045	3.836	1.649	1.039	1.032	0.800	0.458	0.371	5.231
16	5.540	8.268	6.447	8.650	3.739	1.571	1.032	1.032	0.791	0.513	0.339	5.391
17	4.747	6.870	6.492	8.300	3.517	1.531	1.032	1.032	0.799	0.780	0.337	9.830
18	4.177	6.655	6.921	7.506	3.427	1.528	1.030	1.018	0.785	0.785	0.339	10.114
19	3.671	6.303	5.796	7.869	3.272	1.528	1.005	1.004	0.636	0.778	0.415	9.908
20	3.402	5.973	5.552	7.275	3.012	1.525	1.004	1.004	0.494	0.759	0.679	9.613
21	7.706	8.679	5.231	6.652	2.030	1.463	1.004	1.004	0.494	0.508	0.877	8.890
22	5.802	8.373	4.888	6.065	2.774	1.438	1.002	0.986	0.494	0.454	0.792	8.624
23	5.112	6.541	4.391	5.643	2.793	1.438	0.971	0.967	0.494	0.451	0.433	9.746
24	4.461	6.229	4.356	5.347	2.727	1.435	0.967	0.935	0.491	0.473	0.404	31.509
25	4.002	6.403	4.266	5.230	2.579	1.397	0.937	0.904	0.457	0.473	0.382	27.736
26	3.870	6.088	4.089	5.290	2.497	1.392	0.933	0.895	0.489	0.441	0.450	28.946
27	5.915	5.768	3.991	4.980	2.462	1.354	0.904	0.872	0.444	0.447	0.504	39.244
28	7.854	5.914	3.842	5.323	2.385	1.349	0.895	0.870	0.432	0.481	0.604	48.083
29	6.985		3.821	6.216	2.312	1.312	0.872	0.870	0.439	0.493	1.049	50.161
30	5.907		3.587	6.135	2.475	1.299	0.870	0.870	0.424	0.456	1.179	36.051
31	5.839		3.538		2.399		0.902	0.870		0.328		33.387
Mean	4.685	7.597	5.950	6.847	3.731	1.739	1.073	1.064	0.671	0.489	0.509	15.444
Flow (MCM)	12.547	18.379	15.937	17.748	9.994	4.509	2.875	2.849	1.740	1.311	1.320	41.366
Maximum	16.687	17.801	10.123	12.627	6.073	2.483	1.414	1.386	0.870	0.785	1.403	50.161
Minimum	1.981	4.368	3.538	4.529	2.030	1.299	0.870	0.870	0.424	0.328	0.203	5.231
Runoff (mm)	27.821	40.751	35.337	39.353	22.160	9.997	6.375	6.317	3.859	2.907	2.927	91.722

Flow (cumecs)

Annual Statistics

Maximum: 50.161 Minimum: 0.203 Mean: 4.150 cumecs
Total: 130.879 MCM Runoff: 290.197 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2016
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	18.940	17.910	13.828	12.234	4.913	2.727	1.723	1.546	0.888	0.755	0.513	0.312
2	18.274	18.254	13.390	11.863	4.738	2.684	1.720	1.528	0.872	0.747	0.504	0.398
3	18.051	18.051	13.137	11.805	4.747	2.603	1.727	1.502	0.875	0.731	0.507	1.537
4	18.514	18.514	12.552	15.010	4.608	2.474	1.710	1.495	0.861	0.710	0.505	0.849
5	40.281	40.281	11.745	64.362	4.897	2.463	1.709	1.483	0.844	0.708	0.472	0.672
6	25.958	25.958	11.432	39.069	4.463	2.539	1.705	1.479	0.820	0.705	0.481	0.645
7	29.834	29.918	12.582	28.949	4.289	2.531	1.704	1.415	0.806	0.726	0.898	0.815
8	31.353	31.365	12.137	23.553	4.112	2.447	1.697	1.311	0.760	0.747	0.904	0.870
9	27.561	27.561	14.101	23.553	4.005	2.396	1.655	1.318	0.749	0.701	0.756	0.693
10	24.428	24.452	15.149	28.118	3.905	2.308	1.587	1.247	0.739	0.691	0.701	0.570
11	25.999	26.003	15.673	32.926	3.771	2.253	1.504	1.209	0.760	0.669	0.676	0.503
12	23.798	24.364	14.706	32.934	3.670	2.223	1.497	1.166	0.759	0.652	0.660	0.464
13	33.005	48.035	20.427	20.847	3.633	2.174	1.506	1.126	0.713	0.641	0.654	0.428
14	29.082	53.241	19.213	10.142	3.531	2.127	1.505	1.087	0.692	0.639	0.577	0.417
15	24.154	35.435	18.241	9.935	3.431	2.132	1.511	1.079	0.690	0.637	0.477	0.442
16	27.164	31.048	37.289	9.995	3.374	2.075	1.526	1.076	0.704	0.602	0.398	0.485
17	55.982	29.731	24.063	11.306	3.317	2.044	1.510	1.076	0.706	0.590	0.396	0.841
18	32.720	30.493	23.863	9.497	3.277	1.997	1.502	1.044	0.693	0.580	0.401	0.624
19	23.238	29.884	10.045	11.981	3.268	1.977	1.495	1.057	0.710	0.568	0.403	0.531
20	17.591	25.146	8.945	11.047	3.176	1.946	1.469	1.048	0.727	0.563	0.403	0.485
21	15.090	21.162	6.881	9.818	3.148	1.906	1.457	1.025	0.712	0.559	0.399	0.436
22	16.349	18.795	15.687	8.609	3.126	1.886	1.467	1.022	0.712	0.549	0.387	0.459
23	19.089	18.636	14.054	8.596	3.503	1.840	1.453	0.996	0.705	0.539	0.373	0.415
24	24.736	15.830	13.730	8.230	3.521	1.791	1.421	1.002	0.709	0.517	0.367	0.380
25	26.557	14.763	13.430	8.012	3.262	1.769	1.410	0.977	0.693	0.507	0.347	0.356
26	23.427	13.952	13.028	7.561	3.150	1.772	1.427	0.961	0.691	0.484	0.355	0.519
27	23.867	13.853	12.565	7.354	3.121	1.789	1.398	0.924	0.673	0.462	0.363	0.508
28	23.985	13.810	11.999	7.089	3.017	1.754	1.368	0.925	0.696	0.453	0.344	0.463
29	19.133	13.646	11.295	6.992	3.576	1.739	1.324	0.893	0.731	0.443	0.323	0.698
30	18.414		11.129	6.703	2.930	1.721	1.302	0.880	0.731	0.412	0.311	1.732
31	18.513		10.802		2.775		1.528	0.880		0.495		1.691
Mean	25.003	25.176	14.746	16.603	3.686	2.136	1.533	1.154	0.747	0.606	0.495	0.653
Flow (MCM)	66.968	63.080	39.495	43.035	9.872	5.537	4.105	3.091	1.937	1.623	1.283	1.748
Maximum	55.982	53.241	37.289	64.362	4.913	2.727	1.727	1.546	0.888	0.755	0.904	1.732
Minimum	15.090	13.646	6.881	6.703	2.775	1.721	1.302	0.880	0.673	0.412	0.311	0.312
Runoff (mm)	148.487	139.867	87.572	95.421	21.888	12.277	9.103	6.854	4.295	3.598	2.845	3.876

Flow (cumecs)

Annual Statistics

Maximum: 64.362 Minimum: 0.311 Mean: 7.711 cumecs
Total: 243.853 MCM Runoff: 540.694 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2017
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.086	16.559	14.350	26.803	6.432	4.176	1.597	1.172	0.572	0.556	0.433	2.004
2	0.803	17.439	10.228	31.207	6.107	4.089	1.574	1.114	0.514	0.572	0.427	1.967
3	1.201	17.031	12.774	31.354	6.147	4.037	1.561	1.057	0.514	0.568	0.404	1.968
4	1.182	13.043	11.613	27.762	6.098	3.857	1.551	1.025	0.562	0.566	0.295	2.289
5	1.015	8.644	10.579	24.454	6.043	3.725	1.515	1.009	0.768	0.566	0.417	2.342
6	0.819	8.854	9.107	24.808	6.018	3.618	1.484	0.970	0.756	0.563	0.411	2.411
7	0.537	9.049	15.279	23.277	5.986	3.432	1.468	0.963	0.738	0.561	0.401	2.278
8	1.130	8.741	12.469	19.739	5.952	3.399	1.442	0.966	0.741	0.561	0.392	2.310
9	1.924	7.758	12.595	17.228	5.933	3.288	1.420	0.958	0.724	0.562	0.387	2.141
10	1.817	7.283	15.746	12.238	5.930	3.111	1.403	0.940	0.720	0.563	0.385	1.965
11	1.536	7.529	14.864	6.690	5.906	2.833	1.401	0.934	0.709	0.593	0.472	1.833
12	1.680	7.795	16.473	4.914	5.844	2.760	1.367	0.926	0.707	0.595	0.501	1.663
13	1.533	7.655	21.986	10.457	5.677	2.678	1.357	0.922	0.690	0.591	0.468	1.376
14	1.034	7.485	21.407	10.833	5.627	2.522	1.346	0.912	0.681	0.608	0.462	1.486
15	1.246	6.908	20.053	10.383	5.504	2.491	1.322	0.908	0.676	0.578	0.456	1.499
16	1.512	5.106	18.907	10.064	5.491	2.259	1.302	0.897	0.670	0.559	0.443	2.347
17	1.838	4.761	18.635	9.835	5.396	2.053	1.287	0.889	0.659	0.545	0.413	2.819
18	1.866	4.902	23.180	9.728	5.336	2.103	1.264	0.874	0.641	0.523	0.421	3.201
19	2.356	4.891	18.120	12.008	5.267	2.060	1.250	0.868	0.647	0.499	0.408	3.539
20	2.132	5.268	17.717	11.246	5.203	2.105	1.247	0.864	0.629	0.493	0.264	3.343
21	2.157	7.923	25.766	9.901	5.086	2.093	1.212	0.830	0.635	0.459	0.263	3.811
22	2.117	6.923	29.170	9.170	4.996	2.116	1.175	0.820	0.628	0.439	0.347	3.832
23	2.331	6.815	28.905	8.338	4.950	2.022	1.173	0.814	0.612	0.436	1.525	4.022
24	2.235	6.755	25.849	6.905	4.885	1.823	1.154	0.803	0.613	0.432	1.231	4.074
25	2.198	8.358	36.862	8.098	4.815	1.698	1.139	0.804	0.608	0.449	0.625	4.174
26	2.486	8.619	32.921	8.406	4.734	1.671	1.158	0.801	0.602	0.445	0.759	4.208
27	2.652	8.564	30.976	7.989	4.623	1.664	1.202	0.790	0.589	0.439	2.245	4.062
28	3.355	9.536	35.796	7.278	4.468	1.641	1.197	0.781	0.587	0.439	0.868	4.118
29	5.200		34.639	6.914	4.422	1.623	1.185	0.777	0.583	0.439	1.153	4.227
30	6.139		30.646	6.637	4.306	1.620	1.181	0.778	0.586	0.439	1.955	4.956
31	6.038		23.913		4.246		1.184	0.783		0.418		5.026
Mean	2.102	8.578	21.017	13.822	5.401	2.619	1.326	0.902	0.645	0.518	0.641	2.945
Flow (MCM)	5.630	20.753	56.292	35.827	14.466	6.788	3.553	2.415	1.673	1.387	1.662	7.887
Maximum	6.139	17.439	36.862	31.354	6.432	4.176	1.597	1.172	0.768	0.608	2.245	5.026
Minimum	0.537	4.761	9.107	4.914	4.246	1.620	1.139	0.777	0.514	0.418	0.263	1.376
Runoff (mm)	12.482	46.015	124.816	79.439	32.075	15.051	7.877	5.354	3.709	3.076	3.684	17.489

Flow (cumecs)

Annual Statistics

Maximum: 36.862 Minimum: 0.263 Mean: 5.043 cumecs
Total: 159.037 MCM Runoff: 352.632 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2018
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.106	17.893	18.781	29.578	4.556	3.789	1.660	8.576	0.970	0.770	0.713	0.715
2	5.194	18.274	18.933	39.702	4.269	3.477	1.574	9.045	0.969	0.775	0.699	0.522
3	5.105	18.051	19.216	31.354	4.230	3.354	1.557	8.967	0.965	0.774	0.666	0.680
4	5.537	16.936	18.652	29.023	4.058	3.297	1.550	5.841	0.956	0.760	0.648	0.706
5	5.677	18.470	18.306	32.885	4.032	3.272	1.519	2.845	0.958	0.735	0.614	0.709
6	5.553	18.964	18.770	24.808	3.877	3.202	1.465	2.771	0.954	0.715	0.601	0.717
7	5.666	18.350	18.223	23.277	3.208	3.167	2.943	1.783	0.930	0.702	0.695	0.750
8	5.879	18.224	17.726	19.739	3.499	3.105	1.613	1.490	0.922	0.663	1.589	0.715
9	5.857	19.550	17.579	17.215	3.496	3.014	1.421	1.251	0.921	0.631	1.267	0.692
10	5.754	20.025	16.871	12.233	3.392	2.898	1.411	1.216	0.900	0.613	0.858	0.669
11	5.845	20.068	16.040	6.700	3.354	2.821	1.386	1.167	0.892	0.610	0.760	0.652
12	5.913	18.092	14.433	4.914	3.255	2.773	1.368	1.149	0.871	0.702	0.721	0.641
13	9.554	16.637	13.034	10.457	3.150	2.727	1.348	1.129	0.778	0.702	0.847	0.639
14	19.880	17.238	18.329	10.776	3.080	2.684	1.322	1.126	0.765	0.714	0.687	0.625
15	12.982	14.790	17.760	10.369	3.007	2.634	1.301	1.108	0.733	0.703	0.670	0.599
16	12.715	11.335	17.546	9.982	4.388	2.611	1.293	1.110	0.703	0.730	0.662	0.628
17	17.253	10.027	17.556	9.829	4.474	2.570	1.291	1.468	0.692	0.884	0.645	1.566
18	17.308	9.577	19.759	9.714	4.308	2.490	1.266	1.412	0.681	0.896	0.595	1.574
19	17.193	9.172	36.906	11.281	4.226	2.464	1.253	1.348	0.665	0.879	0.516	1.557
20	15.080	9.577	36.046	11.141	4.206	2.420	1.236	1.287	0.652	0.761	0.484	1.550
21	12.108	14.138	35.960	10.573	4.139	2.349	1.208	1.251	0.639	0.703	0.458	1.523
22	11.791	17.273	35.822	9.263	4.029	2.277	1.175	1.209	0.637	0.648	0.442	1.489
23	17.560	16.580	35.275	8.338	3.880	2.239	1.180	1.159	0.615	0.624	0.469	1.468
24	20.012	15.243	35.244	6.791	3.843	2.187	1.165	1.042	0.778	0.622	0.470	1.439
25	18.936	14.658	35.050	8.082	3.811	2.173	1.140	1.024	0.769	0.597	0.460	1.421
26	18.954	13.658	34.747	8.406	3.637	2.138	1.156	1.005	0.760	0.567	0.445	1.411
27	18.308	13.751	34.515	7.977	3.533	2.099	1.165	0.986	0.752	0.636	0.429	1.386
28	18.556	16.343	34.193	7.277	3.480	2.025	1.156	0.970	0.725	0.703	0.428	1.368
29	18.761		32.755	6.914	3.261	1.978	1.114	0.982	0.725	0.721	0.441	1.348
30	18.080		26.563	6.495	3.142	1.886	1.015	0.982	0.709	0.705	0.426	1.326
31	17.782		29.678		3.140		1.426	0.976		0.705		1.289
Mean	12.255	15.818	24.525	14.503	3.741	2.671	1.377	2.183	0.800	0.708	0.647	1.044
Flow (MCM)	32.823	38.266	65.687	37.592	10.019	6.923	3.687	5.847	2.072	1.896	1.677	2.797
Maximum	20.012	20.068	36.906	39.702	4.556	3.789	2.943	9.045	0.970	0.896	1.589	1.574
Minimum	5.105	9.172	13.034	4.914	3.007	1.886	1.015	0.970	0.615	0.567	0.426	0.522
Runoff (mm)	72.779	84.847	145.647	83.353	22.216	15.350	8.176	12.965	4.595	4.205	3.717	6.202

Flow (cumecs)

Annual Statistics

Maximum: 39.702 Minimum: 0.426 Mean: 6.689 cumecs
Total: 210.950 MCM Runoff: 467.739 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA9 **Year:** 2019
Station Name: Kimani River at Old Great North Road
Time-Series Type: Flow (cumecs)

Latitude: 8:53:49 S Longitude: 34: 6:40 E Elevation: 1079.0 metres Area: 451.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	17.414	14.350	27.058	5.201	3.825	1.797	1.315	0.865	0.715	0.515	0.765
2	-	17.439	10.228	29.929	5.194	3.477	1.780	1.244	0.869	0.708	0.504	0.731
3	-	17.031	12.753	30.926	5.105	3.354	1.763	1.171	0.846	0.700	0.507	0.684
4	-	13.043	11.479	24.948	5.537	3.295	1.747	1.143	0.832	0.693	0.505	0.646
5	-	8.644	10.579	23.956	5.677	3.202	1.730	1.127	0.814	0.686	0.472	0.611
6	-	8.854	9.132	11.863	5.553	3.167	1.714	1.097	0.790	0.680	0.452	0.581
7	-	9.049	15.284	11.277	5.666	3.105	1.698	0.998	0.774	0.673	0.435	0.552
8	-	8.126	12.457	19.038	5.872	3.014	1.682	1.022	0.735	0.666	0.426	0.530
9	-	7.670	12.516	18.109	5.754	2.898	1.666	0.994	0.702	0.659	0.412	0.563
10	-	7.283	15.746	12.721	5.845	2.821	1.650	0.970	0.663	0.652	0.406	0.607
11	-	7.529	14.864	12.660	5.913	2.773	1.634	0.956	0.643	0.646	0.426	0.593
12	-	7.795	16.473	15.804	8.490	2.723	1.618	0.941	0.643	0.639	0.443	0.580
13	-	7.655	21.986	11.242	5.340	2.637	1.602	0.933	0.980	0.632	0.412	0.554
14	-	7.521	21.407	10.776	4.777	2.611	1.587	1.155	0.891	0.626	0.494	0.533
15	-	7.194	20.053	10.369	4.633	2.576	1.571	1.149	0.841	0.619	0.479	0.514
16	-	5.138	19.497	9.982	4.512	2.552	1.556	1.097	0.799	0.613	0.468	0.490
17	-	4.764	27.021	9.829	4.475	2.488	1.540	0.901	0.761	0.606	0.468	0.477
18	-	4.928	27.614	9.728	4.308	2.464	1.525	0.871	0.747	0.600	0.454	0.500
19	-	4.895	27.304	12.008	4.226	2.420	1.510	0.861	0.734	0.594	0.465	1.134
20	-	5.268	27.531	11.246	4.206	2.349	1.495	0.841	0.824	0.587	0.850	3.247
21	-	8.030	27.049	9.995	4.139	2.277	1.480	0.818	0.811	0.581	0.825	8.563
22	-	6.938	24.585	9.183	4.039	2.239	1.465	0.820	0.935	0.575	0.380	8.933
23	-	6.815	23.599	8.398	3.947	2.187	1.451	0.783	0.891	0.569	0.344	9.626
24	-	6.755	12.982	6.912	3.843	2.173	1.436	0.766	0.855	0.563	0.327	5.355
25	-	8.383	12.595	8.098	3.776	2.138	1.422	0.749	0.826	0.557	0.341	1.162
26	-	8.660	15.746	8.467	3.618	2.099	1.407	0.729	0.799	0.551	0.818	1.087
27	-	8.569	14.864	7.986	3.493	2.025	1.393	0.719	0.778	0.545	0.839	1.040
28	-	9.536	16.473	7.277	3.369	1.978	1.379	0.700	0.761	0.539	0.826	1.015
29	-		21.986	6.914	3.176	1.893	1.365	0.675	0.748	0.533	0.799	0.992
30	-		19.771	6.541	3.108	1.817	1.350	0.679	0.729	0.527	0.776	0.950
31	-		29.757		3.463		1.337	0.677		0.521		0.733
Mean	-	8.604	18.312	13.441	4.718	2.619	1.560	0.932	0.796	0.615	0.529	1.753
Flow (MCM)	-	20.816	49.048	34.840	12.637	6.789	4.177	2.497	2.064	1.646	1.371	4.696
Maximum	-	17.439	29.757	30.926	8.490	3.825	1.797	1.315	0.980	0.715	0.850	9.626
Minimum	-	4.764	9.132	6.541	3.108	1.817	1.337	0.675	0.643	0.521	0.327	0.477
Runoff (mm)	-	46.155	108.753	77.250	28.019	15.054	9.262	5.536	4.576	3.650	3.039	10.412

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Mbarali River at Igawa			
Station No: 1KA11A		**Established:** November 1954	
Coordinates:		**Altitude (m.a.m.s.l):** 1,119	
Lat: -8.7839	**Long: 34.3781**	**Catchment Area (km²):** 1,553	
Description of the Catchment:			
Scattered native settlement, cultivation, wood land and grassland			

Station Details

1. Staff Gauges	**Range: 0 – 4m**	**A.D.Z.G.R: 0.00mm**
	Type of Gauges: Standard Vertical	**MSL.Z.G.L: -**
2. Automatic Recorder	**Pressure type Orpheus mini**	**Date installed: 2013**
3. Benchmark	Nail in concrete beacon	

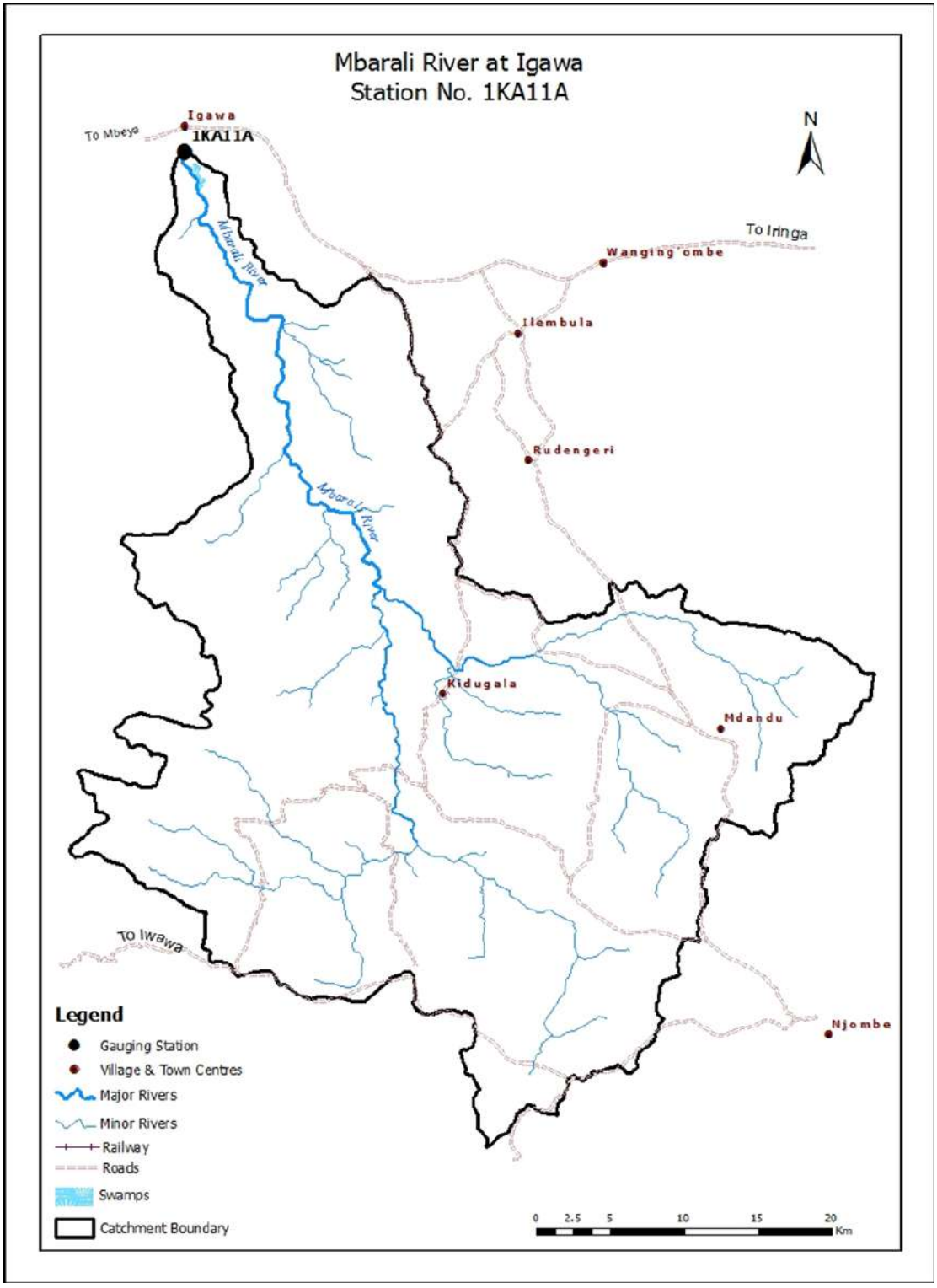
BM Assumed Datum: 6.773m	**N.M.M.S.L: -**	**TBM: –**

4. Control	Consist of permanent rocky bar
5. Access	Accessible throughout the year, 12km from Rujewa suboffice along the Great North road

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	2.2.3
Discharge:	01/01/2010 - 31/12/2019	2.2.3

Extremes:	**Max. Recorded**	402.194m³/sec	**On** 11/01/1976	**WL** 3.04m
	Min. Recorded	0.759m³/sec	**On** 24/11/2019	**WL** 0.001m

Remarks


Mbarali River at Igawa
Station No. 1KA11A
N
Igawa
1KA11A
To Mbeya
To Iringa
Wanging'ombe
Ilembula
Rudengeri
Kidugala
Mdandu
Njombe
To Iwawa
Mbarali River
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Swamps
Catchment Boundary
0 2.5 5 10 15 20
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 8:47: 2 S | Longitude: 34:22:41 E | Elevation: 1119.0 metres | Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	20.800	36.965	49.236	37.400	12.713	8.668	7.159	4.542	3.634	2.554	1.799	2.095
2	26.296	37.280	47.381	36.094	12.903	8.658	7.127	4.486	3.598	2.530	1.783	2.076
3	23.526	36.936	45.225	34.949	13.747	8.501	7.076	4.479	3.540	2.530	1.787	2.043
4	42.016	37.312	43.840	34.461	13.582	8.413	7.038	4.427	3.491	2.528	1.800	2.074
5	23.012	44.072	46.191	33.951	13.962	8.384	7.015	4.382	3.426	2.490	1.818	2.073
6	30.311	45.853	46.432	33.665	13.771	8.376	6.901	4.357	3.393	2.473	1.841	2.087
7	55.993	45.685	48.910	33.300	13.229	8.263	6.862	4.352	3.387	2.553	1.873	2.401
8	32.734	46.310	48.270	32.932	13.142	8.239	6.768	4.291	3.400	2.589	1.888	6.953
9	32.762	60.092	48.213	32.450	13.048	8.160	6.697	4.279	3.330	2.551	1.856	5.418
10	53.596	48.571	44.815	31.901	13.027	8.104	6.582	4.250	3.259	2.534	1.854	8.710
11	30.134	45.612	41.533	31.548	12.991	8.096	6.504	4.232	3.185	2.634	1.854	21.237
12	31.314	44.002	40.673	31.194	12.911	7.985	6.384	4.211	3.106	3.071	1.836	22.469
13	8.263	40.580	40.327	30.330	12.873	7.950	6.284	4.169	3.050	2.530	1.810	20.500
14	42.760	37.863	39.617	24.966	12.844	7.921	6.189	4.133	3.019	2.408	1.792	19.653
15	36.778	37.916	38.336	23.178	12.808	7.883	6.038	4.108	2.960	2.311	1.773	17.847
16	36.596	32.543	37.745	22.685	12.770	7.880	5.919	4.077	2.949	2.219	1.781	12.989
17	26.458	24.411	37.946	22.075	12.711	7.856	5.707	4.039	2.924	2.137	1.774	8.768
18	26.242	29.103	37.280	20.332	12.703	7.852	5.565	4.010	2.885	2.107	1.754	6.844
19	26.349	32.642	36.685	15.852	12.609	7.829	5.513	3.992	2.844	2.042	1.721	4.708
20	25.288	37.866	37.277	15.392	12.538	7.827	5.480	3.984	2.807	2.019	1.708	4.079
21	27.779	33.077	44.072	15.168	12.442	7.691	5.467	3.950	2.774	1.970	4.430	3.940
22	26.269	37.195	45.853	15.143	10.764	7.555	5.454	3.925	2.753	1.944	7.043	3.930
23	26.081	33.596	45.685	15.042	9.071	7.551	5.433	3.906	2.738	1.892	5.353	3.919
24	25.527	34.577	46.310	14.704	8.972	7.476	5.420	3.872	2.710	1.855	3.215	3.912
25	26.912	58.015	60.092	14.474	8.958	6.910	5.372	3.863	2.654	1.932	2.565	3.895
26	24.824	55.623	48.500	13.680	9.009	7.318	5.305	3.829	2.633	2.398	2.285	3.871
27	23.626	53.187	44.835	13.402	8.983	7.317	5.284	3.782	2.633	1.786	2.080	3.858
28	23.643	50.818	42.972	13.134	8.951	7.287	5.096	3.752	2.633	1.765	2.111	3.839
29	23.762		38.313	12.728	8.882	7.287	4.612	3.716	2.611	1.764	2.074	3.793
30	23.596		37.721	12.707	8.812	7.255	4.559	3.685	2.572	1.764	2.077	3.714
31	24.271		40.014		8.738		4.547	3.657		1.783		3.620
Mean	29.275	41.347	43.558	23.961	11.757	7.883	5.979	4.088	3.030	2.247	2.311	7.010
Flow (MCM)	78.410	100.026	116.666	62.107	31.490	20.433	16.015	10.950	7.853	6.019	5.990	18.776
Maximum	55.993	60.092	60.092	37.400	13.962	8.668	7.159	4.542	3.634	3.071	7.043	22.469
Minimum	8.263	24.411	36.685	12.707	8.738	6.910	4.547	3.657	2.572	1.764	1.708	2.043
Runoff (mm)	50.489	64.408	75.123	39.992	20.277	13.157	10.312	7.051	5.057	3.876	3.857	12.090

Flow (cumecs)

Annual Statistics

Maximum: 60.092 | Minimum: 1.708 | Mean: 15.204 cumecs
Total: 479.469 MCM | Runoff: 308.737 mm

Possible data flags

No data stored "-" | Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2011

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.450	6.398	18.436	46.314	18.423	7.909	5.296	3.997	2.891	2.425	1.447	1.931
2	3.611	8.567	17.578	45.417	17.578	7.858	5.289	3.985	2.865	2.488	1.422	1.911
3	3.583	11.833	15.236	48.655	15.236	7.868	5.223	3.981	2.817	2.528	1.384	1.999
4	3.565	11.100	14.321	48.139	14.321	7.866	5.179	3.928	2.785	2.518	1.379	1.968
5	3.515	10.384	14.275	46.478	14.275	7.829	5.168	3.911	2.779	2.481	1.350	1.888
6	3.586	10.065	14.478	41.867	14.478	7.799	5.058	3.873	2.759	2.508	1.405	1.996
7	5.407	11.576	14.617	38.102	14.617	7.758	4.908	3.865	2.742	2.894	2.391	2.027
8	5.526	28.595	14.847	36.699	14.847	7.729	4.837	3.831	2.737	2.887	2.497	5.081
9	5.519	19.360	14.981	33.115	14.981	7.675	4.828	3.749	2.720	2.695	1.741	14.680
10	5.414	15.543	15.178	30.458	15.178	7.585	4.716	3.742	2.674	2.629	1.626	7.940
11	5.373	14.852	15.281	29.525	15.281	6.868	4.648	3.689	2.588	2.581	1.599	7.838
12	5.337	13.904	15.139	30.042	15.139	6.181	4.622	3.673	2.504	2.530	1.679	7.693
13	5.294	12.992	14.950	35.163	14.950	6.180	4.607	3.635	2.474	2.476	1.776	14.026
14	5.176	12.386	14.809	32.646	14.809	6.157	4.567	3.624	2.463	2.441	1.873	13.415
15	5.055	12.311	14.693	30.845	14.693	6.133	4.546	3.560	2.373	2.442	1.596	11.915
16	5.821	12.091	14.491	29.131	14.491	6.129	4.514	3.518	2.349	2.397	1.537	11.742
17	19.767	12.821	14.222	26.962	14.200	6.084	4.483	3.507	2.283	2.328	1.483	11.802
18	19.965	15.260	13.835	25.702	13.683	6.061	4.451	3.451	2.268	2.258	1.422	15.314
19	18.938	15.128	12.446	23.663	12.446	6.068	4.418	3.430	2.233	2.203	1.364	26.565
20	16.470	15.661	12.020	23.112	12.020	6.044	4.405	3.400	2.271	2.134	1.343	23.179
21	14.226	15.682	11.645	21.927	11.645	6.015	4.382	3.289	2.330	2.079	1.420	23.438
22	11.625	15.545	11.532	21.443	11.532	5.903	4.363	3.278	2.386	1.971	1.466	30.744
23	9.670	17.521	11.326	20.805	11.326	5.815	4.325	3.225	2.418	1.877	1.475	40.413
24	7.678	20.445	11.153	20.782	11.153	5.705	4.281	3.225	2.452	1.805	2.053	33.269
25	6.130	21.339	10.961	20.697	10.961	5.572	4.261	3.161	2.526	1.767	2.207	26.725
26	5.530	20.629	10.522	20.551	10.522	5.458	4.229	3.114	2.575	1.762	2.489	24.445
27	5.090	19.814	8.953	20.227	8.953	5.420	4.165	3.107	2.536	1.698	2.304	21.535
28	5.054	19.039	8.453	19.779	8.453	5.408	4.121	3.062	2.479	1.629	2.069	20.753
29	4.929		8.084	19.238	8.084	5.408	4.082	3.021	2.428	1.549	2.003	22.302
30	4.849		8.018	18.829	8.018	5.380	4.047	2.962	2.385	1.502	1.885	23.494
31	4.929		10.126		7.963		4.059	2.877		1.465		23.739
Mean	7.422	15.030	13.116	30.210	13.040	6.529	4.583	3.505	2.536	2.224	1.723	15.347
Flow (MCM)	19.879	36.361	35.131	78.305	34.928	16.923	12.276	9.389	6.574	5.957	4.466	41.106
Maximum	19.965	28.595	18.436	48.655	18.423	7.909	5.296	3.997	2.891	2.894	2.497	40.413
Minimum	3.450	6.398	8.018	18.829	7.963	5.380	4.047	2.877	2.233	1.465	1.343	1.888
Runoff (mm)	12.800	23.413	22.621	50.422	22.490	10.897	7.904	6.046	4.233	3.836	2.875	26.469

Flow (cumecs)

Annual Statistics

Maximum: 48.655 Minimum: 1.343 Mean: 9.606 cumecs
Total: 302.923 MCM Runoff: 195.056 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.117	18.099	32.831	27.693	14.680	7.296	5.794	3.954	2.769	2.329	1.555	2.660
2	10.994	16.594	41.529	26.873	14.299	6.972	5.767	3.889	2.757	2.329	1.647	2.501
3	9.452	15.442	39.140	26.681	13.806	7.560	5.945	3.866	2.706	2.334	1.857	2.300
4	7.298	12.486	38.949	27.040	13.151	7.479	6.076	3.904	2.499	2.335	3.748	2.100
5	7.213	12.106	38.173	32.249	12.791	7.295	6.113	3.895	2.699	2.289	3.745	1.971
6	7.078	11.801	37.985	31.948	12.515	7.260	6.078	3.864	2.681	2.251	3.155	1.858
7	9.643	11.441	39.328	31.426	12.438	7.209	6.136	3.824	2.691	2.233	3.055	1.761
8	14.082	9.871	46.008	31.200	12.357	7.197	6.345	3.808	2.700	2.180	2.970	1.735
9	38.731	8.946	35.416	30.981	12.245	7.191	6.391	3.865	2.689	2.162	2.857	1.725
10	25.074	7.808	34.218	30.829	12.190	7.138	6.286	3.926	2.670	2.132	2.846	2.484
11	24.833	6.852	32.897	30.581	12.128	7.090	6.248	3.997	2.663	2.083	2.799	20.170
12	24.172	6.063	32.876	30.541	12.077	7.049	6.112	3.992	2.643	2.054	2.610	8.506
13	23.313	5.876	32.832	30.838	12.005	7.020	6.021	3.931	2.632	2.020	2.476	6.242
14	18.388	5.786	32.435	30.290	11.885	6.958	5.937	3.810	2.613	1.978	2.511	5.780
15	15.066	6.074	31.944	26.334	11.813	6.894	5.849	3.390	2.592	1.949	2.770	4.336
16	12.674	8.378	31.066	25.968	11.712	6.868	5.704	3.287	2.575	1.892	2.868	4.199
17	18.960	9.716	27.772	24.885	11.550	6.849	5.547	3.216	2.551	1.857	3.305	3.880
18	19.347	14.392	21.774	28.164	11.452	6.762	5.398	3.170	2.534	1.801	3.772	4.163
19	19.330	32.122	25.826	29.257	11.252	6.590	5.239	3.122	2.500	1.765	3.816	3.632
20	19.440	24.558	30.669	25.766	11.095	6.440	5.138	3.078	2.494	1.734	3.953	3.544
21	19.502	23.252	31.160	25.356	10.947	6.293	5.000	3.061	2.485	1.711	4.127	3.610
22	19.507	19.719	33.548	24.839	10.685	6.219	4.796	3.004	2.474	1.697	5.278	3.999
23	19.550	21.363	47.635	23.531	9.782	5.999	4.665	2.993	2.467	1.676	5.556	3.647
24	19.681	21.843	31.385	21.078	8.992	5.925	4.557	2.972	2.449	1.652	5.262	3.547
25	19.802	26.032	30.511	18.398	8.738	6.020	4.453	2.952	2.438	1.649	4.085	3.695
26	19.468	28.321	27.396	16.453	8.453	6.188	4.374	2.960	2.429	1.642	3.953	3.529
27	19.233	30.544	24.272	15.783	8.230	6.135	4.304	2.956	2.408	1.641	3.845	3.172
28	18.930	37.521	32.186	15.447	8.065	6.059	4.231	2.934	2.374	1.626	3.404	2.828
29	18.639	30.684	30.566	15.011	7.890	6.006	4.147	2.885	2.362	1.621	2.973	3.385
30	18.416		30.057	14.805	7.628	5.899	4.075	2.842	2.335	1.624	2.818	3.814
31	18.259		29.124		7.471		4.000	2.788		1.592		3.305
Mean	17.780	16.679	33.275	25.675	11.107	6.729	5.378	3.424	2.563	1.930	3.321	4.003
Flow (MCM)	47.623	41.791	89.122	66.549	29.749	17.441	14.405	9.170	6.642	5.170	8.607	10.720
Maximum	38.731	37.521	47.635	32.249	14.680	7.560	6.391	3.997	2.769	2.335	5.556	20.170
Minimum	7.078	5.786	21.774	14.805	7.471	5.899	4.000	2.788	2.335	1.592	1.555	1.725
Runoff (mm)	30.665	26.910	57.387	42.852	19.156	11.230	9.276	5.905	4.277	3.329	5.542	6.903

Flow (cumecs)

Annual Statistics

Maximum: 47.635 Minimum: 1.555 Mean: 10.989 cumecs
Total: 347.484 MCM Runoff: 223.750 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2013

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.951	17.489	14.039	24.117	9.031	5.469	4.024	2.983	2.417	1.598	1.109	1.264
2	3.136	13.588	12.075	23.989	9.508	5.464	4.020	2.972	2.378	1.606	1.109	1.325
3	4.099	12.114	12.540	24.392	8.894	5.447	3.997	2.971	2.340	1.607	1.109	1.386
4	6.362	8.915	10.476	23.139	8.828	5.441	3.954	2.952	2.299	1.607	1.104	1.449
5	7.873	7.125	9.236	23.669	9.089	5.361	3.901	2.940	2.259	1.594	1.040	1.513
6	8.094	7.814	8.785	24.867	8.965	5.294	3.747	2.916	2.200	1.676	1.035	1.578
7	9.785	7.960	13.076	24.060	8.423	5.155	3.614	2.854	2.134	1.742	1.035	1.644
8	21.380	6.271	17.894	30.746	8.194	5.061	3.581	2.791	2.087	1.697	1.035	1.711
9	7.870	5.694	26.541	29.033	7.759	5.147	3.557	2.745	2.048	1.596	1.072	1.779
10	10.839	6.162	36.537	38.548	8.171	4.957	3.524	2.666	2.011	1.555	1.109	1.848
11	11.121	16.998	54.401	36.840	7.472	4.826	3.511	2.634	1.975	1.505	1.111	1.918
12	13.564	13.648	49.660	22.105	7.274	4.624	3.517	2.633	1.964	1.472	1.130	1.989
13	11.402	21.001	46.514	20.713	7.043	4.633	3.544	2.633	1.963	1.432	1.148	2.061
14	6.594	14.714	40.316	20.097	7.039	4.759	3.521	2.626	1.945	1.424	1.212	2.134
15	7.057	11.910	38.456	19.580	6.798	4.622	3.454	2.536	1.888	1.346	1.331	2.208
16	6.510	14.478	31.547	16.321	6.715	4.500	3.385	2.530	1.784	1.340	1.197	2.283
17	5.710	13.902	26.663	16.120	6.715	4.365	3.309	2.523	1.726	1.316	1.112	2.359
18	4.444	11.303	33.295	16.208	6.710	4.346	3.236	2.435	1.703	1.271	1.094	2.435
19	6.239	10.169	32.057	15.516	6.512	4.265	3.224	2.428	1.694	1.264	1.072	2.513
20	6.877	11.782	38.208	15.700	6.635	4.229	3.268	2.441	1.683	1.291	1.043	2.592
21	6.605	15.265	46.237	18.102	5.654	4.195	3.250	2.616	1.634	1.273	1.035	2.671
22	5.397	25.525	36.343	13.981	5.735	4.165	3.233	2.564	1.612	1.231	1.033	2.752
23	4.423	39.144	31.760	12.452	5.821	4.157	3.148	2.549	1.689	1.196	1.000	2.833
24	4.023	25.105	26.609	12.369	5.925	4.144	3.076	2.530	1.702	1.184	0.971	2.915
25	4.340	31.673	28.148	12.257	6.553	4.129	3.089	2.500	1.685	1.184	0.963	2.998
26	4.892	26.267	24.878	12.240	6.753	4.202	3.090	2.488	1.676	1.184	0.979	3.082
27	4.644	22.527	21.113	11.816	5.865	4.146	3.064	2.470	1.676	1.179	1.032	3.167
28	4.563	17.158	29.936	10.663	5.899	4.121	3.060	2.459	1.658	1.113	1.088	3.253
29	8.943		30.022	10.319	5.685	4.045	3.038	2.449	1.624	1.109	1.146	3.340
30	11.790		25.002	10.378	5.581	4.050	3.010	2.443	1.599	1.109	1.204	3.427
31	14.957		23.220		5.344		2.995	2.429		1.109		3.516
Mean	7.628	15.561	28.245	19.678	7.116	4.644	3.417	2.636	1.902	1.381	1.089	2.321
Flow (MCM)	20.432	37.645	75.651	51.005	19.059	12.037	9.153	7.059	4.930	3.699	2.822	6.216
Maximum	21.380	39.144	54.401	38.548	9.508	5.469	4.024	2.983	2.417	1.742	1.331	3.516
Minimum	2.951	5.694	8.785	10.319	5.344	4.045	2.995	2.428	1.599	1.109	0.963	1.264
Runoff (mm)	13.157	24.240	48.713	32.843	12.272	7.751	5.894	4.546	3.174	2.382	1.817	4.003

Flow (cumecs)

Annual Statistics

Maximum: 54.401 Minimum: 0.963 Mean: 7.968 cumecs
Total: 251.281 MCM Runoff: 161.804 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.670	24.679	25.141	45.126	24.747	12.374	8.103	5.765	4.286	3.177	3.255	6.905
2	4.930	20.368	24.178	43.427	24.720	12.374	8.085	5.765	4.348	3.325	3.219	7.286
3	6.736	19.868	24.943	43.877	23.570	12.353	7.844	5.646	4.239	3.233	3.060	14.729
4	6.794	19.579	25.544	43.827	23.407	12.064	7.827	5.526	4.231	3.261	2.944	13.682
5	7.177	20.713	25.586	47.141	22.047	12.044	7.810	5.409	4.185	3.019	2.744	12.440
6	8.166	20.125	27.723	46.571	21.390	12.023	7.691	5.176	4.278	2.897	2.626	13.907
7	9.422	24.982	22.873	45.323	20.951	11.738	7.572	5.061	4.169	2.790	2.435	8.774
8	9.632	35.750	21.348	40.572	20.334	11.557	7.421	5.061	4.100	2.737	2.280	7.439
9	12.905	29.848	23.474	40.199	19.728	11.396	7.287	5.047	3.993	2.731	2.134	6.668
10	17.574	27.284	24.536	45.487	19.275	11.236	7.287	4.849	3.925	2.633	2.045	6.351
11	16.739	24.964	25.701	46.794	18.146	11.077	7.270	4.835	3.865	2.530	2.039	5.647
12	17.102	29.680	24.440	48.803	16.549	11.077	7.040	4.835	3.857	2.435	2.039	5.025
13	19.247	48.842	23.407	41.302	16.361	10.920	7.023	4.821	3.753	2.379	1.987	4.072
14	23.338	45.414	24.871	31.895	15.872	10.762	6.893	4.624	3.745	2.322	1.860	3.584
15	22.253	31.205	25.378	31.524	15.689	10.743	6.763	4.610	3.686	2.237	1.854	3.453
16	32.472	32.960	49.482	30.630	15.506	10.471	6.763	4.610	3.569	2.224	1.854	3.332
17	25.592	33.260	49.663	30.052	15.506	10.432	6.763	4.624	3.504	2.152	1.854	3.170
18	25.123	38.942	51.116	26.159	15.483	10.163	6.635	4.793	3.346	2.350	1.854	3.067
19	23.068	35.886	44.802	26.266	15.166	10.125	6.508	4.498	3.282	3.180	1.854	3.053
20	13.160	34.102	55.921	28.180	15.121	9.841	6.508	4.482	3.282	4.059	1.855	2.985
21	15.788	30.342	51.907	28.012	14.807	9.560	6.508	4.482	3.275	3.860	2.536	3.406
22	24.827	33.044	50.305	26.030	14.607	9.394	6.492	4.482	3.177	2.806	4.436	5.834
23	32.293	36.230	44.328	25.813	14.363	9.246	6.272	4.427	3.170	3.469	12.638	7.658
24	28.111	34.718	44.084	25.628	13.450	9.100	6.256	4.411	3.115	3.592	8.605	8.585
25	25.222	38.196	49.519	25.362	13.385	8.936	6.240	4.356	3.060	3.129	5.915	9.917
26	25.889	25.243	45.975	24.928	13.385	8.684	6.024	4.293	3.060	2.904	4.652	9.673
27	27.346	25.493	46.199	23.863	13.342	8.649	6.009	4.223	3.060	2.843	3.733	9.119
28	25.324	25.805	47.116	24.338	12.707	8.400	6.009	4.115	3.060	2.843	3.166	8.793
29	22.381		50.431	24.689	12.250	8.383	5.887	4.107	3.060	2.843	4.041	8.383
30	19.685		51.695	24.180	12.374	8.243	5.765	4.107	3.067	2.843	3.457	7.829
31	21.006		51.596		12.374		5.765	4.115		2.870		7.139
Mean	18.483	30.269	37.203	34.533	16.987	10.446	6.849	4.747	3.625	2.893	3.299	7.158
Flow (MCM)	49.505	73.226	99.644	89.510	45.499	27.075	18.344	12.714	9.396	7.748	8.551	19.173
Maximum	32.472	48.842	55.921	48.803	24.747	12.374	8.103	5.765	4.348	4.059	12.638	14.729
Minimum	3.670	19.579	21.348	23.863	12.250	8.243	5.765	4.107	3.060	2.152	1.854	2.985
Runoff (mm)	31.877	47.151	64.162	57.637	29.298	17.434	11.812	8.187	6.050	4.989	5.506	12.345

Flow (cumecs)

Annual Statistics

Maximum: 55.921 Minimum: 1.854 Mean: 14.708 cumecs
Total: 463.819 MCM Runoff: 298.660 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A **Year:** 2015
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.398	12.272	13.600	11.039	13.841	6.009	4.107	3.177	2.237	1.590	2.426	4.028
2	5.902	12.040	14.147	10.806	15.601	5.993	4.107	3.170	2.224	1.590	7.986	3.131
3	5.858	19.021	16.223	13.008	13.108	5.780	4.107	3.115	2.140	3.075	8.243	2.904
4	7.442	16.993	16.491	12.152	11.257	5.646	4.046	3.060	2.128	1.773	7.965	2.790
5	7.438	15.859	14.277	10.744	10.665	5.526	3.985	3.005	2.045	1.590	7.557	2.790
6	7.255	16.541	13.600	11.618	10.706	5.409	3.985	2.951	2.057	1.590	7.270	2.857
7	8.125	42.983	15.102	11.321	10.144	5.291	3.925	2.951	2.310	1.590	7.007	3.101
8	7.421	26.502	15.851	16.200	9.841	5.277	3.865	2.951	2.237	1.590	6.383	3.170
9	6.750	43.696	19.380	15.151	9.267	5.075	3.865	2.951	2.158	1.590	5.544	3.299
10	5.784	31.754	29.261	14.568	8.954	5.047	3.857	2.951	1.871	1.590	5.061	4.342
11	5.418	25.592	25.982	25.114	8.936	4.849	3.753	2.951	1.854	1.584	4.728	4.372
12	14.670	18.428	24.861	21.920	8.508	4.849	3.686	2.951	1.854	1.510	4.482	5.835
13	16.146	17.182	26.149	25.792	7.999	5.032	3.627	2.951	1.854	1.505	4.364	5.995
14	13.411	16.803	20.858	18.966	8.085	4.849	3.569	2.951	1.854	1.505	4.348	6.210
15	11.271	16.405	17.980	16.716	7.844	4.722	3.511	2.951	1.854	1.505	4.231	6.315
16	9.256	16.293	15.899	16.176	7.827	4.608	3.453	2.951	1.854	1.510	3.905	8.510
17	8.208	19.532	14.432	17.306	7.810	4.527	3.453	2.951	1.854	1.584	4.032	8.071
18	9.284	23.862	13.068	15.215	7.572	4.364	3.504	2.897	1.854	1.590	3.335	7.172
19	8.829	20.560	12.209	14.080	7.404	4.356	3.403	2.790	1.854	1.633	2.414	6.763
20	9.713	18.050	11.942	13.215	7.040	4.348	3.396	2.724	1.809	1.676	1.999	6.619
21	24.354	17.687	12.151	12.561	7.007	4.247	3.396	2.543	1.764	1.676	1.854	6.397
22	16.454	18.883	11.597	12.209	6.779	4.340	3.396	2.523	1.764	1.676	1.770	6.303
23	18.120	16.787	11.860	11.861	6.747	4.239	3.389	2.435	1.764	1.676	1.781	6.462
24	16.948	14.283	11.901	11.256	6.523	4.231	3.297	2.428	1.720	1.720	2.168	5.858
25	14.945	12.583	12.520	11.057	6.508	4.223	3.389	2.428	1.676	1.764	3.226	4.963
26	12.714	12.240	12.132	10.782	6.508	4.115	3.396	2.428	1.676	1.764	4.689	4.365
27	11.692	16.048	10.338	10.630	6.508	4.107	3.339	2.428	1.676	1.764	7.793	4.046
28	19.119	14.611	9.413	12.136	6.382	4.107	3.282	2.379	1.633	1.764	4.781	3.865
29	11.866		9.740	12.543	6.256	4.107	3.282	2.329	1.590	1.809	4.286	3.745
30	11.732		10.900	13.344	6.256	4.107	3.282	2.329	1.590	1.854	4.903	3.750
31	11.842		10.959		6.132		3.275	2.322		1.866		6.184
Mean	11.109	19.767	15.317	14.316	8.517	4.779	3.611	2.772	1.892	1.694	4.684	4.975
Flow (MCM)	29.753	47.821	41.025	37.108	22.811	12.388	9.671	7.424	4.904	4.536	12.142	13.324
Maximum	24.354	43.696	29.261	25.792	15.601	6.009	4.107	3.177	2.310	3.075	8.243	8.510
Minimum	5.418	12.040	9.413	10.630	6.132	4.107	3.275	2.322	1.590	1.505	1.770	2.790
Runoff (mm)	19.159	30.793	26.417	23.894	14.688	7.977	6.227	4.780	3.158	2.921	7.818	8.580

Flow (cumecs)

Annual Statistics

Maximum: 43.696 Minimum: 1.505 Mean: 7.786 cumecs
Total: 245.539 MCM Runoff: 158.106 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.295	34.188	19.806	41.685	22.367	11.077	7.023	4.849	3.745	2.479	1.590	1.590
2	31.945	40.119	18.122	34.743	20.745	10.920	7.023	4.835	3.745	2.428	1.590	1.665
3	14.170	37.352	16.662	38.416	19.576	10.607	7.023	4.835	3.745	2.428	1.590	1.595
4	15.933	31.466	16.242	34.276	19.300	10.432	6.893	4.722	3.686	2.379	1.590	1.595
5	18.214	30.937	15.667	66.638	18.731	10.163	6.763	4.610	3.627	2.329	1.590	1.710
6	27.003	31.281	14.652	51.888	17.973	10.125	6.877	4.610	3.627	2.322	1.590	2.948
7	18.536	63.446	14.407	41.667	17.563	9.860	6.652	4.610	3.620	2.237	1.590	5.857
8	27.455	10.225	14.078	35.443	17.158	9.841	6.508	4.546	3.518	2.182	1.590	5.148
9	24.321	35.557	13.773	31.880	16.615	9.691	6.508	4.482	3.511	2.134	1.590	4.086
10	57.824	29.702	14.326	30.385	16.080	9.542	6.382	4.482	3.511	2.086	1.590	3.805
11	19.199	28.432	16.643	29.606	15.689	9.523	6.256	4.474	3.511	2.033	1.633	3.606
12	30.293	25.895	14.436	28.248	15.325	9.264	6.132	4.364	3.453	1.952	1.676	3.049
13	31.137	26.415	17.491	27.318	15.121	9.246	6.009	4.356	3.389	1.946	1.671	2.252
14	40.057	30.843	24.683	27.030	14.785	9.228	5.993	4.356	3.289	1.940	1.595	1.815
15	26.927	31.496	20.964	26.402	14.210	8.954	5.780	4.356	3.226	1.860	1.584	1.645
16	30.662	27.126	36.332	26.118	13.108	8.684	5.887	4.356	3.163	1.860	1.510	2.836
17	26.272	45.188	21.423	25.667	13.023	8.666	6.009	4.356	3.067	1.940	1.505	3.874
18	25.725	30.673	18.735	24.775	12.728	8.525	6.009	4.348	3.060	1.946	1.505	4.571
19	23.610	35.484	17.420	23.381	12.561	8.383	5.993	4.239	3.005	1.940	1.505	5.179
20	27.245	39.896	17.158	23.900	12.519	8.365	5.780	4.231	2.890	1.860	1.505	4.310
21	32.278	37.364	16.313	26.379	12.229	8.120	5.750	4.169	2.744	1.849	1.505	3.978
22	36.972	42.729	17.875	25.612	12.188	8.085	5.541	4.107	2.737	1.770	1.505	3.231
23	31.227	37.970	19.697	26.562	12.209	7.844	5.526	4.100	2.662e	1.764	1.464	2.196
24	24.149	26.088	19.054	31.893	12.209	7.827	5.526	3.993	2.633	1.764	1.422	1.644
25	19.911	23.167	18.510	28.961	12.023	7.810	5.409	3.985	2.633	1.720	1.422	1.469
26	17.954	23.273	17.757	26.831	11.738	7.555	5.291	3.925	2.633	1.676	1.422	1.422
27	16.245	27.445	17.484	25.002	11.718	7.304	5.291	3.865	2.581	1.676	1.417	1.417
28	14.987	27.686	26.985	22.685	11.718	7.287	5.277	3.865	2.530	1.676	1.346	1.297
29	16.851	22.717	27.945	21.731	11.698	7.270	5.075	3.865	2.530	1.671	1.351	1.601
30	34.927		24.420	23.138	11.416	7.040	5.061	3.857	2.530	1.595	1.500	1.590
31	37.856		24.360		11.236		5.047	3.753		1.590		1.563
Mean	26.135	32.212	19.143	30.942	14.695	8.908	6.010	4.306	3.153	1.969	1.531	2.727
Flow (MCM)	69.999	80.711	51.271	80.202	39.360	23.089	16.096	11.534	8.174	5.273	3.969	7.305
Maximum	57.824	63.446	36.332	66.638	22.367	11.077	7.023	4.849	3.745	2.479	1.676	5.857
Minimum	10.295	10.225	13.773	21.731	11.236	7.040	5.047	3.753	2.530	1.590	1.346	1.297
Runoff (mm)	45.074	51.971	33.014	51.643	25.345	14.868	10.364	7.427	5.263	3.395	2.556	4.704

Flow (cumecs)

Annual Statistics

Maximum: 66.638 Minimum: 1.297 Mean: 12.644 cumecs
Total: 399.844 MCM Runoff: 257.465 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.776	28.834	8.542	29.219	10.452	4.835	3.857	2.737	1.590	1.184	0.847	1.698
2	2.306	13.928	8.122	30.205	10.163	4.821	3.805	2.737	1.590	1.179	0.839	1.809
3	2.466	9.314	8.766	31.211	9.993	4.624	3.753	2.731	1.590	1.113	0.839	2.753
4	2.329	7.968	16.814	26.358	9.822	4.610	3.745	2.639	1.590	1.109	0.839	2.325
5	2.231	8.818	16.430	24.582	9.542	4.610	3.745	2.633	1.590	1.109	0.839	1.941
6	2.092	10.614	30.778	23.437	9.264	4.610	3.738	2.581	1.547	1.109	0.839	1.570
7	2.010	11.740	20.314	21.601	9.100	4.546	3.635	2.530	1.505	1.109	0.839	0.921
8	2.404	10.187	19.674	19.759	8.810	4.482	3.620	2.479	1.505	1.109	0.857	0.867
9	3.776	9.192	37.992	18.533	8.525	4.474	3.518	2.422	1.505	1.109	1.076	0.866
10	7.545	12.183	40.592	17.973	8.365	4.364	3.504	2.335	1.500	1.109	0.984	0.865
11	14.425	23.222	22.046	17.563	8.103	4.348	3.403	2.329	1.427	1.109	0.929	0.948
12	6.381	13.220	15.459	17.348	7.844	4.239	3.396	2.329	1.422	1.109	0.907	0.966
13	8.811	12.065	20.225	16.992	7.827	4.231	3.339	2.329	1.422	1.104	0.893	0.948
14	7.606	11.359	30.283	16.638	7.810	4.231	3.226	2.322	1.422	1.040	0.877	0.922
15	7.913	10.013	29.384	16.591	7.572	4.169	3.163	2.237	1.422	1.035	0.863	0.912
16	7.572	8.816	56.129	16.265	7.538	4.107	3.067	2.230	1.422	1.035	0.869	0.920
17	7.404	7.725	37.870	16.057	7.304	4.107	3.005	2.230	1.417	1.035	0.964	1.017
18	7.702	7.538	54.001	15.849	7.287	4.107	2.951	2.182	1.346	1.035	0.846	1.228
19	8.120	7.304	55.490	15.529	7.155	4.107	2.897	2.134	1.341	1.035	0.846	1.292
20	7.965	7.372	48.178	15.325	7.007	4.107	2.843	2.134	1.341	1.035	0.846	1.306
21	7.691	8.754	55.883	15.143	6.668	4.046	2.843	2.086	1.341	1.035	0.846	1.127
22	8.119	10.973	45.196	14.964	6.619	4.046	2.843	2.039	1.336	1.035	0.843	1.077
23	14.669	8.542	32.947	14.629	6.492	4.046	2.843	1.992	1.267	1.035	0.839	1.111
24	8.279	8.225	28.468	14.409	6.256	3.985	2.843	1.946	1.262	1.030	0.839	1.133
25	8.418	7.708	26.149	13.903	6.009	3.985	2.843	1.900	1.262	0.968	0.839	1.117
26	24.985	8.098	50.619	13.903	5.780	3.985	2.843	1.849	1.262	0.963	0.840	1.103
27	18.485	13.737	55.067	13.731	5.750	3.925	2.790	1.770	1.223	0.963	0.858	1.115
28	12.889	9.249	45.319	13.004	5.526	3.865	2.737	1.759	1.184	0.963	0.860	1.109
29	8.544		46.397	11.741	5.292	3.865	2.737	1.682	1.184	0.963	0.860	1.133
30	27.250		32.630	10.920	5.061	3.865	2.737	1.671	1.184	0.963	0.911	1.256
31	35.210		29.937		4.849		2.737	1.595		0.955		2.128
Mean	9.270	10.953	33.087	18.113	7.541	4.245	3.194	2.212	1.400	1.054	0.872	1.274
Flow (MCM)	24.829	26.499	88.621	46.948	20.199	11.002	8.554	5.924	3.628	2.824	2.261	3.411
Maximum	35.210	28.834	56.129	31.211	10.452	4.835	3.857	2.737	1.590	1.184	1.076	2.753
Minimum	1.776	7.304	8.122	10.920	4.849	3.865	2.737	1.595	1.184	0.955	0.839	0.865
Runoff (mm)	15.988	17.063	57.064	30.231	13.006	7.085	5.508	3.815	2.336	1.818	1.456	2.197

Flow (cumecs)

Annual Statistics

Maximum: 56.129 Minimum: 0.839 Mean: 7.768 cumecs

Total: 244.971 MCM Runoff: 157.740 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 8:47: 2 S Longitude: 34:22:41 E Elevation: 1119.0 metres Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	21.440	20.412	4.760	23.354	25.695	9.523	6.492	4.231	2.958	2.086	3.021	1.992
2	11.914	19.327	47.477	22.789	25.247	9.137	6.523	4.223	2.951	2.039	2.595	1.957
3	7.187	17.953	35.955	21.783	24.830	9.082	6.747	4.115	2.897	2.033	2.341	2.134
4	11.856	16.617	33.029	20.617	24.554	8.810	6.635	4.107	2.843	1.952	2.237	2.417
5	7.753	15.849	29.879	20.081	23.706	8.666	6.508	4.046	2.837	1.946	2.176	2.693
6	7.155	15.009	27.120	19.519	22.790	8.666	6.382	3.985	2.744	1.900	2.039	2.951
7	6.877	14.987	26.060	24.611	21.133	8.666	6.256	3.925	2.731	1.939	1.952	3.150
8	6.913	17.507	30.913	21.133	18.354	8.649	6.132	3.865	2.639	3.181	1.900	3.019
9	7.254	38.030	19.322	19.030	15.759	8.400	5.993	3.805	2.633	3.062	1.854	2.944
10	6.780	28.702	16.972	18.338	14.987	8.243	5.765	3.745	2.581	2.142	1.866	2.810
11	7.929	25.752	17.589	17.757	14.629	8.085	5.646	3.738	2.530	2.045	2.124	2.924
12	28.568	24.830	36.005	17.588	14.585	7.844	5.526	3.635	2.530	2.134	3.085	3.405
13	42.293	23.746	59.784	17.925	14.407	7.827	5.306	3.627	2.530	2.224	3.471	4.463
14	25.250	17.649	56.989	17.731	14.099	7.691	5.277	3.569	2.479	2.224	4.466	9.383
15	30.157	15.351	62.016	17.396	14.077	7.538	5.075	3.511	2.428	2.134	3.987	4.915
16	55.490	13.453	40.643	17.420	14.077	7.304	5.047	3.504	2.428	2.045	3.463	4.239
17	53.244	12.541	34.195	17.949	13.903	7.287	4.849	3.403	2.428	2.039	3.122	4.371
18	50.723	11.901	38.119	19.519	13.729	7.270	4.835	3.396	2.428	2.039	2.999	6.325
19	28.042	11.557	63.401	38.597	13.557	7.040	4.821	3.396	2.379	2.033	2.738	6.122
20	27.279	11.236	64.238	47.350	13.364	7.007	4.624	3.339	2.329	1.952	2.530	22.030
21	29.222	11.060	53.078	36.734	13.044	6.779	4.610	3.282	2.329	1.946	2.428	9.967
22	31.085	13.005	40.658	32.871	12.728	6.763	4.610	3.282	2.329	1.900	2.292	11.613
23	31.785	13.010	32.690	30.687	12.520	6.763	4.602	3.282	2.329	1.854	2.341	13.306
24	29.910	28.107	31.509	30.114	12.044	6.763	4.490	3.282	2.280	1.860	2.659	15.669
25	18.907	30.437	29.172	29.635	11.738	6.635	4.482	3.226	2.230	1.940	2.758	14.470
26	17.302	20.774	26.576	29.101	11.557	6.508	4.419	3.170	2.230	1.946	3.060	9.320
27	36.762	15.759	24.640	28.247	11.236	6.508	4.356	3.170	2.224	1.946	3.089	7.441
28	35.532	15.790	26.095	27.781	10.920	6.492	4.356	3.170	2.140	1.992	2.692	5.808
29	31.707		24.252	27.232	10.588	6.272	4.348	3.115	2.134	2.039	2.467	4.671
30	25.861		24.117	26.175	10.012	6.272	4.239	3.060	2.134	2.051	2.105	4.177
31	22.606		25.622		9.691		4.231	3.053		2.275		3.933
Mean	24.348	18.584	34.931	24.636	15.599	7.616	5.264	3.557	2.489	2.094	2.662	6.278
Flow (MCM)	65.213	44.959	93.560	63.855	41.780	19.742	14.099	9.527	6.451	5.607	6.899	16.815
Maximum	55.490	38.030	64.238	47.350	25.695	9.523	6.747	4.231	2.958	3.181	4.466	22.030
Minimum	6.780	11.060	4.760	17.396	9.691	6.272	4.231	3.053	2.134	1.854	1.854	1.957
Runoff (mm)	41.992	28.949	60.245	41.117	26.903	12.712	9.079	6.134	4.154	3.611	4.443	10.827

Flow (cumecs)

Annual Statistics

Maximum: 64.238 Minimum: 1.854 Mean: 12.338 cumecs
Total: 389.093 MCM Runoff: 250.543 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA11A
Station Name: Mbarali River at Igawa
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 8:47: 2 S | Longitude: 34:22:41 E | Elevation: 1119.0 metres | Area: 1553.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.865	25.517	25.747	23.197	13.203	7.023	4.231	3.170	2.219	1.759	1.108	3.918
2	3.827	20.412	21.320	24.624	13.194	6.893	4.231	3.163	2.203	1.682	1.088	3.454
3	4.236	19.327	18.786	32.093	13.686	6.747	4.231	3.067	2.187	1.676	1.038	3.239
4	5.953	19.740	16.971	25.362	13.194	6.523	4.169	3.060	2.171	1.673	1.033	2.629
5	5.397	22.343	15.609	24.554	12.395	6.382	4.107	3.005	2.155	1.604	1.101	2.442
6	4.447	29.120	21.239	23.923	11.901	6.256	4.107	2.951	2.139	1.466	1.065	2.420
7	4.416	33.999	26.589	23.299	11.557	6.256	4.100	2.951	2.124	1.750	0.983	2.946
8	6.332	33.306	19.686	22.763	11.236	6.240	3.993	2.904	2.108	1.676	0.976	4.020
9	12.523	31.573	18.952	21.391	10.920	6.024	3.985	2.890	2.093	1.587	0.958	7.636
10	13.429	35.519	19.227	20.133	10.762	6.009	3.978	2.843	2.077	1.461	0.958	8.507
11	11.944	-	20.590	18.536	10.607	5.993	3.872	2.843	2.061	1.434	0.981	5.118
12	11.080	41.951	19.576	16.808	10.451	5.780	3.865	2.843	2.046	1.576	1.009	4.013
13	10.128	30.843	19.325	15.529	10.432	5.765	3.865	2.843	2.031	1.533	1.483	3.595
14	9.771	29.369	19.126	15.166	10.163	5.646	3.805	2.843	2.015	1.513	1.448	3.340
15	13.424	27.294	18.730	14.964	10.144	5.512	3.745	2.784	2.000	1.505	0.894	3.083
16	24.982	25.305	18.730	14.431	10.144	5.306	3.745	2.646	1.985	1.505	0.894	7.477
17	21.577	24.554	18.854	13.710	9.993	5.291	3.686	2.731	1.969	1.505	0.894	5.470
18	20.467	23.652	17.589	13.044	9.822	5.176	3.627	2.737	1.954	1.512	0.911	17.085
19	22.863	21.812	16.267	12.561	9.560	5.061	3.627	2.737	1.939	1.543	1.154	23.398
20	14.964	20.108	15.506	12.209	9.394	4.948	3.569	2.731	1.924	1.510	1.127	14.705
21	17.610	18.388	15.334	11.881	9.100	4.835	3.511	2.639	1.909	1.504	1.130	25.046
22	47.622	17.374	19.143	11.698	8.810	4.722	3.511	2.633	1.894	1.477	1.104	21.523
23	35.829	17.144	15.422	11.416	8.666	4.610	3.511	2.626	1.879	1.313	0.968	54.777e
24	33.831	25.370	15.462	11.436	8.525	4.586	3.504	2.536	1.864	1.301	0.851	61.182
25	61.152	24.640	15.460	11.840	8.243	4.380	3.403	2.530	1.849	1.258	1.206	33.106
26	56.687	24.673	14.987	12.644	7.965	4.474	3.396	2.479	1.834	1.161	3.713	44.760
27	52.186	21.581	15.490	21.146	7.810	4.364	3.339	2.428	1.819	1.093	2.871	34.705
28	48.945	19.568	16.243	16.425	7.555	4.356	3.282	2.428	1.805	1.073	2.706	32.505
29	41.989		16.080	21.467	7.304	4.293	3.282	2.379	1.790	1.071	4.920	51.667
30	34.207		20.065	16.163	7.270	4.231	3.275	2.329	1.775	1.074	6.601	23.390
31	30.206		21.109		7.040		3.177	2.279		1.107		17.966
Mean	22.125	-	18.491	17.814	10.034	5.456	3.733	2.743	1.994	1.448	1.572	17.068
Flow (MCM)	59.261	-	49.526	46.173	26.874	14.142	9.999	7.346	5.168	3.880	4.076	45.716
Maximum	61.152	-	26.589	32.093	13.686	7.023	4.231	3.170	2.219	1.759	6.601	61.182
Minimum	3.827	-	14.987	11.416	7.040	4.231	3.177	2.279	1.775	1.071	0.851	2.420
Runoff (mm)	38.159	-	31.890	29.732	17.305	9.106	6.439	4.730	3.328	2.498	2.624	29.437

Flow (cumecs)

Annual Statistics

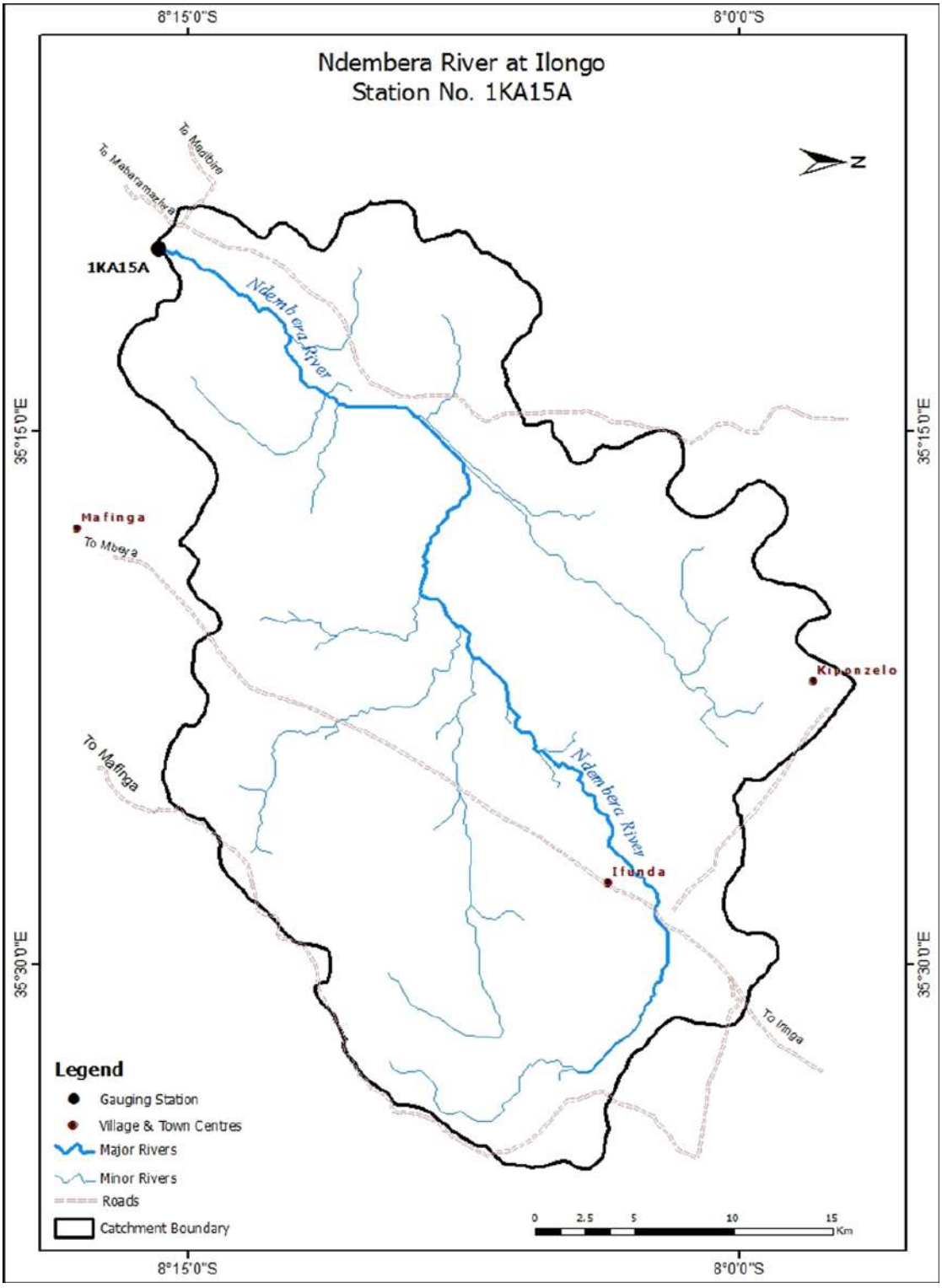
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ndembera River at Ilongo				
Station No: 1KA15A			Established: 16/10/1960	
Coordinates:			Altitude (m.a.m.s.l): 1,673	
Lat: -8.2638	Long: 35.1643		Catchment Area (km²): 1,105	
Description of the Catchment:				
Woodland and wooded grassland				
Station Details				
1. Staff Gauges	Range: 0 – 3m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2019	
3. Benchmark	Bolt embedded in concrete			
BM Assumed Datum: 2.530m		N.M.M.S.L: -	TBM: –	
4. Control	Permanent with rocky bed and banks			
5. Access	Accessible throughout the year, 104 km from Iringa town through Iringa- Madibira Road			
Records	Period		Quality	
Water Level:	01/01/2010 - 31/12/2019		1.2.3	
Discharge:	01/01/2010 - 31/12/2019		2.2.3	
Extremes:	Max. Recorded	79.73m³/sec	On 02/04/2014	WL 2.772m
	Min. Recorded	0.219m³/sec	On 23/08/2018	WL 0.620m
Remarks				


Ndembera River at Ilongo
Station No. 1KA15A
8°15'0"S
8°0'0"S
35°15'0"E
35°30'0"E
N
1KA15A
Ndembera River
To Magubira
To Maharamatwa
Mafinga
To Mbeya
To Mafinga
Kipanzelo
Ifunda
To Iringa
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Catchment Boundary
0 2.5 5 10 15
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.522	13.252	9.551	21.429	7.958	3.360	1.267	0.805	0.447	0.195	0.070	0.264
2	8.572	12.783	10.126	21.215	7.819	3.333	1.242	0.775	0.434	0.193	0.065	0.193
3	9.502	15.298	10.073	20.304	7.645	3.227	1.221	0.773	0.415	0.190	0.019	0.172
4	10.415	21.529	10.044	18.657	7.495	3.122	1.236	0.766	0.400	0.188	0.016	0.159
5	12.427	22.742	10.956	16.737	7.204	2.976	1.249	0.759	0.380	0.186	0.016	0.142
6	13.735	22.692	12.285	15.621	6.969	2.807	1.242	0.751	0.364	0.184	0.017	0.133
7	13.068	23.294	13.595	15.351	6.414	2.630	1.196	0.747	0.355	0.177	0.055	0.136
8	12.392	20.825	13.823	13.138	6.279	2.574	1.152	0.735	0.344	0.167	0.056	0.145
9	12.502	18.190	14.690	12.125	6.086	2.463	1.133	0.722	0.337	0.162	0.056	0.172
10	13.918	17.595	15.715	11.643	6.051	2.352	1.117	0.713	0.329	0.157	0.055	0.199
11	14.153	17.254	16.553	11.007	6.007	2.120	1.106	0.692	0.322	0.153	0.076	0.225
12	14.068	15.768	16.530	10.041	5.888	2.053	1.096	0.662	0.307	0.149	0.095	0.222
13	13.852	14.387	16.908	9.372	5.371	2.041	1.079	0.644	0.297	0.145	0.091	0.206
14	13.993	14.464	17.028	8.982	5.265	2.021	1.043	0.631	0.294	0.136	0.088	0.183
15	16.002	14.246	18.375	8.786	5.106	1.992	1.003	0.625	0.292	0.130	0.073	0.170
16	16.215	11.716	21.229	8.421	4.873	1.905	0.974	0.619	0.290	0.126	0.025	0.160
17	15.194	11.454	24.184	7.904	4.821	1.821	0.965	0.609	0.280	0.121	0.022	0.151
18	15.927	11.243	24.397	8.065	4.813	1.809	0.965	0.593	0.273	0.114	0.052	0.144
19	16.962	10.404	23.529	8.374	4.701	1.781	0.973	0.566	0.269	0.110	0.088	0.139
20	17.451	9.880	23.181	8.298	4.605	1.695	0.965	0.536	0.264	0.107	0.088	0.264
21	17.454	9.548	22.572	8.199	4.447	1.640	0.964	0.524	0.257	0.104	0.105	0.438
22	17.524	9.267	19.338	8.173	4.239	1.625	0.959	0.513	0.254	0.101	0.141	0.468
23	17.487	8.997	17.919	8.282	4.202	1.599	0.960	0.508	0.246	0.098	0.158	0.509
24	17.563	8.918	16.698	8.319	4.102	1.534	0.962	0.503	0.236	0.093	0.150	0.490
25	17.081	8.816	16.480	8.209	3.973	1.477	0.932	0.497	0.232	0.092	0.139	0.390
26	14.500	8.965	16.849	8.142	3.919	1.436	0.918	0.484	0.228	0.089	0.126	0.338
27	14.285	8.863	16.682	8.178	3.838	1.415	0.903	0.476	0.221	0.078	0.114	0.343
28	13.556	8.910	17.339	8.209	3.694	1.381	0.878	0.465	0.216	0.078	0.125	0.335
29	13.259		19.245	8.203	3.583	1.325	0.864	0.462	0.208	0.077	0.175	0.338
30	13.191		19.097	8.048	3.497	1.292	0.851	0.457	0.201	0.077	0.264	0.339
31	13.150		20.119		3.420		0.838	0.452		0.074		0.370
Mean	14.126	13.975	16.939	11.248	5.299	2.094	1.040	0.615	0.300	0.131	0.087	0.256
Flow (MCM)	37.836	33.808	45.369	29.154	14.194	5.427	2.787	1.647	0.777	0.350	0.226	0.686
Maximum	17.563	23.294	24.397	21.429	7.958	3.360	1.267	0.805	0.447	0.195	0.264	0.509
Minimum	8.522	8.816	9.551	7.904	3.420	1.292	0.838	0.452	0.201	0.074	0.016	0.133
Runoff (mm)	34.241	30.596	41.058	26.384	12.845	4.911	2.522	1.491	0.703	0.317	0.205	0.621

Flow (cumecs)

Annual Statistics

Maximum: 24.397 Minimum: 0.016 Mean: 5.509 cumecs
Total: 173.738 MCM Runoff: 157.229 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2011
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.376	5.120	4.042	9.291	7.997	1.800	0.552	0.186	0.182	0.057	0.032	0.073
2	0.360	5.018	5.326	8.366	7.427	1.782	0.537	0.219	0.174	0.055	0.030	0.072
3	0.350	4.866	5.470	8.431	5.982	1.635	0.514	0.246	0.170	0.054	0.029	0.073
4	0.343	4.804	4.759	8.490	5.784	1.614	0.502	0.273	0.162	0.054	0.027	0.074
5	0.370	4.705	4.904	6.676	6.084	1.553	0.487	0.275	0.153	0.052	0.020	0.074
6	0.447	4.482	4.741	8.262	5.873	1.544	0.477	0.276	0.149	0.054	0.027	0.072
7	0.708	4.381	4.845	10.028	5.637	1.463	0.467	0.276	0.145	0.055	0.037	0.069
8	0.696	4.028	4.838	9.736	4.740	1.729	0.457	0.275	0.143	0.056	0.038	0.077
9	1.088	3.927	4.876	10.064	4.652	1.995	0.448	0.275	0.139	0.056	0.034	0.207
10	1.451	3.885	4.926	11.837	4.606	1.985	0.438	0.273	0.138	0.052	0.033	0.213
11	1.410	3.766	4.863	15.635	4.506	1.976	0.429	0.272	0.137	0.049	0.034	0.206
12	1.940	3.640	4.559	17.508	4.603	1.976	0.420	0.272	0.134	0.044	0.034	0.196
13	2.410	3.554	5.576	15.958	4.592	1.967	0.411	0.272	0.131	0.042	0.034	0.190
14	2.531	3.584	6.198	12.918	4.451	1.958	0.406	0.273	0.130	0.044	0.036	0.200
15	2.805	3.553	5.858	12.923	2.361	1.957	0.402	0.275	0.128	0.046	0.040	0.231
16	3.109	3.516	5.416	12.817	3.046	1.335	0.388	0.275	0.127	0.047	0.045	0.251
17	4.009	3.556	5.290	12.693	3.120	0.728	0.381	0.272	0.119	0.049	0.047	0.477
18	4.664	3.549	5.617	10.322	2.724	0.728	0.377	0.267	0.111	0.048	0.050	0.500
19	5.271	3.554	5.453	10.039	2.627	0.693	0.369	0.251	0.104	0.048	0.055	0.513
20	5.030	3.564	6.090	10.081	2.617	0.653	0.363	0.240	0.094	0.048	0.057	0.552
21	4.738	3.532	5.428	10.250	3.263	0.632	0.357	0.223	0.088	0.048	0.058	0.624
22	4.635	3.505	5.473	10.231	3.152	0.619	0.353	0.208	0.086	0.047	0.057	0.683
23	4.615	3.524	6.909	10.178	3.000	0.613	0.346	0.205	0.083	0.045	0.056	2.519
24	5.204	3.514	6.628	10.159	2.961	0.612	0.342	0.205	0.081	0.045	0.054	3.595
25	5.471	3.551	6.348	9.949	2.672	0.606	0.338	0.205	0.077	0.044	0.053	3.799
26	5.637	3.566	6.705	9.715	1.774	0.597	0.331	0.205	0.072	0.044	0.051	3.871
27	5.979	3.553	6.571	8.826	1.583	0.587	0.328	0.199	0.067	0.043	0.050	3.887
28	6.015	3.536	7.878	7.990	1.863	0.582	0.323	0.192	0.063	0.042	0.050	4.240
29	5.874		8.182	7.992	1.805	0.581	0.309	0.189	0.060	0.038	0.054	4.654
30	5.461		8.384	7.979	1.838	0.564	0.180	0.188	0.058	0.034	0.066	4.760
31	5.367		10.476		1.898		0.159	0.186		0.033		4.804
Mean	3.173	3.905	5.891	10.511	3.846	1.235	0.393	0.240	0.117	0.048	0.043	1.347
Flow (MCM)	8.499	9.447	15.779	27.246	10.302	3.202	1.053	0.643	0.303	0.127	0.111	3.607
Maximum	6.015	5.120	10.476	17.508	7.997	1.995	0.552	0.276	0.182	0.057	0.066	4.804
Minimum	0.343	3.505	4.042	6.676	1.583	0.564	0.159	0.186	0.058	0.033	0.020	0.069
Runoff (mm)	7.691	8.549	14.280	24.657	9.323	2.898	0.953	0.582	0.274	0.115	0.101	3.265

Flow (cumecs)

Annual Statistics

Maximum: 17.508 Minimum: 0.020 Mean: 2.563 cumecs
Total: 80.812 MCM Runoff: 73.133 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.361	5.207	14.064	10.506	6.363	1.408	0.564	0.269	0.156	0.051	0.023	0.042
2	6.387	5.177	13.565	10.594	5.815	1.388	0.563	0.269	0.153	0.051	0.022	0.043
3	5.904	5.270	13.401	10.852	5.494	1.365	0.553	0.268	0.149	0.051	0.020	0.043
4	5.318	5.601	13.386	14.768	5.134	1.275	0.545	0.263	0.144	0.048	0.019	0.048
5	5.301	5.807	13.281	16.948	5.033	1.221	0.519	0.263	0.139	0.044	0.023	0.051
6	5.256	5.794	12.979	16.815	4.999	1.178	0.503	0.261	0.138	0.043	0.034	0.050
7	3.985	5.347	11.759	16.516	4.916	1.091	0.497	0.260	0.136	0.042	0.073	0.048
8	4.003	4.778	11.678	14.564	4.698	0.999	0.480	0.257	0.129	0.040	0.118	0.048
9	3.965	4.748	10.797	14.232	4.338	0.928	0.467	0.257	0.122	0.038	0.112	0.048
10	3.895	4.711	9.043	14.004	4.233	0.913	0.462	0.257	0.119	0.037	0.067	0.056
11	3.929	4.688	8.231	13.817	4.191	0.861	0.462	0.254	0.118	0.036	0.062	0.247
12	3.912	4.527	7.136	13.531	3.989	0.814	0.449	0.254	0.115	0.036	0.049	0.271
13	3.870	4.515	7.027	12.635	3.759	0.814	0.426	0.248	0.112	0.035	0.047	0.273
14	3.728	4.217	6.923	12.043	3.640	0.806	0.420	0.242	0.111	0.033	0.044	1.014
15	4.210	2.710	6.815	11.737	3.531	0.797	0.415	0.237	0.106	0.031	0.040	7.664
16	4.874	4.680	6.747	11.411	3.395	0.783	0.411	0.229	0.101	0.029	0.039	0.204
17	4.972	4.738	6.651	11.200	3.272	0.773	0.402	0.216	0.084	0.028	0.040	0.196
18	4.974	4.766	6.564	10.589	3.004	0.742	0.382	0.205	0.080	0.026	0.044	0.146
19	4.871	4.799	6.673	10.748	2.915	0.707	0.374	0.206	0.077	0.024	0.044	0.786
20	4.752	5.501	7.066	9.562	2.690	0.693	0.371	0.205	0.071	0.022	0.041	2.711
21	4.607	6.175	8.215	9.125	2.542	0.680	0.362	0.202	0.066	0.020	0.043	8.853
22	4.287	5.963	8.182	8.543	2.390	0.681	0.357	0.199	0.063	0.019	0.045	1.885
23	4.372	6.011	8.454	8.264	2.188	0.670	0.337	0.195	0.062	0.019	0.047	1.865
24	4.386	7.783	9.357	8.025	1.986	0.646	0.325	0.193	0.060	0.020	0.048	1.839
25	4.512	8.775	9.915	7.907	1.803	0.638	0.322	0.191	0.057	0.022	0.049	2.925
26	4.527	11.012	10.068	7.656	1.622	0.628	0.321	0.185	0.056	0.022	0.051	4.104
27	4.491	13.272	10.304	7.484	1.413	0.624	0.319	0.172	0.056	0.021	0.051	4.231
28	4.108	15.564	10.624	7.331	1.420	0.607	0.317	0.168	0.055	0.021	0.049	4.298
29	3.875	14.434	10.715	6.799	1.435	0.594	0.296	0.168	0.055	0.021	0.043	5.300
30	4.016		10.545	6.689	1.435	0.575	0.275	0.167	0.057	0.021	0.042	10.678
31	5.180		10.450		1.423		0.272	0.163		0.021		3.828
Mean	4.575	6.433	9.697	11.163	3.389	0.863	0.412	0.223	0.098	0.031	0.048	2.058
Flow (MCM)	12.254	16.120	25.973	28.935	9.078	2.238	1.103	0.598	0.254	0.084	0.123	5.512
Maximum	6.387	15.564	14.064	16.948	6.363	1.408	0.564	0.269	0.156	0.051	0.118	10.678
Minimum	3.728	2.710	6.564	6.689	1.413	0.575	0.272	0.163	0.055	0.019	0.019	0.042
Runoff (mm)	11.089	14.588	23.505	26.185	8.215	2.025	0.998	0.542	0.230	0.076	0.112	4.988

Flow (cumecs)

Annual Statistics

Maximum: 16.948 Minimum: 0.019 Mean: 3.249 cumecs
Total: 102.751 MCM Runoff: 92.987 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2013
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.057	7.597	10.023	15.758	8.980	3.170	0.941	0.497	0.299	0.101	0.056	0.084
2	1.961	7.435	9.975	14.218	8.592	3.106	0.935	0.497	0.273	0.101	0.054	0.145
3	3.824	7.415	9.745	14.010	8.310	2.829	0.919	0.492	0.272	0.094	0.052	0.080
4	4.066	7.541	8.971	13.519	7.968	2.576	0.913	0.490	0.270	0.088	0.050	0.076
5	4.752	7.610	8.741	11.735	7.814	2.441	0.897	0.486	0.267	0.088	0.049	0.064
6	4.922	7.621	8.438	12.257	7.683	2.329	0.739	0.477	0.265	0.085	0.046	0.061
7	4.936	7.733	8.434	12.327	7.059	1.934	0.728	0.469	0.260	0.083	0.043	0.218
8	4.932	7.367	8.480	12.443	6.875	1.829	0.725	0.462	0.252	0.082	0.039	0.235
9	4.978	6.966	8.579	12.505	6.530	1.792	0.714	0.457	0.235	0.081	0.038	0.243
10	5.084	7.028	8.580	12.559	6.338	1.773	0.699	0.445	0.219	0.081	0.038	0.243
11	5.853	7.321	9.354	12.645	5.985	1.718	0.685	0.434	0.211	0.080	0.037	0.241
12	5.830	7.705	10.107	12.789	5.802	1.656	0.674	0.420	0.207	0.079	0.035	0.241
13	6.786	7.835	10.768	13.077	5.490	1.624	0.652	0.411	0.206	0.080	0.034	0.239
14	7.019	7.781	17.483	13.176	5.364	1.584	0.648	0.402	0.204	0.083	0.033	0.238
15	7.004	7.301	24.104	13.098	5.287	1.498	0.648	0.396	0.192	0.095	0.032	0.246
16	6.894	6.866	30.474	13.001	5.197	1.404	0.638	0.393	0.183	0.227	0.032	0.254
17	6.734	6.820	33.407	12.511	4.995	1.356	0.625	0.382	0.175	0.101	0.032	0.256
18	6.394	6.784	33.385	12.250	4.796	1.343	0.619	0.375	0.170	0.092	0.032	0.266
19	6.115	6.778	33.846	12.269	4.751	1.312	0.606	0.365	0.171	0.091	0.032	0.272
20	5.785	6.747	29.899	12.271	4.584	1.286	0.581	0.362	0.160	0.091	0.031	0.271
21	5.836	7.982	26.951	13.840	4.391	1.250	0.555	0.359	0.147	0.083	0.029	0.260
22	5.836	8.452	23.305	15.135	4.295	1.154	0.530	0.352	0.135	0.077	0.027	0.257
23	5.857	8.635	22.853	13.965	4.180	1.118	0.524	0.344	0.126	0.081	0.028	0.266
24	5.766	8.662	26.703	12.498	3.892	1.079	0.521	0.338	0.116	0.084	0.050	0.273
25	5.764	8.645	19.324	11.340	3.834	1.043	0.519	0.324	0.108	0.082	0.073	0.276
26	5.887	8.750	13.469	10.749	3.748	1.024	0.518	0.317	0.105	0.079	0.082	0.275
27	6.692	9.677	13.091	10.292	3.515	1.012	0.514	0.316	0.100	0.078	0.084	0.323
28	7.735	9.925	13.147	10.046	3.482	0.984	0.510	0.307	0.085	0.075	0.085	0.358
29	7.998		14.011	9.175	3.460	0.960	0.507	0.296	0.083	0.068	0.081	0.394
30	7.925		17.532	10.047	3.419	0.950	0.498	0.494	0.100	0.060	0.077	0.431
31	7.694		17.306		3.305		0.497	0.517		0.056		0.459
Mean	5.772	7.749	17.112	12.517	5.481	1.638	0.654	0.409	0.187	0.088	0.047	0.243
Flow (MCM)	15.458	18.747	45.834	32.444	14.681	4.245	1.752	1.095	0.484	0.235	0.122	0.652
Maximum	7.998	9.925	33.846	15.758	8.980	3.170	0.941	0.517	0.299	0.227	0.085	0.459
Minimum	1.961	6.747	8.434	9.175	3.305	0.950	0.497	0.296	0.083	0.056	0.027	0.061
Runoff (mm)	13.989	16.966	41.479	29.361	13.286	3.842	1.586	0.991	0.438	0.213	0.110	0.590

Flow (cumecs)

Annual Statistics

Maximum: 33.846 Minimum: 0.027 Mean: 4.325 cumecs
Total: 136.386 MCM Runoff: 123.426 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2014
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.483	9.884	8.670	-	9.730	4.602	3.029	1.449	0.806	0.314	0.234	0.173
2	0.596	10.194	8.633	-	8.592	4.566	3.029	1.449	0.806	0.314	0.267	0.300
3	0.822	10.602	8.588	-	8.310	4.558	3.029	1.449	0.806	0.297	0.823	0.897
4	0.861	10.741	8.563	-	7.968	4.558	3.029	1.449	0.806	0.281	0.256	1.344
5	0.811	10.833	8.575	13.051	7.814	4.558	3.029	1.383	0.806	0.281	0.223	1.092
6	0.781	10.921	8.561	49.279	7.683	4.492	2.899	1.317	0.806	0.266	0.202	0.950
7	0.909	10.924	8.653	43.526	7.059	4.417	2.770	1.317	0.806	0.251	0.200	1.662
8	1.408	10.600	8.661	43.394	6.886	4.304	2.770	1.317	0.767	0.238	0.189	1.320
9	1.900	10.164	8.633	51.547	6.608	4.296	2.754	1.256	0.728	0.224	0.168	0.866
10	1.727	10.639	8.629	49.992	6.338	4.288	2.545	1.196	0.728	0.223	0.159	0.907
11	3.827	11.101	8.741	42.601	5.985	4.177	2.517	1.196	0.728	0.202	0.159	1.189
12	4.546	12.154	8.917	41.638	5.802	4.169	2.324	1.196	0.728	0.200	0.159	1.317
13	4.710	13.198	9.309	38.842	5.490	3.740	2.311	1.189	0.693	0.200	0.149	1.523
14	4.996	13.663	9.660	34.836	5.364	3.310	2.311	1.092	0.658	0.200	0.126	1.573
15	5.097	17.978	10.065	30.968	5.287	3.310	2.298	1.085	0.658	0.199	0.125	1.197
16	5.691	18.831	10.581	30.214	5.197	3.345	2.121	1.085	0.626	0.180	0.125	0.990
17	5.874	18.705e	14.899	27.325	4.995	3.841	2.108	1.085	0.594	0.178	0.118	0.891
18	6.157	18.346	22.159	24.418	4.796	3.746	2.108	1.085	0.590	0.189	0.110	0.806
19	6.282	11.588	32.643	23.381	4.751	3.736	2.108	1.078	0.539	0.200	0.099	0.733
20	6.338	11.031	34.367	22.573	4.584	3.727	2.015	0.990	0.532	0.200	0.098	0.728
21	6.399	10.803	33.381	21.958	4.391	3.599	1.922	0.983	0.485	0.200	0.113	0.728
22	6.609	10.517	41.449	21.882	4.295	3.580	1.922	0.977	0.482	0.189	0.140	0.683
23	7.618	10.316	-	22.516	4.180	3.456	1.922	0.896	0.482	0.178	0.141	0.962
24	8.081	9.888	-	23.643	3.892	3.447	1.911	0.891	0.458	0.178	0.150	1.194
25	10.654	9.655	-	24.195	3.834	3.447	1.761	0.848	0.433	0.178	0.159	1.383
26	11.374	9.463	-	29.479	3.748	3.439	1.751	0.806	0.431	0.177	0.150	1.686
27	10.357	8.924	-	30.965	3.515	3.319	1.751	0.806	0.392	0.160	0.141	2.027
28	9.920	8.846	-	29.254	3.482	3.170	1.672	0.806	0.370	0.159	0.161	2.543
29	9.841		-	26.413	3.460	3.029	1.594	0.848	0.350	0.159	0.178	3.065
30	9.636		39.245	24.088	3.419	3.029	1.594	0.891	0.332	0.149	0.150	3.710
31	9.557		39.172		3.408		1.521	0.848		0.167		3.793
Mean	5.286	11.804	-	-	5.512	3.842	2.272	1.105	0.614	0.211	0.182	1.362
Flow (MCM)	14.158	28.556	-	-	14.762	9.958	6.085	2.960	1.592	0.564	0.472	3.649
Maximum	11.374	18.831	-	-	9.730	4.602	3.029	1.449	0.806	0.314	0.823	3.793
Minimum	0.483	8.846	-	-	3.408	3.029	1.521	0.806	0.332	0.149	0.098	0.173
Runoff (mm)	12.812	25.843	-	-	13.360	9.012	5.506	2.679	1.441	0.510	0.428	3.302

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2015
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.599	5.678	14.003	13.112	8.953	4.296	1.325	0.539	0.297	0.141	0.069	0.230
2	3.510	5.790	16.958	13.020	8.733	4.217	1.317	0.590	0.281	0.141	0.110	0.252
3	4.045	5.545	17.675	12.747	8.612	3.907	1.317	0.594	0.281	0.141	0.231	0.309
4	5.314	4.937	18.168	12.731	8.778	3.888	1.309	0.594	0.281	0.141	0.243	0.272
5	5.649	4.945	20.399	12.841	9.666	3.812	1.203	0.594	0.281	0.133	0.224	0.291
6	5.699	4.381	20.730	13.836	9.375	3.727	1.189	0.564	0.266	0.125	0.211	0.282
7	5.201	4.233	20.421	18.424	8.843	3.519	1.092	0.535	0.251	0.125	0.180	0.268
8	4.903	4.249	20.704	20.732	8.517	3.319	1.085	0.535	0.251	0.125	0.192	0.268
9	4.626	4.696	19.839	21.095	8.398	3.310	1.078	0.532	0.251	0.118	0.246	0.330
10	4.442	5.173	19.689	20.168	8.280	3.292	0.990	0.485	0.251	0.111	0.243	0.347
11	4.541	5.816	18.638	18.437	8.085	3.046	0.983	0.482	0.251	0.111	0.321	0.407
12	4.442	6.336	18.336	17.108	7.685	3.012	0.983	0.482	0.238	0.110	0.257	0.590
13	4.550	6.855	15.878	16.574	7.120	2.786	0.937	0.482	0.224	0.099	0.251	0.658
14	4.626	7.866	15.935	16.226	6.910	2.754	0.891	0.482	0.224	0.098	0.255	0.697
15	4.693	9.406	15.613	15.716	6.740	2.545	0.891	0.482	0.224	0.098	0.306	0.801
16	4.763	10.930	15.619	14.892	6.563	2.517	0.885	0.482	0.224	0.092	0.255	0.880
17	4.841	10.737	12.685	14.251	6.314	2.311	0.811	0.458	0.224	0.087	0.251	0.811
18	4.911	8.930	12.443	14.115	6.218	2.109	0.806	0.433	0.224	0.087	0.251	0.767
19	5.100	8.504	12.076	14.231	6.208	1.933	0.806	0.433	0.223	0.086	0.282	0.724
20	5.109	8.306	12.321	13.921	6.051	1.922	0.767	0.433	0.202	0.077	0.310	0.736
21	4.991	8.280	12.586	12.865	5.887	1.911	0.728	0.433	0.200	0.072	0.255	0.811
22	5.118	8.085	12.320	11.014	5.737	1.761	0.728	0.412	0.179	0.067	0.238	0.897
23	5.418	7.882	12.042	10.128	5.648	1.751	0.724	0.390	0.159	0.066	0.269	1.196
24	5.717	7.695	11.886	9.743	5.408	1.751	0.662	0.390	0.159	0.039	0.282	1.523
25	5.757	7.977	11.632	9.389	5.118	1.741	0.654	0.390	0.159	0.025	0.239	1.751
26	6.208	9.655	11.381	9.136	4.982	1.603	0.598	0.370	0.159	0.018	0.236	2.029
27	6.608	10.082	11.250	8.296	4.902	1.594	0.564	0.350	0.150	0.015	0.243	2.518
28	6.221	10.323	12.203	7.625	4.823	1.521	0.535	0.350	0.141	0.015	0.391	3.042
29	5.727		13.315	9.154	4.754	1.449	0.535	0.332	0.141	0.034	0.582	3.581
30	5.454		13.637	9.361	4.509	1.441	0.535	0.314	0.141	0.052	0.499	3.736
31	5.697		14.018		4.361		0.535	0.314		0.056		4.307
Mean	5.080	7.260	15.303	13.696	6.844	2.625	0.886	0.460	0.218	0.087	0.264	1.139
Flow (MCM)	13.606	17.564	40.988	35.501	18.332	6.804	2.373	1.231	0.565	0.234	0.685	3.051
Maximum	6.608	10.930	20.730	21.095	9.666	4.296	1.325	0.594	0.297	0.141	0.582	4.307
Minimum	3.510	4.233	11.250	7.625	4.361	1.441	0.535	0.314	0.141	0.015	0.069	0.230
Runoff (mm)	12.313	15.895	37.093	32.127	16.590	6.157	2.147	1.114	0.511	0.212	0.620	2.761

Flow (cumecs)

Annual Statistics

Maximum: 21.095 Minimum: 0.015 Mean: 4.489 cumecs
Total: 141.553 MCM Runoff: 128.102 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2016
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.164	15.568	17.130	11.632	13.921	4.566	2.298	1.085	0.535	0.200	0.087	0.063
2	5.265	14.184	17.447	12.042	14.998	4.492	2.121	1.034	0.508	0.200	0.082	0.073
3	5.275	13.446	17.939	12.461	17.198	4.417	2.108	0.983	0.482	0.200	0.077	0.097
4	5.582	13.637	19.864	13.060	16.931	4.296	2.108	0.983	0.482	0.200	0.072	0.117
5	6.221	13.600	19.938	14.417	16.208	4.169	2.015	0.983	0.482	0.200	0.067	0.169
6	6.913	12.623	19.588	16.108	15.547	4.052	1.922	0.937	0.482	0.189	0.067	0.311
7	7.379	12.481	17.473	18.977	15.012	4.035	1.922	0.891	0.458	0.178	0.063	0.291
8	7.181	12.429	16.121	21.660	13.658	3.898	1.911	0.891	0.433	0.178	0.059	0.430
9	6.574	11.649	15.567	25.262	12.748	3.888	1.761	0.848	0.431	0.178	0.059	0.278
10	6.389	11.105	15.567	35.858	11.907	3.878	1.751	0.806	0.392	0.178	0.056	0.278
11	6.401	10.591	15.862	39.650	10.974	3.746	1.751	0.806	0.390	0.178	0.052	0.214
12	6.663	10.373	16.055	38.567	10.221	3.727	1.741	0.806	0.387	0.168	0.052	0.221
13	6.922	10.718	16.226	37.227	9.520	3.599	1.603	0.801	0.352	0.150	0.056	0.237
14	7.106	11.217	16.205	34.522	9.037	3.518	1.594	0.733	0.347	0.141	0.056	0.232
15	7.295	11.381	15.905	28.508	8.412	3.447	1.594	0.728	0.316	0.141	0.052	0.277
16	7.367	12.561	15.884	26.205	7.984	3.379	1.584	0.728	0.314	0.141	0.052	0.255
17	7.431	15.160	15.287	23.434	7.682	3.310	1.458	0.728	0.314	0.150	0.053	0.291
18	8.269	16.579	13.410	21.440	7.297	3.292	1.449	0.693	0.314	0.150	0.073	0.243
19	8.990	17.379	12.593	19.905	6.922	3.046	1.449	0.658	0.310	0.133	0.094	0.248
20	10.331	16.252	11.649	17.163	6.740	3.012	1.441	0.658	0.255	0.125	0.123	0.226
21	11.803	15.779	11.234	15.369	6.552	2.786	1.325	0.658	0.251	0.125	0.132	0.215
22	13.660	16.910	10.860	14.135	6.146	2.754	1.317	0.626	0.251	0.124	0.118	0.254
23	15.342	17.861	10.973	14.135	5.887	2.665	1.317	0.594	0.251	0.112	0.098	0.358
24	16.579	18.952	11.102	14.527	5.727	2.770	1.317	0.594	0.251	0.111	0.087	0.302
25	18.838	20.410	11.250	14.251	5.503	2.650	1.309	0.594	0.251	0.111	0.082	0.295
26	21.122	22.332	11.598	13.638	5.341	2.531	1.203	0.594	0.249	0.110	0.072	0.268
27	21.412	20.866	11.365	12.875	5.191	2.531	1.196	0.564	0.226	0.099	0.067	0.251
28	19.456	19.326	11.102	12.517	5.109	2.531	1.196	0.535	0.224	0.098	0.067	0.238
29	16.459	17.360	10.860	13.038	4.973	2.421	1.189	0.535	0.223	0.097	0.067	0.241
30	16.187		10.860	13.484	4.832	2.311	1.092	0.535	0.202	0.087	0.063	0.310
31	15.200		11.234		4.693		1.085	0.535		0.087		0.332
Mean	10.477	14.922	14.456	20.202	9.447	3.391	1.585	0.747	0.345	0.146	0.074	0.246
Flow (MCM)	28.061	37.388	38.720	52.364	25.304	8.788	4.244	2.000	0.895	0.392	0.191	0.658
Maximum	21.412	22.332	19.938	39.650	17.198	4.566	2.298	1.085	0.535	0.200	0.132	0.430
Minimum	5.164	10.373	10.860	11.632	4.693	2.311	1.085	0.535	0.202	0.087	0.052	0.063
Runoff (mm)	25.394	33.835	35.041	47.388	22.900	7.953	3.841	1.810	0.810	0.355	0.173	0.596

Flow (cumecs)

Annual Statistics

Maximum: 39.650 Minimum: 0.052 Mean: 6.336 cumecs
Total: 200.373 MCM Runoff: 181.333 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2017
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.370	3.389	5.425	22.942	5.887	2.108	0.658	0.281	0.142	0.052	0.027	0.068
2	0.446	4.526	5.570	24.368	5.807	2.015	0.654	0.281	0.141	0.052	0.025	0.082
3	0.585	4.629	5.879	22.746	5.727	1.922	0.598	0.266	0.141	0.052	0.027	0.098
4	0.505	3.781	6.231	20.942	5.807	1.836	0.594	0.251	0.141	0.046	0.030	0.109
5	0.434	3.527	6.746	21.599	5.877	1.751	0.590	0.251	0.141	0.046	0.031	0.099
6	0.390	3.238	8.510	21.977	5.737	1.741	0.539	0.251	0.141	0.046	0.031	0.092
7	0.370	3.064	8.911	20.735	5.727	1.603	0.535	0.251	0.133	0.046	0.033	0.082
8	0.352	3.678	8.693	19.243	5.648	1.521	0.535	0.249	0.125	0.043	0.035	0.076
9	0.370	4.429	8.023	18.951	5.551	1.441	0.508	0.226	0.125	0.040	0.035	0.068
10	0.387	4.947	7.795	18.376	5.201	1.325	0.482	0.224	0.118	0.040	0.038	0.073
11	0.397	4.964	7.795	17.493	4.911	1.309	0.482	0.224	0.111	0.040	0.040	0.086
12	0.482	4.841	8.060	16.503	4.771	1.203	0.479	0.224	0.111	0.035	0.040	0.134
13	0.535	4.754	8.215	12.993	5.033	1.189	0.436	0.224	0.110	0.035	0.038	0.370
14	0.594	4.566	8.761	12.910	4.598	1.092	0.433	0.224	0.099	0.035	0.035	0.311
15	0.658	4.617	8.451	12.786	4.434	1.078	0.433	0.224	0.097	0.035	0.033	0.165
16	0.724	4.566	8.652	11.416	4.361	0.990	0.431	0.224	0.087	0.035	0.031	0.151
17	0.815	4.634	9.072	10.595	4.233	0.983	0.392	0.212	0.087	0.035	0.029	0.177
18	0.984	4.806	10.513	9.726	4.161	0.977	0.390	0.200	0.082	0.033	0.027	0.189
19	1.078	4.575	11.222	8.967	4.042	0.896	0.387	0.200	0.077	0.031	0.027	0.200
20	1.148	4.575	13.173	8.706	3.888	0.885	0.352	0.200	0.072	0.031	0.024	0.303
21	1.309	4.823	13.597	8.203	3.746	0.806	0.350	0.200	0.067	0.031	0.023	0.555
22	1.579	4.955	13.056	7.782	3.663	0.733	0.332	0.200	0.060	0.030	0.025	0.501
23	3.071	4.832	12.518	7.487	3.580	0.728	0.314	0.189	0.059	0.027	0.029	0.259
24	3.302	4.711	11.088	7.097	3.456	0.728	0.314	0.178	0.059	0.025	0.037	0.206
25	3.073	4.823	11.976	6.487	3.379	0.728	0.314	0.178	0.056	0.023	0.043	0.415
26	3.581	4.841	15.856	6.125	3.310	0.728	0.297	0.178	0.052	0.022	0.046	0.393
27	3.727	5.055	16.884	5.678	3.153	0.728	0.281	0.168	0.052	0.020	0.046	0.322
28	3.575	5.397	16.950	5.638	2.666	0.724	0.281	0.159	0.052	0.023	0.052	0.380
29	2.692		17.287	5.648	2.421	0.662	0.281	0.159	0.052	0.027	0.059	0.243
30	2.109		17.843	5.807	2.298	0.658	0.281	0.159	0.052	0.027	0.067	0.212
31	2.170		21.237		2.121		0.281	0.157		0.027		0.203
Mean	1.349	4.484	10.774	13.331	4.361	1.170	0.427	0.213	0.095	0.035	0.035	0.214
Flow (MCM)	3.612	10.847	28.857	34.554	11.681	3.032	1.143	0.572	0.246	0.094	0.092	0.572
Maximum	3.727	5.397	21.237	24.368	5.887	2.108	0.658	0.281	0.142	0.052	0.067	0.555
Minimum	0.352	3.064	5.425	5.638	2.121	0.658	0.281	0.157	0.052	0.020	0.023	0.068
Runoff (mm)	3.269	9.816	26.115	31.270	10.571	2.744	1.035	0.517	0.222	0.085	0.083	0.518

Flow (cumecs)

Annual Statistics

Maximum: 24.368 Minimum: 0.020 Mean: 3.041 cumecs
Total: 95.888 MCM Runoff: 86.777 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2018
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.246	7.708	6.921	17.612	7.997	3.430	0.733	0.372	0.224	0.098	0.096	0.111
2	0.239	8.551	6.899	16.583	7.682	3.301	0.724	0.363	0.224	0.098	0.166	0.128
3	0.241	10.131	6.596	13.606	7.463	3.030	0.709	0.355	0.224	0.097	0.199	0.188
4	9.195	10.342	6.740	12.357	6.956	2.770	0.694	0.347	0.223	0.087	0.199	0.224
5	18.685	10.326	6.910	13.721	7.156	2.531	0.679	0.339	0.202	0.087	0.180	0.266
6	16.937	10.038	6.956	15.032	7.517	2.324	0.664	0.331	0.200	0.087	0.177	0.293
7	13.172	9.009	7.475	13.835	6.259	2.285	0.650	0.324	0.200	0.086	0.151	0.240
8	1.938	9.656	7.908	11.420	5.898	1.934	0.636	0.316	0.200	0.077	0.132	0.223
9	1.513	10.383	8.876	11.887	5.877	1.751	0.622	0.309	0.200	0.077	0.111	0.227
10	1.705	7.916	10.627	12.569	5.727	1.603	0.609	0.302	0.200	0.077	0.098	0.253
11	2.519	8.532	11.102	12.892	5.560	1.594	0.596	0.295	0.200	0.076	0.087	0.361
12	3.030	8.306	11.381	13.020	5.275	1.584	0.583	0.288	0.189	0.068	0.116	0.532
13	3.379	8.444	11.887	12.765	5.118	1.458	0.570	0.281	0.178	0.072	0.184	0.857
14	3.821	10.742	12.162	12.604	4.982	1.441	0.557	0.275	0.178	0.077	0.137	1.488
15	4.337	11.769	12.338	12.443	4.902	1.325	0.545	0.268	0.178	0.072	0.110	1.458
16	4.535	10.941	12.802	12.197	4.823	1.317	0.533	0.262	0.178	0.069	0.099	1.441
17	5.193	11.365	14.099	12.162	4.693	1.256	0.522	0.256	0.177	0.075	0.104	1.317
18	5.941	11.835	17.437	12.059	4.558	1.196	0.510	0.222	0.160	0.077	0.118	1.124
19	6.389	11.219	27.350	12.180	4.426	1.196	0.499	0.116	0.159	0.082	0.124	1.466
20	7.189	10.164	31.559	12.042	4.296	1.189	0.488	0.059	0.150	0.087	0.112	2.279
21	7.977	8.495	34.048	11.903	4.177	1.092	0.477	0.018	0.141	0.087	0.136	3.159
22	9.551	8.189	32.061	11.869	4.154	1.085	0.466	0.006	0.141	0.086	0.178	3.803
23	10.221	7.971	31.373	11.381	3.907	1.078	0.456	0.002	0.141	0.077	0.199	5.205
24	10.812	7.585	25.774	11.118	3.878	0.990	0.446	0.004	0.133	0.077	0.188	8.156
25	7.908	7.306	27.483	11.054	3.746	0.983	0.436	0.007	0.125	0.077	0.160	9.392
26	7.782	7.294	25.408	10.358	3.727	0.937	0.426	0.011	0.118	0.072	0.159	8.973
27	7.549	7.271	23.995	9.726	3.599	0.891	0.417	0.054	0.111	0.067	0.149	8.609
28	6.866	6.945	21.421	8.967	3.580	0.891	0.407	0.038	0.104	0.067	0.126	5.975
29	6.752		20.964	8.719	3.456	0.885	0.398	0.194	0.098	0.063	0.118	5.278
30	7.109		20.756	8.491	3.439	0.806	0.389	0.212	0.098	0.057	0.111	4.841
31	7.487		20.221		3.327		0.380	0.224		0.068		5.160
Mean	6.459	9.230	16.824	12.219	5.102	1.605	0.543	0.208	0.168	0.078	0.141	2.678
Flow (MCM)	17.299	22.329	45.060	31.672	13.665	4.160	1.453	0.557	0.437	0.209	0.365	7.173
Maximum	18.685	11.835	34.048	17.612	7.997	3.430	0.733	0.372	0.224	0.098	0.199	9.392
Minimum	0.239	6.945	6.596	8.491	3.327	0.806	0.380	0.002	0.098	0.057	0.087	0.111
Runoff (mm)	15.655	20.207	40.779	28.662	12.366	3.765	1.315	0.504	0.395	0.189	0.330	6.492

Flow (cumecs)

Annual Statistics

Maximum: 34.048 Minimum: 0.002 Mean: 4.605 cumecs
Total: 145.208 MCM Runoff: 131.410 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA15A **Year:** 2019
Station Name: Ndembera River at Ilongo
Time-Series Type: Flow (cumecs)

Latitude: 8:15:49 S Longitude: 35: 9:51 E Elevation: 1673.0 metres Area: 1105.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.888	10.499	13.560	11.728	10.203	5.265	2.096	0.728	0.350	0.245	0.081	0.180
2	6.208	9.860	14.076	13.131	12.544	5.191	1.933	0.728	0.350	0.237	0.068	0.159
3	6.433	9.743	14.574	13.315	13.578	5.109	1.836	0.728	0.350	0.230	0.067	0.125
4	5.991	9.887	17.503	13.075	12.829	4.982	1.751	0.724	0.332	0.222	0.067	0.112
5	5.909	9.947	18.760	14.698	10.653	4.894	1.741	0.662	0.312	0.215	0.063	0.111
6	6.218	9.650	19.847	17.701	9.636	4.702	1.603	0.658	0.283	0.208	0.059	0.111
7	6.679	9.739	22.063	17.860	9.389	4.626	1.594	0.658	0.281	0.202	0.059	0.112
8	7.237	9.857	24.285	18.046	9.176	4.550	1.594	0.658	0.281	0.195	0.059	0.189
9	6.576	9.977	24.446	18.566	9.050	4.434	1.521	0.658	0.281	0.189	0.059	0.279
10	6.135	11.825	22.303	18.379	8.829	4.353	1.449	0.626	0.281	0.183	0.056	0.281
11	5.887	17.580	20.973	17.493	8.612	4.169	1.383	0.594	0.281	0.177	0.052	0.300
12	5.747	18.757	19.368	17.493	8.491	4.052	1.309	0.594	0.281	0.171	0.049	0.736
13	6.022	19.169	18.258	18.187	8.202	4.035	1.203	0.590	0.281	0.165	0.045	0.860
14	5.828	19.588	17.999	18.590	8.202	3.888	1.189	0.539	0.266	0.160	0.041	0.937
15	5.737	20.630	17.313	18.975	8.491	3.746	1.092	0.535	0.251	0.155	0.043	0.844
16	5.887	19.225	16.708	18.481	8.504	3.663	1.085	0.535	0.251	0.149	0.040	0.712
17	6.031	17.657	15.592	16.165	8.491	3.580	1.085	0.508	0.251	0.145	0.043	0.838
18	5.887	16.423	15.571	15.715	8.202	3.456	1.085	0.482	0.251	0.140	0.046	0.806
19	6.101	15.510	15.844	16.127	7.984	3.379	1.034	0.482	0.251	0.135	0.046	0.843
20	7.004	14.136	14.892	17.746	7.672	3.319	0.983	0.482	0.251	0.131	0.045	1.860
21	7.475	13.503	14.290	17.470	7.295	3.421	0.983	0.482	0.251	0.126	0.044	3.838
22	7.782	13.149	14.195	16.365	7.106	3.064	0.937	0.479	0.238	0.122	0.052	5.210
23	8.988	12.694	13.187	13.988	6.922	3.029	0.891	0.436	0.224	0.118	0.060	8.349
24	10.467	14.267	12.184	12.339	6.740	2.899	0.848	0.433	0.224	0.114	0.077	10.548
25	11.086	15.486	11.381	11.751	6.476	2.754	0.806	0.433	0.224	0.110	0.060	10.706
26	11.950	15.011	10.708	11.103	6.218	2.545	0.806	0.431	0.223	0.106	0.104	13.905
27	13.297	14.252	9.992	10.498	5.899	2.421	0.806	0.392	0.202	0.102	0.109	19.529
28	13.578	13.923	9.739	10.326	5.797	2.311	0.806	0.390	0.200	0.099	0.115	19.975
29	13.093		9.520	9.978	5.717	2.298	0.801	0.390	0.226	0.096	0.152	16.811
30	13.260		9.636	9.636	5.426	2.121	0.733	0.370	0.251	0.092	0.196	14.384
31	11.918		9.934		5.275		0.728	0.350		0.089		9.242
Mean	7.945	13.998	15.764	15.164	8.310	3.742	1.216	0.540	0.266	0.156	0.069	4.609
Flow (MCM)	21.280	33.864	42.224	39.306	22.257	9.699	3.258	1.448	0.689	0.417	0.178	12.346
Maximum	13.578	20.630	24.446	18.975	13.578	5.265	2.096	0.728	0.350	0.245	0.196	19.975
Minimum	5.737	9.650	9.520	9.636	5.275	2.121	0.728	0.350	0.200	0.089	0.040	0.111
Runoff (mm)	19.258	30.646	38.211	35.571	20.142	8.777	2.949	1.310	0.624	0.377	0.161	11.172

Flow (cumecs)

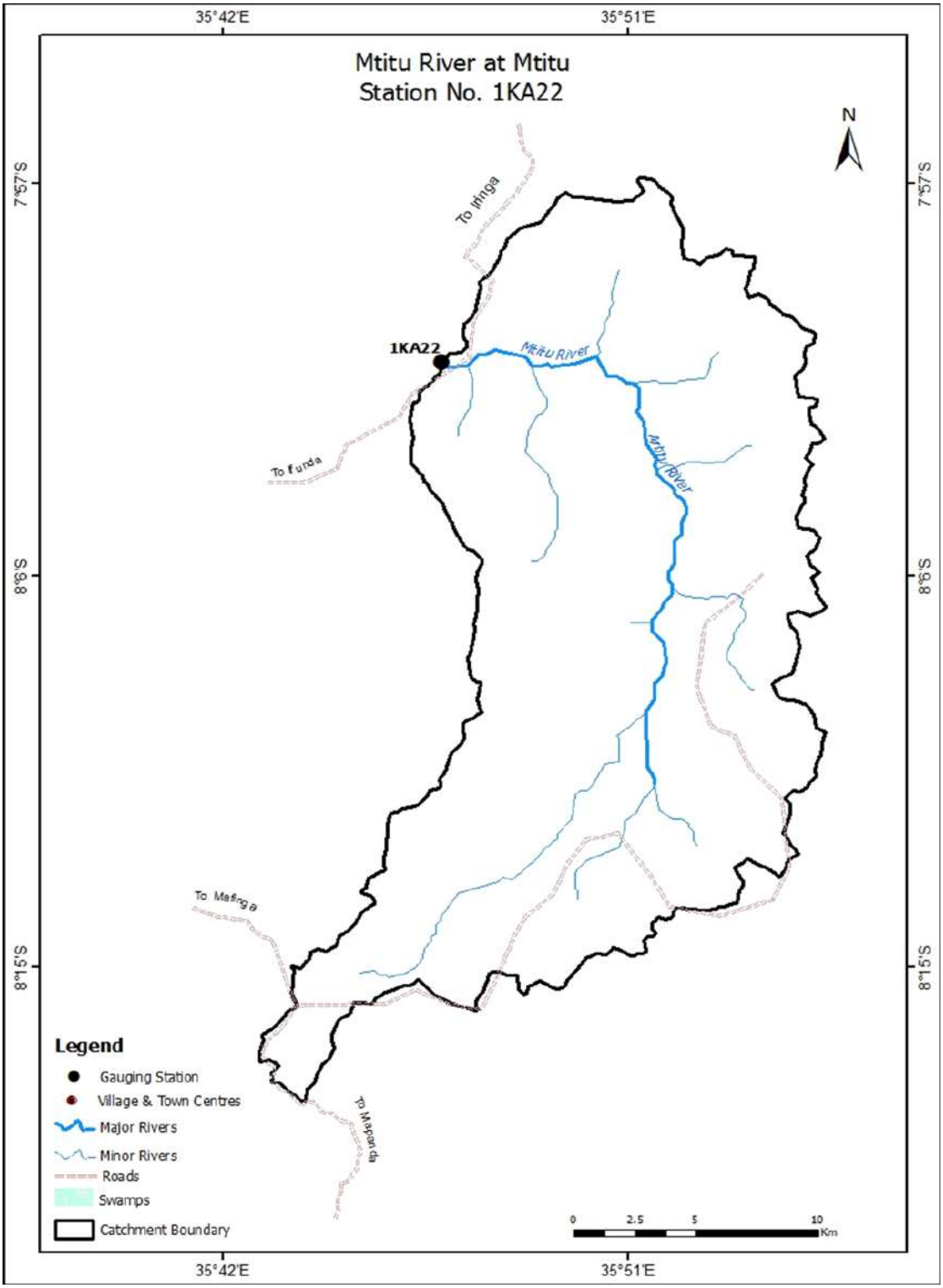
Annual Statistics

Maximum: 24.446 Minimum: 0.040 Mean: 5.982 cumecs
Total: 188.638 MCM Runoff: 170.713 mm

Possible data flags

No data stored "-" Estimated values "e"

Mtitu River at Mtitu				
Station No: 1KA22			**Established:** May 1957	
Coordinates:			**Altitude (m.a.m.s.l):** 1,830	
Lat: -8.0183	**Long:** 35.7808		**Catchment Area (km²):** 464	
Description of the Catchment:				
Mainly wooded grassland and forest in the upper area				
Station Details				
1. Staff Gauges	**Range:** 0 – 2m		**A.D.Z.G.R:** 0.00mm	
	Type of Gauges: Standard Vertical		**MSL.Z.G.L:** -	
2. Automatic Recorder	**Pressure type Orpheus mini**		**Date installed:** 2013	
3. Benchmark	Bolt embedded in concrete			
BM Assumed Datum: 2.109m		**N.M.M.S.L:** -	**TBM:** –	
4. Control	Permanent with rocky bed and banks			
5. Access	Accessible throughout the year, 104 km from Iringa town through Iringa- Madibira Road			
Records	**Period**		**Quality**	
Water Level:	01/01/2010 - 31/12/2019		2.2.3	
Discharge:	01/01/2010 - 31/12/2019		2.2.3	
Extremes:	**Max. Recorded**	43.155m³/sec	**On** 03/03/2009	**WL** 1.95m
	Min. Recorded	0.671m³/sec	**On** 27/12/2006	**WL** 0.335m
Remarks				


Mtitu River at Mtitu
Station No. 1KA22
35°42'E
35°51'E
7°57'S
8°3'S
8°15'S
N
1KA22
Mtitu River
To Iringa
To Ifunda
To Mafinga
To Mapanda
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Swamps
Catchment Boundary
0
2.5
5
10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2010
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.522	5.577	5.167	4.346	7.988	3.930	2.823	2.411	1.949	1.633	1.141	1.145
2	5.873	4.655	6.845	4.289	8.374	3.769	2.927	2.470	2.079	1.623	1.147	1.112
3	8.275	6.175	8.425	4.248	8.556	3.624	2.967	2.533	2.201	1.635	1.143	1.078
4	7.116	6.899	9.275	4.384	7.471	3.537	2.929	2.592	2.189	1.596	1.130	1.069
5	6.651	6.335	9.804	4.778	6.527	3.439	2.888	2.628	2.146	1.550	1.115	1.086
6	6.846	8.473	7.608	4.750	5.786	3.257	2.855	2.607	2.043	1.517	1.094	1.102
7	10.197	8.922	6.181	4.673	5.330	3.062	2.810	2.530	1.940	1.481	1.059	1.459
8	8.172	8.533	5.939	4.505	5.116	2.972	2.758	2.385	1.911	1.445	1.045	1.946
9	7.771	9.632	6.063	4.253	4.948	2.929	2.702	2.317	1.875	1.404	1.039	2.231
10	7.672	7.452	6.332	4.181	4.690	2.868	2.629	2.305	1.853	1.340	1.035	2.353
11	7.671	5.895	6.484	4.106	4.388	2.853	2.537	2.297	1.823	1.325	1.031	2.147
12	7.016	5.774	6.364	3.984	4.067	2.821	2.485	2.249	1.759	1.306	1.025	1.957
13	6.535	5.729	6.069	3.870	3.900	2.787	2.431	2.203	1.781	1.271	1.028	1.937
14	6.430	5.507	5.524	3.865	3.895	2.763	2.453	2.151	1.821	1.271	1.035	1.971
15	6.750	5.184	5.146	4.480	3.821	2.743	2.453	2.125	1.788	1.302	1.052	1.982
16	7.470	5.021	4.702	4.168	3.734	2.731	2.418	2.114	1.773	1.318	1.249	2.029
17	7.454	4.954	4.698	3.960	3.590	2.731	2.382	2.087	1.763	1.336	1.712	2.360
18	7.187	4.896	6.230	3.966	3.532	2.742	2.344	2.041	1.747	1.324	1.898	1.809
19	6.827	4.777	5.720	4.055	3.394	2.763	2.305	1.978	1.751	1.279	1.653	1.432
20	7.084	4.602	5.288	4.061	3.363	2.770	2.280	1.941	1.690	1.208	1.430	1.297
21	7.175	4.373	4.676	3.889	3.374	2.785	2.300	1.926	1.630	1.166	1.270	1.296
22	6.721	4.261	4.445	3.827	3.400	2.787	2.379	1.937	1.585	1.158	1.306	1.690
23	5.759	4.106	4.299	3.700	3.457	2.792	2.423	1.947	1.567	1.154	1.366	1.943
24	5.269	4.065	4.120	3.539	3.538	2.797	2.442	1.926	1.546	1.154	1.511	2.356
25	5.159	4.047	4.636	3.261	3.602	2.785	2.423	1.926	1.529	1.151	1.445	2.799
26	7.135	3.920	4.802	3.064	3.743	2.747	2.405	1.943	1.506	1.153	1.355	2.885
27	8.432	3.771	4.747	4.284	3.835	2.703	2.345	2.009	1.494	1.151	1.289	2.959
28	5.849	4.255	4.696	5.600	3.948	2.670	2.290	2.051	1.506	1.154	1.262	2.802
29	8.502		4.645	7.125	4.068	2.657	2.236	2.052	1.534	1.154	1.226	2.591
30	9.440		4.514	7.941	4.081	2.667	2.118	1.976	1.569	1.154	1.185	2.296
31	7.652		4.419		4.002		2.272	1.963		1.153		1.890
Mean	7.149	5.635	5.738	4.372	4.630	2.949	2.517	2.181	1.778	1.318	1.243	1.904
Flow (MCM)	19.147	13.633	15.367	11.331	12.400	7.645	6.740	5.842	4.609	3.531	3.221	5.099
Maximum	10.197	9.632	9.804	7.941	8.556	3.930	2.967	2.628	2.201	1.635	1.898	2.959
Minimum	5.159	3.771	4.120	3.064	3.363	2.657	2.118	1.926	1.494	1.151	1.025	1.069
Runoff (mm)	41.266	29.381	33.119	24.421	26.725	16.476	14.526	12.592	9.934	7.610	6.941	10.988

Flow (cumecs)

Annual Statistics

Maximum: 10.197 Minimum: 1.025 Mean: 3.451 cumecs
Total: 108.834 MCM Runoff: 234.555 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2011
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.683	2.000	6.154	4.499	5.432	3.015	2.340	1.811	1.575	1.541	1.133	1.482
2	1.596	2.055	6.325	4.629	5.473	2.928	2.319	1.823	1.562	1.567	1.150	1.593
3	1.510	2.331	5.319	4.777	5.433	2.788	2.298	1.860	1.530	1.600	1.158	1.701
4	1.390	2.524	5.138	5.191	5.350	2.724	2.254	1.875	1.532	1.616	1.165	1.986
5	1.318	2.804	5.076	4.551	5.193	2.846	2.199	1.886	1.682	1.610	1.149	2.018
6	1.367	3.066	5.017	4.771	4.811	2.813	2.164	1.915	1.489	1.629	1.144	1.689
7	2.074	3.639	4.952	5.201	4.452	2.589	2.126	1.925	1.477	1.722	1.126	1.826
8	1.941	5.096	4.393	6.190	4.318	2.511	2.082	1.926	1.462	1.822	1.106	4.277
9	2.327	5.493	4.154	6.380	4.246	2.521	2.051	1.921	1.461	1.922	1.082	9.357
10	3.071	5.624	4.053	6.473	4.168	2.481	2.016	1.896	1.449	2.085	1.072	6.914
11	3.982	5.508	3.987	6.599	4.079	2.429	1.991	1.845	1.438	2.177	1.068	4.770
12	3.887	10.576	3.644	5.954	3.988	2.403	1.969	1.802	1.434	2.236	1.051	4.532
13	4.088	9.308	3.300	5.086	3.881	2.397	1.976	1.726	1.430	2.239	1.037	4.892
14	4.369	8.672	2.990	4.879	3.793	2.388	1.982	1.684	1.429	2.189	1.015	5.414
15	4.674	8.271	2.877	4.505	3.624	2.407	1.990	1.661	1.415	2.128	1.021	5.616
16	5.007	7.281	4.147	4.239	3.568	2.416	1.991	1.675	1.413	2.032	1.553	5.274
17	5.001	7.890	5.114	4.142	3.750	2.399	2.000	1.684	1.399	1.776	1.843	5.091
18	5.005	8.455	4.459	4.234	5.322	2.417	2.009	1.742	1.391	1.655	1.939	4.970
19	4.961	12.183	4.243	6.435	3.376	2.433	1.999	1.736	1.387	1.600	1.519	4.511
20	4.662	9.668	4.555	7.742	3.337	2.433	1.969	1.706	1.377	1.519	1.317	4.436
21	4.344	7.901	5.385	8.062	3.311	2.423	1.949	1.685	1.345	1.363	1.124	7.477
22	3.986	6.065	7.686	8.541	3.267	2.418	1.944	1.665	1.318	1.311	1.096	7.633
23	3.639	6.577	8.733	9.164	3.307	2.418	1.931	1.658	1.369	1.177	1.085	8.632
24	2.678	6.694	9.038	9.465	3.488	2.417	1.921	1.642	1.621	1.053	1.079	8.042
25	2.539	6.436	7.908	9.077	3.668	2.419	1.903	1.622	1.727	1.046	1.072	6.065
26	2.452	6.324	6.115	8.222	3.632	2.498	1.889	1.616	1.809	1.039	1.061	5.736
27	2.403	6.090	5.212	7.230	3.537	2.435	1.880	1.600	1.834	1.089	1.052	5.416
28	2.277	5.797	4.592	6.355	3.414	2.387	1.856	1.576	1.795	1.120	1.279	4.629
29	2.154		4.507	5.648	3.301	2.366	1.813	1.579	1.660	1.093	1.447	3.987
30	2.043		5.315	5.479	3.203	2.355	1.799	1.583	1.539	1.149	1.390	3.883
31	1.980		4.932		3.142		1.795	1.576		1.131		3.972
Mean	3.045	6.226	5.139	6.124	4.028	2.516	2.013	1.739	1.512	1.588	1.211	4.768
Flow (MCM)	8.157	15.062	13.765	15.873	10.788	6.521	5.392	4.657	3.918	4.254	3.139	12.772
Maximum	5.007	12.183	9.038	9.465	5.473	3.015	2.340	1.926	1.834	2.239	1.939	9.357
Minimum	1.318	2.000	2.877	4.142	3.142	2.355	1.795	1.576	1.318	1.039	1.015	1.482
Runoff (mm)	17.579	32.461	29.666	34.210	23.250	14.054	11.620	10.037	8.444	9.168	6.765	27.525

Flow (cumecs)

Annual Statistics

Maximum: 12.183 Minimum: 1.015 Mean: 3.326 cumecs
Total: 104.882 MCM Runoff: 226.038 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2012
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.588	3.216	5.687	5.587	3.288	2.429	1.808	1.492	1.262	1.012	1.389	1.103
2	4.036	3.991	5.842	7.595	3.293	2.416	1.803	1.478	1.254	1.005	3.893	1.099
3	3.861	4.002	5.683	9.103	3.284	2.393	1.799	1.469	1.230	0.998	3.791	1.087
4	3.808	3.182	5.559	8.699	3.401	2.316	1.799	1.461	1.225	0.993	2.897	1.038
5	3.765	2.952	5.240	7.274	3.688	2.241	1.793	1.454	1.219	0.992	2.334	0.970
6	3.686	2.821	5.032	5.293	3.903	2.177	1.769	1.452	1.210	0.986	2.054	0.924
7	3.596	2.568	4.769	5.070	4.055	2.107	1.758	1.438	1.190	0.979	1.874	0.913
8	3.450	2.090	4.539	5.055	4.073	2.045	1.737	1.430	1.189	0.969	1.776	0.903
9	3.209	1.938	4.333	4.999	3.995	2.005	1.714	1.422	1.182	0.951	1.633	0.887
10	3.105	1.986	4.637	4.907	3.883	1.907	1.681	1.414	1.175	0.929	1.569	0.882
11	3.013	2.670	5.088	4.808	3.777	1.883	1.659	1.406	1.171	0.919	1.553	1.208
12	2.973	3.225	5.652	4.721	3.889	1.923	1.642	1.383	1.161	0.898	1.526	1.541
13	3.138	3.627	5.485	4.412	4.207	1.927	1.626	1.363	1.154	0.879	1.501	1.702
14	4.278	4.029	5.131	4.239	4.255	1.948	1.617	1.352	1.144	0.855	1.472	1.803
15	5.456	3.844	4.816	4.017	4.110	1.948	1.616	1.338	1.133	0.821	1.401	2.148
16	5.815	3.516	5.003	3.870	3.781	1.926	1.609	1.337	1.127	0.808	1.259	2.618
17	5.793	3.172	12.244	5.028	3.678	1.903	1.604	1.337	1.123	0.802	1.343	2.757
18	5.519	2.673	17.788	5.265	3.585	1.880	1.591	1.337	1.119	0.803	1.318	2.600
19	5.306	2.404	17.374	4.727	3.481	1.857	1.575	1.337	1.118	0.816	1.163	2.369
20	5.115	2.289	13.930	4.505	3.460	1.837	1.555	1.333	1.102	0.826	1.070	1.967
21	4.609	2.422	10.977	4.196	3.340	1.867	1.538	1.321	1.082	0.832	1.041	1.511
22	3.823	3.140	8.111	3.998	3.035	1.907	1.525	1.307	1.068	0.843	1.036	1.281
23	3.577	2.979	6.207	3.884	2.738	1.937	1.502	1.300	1.045	0.849	1.258	1.140
24	3.304	4.253	5.486	3.717	2.436	1.982	1.494	1.299	1.028	0.849	1.183	1.099
25	3.083	5.117	4.602	3.530	2.343	1.941	1.495	1.292	1.019	0.850	1.118	1.080
26	2.950	5.524	4.430	3.304	2.287	1.900	1.541	1.284	1.018	0.858	1.085	1.043
27	2.757	5.352	4.089	3.150	2.192	1.837	1.579	1.277	1.018	0.861	1.052	0.950
28	2.610	4.991	3.808	3.034	2.204	1.826	1.590	1.273	1.018	0.862	1.039	0.884
29	2.829	4.693	3.553	3.081	2.339	1.816	1.566	1.269	1.012	0.883	1.030	0.862
30	3.175		3.131	3.237	2.450	1.808	1.527	1.262	1.012	0.909	1.056	0.846
31	3.346		3.293		2.459		1.502	1.262		0.931		0.826
Mean	3.889	3.402	6.501	4.810	3.320	1.996	1.633	1.361	1.127	0.896	1.591	1.356
Flow (MCM)	10.417	8.525	17.411	12.468	8.891	5.174	4.373	3.644	2.921	2.399	4.123	3.632
Maximum	5.815	5.524	17.788	9.103	4.255	2.429	1.808	1.492	1.262	1.012	3.893	2.757
Minimum	2.610	1.938	3.131	3.034	2.192	1.808	1.494	1.262	1.012	0.802	1.030	0.826
Runoff (mm)	22.451	18.372	37.524	26.870	19.162	11.151	9.425	7.854	6.296	5.171	8.885	7.828

Flow (cumecs)

Annual Statistics

Maximum: 17.788 Minimum: 0.802 Mean: 2.657 cumecs
Total: 84.012 MCM Runoff: 181.061 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2013
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.910	5.624	1.840	5.297	3.363	1.893	1.442	1.247	1.093	0.907	0.707	1.285
2	1.171	5.061	1.638	7.112	3.493	1.845	1.406	1.248	1.064	0.929	0.707	1.378
3	1.346	4.942	1.493	7.256	3.624	1.825	1.376	1.254	1.045	1.003	0.707	1.500
4	2.434	4.819	1.491	5.351	3.915	1.803	1.356	1.257	1.031	1.047	0.703	1.501
5	3.929	4.632	1.643	5.303	4.256	1.780	1.344	1.309	1.022	1.075	0.752	1.484
6	4.230	4.301	1.746	5.182	4.480	1.737	1.333	1.363	1.018	1.092	0.804	1.456
7	3.463	3.806	1.886	4.850	4.330	1.702	1.325	1.396	1.008	1.109	0.859	1.626
8	3.815	3.213	2.422	5.128	4.009	1.613	1.317	1.374	0.987	1.119	0.854	3.148
9	4.114	2.728	2.550	5.185	3.621	1.581	1.307	1.329	0.985	1.103	0.825	1.159
10	4.294	2.196	4.155	5.301	3.370	1.528	1.300	1.274	0.977	1.097	0.821	1.086
11	4.277	1.878	4.726	6.424	3.184	1.514	1.298	1.244	0.969	1.031	0.769	1.069
12	4.273	1.763	6.244	7.119	3.197	1.509	1.271	1.226	0.960	0.944	0.723	1.061
13	4.609	1.691	7.229	6.251	3.353	1.502	1.255	1.218	0.948	0.890	0.688	1.052
14	5.090	1.874	5.817	6.499	3.281	1.501	1.244	1.197	0.943	0.854	0.685	1.046
15	4.514	3.036	4.827	5.855	3.122	1.494	1.236	1.179	0.924	0.813	0.668	1.009
16	3.949	2.995	4.010	5.479	3.017	1.494	1.225	1.172	0.922	0.802	2.066	1.004
17	4.166	2.926	3.351	5.217	2.902	1.513	1.212	1.183	0.922	0.802	0.795	1.038
18	6.293	2.779	3.874	5.101	2.818	1.526	1.208	1.211	0.919	0.797	0.621	1.093
19	5.751	2.648	4.163	4.797	2.859	1.533	1.214	1.225	0.916	0.785	0.614	1.218
20	4.906	2.805	5.727	4.532	3.090	1.534	1.222	1.236	0.913	0.769	0.608	1.390
21	4.548	3.028	7.266	4.270	2.931	1.539	1.229	1.247	0.910	0.760	0.582	1.466
22	4.283	3.173	8.117	3.897	2.777	1.558	1.233	1.243	0.913	0.754	0.566	1.681
23	4.088	3.324	8.362	3.831	2.731	1.571	1.243	1.233	0.913	0.745	1.314	1.774
24	3.964	3.242	8.550	3.761	2.701	1.602	1.240	1.226	0.907	0.735	0.673	1.805
25	3.878	3.118	9.852	3.700	2.646	1.588	1.230	1.221	0.903	0.732	0.590	2.133
26	3.735	2.972	8.065	3.636	2.551	1.546	1.225	1.207	0.898	0.729	0.630	2.357
27	3.405	2.675	7.158	3.582	2.415	1.517	1.229	1.189	0.895	0.727	0.736	2.232
28	3.262	2.185	6.258	3.491	2.326	1.495	1.233	1.172	0.892	0.723	0.908	2.217
29	3.742		5.256	3.386	2.241	1.489	1.251	1.147	0.892	0.718	1.091	2.289
30	5.694		5.239	3.288	2.063	1.480	1.262	1.110	0.895	0.713	1.218	2.280
31	6.397		5.185		1.952		1.251	1.089		0.710		2.234
Mean	4.017	3.194	4.843	5.003	3.117	1.594	1.275	1.233	0.953	0.871	0.810	1.583
Flow (MCM)	10.760	7.727	12.972	12.967	8.348	4.131	3.414	3.303	2.470	2.334	2.098	4.240
Maximum	6.397	5.624	9.852	7.256	4.480	1.893	1.442	1.396	1.093	1.119	2.066	3.148
Minimum	0.910	1.691	1.491	3.288	1.952	1.480	1.208	1.089	0.892	0.710	0.566	1.004
Runoff (mm)	23.189	16.653	27.957	27.946	17.991	8.903	7.358	7.118	5.323	5.030	4.522	9.138

Flow (cumecs)

Annual Statistics

Maximum: 9.852 Minimum: 0.566 Mean: 2.374 cumecs
Total: 74.877 MCM Runoff: 161.373 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2014
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.227	5.416	2.094	11.037	5.565	2.945	2.497	1.771	1.544	1.262	1.958	1.020
2	2.296	4.285	1.962	13.298	5.322	2.918	2.445	1.759	1.566	1.262	1.936	1.046
3	2.342	3.929	1.808	9.023	5.398	2.893	2.407	1.746	1.575	1.282	1.926	1.091
4	2.408	3.709	1.737	6.893	5.616	2.855	2.375	1.733	1.579	1.349	1.516	1.143
5	2.473	3.721	1.680	5.550	5.981	2.815	2.330	1.713	1.593	1.408	1.098	1.168
6	2.525	3.648	1.629	5.471	6.386	2.770	2.281	1.666	1.630	1.413	1.081	1.153
7	2.627	3.583	1.817	7.209	6.755	2.742	2.211	1.659	1.661	1.390	1.058	1.125
8	2.845	3.428	2.365	6.433	7.204	2.721	2.172	1.659	1.650	1.347	1.027	1.083
9	3.540	3.159	3.405	4.959	7.846	2.712	2.074	1.664	1.605	1.293	0.971	1.058
10	3.490	2.702	3.730	4.499	7.729	2.676	2.016	1.676	1.579	1.252	0.922	1.028
11	3.378	2.434	3.973	4.148	7.322	2.654	2.009	1.689	1.545	1.182	0.893	0.991
12	3.237	2.361	4.560	5.316	6.482	2.648	1.991	1.707	1.493	1.104	0.889	0.956
13	3.107	2.611	4.667	5.793	5.257	2.637	1.973	1.739	1.451	1.046	0.885	0.954
14	3.020	2.630	4.507	6.561	4.790	2.629	1.972	1.786	1.426	1.009	0.879	0.960
15	3.141	2.919	4.266	6.603	4.711	2.594	1.968	1.776	1.414	0.989	0.873	0.967
16	3.442	2.631	3.998	6.785	4.064	2.571	1.963	1.763	1.414	0.986	0.863	0.975
17	3.700	2.231	4.362	6.928	4.076	2.535	1.962	1.736	1.409	0.988	0.873	0.985
18	5.327	2.527	3.904	7.228	3.948	2.511	1.954	1.695	1.398	1.239	0.870	1.086
19	4.975	2.721	3.905	11.103	3.780	2.465	1.953	1.667	1.391	1.859	0.867	1.118
20	4.424	2.524	3.696	15.668	3.665	2.476	1.944	1.625	1.381	2.018	0.862	1.192
21	3.866	2.318	3.836	14.456	3.708	2.603	1.931	1.584	1.345	2.184	0.864	1.517
22	4.318	2.954	4.560	14.196	3.609	2.714	1.916	1.567	1.329	2.421	0.914	1.639
23	5.388	3.015	3.772	14.790	3.642	2.811	1.888	1.559	1.311	2.273	0.966	1.892
24	5.535	2.902	3.449	13.489	3.533	2.825	1.849	1.550	1.295	2.258	1.086	1.984
25	5.382	2.825	3.183	12.780	3.415	2.797	1.825	1.518	1.288	2.238	1.099	2.054
26	5.544	2.656	3.319	12.104	3.171	2.753	1.804	1.494	1.284	2.214	1.102	2.393
27	6.046	2.370	8.225	10.725	3.137	2.702	1.794	1.493	1.277	2.189	1.112	2.728
28	6.373	2.189	11.270	7.903	3.018	2.643	1.772	1.493	1.270	2.148	1.119	3.347
29	7.246		10.990	6.831	2.972	2.592	1.751	1.502	1.266	2.086	1.097	3.579
30	6.373		10.704	5.958	2.970	2.535	1.750	1.526	1.262	2.031	1.037	3.698
31	5.959		9.000		2.958		1.759	1.541		1.991		3.631
Mean	4.083	3.014	4.399	8.791	4.775	2.691	2.017	1.647	1.441	1.604	1.088	1.599
Flow (MCM)	10.935	7.292	11.782	22.787	12.790	6.976	5.403	4.411	3.735	4.295	2.820	4.282
Maximum	7.246	5.416	11.270	15.668	7.846	2.945	2.497	1.786	1.661	2.421	1.958	3.698
Minimum	2.227	2.189	1.629	4.148	2.958	2.465	1.750	1.493	1.262	0.986	0.862	0.954
Runoff (mm)	23.566	15.715	25.393	49.110	27.564	15.035	11.645	9.507	8.050	9.256	6.078	9.228

Flow (cumecs)

Annual Statistics

Maximum: 15.668 Minimum: 0.862 Mean: 3.096 cumecs
Total: 97.628 MCM Runoff: 210.406 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2015
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.799	5.572	4.098	4.529	4.477	2.407	1.690	1.493	1.166	1.061	1.045	1.262
2	3.762	5.626	4.074	4.449	3.923	2.384	1.715	1.494	1.181	1.052	1.053	1.139
3	3.515	6.415	3.897	4.405	3.635	2.320	1.723	1.501	1.058	1.045	1.083	1.064
4	2.956	6.488	4.071	4.283	3.718	2.237	1.703	1.509	1.233	1.031	1.690	0.943
5	2.747	6.487	4.370	4.064	5.495	2.160	1.685	1.514	1.232	1.022	2.413	0.878
6	2.863	6.387	4.201	3.967	5.922	2.117	1.663	1.529	1.230	1.018	2.987	0.804
7	3.606	6.312	4.150	3.881	5.187	2.100	1.657	1.539	1.243	1.012	2.819	0.774
8	4.297	6.235	5.237	3.792	5.004	2.044	1.680	1.561	1.247	1.002	2.616	0.775
9	4.849	6.037	11.678e	3.644	5.318	2.002	1.680	1.554	1.241	0.998	2.574	0.877
10	5.057	5.496	7.556	3.456	5.004	1.985	1.668	1.528	1.234	0.989	2.464	1.095
11	4.637	5.756	5.899	3.340	4.738	1.949	1.660	1.524	1.133	0.975	2.246	1.406
12	4.326	6.747	5.126	3.378	4.576	1.926	1.659	1.498	1.083	0.934	2.089	2.427
13	4.152	6.646	4.603	3.497	4.300	1.899	1.650	1.494	1.069	0.919	1.901	2.261
14	4.087	5.154	3.788	3.634	4.049	1.870	1.619	1.500	1.061	0.910	1.457	4.094
15	5.751	5.118	3.200	3.739	3.769	1.813	1.565	1.494	1.052	0.901	1.273	3.712
16	5.661	5.355	3.515	3.716	3.577	1.768	1.519	1.497	1.048	0.898	0.983	3.292
17	4.924	6.748	4.257	3.498	3.324	1.738	1.562	1.493	1.048	0.895	0.915	2.909
18	4.536	6.744	4.900	3.381	3.176	1.740	1.575	1.450	1.032	0.891	0.878	2.967
19	4.169	6.601	4.771	3.298	3.107	1.786	1.580	0.883	1.015	0.877	0.862	2.970
20	3.840	6.514	4.511	3.393	2.999	1.781	1.610	0.825	1.003	0.865	0.861	3.157
21	4.467	6.361	4.287	3.418	2.883	1.780	1.657	0.814	1.011	0.870	0.857	3.798
22	4.617	6.260	4.588	3.437	2.788	1.759	1.649	1.062	1.008	0.912	0.795	3.741
23	5.092	5.908	5.782	3.556	2.740	1.747	1.613	1.233	1.009	0.957	0.835	3.565
24	5.517	5.016	6.164	4.202	2.659	1.757	1.588	1.247	1.022	0.962	0.862	3.301
25	5.576	4.365	6.632	4.683	2.561	1.731	1.571	2.142	1.048	0.974	0.891	2.961
26	5.641	4.164	7.585	4.810	2.431	1.699	1.547	1.360	1.064	0.991	0.969	2.346
27	5.755	4.102	7.514	5.166	2.418	1.685	1.522	1.183	1.108	0.989	1.253	1.859
28	5.775	3.655	6.376	5.262	2.417	1.676	1.514	1.175	1.112	0.987	1.655	1.697
29	5.718		5.944	4.732	2.403	1.665	1.501	1.175	1.095	1.012	1.555	1.464
30	5.654		4.855	4.955	2.412	1.680	1.493	1.171	1.072	1.037	1.414	1.424
31	5.604		4.677		2.413		1.493	1.149		1.039		1.599
Mean	4.611	5.795	5.236	3.986	3.659	1.907	1.613	1.374	1.105	0.968	1.510	2.147
Flow (MCM)	12.351	14.020	14.023	10.330	9.800	4.942	4.321	3.680	2.865	2.594	3.913	5.751
Maximum	5.775	6.748	11.678	5.262	5.922	2.407	1.723	2.142	1.247	1.061	2.987	4.094
Minimum	2.747	3.655	3.200	3.298	2.403	1.665	1.493	0.814	1.003	0.865	0.795	0.774
Runoff (mm)	26.618	30.216	30.222	22.264	21.120	10.652	9.312	7.931	6.174	5.590	8.434	12.394

Flow (cumecs)

Annual Statistics

Maximum: 11.678 Minimum: 0.774 Mean: 2.826 cumecs
Total: 89.119 MCM Runoff: 192.066 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2016
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.661	5.902	3.226	8.322	5.567	2.742	2.346	1.714	1.608	1.183	1.045	0.804
2	1.702	4.383	3.106	6.415	5.290	2.743	2.325	1.681	1.619	1.224	1.036	1.082
3	1.745	4.683	3.044	7.434	5.000	2.755	2.298	1.660	1.657	1.184	1.027	1.260
4	1.912	6.635	2.956	8.917	4.736	2.702	2.274	1.659	1.651	1.155	1.019	1.642
5	3.873	8.953	2.825	10.110	4.636	2.628	2.232	1.655	1.634	1.141	1.010	1.702
6	3.917	7.110	2.632	11.197	4.444	2.587	2.143	1.650	1.642	1.132	1.002	1.673
7	3.142	7.888	2.444	11.280	4.331	2.568	2.114	1.631	1.659	1.120	0.993	1.499
8	2.949	7.106	2.318	13.966	4.189	2.730	2.086	1.626	1.683	1.116	0.985	1.371
9	4.376	5.384	2.295	12.538	4.019	2.725	2.038	1.724	1.740	1.112	0.976	1.196
10	4.498	5.719	2.729	10.621	3.932	2.624	1.964	1.829	1.698	1.102	0.968	1.148
11	4.814	6.164	2.638	9.353	3.819	2.549	1.926	1.840	1.651	1.095	0.960	1.093
12	4.496	7.210	3.462	8.603	3.684	2.471	2.129	1.853	1.608	1.083	0.951	1.044
13	3.734	7.836	4.393	8.537	3.599	2.439	2.077	1.866	1.576	1.076	0.943	1.012
14	3.611	7.722	4.608	8.992	3.576	2.419	2.071	1.879	1.546	1.084	0.935	0.968
15	4.274	6.459	5.112	9.521	3.465	2.418	1.926	1.891	1.488	1.088	0.926	0.902
16	4.728	6.552	4.139	11.949	3.205	2.416	1.912	1.948	1.362	1.100	0.918	0.870
17	5.256	6.075	4.022	11.833	3.130	2.392	1.938	1.977	1.337	1.161	0.910	0.917
18	4.831	5.188	4.824	10.576	3.077	2.361	2.058	1.995	1.333	1.249	0.902	1.125
19	4.494	5.092	5.251	9.476	3.045	2.404	2.033	2.076	1.325	1.140	0.894	1.177
20	4.234	5.060	5.674	8.791	3.005	2.417	1.932	2.067	1.321	1.053	0.886	1.186
21	4.366	5.024	6.242	8.074	2.971	2.418	1.926	1.962	1.314	1.050	0.878	1.189
22	4.832	5.461	6.386	7.889	2.970	2.394	1.926	1.890	1.307	1.045	0.870	1.181
23	4.997	5.797	6.304	7.656	2.970	2.395	1.926	1.771	1.298	1.037	0.862	1.136
24	5.146	5.672	4.790	7.102	2.966	2.396	1.926	1.681	1.270	0.996	0.854	1.041
25	4.554	5.383	5.005	6.120	2.913	2.387	1.925	1.599	1.244	1.025	0.847	0.976
26	3.857	4.928	5.663	5.711	2.865	2.393	1.912	1.584	1.229	1.115	0.839	0.803
27	3.626	4.645	6.899	5.453	2.801	2.417	1.898	1.604	1.213	1.102	0.831	0.562
28	4.560	4.488	6.126	5.554	2.792	2.436	1.866	1.617	1.176	1.099	0.823	0.969
29	4.480	3.780	5.653	5.689	2.781	2.416	1.826	1.634	1.145	1.098	0.816	1.044
30	4.332		5.949	5.637	2.769	2.368	1.796	1.655	1.148	1.088	0.808	0.963
31	4.132		8.737		2.748		1.740	1.612		1.065		0.875
Mean	3.972	5.941	4.498	8.777	3.590	2.504	2.016	1.769	1.449	1.107	0.924	1.110
Flow (MCM)	10.638	14.886	12.049	22.751	9.616	6.489	5.399	4.737	3.757	2.965	2.395	2.973
Maximum	5.256	8.953	8.737	13.966	5.567	2.755	2.346	2.076	1.740	1.249	1.045	1.702
Minimum	1.661	3.780	2.295	5.453	2.748	2.361	1.740	1.584	1.145	0.996	0.808	0.562
Runoff (mm)	22.927	32.083	25.967	49.031	20.724	13.985	11.635	10.209	8.097	6.390	5.161	6.408

Flow (cumecs)

Annual Statistics

Maximum: 13.966 Minimum: 0.562 Mean: 3.138 cumecs
Total: 99.235 MCM Runoff: 213.868 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2017
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.937	2.762	6.870	6.100	6.818	4.066	2.770	2.110	1.720	1.338	1.462	1.619
2	1.043	2.445	7.201	5.851	6.407	4.077	2.758	2.129	1.679	1.324	1.807	1.578
3	1.154	3.071	6.785	5.607	6.013	4.035	2.747	2.202	1.608	1.284	1.987	1.573
4	1.272	3.651	6.683	5.317	5.780	3.946	2.745	2.256	1.628	1.245	2.010	1.432
5	1.396	3.503	6.729	5.111	5.624	3.849	2.792	2.262	1.660	1.229	2.020	1.134
6	1.527	3.126	7.798	4.995	5.703	3.794	2.751	2.229	1.693	1.201	2.037	1.456
7	1.663	4.250	8.894	4.851	7.715	3.731	2.672	2.183	1.705	1.191	2.031	1.603
8	1.806	5.832	12.611	5.517	11.099	3.619	2.631	2.136	1.695	1.218	1.914	1.667
9	1.956	5.587	13.734	8.272	11.845	3.563	2.595	2.116	1.703	1.247	1.855	1.702
10	2.111	5.619	11.849	9.553	10.679	3.489	2.565	2.109	1.735	1.282	1.655	2.178
11	2.273	4.238	10.762	9.712	9.585	3.419	2.539	2.088	1.736	1.339	1.379	4.007
12	2.442	3.809	8.212	9.090	9.434	3.361	2.511	2.105	1.715	1.397	1.309	3.797
13	2.617	3.573	7.283	8.634	9.075	3.321	2.466	2.115	1.692	1.377	1.211	2.876
14	2.798	3.428	6.664	8.347	8.280	3.436	2.449	2.118	1.660	1.330	1.175	2.332
15	2.986	3.275	6.271	7.965	7.609	3.393	2.434	2.154	1.634	1.292	1.137	2.140
16	3.181	2.938	5.942	7.574	7.180	3.345	2.423	2.240	1.593	1.262	1.079	2.045
17	3.317	2.824	5.798	7.100	6.599	3.385	2.417	2.209	1.575	1.236	1.044	1.959
18	3.104	2.393	5.656	6.783	6.261	3.400	2.396	2.177	1.567	1.198	1.023	1.801
19	3.140	2.186	5.634	7.662	5.721	3.302	2.290	2.126	1.546	1.182	0.990	1.614
20	3.233	1.933	5.517	8.236	5.307	3.173	2.269	2.180	1.507	1.172	1.035	1.534
21	3.298	2.565	5.607	8.367	5.180	3.090	2.254	2.262	1.529	1.168	1.090	1.505
22	3.757	4.196	5.323	9.738	4.967	3.071	2.224	2.310	1.619	1.172	1.136	1.559
23	3.433	3.802	4.896	10.300	4.916	3.058	2.204	2.277	1.644	1.172	1.560	1.598
24	2.760	3.636	4.737	11.786	5.086	3.051	2.193	2.192	1.578	1.165	1.744	1.610
25	2.326	4.090	4.827	11.024	4.818	3.033	2.155	2.083	1.547	1.164	1.903	1.720
26	2.046	6.526	4.952	10.664	4.654	2.994	2.120	2.020	1.561	1.155	1.925	1.815
27	3.113	9.314	5.029	9.310	4.467	2.958	2.092	1.965	1.961	1.158	1.930	1.824
28	3.643	8.108	5.080	7.241	4.384	2.895	2.071	1.931	2.400	1.161	1.925	1.807
29	2.738		5.170	6.986	4.227	2.862	2.035	1.912	1.531	1.165	1.893	1.879
30	2.548		5.024	6.880	4.107	2.796	2.019	1.816	1.372	1.168	1.665	2.067
31	2.486		4.916		4.023		2.029	1.759		1.182		2.537
Mean	2.455	4.024	6.853	7.819	6.567	3.384	2.407	2.122	1.660	1.231	1.564	1.934
Flow (MCM)	6.575	9.736	18.356	20.267	17.588	8.771	6.447	5.683	4.302	3.298	4.055	5.181
Maximum	3.757	9.314	13.734	11.786	11.845	4.077	2.792	2.310	2.400	1.397	2.037	4.007
Minimum	0.937	1.933	4.737	4.851	4.023	2.796	2.019	1.759	1.372	1.155	0.990	1.134
Runoff (mm)	14.171	20.982	39.560	43.679	37.905	18.902	13.894	12.247	9.272	7.108	8.739	11.167

Flow (cumecs)

Annual Statistics

Maximum: 13.734 Minimum: 0.937 Mean: 3.502 cumecs
Total: 110.430 MCM Runoff: 237.996 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2018
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.943	7.490	5.279	4.931	3.589	2.602	1.777	1.717	1.183	0.933	1.109	0.840
2	3.081	6.129	6.638	4.549	3.616	2.514	1.746	1.681	1.237	0.940	1.109	0.807
3	3.194	5.590	5.547	4.307	3.647	2.448	1.716	1.658	1.350	1.010	1.091	0.797
4	3.639	5.561	4.682	4.356	3.681	2.345	1.716	1.629	1.433	0.991	1.049	0.816
5	5.768	6.249	4.502	4.309	3.714	2.255	1.737	1.592	1.521	1.047	1.024	0.997
6	5.379	4.986	4.126	4.225	3.707	2.201	1.768	1.573	1.742	1.119	0.992	1.574
7	4.261	6.747	3.843	4.239	3.680	2.096	1.779	1.507	2.319	1.088	0.909	1.647
8	4.545	8.776	4.282	4.155	3.636	2.056	1.746	1.377	3.138	1.077	0.854	1.679
9	5.254	8.781	5.386	3.974	3.597	2.021	1.722	1.318	3.739	1.052	0.805	1.813
10	5.520	6.812	6.052	3.812	3.576	2.009	1.790	1.318	3.458	1.028	0.803	2.341
11	6.556	6.669	5.673	3.656	3.481	1.990	1.817	1.352	2.909	0.996	0.814	2.576
12	6.916	6.648	6.286	3.724	3.555	1.950	1.832	1.379	2.371	0.964	0.858	2.654
13	6.621	6.184	7.512	4.475	3.590	1.925	1.816	1.405	2.165	0.941	0.854	2.595
14	6.114	4.973	8.812	5.908	3.727	1.895	1.786	1.421	1.962	0.923	0.832	2.504
15	6.020	4.015	12.248	5.953	3.837	1.875	1.773	1.540	1.468	0.907	0.825	2.314
16	5.704	3.516	13.171	5.926	4.225	1.873	1.784	1.591	1.320	0.888	0.814	2.239
17	5.224	3.209	8.964	6.048	4.061	1.918	1.776	1.592	1.246	0.877	0.806	2.156
18	6.081	2.798	6.944	6.848	3.865	1.926	1.754	1.545	1.222	0.871	0.802	2.273
19	6.860	2.428	6.851	7.351	3.705	1.921	1.720	1.456	1.212	0.903	0.797	2.785
20	6.593	2.341	10.173	6.877	3.611	1.900	1.694	1.371	1.232	0.993	0.811	3.703
21	6.152	2.240	9.729	6.783	3.538	1.911	1.680	1.332	1.248	1.038	0.858	4.037
22	5.172	2.100	7.275	6.624	4.530	1.917	1.660	1.336	1.260	1.059	1.073	4.163
23	4.843	2.152	5.758	6.386	3.473	1.924	1.651	1.342	1.235	1.086	1.163	3.934
24	5.272	2.293	5.016	5.723	3.437	1.904	1.631	1.431	1.156	1.117	1.433	3.777
25	5.623	2.134	4.553	5.111	3.362	1.835	1.628	1.491	1.112	1.119	1.514	3.757
26	5.181	2.644	4.321	4.582	3.261	1.819	1.619	1.454	1.054	1.118	1.445	3.699
27	4.812	3.508	4.272	4.038	3.196	1.787	1.646	1.393	1.029	1.103	1.316	3.400
28	4.710	4.287	4.650	3.880	2.963	1.775	1.688	1.343	1.017	1.092	1.158	3.089
29	5.376		4.964	3.782	2.884	1.747	1.730	1.296	0.986	1.085	1.039	3.010
30	6.366		5.246	3.648	2.788	1.748	1.778	1.228	0.958	1.095	0.897	2.791
31	7.117		5.480		2.696		1.758	1.182		1.103		2.477
Mean	5.384	4.688	6.395	5.006	3.556	2.003	1.733	1.447	1.643	1.018	0.995	2.492
Flow (MCM)	14.420	11.341	17.128	12.975	9.524	5.191	4.641	3.875	4.258	2.727	2.580	6.674
Maximum	7.117	8.781	13.171	7.351	4.530	2.602	1.832	1.717	3.739	1.119	1.514	4.163
Minimum	2.943	2.100	3.843	3.648	2.696	1.747	1.619	1.182	0.958	0.871	0.797	0.797
Runoff (mm)	31.077	24.442	36.913	27.964	20.525	11.188	10.003	8.351	9.177	5.877	5.559	14.383

Flow (cumecs)

Annual Statistics

Maximum: 13.171 Minimum: 0.797 Mean: 3.030 cumecs
Total: 95.550 MCM Runoff: 205.927 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA22 **Year:** 2019
Station Name: Mtitu River at Mtitu
Time-Series Type: Flow (cumecs)

Latitude: 8: 1: 6 S Longitude: 35:46:50 E Elevation: 1729.0 metres Area: 464.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.277	4.932	6.354	4.632	4.111	3.842	2.048	1.778	1.453	1.387	1.132	2.603
2	2.096	5.648	5.584	4.526	3.952	3.731	2.029	1.780	1.462	1.349	1.123	2.735
3	2.897	5.540	4.956	4.372	3.936	3.592	2.018	1.760	1.480	1.328	1.131	2.823
4	3.602	5.476	4.491	4.281	4.537	3.538	1.996	1.746	1.489	1.303	1.148	3.202
5	2.978	5.606	5.272	4.173	6.123	3.280	1.977	1.732	1.493	1.387	1.195	2.874
6	2.658	5.898	5.694	4.038	6.886	3.190	1.962	1.715	1.493	1.644	1.275	2.633
7	2.027	5.984	5.947	3.992	7.874	3.160	1.936	1.703	1.501	1.922	1.278	2.210
8	2.190	5.759	5.475	4.548	8.409	3.052	1.926	1.697	1.505	1.934	1.292	1.694
9	3.234	5.409	4.601	5.295	8.292	2.998	1.922	1.685	1.486	1.923	1.423	2.173
10	4.529	5.043	4.196	5.719	7.914	2.937	1.925	1.677	1.477	1.982	1.596	1.183
11	4.207	4.777	3.936	6.046	7.268	2.889	1.915	1.671	1.470	2.464	1.676	2.169
12	4.826	4.575	3.783	6.179	7.616	2.847	1.890	1.660	1.469	4.325	1.674	2.099
13	5.361	4.367	4.604	5.730	8.263	2.799	1.884	1.658	1.462	5.975	1.692	1.801
14	5.296	4.089	4.621	5.428	8.138	2.770	1.866	1.634	1.457	5.363	1.635	1.648
15	5.204	3.885	4.489	5.535	7.651	2.742	1.853	1.608	1.449	5.158	1.558	1.584
16	4.925	3.733	4.498	4.794	7.251	2.709	1.840	1.583	1.434	5.140	1.331	2.041
17	4.674	3.189	4.360	4.468	6.512	2.596	1.834	1.546	1.360	4.235	1.159	2.099
18	4.644	2.777	4.187	4.552	5.498	2.514	1.826	1.503	1.328	3.936	1.096	2.280
19	4.344	2.608	3.980	4.865	5.260	2.461	1.815	1.493	1.300	3.455	1.053	2.591
20	4.081	2.512	3.648	5.787	5.058	2.433	1.791	1.492	1.299	2.927	1.044	3.227
21	3.728	2.432	3.173	6.436	4.791	2.418	1.775	1.470	1.285	2.674	1.012	3.931
22	3.715	2.421	3.353	6.802	4.478	2.365	1.741	1.440	1.269	2.452	0.982	5.160
23	3.857	2.749	4.046	6.897	4.260	2.363	1.687	1.383	1.258	2.360	0.948	5.521
24	3.807	5.153	4.468	6.058	4.059	2.312	1.662	1.319	1.240	2.142	0.945	6.158
25	3.744	5.028	4.488	5.153	3.970	2.293	1.648	1.271	1.226	1.979	1.037	5.832
26	3.953	5.089	4.061	4.489	3.968	2.262	1.660	1.203	1.251	1.774	1.466	5.586
27	4.409	5.175	3.755	4.863	3.980	2.204	1.684	1.210	1.384	1.641	1.459	5.714
28	5.111	5.520	4.100	4.913	3.967	2.149	1.701	1.271	1.436	1.544	1.548	5.822
29	4.859		4.541	4.508	3.934	2.088	1.703	1.353	1.488	1.489	1.808	7.379
30	4.387		4.697	4.137	3.908	2.066	1.714	1.395	1.435	1.374	2.519	7.035
31	4.300		5.073		3.885		1.723	1.433		1.274		5.073
Mean	3.933	4.478	4.530	5.107	5.669	2.753	1.837	1.544	1.405	2.576	1.341	3.512
Flow (MCM)	10.534	10.832	12.133	13.238	15.185	7.137	4.921	4.136	3.641	6.898	3.476	9.407
Maximum	5.361	5.984	6.354	6.897	8.409	3.842	2.048	1.780	1.505	5.975	2.519	7.379
Minimum	2.027	2.421	3.173	3.992	3.885	2.066	1.648	1.203	1.226	1.274	0.945	1.183
Runoff (mm)	22.702	23.345	26.149	28.530	32.726	15.381	10.605	8.914	7.846	14.867	7.492	20.274

Flow (cumecs)

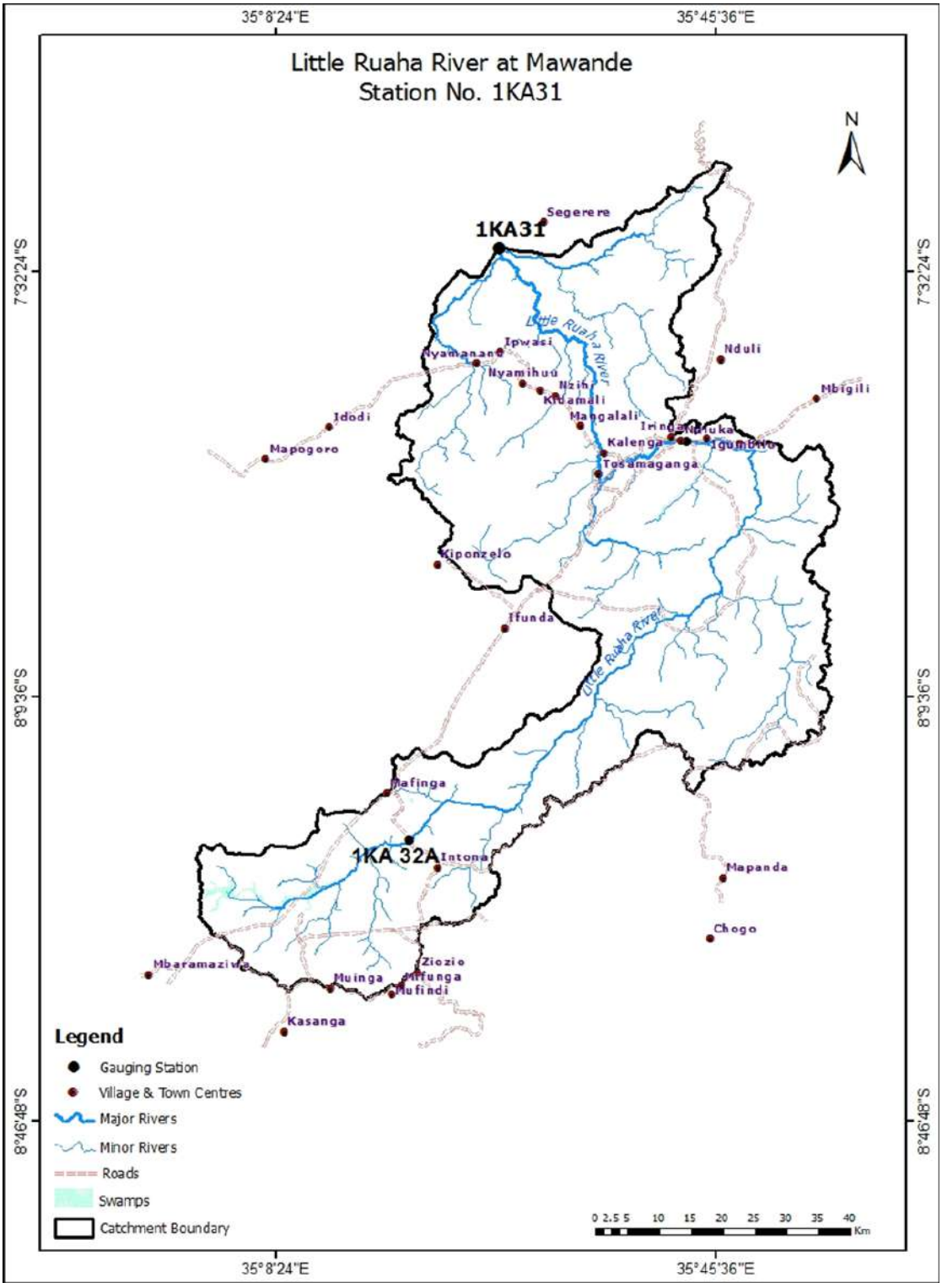
Annual Statistics

Maximum: 8.409 Minimum: 0.945 Mean: 3.224 cumecs
Total: 101.665 MCM Runoff: 219.106 mm

Possible data flags

No data stored "-" Estimated values "e"

Little Ruaha River at Mawande				
Station No: 1KA31			Established: 21/11/1956	
Coordinates:			Altitude (m.a.m.s.l): 773	
Lat: -7.5039	Long: 35.4553		Catchment Area (km²): 5,209	
Description of the Catchment:				
Mainly wooded grassland and forest in the upper area				
Station Details				
1. Staff Gauges	Range: 0 – 6m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2013	
3. Benchmark	Nail in concrete beacon			
BM Assumed Datum: 6.818m		N.M.M.S.L: -	TBM: –	
4. Control	Permanent consists of rock boulders across the stream			
5. Access	Accessible throughout the year, 55km from Iringa town to stationvia Pawaga road			
Records	Period		Quality	
Water Level:	01/01/2010 - 31/12/2019		1.2.2	
Discharge:	01/01/2010 - 31/12/2019		2.2.2	
Extremes:	Max. Recorded	-	On 10/02/2016	WL 5.213m
	Min. Recorded	1.838m³/sec	On 03/10/2019	WL 1.723m
Remarks				


Little Ruaha River at Mawande
Station No. 1KA31
35°8'24"E
35°45'36"E
7°32'24"S
8°9'36"S
8°46'48"S
N
1KA31
1KA 32A
Segerere
Ipwasi
Nyamanano
Nyamihuu
Nzih
Kidamali
Mangalali
Irindi
Kalenga
Tosamaganga
Nduli
Mbigili
Idodi
Mapogoro
Kiponzelo
Ifunda
Little Ruaha River
Mafinga
Intona
Mapanda
Chogo
Mbaramaziwa
Muinga
Ziozio
Mufindi
Kasanga
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Swamps
Catchment Boundary
0 2.5 5 10 15 20 25 30 35 40
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2010
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	17.124	36.264	33.775	36.255	17.761	9.849	9.652	7.927	6.273	4.501	2.280	2.096
2	24.297	32.289	36.303	33.636	18.243	9.608	9.608	7.852	6.230	4.338	2.140	1.943
3	25.438	31.372	36.048	31.673	19.062	9.623	9.623	7.829	6.162	4.216	2.076	1.856
4	21.509	33.501	40.158	29.339	19.605	9.511	9.511	7.760	6.114	4.099	1.991	1.849
5	25.748	32.624	43.166	28.506	20.267	9.458	9.461	7.684	6.099	3.960	1.909	1.775
6	21.856	31.571	48.648	28.243	20.682	9.432	9.421	7.670	6.410	3.928	1.783	1.938
7	22.999	30.365	49.485	27.916	20.096	9.580	9.386	7.699	6.346	3.769	1.746	2.328
8	25.868	29.729	50.718	27.016	19.501	11.725	9.316	7.626	6.129	3.757	1.671	5.430
9	26.279	30.722	48.092	26.471	18.770	11.828	9.310	7.757	5.986	3.716	1.607	7.003
10	47.947	32.712	44.860	25.294	17.738	11.759	9.345	7.740	5.877	3.673	1.564	10.248
11	38.720	31.763	44.532	24.656	17.113	11.639	9.271	7.719	5.647	3.587	1.506	6.383
12	34.103	31.022	42.682	24.092	16.738	11.498	9.386	7.606	5.482	3.508	1.551	5.526
13	33.730	30.069	41.649	23.253	16.310	11.414	9.299	7.539	5.232	3.434	1.509	5.219
14	41.282	29.011	49.247	22.361	16.010	11.386	9.234	7.411	5.054	3.549	1.498	4.703
15	35.882	28.001	48.862	22.063	15.520	11.290	9.100	7.296	5.056	3.452	1.718	4.077
16	32.677	26.880	53.234	21.302	15.394	11.178	8.899	7.257	5.103	3.329	2.119	3.493
17	32.509	27.395	48.034	20.976	15.183	11.002	8.878	7.227	5.070	3.235	2.022	3.172
18	34.835	26.979	44.756	20.828	14.744	10.693	8.903	7.148	5.072	3.160	1.959	2.964
19	34.192	28.147	43.699	20.714	15.016	10.599	8.936	7.082	5.050	3.091	2.136	2.875
20	31.456	27.214	42.635	21.424	14.691	10.455	8.830	7.009	5.117	3.038	2.435	2.667
21	28.483	45.207	45.639	20.675	14.538	10.310	8.749	6.927	5.080	2.955	2.608	2.426
22	28.006	32.341	44.995	20.205	14.325	10.244	8.555	6.868	5.015	2.851	2.974	2.242
23	27.738	28.586	42.542	20.258	13.869	10.325	8.380	6.688	4.931	2.764	3.187	2.293
24	30.246	27.469	40.877	20.557	13.682	10.274	8.334	6.592	4.765	2.716	2.961	2.248
25	27.873	28.244	40.529	20.414	13.458	10.164	8.270	6.635	4.618	2.594	3.259	2.373
26	27.541	28.665	40.292	19.715	13.471	10.057	8.198	6.611	4.595	2.540	3.376	3.369
27	27.161	33.045	39.656	18.970	13.461	9.963	8.127	6.566	4.747	2.416	3.094	4.691
28	28.739	34.049	38.516	18.259	13.304	9.919	8.090	6.439	4.703	2.428	2.952	4.844
29	36.300		39.836	18.055	13.303	9.962	8.054	6.402	4.751	2.425	3.045	6.033
30	46.164		41.554	17.673	13.211	9.859	8.016	6.376	4.669	2.405	2.703	5.727
31	43.823		40.448		12.903		7.967	6.328		2.344		4.997
Mean	30.985	30.901	43.402	23.693	16.063	10.487	8.907	7.202	5.380	3.283	2.246	3.832
Flow (MCM)	82.989	74.756	116.248	61.413	43.024	27.182	23.856	19.290	13.944	8.794	5.822	10.263
Maximum	47.947	45.207	53.234	36.255	20.682	11.828	9.652	7.927	6.410	4.501	3.376	10.248
Minimum	17.124	26.880	33.775	17.673	12.903	9.432	7.967	6.328	4.595	2.344	1.498	1.775
Runoff (mm)	15.932	14.351	22.317	11.790	8.260	5.218	4.580	3.703	2.677	1.688	1.118	1.970

Flow (cumecs)

Annual Statistics

Maximum: 53.234 Minimum: 1.498 Mean: 15.532 cumecs
Total: 489.809 MCM Runoff: 94.031 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2011
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.559	6.912	15.580	39.946	20.969	12.361	9.556	7.861	6.111	4.927	3.708	4.374
2	3.946	6.649	15.786	35.969	19.763	12.097	9.457	8.008	6.079	4.908	3.466	4.323
3	3.694	7.395	16.073	35.510	18.819	11.913	9.267	7.796	6.013	4.914	3.212	4.280
4	3.344	7.526	16.495	36.397	18.277	11.713	9.215	7.749	6.099	5.003	3.111	4.212
5	3.829	8.668	16.719	33.759	18.050	11.655	9.101	7.668	6.169	5.039	3.043	4.108
6	3.961	9.059	16.585	29.548	17.931	11.872	9.046	7.645	5.973	5.091	3.122	4.097
7	5.452	8.140	16.698	27.426	17.711	11.860	8.990	7.612	5.883	5.061	3.281	7.313
8	4.273	9.506	17.541	26.937	17.166	11.682	8.927	7.581	5.803	5.052	3.561	6.204
9	10.748	11.562	16.796	28.150	17.016	11.465	8.879	7.548	5.785	5.032	3.525	5.168
10	9.715	12.216	16.751	27.000	16.488	11.362	8.844	7.464	5.758	4.912	3.965	13.360
11	7.364	11.832	16.310	24.292	16.029	11.526	8.872	7.448	5.694	4.688	4.249	15.546
12	18.668	12.296	15.778	26.592	15.937	10.984	9.047	7.570	5.641	4.779	4.091	14.396
13	11.431	13.380	14.707	31.108	15.782	10.814	8.941	7.492	5.496	5.072	4.058	13.290
14	18.156	14.169	13.808	30.361	15.260	10.674	8.888	7.379	5.450	5.103	4.040	11.510
15	12.624	15.528	12.984	29.999	14.726	10.600	8.776	7.277	5.390	5.292	4.007	10.481
16	14.922	16.802	12.265	31.282	14.613	10.350	8.431	7.258	5.317	5.134	4.484	12.779
17	13.831	16.710	11.871	28.371	14.436	10.297	8.336	7.118	5.107	5.066	4.748	11.168
18	13.578	16.051	11.803	25.917	14.187	10.025	8.410	6.908	5.067	4.936	4.559	11.311
19	13.465	15.559	13.738	23.461	13.925	9.873	8.536	6.692	5.051	4.895	4.688	16.918
20	13.079	17.714	22.417	22.486	13.686	9.835	8.533	6.678	5.024	4.766	4.690	10.822
21	12.897	21.377	18.651	22.070	13.604	9.816	8.343	6.676	5.022	4.650	4.574	13.612
22	12.394	20.718	33.147	21.748	13.468	9.990	8.153	6.644	5.016	4.599	4.493	18.561
23	12.173	23.404	28.209	22.348	13.407	9.845	8.112	6.597	4.992	4.601	4.415	26.323
24	12.884	21.929	26.013	23.783	13.400	9.795	8.139	6.564	4.923	4.754	4.282	20.589
25	11.805	18.528	26.279	23.806	13.065	9.700	8.104	6.491	4.907	4.713	4.942	19.248
26	10.907	16.833	25.554	23.487	12.980	9.975	8.020	6.431	4.965	4.577	4.846	18.637
27	9.866	16.084	27.348	23.267	12.934	10.030	7.966	6.398	5.015	4.477	4.945	17.815
28	9.131	16.424	25.473	22.932	13.169	9.995	7.884	6.301	5.008	4.374	5.046	15.838
29	9.033		24.781	22.291	12.973	9.913	7.861	6.251	5.009	4.332	4.707	14.826
30	7.997		23.929	21.538	12.826	9.656	7.929	6.156	5.015	4.153	4.507	17.279
31	7.256		25.469		12.596		7.916	6.115		3.777		16.255
Mean	9.903	14.035	19.212	27.393	15.329	10.722	8.596	7.077	5.426	4.796	4.146	12.408
Flow (MCM)	26.523	33.953	51.456	71.002	41.057	27.792	23.024	18.954	14.065	12.845	10.745	33.233
Maximum	18.668	23.404	33.147	39.946	20.969	12.361	9.556	8.008	6.169	5.292	5.046	26.323
Minimum	3.344	6.649	11.803	21.538	12.596	9.656	7.861	6.115	4.907	3.777	3.043	4.097
Runoff (mm)	5.092	6.518	9.878	13.631	7.882	5.335	4.420	3.639	2.700	2.466	2.063	6.380

Flow (cumecs)

Annual Statistics

Maximum: 39.946 Minimum: 3.043 Mean: 11.587 cumecs
Total: 365.400 MCM Runoff: 70.148 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2012
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.951	11.892	20.853	21.710	15.332	8.546	8.428	5.190	5.056	3.993	3.391	4.903
2	15.856	11.893	19.858	22.878	14.889	8.400	8.400	5.124	5.124	3.966	2.786	5.057
3	14.261	14.655	19.108	22.624	14.633	8.411	8.411	5.124	5.124	3.945	3.115	4.898
4	13.223	15.648	18.448	21.933	14.437	8.328	8.328	5.124	5.124	3.919	2.750	4.779
5	12.459	15.682	17.793	21.309	14.108	8.394	8.394	5.124	5.124	3.827	4.907	4.420
6	12.398	13.873	18.189	21.300	13.911	8.190	8.190	5.124	5.124	3.795	6.697	3.291
7	16.157	12.676	16.654	22.441	13.669	8.128	8.128	5.110	5.110	3.736	6.697	3.036
8	16.461	14.354	15.780	22.397	13.825	8.344	8.344	5.093	5.093	3.687	6.939	3.684
9	16.290	13.756	15.543	22.780	13.866	8.310	8.310	4.996	4.996	3.610	6.783	3.331
10	14.736	12.694	14.857	22.660	13.648	8.190	8.207	4.919	4.919	3.569	5.207	3.369
11	14.128	14.900	14.907	22.028	13.502	7.356	8.290	4.881	4.881	3.432	4.840	10.931
12	13.459	13.077	16.622	21.313	13.502	6.978	8.413	4.879	4.879	3.417	4.324	11.492
13	12.663	13.340	16.351	21.120	13.591	7.387	8.537	4.874	4.874	3.386	2.991	15.931
14	11.724	13.964	16.764	20.830	13.425	7.805	8.662	4.810	4.810	3.345	2.826	13.982
15	11.064	14.823	17.446	20.418	13.384	8.235	8.788	4.778	4.778	3.244	2.731	11.049
16	10.887	15.178	18.351	20.255	13.414	8.674	8.915	4.740	4.740	3.233	2.825	8.845
17	11.688	15.382	18.751	19.488	13.217	9.027	9.037	4.732	4.732	3.100	6.061	8.705
18	14.060	14.591	19.271	18.729	12.620	9.473	9.473	4.667	4.667	3.089	2.858	8.663
19	15.963	14.357	24.419	18.816	12.402	9.461	9.461	4.606	4.636	3.065	3.407	5.377
20	16.647	13.655	22.674	22.324	12.292	9.211	9.211	4.654	4.627	3.002	3.348	6.557
21	16.472	12.836	23.948	21.470	12.109	8.853	8.853	4.526	4.522	2.979	3.246	5.588
22	15.885	12.717	26.910	20.900	11.634	8.732	8.732	4.435	4.435	2.953	2.794	10.454
23	14.539	12.695	27.497	19.734	11.444	8.644	8.644	4.396	4.396	2.919	2.624	10.143
24	13.221	12.824	26.065	19.082	11.347	8.429	8.429	4.362	4.362	2.891	2.974	10.065
25	12.131	14.954	25.165	18.580	11.180	8.380	8.380	4.321	4.321	2.959	3.142	10.774
26	11.475	16.286	24.511	18.020	11.051	8.612	8.612	4.243	4.243	2.830	4.165	12.754
27	10.944	18.209	24.618	17.460	10.887	9.078	9.078	4.191	4.191	2.717	4.985	11.439
28	10.384	18.549	22.956	16.790	10.795	8.910	8.910	4.184	4.184	2.706	4.353	9.306
29	10.614	19.392	21.534	16.000	10.665	8.661	8.557	4.113	4.113	3.004	4.104	12.499
30	11.000		20.928	15.576	10.635	8.623	7.843	4.076	4.072	3.451	5.002	9.115
31	12.004		21.522		10.459		6.797	4.121		3.450		8.687
Mean	13.508	14.443	20.268	20.365	12.770	8.459	8.541	4.694	4.709	3.330	4.096	8.165
Flow (MCM)	36.179	36.189	54.285	52.787	34.203	21.926	22.876	12.573	12.205	8.918	10.616	21.870
Maximum	16.647	19.392	27.497	22.878	15.332	9.473	9.473	5.190	5.124	3.993	6.939	15.931
Minimum	10.384	11.892	14.857	15.576	10.459	6.978	6.797	4.076	4.072	2.706	2.624	3.036
Runoff (mm)	6.946	6.947	10.421	10.134	6.566	4.209	4.392	2.414	2.343	1.712	2.038	4.199

Flow (cumecs)

Annual Statistics

Maximum: 27.497 Minimum: 2.624 Mean: 10.279 cumecs
Total: 325.045 MCM Runoff: 62.401 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2013
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.738	12.481	16.702	50.261	57.886	13.548	9.493	8.659	6.678	5.122	2.574	4.798
2	8.850	12.611	21.909	67.568	41.375	13.441	9.373	8.659	6.678	5.095	2.566	4.877
3	8.962	12.743	19.388	54.432	22.393	13.277	9.041	8.687	6.678	5.065	2.544	4.791
4	9.074	12.875	18.693	60.559	18.774	13.216	8.939	8.389	6.578	4.673	2.515	4.639
5	9.187	13.007	18.271	72.760	18.282	13.035	8.900	8.188	5.219	4.903	2.510	4.580
6	9.301	13.140	17.585	79.382	18.427	12.740	8.888	8.111	5.122	4.866	2.462	4.810
7	9.416	13.274	18.880	68.014	18.212	12.813	8.735	8.063	5.095	4.937	2.436	5.103
8	9.531	13.409	19.677	64.891	17.817	12.840	8.799	8.000	5.068	4.400	2.354	5.844
9	9.646	13.544	21.814	62.543	17.494	13.599	9.027	7.979	5.095	3.721	2.240	5.186
10	9.763	13.679	20.611	73.219	17.062	12.738	9.085	7.949	5.122	3.689	2.204	5.005
11	9.880	13.815	20.927	81.032	17.027	12.136	9.027	8.047	5.003	3.665	2.157	3.896
12	9.997	13.952	23.116	86.216	16.752	11.636	8.939	8.061	4.815	3.630	2.132	4.996
13	10.116	14.090	29.188	90.273	16.571	11.474	8.896	8.114	4.806	4.196	2.061	5.121
14	10.234	14.228	27.915	84.888	16.211	11.073	8.798	8.099	4.780	4.158	2.038	7.741
15	10.354	14.366	24.434	83.951	15.843	10.820	8.746	8.024	4.752	4.043	2.008	7.061
16	10.474	14.506	22.073	84.574	15.759	10.698	8.710	7.991	4.672	3.933	1.957	5.323
17	10.595	14.645	29.409	80.560	15.715	10.609	8.662	7.847	3.795	3.725	1.960	6.649
18	10.716	14.786	25.149	68.788	15.654	10.671	8.710	7.807	3.715	3.589	1.945	6.820
19	10.838	14.927	33.951	67.945	15.488	10.626	8.746	7.795	3.613	3.544	1.960	8.365
20	10.961	15.069	28.901	65.268	15.365	10.577	8.709	7.999	3.585	3.494	1.944	8.609
21	11.084	15.211	38.014	63.619	15.303	10.310	8.400	7.976	3.576	3.582	1.941	6.144
22	11.208	15.354	21.630	63.242	15.130	10.220	8.377	7.735	3.733	3.660	1.917	5.008
23	11.332	15.497	44.023	61.350	15.072	10.098	8.348	7.395	4.151	3.521	1.912	5.125
24	11.458	15.642	36.857	60.243	14.985	10.153	8.366	7.209	4.331	2.837	1.871	6.871
25	11.583	15.786	43.941	58.767	14.652	10.267	8.218	7.062	4.554	2.877	1.859	7.718
26	11.710	15.932	57.570	57.711	14.379	10.490	8.301	6.981	5.039	2.867	1.836	5.387
27	11.837	16.077	62.143	57.594	14.281	10.316	8.190	6.921	4.813	2.788	2.005	11.651
28	11.964	16.224	63.934	58.216	14.166	10.246	8.014	6.786	4.846	2.761	4.883	11.699
29	12.092		61.975	55.851	14.126	10.089	8.013	6.678	4.913	2.720	4.950	11.453
30	12.221		62.207	54.478	13.925	9.739	8.344	6.678	5.109	2.576	4.783	11.703
31	12.351		55.080		13.656		8.726	6.678		2.557		12.579
Mean	10.499	14.317	32.451	67.940	18.316	11.450	8.694	7.760	4.864	3.781	2.418	6.760
Flow (MCM)	28.121	34.635	86.916	176.100	49.056	29.678	23.286	20.785	12.609	10.126	6.266	18.105
Maximum	12.351	16.224	63.934	90.273	57.886	13.599	9.493	8.687	6.678	5.122	4.950	12.579
Minimum	8.738	12.481	16.702	50.261	13.656	9.739	8.013	6.678	3.576	2.557	1.836	3.896
Runoff (mm)	5.398	6.649	16.686	33.807	9.418	5.697	4.470	3.990	2.421	1.944	1.203	3.476

Flow (cumecs)

Annual Statistics

Maximum: 90.273 Minimum: 1.836 Mean: 15.771 cumecs
Total: 497.345 MCM Runoff: 95.478 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2014
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.874	26.317	22.043	63.910	43.532	18.002	14.607	12.089	9.700	6.845	5.143	6.771
2	14.000	26.005	19.575	60.044	45.875	17.770	14.602	12.059	9.573	6.556	5.124	13.040
3	18.517	52.918	19.292	61.370	36.267	17.713	14.585	12.038	9.447	5.840	5.124	20.162
4	11.735	73.814	19.427	61.665	32.573	17.593	14.360	12.008	9.358	5.859	5.124	14.905
5	11.015	27.444	21.438	66.708	32.321	17.515	14.342	11.874	9.371	5.762	5.106	15.728
6	11.982	23.096	20.971	67.464	32.669	17.441	14.306	11.833	9.371	6.084	4.774	15.817
7	11.593	21.561	19.662	62.598	32.971	17.103	14.086	11.644	9.372	6.336	4.487	14.274
8	12.297	32.598	21.060	70.145	32.387	17.030	14.126	11.602	9.365	6.263	4.215	13.092
9	12.248	58.555	22.033	67.987	28.794	16.946	14.064	11.452	9.395	5.705	4.025	11.747
10	13.808	57.324	22.197	62.765	28.427	16.705	13.849	11.413	9.540	5.649	3.936	11.204
11	15.589	105.170	24.106	64.145	28.037	16.444	13.799	11.263	9.354	5.534	3.898	9.674
12	12.440	128.762	21.046	64.675	28.089	16.296	13.858	11.224	9.421	5.143	4.091	8.693
13	14.719	79.878	21.208	63.973	27.855	15.986	13.880	11.202	9.355	5.115	4.027	8.227
14	15.140	62.945	26.192	61.145	27.709	15.958	13.590	11.056	9.141	4.979	3.209	6.657
15	16.740	53.828	32.185	47.121	27.543	15.849	13.649	11.026	9.000	4.836	3.297	6.804
16	16.655	48.501	33.910	48.941	27.293	15.754	13.639	11.007	8.825	4.703	3.112	6.185
17	16.534	46.040	44.268	64.225	25.107	15.585	13.437	11.004	8.882	4.695	3.178	6.313
18	21.367	74.994	48.420	57.341	24.747	15.540	13.369	10.977	8.841	4.686	3.540	5.958
19	75.940	121.792	41.433	48.089	24.424	15.814	13.150	10.848	8.246	4.767	3.563	5.802
20	42.687	112.773	40.447	53.031	24.061	15.729	13.123	10.820	7.799	4.819	3.456	8.233
21	112.712	70.711	40.189	50.383	23.879	15.685	12.952	10.791	7.612	5.461	3.379	8.412
22	103.330	67.663	42.968	66.154	23.817	15.458	12.726	10.646	7.722	6.838	3.655	8.453
23	106.198	46.587	44.470	62.887	22.531	15.253	12.692	10.616	7.954	7.955	5.321	8.371
24	66.788	26.809	41.844	57.716	21.120	15.209	12.682	10.596	7.744	7.865	5.501	9.003
25	61.629	26.378	40.457	56.946	20.959	15.054	12.566	10.573	6.971	7.623	5.729	14.000
26	56.136	25.543e	40.522	54.484	20.668	14.804	12.537	10.477	5.861	7.192	4.634	14.453
27	41.234	24.067	39.848	52.343	20.449	14.769	12.500	10.345	6.546	6.454	4.409	15.550
28	43.504	23.688	39.646	51.404	19.888	14.773	12.269	10.215	6.751	6.015	4.934	15.326
29	36.397		54.876	50.579	19.371	14.560	12.233	10.085	7.228	5.734	6.064	20.043
30	32.023		51.580	47.466	19.201	14.415	12.232	9.956	7.054	5.496	7.116	23.195
31	28.615		60.301		18.713		12.223	9.827		5.402		22.780
Mean	34.498	55.206	33.471	58.923	27.138	16.092	13.420	11.051	8.493	5.878	4.439	11.899
Flow (MCM)	92.400	133.554	89.650	152.730	72.686	41.710	35.945	29.598	22.014	15.743	11.506	31.871
Maximum	112.712	128.762	60.301	70.145	45.875	18.002	14.607	12.089	9.700	7.955	7.116	23.195
Minimum	11.015	21.561	19.292	47.121	18.713	14.415	12.223	9.827	5.861	4.686	3.112	5.802
Runoff (mm)	17.739	25.639	17.211	29.320	13.954	8.007	6.901	5.682	4.226	3.022	2.209	6.118

Flow (cumecs)

Annual Statistics

Maximum: 128.762 Minimum: 3.112 Mean: 23.376 cumecs
Total: 737.176 MCM Runoff: 141.520 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2015
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	21.914	24.015	28.257	28.004	24.713	13.033	10.035	8.105	6.326	4.064	2.390	5.897
2	19.421	25.525	29.002	27.953	24.495	12.972	9.918	8.004	6.336	3.789	3.264	5.884
3	17.823	25.584	29.114	27.281	24.347	12.937	10.043	8.020	6.039	3.673	2.732	5.618
4	18.098	25.086	32.105	25.765	23.786	12.731	9.905	8.106	5.745	3.383	3.604	5.010
5	17.841	24.187	28.833	28.108	24.109	12.584	9.662	7.871	5.762	3.303	4.174	4.604
6	24.843	24.162	27.294	26.199	23.077	12.322	9.735	7.891	5.697	3.494	5.321	4.098
7	22.768	23.937	29.206	25.454	21.628	12.112	9.789	7.815	5.706	3.814	7.269	3.698
8	20.384	23.309	29.982	29.643	21.187	12.313	9.800	7.794	5.684	3.402	7.598	3.734
9	18.785	22.760	29.984	29.363	20.942	12.174	9.595	7.871	5.875	3.643	8.245	4.419
10	18.694	22.145	30.793	28.528	20.552	11.619	9.508	8.147	5.653	3.646	7.533	4.208
11	26.671	22.854	32.196	27.726	20.599	11.239	9.457	8.135	5.155	3.356	6.610	7.428
12	24.716	22.675	32.092	30.588	20.192	11.159	9.300	7.554	5.089	2.964	6.089	6.437
13	26.105	22.939	33.599	27.742	19.518	11.051	9.332	7.128	4.710	2.897	5.925	6.708
14	26.443	22.747	34.101	30.350	18.569	10.863	9.294	7.165	4.769	2.819	5.681	11.355
15	34.653	23.627	32.214	31.933	17.979	11.017	9.189	7.172	4.865	2.759	5.130	39.322
16	27.239	23.409	30.044	29.679	17.462	11.062	9.086	7.206	4.813	2.722	4.810	18.086
17	45.079	23.670	29.944	26.956	16.686	10.779	9.092	7.181	4.732	2.760	4.632	20.364
18	33.214	25.919	30.919	25.453	16.184	10.732	8.909	7.199	4.671	2.655	4.236	22.205
19	28.160	26.066	30.660	23.977	15.685	10.625	8.674	7.107	4.757	2.468	4.035	16.406
20	25.095	26.476	29.162	23.315	15.296	10.522	8.880	7.184	4.579	2.395	4.047	15.981
21	28.793	26.972	27.980	22.688	14.970	10.212	8.973	7.158	4.424	2.503	4.025	18.848
22	26.557	26.453	28.148	21.979	14.735	10.382	8.851	6.710	4.368	2.555	3.610	36.126
23	25.227	27.476	27.628	20.809	14.604	10.603	8.679	6.634	4.447	2.568	3.973	20.891
24	27.167	28.757	27.270	20.439	14.315	10.601	8.671	6.653	4.275	2.534	3.423	23.482
25	25.121	38.702	27.504	20.594	14.179	10.482	8.668	6.610	3.979	2.491	2.894	21.459
26	25.123	32.312	27.817	20.435	14.229	10.439	8.488	6.466	3.828	2.393	3.423	19.844
27	25.299	27.405	27.695	20.909	13.930	10.297	8.254	6.368	3.634	2.349	7.566	19.540
28	24.963	26.474	27.445	21.132	13.740	9.939	8.194	6.222	3.645	2.497	4.507	18.775
29	24.634		29.138	21.361	13.459	10.021	7.976	6.235	3.720	2.546	4.680	18.525
30	23.920		36.338	22.705	13.254	10.048	8.105	6.303	4.017	2.623	5.157	16.905
31	23.695		28.260		13.044		8.129	6.296		2.456		15.457
Mean	25.111	25.559	29.830	25.569	18.112	11.229	9.103	7.236	4.910	2.952	4.886	14.236
Flow (MCM)	67.258	61.832	79.896	66.274	48.511	29.106	24.381	19.381	12.727	7.907	12.665	38.130
Maximum	45.079	38.702	36.338	31.933	24.713	13.033	10.043	8.147	6.336	4.064	8.245	39.322
Minimum	17.823	22.145	27.270	20.435	13.044	9.939	7.976	6.222	3.634	2.349	2.390	3.698
Runoff (mm)	12.912	11.870	15.338	12.723	9.313	5.588	4.681	3.721	2.443	1.518	2.431	7.320

Flow (cumecs)

Annual Statistics

Maximum: 45.079 Minimum: 2.349 Mean: 14.894 cumecs
Total: 469.708 MCM Runoff: 90.172 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2016
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	16.773	54.803	60.365	65.551	62.796	32.924	23.796	17.746	14.325	9.490	7.040	5.106
2	17.671	71.285	58.710	93.305	60.393	32.869	23.251	18.141	14.199	9.686	6.927	4.890
3	19.564	73.133	56.650	74.706	58.751	32.575	24.086	17.984	14.131	9.994	6.714	5.091
4	53.120	87.960	56.414	88.383	58.094	32.239	24.434	17.050	14.179	9.933	5.857	6.419
5	25.742	76.508	55.408	104.961	59.087	31.763	24.316	16.478	14.068	9.487	5.714	6.570
6	24.209	65.283	53.691	153.987	58.089	31.454	23.125	16.388	14.165	8.609	5.810	8.848
7	28.019	61.549	51.986	146.856	56.290	30.942	22.401	16.030	13.704	8.452	5.874	10.730
8	25.887	68.498	52.364	123.300	53.497	30.210	22.196	15.869	13.323	8.432	5.983	11.694
9	33.521	78.922	50.752	104.219	51.505	29.866	22.333	16.491	13.336	8.392	5.711	11.926
10	143.413	112.572	50.972	95.182	50.188	29.777	22.097	16.215	13.324	8.459	5.595	11.643
11	154.193	82.960	52.734	89.756	48.651	29.634	21.975	16.234	13.458	8.285	5.815	10.417
12	53.194	72.660	54.490	82.625	47.419	29.749	21.732	16.259	13.521	7.918	5.674	9.842
13	39.637	75.259	51.470	79.339	46.590	30.181	21.245	16.219	13.407	7.662	5.833	9.129
14	36.192	68.833	54.010	76.021	45.158	29.691	21.151	16.523	12.831	7.501	5.727	8.738
15	35.401	65.163	56.653	68.563	43.991	28.283	21.236	16.443	12.215	7.733	5.643	8.711
16	32.150	60.387	54.539	68.089	43.019	27.918	21.343	16.141	11.958	7.592	5.584	8.395
17	39.489	62.546	52.617	68.089	42.306	26.673	21.489	16.293	11.428	7.331	5.459	8.968
18	114.520	65.925	52.302	68.077	41.604	26.651	21.210	16.141	11.543	7.175	5.637	8.868
19	62.672	73.088	52.247	67.842	40.268	26.443	21.393	16.129	12.497	7.077	5.978	9.199
20	83.723	76.181	52.386	68.066	39.063	26.564	20.620	15.970	12.511	6.846	5.994	10.325
21	88.231	77.793	52.879	67.491	38.540	26.495	19.736	15.908	11.880	6.816	5.971	10.967
22	61.585	71.993	55.745	67.702	38.424	25.977	19.564	15.459	10.340	6.911	5.906	10.134
23	57.475	68.243	66.543	73.343	37.833	25.613	19.682	15.095	10.073	6.881	5.692	9.653
24	65.610	67.954	62.204	100.714	37.216	25.923	19.514	14.623	10.002	7.613	5.624	9.615
25	57.874	65.843	60.797	85.566	36.610	26.055	19.474	14.405	10.097	6.600	5.662	9.474
26	62.523	63.591	63.443	84.904	35.995	25.885	19.111	14.586	10.183	6.485	5.920	9.852
27	54.148	63.219	61.633	78.480	35.599	25.687	18.670	14.666	10.301	6.439	5.994	10.048
28	68.900	65.890	60.079	67.667	34.914	25.673	18.518	14.566	10.210	6.359	5.765	10.250
29	62.551	62.420	57.799	63.854	34.127	24.823	18.422	14.760	9.781	6.302	5.372	11.004
30	53.721		58.637	61.275	33.796	24.477	18.123	14.726	9.488	6.329	5.124	10.679
31	53.009		59.631		33.405		17.836	14.548		7.159		10.178
Mean	55.636	71.050	56.134	84.597	45.265	28.434	21.099	15.938	12.216	7.740	5.853	9.270
Flow (MCM)	149.016	178.024	150.349	219.276	121.238	73.700	56.512	42.689	31.663	20.732	15.172	24.828
Maximum	154.193	112.572	66.543	153.987	62.796	32.924	24.434	18.141	14.325	9.994	7.040	11.926
Minimum	16.773	54.803	50.752	61.275	33.405	24.477	17.836	14.405	9.488	6.302	5.124	4.890
Runoff (mm)	28.607	34.176	28.863	42.096	23.275	14.149	10.849	8.195	6.079	3.980	2.913	4.766

Flow (cumecs)

Annual Statistics

Maximum: 154.193 Minimum: 4.890 Mean: 34.436 cumecs
Total: 1088.952 MCM Runoff: 209.052 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2017
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.687	32.027	48.930	62.354	41.897	26.064	15.409	11.301	7.718	4.808	3.225	7.444
2	9.428	30.304	45.373	60.028	40.775	25.717	15.180	11.218	7.643	4.728	2.883	6.473
3	9.413	32.506	47.774	58.376	39.284	25.189	15.038	11.033	7.532	4.745	2.993	6.333
4	9.414	41.258	52.458	58.143	38.411	24.703	15.239	11.038	7.335	4.527	3.189	6.533
5	9.972	34.998	58.222	57.230	37.762	24.318	14.855	10.805	7.255	4.430	3.240	5.470
6	11.983	35.765	58.638	55.035	36.858	23.454	14.544	10.829	7.195	4.585	3.568	5.161
7	14.225	35.267	53.699	52.767	36.103	22.843	14.375	10.819	6.928	4.229	3.473	5.164
8	13.433	32.111	53.307	50.600	35.463	22.175	14.440	11.048	6.830	4.180	3.581	5.607
9	13.039	34.476	64.218	49.052	35.715	21.882	14.273	10.794	6.765	4.202	4.058	5.321
10	12.280	34.457	59.986	47.416	35.413	21.233	13.933	10.168	6.776	4.241	3.995	10.268
11	14.106	35.501	62.709	45.591	37.252	20.966	13.822	10.039	6.801	4.063	4.242	56.766
12	14.643	34.600	67.925	44.418	41.113	20.685	13.726	9.896	6.688	4.054	4.612	13.592
13	15.309	35.672	66.365	45.231	41.420	20.658	13.652	10.074	6.644	3.984	5.068	12.176
14	15.937	34.883	60.644	46.344	39.575	20.173	13.386	10.610	6.461	4.038	4.159	15.983
15	15.760	31.618	62.832	49.533	38.773	19.756	13.135	11.158	6.215	4.152	3.470	15.300
16	17.259	28.277	64.288	48.115	38.429	19.578	12.730	10.868	6.077	3.984	3.083	14.048
17	16.789	26.157	67.401	46.288	37.725	19.259	13.509	10.493	5.872	3.260	2.618	13.093
18	19.228	26.696	66.072	45.945	36.252	19.075	13.372	9.543	5.488	3.821	2.830	12.079
19	21.807	25.766	65.672	50.306	34.895	18.734	13.612	9.514	5.133	3.329	2.698	11.984
20	21.345	27.347	65.900	52.516	33.620	18.575	12.180	9.526	4.997	3.409	2.436	11.584
21	20.793	51.996	65.201	52.563	32.805	18.324	11.911	10.332	4.994	3.314	3.018	11.691
22	21.367	44.129	64.323	48.612	32.170	17.838	11.860	10.475	5.107	3.468	6.135	11.682
23	23.171	38.544	63.875	46.567	31.610	17.218	12.003	10.424	5.124	3.224	2.932	11.262
24	22.991	38.552	62.085	46.850	31.142	17.018	12.180	9.170	5.159	3.073	3.666	10.871
25	22.714	54.765	59.354	48.488	30.763	16.615	12.244	9.014	5.396	2.887	3.650	10.749
26	23.143	43.393	57.089	46.772	30.320	16.483	11.671	8.865	5.286	2.719	3.712	10.803
27	22.766	41.052	53.734	47.767	29.291	16.338	11.438	8.547	5.104	2.826	4.137	11.818
28	23.013	62.122	56.293	46.678	28.360	15.874	11.515	8.769	4.954	3.170	4.701	12.875
29	26.648		56.780	45.165	28.132	15.884	11.367	8.552	4.897	3.868	4.781	14.053
30	31.497		51.245	43.161	27.343	15.630	11.237	8.061	4.750	3.778	5.001	16.433
31	34.163		62.677		26.664		11.203	7.869		3.495		16.538
Mean	17.978	36.580	59.518	49.930	35.011	20.075	13.195	10.027	6.104	3.825	3.705	12.231
Flow (MCM)	48.153	88.494	159.414	129.419	93.773	52.035	35.341	26.857	15.822	10.246	9.604	32.759
Maximum	34.163	62.122	67.925	62.354	41.897	26.064	15.409	11.301	7.718	4.808	6.135	56.766
Minimum	9.413	25.766	45.373	43.161	26.664	15.630	11.203	7.869	4.750	2.719	2.436	5.161
Runoff (mm)	9.244	16.989	30.604	24.845	18.002	9.989	6.785	5.156	3.037	1.967	1.844	6.289

Flow (cumecs)

Annual Statistics

Maximum: 67.925 Minimum: 2.436 Mean: 22.348 cumecs
Total: 704.779 MCM Runoff: 135.300 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2018
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	14.653	45.375	39.588	33.600	28.231	22.951	16.907	15.074	11.265	8.806	9.437	9.012
2	19.996	45.163	39.388	33.414	28.060	22.505	16.743	14.833	10.904	8.478	11.295	8.728
3	22.523	44.950	39.188	33.229	27.889	21.840	16.900	14.715	11.037	8.097	10.655	12.052
4	26.680	44.738	38.989	33.044	27.718	21.437	16.723	14.437	11.367	7.578	15.413	12.507
5	66.358	44.527	38.790	32.860	27.548	21.215	16.218	14.173	11.207	7.704	13.745	11.585
6	37.796	44.316	38.592	32.676	27.378	21.085	16.015	13.815	10.740	7.558	13.159	13.627
7	38.250	44.105	38.394	32.492	27.209	20.993	15.960	14.179	11.052	7.340	12.409	14.489
8	37.747	43.895	38.197	32.309	27.040	20.505	16.047	13.977	11.016	7.631	11.172	15.022
9	35.350	43.685	38.000	32.127	26.872	19.957	16.008	13.631	11.176	7.685	10.253	17.252
10	33.235	43.476	37.804	31.945	26.704	19.590	15.933	13.438	12.178	7.922	9.721	19.262
11	45.558	43.267	37.608	31.763	26.536	19.438	15.907	13.346	12.922	8.388	9.952	23.820
12	36.608	43.059	37.412	31.582	26.369	19.435	15.603	13.235	12.871	8.754	8.655	16.397
13	35.993	42.851	37.217	31.402	26.203	18.580	15.358	13.079	12.119	8.703	8.573	15.638
14	41.398	42.644	37.023	31.222	26.037	18.339	15.379	13.000	11.795	8.184	8.392	17.220
15	42.675	42.437	36.829	31.042	25.872	18.829	15.202	12.791	11.531	7.365	8.152	23.057
16	43.675	42.230	36.635	30.863	25.707	18.402	15.389	12.566	11.499	7.140	7.847	22.657
17	63.664	42.024	36.442	30.684	25.542	18.296	15.221	12.558	11.136	6.772	7.685	22.832
18	48.100	41.819	36.249	30.506	25.378	18.252	15.109	12.660	11.179	6.837	7.656	21.637
19	43.817	41.614	36.057	30.328	25.215	18.079	15.113	12.651	10.544	6.821	7.482	20.883
20	55.700	41.409	35.865	30.151	25.051	18.000	15.314	13.314	10.131	7.321	7.299	23.479
21	57.220	41.205	35.674	29.974	24.889	17.907	15.133	12.877	9.876	7.038	7.226	24.577
22	46.939	41.001	35.483	29.797	24.727	17.759	15.211	12.392	9.803	6.886	8.274	26.262
23	45.230	40.798	35.292	29.622	24.565	17.729	15.779	12.058	9.760	6.785	8.295	27.688
24	46.439	40.595	35.103	29.446	24.404	17.665	16.331	11.961	10.104	6.944	11.834	27.181
25	46.093	40.393	34.913	29.271	24.243	17.677	15.830	12.049	9.647	6.671	12.008	30.215
26	46.207	40.191	34.724	29.097	24.083	17.719	15.147	12.027	8.150	7.129	12.907	30.556
27	46.534	39.989	34.536	28.923	23.923	17.545	14.933	12.200	8.106	7.112	12.559	28.604
28	46.375	39.788	34.347	28.749	23.764	17.364	14.949	12.351	8.093	6.679	12.125	27.327
29	50.870		34.160	28.576	23.605	17.127	14.554	12.120	8.000	6.942	11.077	26.455
30	52.326		33.973	28.404	23.447	17.100	14.942	11.859	8.464	7.005	9.812	24.678
31	46.191		33.786		23.289		14.751	11.561		6.978		24.846
Mean	42.587	42.555	36.653	30.970	25.726	19.111	15.633	13.062	10.589	7.460	10.169	20.630
Flow (MCM)	114.065	102.949	98.172	80.274	68.904	49.535	41.870	34.986	27.447	19.980	26.358	55.257
Maximum	66.358	45.375	39.588	33.600	28.231	22.951	16.907	15.074	12.922	8.806	15.413	30.556
Minimum	14.653	39.788	33.786	28.404	23.289	17.100	14.554	11.561	8.000	6.671	7.226	8.728
Runoff (mm)	21.898	19.764	18.847	15.411	13.228	9.509	8.038	6.716	5.269	3.836	5.060	10.608

Flow (cumecs)

Annual Statistics

Maximum: 66.358 Minimum: 6.671 Mean: 22.929 cumecs
Total: 723.081 MCM Runoff: 138.814 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA31 **Year:** 2019
Station Name: Little Ruaha River at Mawande
Time-Series Type: Flow (cumecs)

Latitude: 7:30:14 S Longitude: 35:27:19 E Elevation: 773.0 metres Area: 5209.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	23.122	39.783	47.660	47.250	35.938	27.026	17.301	13.386	10.432	7.763	4.433	11.649
2	21.937	39.313	48.407	48.705	36.007	26.131	17.267	13.296	10.341	7.149	3.970	12.548
3	21.565	39.309	47.475	52.887	36.412	25.730	16.840	13.083	10.306	6.982	3.791	12.350
4	25.081	39.463	47.606	54.716	39.083	25.568	16.387	12.927	10.124	6.974	3.857	11.750
5	23.111	40.336	51.031	56.163	38.361	24.612	16.279	13.240	10.058	6.686	3.698	11.336
6	22.717	40.073	64.869	54.455	36.900	24.025	16.441	13.869	9.967	7.019	3.391	11.416
7	22.308	41.335	56.448	51.473	36.933	23.572	16.427	13.306	9.714	7.481	3.253	10.054
8	22.179	45.930	53.893	49.620	36.646	23.273	16.241	12.557	9.730	7.839	3.108	13.457
9	22.970	47.512	52.621	52.731	35.792	22.865	16.196	11.950	9.305	7.801	2.945	12.081
10	25.092	46.982	51.992	51.474	36.544	23.340	15.826	11.725	9.627	8.002	3.502	11.123
11	32.680	47.564	50.217	53.978	37.379	22.276	15.412	12.165	9.148	8.063	3.364	13.772
12	36.919	50.474	50.489	50.636	37.989	21.764	15.463	12.366	9.117	8.516	3.389	14.144
13	35.715	50.131	51.044	47.596	37.676	22.943	15.153	12.356	9.227	9.141	3.435	12.578
14	38.368	49.425	53.650	47.595	37.242	21.210	15.038	12.041	9.160	11.708	3.448	15.336
15	34.792	48.847	51.692	48.352	37.222	20.823	14.841	12.026	9.291	12.201	3.549	17.983
16	37.950	49.070	49.396	46.885	37.294	20.611	14.930	11.864	9.485	12.102	3.534	21.940
17	38.116	47.803	49.357	45.644	37.430	20.408	14.578	11.773	9.274	11.620	3.499	18.188
18	37.493	45.081	49.680	44.558	37.233	20.207	14.523	11.539	8.768	11.507	3.496	18.315
19	37.265	50.538	48.657	42.209	36.360	19.751	14.585	11.504	8.338	11.322	3.491	20.145
20	37.272	50.042	46.256	40.640	35.634	19.256	14.437	11.638	8.576	16.924	3.681	50.054
21	39.927	43.669	44.437	38.505	34.750	19.168	14.532	11.604	8.090	10.608	3.596	36.929
22	54.139	40.866	44.682	38.458	33.687	18.837	14.400	11.168	8.095	8.654	3.767	75.090
23	44.105	40.671	42.456	37.157	33.056	18.902	14.481	11.140	8.410	8.572	4.745	50.433
24	40.063	44.637	41.225	41.655	32.180	18.879	14.337	11.052	8.440	7.629	5.028	46.951
25	38.445	51.571	41.308	41.472	31.558	18.684	14.031	10.855	7.886	7.135	5.138	45.830
26	37.563	46.773	41.162	40.364	30.640	18.360	13.819	11.088	7.008	6.223	6.066	48.961
27	37.399	46.057	40.986	39.732	30.155	17.857	13.835	11.019	7.320	5.225	7.807	48.263
28	38.051	47.041	42.472	39.847	29.513	17.700	13.587	10.767	7.201	5.453	8.495	53.278
29	38.082		44.147	38.899	28.590	17.461	14.111	10.567	7.205	5.124	11.081	117.984
30	38.182		46.779	37.825	28.300	17.392	14.351	10.625	7.788	5.124	12.204	61.897
31	38.298		52.760		27.872		14.053	10.267		5.104		68.089
Mean	33.578	45.368	48.544	46.049	34.851	21.288	15.152	11.896	8.914	8.440	4.625	31.417
Flow (MCM)	89.934	109.754	130.020	119.360	93.345	55.178	40.582	31.861	23.106	22.607	11.989	84.147
Maximum	54.139	51.571	64.869	56.163	39.083	27.026	17.301	13.869	10.432	16.924	12.204	117.984
Minimum	21.565	39.309	40.986	37.157	27.872	17.392	13.587	10.267	7.008	5.104	2.945	10.054
Runoff (mm)	17.265	21.070	24.961	22.914	17.920	10.593	7.791	6.117	4.436	4.340	2.302	16.154

Flow (cumecs)

Annual Statistics

Maximum: 117.984 Minimum: 2.945 Mean: 25.843 cumecs
Total: 814.999 MCM Runoff: 156.460 mm

Possible data flags

No data stored "-" Estimated values "e"

Kizigo River at Chinugulu

Station No: 1KA42A		**Established:** 26/12/1957	
Coordinates:		**Altitude (m.a.m.s.l):** 883	
Lat: -6.9303	**Long: 35.3975**	**Catchment Area (km²):** 25,071	
Description of the Catchment:			
Mainly wooded grassland and forest in the upper area			

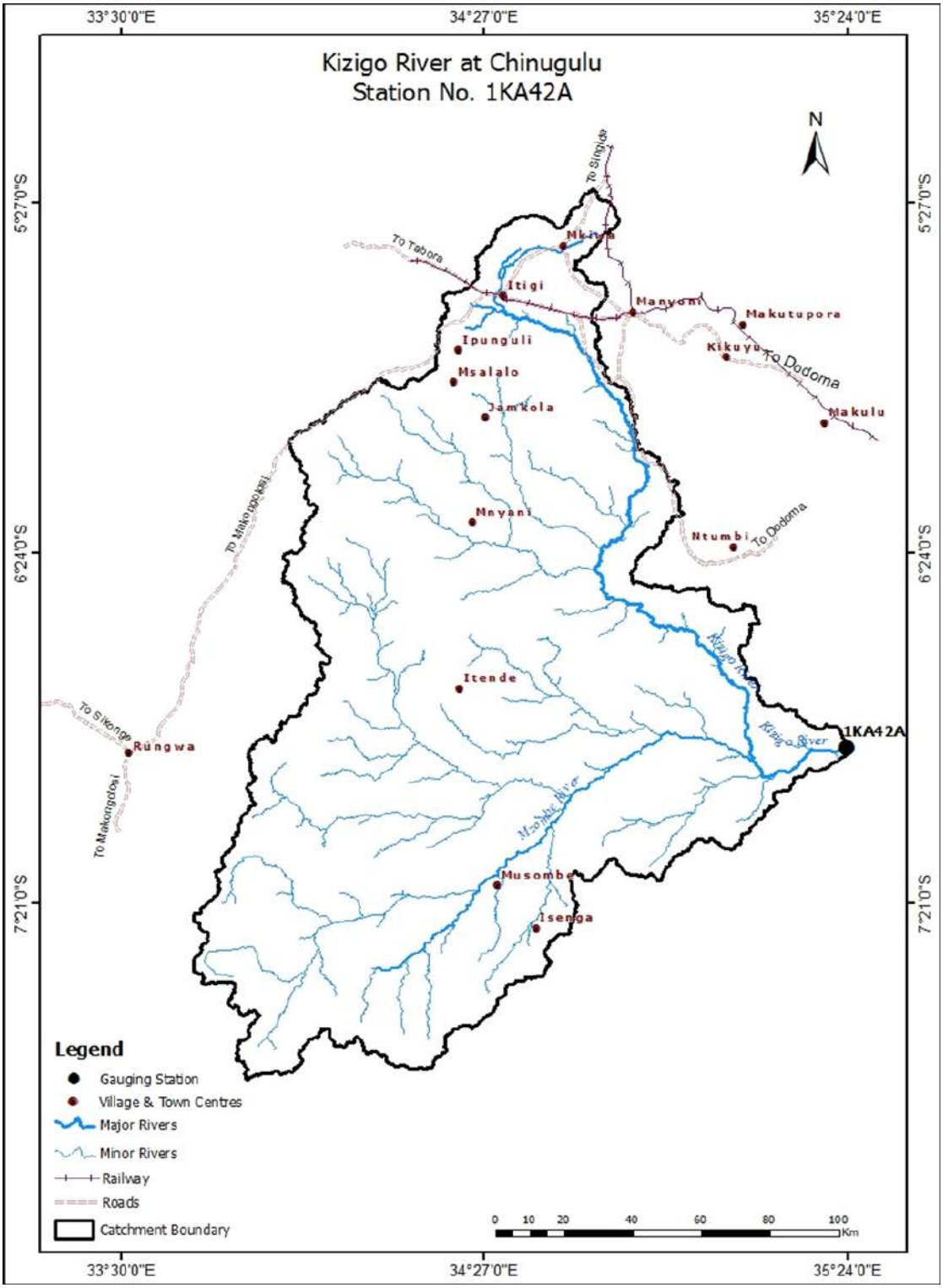
Station Details

1. Staff Gauges	**Range: 0 – 8m**		**A.D.Z.G.R: 0.00mm**	
	Type of Gauges: Standard Vertical		**MSL.Z.G.L: -**	
2. Automatic Recorder	**Pressure type Orpheus mini**		**Date installed: 2013**	
3. Benchmark	Nail in concrete beacon			
BM Assumed Datum: 6.818m		**N.M.M.S.L: -**	**TBM: –**	
4. Control	Permanent consists of rock boulders across the stream			
5. Access	Accessible throughout the year about 244km from Iringa town to the station via Dodoma road			

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	2.2.3
Discharge:	01/01/2010 - 31/12/2019	2.2.3

Extremes:	**Max. Recorded**	1805.276m³/sec	**On** 04/01/1998	**WL** 7.950m
	Min. Recorded	0.000m³/sec	**On** 20/12/1995	**WL** 0.00m

Remarks


Kizigo River at Chinugulu
Station No. 1KA42A
N
33°30'0"E
34°27'0"E
35°24'0"E
5°27'0"S
6°24'0"S
7°21'0"S
To Singida
To Tabora
Mkiwa
Itigi
Manyoni
Makutupora
Kikuyu
To Dodoma
Makulu
Ipunguli
Msalalo
Jamkola
Mnyani
Ntumbi
To Dodoma
To Makongolosi
Itende
Kizigo River
1KA42A
To Sikonge
Rungwa
To Makongolosi
Musomba
Isenga
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Catchment Boundary
0 10 20 40 60 80 100
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2010
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	69.628	55.277	34.493	58.704	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	65.366	37.282	51.762	60.955	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	52.246	27.978	53.643	44.304	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	57.744	21.884	34.493	32.879	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	150.873	17.748	19.841	26.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	120.780	14.493	38.840	25.384	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	79.861	64.579	59.973	22.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	161.729	48.845	78.977	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	110.457	55.277	79.595	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	122.591	75.499	68.568	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	213.486	52.942	78.713	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	225.104	38.665	71.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	132.710	35.593	54.350	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	210.832	26.750	46.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	296.516	18.870	36.151	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	228.838	15.019	31.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	104.145	18.680	31.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	70.698	24.633	29.052	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	56.286	51.555	24.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	48.645	2073.339	22.957	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	41.217	129.990	28.607	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	36.940	211.299	25.384	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	32.194	141.191	25.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	41.399	142.800	25.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	36.375	111.530	25.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	30.350	72.949	201.617	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	24.235	41.824	165.355	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	19.498	52.732	89.298	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	31.484		61.487	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	79.242		78.362	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	60.727		85.930		0.000		0.000	0.000		0.000		0.000
Mean	97.168	131.401	56.665	9.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Flow (MCM)	260.254	317.885	151.772	23.416	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum	296.516	2073.339	201.617	60.955	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Minimum	19.498	14.493	19.841	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Runoff (mm)	10.381	12.679	6.054	0.934	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Flow (cumecs)

Annual Statistics

Maximum: 2073.339 Minimum: 0.000 Mean: 24.522 cumecs
Total: 773.336 MCM Runoff: 30.846 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2011
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.000	-	27.360	37.855	19.990	0.000	0.000	0.000	0.000	0.000	0.000	33.092
2	0.000	-	22.043	207.272	18.870	0.000	0.000	0.000	0.000	0.000	0.000	28.607
3	0.000	-	-	151.258	18.070	0.000	0.000	0.000	0.000	0.000	0.000	24.633
4	0.000	-	-	109.816	17.474	0.000	0.000	0.000	0.000	0.000	0.000	21.154
5	0.000	-	-	74.643	17.025	0.000	0.000	0.000	0.000	0.000	0.000	19.990
6	0.000	-	-	61.182	16.410	0.000	0.000	0.000	0.000	0.000	0.000	18.538
7	31.484	20.139	28.417	36.151	15.852	0.000	0.000	0.000	0.000	0.000	0.000	19.014
8	20.999	17.932	14.896	40.795	15.142	0.000	0.000	0.000	0.000	0.000	0.000	18.870
9	0.000	16.716	-	29.892	15.019	0.000	0.000	0.000	0.000	0.000	0.000	16.584
10	0.000	18.680	-	18.680	15.431	0.000	0.000	0.000	0.000	0.000	0.000	23.286
11	0.000	16.848	-	55.277	15.142	0.000	0.000	0.000	0.000	0.000	0.000	21.517
12	0.000	16.848	-	49.045	15.019	0.000	0.000	0.000	0.000	0.000	0.000	37.282
13	0.000	14.896	-	47.982	14.614	0.000	0.000	0.000	0.000	0.000	0.000	49.045
14	36.827	13.443	-	40.615	14.334	0.000	0.000	0.000	0.000	0.000	0.000	135.463
15	65.366	18.870	-	32.720	14.216	0.000	0.000	0.000	0.000	0.000	0.000	116.322
16	61.182	21.674	-	63.254	13.826	0.000	0.000	0.000	0.000	0.000	0.000	71.029
17	45.128	18.538	-	36.940	12.445	0.000	0.000	0.000	0.000	0.000	0.000	54.848
18	41.217	18.870	-	37.111	10.000	0.000	0.000	0.000	0.000	0.000	0.000	49.514
19	42.437	17.474	-	27.176	-	0.000	0.000	0.000	0.000	0.000	0.303	40.615
20	39.250	17.474	20.490	26.389	-	0.000	0.000	0.000	0.000	0.000	6.105	81.915
21	31.014	18.870	15.019	22.957	-	0.000	0.000	0.000	0.000	0.000	3.921	238.747
22	23.121	21.674	44.494	22.043	-	0.000	0.000	0.000	0.000	0.000	0.983	542.494
23	24.065	30.814	95.766	42.621	-	0.000	0.000	0.000	0.000	0.000	0.354	291.988
24	20.642	35.427	68.244	37.682	-	0.000	0.000	0.000	0.000	0.000	0.021	214.428
25	19.352	27.606	77.837	34.166	-	0.000	0.000	0.000	0.000	0.000	52.732	168.480
26	17.748	23.121	51.074	30.153	-	0.000	0.000	0.000	0.000	0.000	51.555	135.945
27	16.280	20.642	56.503	25.972	-	0.000	0.000	0.000	0.000	0.000	40.018	75.499
28	15.142	21.517	47.324	24.405	-	0.000	0.000	0.000	0.000	0.000	37.282	82.818
29	14.098		39.427	22.740	-	0.000	0.000	0.000	0.000	0.000	34.711	59.449
30	11.194		32.562	21.154	-	0.000	0.000	0.000	0.000	0.000	29.244	48.180
31	10.000		46.413		-		0.000	0.000		0.000		29.052
Mean	18.921	-	-	48.932	-	0.000	0.000	0.000	0.000	0.000	8.574	89.303
Flow (MCM)	50.678	-	-	126.831	-	0.000	0.000	0.000	0.000	0.000	22.225	239.189
Maximum	65.366	-	-	207.272	-	0.000	0.000	0.000	0.000	0.000	52.732	542.494
Minimum	0.000	-	-	18.680	-	0.000	0.000	0.000	0.000	0.000	0.000	16.584
Runoff (mm)	2.021	-	-	5.059	-	0.000	0.000	0.000	0.000	0.000	0.886	9.540

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2012
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	36.544	24.065	73.202	14.216	14.216	6.490	0.000	0.000	0.000	0.000	0.000	0.000
2	84.091	21.517	62.482	13.826	13.826	6.490	0.000	0.000	0.000	0.000	0.000	0.000
3	83.727	41.399	55.996	13.710	13.710	6.490	0.000	0.000	0.000	0.000	0.000	0.000
4	65.050	35.983	44.115	13.067	13.067	6.330	0.000	0.000	0.000	0.000	0.000	0.000
5	49.716	32.194	61.945	12.956	12.956	6.105	0.000	0.000	0.000	0.000	0.000	0.000
6	41.642	26.389	70.698	12.956	12.956	6.038	0.000	0.000	0.000	0.000	0.000	0.000
7	50.189	22.740	81.646	12.698	12.698	5.885	0.000	0.000	0.000	0.000	0.000	0.000
8	42.621	21.154	68.568	12.337	12.337	5.756	0.000	0.000	0.000	0.000	0.000	0.000
9	156.050	19.644	61.945	11.983	11.983	5.545	0.000	0.000	0.000	0.000	0.000	0.000
10	86.858	17.748	59.449	11.635	11.635	5.401	0.000	0.000	0.000	0.000	0.000	0.000
11	110.885	15.979	52.942	11.295	11.295	5.199	0.000	0.000	0.000	0.000	0.000	0.000
12	79.242	14.614	47.521	11.194	11.194	5.003	0.000	0.000	0.000	0.000	0.000	0.000
13	97.748	12.445	47.982	10.961	10.961	5.003	0.000	0.000	0.000	0.000	0.000	0.000
14	70.450	11.983	65.050	10.961	10.961	5.003	0.000	0.000	0.000	0.000	0.000	0.000
15	68.002	17.611	91.201	10.961	10.961	4.945	0.000	0.000	0.000	0.000	0.000	0.000
16	60.425	10.862	72.361	10.634	10.634	4.811	0.000	0.000	0.000	0.000	0.000	0.000
17	35.261	28.861	60.425	10.634	10.634	4.811	0.000	0.000	0.000	0.000	0.000	0.000
18	28.861	39.250	81.646	10.634	10.634	4.811	0.000	0.000	0.000	0.000	0.000	0.000
19	104.870	38.433	145.797	10.314	10.314	4.811	0.000	0.000	0.000	0.000	0.000	0.000
20	255.806	38.085	93.128	10.314	10.314	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	171.640	37.111	66.397	10.000	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	124.532	36.714	57.231	10.000	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	63.487	35.816	54.563	9.693	9.693	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	58.927	35.040	48.845	9.482	9.482	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	53.855	34.166	42.621	9.185	9.185	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	48.645	42.621	35.816	9.098	9.098	0.000	0.000	0.000	0.000	0.000	0.000	118.874
27	46.413	49.045	28.861	8.896	8.810	0.000	0.000	0.000	0.000	0.000	0.000	75.241
28	44.115	56.286	31.484	8.810	8.810	0.000	0.000	0.000	0.000	0.000	0.000	55.996
29	40.615	64.579	24.633	8.810	8.810	0.000	0.000	0.000	0.000	0.000	0.000	38.433
30	34.711		21.517	8.810	8.810	0.000	0.000	0.000	0.000	0.000	0.000	35.427
31	30.548		19.352		8.810		0.000	0.000		0.000		30.153
Mean	75.017	30.425	59.014	11.002	10.929	3.498	0.000	0.000	0.000	0.000	0.000	11.423
Flow (MCM)	200.926	76.233	158.062	28.518	29.271	9.066	0.000	0.000	0.000	0.000	0.000	30.596
Maximum	255.806	64.579	145.797	14.216	14.216	6.490	0.000	0.000	0.000	0.000	0.000	118.874
Minimum	28.861	10.862	19.352	8.810	8.810	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Runoff (mm)	8.014	3.041	6.305	1.137	1.168	0.362	0.000	0.000	0.000	0.000	0.000	1.220

Flow (cumecs)

Annual Statistics

Maximum: 255.806 Minimum: 0.000 Mean: 16.776 cumecs
Total: 530.486 MCM Runoff: 21.159 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2013
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	120.780	65.050	17.748	28.229	16.716	0.000	4.868	0.000	0.000	0.000	0.000	0.000
2	111.961	116.653	16.584	31.828	15.557	0.000	4.811	0.000	0.000	0.000	0.000	0.000
3	377.149	63.487	15.307	137.884	14.493	0.000	4.811	0.000	0.000	0.000	0.000	0.000
4	252.340	46.672	13.826	156.443	13.443	0.000	4.811	0.000	0.000	0.000	0.000	0.000
5	115.552	64.031	12.698	127.186	12.589	0.000	4.680	0.000	0.000	0.000	0.000	0.000
6	271.205	55.780	13.067	129.520	14.614	0.000	4.755	0.000	0.000	0.000	0.000	0.000
7	208.815	45.768	12.698	105.182	14.334	0.000	4.443	0.000	0.000	0.000	0.000	0.000
8	122.250	38.840	13.067	162.130	14.098	0.000	4.266	0.000	0.000	0.000	0.000	0.000
9	129.168	35.427	19.498	285.270	13.710	0.000	4.266	0.000	0.000	0.000	0.000	0.000
10	184.330	31.215	32.351	265.836	13.179	0.000	4.266	0.000	0.000	0.000	0.000	0.000
11	142.056	25.384	22.957	302.234	13.557	0.000	4.175	0.000	0.000	0.000	0.000	0.000
12	80.127	20.139	79.242	231.128	12.698	0.000	4.175	0.000	0.000	0.000	0.000	0.000
13	133.067	16.280	79.861	174.973	12.956	0.000	4.085	0.000	0.000	0.000	0.000	0.000
14	66.158	18.680	62.713	116.985	12.808	0.000	4.047	0.000	0.000	0.000	0.000	688.891
15	52.038	17.025	47.324	81.377	11.878	0.000	4.047	0.000	0.000	0.000	0.000	9.098
16	44.115	16.584	42.437	63.254	15.979	0.000	4.047	0.000	0.000	0.000	0.000	78.977
17	36.714	38.433	38.665	64.579	11.060	5.401	4.868	0.000	0.000	0.000	0.000	89.962
18	30.814	31.828	36.714	60.955	10.731	5.401	4.811	0.000	0.000	0.000	0.000	160.000
19	25.795	25.972	33.950	50.869	10.093	5.199	4.811	0.000	0.000	0.000	0.000	126.838
20	15.142	64.814	61.182	40.615	10.000	5.199	4.811	0.000	0.000	0.000	0.000	138.737
21	40.795	49.986	84.366	34.876	10.000	5.199	4.680	0.000	0.000	0.000	0.000	87.792
22	127.186	48.845	304.732	30.153	9.907	5.199	4.680	0.000	0.000	0.000	0.000	63.798
23	64.031	49.313	168.071	26.569	9.693	5.199	4.443	0.000	0.000	0.000	0.000	49.514
24	65.841	38.085	121.119	26.569	9.482	5.199	4.266	0.000	0.000	0.000	0.000	51.349
25	46.413	38.085	105.599	23.121	9.392	5.199	4.266	0.000	0.000	0.000	0.000	35.593
26	39.427	31.215	73.793	21.674	9.098	5.199	4.266	0.000	0.000	0.000	0.000	32.194
27	33.412	22.043	60.955	20.139	9.693	5.199	4.214	0.000	0.000	0.000	0.000	28.861
28	28.229	20.490	51.762	19.014	9.098	5.199	4.175	0.000	0.000	0.000	0.000	23.841
29	21.884		42.621	18.070	9.098	5.003	4.175	0.000	0.000	0.000	0.000	33.627
30	31.484		36.544	17.748	8.810	5.003	4.047	0.000	0.000	0.000	0.000	28.861
31	24.235		32.562		8.810		4.047	0.000		0.000		54.563
Mean	98.146	40.576	56.581	95.147	11.857	2.427	4.423	0.000	0.000	0.000	0.000	57.500
Flow (MCM)	262.873	98.161	151.547	246.621	31.758	6.290	11.847	0.000	0.000	0.000	0.000	154.007
Maximum	377.149	116.653	304.732	302.234	16.716	5.401	4.868	0.000	0.000	0.000	0.000	688.891
Minimum	15.142	16.280	12.698	17.748	8.810	0.000	4.047	0.000	0.000	0.000	0.000	0.000
Runoff (mm)	10.485	3.915	6.045	9.837	1.267	0.251	0.473	0.000	0.000	0.000	0.000	6.143

Flow (cumecs)

Annual Statistics

Maximum: 688.891 Minimum: 0.000 Mean: 30.555 cumecs
Total: 963.572 MCM Runoff: 38.434 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	57.965	155.528	79.242	386.805	13.067	13.067	10.000	5.821	0.000	0.000	0.000	-
2	48.379	105.599	74.388	431.552	28.229	13.067	10.000	5.821	0.000	0.000	0.000	-
3	172.192	77.488	55.780	302.810	26.389	13.067	10.000	5.608	0.000	0.000	0.000	-
4	209.280	71.860	47.324	275.363	24.405	12.698	10.000	5.608	0.000	0.000	0.000	-
5	121.910	61.716	40.436	200.558	23.286	12.698	10.000	0.000	0.000	0.000	0.000	-
6	86.486	58.186	35.816	155.137	22.202	12.337	10.000	0.000	0.000	0.000	0.000	-
7	69.874	62.252	32.879	116.985	22.043	12.337	9.907	0.000	0.000	0.000	0.000	-
8	60.425	50.869	29.502	98.048	21.517	12.230	9.693	0.000	0.000	0.000	0.000	-
9	43.240	42.621	27.978	65.050	20.999	11.983	9.693	0.000	0.000	0.000	0.000	-
10	68.244	86.858	29.052	57.231	21.154	11.635	9.693	0.000	0.000	0.000	0.000	-
11	90.247	58.704	26.750	282.129	21.517	11.635	9.693	0.000	0.000	0.000	0.000	-
12	75.756	48.379	23.286	213.957	20.490	11.635	9.693	0.000	0.000	0.000	0.000	-
13	103.526	35.816	34.876	140.329	19.498	11.396	7.642	0.000	0.000	0.000	0.000	-
14	85.561	41.217	29.244	105.912	19.014	11.295	7.642	0.000	0.000	0.000	0.000	-
15	73.202	69.383	35.593	90.628	19.014	11.295	7.642	0.000	0.000	0.000	0.000	-
16	103.835	50.869	107.695	72.110	19.014	11.295	7.642	0.000	0.000	0.000	0.000	-
17	90.247	46.219	148.323	66.397	18.538	11.060	6.725	0.000	0.000	0.000	0.000	-
18	65.841	43.489	104.870	55.996	18.070	10.961	6.654	0.000	0.000	0.000	0.000	-
19	109.390	37.282	91.585	50.189	18.070	10.961	6.490	0.000	0.000	0.000	0.000	-
20	74.643	41.036	87.792	44.115	17.611	10.961	6.490	0.000	0.000	0.000	0.000	-
21	99.049	149.595	66.636	38.840	17.294	10.961	6.490	0.000	0.000	0.000	0.000	-
22	178.202	262.821	65.050	33.252	16.716	10.862	6.490	0.000	0.000	0.000	0.000	-
23	176.793	153.449	64.031	55.062	16.584	10.634	6.490	0.000	0.000	0.000	0.000	-
24	111.961	99.451	82.547	46.867	15.725	10.634	6.330	0.000	0.000	0.000	0.000	-
25	144.044	72.949	66.636	41.824	15.307	10.634	6.262	0.000	0.000	0.000	0.000	-
26	142.800	62.713	65.366	38.259	14.896	10.537	6.262	0.000	0.000	0.000	0.000	-
27	142.056	105.912	53.643	59.673	14.614	10.314	6.262	0.000	0.000	0.000	0.000	-
28	130.343	166.167	71.860	44.747	14.216	10.314	6.262	0.000	0.000	0.000	0.000	-
29	110.457		67.196	39.427	13.826	10.314	6.105	0.000	0.000	0.000	0.000	-
30	152.545		295.191	34.493	13.443	10.000	6.038	0.000	0.000	0.000	0.000	-
31	308.015		416.167		13.179		6.038	0.000		0.000		-
Mean	113.113	82.801	79.250	121.458	18.707	11.427	7.881	0.737	0.000	0.000	0.000	-
Flow (MCM)	302.962	200.312	212.262	314.820	50.105	29.619	21.110	1.975	0.000	0.000	0.000	-
Maximum	308.015	262.821	416.167	431.552	28.229	13.067	10.000	5.821	0.000	0.000	0.000	-
Minimum	43.240	35.816	23.286	33.252	13.067	10.000	6.038	0.000	0.000	0.000	0.000	-
Runoff (mm)	12.084	7.990	8.466	12.557	1.999	1.181	0.842	0.079	0.000	0.000	0.000	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2015
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	14.734	56.721	13.329	0.000	0.000	0.000	0.000	0.000	0.000
2	-	-	-	17.159	43.489	12.589	0.000	0.000	0.000	0.000	0.000	0.000
3	-	-	-	16.848	53.152	12.088	0.000	0.000	0.000	0.000	0.000	0.000
4	-	-	-	16.280	49.716	11.396	0.000	0.000	0.000	0.000	0.000	0.000
5	-	-	-	21.517	41.217	3.473	0.000	0.000	0.000	0.000	0.000	0.000
6	-	-	-	19.014	34.876	10.093	0.000	0.000	0.000	0.000	0.000	0.000
7	-	-	-	55.062	32.720	0.000	0.000	0.000	0.000	0.000	34.711	0.000
8	-	-	-	50.393	29.696	0.000	0.000	0.000	0.000	0.000	27.978	0.000
9	-	-	40.018	52.454	27.978	0.000	0.000	0.000	0.000	0.000	25.209	24.805
10	-	-	36.375	42.437	27.606	0.000	0.000	0.000	0.000	0.000	22.202	35.983
11	-	-	33.627	36.375	26.569	0.000	0.000	0.000	0.000	0.000	20.339	23.121
12	-	-	29.696	31.484	24.633	0.000	0.000	0.000	0.000	0.000	18.538	68.244
13	-	-	26.569	27.360	22.740	0.000	0.000	0.000	0.000	0.000	18.210	67.759
14	-	-	23.507	26.389	22.202	0.000	0.000	0.000	0.000	0.000	17.294	52.038
15	-	-	22.740	31.687	21.884	0.000	0.000	0.000	0.000	0.000	16.584	95.078
16	-	-	21.154	33.788	20.846	0.000	0.000	0.000	0.000	0.000	16.151	77.488
17	-	-	19.841	33.627	19.990	0.000	0.000	0.000	0.000	0.000	14.896	74.643
18	-	-	20.139	30.350	19.498	0.000	0.000	0.000	0.000	0.000	13.942	84.091
19	-	-	19.498	32.194	19.158	0.000	0.000	0.000	0.000	0.000	13.329	160.797
20	-	-	18.680	32.720	18.397	0.000	0.000	0.000	0.000	0.000	13.067	160.797
21	-	-	18.070	28.607	18.070	0.000	0.000	0.000	0.000	0.000	4.047	138.737
22	-	-	17.294	26.150	17.611	0.000	0.000	0.000	0.000	0.000	11.739	145.797
23	-	-	16.584	24.405	17.025	0.000	0.000	0.000	0.000	0.000	10.862	311.905
24	-	-	15.557	23.507	16.584	0.000	0.000	0.000	0.000	0.000	10.409	280.291
25	-	-	14.896	22.416	16.151	0.000	0.000	0.000	0.000	0.000	10.000	220.765
26	-	-	14.334	22.043	15.852	0.000	0.000	0.000	0.000	0.000	10.000	130.343
27	-	-	14.216	21.517	15.431	0.000	0.000	0.000	0.000	0.000	0.000	69.383
28	-	-	13.826	20.999	15.307	0.000	0.000	0.000	0.000	0.000	0.000	59.225
29	-		13.942	22.578	14.734	0.000	0.000	0.000	0.000	0.000	0.000	49.045
30	-		14.734	60.199	14.334	0.000	0.000	0.000	0.000	0.000	0.000	41.217
31	-		14.896		13.942		0.000	0.000		0.000		37.510
Mean	-	-	-	29.810	25.424	2.099	0.000	0.000	0.000	0.000	10.984	77.712
Flow (MCM)	-	-	-	77.267	68.094	5.441	0.000	0.000	0.000	0.000	28.469	208.143
Maximum	-	-	-	60.199	56.721	13.329	0.000	0.000	0.000	0.000	34.711	311.905
Minimum	-	-	-	14.734	13.942	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Runoff (mm)	-	-	-	3.082	2.716	0.217	0.000	0.000	0.000	0.000	1.136	8.302

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2016
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	39.016	197.099	59.449	31.828	27.792	8.528	4.497	3.211	1.943	1.271	0.661	0.000
2	35.040	328.952	53.152	52.246	24.405	8.528	4.443	3.211	1.943	1.271	0.661	0.000
3	29.244	395.708	44.494	109.390	22.740	8.253	4.266	3.100	1.943	1.206	0.000	0.000
4	33.092	313.860	34.876	352.364	21.884	8.171	4.085	3.100	1.943	1.187	0.000	0.000
5	50.665	484.431	28.607	758.785	20.846	7.983	3.958	3.100	1.860	1.143	0.000	0.000
6	87.418	291.988	24.805	580.903	19.644	7.903	3.883	3.024	1.860	1.143	0.000	0.000
7	56.721	337.878	22.043	383.058	18.870	7.720	3.797	2.992	1.860	1.124	0.000	0.000
8	44.747	242.779	19.014	315.823	17.932	7.539	3.797	2.992	1.860	1.082	0.000	0.000
9	40.018	227.210	17.159	261.057	17.025	7.462	3.797	2.918	1.779	1.040	0.000	0.000
10	37.682	264.592	18.538	144.544	16.151	7.462	3.711	2.886	1.779	1.023	0.000	0.000
11	39.016	555.218	30.814	98.447	15.307	7.386	3.675	2.782	1.779	1.023	0.000	0.000
12	41.036	402.461	116.322	101.783	14.493	7.136	3.556	2.782	1.779	0.983	0.000	0.000
13	119.657	271.745	86.486	64.031	14.098	6.965	3.556	2.782	1.779	0.966	0.000	0.000
14	112.284	386.805	75.499	48.845	13.557	6.725	3.520	2.680	1.701	0.910	0.000	0.000
15	153.449	380.863	52.942	43.677	12.956	6.725	3.439	2.680	1.701	0.910	0.000	0.000
16	218.218	301.468	43.054	37.682	12.589	6.490	3.439	2.680	1.701	0.910	0.000	0.000
17	85.284	179.616	35.261	34.329	12.230	6.262	3.439	2.610	1.701	0.910	0.000	0.000
18	75.756	123.388	29.052	32.194	11.739	6.262	3.439	2.581	1.701	0.910	0.000	0.000
19	328.952	163.469	24.805	30.350	11.194	6.262	3.439	2.512	1.647	0.910	0.000	0.000
20	288.244	288.244	22.043	28.607	10.862	6.038	3.439	2.483	1.624	0.910	0.000	0.000
21	223.974	339.106	19.498	26.993	10.634	6.038	3.439	2.483	1.624	0.910	0.000	0.000
22	218.694	193.675	17.159	26.389	10.314	5.885	3.404	2.483	1.572	0.857	0.000	0.000
23	151.643	119.993	16.584	25.559	10.000	5.608	3.324	2.416	1.498	0.857	0.000	0.000
24	384.598	81.646	33.412	26.150	9.693	5.401	3.324	2.388	1.477	0.857	0.000	0.000
25	262.291	61.487	32.194	33.627	9.602	5.401	3.324	2.322	1.406	0.821	0.000	0.000
26	190.726	47.718	22.957	73.202	9.392	5.199	3.324	2.231	1.406	0.821	0.000	0.000
27	169.438	40.197	30.153	54.563	9.392	5.199	3.324	2.141	1.337	0.821	0.000	0.000
28	230.473	34.493	24.805	46.219	9.098	5.061	3.324	2.115	1.290	0.805	0.000	0.000
29	255.806	41.824	19.841	38.085	9.098	4.945	3.324	2.028	1.271	0.756	0.000	0.000
30	206.195		35.040	31.687	9.098	4.811	3.211	1.943	1.271	0.756	0.000	0.000
31	119.993		32.879		8.810		3.211	1.943		0.722		0.000
Mean	139.657	244.756	36.224	129.747	14.240	6.645	3.603	2.632	1.668	0.962	0.044	0.000
Flow (MCM)	374.058	613.260	97.022	336.305	38.141	17.224	9.651	7.050	4.323	2.576	0.114	0.000
Maximum	384.598	555.218	116.322	758.785	27.792	8.528	4.497	3.211	1.943	1.271	0.661	0.000
Minimum	29.244	34.493	16.584	25.559	8.810	4.811	3.211	1.943	1.271	0.722	0.000	0.000
Runoff (mm)	14.920	24.461	3.870	13.414	1.521	0.687	0.385	0.281	0.172	0.103	0.005	0.000

Flow (cumecs)

Annual Statistics

Maximum: 758.785 Minimum: 0.000 Mean: 48.348 cumecs
Total: 1528.885 MCM Runoff: 60.982 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2017
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.000	19.990	69.874	19.644	10.961	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	16.410	108.753	18.870	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	10.862	80.750	16.716	9.693	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	53.855	66.956	14.493	9.303	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	27.360	45.128	25.795	8.612	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	22.578	84.641	12.337	8.335	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	25.795	109.390	11.295	7.983	0.000	0.000	0.000	0.000	0.000	0.000	9.303
8	0.000	18.210	92.548	10.862	7.798	0.000	0.000	0.000	0.000	0.000	0.000	8.063
9	0.000	15.431	76.360	3.358	7.720	0.000	0.000	0.000	0.000	0.000	0.000	6.965
10	8.390	16.151	113.042	9.693	7.539	0.000	0.000	0.000	0.000	0.000	0.000	6.262
11	7.386	15.641	95.471	9.303	7.136	0.000	0.000	0.000	0.000	0.000	0.000	15.431
12	8.335	14.216	78.362	8.725	6.654	0.000	0.000	0.000	0.000	0.000	0.000	14.734
13	6.038	11.194	93.516	8.253	6.262	0.000	0.000	0.000	0.000	0.000	0.000	41.399
14	5.821	9.784	46.413	8.063	6.038	0.000	0.000	0.000	0.000	0.000	0.000	28.417
15	5.608	9.392	38.665	7.798	5.821	0.000	0.000	0.000	0.000	0.000	0.000	18.870
16	470.198	9.098	45.383	7.720	5.756	0.000	0.000	0.000	0.000	0.000	0.000	13.443
17	20.642	8.810	41.642	5.608	5.608	0.000	0.000	0.000	0.000	0.000	0.000	11.295
18	12.337	9.185	31.014	5.608	5.608	0.000	0.000	0.000	0.000	0.000	0.000	9.907
19	18.210	8.612	37.510	5.608	5.608	0.000	0.000	0.000	0.000	0.000	0.000	8.171
20	20.846	8.253	56.286	5.608	5.545	0.000	0.000	0.000	0.000	0.000	0.000	21.361
21	16.716	35.040	47.982	5.463	5.401	0.000	0.000	0.000	0.000	0.000	0.000	10.634
22	13.443	56.721	40.197	5.463	5.401	0.000	0.000	0.000	0.000	0.000	0.000	3.711
23	24.065	85.284	32.562	5.401	5.401	0.000	0.000	0.000	0.000	0.000	0.000	10.862
24	9.784	45.383	23.673	5.199	5.199	0.000	0.000	0.000	0.000	0.000	0.000	9.907
25	9.185	64.814	27.606	5.199	5.199	0.000	0.000	0.000	0.000	0.000	0.000	9.098
26	13.179	31.484	23.121	5.199	5.199	0.000	0.000	0.000	0.000	0.000	0.000	45.128
27	16.716	117.428	23.841	5.003	5.003	0.000	0.000	0.000	0.000	0.000	0.000	28.607
28	14.216	61.716	18.870	5.003	5.003	0.000	0.000	0.000	0.000	0.000	0.000	20.339
29	11.983		20.490	5.003	2.782	0.000	0.000	0.000	0.000	0.000	0.000	13.710
30	21.517		22.202	4.811	4.811	0.000	0.000	0.000	0.000	0.000	0.000	38.259
31	18.210		19.498		4.443		0.000	0.000		0.000		14.734
Mean	24.285	29.596	55.218	8.903	6.510	0.000	0.000	0.000	0.000	0.000	0.000	13.504
Flow (MCM)	65.044	71.599	147.895	23.077	17.437	0.000	0.000	0.000	0.000	0.000	0.000	36.168
Maximum	470.198	117.428	113.042	25.795	10.961	0.000	0.000	0.000	0.000	0.000	0.000	45.128
Minimum	0.000	8.253	18.870	3.358	2.782	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Runoff (mm)	2.594	2.856	5.899	0.920	0.696	0.000	0.000	0.000	0.000	0.000	0.000	1.443

Flow (cumecs)

Annual Statistics

Maximum: 470.198 Minimum: 0.000 Mean: 11.501 cumecs
Total: 362.705 MCM Runoff: 14.467 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 6:55:49 S | Longitude: 35:23:51 E | Elevation: 883.0 metres | Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	23.841	65.366	50.665	-	39.840	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	31.014	52.038	46.413	60.955	34.166	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	61.716	40.197	53.855	36.714	30.350	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	39.604	30.814	55.996	31.215	26.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	44.304	21.154	84.366	25.972	24.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	32.037	112.609	89.014	21.361	23.286	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	92.162	131.523	86.486	18.538	21.154	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	74.899	111.961	109.816	16.151	19.841	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	51.349	92.548	104.559	13.826	18.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	45.575	73.539	94.100	96.062	17.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	56.503	54.563	59.225	107.274	17.159	0.000	0.000	0.000	0.000	0.000	0.000	1.040
12	57.231	97.449	104.559	83.727	16.584	0.000	0.000	0.000	0.000	0.000	0.000	0.141
13	129.520	63.798	115.552	70.698	15.725	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	76.101	48.379	328.349	61.487	15.307	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	84.641	39.427	503.020	84.641	14.896	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	63.487	33.412	370.645	167.525	14.493	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	171.225	27.978	486.196	152.932	13.557	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	120.780	25.209	294.625	139.593	12.956	0.000	0.000	0.000	0.000	0.000	0.000	0.966
19	206.656	22.043	296.138	127.650	12.589	0.000	0.000	0.000	0.000	0.000	0.000	0.002
20	174.973	19.990	297.655	159.470	11.983	0.000	0.000	0.000	0.000	0.000	0.000	0.770
21	125.682	19.014	661.421	157.755	11.739	0.000	0.000	0.000	0.000	0.000	0.000	0.949
22	94.491	18.680	829.176	109.816	11.532	0.000	0.000	0.000	0.000	0.000	0.000	32.351
23	79.861	18.210	315.430	79.861	11.060	0.000	0.000	0.000	0.000	0.000	0.000	49.313
24	61.182	17.474	169.438	127.650	10.862	0.000	0.000	0.000	0.000	0.000	0.000	14.734
25	49.045	16.151	129.168	310.540	10.634	0.000	0.000	0.000	0.000	0.000	0.000	-
26	80.483	15.307	-	166.167	10.409	0.000	0.000	0.000	0.000	0.000	0.000	-
27	145.797	14.334	-	114.785	10.219	0.000	0.000	0.000	0.000	0.000	0.000	0.894
28	354.462	13.443	60.727	81.915	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.410
29	256.503		41.036	62.252	9.693	0.000	0.000	0.000	0.000	0.000	0.000	0.156
30	160.797		-	52.246	9.303	0.000	0.000	0.000	0.000	0.000	0.000	0.722
31	92.838		55.564		9.011		0.000	0.000		0.000		0.323
Mean	101.250	46.307	-	-	16.633	0.000	0.000	0.000	0.000	0.000	0.000	-
Flow (MCM)	271.189	112.027	-	-	44.551	0.000	0.000	0.000	0.000	0.000	0.000	-
Maximum	354.462	131.523	-	-	39.840	0.000	0.000	0.000	0.000	0.000	0.000	-
Minimum	23.841	13.443	-	-	9.011	0.000	0.000	0.000	0.000	0.000	0.000	-
Runoff (mm)	10.817	4.468	-	-	1.777	0.000	0.000	0.000	0.000	0.000	0.000	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA42A **Year:** 2019
Station Name: Kizigo River at Chinugulu
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 883.0 metres Area: 25071.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.208	9.098	10.314	0.354	0.067	0.000	0.000	0.000	0.000	0.000	-	-
2	0.156	1.023	-	0.070	0.574	0.000	0.000	0.000	0.000	0.000	-	-
3	0.132	0.675	15.852	0.694	0.468	0.000	0.000	0.000	0.000	0.000	-	-
4	0.055	0.457	-	-	0.821	0.000	0.000	0.000	0.000	0.000	-	-
5	0.023	0.364	-	22.740	0.630	0.000	0.000	0.000	0.000	0.000	-	-
6	0.008	0.274	-	12.956	0.521	0.000	0.000	0.000	0.000	0.000	-	-
7	0.002	0.186	-	-	0.410	0.000	0.000	0.000	0.000	0.000	-	-
8	0.051	0.332	-	-	0.354	0.000	0.000	0.000	0.000	0.000	-	-
9	0.013	0.240	-	-	0.258	0.000	0.000	0.000	0.000	0.000	-	-
10	0.004	0.145	-	1.477	0.215	0.000	0.000	0.000	0.000	0.000	-	-
11	0.533	0.604	-	1.225	0.177	0.000	0.000	0.000	0.000	0.000	-	-
12	0.000	0.000	-	0.708	0.145	0.000	0.000	0.000	0.000	0.000	-	-
13	0.000	0.000	-	0.574	0.103	0.000	0.000	0.000	0.000	0.000	-	-
14	26.993	0.694	-	0.521	0.080	0.000	0.000	0.000	0.000	0.000	-	-
15	20.339	0.841	1.527	0.410	0.055	0.000	0.000	0.000	0.000	0.000	-	-
16	11.878	0.741	1.358	0.354	0.045	0.000	0.000	0.000	0.000	0.000	-	-
17	7.038	0.648	1.023	0.294	0.036	0.000	0.000	0.000	0.000	0.000	-	-
18	120.780	0.377	0.722	0.232	0.021	0.000	0.000	0.000	0.000	0.000	-	-
19	54.848	0.483	0.521	0.177	0.017	0.000	0.000	0.000	0.000	0.000	-	-
20	37.855	1.455	0.377	0.171	0.013	0.000	0.000	0.000	0.000	0.000	-	-
21	20.999	1.317	0.274	0.171	0.009	0.000	0.000	0.000	0.000	0.000	-	-
22	38.665	0.604	0.223	0.150	0.007	0.000	0.000	0.000	0.000	0.000	-	-
23	74.899	0.294	0.171	0.150	0.005	0.000	0.000	0.000	0.000	0.000	-	-
24	27.176	0.119	0.109	0.132	0.005	0.000	0.000	0.000	0.000	0.000	-	-
25	36.714	0.045	0.067	0.119	0.003	0.000	0.000	0.000	0.000	0.000	-	-
26	42.252	-	0.028	0.109	0.001	0.000	0.000	0.000	0.000	0.000	-	-
27	32.562	1.477	0.018	0.098	0.000	0.000	0.000	0.000	0.000	0.000	-	-
28	22.416	12.088	0.010	0.332	0.000	0.000	0.000	0.000	0.000	0.000	-	-
29	13.710		0.002	0.077	0.000	0.000	0.000	0.000	0.000	0.000	-	-
30	-		0.000	0.103	0.000	0.000	0.000	0.000	0.000	0.000	-	-
31	-		-		0.000		0.000	0.000		0.000		-
Mean	-	-	-	-	0.163	0.000	0.000	0.000	0.000	0.000	-	-
Flow (MCM)	-	-	-	-	0.435	0.000	0.000	0.000	0.000	0.000	-	-
Maximum	-	-	-	-	0.821	0.000	0.000	0.000	0.000	0.000	-	-
Minimum	-	-	-	-	0.000	0.000	0.000	0.000	0.000	0.000	-	-
Runoff (mm)	-	-	-	-	0.017	0.000	0.000	0.000	0.000	0.000	-	-

Flow (cumecs)

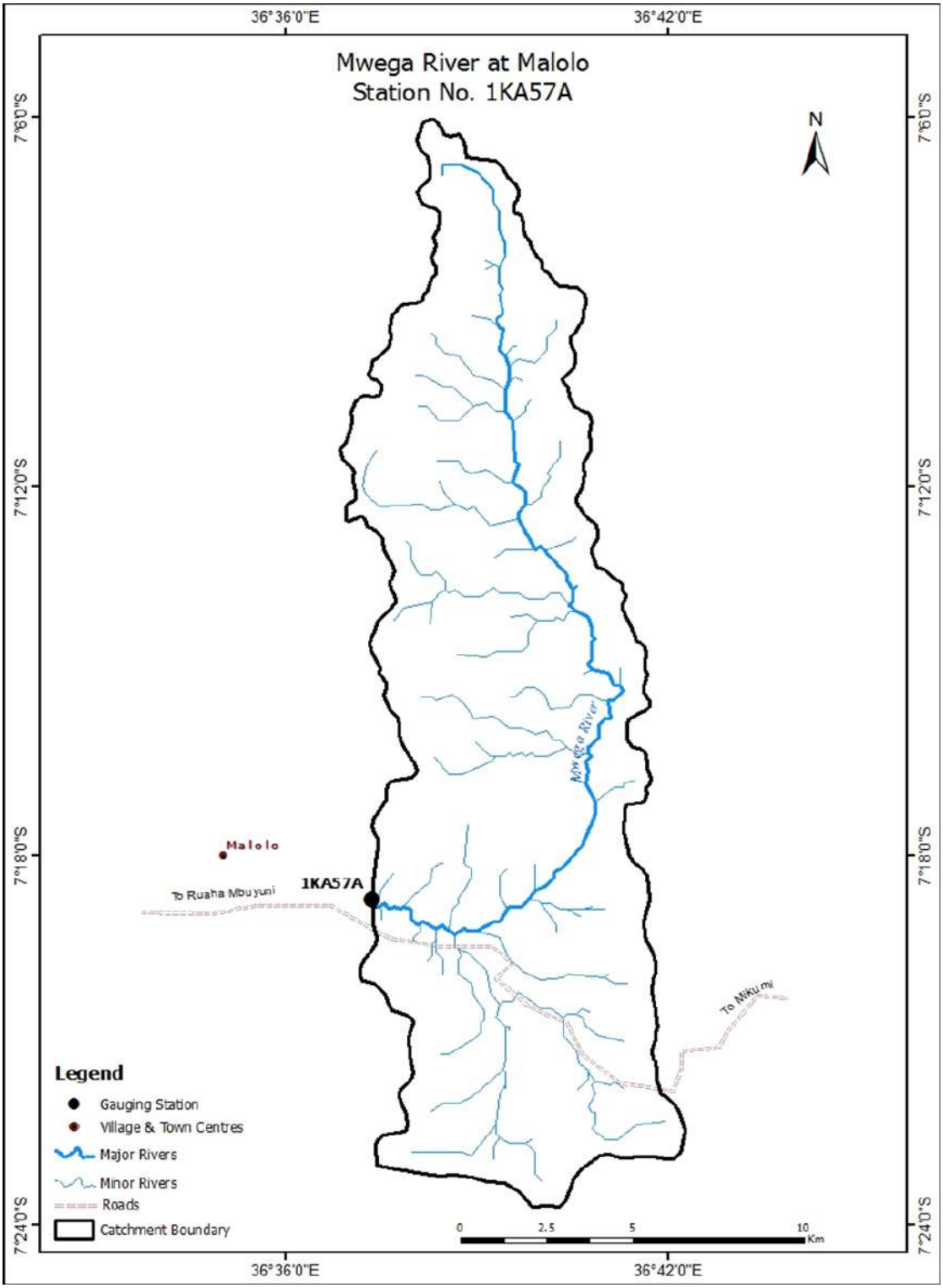
Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Mwega River at Malolo				
Station No: 1KA57A			Established: 01/01/1965	
Coordinates:			Altitude (m.a.m.s.l): 1,237	
Lat: -7.400	Long: 36.600		Catchment Area (km²): 200	
Description of the Catchment:				
Mainly wooded grassland and forest in the upper area				
Station Details				
1. Staff Gauges	Range: 0 – 3m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	-		Date installed: -	
3. Benchmark	Bolt in concrete			
BM Assumed Datum: 4.982m		N.M.M.S.L: -	TBM: –	
4. Control	Permanent consisting of rock boulders across the river with further rapids Down Stream			
5. Access	Accessible throughout the year about 133km from Iringa town to the station via Iringa – Dar es Salaam road			
Records	Period		Quality	
Water Level:	01/01/2010 - 31/12/2019		2.2.3	
Discharge:	01/01/2010 - 31/12/2019		2.2.3	
Extremes:	Max. Recorded	43.610m³/sec	On	WL 2.82m
	Min. Recorded	-	On	WL
Remarks				


Mwega River at Malolo
Station No. 1KA57A
36°36'0"E
36°42'0"E
7°0'0"S
7°12'0"S
7°18'0"S
7°24'0"S
N
Mwega River
Malolo
1KA57A
To Ruaha Mbuyuni
To Mikumi
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Catchment Boundary
0
2.5
5
10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2010
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.174	0.782	1.006	1.169	3.324	1.418	1.211	0.964	0.917	0.763	0.754	0.730
2	1.324	0.726	0.970	1.140	2.523	1.363	1.241	0.964	0.891	0.764	0.730	0.733
3	1.738	0.688	1.116	1.170	2.374	1.413	1.200	1.001	0.895	0.741	0.728	0.723
4	1.854	0.738	0.979	1.163	2.133	1.373	1.195	0.983	0.945	0.734	0.685	0.685
5	1.434	0.870	1.095	1.339	1.918	1.314	1.209	0.961	0.917	0.731	0.682	0.682
6	1.678	1.179	1.450	1.294	1.942	1.277	1.144	0.987	0.891	0.729	0.686	0.711
7	1.382	1.355	1.116	1.561	2.220	1.237	1.195	1.014	0.894	0.706	0.738	0.907
8	1.063	3.025	2.469	1.208	2.122	1.188	1.190	0.990	0.885	0.682	0.741	1.598
9	1.067	2.940	1.817	1.164	1.837	1.359	1.110	1.001	0.838	0.685	0.727	0.988
10	1.573	1.518	1.576	1.135	1.687	1.633	1.074	1.004	0.840	0.726	0.695	3.672
11	1.843	1.179	1.501	1.074	1.538	1.573	1.082	1.004	0.838	0.704	1.339	2.001
12	1.769	1.226	1.440	1.017	1.485	1.452	1.128	0.983	0.838	0.682	1.364	0.902
13	1.400	2.945	1.210	1.013	1.495	1.379	1.114	0.956	0.835	0.679	1.037	1.162
14	1.169	1.727	1.086	1.455	1.514	1.304	1.189	0.951	0.790	0.639	1.181	0.986
15	1.104	1.392	1.163	1.367	1.554	1.223	1.139	0.951	0.787	0.635	1.135	0.865
16	1.033	1.169	1.087	1.213	1.488	1.276	1.131	0.942	0.784	0.639	1.143	0.787
17	0.851	1.002	1.155	1.760	1.415	1.303	1.077	0.895	0.744	0.725	1.097	0.744
18	0.810	1.137	1.135	1.334	1.348	1.310	1.069	0.891	0.741	0.730	0.856	0.741
19	0.740	1.283	1.104	1.204	1.335	1.308	1.073	0.888	0.764	0.728	0.831	0.730
20	0.689	2.470	1.045	1.194	1.280	1.276	1.074	0.846	0.787	0.685	0.793	0.735
21	0.689	2.304	1.144	1.135	1.262	1.246	1.074	0.840	0.784	0.682	0.832	0.732
22	0.747	1.794	1.275	1.078	1.576	1.219	1.076	0.838	0.744	0.705	0.790	0.743
23	0.822	2.475	1.397	1.112	2.896	1.268	1.073	0.838	0.741	0.740	0.764	0.790
24	1.066	1.514	1.931	1.200	2.066	1.219	1.065	0.867	0.735	0.741	0.741	0.923
25	1.201	1.210	1.543	1.105	1.714	1.219	1.017	0.891	0.729	0.706	0.736	1.052
26	1.383	1.110	1.513	1.074	1.843	1.242	1.011	0.888	0.729	0.714	0.733	0.848
27	1.633	1.068	1.671	1.262	1.936	1.215	0.964	0.846	0.729	1.343	0.731	0.750
28	1.465	1.017	1.554	3.578	1.824	1.215	0.964	0.843	0.729	1.364	0.728	0.811
29	1.342		1.352	3.784	1.770	1.212	1.011	0.867	0.725	1.037	0.740	0.835
30	1.204		1.296	3.359	1.692	1.204	1.014	0.917	0.726	1.181	0.735	0.789
31	1.115		1.202		1.132		1.011	0.944		1.112		0.744
Mean	1.238	1.494	1.335	1.455	1.814	1.308	1.101	0.928	0.807	0.788	0.849	0.971
Flow (MCM)	3.315	3.615	3.577	3.772	4.859	3.390	2.948	2.485	2.091	2.111	2.201	2.601
Maximum	1.854	3.025	2.469	3.784	3.324	1.633	1.241	1.014	0.945	1.364	1.364	3.672
Minimum	0.689	0.688	0.970	1.013	1.132	1.188	0.964	0.838	0.725	0.635	0.682	0.682
Runoff (mm)	16.573	18.076	17.884	18.861	24.297	16.951	14.742	12.423	10.453	10.555	11.004	13.003

Flow (cumecs)

Annual Statistics

Maximum: 3.784 Minimum: 0.635 Mean: 1.174 cumecs
Total: 37.023 MCM Runoff: 185.115 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2011
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.836	0.641	0.732	1.275	1.712	1.691	1.082	0.960	0.788	0.784	0.593	0.685
2	0.836	0.642	0.731	1.254	1.892	1.801	1.074	0.961	0.813	0.744	0.593	0.682
3	0.740	0.727	0.727	1.313	1.844	1.419	1.071	0.961	0.763	0.737	0.593	0.679
4	0.708	0.707	0.740	3.055	1.819	1.389	1.068	0.959	0.724	0.731	0.631	0.639
5	0.743	0.685	0.757	2.541	1.743	1.544	1.041	0.956	0.685	0.727	0.659	0.639
6	1.250	0.729	1.074	2.949	1.810	1.436	1.011	0.954	0.682	0.723	0.637	0.716
7	1.409	0.741	1.169	3.050	1.826	1.421	0.964	0.925	0.709	0.685	0.635	0.885
8	1.880	0.804	1.220	2.143	1.619	1.589	0.987	0.919	0.733	0.679	0.641	0.966
9	1.434	1.010	1.927	2.084	2.051	1.469	1.043	0.916	0.730	0.641	0.709	1.021
10	1.365	2.009	0.969	1.962	1.962	1.320	1.041	0.870	0.727	0.641	0.727	1.175
11	1.017	1.413	0.865	2.262	1.671	1.272	1.011	0.864	0.704	0.766	0.685	1.226
12	1.033	1.159	0.833	2.021	1.828	1.219	0.964	0.840	0.682	1.208	0.771	1.866
13	1.314	0.754	0.790	2.752	1.944	1.215	0.960	0.838	0.682	1.787	1.730	6.331
14	2.410	0.735	0.764	2.083	1.823	1.212	0.955	0.838	0.706	1.424	1.385	2.942
15	3.849	0.797	0.758	1.694	1.773	1.204	0.964	0.842	0.741	1.015	1.385	2.122
16	3.104	0.695	1.966	4.788	1.775	1.197	1.011	0.835	0.737	0.845	1.127	1.527
17	1.119	1.369	3.269	3.061	1.812	1.190	1.014	0.833	0.730	0.835	1.324	1.190
18	1.089	1.854	1.340	2.678	1.821	1.139	1.014	0.790	0.729	0.787	1.107	0.940
19	0.920	4.109	2.293	3.243	1.835	1.139	1.014	0.784	0.726	0.744	0.983	1.366
20	0.836	2.317	2.410	3.382	1.931	1.195	1.011	0.744	0.740	0.741	0.865	1.981
21	0.767	1.472	2.137	3.562e	1.766	1.202	0.964	0.741	0.741	0.738	0.790	2.335
22	0.741	1.065	2.510	2.911	1.812	1.331	0.961	0.741	0.741	0.737	0.764	2.701
23	0.735	0.860	1.973	2.577	1.782	1.292	0.961	0.733	0.796	0.730	0.737	9.164
24	0.704	0.744	1.893	3.260	1.745	1.250	0.961	0.726	1.413	0.704	0.706	2.908
25	0.661	0.775	2.017	2.372	1.777	1.212	0.961	0.725	0.939	0.682	0.685	1.880
26	0.698	0.889	1.665	1.884	1.739	1.204	0.959	0.725	0.860	0.679	0.725	1.650
27	0.796	0.788	1.292	1.868	1.727	1.197	0.954	0.704	0.787	0.643	0.685	1.529
28	0.685	0.744	1.207	1.925	1.692	1.199	0.954	0.682	0.744	0.638	0.682	1.477
29	0.661		1.195	1.956	1.614	1.164	0.949	0.682	0.741	0.637	0.702	2.461
30	0.637		1.214	1.867	1.611	1.132	0.946	0.682	0.764	0.636	0.726	2.643
31	0.634		1.208		1.579		0.944	0.686		0.613		2.280
Mean	1.149	1.115	1.408	2.459	1.785	1.308	0.994	0.820	0.769	0.796	0.833	1.955
Flow (MCM)	3.077	2.698	3.771	6.374	4.781	3.391	2.662	2.196	1.992	2.132	2.158	5.236
Maximum	3.849	4.109	3.269	4.788	2.051	1.801	1.082	0.961	1.413	1.787	1.730	9.164
Minimum	0.634	0.641	0.727	1.254	1.579	1.132	0.944	0.682	0.682	0.613	0.593	0.639
Runoff (mm)	15.384	13.492	18.854	31.869	23.905	16.953	13.311	10.979	9.960	10.662	10.792	26.182

Flow (cumecs)

Annual Statistics

Maximum: 9.164 Minimum: 0.593 Mean: 1.283 cumecs
Total: 40.446 MCM Runoff: 202.229 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 6:55:49 S | Longitude: 35:23:51 E | Elevation: 1237.0 metres | Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.569	1.214	1.448	1.196	1.399	1.215	1.100	0.891	0.741	-	-	-
2	2.114	1.215	1.218	1.370	1.346	1.210	1.074	0.891	0.741	-	-	-
3	1.988	1.210	1.214	1.584	1.364	1.202	1.074	0.891	0.741	-	-	-
4	1.662	1.202	1.196	1.436	1.572	1.193	1.071	0.865	0.737	-	-	-
5	1.563	1.201	1.139	1.438	1.938	1.144	1.065	0.838	0.733	-	-	-
6	1.688	1.195	1.236	1.752	2.073	1.210	1.017	0.840	0.730	-	-	-
7	1.553	1.165	2.099	1.871	2.208	1.215	1.014	0.846	0.729	-	-	-
8	1.708	1.168	1.789	2.184	1.720	1.210	1.014	0.916	0.725	-	-	-
9	1.584	1.164	1.553	1.918	1.571	1.202	0.987	0.944	0.726	-	-	-
10	2.322	1.135	1.684	1.537	1.511	1.199	0.961	0.947	0.740	-	-	-
11	1.495	1.131	1.715	1.533	1.616	1.202	0.961	0.949	0.741	-	-	-
12	1.428	1.081	1.504	1.501	1.752	1.210	0.961	0.939	0.741	-	-	-
13	1.936	1.131	2.084	1.455	1.844	1.209	0.956	0.895	0.737	-	-	-
14	1.579	1.135	2.035	1.411	1.978	1.194	0.951	0.891	0.733	-	-	-
15	1.520	1.107	1.738	1.343	1.764	1.198	0.949	0.869	0.728	-	-	-
16	1.834	1.079	1.390	1.223	1.519	1.195	0.948	0.839	0.685	-	-	-
17	1.599	1.076	1.478	1.306	1.487	1.209	0.960	0.840	0.682	-	-	-
18	2.151	1.049	1.770	1.852	1.415	1.207	0.961	0.838	0.682	-	-	-
19	1.884	1.069	2.228	1.656	1.352	1.202	0.964	0.840	0.686	-	-	-
20	1.682	1.144	1.782	1.587	1.313	1.196	1.001	0.893	0.738	-	-	-
21	1.620	1.315	1.351	1.345	1.272	1.190	0.978	0.951	0.741	-	-	-
22	1.381	1.667	1.289	1.219	1.219	1.139	0.949	0.947	0.730	-	-	-
23	1.317	1.463	1.430	1.296	1.215	1.135	0.947	0.941	0.727	-	-	-
24	1.376	1.721	1.673	1.223	1.215	1.132	0.947	0.895	0.725	-	-	-
25	1.421	2.164	1.573	1.219	1.205	1.082	0.944	0.891	0.723	-	-	-
26	1.378	1.961	1.420	1.276	1.204	1.078	0.950	0.891	0.685	-	-	-
27	1.250	1.854	1.300	1.302	1.210	1.074	0.953	0.867	0.682	-	-	-
28	1.215	2.651	1.215	1.213	1.242	1.074	0.961	0.838	0.682	-	-	-
29	1.215	2.353	1.205	1.220	1.218	1.076	0.954	0.812	0.682	-	-	-
30	1.210		1.201	1.574	1.207	1.080	0.943	0.764	0.682	-	-	-
31	1.208		1.195		1.241		0.895	0.741		-		-
Mean	1.627	1.380	1.521	1.468	1.490	1.169	0.981	0.878	0.719	-	-	-
Flow (MCM)	4.359	3.458	4.074	3.805	3.991	3.031	2.627	2.350	1.863	-	-	-
Maximum	2.569	2.651	2.228	2.184	2.208	1.215	1.100	0.951	0.741	-	-	-
Minimum	1.208	1.049	1.139	1.196	1.204	1.074	0.895	0.741	0.682	-	-	-
Runoff (mm)	21.794	17.289	20.370	19.025	19.953	15.155	13.137	11.752	9.313	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2013
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	-	-	0.555	0.767
2	-	-	-	-	-	-	-	-	-	-	0.554	3.965
3	-	-	-	-	-	-	-	-	-	-	0.547	1.305
4	-	-	-	-	-	-	-	-	-	-	0.543	0.847
5	-	-	-	-	-	-	-	-	-	-	0.523	0.683
6	-	-	-	-	-	-	-	-	-	-	0.505	0.577
7	-	-	-	-	-	-	-	-	-	-	0.486	0.557
8	-	-	-	-	-	-	-	-	-	-	0.466	0.558
9	-	-	-	-	-	-	-	-	-	-	0.463	0.807
10	-	-	-	-	-	-	-	-	-	-	0.431	1.505
11	-	-	-	-	-	-	-	-	-	-	0.402	0.747
12	-	-	-	-	-	-	-	-	-	-	0.398	0.660
13	-	-	-	-	-	-	-	-	-	-	0.395	0.641
14	-	-	-	-	-	-	-	-	-	-	0.413	0.630
15	-	-	-	-	-	-	-	-	-	-	0.400	0.560
16	-	-	-	-	-	-	-	-	-	-	0.399	0.551
17	-	-	-	-	-	-	-	-	-	-	0.394	0.546
18	-	-	-	-	-	-	-	-	-	-	0.390	0.539
19	-	-	-	-	-	-	-	-	-	-	0.374	0.997
20	-	-	-	-	-	-	-	-	-	-	0.366	0.863
21	-	-	-	-	-	-	-	-	-	-	0.432	0.742
22	-	-	-	-	-	-	-	-	-	-	0.394	0.672
23	-	-	-	-	-	-	-	-	-	-	0.389	0.592
24	-	-	-	-	-	-	-	-	-	-	0.403	0.616
25	-	-	-	-	-	-	-	-	-	-	0.544	2.635
26	-	-	-	-	-	-	-	-	-	-	0.639	2.351
27	-	-	-	-	-	-	-	-	-	-	2.058	0.904
28	-	-	-	-	-	-	-	-	-	-	1.287	0.678
29	-		-	-	-	-	-	-	-	-	1.167	0.961
30	-		-	-	-	-	-	-	-	-	0.778	0.660
31	-		-		-		-	-		-		0.663
Mean	-	-	-	-	-	-	-	-	-	-	0.570	0.961
Flow (MCM)	-	-	-	-	-	-	-	-	-	-	1.477	2.573
Maximum	-	-	-	-	-	-	-	-	-	-	2.058	3.965
Minimum	-	-	-	-	-	-	-	-	-	-	0.366	0.539
Runoff (mm)	-	-	-	-	-	-	-	-	-	-	7.385	12.864

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2014
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.790	0.577	0.726	1.309	2.619	1.821	1.336	1.199	1.075	0.842	1.417	0.917
2	1.361	0.551	0.671	1.087	2.690	1.815	1.335	1.197	1.277	0.842	2.283	0.952
3	1.182	0.545	0.806	1.072	2.610	1.820	1.280	1.211	1.370	0.838	1.490	2.483
4	0.814	0.559	0.833	1.071	2.413	1.817	1.310	1.205	1.249	0.838	1.109	3.110
5	0.642	0.688	0.840	1.076	2.483	1.810	1.344	1.193	1.194	0.850	0.978	1.531
6	0.610	0.788	0.817	1.080	2.520	1.807	1.308	1.141	1.135	0.953	0.951	1.242
7	0.771	0.616	0.724	1.136	3.022	1.815	1.246	1.135	1.078	0.952	0.924	1.131
8	0.732	0.719	1.114	1.170	4.516	1.832	1.215	1.129	1.132	0.920	0.916	1.021
9	0.759	0.590	1.207	1.198	4.185	1.807	1.210	1.077	1.138	0.921	0.870	0.987
10	0.959	0.669	0.914	1.609	3.009	1.737	1.202	1.069	1.082	0.919	0.860	0.952
11	0.793	0.582	1.255	1.485	2.757	1.786	1.199	1.071	1.074	0.891	0.952	0.944
12	0.737	0.592	2.261	2.632	2.614	1.831	1.198	1.074	1.074	0.865	3.025	0.895
13	0.960	0.571	1.406	3.798	2.599	1.812	1.214	1.071	1.074	0.863	1.324	0.865
14	1.170	0.569	1.875	2.880	2.659	1.732	1.215	1.065	1.171	0.841	0.994	0.836
15	1.314	0.605	1.743	2.919	2.640	1.663	1.246	1.017	1.343	0.834	0.902	0.810
16	0.948	0.787	1.496	2.497	2.435	1.648	1.272	1.018	1.847	0.834	0.891	0.770
17	0.986	2.062	1.303	4.461	2.289	1.580	1.219	1.070	1.380	0.836	0.942	0.804
18	1.616	1.300	1.341	3.921	2.213	1.575	1.210	1.074	1.076	0.817	0.944	0.764
19	1.083	0.964	1.391	4.907	2.233	1.540	1.205	1.073	0.964	0.978	0.917	0.737
20	0.875	1.633	2.135	4.069	2.102	1.506	1.209	1.069	0.952	1.124	0.870	0.735
21	1.025	1.348	2.931	2.600	2.233	1.510	1.207	1.068	0.951	0.937	0.891	0.783
22	1.022	1.143	3.098	3.110	2.199	1.575	1.204	1.065	0.947	0.874	1.058	0.848
23	1.298	0.850	2.154	6.140	2.131	1.643	1.199	1.017	0.946	0.895	1.035	1.294
24	0.986	0.713	1.794	5.587	2.046	1.545	1.196	1.014	0.942	0.932	0.961	1.022
25	0.773	0.728	1.605	3.642	2.002	1.500	1.194	0.985	0.939	0.863	0.891	0.848
26	0.716	0.703	1.736	3.392	2.029	1.496	1.190	0.954	0.895	0.779	0.842	0.838
27	0.876	0.679	1.479	2.688	1.912	1.487	1.139	0.951	0.891	0.877	0.889	0.790
28	0.774	0.646	2.005	2.787	1.878	1.477	1.140	0.947	0.888	1.277	0.831	1.008
29	0.709		2.477	2.602	1.907	1.415	1.210	0.947	0.845	1.436	0.973	1.243
30	0.661		2.299	2.461	1.839	1.295	1.215	0.944	0.839	1.245	0.954	0.954
31	0.637		2.944		1.834		1.205	0.947		1.163		0.923
Mean	0.922	0.813	1.593	2.680	2.472	1.657	1.228	1.064	1.092	0.937	1.096	1.066
Flow (MCM)	2.469	1.968	4.266	6.945	6.620	4.294	3.289	2.851	2.831	2.509	2.841	2.854
Maximum	1.616	2.062	3.098	6.140	4.516	1.832	1.344	1.211	1.847	1.436	3.025	3.110
Minimum	0.610	0.545	0.671	1.071	1.834	1.295	1.139	0.944	0.839	0.779	0.831	0.735
Runoff (mm)	12.347	9.840	21.332	34.727	33.098	21.469	16.446	14.254	14.155	12.544	14.206	14.272

Flow (cumecs)

Annual Statistics

Maximum: 6.140 Minimum: 0.545 Mean: 1.385 cumecs
Total: 43.675 MCM Runoff: 218.376 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2015
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.919	0.998	1.396	1.481	1.377	1.335	0.960	0.846	0.737	0.551	0.554	0.631
2	0.914	1.179	1.127	1.384	1.187	1.280	0.961	0.843	0.734	0.545	0.547	0.593
3	0.881	0.998	0.840	1.371	1.194	1.272	0.959	0.840	0.731	0.539	0.678	0.557
4	1.009	1.013	0.731	1.254	1.317	1.218	0.956	0.835	0.725	0.507	1.133	0.548
5	1.005	0.950	1.172	1.267	2.654	1.205	0.954	0.790	0.685	0.527	0.823	0.545
6	0.892	0.919	1.466	1.917	2.709	1.199	0.951	0.787	0.682	0.546	0.734	0.543
7	0.865	0.910	1.882	1.496	2.328	1.196	0.949	0.784	0.682	0.542	0.720	0.525
8	0.839	0.850	1.626	1.189	2.510	1.164	0.947	0.744	0.682	0.545	0.685	0.546
9	0.810	0.856	1.182	1.191	2.268	1.135	0.947	0.741	0.661	0.554	0.679	0.555
10	0.887	0.787	0.987	1.108	1.753	1.104	0.944	0.741	0.643	0.551	0.643	0.550
11	0.926	0.744	0.841	1.080	1.411	1.044	0.942	0.741	0.679	0.545	0.638	0.613
12	0.801	0.741	0.744	1.163	1.302	0.987	0.939	0.741	0.679	0.542	0.635	1.717
13	1.035	0.734	0.732	1.087	1.624	0.956	0.895	0.741	0.643	0.554	0.627	1.496
14	0.963	0.729	0.704	1.074	1.838	0.949	0.891	0.737	0.640	0.554	0.551	0.751
15	0.944	0.726	0.686	1.044	1.789	0.942	0.891	0.733	0.637	0.546	0.542	0.639
16	0.843	0.743	0.805	0.987	1.434	0.943	0.888	0.733	0.637	0.513	0.547	0.618
17	0.836	0.789	1.799	1.020	1.317	0.960	0.846	0.730	0.636	0.587	0.634	0.686
18	0.874	1.105	1.371	1.046	1.340	0.961	0.840	0.729	0.631	0.601	0.637	0.730
19	0.987	0.959	1.048	0.987	1.339	0.958	0.838	0.726	0.596	0.714	0.631	0.726
20	1.017	1.081	1.431	0.952	1.307	0.952	0.865	0.685	0.591	0.682	0.596	0.688
21	0.988	0.775	2.078	0.978	1.246	0.949	0.870	0.682	0.557	0.637	0.574	0.840
22	1.171	0.734	4.175	1.427	1.210	0.946	0.869	0.709	0.555	0.596	0.555	1.576
23	1.196	0.775	4.075	1.547	1.202	0.944	0.862	0.730	0.554	0.574	0.551	1.089
24	0.963	0.732	3.165	1.929	1.196	0.960	0.863	0.729	0.548	0.555	0.545	0.770
25	0.949	0.726	3.654	1.519	1.199	0.961	0.845	0.725	0.548	0.596	0.543	0.728
26	0.939	0.734	2.985	1.885	1.207	0.960	0.865	0.725	0.545	0.632	0.585	0.663
27	0.873	0.789	3.660	1.700	1.207	0.952	0.860	0.726	0.550	0.593	1.805	0.636
28	0.964	1.531	2.758	1.450	1.255	0.947	0.838	0.740	0.631	0.557	0.981	0.593
29	1.061		1.931	1.781	1.910	0.951	0.861	0.741	0.632	0.554	0.711	0.557
30	1.159		1.689	1.589	1.407	0.954	0.868	0.741	0.593	0.548	0.639	0.674
31	1.224		1.511		1.344		0.888	0.741		0.546		1.269
Mean	0.959	0.879	1.750	1.330	1.561	1.043	0.899	0.750	0.635	0.569	0.691	0.763
Flow (MCM)	2.569	2.126	4.687	3.447	4.180	2.703	2.407	2.008	1.645	1.524	1.790	2.044
Maximum	1.224	1.531	4.175	1.929	2.709	1.335	0.961	0.846	0.737	0.714	1.805	1.717
Minimum	0.801	0.726	0.686	0.952	1.187	0.942	0.838	0.682	0.545	0.507	0.542	0.525
Runoff (mm)	12.845	10.631	23.436	17.237	20.899	13.516	12.033	10.039	8.227	7.618	8.952	10.218

Flow (cumecs)

Annual Statistics

Maximum: 4.175 Minimum: 0.507 Mean: 0.986 cumecs
Total: 31.081 MCM Runoff: 155.407 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2016
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.599	1.736	0.934	2.313	2.485	1.868	-	-	-	-	0.733	0.640
2	1.077	1.288	0.790	1.996	2.013	1.828	-	-	-	-	0.733	0.640
3	0.860	1.018	0.747	1.559	1.840	1.817	-	-	-	-	0.730	0.643
4	4.235	1.159	0.831	3.101	2.556	1.824	-	-	-	-	0.729	0.950
5	4.924	1.620	1.473	3.878	2.876	1.828	-	-	-	-	0.729	0.934
6	2.054	1.183	1.367	3.263	2.656	1.820	-	-	-	-	0.725	0.790
7	1.419	1.270	1.166	3.234	2.576	1.777	-	-	-	-	0.784	0.744
8	0.990	2.224	1.098	3.420	2.490	1.765	-	-	-	-	0.842	0.741
9	0.724	2.087	1.271	2.439	2.435	1.700	-	-	-	-	0.816	0.731
10	0.873	1.836	2.004	1.756	2.337	1.687	-	-	-	-	0.807	0.685
11	1.326	1.732	1.481	1.628	2.246	1.650	-	-	-	-	0.767	0.661
12	1.428	2.078	1.138	1.851	2.191	1.650	-	-	-	-	0.764	0.640
13	1.207	1.660	0.883	1.780	2.191	1.585	-	-	-	-	0.761	0.913
14	4.701	1.821	0.943	2.257	2.202	1.647	-	-	-	-	0.761	0.955
15	2.850	1.505	1.056	5.024	2.194	1.653	-	-	-	-	0.814	0.747
16	1.061	1.282	1.204	6.194	2.176	1.663	-	-	-	-	1.108	0.689
17	2.097	1.072	1.235	5.040	2.176	1.727	0.843	-	-	0.843	0.963	0.730
18	1.466	1.343	1.102	3.790	2.125	1.737	0.842	-	-	0.842	0.890	0.727
19	1.385	1.149	0.957	2.655	2.048	1.812	0.838	-	-	0.838	0.787	0.685
20	1.041	0.960	0.978	1.791	1.996	1.817	0.838	-	-	0.838	0.744	0.682
21	0.793	0.868	0.925	1.191	1.947	1.814	0.838	-	-	0.838	0.737	0.679
22	0.887	0.804	0.929	1.100	1.878	1.810	0.834	-	-	0.834	0.733	0.643
23	2.524	0.744	1.181	0.894	1.927	1.807	0.831	-	-	0.831	0.733	0.640
24	2.018	0.737	2.121	5.434	1.852	1.769	0.790	-	-	0.790	0.730	0.637
25	1.437	0.753	1.232	3.938	1.868	1.732	0.787	-	-	0.787	0.726	0.633
26	1.242	0.717	0.927	3.120	1.879	1.695	0.784	-	-	0.784	0.685	0.633
27	1.171	0.814	0.890	2.963	1.950	1.653	0.744	-	-	0.744	0.682	0.613
28	1.200	0.964	1.115	3.383	1.852	1.645	0.741	-	-	0.741	0.661	0.593
29	1.184	1.173	1.233	3.071	1.684	1.575	0.739	-	-	0.739	0.638	0.591
30	0.398		1.874	2.815	1.826	1.510	0.734	-	-	0.734	0.637	0.557
31	0.441		1.498		1.871		0.731	-		0.732		0.597
Mean	1.633	1.296	1.180	2.896	2.140	1.729	-	-	-	-	0.765	0.701
Flow (MCM)	4.373	3.248	3.161	7.506	5.732	4.481	-	-	-	-	1.983	1.879
Maximum	4.924	2.224	2.121	6.194	2.876	1.868	-	-	-	-	1.108	0.955
Minimum	0.398	0.717	0.747	0.894	1.684	1.510	-	-	-	-	0.637	0.557
Runoff (mm)	21.864	16.240	15.805	37.531	28.661	22.405	-	-	-	-	9.914	9.394

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2017
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.637	0.829	1.667	1.944	2.939	2.938	2.172	1.655	1.354	1.135	1.736	1.073
2	0.615	0.789	1.372	1.418	2.817	3.288	2.166	1.652	1.350	1.135	1.901	1.065
3	0.614	1.326	1.884	1.098	3.370	2.938	2.093	1.646	1.340	1.170	1.494	1.017
4	0.916	1.170	2.295	1.082	2.815	2.519	2.088	1.646	1.280	1.199	1.707	1.011
5	0.743	1.074	2.118	1.182	3.464	2.681	2.083	1.644	1.276	1.090	1.381	0.964
6	0.676	1.014	2.378	1.352	7.842	2.616	2.011	1.580	1.246	1.132	1.411	0.964
7	0.562	0.963	1.368	1.254	8.909	2.595	2.006	1.571	1.215	1.135	1.347	1.031
8	0.633	0.944	1.864	1.993	9.529	2.590	1.994	1.510	1.215	1.132	1.219	1.464
9	1.537	0.892	3.093	2.306	10.127	2.581	1.917	1.505	1.205	1.082	1.215	1.360
10	0.981	0.836	1.897	1.758	6.863	2.577	1.912	1.494	1.202	1.074	1.202	1.299
11	1.775	0.787	1.582	2.037	5.349	2.531	1.912	1.488	1.200	1.074	1.199	1.215
12	1.303	0.743	1.187	3.039	7.271	2.484	1.873	1.493	1.214	1.074	1.193	1.199
13	0.806	0.725	1.074	2.027	7.566	2.439	1.834	1.533	1.215	1.078	1.139	1.167
14	0.737	0.750	0.991	1.591	8.475	2.395	1.834	1.642	1.215	1.079	1.131	1.131
15	0.731	0.644	0.960	3.227	5.156	2.428	1.828	1.653	1.205	1.076	1.077	1.070
16	0.725	0.610	1.116	4.510	3.222	2.379	1.818	1.576	1.204	1.077	1.068	0.971
17	0.685	0.764	3.636	3.068	3.729	2.295	1.827	1.509	1.202	1.131	1.017	1.001
18	0.679	0.597	2.415	2.717	3.809	2.289	1.824	1.494	1.202	1.131	1.049	1.135
19	0.661	0.553	1.436	5.039	3.799	2.282	1.821	1.493	1.199	1.077	1.722	1.220
20	0.618	0.645	1.296	6.797	3.798	2.193	1.817	1.488	1.235	1.070	2.406	1.297
21	0.641	2.664	1.095	7.023	3.735	2.186	1.814	1.487	1.276	1.018	2.972	1.202
22	0.799	3.766	1.963	5.394	3.671	2.180	1.810	1.482	1.246	1.042	1.644	1.139
23	0.718	2.953	1.718	6.651	3.614	2.203	1.802	1.493	1.215	1.191	1.383	1.132
24	0.703	2.555	1.287	5.853	3.556	2.581	1.737	1.493	1.215	0.997	1.277	1.080
25	0.636	2.747	1.149	4.575	3.545	3.355	1.732	1.488	1.210	1.740	1.219	1.327
26	0.559	1.347	1.227	7.455	3.526	2.915	1.695	1.487	1.202	1.515	1.215	4.123
27	0.552	1.084	1.219	5.053	3.482	2.598	1.658	1.482	1.199	1.447	1.214	2.217
28	0.617	1.163	3.488	4.740	2.782	2.473	1.653	1.477	1.193	1.311	1.198	1.374
29	0.762		3.242	3.717	2.363	2.211	1.652	1.419	1.139	1.219	1.191	1.214
30	0.759		3.421	4.349	2.532	2.179	1.649	1.415	1.135	1.207	1.081	1.201
31	1.003		3.477		2.813		1.649	1.411		1.273		1.277
Mean	0.787	1.248	1.901	3.475	4.725	2.531	1.861	1.529	1.227	1.165	1.400	1.288
Flow (MCM)	2.107	3.019	5.090	9.007	12.655	6.559	4.984	4.096	3.180	3.120	3.629	3.451
Maximum	1.775	3.766	3.636	7.455	10.127	3.355	2.172	1.655	1.354	1.740	2.972	4.123
Minimum	0.552	0.553	0.960	1.082	2.363	2.179	1.649	1.411	1.135	0.997	1.017	0.964
Runoff (mm)	10.534	15.093	25.452	45.035	63.273	32.797	24.918	20.479	15.899	15.599	18.147	17.254

Flow (cumecs)

Annual Statistics

Maximum: 10.127 Minimum: 0.552 Mean: 1.928 cumecs
Total: 60.800 MCM Runoff: 303.998 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A **Year:** 2018
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.366	1.166	0.942	3.089	1.258	1.515	1.198	0.948	0.741	0.741	0.739	0.743
2	1.195	1.044	1.058	1.327	1.522	1.487	1.194	0.895	0.741	0.741	0.731	0.710
3	1.281	0.964	1.659	2.570	1.526	1.477	1.139	0.888	0.734	0.730	0.727	0.682
4	1.165	0.954	2.986	3.128	1.447	1.419	1.104	0.845	0.732	0.729	0.708	0.698
5	1.287	0.945	2.548	1.935	1.380	1.411	1.066	0.838	0.808	0.704	0.704	0.643
6	1.439	0.916	1.454	1.229	1.311	1.354	0.968	0.812	1.399	0.682	0.767	0.629
7	1.408	0.841	1.254	1.131	1.188	1.347	0.960	0.787	1.138	0.714	0.739	0.562
8	1.472	0.840	1.301	1.010	1.237	1.344	0.952	0.787	0.930	0.764	0.737	0.593
9	1.406	0.811	1.583	1.176	1.653	1.335	0.947	0.784	0.840	0.803	0.712	0.569
10	1.197	1.068	3.567	1.323	1.978	1.280	0.917	0.744	0.790	0.788	0.689	0.560
11	1.224	3.787	1.540	1.224	1.868	1.276	0.926	0.747	0.784	0.763	0.712	0.791
12	1.520	0.835	1.503	1.072	3.024	1.272	0.960	0.834	0.744	0.734	0.760	2.757
13	1.424	0.770	1.573	1.340	2.590	1.219	0.947	0.873	0.741	0.714	0.787	1.384
14	1.345	0.825	1.526	2.138	2.188	1.215	0.939	0.979	0.741	0.732	0.800	1.152
15	1.319	0.659	1.499	2.495	2.169	1.210	0.895	0.946	0.730	0.736	0.786	1.205
16	1.249	0.869	2.881	5.126	5.982	1.202	0.899	0.895	0.727	0.736	0.742	1.237
17	1.358	0.837	1.823	6.602	3.907	1.204	1.006	0.891	0.729	0.734	0.797	1.123
18	1.195	0.767	1.312	2.854	2.567	1.204	1.011	0.891	0.704	0.727	0.743	1.536
19	1.194	0.737	1.259	4.512	1.901	1.199	0.964	0.888	0.679	0.733	0.729	2.144
20	1.220	0.731	1.694	2.376	1.364	1.199	0.960	0.846	0.648	0.741	0.708	2.009
21	1.236	0.728	7.302	1.576	1.152	1.194	0.952	0.842	0.719	0.768	0.701	4.400
22	1.397	0.763	1.675	1.369	1.292	1.190	0.947	0.838	0.685	0.814	0.662	6.402
23	1.465	0.764	1.206	1.302	1.736	1.139	0.951	0.838	0.679	0.858	0.657	2.861
24	1.561	0.804	1.240	1.558	1.434	1.135	0.945	0.834	0.639	0.860	0.619	2.036
25	1.311	1.264	1.206	1.515	1.262	1.107	0.917	0.831	0.637	0.816	0.612	1.635
26	1.187	1.246	1.231	1.295	1.463	1.076	0.895	0.790	0.643	0.808	0.576	1.347
27	1.310	0.753	1.150	1.293	1.231	1.044	0.947	0.784	0.727	0.747	0.572	1.218
28	1.442	0.767	1.123	1.266	1.208	1.014	0.953	0.744	0.731	0.741	0.590	1.152
29	2.025		0.966	1.437	1.396	0.987	0.990	0.741	0.733	0.729	0.556	1.218
30	1.313		0.948	1.247	1.344	0.976	1.033	0.734	0.738	0.778	0.561	1.170
31	1.356		1.194		1.298		0.964	0.734		0.782		1.044
Mean	1.351	0.981	1.749	2.051	1.835	1.234	0.982	0.833	0.767	0.756	0.698	1.491
Flow (MCM)	3.617	2.372	4.683	5.315	4.914	3.200	2.631	2.232	1.988	2.026	1.808	3.993
Maximum	2.025	3.787	7.302	6.602	5.982	1.515	1.198	0.979	1.399	0.860	0.800	6.402
Minimum	1.165	0.659	0.942	1.010	1.152	0.976	0.895	0.734	0.637	0.682	0.556	0.560
Runoff (mm)	18.087	11.860	23.416	26.575	24.570	15.998	13.153	11.159	9.941	10.128	9.040	19.963

Flow (cumecs)

Annual Statistics

Maximum: 7.302 Minimum: 0.556 Mean: 1.227 cumecs
Total: 38.700 MCM Runoff: 193.501 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA57A
Station Name: Mwega River at Malolo
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 6:55:49 S Longitude: 35:23:51 E Elevation: 1237.0 metres Area: 200.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.196	-	-	1.243	1.731	1.175	1.340	0.964	0.741	0.864	1.548	8.775
2	1.106	-	-	1.162	1.510	1.074	1.308	0.961	0.741	0.968	1.484	7.282
3	1.002	-	-	1.048	1.681	1.018	1.250	0.968	0.734	1.233	1.345	4.470
4	1.170	-	-	0.958	1.909	1.014	1.215	1.071	0.733	1.379	1.187	3.299
5	1.707	-	-	0.940	2.129	1.011	1.210	1.070	0.730	1.655	1.144	2.248
6	1.097	-	-	0.868	4.929	0.964	1.202	1.018	0.729	4.816	1.222	2.106
7	1.029	-	-	0.888	5.581	0.960	1.199	1.011	0.729	3.797	1.255	1.874
8	1.288	-	-	0.839	3.964	0.952	1.194	0.964	0.725	2.273	2.115	2.771
9	2.850	-	-	1.097	3.242	0.951	1.199	0.960	0.725	2.355	2.895	3.395
10	2.076	-	-	1.194	3.196	0.967	1.267	0.952	0.723	3.332	2.908	4.323
11	3.016	-	-	1.048	7.830	1.251	1.219	0.951	0.685	7.834	4.670	4.522
12	6.406	-	-	0.933	5.367	1.219	1.215	0.947	0.682	9.629	3.381	2.729
13	7.115	-	-	0.892	4.750	1.215	1.215	0.946	0.679	7.023	8.236	1.827
14	3.678	-	-	0.907	3.316	1.202	1.206	0.939	0.643	4.472	9.210	1.688
15	4.121	-	-	0.877	2.418	1.194	1.215	0.895	0.638	2.180	7.978	1.292
16	7.643	-	-	0.945	2.074	1.250	1.219	0.867	0.655	1.801	6.947	1.210
17	5.896	-	-	0.980	2.420	2.119	1.272	0.842	0.930	1.778	1.660	2.340
18	4.960	-	-	0.819	2.458	2.183	1.272	0.838	0.947	1.896	1.398	7.094
19	6.910	-	-	0.889	3.097	2.176	1.219	0.812	0.939	1.839	1.280	5.677
20	4.553	-	-	0.892	2.396	1.876	1.215	0.787	0.892	1.824	1.210	4.102
21	2.657	-	-	1.238	2.497	1.828	1.204	0.764	0.845	1.802	1.201	2.243
22	2.094	-	-	1.040	2.912	1.782	1.194	0.741	0.838	1.765	1.194	1.603
23	1.538	-	-	1.181	6.359	1.458	1.164	0.741	0.831	2.573	1.290	2.545
24	1.307	-	-	1.007	3.629	1.454	1.135	0.848	0.787	2.879	1.928	4.087
25	1.755	-	-	0.920	2.196	1.451	1.135	0.956	0.750	2.422	2.299	4.337
26	1.704	-	-	0.965	1.956	1.416	1.107	0.944	0.836	2.048	2.915	3.390
27	1.423	-	-	1.281	1.815	1.380	1.076	0.892	0.835	1.913	3.911	3.245
28	1.215	-	-	1.520	2.034	1.373	1.074	0.836	0.790	1.839	4.435	2.852
29	1.190		-	1.544	1.514	1.344	1.044	0.787	0.764	1.834	4.884	2.327
30	1.144		-	1.304	1.692	1.344	1.014	0.744	0.748	1.821	8.831	2.750
31	1.241		-		1.356		1.011	0.741		1.794		3.154
Mean	2.777	-	-	1.047	3.031	1.353	1.187	0.895	0.767	2.762	3.199	3.405
Flow (MCM)	7.438	-	-	2.715	8.118	3.508	3.180	2.398	1.989	7.399	8.291	9.120
Maximum	7.643	-	-	1.544	7.830	2.183	1.340	1.071	0.947	9.629	9.210	8.775
Minimum	1.002	-	-	0.819	1.356	0.951	1.011	0.741	0.638	0.864	1.144	1.210
Runoff (mm)	37.189	-	-	13.574	40.590	17.539	15.900	11.992	9.947	36.995	41.455	45.600

Flow (cumecs)

Annual Statistics

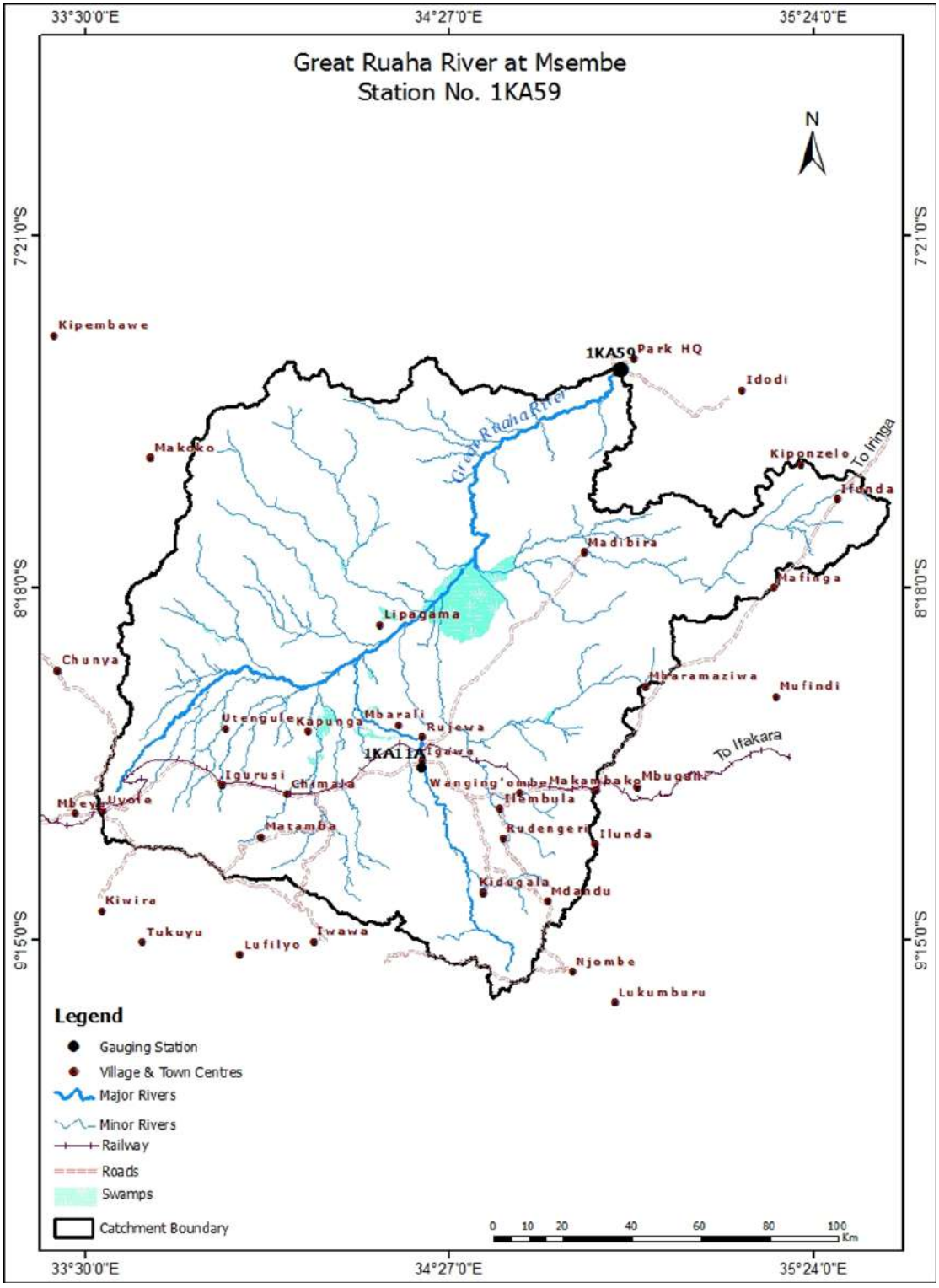
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Great Ruaha River at Msembe				
Station No: 1KA59			Established: 23/10/1963	
Coordinates:			Altitude (m.a.m.s.l): 838	
Lat: -7.7129	Long: 34.8963		Catchment Area (km²): 23,527	
Description of the Catchment:				
Scattered native settlement, cultivation, wood land and wooded grassland.				
Station Details				
1. Staff Gauges	Range: 0 – 6m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2013	
3. Benchmark	Nail in concrete beacon			
BM Assumed Datum: 5.808m		N.M.M.S.L: -	TBM: –	
4. Control	Permanent consists of rock boulders across the stream			
5. Access	Accessible throughout the year, about 122km from Iringa town to the station in Ruaha National Park via Iringa - Tungamalenga road			
Records	Period		Quality	
Water Level:	01/01/2015 - 31/12/2019		2.2.3	
Discharge:	01/01/2015 - 31/12/2019		2.2.3	
Extremes:	Max. Recorded	1396.829m³/sec	On	WL 4.580m
	Min. Recorded	0.00m³/sec	On	WL 0.00m
Remarks				


Great Ruaha River at Msembe
Station No. 1KA59
N
33°30'0"E
34°27'0"E
35°24'0"E
7°21'0"S
8°18'0"S
9°15'0"S
Kipembawe
1KA59
Park HQ
Idodi
Makoko
Great Ruaha River
Kipanzelo
To Iringa
Ifunda
Madibira
Mafinga
Lipagama
Chunya
Mufindi
Utengule
Kapunga
Mbarali
Rujewa
1KA11A
Igawa
To Ifakara
Igurusi
Chimala
Wanging'ombe
Makambako
Mbuguni
Mbeya
Uyole
Ilembula
Matamba
Rudenge
Ilunda
Kidugala
Mdandu
Kiwira
Tukuyu
Lufilyo
Iwawa
Njombe
Lukumburu
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Swamps
Catchment Boundary
0 10 20 40 60 80 100
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.685	72.205	92.100	133.511	80.000	17.888	7.486	2.651	0.627	0.028	0.000	0.000
2	7.862	78.544	94.675	132.554	77.205	17.593	7.172	2.539	0.591	0.024	0.000	0.000
3	16.596	83.941	95.797	131.582	70.512	16.864	6.859	2.493	0.556	0.022	0.000	0.000
4	25.624	85.807	96.616	130.358	68.622	16.642	6.651	2.402	0.541	0.029	0.000	0.000
5	34.754	93.050	98.034	129.396	66.734	18.369	6.484	2.311	0.521	0.023	0.000	0.000
6	40.787	103.893	99.064	128.418	62.778	15.884	6.338	2.222	0.458	0.018	0.000	0.000
7	59.000	106.200	99.900	126.941	59.906	15.140	6.150	2.166	0.430	0.014	0.000	0.000
8	78.906	108.564	99.434	126.168	57.743	14.614	5.899	2.124	0.397	0.010	0.000	0.000
9	96.005	110.748	102.758	125.726	55.031	14.129	5.546	2.090	0.362	0.007	0.000	0.000
10	127.270	103.122	102.110	121.608	51.906	13.420	5.304	2.045	0.329	0.005	0.000	0.000
11	166.964	101.112	102.313	120.290	49.427	13.174	5.128	1.972	0.282	0.002	0.000	0.000
12	216.232	99.933	102.944	119.392	47.330	12.491	4.378	1.799	0.258	0.000	0.000	0.000
13	181.027	98.965	106.078	118.702	46.062	12.073	4.806	1.643	0.236	0.000	0.000	0.000
14	136.129	97.951	106.460	117.904	44.556	11.771	4.717	1.603	0.214	0.000	0.000	0.000
15	102.750	97.753	105.817	117.128	42.949	11.435	4.637	1.550	0.192	0.000	0.000	0.000
16	84.590	96.731	106.445	116.520	41.453	11.457	4.515	1.510	0.163	0.000	0.000	0.000
17	82.322	95.552	110.601	115.421	36.620	16.126	4.391	1.476	0.128	0.000	0.000	0.000
18	58.484	94.754	111.690	111.399	34.409	11.012	4.248	1.409	0.118	0.000	0.000	0.000
19	40.425	93.977	115.387	108.792	32.940	10.474	4.117	1.365	0.111	0.000	0.000	0.000
20	42.205	93.204	121.740	106.844	31.257	9.931	3.979	1.275	0.108	0.000	0.000	0.000
21	42.672	92.435	120.721	105.246	30.726	6.827	3.874	1.235	0.102	0.000	0.000	0.000
22	39.594	91.670	119.749	102.349	29.832	9.376	3.708	1.178	0.095	0.000	0.000	0.000
23	24.501	93.797	115.368	99.389	29.073	9.173	4.300	1.071	0.087	0.000	0.000	0.000
24	36.247	96.009	119.750	94.546	27.660	8.938	3.649	1.010	0.072	0.000	0.000	0.000
25	41.996	95.552	123.409	92.484	24.617	8.818	3.391	0.949	0.065	0.000	0.000	0.000
26	52.837	94.754	125.071	90.309	23.080	8.594	3.349	0.897	0.057	0.000	0.000	0.000
27	58.949	93.495	126.439	87.322	22.104	8.248	3.355	0.855	0.049	0.000	0.000	0.000
28	63.039	92.595	129.829	84.954	21.266	8.023	3.222	0.819	0.044	0.000	0.000	0.000
29	65.011		130.458	82.395	19.744	7.779	3.064	0.750	0.036	0.000	0.000	0.000
30	67.559		132.380	80.985	18.833	7.600	2.904	0.699	0.032	0.000	0.000	0.000
31	69.160		134.411		18.239		2.805	0.655		0.000		0.000
Mean	69.683	95.225	111.211	111.955	42.665	12.129	4.723	1.573	0.242	0.006	0.000	0.000
Flow (MCM)	186.640	230.369	297.868	290.186	114.274	31.437	12.651	4.213	0.627	0.016	0.000	0.000
Maximum	216.232	110.748	134.411	133.511	80.000	18.369	7.486	2.651	0.627	0.029	0.000	0.000
Minimum	0.685	72.205	92.100	80.985	18.239	6.827	2.805	0.655	0.032	0.000	0.000	0.000
Runoff (mm)	7.933	9.792	12.661	12.334	4.857	1.336	0.538	0.179	0.027	0.001	0.000	0.000

Flow (cumecs)

Annual Statistics

Maximum : 216.232 Minimum : 0.000 Mean : 37.451 cumecs

Total : 1181.056 MCM Runoff : 50.200 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Year: 2011

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.000	0.569	0.468	1.175	28.338	17.856	7.913	2.975	1.046	0.211	0.000	0.000
2	0.000	1.393	0.435	1.164	28.896	17.697	7.706	2.847	1.020	0.198	0.000	0.000
3	0.000	1.236	0.396	1.056	29.389	17.576	7.449	2.767	0.984	0.182	0.000	0.000
4	0.000	1.250	0.371	0.987	29.782	17.284	7.192	2.659	0.952	0.165	0.000	0.000
5	0.000	1.187	0.297	0.735	30.171	16.998	6.691	2.600	0.923	0.125	0.000	0.000
6	0.000	0.816	0.278	0.575	30.562	16.736	6.856	2.548	0.893	0.106	0.000	0.000
7	0.000	0.747	0.264	0.546	30.964	16.359	6.348	2.512	0.864	0.095	0.000	0.000
8	0.000	1.253	0.244	0.530	31.504	16.073	6.145	2.532	0.836	0.074	0.000	0.000
9	0.055	0.529	0.232	0.612	32.183	15.660	5.852	2.426	0.799	0.053	0.000	0.000
10	0.593	0.375	0.218	0.647	32.547	15.394	5.664	2.379	0.691	0.045	0.000	0.001
11	0.281	0.326	0.202	0.756	32.428	15.174	5.533	2.346	0.661	0.038	0.000	0.501
12	0.422	0.261	0.304	4.673	32.014	14.941	5.411	2.251	0.640	0.030	0.000	1.054
13	6.455	0.121	0.118	6.178	31.495	14.063	5.290	2.188	0.590	0.015	0.000	5.282
14	10.113	0.070	0.073	9.538	31.006	13.559	5.163	2.140	0.561	0.011	0.000	4.301
15	10.138	1.286	0.062	13.301	30.017	13.174	5.022	2.091	0.541	0.008	0.000	3.486
16	8.196	2.611	0.072	13.889	29.389	12.606	4.871	2.029	0.519	0.006	0.000	1.943
17	1.544	0.704	0.066	15.674	28.699	12.442	4.732	1.835	0.479	0.005	0.000	3.172
18	1.259	0.439	0.053	16.549	28.236	12.301	4.557	1.761	0.355	0.004	0.000	3.041
19	1.220	0.065	0.067	17.684	27.540	12.054	4.365	1.678	0.403	0.003	0.000	2.855
20	1.177	0.062	1.143	18.229	27.051	11.703	4.172	1.608	0.405	0.002	0.000	3.083
21	1.118	0.886	4.539	20.171	26.267	11.296	4.018	1.532	0.387	0.001	0.000	3.135
22	1.035	1.860	6.304	21.469	25.505	11.052	3.872	1.463	0.369	0.001	0.000	9.679
23	0.904	2.363	6.029	22.265	24.656	10.843	3.777	1.418	0.352	0.000	0.000	6.510
24	0.560	1.603	3.809	22.988	23.628	10.391	3.655	1.368	0.339	0.000	0.000	5.992
25	0.427	1.495	3.472	23.837	22.274	9.483	3.559	1.308	0.334	0.000	0.000	4.607
26	0.295	1.433	1.696	24.269	21.403	9.241	3.494	1.259	0.305	0.000	0.000	3.628
27	0.092	0.712	0.645	25.104	20.931	9.013	3.447	1.212	0.274	0.000	0.000	2.034
28	0.081	0.570	0.452	26.223	20.294	8.786	3.352	1.167	0.256	0.000	0.000	3.535
29	0.074		0.370	26.793	19.755	8.528	3.261	1.133	0.242	0.000	0.000	3.727
30	0.070		0.164	27.517	18.792	8.261	3.179	1.100	0.227	0.000	0.000	6.300
31	0.066		0.653		18.232		3.073	1.071		0.000		9.286
Mean	1.489	0.936	1.081	12.171	27.224	13.218	5.020	1.942	0.575	0.044	0.000	2.811
Flow (MCM)	3.989	2.266	2.894	31.548	72.917	34.261	13.445	5.202	1.490	0.119	0.000	7.530
Maximum	10.138	2.611	6.304	27.517	32.547	17.856	7.913	2.975	1.046	0.211	0.000	9.679
Minimum	0.000	0.062	0.053	0.530	18.232	8.261	3.073	1.071	0.227	0.000	0.000	0.000
Runoff (mm)	0.170	0.096	0.123	1.341	3.099	1.456	0.571	0.221	0.063	0.005	0.000	0.320

Flow (cumecs)

Annual Statistics

Maximum : 32.547 Minimum : 0.000 Mean : 5.543 cumecs

Total : 174.795 MCM Runoff : 7.430 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59 **Year:** 2012
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.467	39.919	24.548	35.078	30.164	19.510	10.176	4.342	2.028	0.531	0.291	0.000
2	6.148	40.314	26.127	34.145	29.646	19.176	9.897	4.222	1.982	0.390	0.307	0.000
3	6.262	41.328	25.374	31.573	29.622	18.851	9.529	4.125	1.936	0.466	0.274	0.000
4	6.114	42.119	25.060	30.228	30.195	18.650	9.251	4.053	1.889	0.458	0.226	0.000
5	3.744	41.213	27.208	29.750	29.920	18.390	8.908	3.913	1.841	0.447	0.166	0.000
6	3.190	38.466	26.045	28.920	29.342	18.164	8.605	3.673	1.792	0.439	0.120	0.000
7	2.944	37.715	25.431	28.778	28.644	17.940	8.417	3.626	1.731	0.440	0.095	0.000
8	2.779	36.967	24.792	30.181	28.424	17.683	8.201	3.458	1.687	0.414	0.079	0.000
9	5.330	36.364	24.369	30.252	28.190	17.438	8.062	3.373	1.658	0.386	0.069	0.000
10	5.524	35.812	24.169	30.122	27.920	17.137	7.871	3.317	1.609	0.364	0.060	0.000
11	8.911	35.641	24.070	28.976	27.348	16.625	7.698	3.269	1.568	0.347	0.053	2.915
12	6.613	35.293	24.000	28.644	27.287	16.050	7.280	3.232	1.536	0.330	0.043	0.701
13	7.128	33.788	23.852	28.636	27.378	15.560	7.053	3.179	1.488	0.314	0.034	0.598
14	6.439	31.275	24.302	29.263	27.020	15.288	6.842	3.117	1.449	0.292	0.027	0.570
15	14.022	30.163	36.234	31.004	26.544	14.979	6.733	3.038	1.419	0.267	0.021	0.474
16	14.163	28.993	24.872	38.368	26.103	14.866	6.620	2.961	1.389	0.245	0.016	0.449
17	10.278	27.795	23.816	36.446	26.081	14.688	6.486	2.913	1.364	0.223	0.007	0.433
18	13.554	27.066	24.242	35.803	25.703	13.987	6.363	2.882	1.339	0.176	0.005	0.511
19	10.018	26.432	25.623	35.355	25.205	13.577	6.130	2.843	1.307	0.158	0.002	0.458
20	10.033	25.932	29.358	34.927	24.770	13.171	6.111	2.768	1.271	0.128	0.001	0.441
21	14.196	25.256	27.256	34.442	24.369	12.938	5.743	2.695	1.234	0.111	0.000	0.360
22	20.429	24.770	26.372	33.223	24.014	12.657	5.542	2.638	1.179	0.094	0.000	0.391
23	46.120	24.212	26.126	32.743	23.535	12.391	5.340	2.583	1.132	0.081	0.000	0.387
24	60.960	23.753	27.494	32.074	23.181	12.112	5.267	2.514	1.078	0.067	0.000	0.364
25	35.314	23.243	28.963	32.327	22.085	11.880	5.084	2.460	1.021	0.053	0.000	0.343
26	34.750	23.461	31.389	35.584	20.640	11.643	4.976	2.400	0.972	0.042	0.000	0.321
27	35.230	26.935	32.934	30.399	20.318	11.368	4.849	2.317	0.910	0.033	0.000	0.304
28	36.293	26.529	33.465	29.936	20.525	11.076	4.757	2.269	0.808	0.024	0.000	0.290
29	37.781	25.540	34.390	30.162	20.524	10.817	4.642	2.199	0.663	0.017	0.000	0.272
30	38.304		35.417	30.333	20.242	10.482	4.563	2.125	0.581	0.012	0.000	0.259
31	38.824		35.375		19.824		4.456	2.076		0.018		0.259
Mean	17.673	31.596	27.506	31.922	25.637	14.970	6.821	3.051	1.395	0.237	0.063	0.358
Flow (MCM)	47.335	79.168	73.671	82.743	68.667	38.802	18.270	8.171	3.617	0.636	0.164	0.959
Maximum	60.960	42.119	36.234	38.368	30.195	19.510	10.176	4.342	2.028	0.531	0.307	2.915
Minimum	2.779	23.243	23.816	28.636	19.824	10.482	4.456	2.076	0.581	0.012	0.000	0.000
Runoff (mm)	2.012	3.365	3.131	3.517	2.919	1.649	0.777	0.347	0.154	0.027	0.007	0.041

Flow (cumecs)

Annual Statistics

Maximum : 60.960 Minimum : 0.000 Mean : 13.436 cumecs

Total : 424.875 MCM Runoff : 18.059 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59 **Year:** 2013
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.804	17.560	2.746	25.244	51.644	24.729	9.562	4.261	2.599	1.157	0.002	1.990
2	3.751	18.349	2.652	28.857	51.095	22.989	9.310	4.195	2.505	1.089	0.001	1.703
3	4.433	7.016	2.681	28.833	50.671	22.217	9.060	4.102	2.442	1.035	0.000	1.461
4	4.596	10.207	2.604	29.201	50.195	21.675	8.830	4.018	2.402	0.987	0.000	1.389
5	13.674	10.778	2.478	33.488	49.317	21.206	8.539	3.974	2.372	0.952	0.000	1.347
6	6.673	10.600	2.414	36.262	48.220	20.634	8.234	3.907	2.339	0.923	0.000	1.336
7	6.219	9.771	2.366	38.905	47.276	19.561	7.990	3.824	2.315	0.899	0.000	1.419
8	6.092	6.347	2.314	38.797	46.671	18.816	7.785	3.797	2.282	0.874	0.000	1.496
9	5.981	3.814	2.776	45.209	45.559	17.867	7.528	3.656	2.248	0.851	0.000	1.539
10	5.804	3.619	3.051	50.389	44.781	17.597	7.305	3.536	2.221	0.835	0.000	1.623
11	4.168	3.508	5.620	50.705	44.063	17.171	7.082	3.429	2.204	0.812	0.000	1.663
12	3.986	3.259	8.788	51.610	43.231	16.806	6.936	3.323	2.167	0.796	0.000	1.563
13	4.079	3.077	7.377	52.538	42.557	16.406	6.797	2.619	2.140	0.775	0.000	1.502
14	7.463	2.946	7.285	53.450	40.931	16.011	6.647	3.006	2.118	0.759	0.000	1.534
15	5.564	2.758	7.974	54.246	40.354	15.156	6.430	3.067	2.096	0.725	0.000	1.619
16	4.836	2.654	8.150	53.107	38.586	14.750	6.283	3.031	2.075	0.684	0.000	1.676
17	4.722	2.608	8.015	52.617	38.126	14.358	6.191	2.991	2.024	0.649	0.000	1.535
18	4.573	2.590	7.744	52.301	37.548	14.026	6.079	2.953	1.850	0.589	0.000	1.495
19	4.336	2.635	7.526	54.363	36.996	13.633	5.964	2.927	1.825	0.544	0.000	1.515
20	3.596	3.691	7.382	55.681	36.158	13.446	5.909	2.894	1.806	0.492	0.000	1.501
21	3.021	3.206	7.613	56.401	36.264	13.089	5.799	2.856	1.781	0.207	0.000	1.416
22	3.782	3.185	8.099	56.449	35.669	12.789	5.705	2.814	1.747	0.094	0.000	1.283
23	6.155	3.435	10.953	55.763	34.557	12.479	5.632	2.787	1.694	0.070	0.000	1.251
24	5.326	4.171	11.033	55.952	33.440	11.891	5.460	2.755	1.662	0.052	0.000	3.170
25	3.651	2.862	9.850	54.780	32.170	11.661	5.289	2.724	1.615	0.044	0.000	4.176
26	3.221	2.178	7.766	54.083	30.776	11.397	5.096	2.688	1.538	0.029	0.000	4.311
27	3.071	2.388	6.925	53.634	29.672	11.049	4.971	2.662	1.474	0.014	0.000	4.392
28	4.261	2.683	6.306	53.266	27.718	10.736	4.765	2.638	1.406	0.011	0.040	4.360
29	11.926		6.183	53.038	26.982	10.352	4.571	2.621	1.322	0.010	0.444	4.322
30	6.293		6.035	52.208	26.267	9.774	4.419	2.620	1.256	0.006	1.727	4.319
31	6.746		6.767		25.483		4.331	2.619		0.003		4.331
Mean	5.284	5.425	6.112	47.713	39.451	15.809	6.597	3.203	1.984	0.547	0.074	2.201
Flow (MCM)	14.152	13.124	16.371	123.671	105.665	40.977	17.669	8.579	5.143	1.466	0.191	5.896
Maximum	13.674	18.349	11.033	56.449	51.644	24.729	9.562	4.261	2.599	1.157	1.727	4.392
Minimum	1.804	2.178	2.314	25.244	25.483	9.774	4.331	2.619	1.256	0.003	0.000	1.251
Runoff (mm)	0.602	0.558	0.696	5.257	4.491	1.742	0.751	0.365	0.219	0.062	0.008	0.251

Flow (cumecs)

Annual Statistics

Maximum : 56.449 Minimum : 0.000 Mean : 11.200 cumecs

Total : 353.202 MCM Runoff : 15.013 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.695	30.918	57.693	180.571	276.338	105.732	31.666	10.115	3.363	1.055	0.594	0.172
2	3.618	30.106	58.912	186.639	275.031	102.625	30.432	9.572	3.208	1.014	0.582	0.202
3	3.446	29.255	59.991	171.986	273.585	99.434	29.566	9.394	3.177	0.970	0.584	0.214
4	3.381	28.644	62.282	150.440	270.629	96.028	28.582	9.208	3.138	0.935	0.576	0.227
5	3.253	28.244	65.038	148.595	236.668	93.736	27.603	9.020	3.078	0.901	0.468	0.236
6	3.225	27.448	70.805	150.181	234.814	92.355	26.045	8.816	3.001	0.877	0.425	0.248
7	3.248	26.928	81.519	154.312	256.939	91.574	24.851	8.685	2.904	0.905	0.347	0.267
8	3.229	29.461	84.168	159.869	254.642	90.766	23.894	8.519	2.735	1.190	0.301	0.209
9	3.047	36.196	85.669	170.169	249.654	87.148	23.522	8.363	2.641	0.823	0.268	0.184
10	3.005	42.269	86.189	172.113	245.100	84.892	23.098	8.263	2.587	0.820	0.239	0.164
11	3.023	42.137	88.009	174.333	239.546	84.226	22.816	8.122	2.512	0.842	0.206	0.136
12	2.993	42.954	87.621	175.533	233.139	83.472	22.427	7.893	2.434	0.832	0.180	0.103
13	2.634	42.738	87.158	177.234	230.214	80.525	20.947	7.699	2.324	0.815	0.150	0.083
14	3.838	43.565	91.695	178.469	222.198	76.608	18.790	7.593	2.230	0.811	0.102	0.069
15	3.644	44.503	94.342	178.541	217.733	72.168	18.441	7.461	2.177	0.803	0.071	0.058
16	3.663	44.973	106.355	181.773	213.969	64.234	18.461	7.430	2.102	0.793	0.061	0.046
17	3.581	49.485	97.447	182.640	207.107	60.123	18.643	7.225	2.003	0.784	0.053	0.035
18	3.433	50.661	95.031	181.508	192.076	56.879	18.225	7.088	1.930	0.772	0.050	0.024
19	3.411	51.341	93.189	179.973	181.374	53.844	17.583	7.001	1.831	0.808	0.046	0.019
20	5.191	52.004	91.817	178.970	175.422	52.924	17.073	6.934	1.720	0.805	0.041	0.010
21	5.143	52.651	99.323	179.351	170.674	51.954	16.506	6.807	1.659	0.793	0.036	0.007
22	8.079	50.906	98.038	180.691	167.839	49.028	15.767	6.653	1.646	0.778	0.032	0.008
23	6.392	51.274	94.448	182.327	164.353	44.382	14.067	6.546	1.516	0.759	0.026	0.052
24	6.155	51.813	92.403	213.893	161.491	44.800	13.610	6.434	1.379	0.759	0.014	0.073
25	5.822	52.469	91.638	249.074	157.558	44.033	13.191	6.342	1.339	0.733	0.012	0.064
26	3.769	53.152	90.434	273.147	153.962	42.749	12.792	6.238	1.295	0.690	0.010	0.058
27	3.633	53.703	96.336	276.757	146.815	41.065	12.224	6.085	1.248	0.672	0.008	0.053
28	8.773	54.479	111.927	278.221	133.662	39.135	11.325	5.964	1.208	0.658	0.003	0.044
29	16.946		123.404	277.625	112.121	36.541	10.716	5.871	1.166	0.644	0.002	0.036
30	17.572		156.194	277.005	109.855	34.085	10.415	5.598	1.130	0.607	0.006	0.030
31	25.195		128.303		107.631		10.334	4.799		0.594		0.040
Mean	5.679	42.653	91.206	194.065	202.327	68.569	19.471	7.475	2.156	0.814	0.183	0.102
Flow (MCM)	15.210	103.185	244.285	503.016	541.913	177.730	52.152	20.022	5.589	2.181	0.474	0.274
Maximum	25.195	54.479	156.194	278.221	276.338	105.732	31.666	10.115	3.363	1.190	0.594	0.267
Minimum	2.634	26.928	57.693	148.595	107.631	34.085	10.334	4.799	1.130	0.594	0.002	0.007
Runoff (mm)	0.646	4.386	10.383	21.380	23.034	7.554	2.217	0.851	0.238	0.093	0.020	0.012

Flow (cumecs)

Annual Statistics

Maximum : 278.221 Minimum : 0.002 Mean : 52.892 cumecs

Total : 1667.991 MCM Runoff : 70.897 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Year: 2015

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.068	2.912	22.939	31.580	21.423	15.307	10.301	3.767	1.949	0.946	0.239	0.200
2	0.438	2.870	23.174	33.874	21.186	15.238	10.185	3.608	1.830	0.936	0.220	0.202
3	0.544	2.837	23.215	33.605	20.977	15.111	10.031	3.566	1.780	0.929	0.225	0.214
4	0.602	2.786	23.767	31.538	20.801	14.236	9.830	3.514	1.738	0.916	0.233	0.227
5	0.871	2.713	24.091	30.678	20.659	14.035	9.684	3.287	1.573	0.903	0.242	0.238
6	1.278	2.656	24.462	29.992	20.491	13.479	9.291	3.232	1.627	0.889	0.265	0.248
7	1.542	2.573	24.777	29.702	20.299	13.188	8.964	3.179	1.627	0.861	0.280	0.267
8	1.896	2.467	25.125	28.999	19.887	12.973	8.795	3.111	1.589	0.830	0.294	0.209
9	2.229	2.167	25.475	28.714	19.679	12.863	8.669	3.052	1.492	0.794	0.296	0.184
10	2.489	1.847	25.829	28.588	19.535	12.726	8.575	3.026	1.325	0.757	0.278	0.164
11	6.084	1.812	26.140	28.432	19.305	12.532	8.406	3.011	1.307	0.685	0.252	0.134
12	4.131	2.527	26.424	28.717	19.448	12.265	8.181	2.986	1.300	0.654	0.232	0.102
13	4.212	1.922	26.785	29.431	19.074	12.037	7.951	2.967	1.291	0.632	0.219	0.083
14	4.359	1.816	27.149	26.977	18.754	11.443	7.685	2.946	1.279	0.577	0.209	0.069
15	4.767	1.761	27.516	25.984	18.465	11.263	7.461	2.922	1.270	0.561	0.199	0.058
16	4.969	1.928	27.887	25.902	18.168	11.232	7.297	2.907	1.259	0.555	0.192	0.046
17	5.141	5.603	28.260	25.703	17.972	11.194	7.216	2.871	1.247	0.538	0.178	0.035
18	5.333	5.725	28.636	25.278	17.697	11.075	7.151	2.850	1.125	0.517	0.157	0.024
19	5.521	5.595	28.936	24.828	17.424	10.908	7.077	2.819	1.197	0.494	0.127	0.019
20	5.664	5.454	29.269	24.547	17.890	10.744	7.021	2.797	1.211	0.469	0.109	0.010
21	5.832	5.459	29.573	24.205	17.080	10.710	6.936	2.730	1.181	0.447	0.093	0.007
22	5.998	8.596	29.831	23.858	16.910	10.671	6.862	2.637	1.152	0.432	0.070	0.008
23	6.507	12.470	30.122	23.431	16.675	10.630	6.817	2.543	1.137	0.424	0.055	0.052
24	7.124	13.171	30.489	23.250	16.399	10.576	6.733	2.450	1.126	0.411	0.047	0.073
25	6.398	13.240	31.147	22.830	16.148	10.545	6.622	2.302	1.106	0.395	0.040	0.065
26	4.928	13.295	31.204	22.495	15.880	10.507	6.546	2.199	1.067	0.376	0.022	0.058
27	4.564	18.899	31.171	22.278	15.802	10.466	6.470	2.134	1.039	0.357	0.069	0.053
28	4.096	22.947	30.841	22.096	15.702	10.425	6.317	2.074	1.011	0.290	0.463	0.045
29	3.415		31.158	21.854	15.628	10.385	6.221	2.005	0.974	0.269	0.367	0.036
30	3.157		33.205	21.635	15.499	10.344	6.127	1.991	0.959	0.259	0.358	0.031
31	2.961		32.090		15.406		5.850	1.976		0.256		0.189
Mean	3.778	6.002	27.764	26.700	18.267	11.970	7.783	2.821	1.326	0.592	0.201	0.108
Flow (MCM)	10.119	14.519	74.363	69.207	48.925	31.027	20.846	7.556	3.436	1.586	0.521	0.290
Maximum	7.124	22.947	33.205	33.874	21.423	15.307	10.301	3.767	1.949	0.946	0.463	0.267
Minimum	0.068	1.761	22.939	21.635	15.406	10.344	5.850	1.976	0.959	0.256	0.022	0.007
Runoff (mm)	0.430	0.617	3.161	2.942	2.080	1.319	0.886	0.321	0.146	0.067	0.022	0.012

Flow (cumecs)

Annual Statistics

Maximum : 33.874 Minimum : 0.007 Mean : 8.943 cumecs

Total : 282.016 MCM Runoff : 11.987 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59 **Year:** 2016
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.151	311.149	353.544	40.189	83.912	18.936	8.039	4.010	1.298	0.259	0.000	0.000
2	4.317	375.805	341.356	54.183	82.500	18.807	7.901	4.312	1.256	0.235	0.000	0.000
3	3.812	405.564	336.698	60.291	80.750	18.689	7.787	3.512	1.206	0.185	0.000	0.000
4	3.693	420.589	327.154	67.043	78.256	18.518	7.666	3.427	1.162	0.074	0.000	0.000
5	3.622	421.678	322.265	65.740	76.134	18.196	7.293	3.332	1.127	0.020	0.000	0.000
6	3.107	422.076	295.657	62.861	73.784	17.815	7.196	3.260	1.069	0.021	0.000	0.000
7	2.764	423.006	286.091	58.359	69.337	17.624	7.118	3.179	1.038	0.022	0.000	0.000
8	2.197	427.791	275.004	60.248	64.584	17.583	7.023	3.086	0.987	0.020	0.000	0.000
9	1.999	432.132	261.821	59.940	60.350	17.118	6.944	2.991	0.949	0.018	0.000	0.000
10	2.566	434.389	236.259	59.327	58.588	16.602	6.838	2.882	0.908	0.033	0.000	0.000
11	3.520	459.688	183.959	58.682	54.993	16.405	6.702	2.768	0.856	0.014	0.000	0.000
12	4.613	494.001	177.902	57.331	52.423	16.316	6.530	2.657	0.830	0.012	0.000	0.000
13	7.777	492.159	173.258	56.948	50.008	15.991	6.253	2.565	0.787	0.011	0.000	0.000
14	13.376	469.693	161.544	56.698	49.349	15.554	6.000	2.467	0.702	0.011	0.000	0.000
15	37.886	467.103	137.548	56.579	48.177	15.153	5.828	2.407	0.659	0.010	0.000	0.000
16	35.195	467.368	126.734	55.353	46.220	14.732	5.639	2.344	0.629	0.009	0.000	0.000
17	30.749	463.910	118.267	57.917	44.946	10.127	5.373	2.248	0.620	0.007	0.000	0.000
18	24.228	462.982	109.651	65.800	44.493	9.825	4.986	2.140	0.596	0.005	0.000	0.000
19	38.412	461.166	108.229	73.104	42.584	9.823	4.856	2.056	0.565	0.003	0.000	0.000
20	34.831	444.419	104.455	81.897	40.236	9.789	4.760	2.022	0.528	0.002	0.000	0.000
21	20.549	439.868	76.440	93.110	37.445	9.784	4.626	1.991	0.512	0.000	0.000	0.000
22	18.967	436.475	71.833	97.575	35.374	9.747	4.533	1.961	0.482	0.000	0.000	0.000
23	17.986	416.777	73.860	107.290	34.144	9.696	4.506	1.940	0.456	0.000	0.000	0.000
24	17.583	413.182	62.809	108.862	32.348	9.664	4.270	1.903	0.432	0.000	0.000	0.000
25	17.108	392.375	60.409	107.964	30.760	9.548	4.140	1.832	0.401	0.000	0.000	0.000
26	38.951	388.043	59.523	106.078	29.848	9.303	4.124	1.779	0.375	0.000	0.000	0.000
27	49.544	386.010	58.609	101.793	28.707	9.000	4.124	1.695	0.350	0.000	0.000	0.000
28	74.778	380.068	57.535	97.968	27.544	8.760	4.103	1.653	0.325	0.000	0.000	0.000
29	104.477	365.554	55.026	95.298	24.926	8.664	4.100	1.622	0.300	0.000	0.000	0.000
30	156.244		42.352	92.011	22.737	8.569	4.079	1.530	0.279	0.000	0.000	0.000
31	314.542		41.123		20.392		4.077	1.399		0.000		0.000
Mean	35.276	426.725	164.417	73.881	49.221	13.545	5.723	2.483	0.723	0.031	0.000	0.000
Flow (MCM)	94.482	1069.202	440.373	191.500	131.833	35.108	15.329	6.650	1.874	0.084	0.000	0.000
Maximum	314.542	494.001	353.544	108.862	83.912	18.936	8.039	4.312	1.298	0.259	0.000	0.000
Minimum	1.999	311.149	41.123	40.189	20.392	8.569	4.077	1.399	0.279	0.000	0.000	0.000
Runoff (mm)	4.016	45.446	18.718	8.140	5.603	1.492	0.652	0.283	0.080	0.004	0.000	0.000

Flow (cumecs)

Annual Statistics

Maximum : 494.001 Minimum : 0.000 Mean : 64.335 cumecs

Total : 2034.438 MCM Runoff : 86.472 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.000	3.181	4.341	3.443	37.521	12.285	5.101	1.474	0.196	0.000	0.000	0.000
2	0.000	3.003	4.131	56.577	36.402	12.032	4.804	1.409	0.175	0.000	0.000	0.000
3	0.000	2.888	3.664	44.516	34.583	11.839	4.027	1.376	0.157	0.000	0.000	0.000
4	0.000	2.880	3.234	27.045	33.951	11.610	4.088	1.340	0.133	0.000	0.000	0.000
5	0.000	2.805	3.009	21.037	33.060	11.384	4.260	1.304	0.112	0.000	0.000	0.000
6	0.000	2.677	2.744	26.313	32.599	10.838	4.125	1.279	0.077	0.000	0.000	0.000
7	0.000	2.603	2.488	27.569	31.272	10.454	3.985	1.255	0.070	0.000	0.000	0.000
8	0.000	2.549	1.687	34.973	30.359	10.071	3.861	1.231	0.067	0.000	0.000	0.000
9	0.000	2.508	1.677	37.470	29.167	9.686	3.758	1.182	0.065	0.000	0.000	0.000
10	0.000	2.388	1.650	39.797	28.106	9.316	3.692	1.153	0.062	0.000	0.000	0.000
11	0.000	1.820	1.503	41.409	27.135	8.913	3.550	1.038	0.059	0.000	0.000	0.000
12	0.000	1.718	1.782	41.813	26.149	8.669	3.393	0.936	0.052	0.000	0.000	0.000
13	0.000	1.686	1.943	43.069	25.148	8.498	3.240	0.850	0.046	0.000	0.000	0.000
14	0.000	1.638	1.666	44.167	22.433	8.135	3.118	0.798	0.036	0.000	0.000	0.000
15	0.000	1.578	1.284	44.967	19.657	8.076	3.015	0.732	0.028	0.000	0.000	0.000
16	0.000	1.527	2.090	45.831	18.921	7.982	2.859	0.692	0.023	0.000	0.000	0.000
17	0.012	1.513	3.038	47.804	18.359	7.936	2.746	0.667	0.020	0.000	0.000	0.000
18	0.006	1.478	38.375	52.940	17.812	7.796	2.644	0.639	0.017	0.000	0.000	0.000
19	0.002	1.444	76.889	53.797	17.624	7.598	2.537	0.599	0.012	0.000	0.000	0.000
20	0.001	1.447	77.998	50.729	17.551	7.461	2.448	0.575	0.005	0.000	0.000	0.000
21	0.000	1.460	79.565	49.153	17.459	7.330	2.340	0.548	0.002	0.000	0.000	0.000
22	0.000	3.500	63.592	48.081	17.066	7.220	2.238	0.529	0.001	0.000	0.000	0.000
23	0.000	2.856	43.680	46.503	16.729	7.149	2.141	0.510	0.000	0.000	0.000	0.000
24	0.000	2.939	31.006	45.527	16.237	7.023	2.074	0.477	0.000	0.000	0.000	0.000
25	0.000	2.770	19.777	44.771	15.752	6.902	2.003	0.443	0.000	0.000	0.000	0.000
26	0.000	1.788	13.840	43.910	14.988	6.777	1.950	0.419	0.000	0.000	0.000	0.000
27	0.000	2.861	6.493	42.829	14.558	7.546	1.901	0.389	0.000	0.000	0.000	0.000
28	0.000	4.145	3.586	41.280	13.615	9.235	1.865	0.334	0.000	0.000	0.000	0.000
29	0.000		2.165	40.179	13.535	6.671	1.799	0.294	0.000	0.000	0.000	0.000
30	0.021		1.499	38.968	13.014	6.190	1.580	0.262	0.000	0.000	0.000	0.000
31	2.219		1.534		12.623		1.534	0.229		0.000		0.000
Mean	0.073	2.345	16.191	40.882	22.690	8.754	2.989	0.805	0.047	0.000	0.000	0.000
Flow (MCM)	0.195	5.672	43.367	105.967	60.773	22.690	8.007	2.157	0.122	0.000	0.000	0.000
Maximum	2.219	4.145	79.565	56.577	37.521	12.285	5.101	1.474	0.196	0.000	0.000	0.000
Minimum	0.000	1.444	1.284	3.443	12.623	6.190	1.534	0.229	0.000	0.000	0.000	0.000
Runoff (mm)	0.008	0.241	1.843	4.504	2.583	0.964	0.340	0.092	0.005	0.000	0.000	0.000

Flow (cumecs)

Annual Statistics

Maximum : 79.565 Minimum : 0.000 Mean : 7.898 cumecs

Total : 249.073 MCM Runoff : 10.587 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.000	4.348	54.908	206.515	160.135	44.391	12.830	4.722	1.744	0.310	0.012	0.000
2	0.000	10.809	53.750	207.518	145.133	43.869	12.222	4.563	1.664	0.291	0.008	0.000
3	0.000	12.600	55.685	206.919	121.363	43.222	11.329	4.415	1.599	0.305	0.007	0.000
4	0.000	13.804	59.283	206.528	107.421	41.703	11.341	4.287	1.524	0.226	0.006	0.000
5	0.000	15.378	62.107	203.776	106.043	40.810	11.076	4.059	1.457	0.147	0.003	0.000
6	0.000	15.608	62.208	177.702	105.487	39.641	10.804	4.006	1.394	0.218	0.001	0.000
7	0.001	18.896	78.296	166.839	104.831	38.119	10.449	3.871	1.339	0.206	0.000	0.000
8	0.000	24.422	80.723	159.705	103.080	35.908	10.292	3.749	1.303	0.180	0.000	0.000
9	0.000	27.610	70.591	157.358	101.958	33.287	9.872	3.666	1.256	0.162	0.002	0.000
10	0.000	32.522	73.837	154.002	99.984	32.293	9.601	3.579	1.181	0.144	0.022	0.000
11	0.000	39.728	72.276	153.349	99.147	30.829	9.263	3.414	1.135	0.129	0.060	0.071
12	0.000	45.174	77.775	152.612	98.333	29.550	8.915	3.180	1.083	0.117	0.047	4.046
13	0.000	56.541	73.560	152.200	97.175	28.628	8.696	3.077	1.058	0.102	0.035	3.679
14	0.000	62.852	73.908	151.337	94.408	28.096	8.406	2.979	1.012	0.086	0.026	3.242
15	0.000	76.684	80.919	155.353	90.562	27.349	8.065	2.901	0.979	0.081	0.027	2.416
16	0.000	76.953	91.708	227.220	87.980	26.499	7.789	2.824	0.932	0.071	0.031	1.831
17	0.000	71.181	86.970	192.899	85.335	25.755	7.522	2.731	0.893	0.071	0.021	2.640
18	0.000	69.264	69.496	190.390	85.727	25.111	7.187	2.638	0.845	0.061	0.012	1.755
19	0.000	68.423	144.828	195.006	81.654	24.200	6.962	2.549	0.794	0.055	0.007	1.464
20	0.000	65.309	201.006	199.141	79.416	22.115	6.749	2.478	0.748	0.050	0.004	3.139
21	0.000	63.892	173.108	236.227	77.750	19.228	6.558	2.435	0.688	0.076	0.003	1.485
22	0.000	63.114	207.514	250.179	75.722	16.954	6.342	2.391	0.644	0.074	0.096	1.229
23	0.000	62.130	209.985	259.225	73.602	16.485	6.098	2.355	0.594	0.061	0.141	1.121
24	0.000	60.385	203.447	235.279	70.660	16.178	5.801	2.315	0.556	0.043	0.048	1.250
25	0.000	58.901	237.807	227.860	65.844	15.829	5.586	2.271	0.517	0.029	0.025	6.563
26	0.000	57.968	238.366	233.168	65.215	15.188	5.442	2.221	0.482	0.022	0.013	6.946
27	0.000	56.902	256.039	277.067	62.181	13.304	5.396	2.160	0.449	0.012	0.006	6.504
28	0.000	55.917	269.897	309.475	60.188	14.399	5.049	2.100	0.415	0.012	0.003	3.838
29	0.183		255.734	300.034	58.427	13.906	5.006	2.024	0.378	0.009	0.002	2.311
30	4.387		220.920	289.807	56.210	13.476	4.812	1.921	0.347	0.006	0.001	1.536
31	4.323		212.697		46.271		4.698	1.831		0.005		0.985
Mean	0.287	45.975	132.560	207.823	89.266	27.211	8.070	3.023	0.967	0.108	0.022	1.873
Flow (MCM)	0.769	111.224	355.048	538.678	239.090	70.530	21.614	8.097	2.506	0.290	0.058	5.016
Maximum	4.387	76.953	269.897	309.475	160.135	44.391	12.830	4.722	1.744	0.310	0.141	6.946
Minimum	0.000	4.348	53.750	151.337	46.271	13.304	4.698	1.831	0.347	0.005	0.000	0.000
Runoff (mm)	0.033	4.727	15.091	22.896	10.162	2.998	0.919	0.344	0.107	0.012	0.002	0.213

Flow (cumecs)

Annual Statistics

Maximum : 309.475 Minimum : 0.000 Mean : 43.099 cumecs

Total : 1359.161 MCM Runoff : 57.770 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA59 **Year:** 2019
Station Name: Great Ruaha River at Msembe
Time-Series Type: Flow (cumecs)

Latitude : 7:42:46 S Longitude : 34:53:46 E Elevation : 838.0 metres Area : 23527.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.667	0.369	57.026	60.322	31.059	15.658	8.505	3.663	1.524	0.459	0.034	0.217
2	0.467	0.298	61.530	60.015	29.888	15.432	8.399	3.609	1.471	0.443	0.013	3.925
3	0.348	0.183	62.849	57.320	28.511	15.136	8.359	3.542	1.431	0.355	0.010	2.428
4	0.270	0.137	62.030	55.894	27.732	14.888	8.285	3.320	1.374	0.336	0.008	1.486
5	0.212	0.107	62.937	54.745	27.348	14.666	8.111	3.306	1.333	0.326	0.007	1.269
6	0.176	0.089	64.963	53.532	27.005	14.428	7.865	3.174	1.268	0.304	0.006	1.156
7	0.167	0.055	63.513	50.719	26.446	14.181	7.555	3.138	1.216	0.280	0.005	1.365
8	0.356	0.046	65.003	49.525	26.096	13.857	7.363	3.137	1.167	0.264	0.004	7.875
9	1.133	0.058	72.101	49.678	25.593	13.624	7.229	3.118	1.122	0.259	0.004	4.930
10	3.328	0.052	75.976	46.982	25.234	13.058	7.098	3.099	1.067	0.247	0.003	3.371
11	2.794	0.060	75.891	45.663	24.713	12.134	6.968	3.095	1.025	0.242	0.002	2.574
12	1.532	1.260	73.815	44.043	24.319	12.683	6.821	3.012	1.010	0.283	0.001	2.160
13	1.055	9.489	74.508	42.959	23.901	12.373	6.651	2.919	0.977	0.278	0.025	1.934
14	0.690	6.423	72.436	41.990	23.258	12.059	6.471	2.828	0.931	0.264	0.012	1.539
15	0.851	6.349	73.059	41.015	22.932	11.990	6.221	2.768	0.874	0.250	0.006	1.278
16	0.739	7.429	75.100	39.766	22.631	11.727	5.988	2.691	0.810	0.236	0.003	1.202
17	0.546	9.197	59.945	40.084	22.029	11.564	5.839	2.586	0.729	0.223	0.001	2.163
18	0.495	12.960	61.392	37.725	21.351	11.486	5.720	2.529	0.694	0.205	0.000	2.040
19	0.427	17.942	63.255	36.894	20.595	11.701	5.602	2.461	0.685	0.187	0.000	1.128
20	0.324	19.755	64.752	36.171	19.956	11.299	5.420	2.400	0.661	0.167	0.000	1.034
21	0.405	23.833	64.713	35.580	19.567	10.981	5.189	2.312	0.626	0.144	0.000	1.006
22	1.219	26.086	64.766	34.927	19.145	10.837	4.778	2.248	0.616	0.125	0.000	1.167
23	2.352	29.741	65.488	34.282	18.761	11.260	4.619	2.188	0.603	0.118	0.000	5.981
24	2.352	33.193	65.384	33.736	18.400	10.292	4.673	2.139	0.588	0.109	0.000	11.863
25	2.273	36.559	64.076	32.395	18.154	9.713	4.474	2.076	0.568	0.101	0.000	23.713
26	2.107	35.947	63.025	31.882	17.756	9.514	4.391	2.023	0.557	0.093	0.000	22.889
27	0.907	32.359	62.205	31.787	17.459	9.298	4.298	1.982	0.531	0.085	0.000	16.657
28	1.154	41.695	61.128	31.707	17.117	9.118	4.152	1.933	0.513	0.073	0.000	15.496
29	0.927		60.917	31.627	16.741	8.890	4.063	1.834	0.492	0.062	0.002	15.607
30	0.590		60.768	31.547	16.371	8.630	3.939	1.764	0.478	0.048	0.002	13.108
31	0.464		60.508		16.005		3.784	1.660		0.035		9.063
Mean	1.011	12.560	65.647	42.484	22.454	12.083	6.091	2.663	0.898	0.213	0.005	5.859
Flow (MCM)	2.707	30.384	175.829	110.118	60.141	31.318	16.315	7.133	2.328	0.570	0.013	15.693
Maximum	3.328	41.695	75.976	60.322	31.059	15.658	8.505	3.663	1.524	0.459	0.034	23.713
Minimum	0.167	0.046	57.026	31.547	16.005	8.630	3.784	1.660	0.478	0.035	0.000	0.217
Runoff (mm)	0.115	1.291	7.474	4.680	2.556	1.331	0.693	0.303	0.099	0.024	0.001	0.667

Flow (cumecs)

Annual Statistics

Maximum : 75.976 Minimum : 0.000 Mean : 14.331 cumecs

Total : 451.928 MCM Runoff : 19.209 mm

Possible data flags

No data stored "-" Estimated values "e"

Rufiji River at Stiegler's Gorge

Station No: 1K3B		Established: 02/07/2018	
Coordinates:		Altitude (m.a.m.s.l): 126	
Lat: -7.8067	Long: 37.8957	Catchment Area (km²): 158,388	
Description of the Catchment:			
Mainly wooded grassland and Forest in upper area			

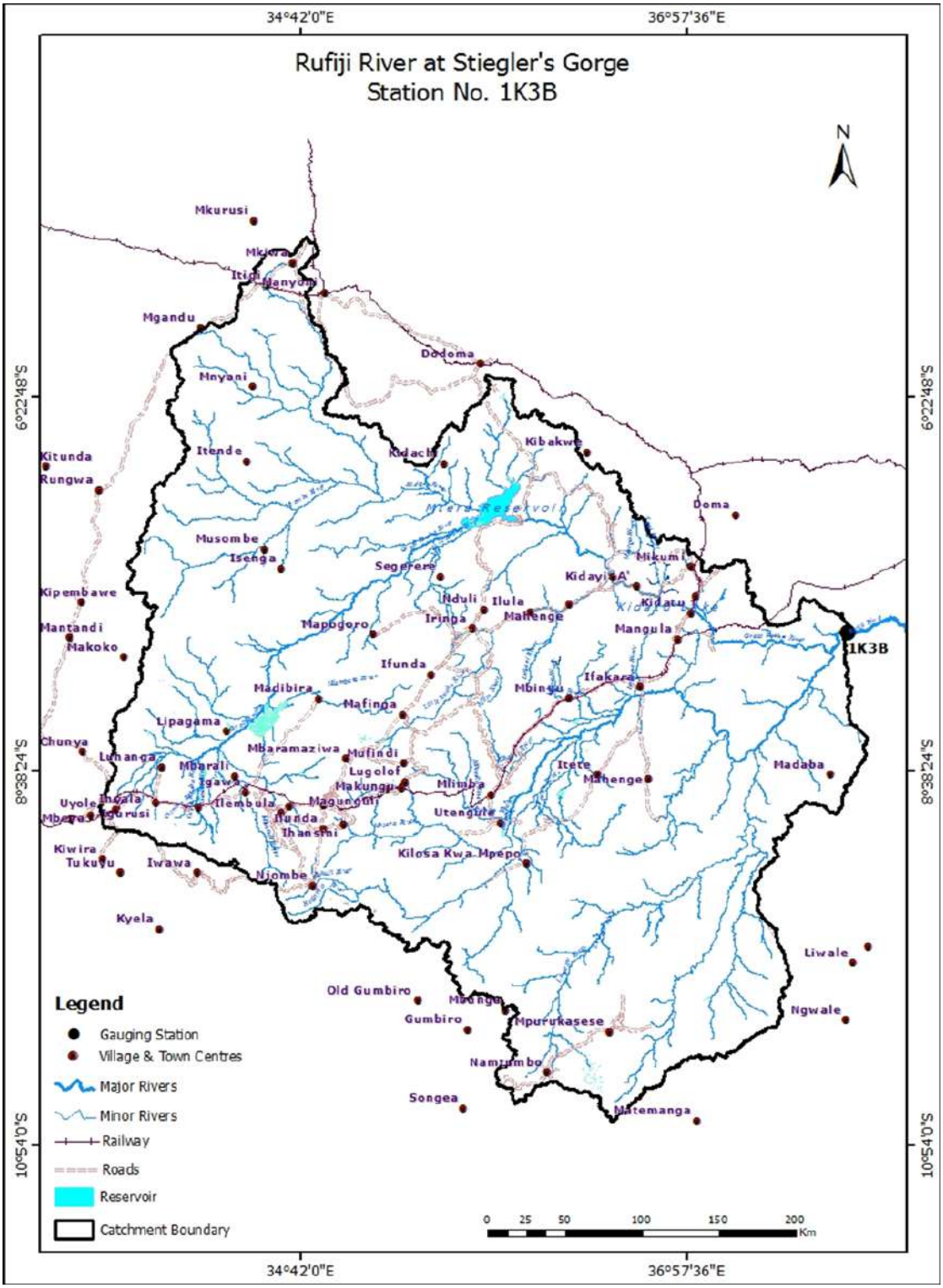
Station Details

1. Staff Gauges	Range: 0 – 15m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2018	
3. Benchmark	Nail in concrete beacon			
BM Assumed Datum: 13.700m		N.M.M.S.L: -	TBM: -10.972m	
4. Control	Permanent consists of rock boulders across the stream			
5. Access	Accessible throughout the year, about 720km from Iringa town to the station			

Records	Period	Quality
Water Level:	02/07/2018 - 31/12/2019	3.2.3
Discharge:	02/07/2018 - 31/12/2019	3.2.3

Extremes:	Max. Recorded	2210.83m³/sec	On 12/05/2019	WL 11.767m
	Min. Recorded	109.689m³/sec	On 27/11/2018	WL 5.508m

Remarks


Rufiji River at Stiegler's Gorge
Station No. 1K3B
34°42'0"E
36°57'36"E
6°22'48"S
8°38'24"S
10°54'0"S
N
1K3B
Mkurusi
Mgandu
Dodoma
Mnyani
Itende
Kitunda
Rungwa
Kidachi
Kibakwe
Doma
Musombe
Isenga
Segerere
Mikumi
Kidayisa'
Kipembawe
Nduli
Ilula
Kidatu
Mantandi
Makoko
Mapogoro
Iringa
Mafinga
Mangula
Ifunda
Madibira
Mbingu
Ifakara
Lipagama
Chunya
Mbaramaziwa
Mufindi
Lugolofi
Itete
Madaba
Mbarali
Igawa
Makungu
Mlimba
Mahenge
Uyole
Ilembula
Magunguli
Utengule
Mbeya
Ihanshi
Kiwira
Tukuyu
Iwawa
Kilosa Kwa Mpepo
Njombe
Kyela
Liwale
Old Gumbiro
Mpanga
Ngwale
Gumbiro
Mpurukasese
Namtumbo
Songea
Matemanga
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Reservoir
Catchment Boundary
0 25 50 100 150 200
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1K3B
Station Name: Rufiji River at Stiegler's Gorge
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 7:48:24 S | Longitude: 37:53:44 E | Elevation: 126.0 metres | Area: 158388.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	308.859	234.423	186.783	163.504	154.948	138.234
2	-	-	-	-	-	-	308.910	236.097	187.639	158.981	152.152	141.525
3	-	-	-	-	-	-	308.477	234.533	187.990	165.263	149.486	166.192
4	-	-	-	-	-	-	303.980	232.646	179.800	161.809	149.193	237.180
5	-	-	-	-	-	-	301.657	232.165	186.317	160.678	146.028	211.333
6	-	-	-	-	-	-	295.967	227.576	185.212	161.557	139.658	181.882
7	-	-	-	-	-	-	290.656	221.307	186.492	157.577	143.927	165.609
8	-	-	-	-	-	-	284.152	225.655	184.150	157.347	143.910	160.195
9	-	-	-	-	-	-	279.973	221.691	180.983	156.569	142.883	174.475
10	-	-	-	-	-	-	276.596	213.124	188.439	160.660	148.987	168.040
11	-	-	-	-	-	-	276.621	216.689	187.367	165.591	149.348	164.047
12	-	-	-	-	-	-	275.492	216.500	186.744	164.065	151.561	163.667
13	-	-	-	-	-	-	274.869	213.124	187.036	171.510	154.439	173.315
14	-	-	-	-	-	-	275.612	204.842	184.826	164.645	165.300	161.593
15	-	-	-	-	-	-	274.892	208.703	187.036	160.213	164.555	168.555
16	-	-	-	-	-	-	269.815	212.395	187.250	152.883	150.781	193.534
17	-	-	-	-	-	-	265.281	211.520	185.193	157.719	138.482	194.645
18	-	-	-	-	-	-	268.535	210.835	181.499	159.498	135.149	184.189
19	-	-	-	-	-	-	266.906	208.476	183.245	158.963	132.843	199.729
20	-	-	-	-	-	-	260.743	205.088	181.231	160.499	129.298	261.046
21	-	-	-	-	-	-	256.801	199.749	179.058	155.159	136.195	325.007
22	-	-	-	-	-	-	253.441	202.642	177.996	158.945	133.750	366.297
23	-	-	-	-	-	-	248.628	199.426	177.051	150.764	133.588	404.287
24	-	-	-	-	-	-	243.170	195.381	178.565	151.752	133.685	853.289
25	-	-	-	-	-	-	248.833	200.920	175.394	149.021	130.559	489.595
26	-	-	-	-	-	-	250.516	197.498	176.297	148.094	130.431	355.358
27	-	-	-	-	-	-	244.067	191.696	171.696	150.816	131.634	311.879
28	-	-	-	-	-	-	243.416	182.937	169.807	152.674	137.657	273.218
29	-		-	-	-	-	240.020	187.717	169.291	147.769	140.074	250.926
30	-		-	-	-	-	237.577	189.045	169.512	146.147	140.223	238.530
31	-		-		-		230.441	188.928		149.520		232.799
Mean	-	-	-	-	-	-	269.836	210.430	181.663	157.426	143.024	248.715
Flow (MCM)	-	-	-	-	-	-	722.728	563.616	470.871	421.649	370.718	666.159
Maximum	-	-	-	-	-	-	308.910	236.097	188.439	171.510	165.300	853.289
Minimum	-	-	-	-	-	-	230.441	182.937	169.291	146.147	129.298	138.234
Runoff (mm)	-	-	-	-	-	-	4.563	3.558	2.973	2.662	2.341	4.206

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1K3B **Year:** 2019
Station Name: Rufiji River at Stiegler's Gorge
Time-Series Type: Flow (cumecs)

Latitude: 7:48:24 S Longitude: 37:53:44 E Elevation: 126.0 metres Area: 158388.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	223.636	383.731	757.317	658.137	1286.409	1237.188	476.107	328.585	270.622	229.832	245.665	323.931
2	228.009	419.859	869.164	721.532	1244.830	1202.925	463.933	327.873	265.681	235.744	242.095	291.101
3	224.473	580.401	876.061	843.011	1435.107	1175.964	452.244	335.192	262.983	246.387	236.119	285.838
4	221.350	669.609	958.312	845.826	1517.146	1146.060	440.778	328.453	264.811	255.924	231.466	284.494
5	219.904	720.320	1033.105	697.864	1489.963	1117.136	433.938	323.409	262.492	255.463	247.858	335.059
6	217.364	656.830	1000.891	630.058	1677.476	1089.723	426.274	321.397	261.092	240.109	247.631	317.266
7	217.279	642.439	950.506	637.592	1719.748	1063.925	420.371	328.823	258.490	237.223	239.041	314.553
8	215.785	561.675	791.999	769.106	1830.134	1043.883	415.710	327.241	257.286	236.008	232.712	313.755
9	215.974	552.648	741.807	1092.253	1813.851	1018.097	410.096	318.458	256.016	240.733	236.185	328.084
10	212.791	641.985	742.422	1184.192	1913.347	988.582	408.520	310.316	248.992	241.313	239.330	385.570
11	217.512	662.258	842.439	1109.878	2010.373	961.566	400.369	313.549	250.880	253.625	243.417	338.294
12	265.329	597.449	801.551	1021.313	2101.704	935.745	394.081	317.939	252.456	269.435	252.754	321.815
13	309.370	586.234	798.303	1068.119	2070.109	911.083	391.146	311.238	253.625	320.330	245.530	323.304
14	291.126	608.817	734.606	1313.030	2015.866	886.688	389.032	302.818	251.223	308.630	242.744	326.083
15	372.766	558.681	734.036	1205.858	1994.920	854.526	384.937	303.171	251.268	303.298	239.552	315.198
16	316.489	525.086	754.499	1130.594	1980.440	819.755	375.994	299.620	245.575	299.144	242.789	324.011
17	366.270	477.269	731.265	1099.446	1969.148	800.097	373.982	297.741	240.242	303.222	236.737	387.963
18	357.399	439.912	704.469	1047.291	1933.412	772.833	369.130	295.045	243.865	294.050	227.360	402.458
19	456.207	426.578	661.101	929.754	1866.178	748.963	366.129	291.843	244.450	301.607	218.188	488.649
20	442.481	471.025	634.309	940.730	1798.442	722.219	363.197	290.879	240.710	298.567	209.157	766.098
21	386.952	460.346	581.370	1157.931	1745.919	693.823	360.029	293.554	237.998	292.437	209.158	558.222
22	436.489	462.090	544.219	1096.858	1691.802	667.166	351.023	292.908	239.730	287.996	202.257	607.970
23	525.086	435.473	524.270	1015.809	1632.186	643.844	338.938	294.299	234.819	284.665	200.718	1151.262
24	550.866	441.273	513.185	979.833	1573.357	613.544	345.196	287.898	233.545	280.724	200.677	1371.616
25	456.143	468.591	505.123	965.299	1522.650	585.476	342.086	286.646	235.633	279.320	195.939	897.019
26	415.590	565.317	503.326	959.348	1470.761	560.935	339.180	282.059	239.997	276.765	196.878	737.588
27	413.705	595.190	521.080	994.438	1421.128	531.194	335.006	278.427	242.968	274.605	208.579	711.829
28	392.888	666.586	561.112	1177.334	1385.270	509.697	335.539	280.748	242.632	268.748	208.311	870.640
29	411.198		708.625	1098.532	1341.922	492.944	329.087	279.151	235.369	261.232	258.235	1425.393
30	450.051		721.087	1074.375	1300.765	485.252	329.114	275.948	230.245	258.582	435.136	1298.430
31	399.166		683.148		1265.335		334.899	271.978		253.075		1296.654
Mean	336.440	545.631	725.313	982.178	1678.055	842.694	383.744	303.136	248.523	270.606	235.741	583.876
Flow (MCM)	901.121	1319.991	1942.679	2545.806	4494.502	2184.264	1027.820	811.919	644.172	724.792	611.039	1563.853
Maximum	550.866	720.320	1033.105	1313.030	2101.704	1237.188	476.107	335.192	270.622	320.330	435.136	1425.393
Minimum	212.791	383.731	503.326	630.058	1244.830	485.252	329.087	271.978	230.245	229.832	195.939	284.494
Runoff (mm)	5.689	8.334	12.265	16.073	28.377	13.791	6.489	5.126	4.067	4.576	3.858	9.874

Flow (cumecs)

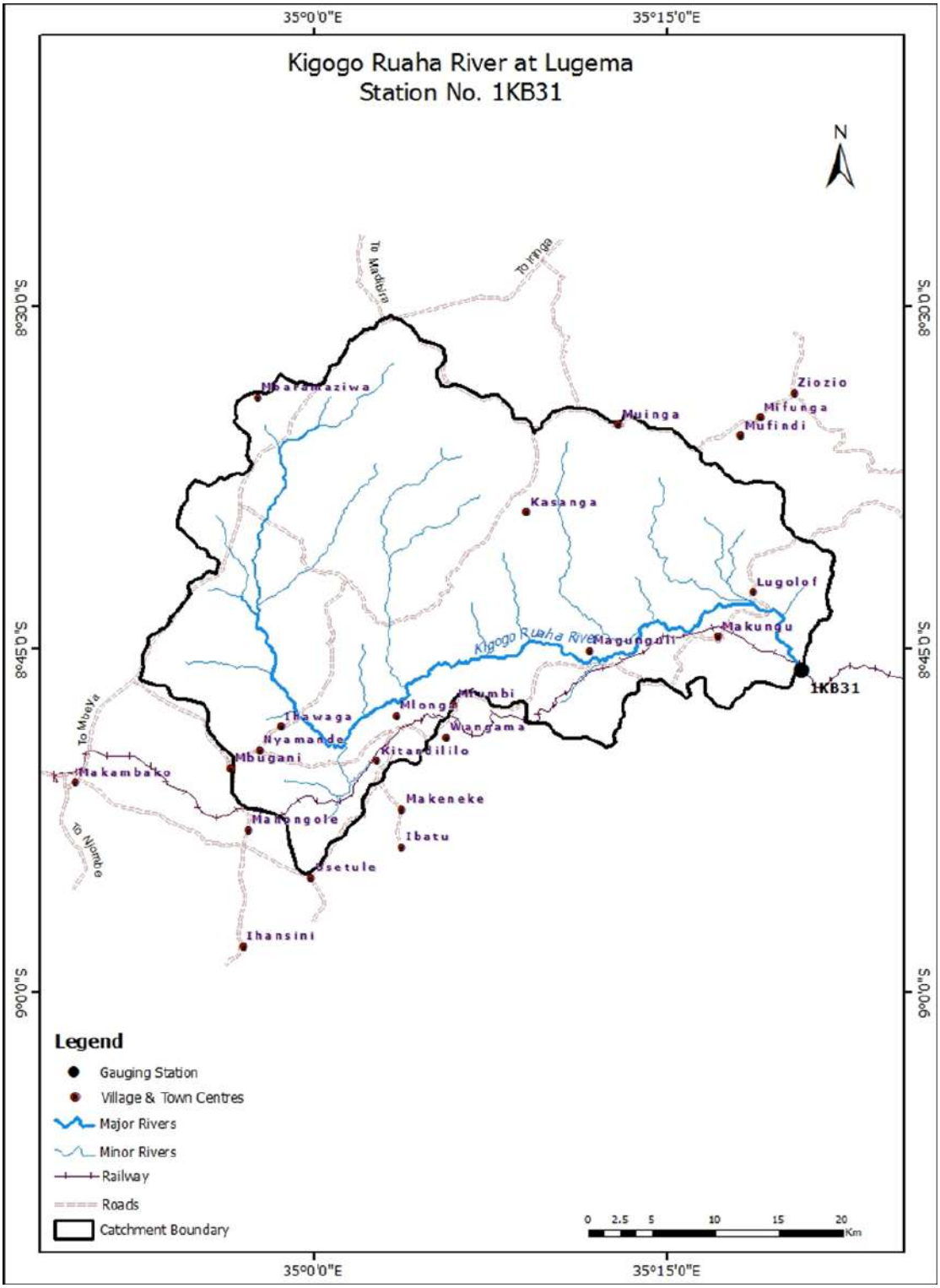
Annual Statistics

Maximum: 2101.704 Minimum: 195.939 Mean: 594.661 cumecs
Total: 18753.243 MCM Runoff: 118.401 mm

Possible data flags

No data stored "-" Estimated values "e"

Kigogo Ruaha River at Lugema				
Station No: 1KB31			Established: 01/01/1990	
Coordinates:			Altitude (m.a.m.s.l): 1,212	
Lat: -8.7657	Long: 35.3449		Catchment Area (km²): 1,291	
Description of the Catchment:				
Grassland, some forest and woodland				
Station Details				
1. Staff Gauges	Range: 0 – 7m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	-		Date installed: -	
3. Benchmark	Bolt in concrete			
BM Assumed Datum: 7.469m		N.M.M.S.L: -	TBM: -	
4. Control	Permanent consist of rock bar across the river with further rapids downstream			
5. Access	Accessible throughout the year, about 175km from Iringa town to the station via Mafinga – Mgololo road			
Records	Period		Quality	
Water Level:	01/01/2010 - 31/12/2019		2.2.3	
Discharge:	01/01/2010 - 31/12/2019		2.2.3	
Extremes:	Max. Recorded	-	On 23/04/2014	WL 6.96m
	Min. Recorded	1.154m³/sec	On 22/11/2018	WL 1.07m
Remarks				


Kigogo Ruaha River at Lugema
Station No. 1KB31
N
35°0'0"E
35°15'0"E
8°30'0"S
8°45'0"S
9°0'0"S
To Madibira
To Iringa
To Mbeya
To Njombe
Ziozio
Mufunga
Mufindi
Muinga
Kasanga
Lugoloi
Makungu
Magungudi
Kigogo Ruaha River
1KB31
Mfumbi
Mlonga
Ihawaga
Nyamande
Wangama
Kitandililo
Mbugani
Makambako
Makeneke
Ibatu
Malongole
Usetule
Ihansini
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Catchment Boundary
0 2.5 5 10 15 20
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2010
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	21.586	19.247	-	12.450	8.440	6.329	5.407	4.525	3.636	3.769
2	-	-	23.375	18.573	-	12.203	8.781	6.337	5.333	4.477	3.651	3.703
3	-	-	25.142	17.648	-	12.136	8.578	6.571	5.290	4.517	3.642	3.606
4	-	-	26.991	17.058	23.002	12.077	8.549	6.614	5.267	4.513	3.625	3.529
5	-	-	25.795	16.367	25.260	11.379	8.572	6.611	5.259	4.512	3.599	3.506
6	-	-	26.433	16.205	26.964	11.366	8.714	6.627	5.246	4.499	3.577	3.524
7	-	-	29.636	16.420	27.909	10.717	8.415	6.629	5.206	4.322	3.580	3.718
8	-	-	29.136	17.217	18.811	10.557	8.394	6.657	5.147	4.306	3.582	4.005
9	-	-	28.149	15.465	17.385	10.756	8.181	6.657	5.016	4.264	3.563	4.150
10	-	-	26.063	14.985	17.138	10.058	7.972	6.583	4.984	4.205	3.580	4.413
11	-	-	23.053	15.181	16.226	9.631	7.841	6.536	4.951	4.187	3.576	4.637
12	-	-	22.700	15.684	14.782	9.617	7.853	6.438	4.912	4.174	3.591	4.769
13	-	-	24.749	16.375	14.269	9.382	7.762	6.365	4.787	4.131	3.587	4.910
14	-	-	25.289	16.468	13.887	9.215	7.756	6.298	4.812	4.056	3.577	4.692
15	-	-	28.580	16.533	13.629	9.081	7.758	6.209	4.864	4.047	3.588	4.371
16	-	-	7.646	16.725	13.341	8.993	7.810	6.198	4.866	3.944	3.638	4.154
17	-	-	-	17.614	13.214	8.957	7.577	6.224	4.862	3.936	3.646	4.049
18	-	-	-	16.329	12.999	8.829	7.534	6.219	4.841	3.945	3.646	3.993
19	-	-	-	15.126	12.395	8.928	7.277	6.207	4.837	3.944	3.646	4.006
20	-	-	-	13.811	11.840	8.955	7.195	6.150	4.805	3.950	3.649	4.010
21	-	-	-	13.223	11.441	8.988	7.281	5.587	4.780	3.986	3.722	3.947
22	-	-	29.496	12.556	11.180	9.247	7.157	5.546	4.731	3.994	4.125	3.924
23	-	-	26.625	12.095	11.198	9.046	7.250	5.532	4.721	3.949	4.149	3.892
24	-	-	23.981	11.708	11.618	8.956	7.193	5.527	4.667	3.959	4.098	4.054
25	-	-	22.623	11.300	11.996	8.842	7.061	5.523	4.597	4.064	4.040	4.458
26	-	-	22.985	11.233	12.440	8.689	7.080	5.513	4.544	4.184	3.960	4.836
27	-	-	22.709	12.111	12.853	8.596	7.012	5.453	4.535	4.201	3.935	5.299
28	-	-	21.357	14.474	12.918	8.529	6.891	5.449	4.543	4.124	3.935	4.821
29	-		24.518	19.203	13.029	8.453	6.862	5.449	4.535	4.098	4.197	4.598
30	-		24.993	29.047	12.859	8.296	6.893	5.449	4.535	4.088	4.122	4.234
31	-		21.193		12.618		6.575	5.447		3.474		4.816
Mean	-	-	-	15.866	-	9.764	7.684	6.095	4.896	4.148	3.749	4.206
Flow (MCM)	-	-	-	41.125	-	25.309	20.582	16.324	12.691	11.109	9.717	11.266
Maximum	-	-	-	29.047	-	12.450	8.781	6.657	5.407	4.525	4.197	5.299
Minimum	-	-	-	11.233	-	8.296	6.575	5.447	4.535	3.474	3.563	3.506
Runoff (mm)	-	-	-	31.855	-	19.604	15.942	12.644	9.830	8.605	7.527	8.726

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2011
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.199	10.953	4.821	-	-	-	6.226	5.234	4.585	4.153	3.288	3.373
2	4.026	10.500	4.561	-	-	-	6.226	4.693	4.572	4.061	3.322	3.321
3	4.027	9.614	8.273	-	-	-	6.220	5.334	3.511	4.020	3.327	3.288
4	3.882	8.793	8.639	-	-	-	6.219	5.331	4.395	3.999	3.351	3.225
5	3.951	8.741	8.710	-	-	-	6.208	5.323	4.551	3.994	3.348	3.183
6	4.309	9.290	8.711	-	-	-	6.201	5.291	4.560	3.991	3.326	3.207
7	4.494	13.694	9.199	-	-	-	6.198	5.248	4.607	4.760	3.305	3.273
8	4.545	18.622	13.788	-	-	-	6.184	5.212	4.503	4.708	3.373	3.348
9	5.357	18.072	14.529	-	-	-	6.103	5.196	4.343	4.825	3.627	3.644
10	5.654	19.056	13.654	-	-	-	6.191	5.154	4.267	4.846	3.598	5.241
11	6.372	16.920	12.474	-	-	-	6.174	5.108	4.256	4.854	3.635	5.812
12	6.478	16.780	12.384	-	-	-	6.063	5.110	4.278	4.822	3.564	5.702
13	6.665	15.348	11.850	-	-	-	5.974	5.056	4.266	4.872	3.486	6.195
14	7.528	9.701	11.706	-	-	-	5.784	5.066	4.258	4.680	3.468	6.325
15	7.853	8.386	10.760	-	-	-	5.947	4.998	4.230	4.561	3.427	6.794
16	7.991	7.835	9.673	-	-	-	5.948	4.953	4.228	4.420	3.383	6.974
17	8.346	8.440	8.258	-	-	-	5.915	4.888	4.228	4.281	3.465	6.987
18	8.533	8.630	8.029	-	-	-	5.899	4.865	4.223	4.065	3.584	7.367
19	8.521	8.556	11.051	-	-	-	5.883	4.834	4.050	3.962	3.623	7.585
20	8.477	9.535	11.489	-	-	-	5.845	4.842	4.130	4.171	3.551	7.052
21	8.600	10.739	13.747	-	-	-	5.808	4.846	4.127	4.094	3.411	8.116
22	8.411	17.213	14.420	-	-	-	5.744	4.824	4.090	3.179	3.306	10.347
23	8.306	16.889	15.372	-	-	-	5.686	4.823	4.097	3.768	3.265	10.757
24	8.360	15.966	14.531	-	-	-	5.654	4.704	4.221	3.644	3.229	12.406
25	7.243	7.108	13.927	-	-	-	5.605	4.644	4.266	3.730	3.206	14.442
26	6.730	5.536	14.014	-	-	-	5.556	4.645	4.344	3.734	3.197	14.682
27	7.115	5.454	13.807	-	-	-	5.511	4.648	4.347	3.642	3.174	13.074
28	7.742	5.374	13.685	-	-	-	5.503	4.609	4.307	3.529	3.145	10.550
29	8.049		13.207	-	-	-	4.722	4.606	4.297	3.478	3.159	8.094
30	7.167		13.215	-	-	-	5.262	4.617	4.242	3.401	3.362	6.824
31	8.172		13.736		-		5.104	4.702		3.333		8.429
Mean	6.681	11.491	11.491	-	-	-	5.857	4.949	4.279	4.115	3.384	7.084
Flow (MCM)	17.894	27.799	30.777	-	-	-	15.687	13.254	11.092	11.023	8.770	18.975
Maximum	8.600	19.056	15.372	-	-	-	6.226	5.334	4.607	4.872	3.635	14.682
Minimum	3.882	5.374	4.561	-	-	-	4.722	4.606	3.511	3.179	3.145	3.183
Runoff (mm)	13.860	21.533	23.840	-	-	-	12.151	10.267	8.592	8.538	6.793	14.698

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2012
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.496	8.843	13.096	10.296	8.306	6.482	5.080	4.343	3.755	3.157	2.944	2.984
2	11.496	10.293	12.871	9.894	9.047	6.501	5.069	4.310	3.754	3.120	3.462	2.970
3	10.503	11.239	7.892	11.218	8.945	6.545	5.052	4.289	3.727	3.091	3.696	2.941
4	8.542	10.984	9.913	10.239	9.643	6.429	5.030	4.266	3.712	3.105	3.721	2.934
5	7.648	8.577	10.147	12.018	11.341	6.393	4.985	4.241	3.683	3.130	3.778	2.903
6	7.062	8.169	10.387	12.943	13.884	6.341	4.930	4.212	3.629	3.063	3.871	2.886
7	6.941	7.613	9.998	15.692	14.983	6.008	4.905	4.198	3.581	3.096	3.769	2.888
8	6.169	7.401	8.831	17.156	14.292	5.698	4.823	4.217	3.577	3.101	3.558	2.860
9	6.087	6.756	8.753	18.918	14.933	5.793	4.812	4.252	3.567	3.094	3.419	2.790
10	6.207	6.884	9.005	16.710	14.706	5.719	4.759	4.214	3.582	3.083	3.323	2.707
11	6.497	6.950	11.030	20.969	11.062	5.705	4.723	4.193	3.528	3.035	3.229	2.717
12	10.138	7.171	12.828	21.258	10.906	5.710	4.713	4.144	3.453	3.007	3.154	2.767
13	9.330	7.622	12.822	20.281	11.735	5.694	4.698	4.121	3.478	2.989	3.076	3.054
14	8.969	7.843	13.892	14.640	12.758	5.576	4.673	4.102	3.458	2.944	3.030	3.360
15	10.529	8.956	13.610	9.882	13.591	5.528	4.646	4.033	3.436	2.930	2.974	3.530
16	10.206	9.950	13.405	9.234	12.975	5.394	4.642	3.979	3.432	2.914	2.928	3.714
17	11.223	9.532	11.846	10.948	10.589	5.383	4.615	3.975	3.425	2.864	2.904	3.712
18	9.802	8.484	11.929	15.786	10.071	5.350	4.623	3.972	3.416	2.836	2.875	3.476
19	9.111	7.932	11.738	17.156	9.120	5.257	4.598	3.955	3.422	2.808	2.850	3.414
20	8.283	7.200	11.150	16.680	7.948	5.377	4.553	4.009	3.424	2.820	2.823	3.284
21	7.449	7.145	10.658	15.596	7.597	5.589	4.496	3.997	3.400	2.793	2.738	3.196
22	6.777	7.156	9.887	13.662	7.265	5.557	4.443	4.009	3.374	2.780	2.772	3.376
23	6.448	7.616	9.126	9.928	7.026	5.601	4.420	4.068	3.347	2.764	3.052	3.439
24	6.280	7.256	9.051	9.200	6.944	5.567	4.417	3.873	3.331	2.754	2.970	3.412
25	5.907	7.346	8.640	8.468	6.917	5.528	4.403	3.907	3.303	2.733	3.147	3.457
26	6.339	7.866	8.624	8.230	6.915	6.052	4.417	3.837	3.266	2.656	3.151	3.396
27	6.357	10.085	8.585	8.585	6.880	5.510	4.428	3.830	3.252	2.691	3.092	3.370
28	6.730	11.518	9.077	8.394	6.598	5.283	4.447	3.857	3.238	2.683	3.062	3.360
29	6.490	12.274	9.506	8.354	6.533	5.205	4.442	3.834	3.240	2.704	3.037	3.381
30	6.482		9.746	8.247	6.515	5.119	4.419	3.804	3.210	2.703	3.004	3.604
31	7.627		9.820		6.504		4.366	3.773		2.700		3.828
Mean	8.004	8.506	10.576	13.020	9.888	5.730	4.665	4.059	3.467	2.908	3.180	3.216
Flow (MCM)	21.438	21.312	28.328	33.747	26.484	14.852	12.496	10.871	8.986	7.789	8.243	8.615
Maximum	11.496	12.274	13.892	21.258	14.983	6.545	5.080	4.343	3.755	3.157	3.871	3.828
Minimum	5.907	6.756	7.892	8.230	6.504	5.119	4.366	3.773	3.210	2.656	2.738	2.707
Runoff (mm)	16.606	16.508	21.942	26.140	20.514	11.504	9.679	8.420	6.960	6.033	6.385	6.673

Flow (cumecs)

Annual Statistics

Maximum: 21.258 Minimum: 2.656 Mean: 6.435 cumecs
Total: 203.487 MCM Runoff: 157.620 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2013
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.846	6.092	7.552	24.230	12.815	7.160	5.280	4.589	3.999	3.305	2.887	4.803
2	3.747	5.761	8.104	21.092	14.978	7.034	5.288	4.629	3.995	3.331	2.841	4.372
3	3.848	5.675	7.685	17.359	17.337	6.894	5.251	4.683	3.947	3.502	2.827	4.301
4	3.840	6.343	8.024	14.462	17.237	6.807	5.220	4.735	3.902	3.778	2.826	4.323
5	3.997	7.793	8.661	12.994	15.635	6.624	5.189	4.793	3.866	3.980	2.810	4.646
6	4.217	9.207	7.855	12.993	14.748	6.509	5.161	4.830	3.858	4.032	2.807	4.520
7	4.823	9.951	6.751	21.116	15.530	6.412	5.135	4.825	3.836	3.938	2.834	4.469
8	4.734	9.351	7.205	7.146	16.552	6.243	5.041	4.761	3.808	3.791	2.800	4.299
9	4.837	7.587	7.773	22.095	15.762	6.146	4.969	4.738	3.818	4.303	2.812	4.689
10	4.901	6.427	8.828	25.190	14.339	6.055	4.905	4.684	3.824	3.525	2.780	4.950
11	4.999	6.416	11.184	25.234	12.886	6.002	4.858	4.612	3.758	3.579	2.767	4.653
12	5.248	6.856	11.751	-	11.899	5.953	4.830	4.536	3.750	3.552	2.673	4.479
13	5.259	6.860	12.965	-	11.677	5.876	4.786	4.480	3.688	3.467	2.729	4.973
14	5.923	6.851	14.169	-	11.508	5.845	4.754	4.447	3.677	3.425	2.646	4.656
15	6.548	7.486	13.970	-	11.285	5.814	4.732	4.394	3.665	3.369	2.634	4.491
16	6.628	7.840	13.672	7.980	10.739	5.790	4.699	4.355	3.615	3.303	2.639	4.758
17	7.045	8.167	13.113	27.544	10.156	5.764	4.653	4.297	3.594	3.262	2.664	5.838
18	6.867	9.332	13.172	20.327	9.662	5.724	4.638	4.255	3.567	3.258	2.607	5.571
19	6.309	11.216	12.924	16.224	9.322	5.663	4.650	4.260	3.537	3.239	2.601	5.985
20	7.164	10.873	12.689	14.844	9.176	5.612	4.644	4.220	3.510	3.196	2.581	6.288
21	6.876	10.895	18.084	13.395	9.068	5.570	4.565	4.202	3.527	3.151	2.646	9.790
22	8.016	11.131	24.396	12.754	8.839	5.546	4.530	4.203	3.512	3.098	2.533	8.602
23	8.186	9.585	26.958	12.644	8.612	5.507	4.528	4.158	3.465	3.066	2.541	9.332
24	7.866	8.507	23.433	13.326	8.439	5.472	4.523	4.110	3.427	3.005	2.532	8.499
25	7.494	8.002	19.786	12.692	8.246	5.594	4.515	4.143	3.432	2.981	2.518	7.774
26	7.239	7.326	16.613	13.469	8.045	5.634	4.516	4.195	3.434	2.987	2.805	7.108
27	7.503	7.308	15.027	14.502	7.918	5.567	4.523	4.095	3.423	2.952	3.616	6.562
28	7.499	7.191	17.514	14.409	7.636	5.486	4.521	4.055	3.386	2.966	4.180	6.063
29	8.729		19.759	12.765	7.603	5.408	4.509	4.016	3.330	2.957	4.892	5.492
30	7.773		22.140	10.129	7.465	5.305	4.527	4.003	3.325	3.028	4.571	5.154
31	6.447		24.908		7.312		4.542	4.035		3.562		5.128
Mean	6.078	8.072	14.086	-	11.369	5.967	4.790	4.398	3.649	3.383	2.920	5.696
Flow (MCM)	16.278	19.529	37.728	-	30.450	15.467	12.829	11.779	9.459	9.062	7.569	15.256
Maximum	8.729	11.216	26.958	-	17.337	7.160	5.288	4.830	3.999	4.303	4.892	9.790
Minimum	3.747	5.675	6.751	-	7.312	5.305	4.509	4.003	3.325	2.952	2.518	4.299
Runoff (mm)	12.609	15.127	29.224	-	23.586	11.981	9.937	9.124	7.327	7.019	5.863	11.817

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2014
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.850	23.291	28.529	-	-	14.528	10.435	7.917	6.246	4.865	4.339	3.637
2	8.967	20.134	26.022	-	-	14.161	10.171	7.893	6.223	4.821	4.320	3.715
3	9.535	17.378	21.932	-	-	13.856	9.993	7.846	6.197	4.751	4.355	4.104
4	8.973	16.551	23.385	-	-	13.565	9.866	7.843	6.190	4.718	4.273	4.458
5	9.078	14.967	23.792	-	32.074	13.336	9.707	7.746	6.193	4.879	4.192	4.980
6	12.404	12.835	20.713	23.105	31.174	13.104	9.620	7.607	6.225	5.049	4.103	5.599
7	13.338	11.623	17.039	29.484	31.384	13.019	9.515	7.504	6.276	5.027	4.050	5.418
8	11.264	11.268	14.569	29.060	31.671	14.180	9.439	7.484	6.305	4.933	3.980	5.018
9	9.739	11.398	13.224	7.582	32.286	14.714	9.335	7.431	6.326	4.847	3.948	4.685
10	9.347	10.963	12.637	-	31.343	15.199	9.243	7.354	6.262	4.754	3.911	4.461
11	12.301	10.160	12.726	-	29.782	14.860	9.123	7.334	6.092	4.640	3.869	4.305
12	14.608	10.031	13.695	-	27.608	13.861	8.961	7.284	5.966	4.592	3.835	3.917
13	12.113	9.771	14.550	-	25.358	13.096	8.830	7.267	5.835	4.515	3.839	4.018
14	10.700	9.862	15.655	-	23.602	12.673	8.693	7.278	5.762	4.437	3.783	4.035
15	11.186	10.068	15.421	-	22.286	12.412	8.682	7.344	5.735	4.373	3.776	3.946
16	10.754	10.489	15.449	-	20.853	12.136	8.621	7.302	5.705	4.330	3.736	3.857
17	11.483	10.648	14.509	-	20.594	11.929	8.539	7.265	5.628	4.308	3.726	3.780
18	14.894	10.809	13.078	-	19.993	11.753	8.463	7.227	5.528	4.301	3.684	3.713
19	16.668	12.009	13.470	-	19.383	11.582	8.448	7.210	5.420	4.476	3.672	3.724
20	15.032	13.215	15.803	-	18.740	11.387	8.464	7.213	5.337	4.810	3.691	3.737
21	12.798	12.697	19.516	-	18.097	11.249	8.421	7.141	5.294	5.024	3.739	4.420
22	17.229	13.618	21.011	-	17.596	11.180	8.398	7.018	5.241	5.088	3.770	4.972
23	15.501	15.656	23.580	-	17.122	11.237	8.373	6.904	5.201	4.968	3.868	5.540
24	18.681	18.119	26.467	-	16.691	11.436	8.312	6.792	5.212	4.820	3.973	5.826
25	23.422	19.298	26.556	-	16.244	11.848	8.250	6.633	5.207	4.671	3.957	5.873
26	7.539	21.827	23.201	-	16.007	11.872	8.181	6.496	5.209	4.563	3.925	6.604
27	-	24.408	25.118	-	15.818	11.567	8.077	6.434	5.147	4.442	3.901	6.945
28	27.716	25.354	-	-	15.985	11.219	7.966	6.371	5.060	4.348	3.809	6.953
29	20.573		-	-	15.559	10.959	7.914	6.318	4.994	4.348	3.754	7.135
30	23.815		-	-	15.241	10.720	7.930	6.306	4.924	4.357	3.650	7.289
31	25.516		-		14.927		7.922	6.263		4.349		7.069
Mean	-	14.587	-	-	-	12.621	8.835	7.162	5.698	4.658	3.914	4.959
Flow (MCM)	-	35.290	-	-	-	32.714	23.664	19.183	14.769	12.477	10.146	13.283
Maximum	-	25.354	-	-	-	15.199	10.435	7.917	6.326	5.088	4.355	7.289
Minimum	-	9.771	-	-	-	10.720	7.914	6.263	4.924	4.301	3.650	3.637
Runoff (mm)	-	27.335	-	-	-	25.340	18.330	14.859	11.440	9.664	7.859	10.289

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2015
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.800	17.617	12.381	14.078	14.813	8.584	6.377	5.339	4.490	3.843	3.247	4.031
2	7.373	16.260	11.822	13.792	13.751	8.498	6.464	5.326	4.514	3.806	3.298	3.955
3	7.235	17.153	11.362	15.661	13.159	8.347	6.529	5.312	4.528	3.724	3.725	3.907
4	7.070	21.604	11.029	17.538	12.877	8.120	6.523	5.275	4.521	3.772	3.613	3.902
5	6.261	24.040	13.502	19.856	13.726	7.948	6.388	5.262	4.524	3.759	3.740	3.840
6	5.789	24.405	19.530	18.684	14.615	7.813	6.325	5.229	4.458	3.740	4.143	3.714
7	5.418	22.217	18.180	16.081	15.709	7.582	6.254	5.242	4.396	3.698	4.459	3.602
8	5.255	23.453	17.093	14.091	16.991	7.495	6.243	5.244	4.361	3.644	4.537	3.546
9	6.035	26.424	17.706	12.567	16.241	7.422	6.188	5.194	4.319	3.593	4.372	3.635
10	6.324	24.418	19.729	12.467	16.519	7.390	6.124	5.123	4.290	3.586	4.167	3.682
11	8.460	23.435	27.559	12.911	16.237	7.299	6.090	5.053	4.247	3.570	4.108	3.594
12	9.261	23.862	26.540	14.232	15.347	7.216	5.999	5.045	4.172	3.534	3.863	3.728
13	9.619	25.378	25.587	15.514	14.304	7.157	5.936	5.032	4.150	3.489	3.794	3.912
14	8.781	20.851	27.221	17.791	13.443	7.042	5.898	5.028	4.157	3.491	3.661	4.436
15	8.311	18.126	19.969	22.336	12.725	6.969	5.855	5.035	4.121	3.450	3.597	4.479
16	7.867	15.611	16.143	23.232	12.129	6.889	5.782	5.007	4.098	3.427	3.526	5.156
17	7.863	15.198	16.719	20.545	11.581	6.835	5.748	4.986	4.064	3.401	3.360	5.462
18	8.010	17.520	21.157	17.361	11.102	6.798	5.694	4.949	4.068	3.413	3.321	5.417
19	8.031	20.282	26.182	15.988	10.573	7.028	5.648	4.882	4.061	3.388	3.302	5.372
20	7.863	18.219	24.865	14.342	10.156	6.724	5.663	4.850	3.956	3.307	3.282	5.327
21	8.693	15.100	22.056	15.260	9.876	6.714	5.680	4.766	3.948	3.285	3.254	5.282
22	10.034	13.131	20.739	15.119	9.549	6.717	5.649	4.716	3.904	3.323	3.205	5.237
23	12.919	12.259	20.752	15.895	9.363	6.645	5.631	4.652	3.869	3.314	3.176	5.193
24	15.732	12.888	20.390	17.575	9.286	6.650	5.572	4.640	3.832	3.294	3.140	5.148
25	18.587	14.506	19.270	18.966	9.077	6.745	5.549	4.617	3.750	3.286	3.290	5.104
26	19.749	14.504	18.952	19.562	8.929	6.586	5.442	4.618	3.764	3.293	3.538	5.060
27	19.322	14.061	18.875	19.277	8.776	6.541	5.442	4.589	3.793	3.269	4.685	5.016
28	19.911	12.910	18.375	18.036	8.669	6.511	5.345	4.548	3.830	3.239	4.586	4.972
29	20.677		17.778	16.720	8.618	6.432	5.333	4.528	3.850	3.232	4.248	4.928
30	19.728		15.976	15.849	8.607	6.367	5.337	4.580	3.847	3.230	4.141	4.885
31	18.927		14.830		8.591		5.339	4.529		3.238		4.841
Mean	10.707	18.766	19.105	16.711	12.108	7.169	5.872	4.942	4.129	3.472	3.746	4.528
Flow (MCM)	28.677	45.398	51.172	43.315	32.429	18.582	15.729	13.236	10.703	9.300	9.709	12.127
Maximum	20.677	26.424	27.559	23.232	16.991	8.584	6.529	5.339	4.528	3.843	4.685	5.462
Minimum	5.255	12.259	11.029	12.467	8.591	6.367	5.333	4.528	3.750	3.230	3.140	3.546
Runoff (mm)	22.213	35.165	39.638	33.551	25.120	14.393	12.183	10.253	8.291	7.204	7.521	9.394

Flow (cumecs)

Annual Statistics

Maximum: 27.559 Minimum: 3.140 Mean: 9.271 cumecs
Total: 292.377 MCM Runoff: 226.474 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2016
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.568	11.965	15.109	28.445	17.272	8.860	6.154	5.478	4.678	3.952	3.292	2.780
2	11.807	12.268	14.050	28.519	17.149	8.820	6.584	5.451	4.653	3.929	3.277	2.819
3	11.893	13.179	14.187	27.683	16.814	8.729	6.620	5.425	4.628	3.905	3.240	2.886
4	11.509	13.672	14.750	26.762	16.395	8.600	6.541	5.398	4.603	3.882	3.194	3.072
5	10.129	13.794	13.806	26.164	16.811	8.446	6.434	5.372	4.578	3.859	3.166	3.359
6	8.838	13.843	13.333	29.071	16.518	8.311	6.335	5.345	4.553	3.836	3.136	3.477
7	8.489	14.348	14.072	-	15.606	8.511	6.296	5.319	4.529	3.813	3.140	3.505
8	8.773	14.014	13.301	-	14.659	8.567	6.258	5.293	4.504	3.789	3.151	3.765
9	10.051	14.016	12.135	-	13.877	8.523	6.249	5.266	4.479	3.767	3.152	4.367
10	11.664	14.179	12.917	-	13.191	8.480	6.168	5.240	4.455	3.744	3.156	3.901
11	15.317	13.694	11.611	-	12.628	8.369	6.116	5.214	4.430	3.721	3.147	3.846
12	16.253	17.866	12.290	-	12.151	8.183	6.040	5.188	4.406	3.698	3.112	3.665
13	17.041	22.194	16.751	-	11.817	8.074	5.982	5.162	4.382	3.675	3.080	3.585
14	16.971	26.089	19.558	-	11.428	7.918	5.918	5.136	4.357	3.652	3.075	3.476
15	15.309	23.817	15.237	-	11.063	7.737	6.027	5.110	4.333	3.630	3.062	3.401
16	13.259	22.802	14.874	-	10.527	7.619	7.289	5.084	4.309	3.607	3.027	3.314
17	12.751	25.313	14.822	-	10.493	7.464	5.882	5.059	4.285	3.583	3.023	3.227
18	14.932	26.550	14.881	-	10.312	7.359	5.855	5.033	4.260	3.553	3.067	3.320
19	17.559	27.584	15.207	-	10.110	7.278	5.828	5.007	4.236	3.553	2.980	4.190
20	16.407	32.573	15.578	-	9.900	7.257	5.801	4.981	4.212	3.526	2.954	4.335
21	15.678	32.182	17.744	30.897	9.798	7.244	5.773	4.956	4.188	3.507	2.982	4.021
22	14.314	25.136	16.194	27.256	9.667	7.243	5.746	4.930	4.165	3.481	2.974	3.856
23	15.341	22.093	14.273	24.340	9.575	7.175	5.719	4.905	4.141	3.441	2.968	3.700
24	19.503	20.039	15.168	21.844	9.572	7.068	5.692	4.879	4.117	3.419	2.964	3.605
25	18.863	17.257	16.800	20.069	9.457	6.984	5.665	4.854	4.093	3.413	2.948	3.530
26	16.048	15.592	17.588	18.700	9.241	6.935	5.638	4.829	4.069	3.400	2.917	3.515
27	13.791	15.087	21.931	17.761	9.087	6.894	5.611	4.803	4.046	3.381	2.878	3.418
28	12.739	15.655	27.454	17.190	8.957	6.843	5.584	4.778	4.022	3.358	2.851	3.310
29	12.364	15.792	28.276	17.104	8.914	6.423	5.558	4.753	3.999	3.290	2.834	3.238
30	12.373		24.775	17.017	8.900	6.061	5.531	4.728	3.975	3.294	2.809	3.194
31	11.832		25.882		8.881		5.504	4.703		3.306		3.174
Mean	13.463	19.055	16.599	-	11.960	7.732	6.013	5.086	4.323	3.612	3.052	3.511
Flow (MCM)	36.061	47.744	44.458	-	32.035	20.043	16.105	13.624	11.205	9.674	7.910	9.405
Maximum	19.503	32.573	28.276	-	17.272	8.860	7.289	5.478	4.678	3.952	3.292	4.367
Minimum	5.568	11.965	11.611	-	8.881	6.061	5.504	4.703	3.975	3.290	2.809	2.780
Runoff (mm)	27.932	36.982	34.437	-	24.814	15.525	12.475	10.553	8.679	7.493	6.127	7.285

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2017
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.111	6.859	11.170	-	19.585	12.287	7.618	5.855	4.845	4.063	3.958	3.998
2	2.992	7.200	12.666	-	17.632	12.279	7.545	5.864	4.796	4.050	4.068	3.945
3	3.217	8.452	12.744	29.770	16.315	12.562	7.460	5.926	4.750	4.013	4.098	4.040
4	3.510	9.412	14.732	27.807	15.288	11.462	7.419	5.953	4.745	3.977	4.070	4.184
5	3.917	8.260	17.413	25.953	14.692	11.090	7.408	5.936	4.719	3.986	3.996	4.096
6	3.676	7.514	24.209	24.096	17.102	10.784	7.358	5.950	4.696	3.958	3.968	4.065
7	3.593	6.908	23.521	22.627	23.984	10.524	7.285	5.914	4.688	3.952	3.936	4.020
8	3.514	7.339	20.728	21.327	7.539	10.266	7.230	5.839	4.676	3.962	3.936	3.941
9	3.564	8.426	20.536	22.652	-	10.086	7.164	5.787	4.652	3.975	3.945	3.870
10	3.752	9.891	19.573	20.749	-	9.737	7.085	5.703	4.645	3.993	3.946	3.833
11	4.199	9.907	16.777	-	-	9.507	7.026	5.685	4.635	3.970	3.946	4.293
12	4.444	10.591	14.323	-	23.707	9.308	6.949	5.644	4.598	3.943	4.008	5.409
13	4.830	12.620	13.351	31.227	28.979	9.181	6.839	5.652	4.542	3.885	3.997	4.916
14	4.773	14.278	13.473	26.462	27.788	9.154	6.769	5.650	4.482	3.838	3.865	4.753
15	5.395	14.475	12.891	23.009	25.766	9.104	6.622	5.651	4.454	3.806	3.717	4.530
16	8.508	12.770	12.262	20.634	23.217	8.984	6.576	5.652	4.394	3.784	3.612	4.463
17	7.511	10.355	12.429	19.823	21.049	8.874	6.487	5.639	4.357	3.730	3.519	4.064
18	7.920	8.460	11.425	19.736	19.652	8.808	6.436	5.691	4.308	3.690	3.403	3.999
19	8.121	7.315	10.757	18.732	18.484	8.702	6.378	5.682	4.272	3.628	3.340	4.542
20	7.250	7.402	11.727	18.356	17.058	8.564	6.331	5.675	4.256	3.600	3.326	7.450
21	6.267	7.525	17.489	21.594	15.910	8.450	6.311	5.697	4.229	3.574	3.367	6.287
22	6.287	8.379	21.069	27.668	15.084	8.328	6.279	5.727	4.190	3.526	3.404	6.057
23	6.145	8.258	18.768	-	14.444	8.159	6.263	5.681	4.184	3.483	3.414	5.655
24	5.657	8.464	15.255	-	14.031	7.990	6.208	5.579	4.211	3.455	3.428	5.125
25	5.457	8.913	13.253	-	13.749	7.888	6.155	5.482	4.209	3.449	3.411	5.271
26	5.412	9.593	15.529	7.981	13.417	7.825	6.103	5.371	4.196	3.466	3.439	5.126
27	6.040	10.650	14.503	28.064	12.919	7.763	6.047	5.330	4.182	3.437	3.711	5.373
28	5.757	10.901	17.755	25.796	12.402	7.699	5.975	5.162	4.156	3.434	3.701	5.849
29	5.662		22.238	22.914	11.932	7.687	5.906	5.062	4.142	3.426	3.725	6.774
30	5.812		26.704	25.311	11.763	7.660	5.875	4.980	4.146	3.420	3.838	7.016
31	7.055		7.852		12.048		5.845	4.914		3.726		7.100
Mean	5.269	9.326	16.036	-	-	9.357	6.676	5.624	4.445	3.748	3.736	4.969
Flow (MCM)	14.113	22.561	42.951	-	-	24.254	17.881	15.062	11.522	10.040	9.685	13.309
Maximum	8.508	14.475	26.704	-	-	12.562	7.618	5.953	4.845	4.063	4.098	7.450
Minimum	2.992	6.859	7.852	-	-	7.660	5.845	4.914	4.142	3.420	3.326	3.833
Runoff (mm)	10.932	17.475	33.270	-	-	18.787	13.850	11.667	8.925	7.777	7.502	10.309

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2018
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.196	16.889	8.658	16.614	9.499	6.518	5.208	4.381	3.837	3.475	3.229	3.080
2	7.248	16.250	8.185	16.865	9.951	6.442	5.233	4.351	3.833	3.441	3.197	3.188
3	6.505	13.769	9.021	14.485	10.337	6.372	5.213	4.342	3.817	3.421	3.188	3.176
4	6.001	12.715	10.207	13.002	11.163	6.290	5.181	4.332	3.772	3.437	3.168	3.186
5	7.814	12.121	11.056	12.175	12.048	6.169	5.157	4.323	4.073	3.457	3.166	3.181
6	9.566	10.982	10.994	11.464	12.470	6.057	5.111	4.313	4.704	3.451	3.159	3.223
7	10.517	10.631	10.258	11.198	11.923	5.922	5.108	4.304	4.733	3.422	3.098	3.331
8	10.256	11.349	9.949	10.990	10.978	5.817	5.143	4.294	4.617	3.414	3.072	3.387
9	7.875	12.341	9.914	10.661	10.410	5.753	5.215	4.285	4.445	3.432	3.037	3.501
10	6.982	13.725	9.001	10.095	10.348	5.726	5.225	4.275	4.311	3.464	3.002	3.312
11	7.086	21.027	11.289	9.458	10.304	5.673	5.214	4.266	4.226	3.447	2.977	3.404
12	7.254	23.814	12.610	9.071	10.067	5.632	5.210	4.256	4.156	3.423	3.369	3.722
13	7.749	21.728	16.564	9.883	10.236	5.635	5.148	4.247	4.125	3.393	5.711	4.187
14	8.696	17.318	19.981	10.222	10.486	5.644	5.089	4.238	4.059	3.367	3.085	4.690
15	9.828	16.504	21.337	14.347	10.308	5.573	5.027	4.228	3.989	3.329	3.086	5.122
16	9.836	14.927	19.667	17.358	9.976	5.541	5.025	4.219	3.935	3.287	3.040	4.828
17	8.803	12.509	21.503	20.046	9.592	5.510	4.967	4.205	3.881	3.274	2.998	4.719
18	8.206	11.054	21.893	21.007	9.088	5.504	4.982	4.169	3.788	3.232	2.960	4.856
19	7.556	9.863	21.212	21.873	8.594	5.432	4.946	4.123	3.703	3.225	2.941	5.209
20	7.200	8.815	19.195	23.237	8.259	5.416	4.856	4.110	3.702	3.164	2.961	5.044
21	6.799	8.842	17.745	21.088	7.990	5.368	4.618	4.089	3.721	3.145	2.897	5.470
22	8.473	7.454	21.052	18.007	7.785	5.347	4.788	4.066	3.767	3.299	2.120	5.564
23	12.334	7.100	23.811	15.739	7.610	5.357	4.753	4.065	3.722	3.344	2.867	6.257
24	13.990	7.585	22.741	14.009	7.530	5.341	4.708	4.078	3.679	3.331	3.488	7.697
25	13.996	9.850	18.837	12.567	7.395	5.295	4.678	4.057	3.636	3.335	3.380	9.512
26	12.706	10.173	16.115	11.677	7.324	5.273	4.487	3.992	3.613	3.377	3.390	10.003
27	13.432	8.733	14.308	10.354	7.245	5.247	3.599	3.988	3.584	3.368	3.414	9.639
28	16.900	9.918	13.324	9.835	7.067	5.212	4.724	3.965	3.566	3.344	3.311	8.437
29	16.610		12.372	9.349	6.905	5.181	4.731	3.885	3.536	3.325	3.237	7.563
30	15.874		11.685	9.326	6.774	5.178	4.745	3.879	3.513	3.308	3.121	6.298
31	15.674		12.880		6.625		4.674	3.855		3.262		5.463
Mean	9.967	12.785	15.076	13.867	9.235	5.647	4.928	4.167	3.935	3.355	3.189	5.169
Flow (MCM)	26.694	30.930	40.380	35.943	24.735	14.638	13.199	11.161	10.199	8.985	8.266	13.846
Maximum	16.900	23.814	23.811	23.237	12.470	6.518	5.233	4.381	4.733	3.475	5.711	10.003
Minimum	6.001	7.100	8.185	9.071	6.625	5.178	3.599	3.855	3.513	3.145	2.120	3.080
Runoff (mm)	20.677	23.958	31.278	27.841	19.160	11.339	10.224	8.645	7.900	6.960	6.403	10.725

Flow (cumecs)

Annual Statistics

Maximum: 23.814 Minimum: 2.120 Mean: 7.610 cumecs
Total: 239.989 MCM Runoff: 185.894 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB31 **Year:** 2018
Station Name: Kigogo Ruaha River at Lungema
Time-Series Type: Flow (cumecs)

Latitude: 8:45:56 S Longitude: 35:20:41 E Elevation: 1212.0 metres Area: 1291.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.486	10.503	7.953	14.825	15.090	12.954	7.536	5.984	4.846	4.012	3.688	4.825
2	5.123	10.138	28.982	18.891	17.170	12.654	7.475	6.004	4.814	3.988	3.654	4.932
3	5.321	10.260	23.767	20.186	20.302	12.187	7.367	5.995	4.770	4.091	3.727	5.010
4	5.970	12.838	21.509	20.265	24.047	11.963	7.359	5.993	4.706	4.240	3.809	4.729
5	7.073	17.224	24.262	18.728	26.555	11.573	7.333	5.974	4.650	4.145	3.794	4.431
6	7.832	23.557	28.234	15.904	28.660	11.035	7.291	5.857	4.638	4.228	3.787	4.321
7	8.025	24.305	25.816	15.226	28.846	10.777	7.211	5.751	4.597	4.221	3.765	4.220
8	9.560	27.012	21.234	17.287	28.138	10.456	7.160	5.671	4.584	4.246	3.724	4.424
9	10.414	27.885	18.107	23.471	27.776	10.306	7.137	5.596	4.562	4.194	3.712	4.407
10	10.187	26.231	16.538	25.118	27.635	10.108	7.113	5.559	4.553	4.283	3.656	5.771
11	12.963	25.733	16.852	22.678	29.143	9.892	7.016	5.532	4.528	4.672	3.693	6.729
12	17.686	27.089	15.076	20.867	24.132	9.695	6.892	5.491	4.533	5.587	3.627	7.440
13	17.276	29.758	14.524	17.857	-	9.139	6.743	5.405	4.529	6.047	3.578	8.894
14	16.301	27.434	14.493	19.353	24.292	8.771	6.672	5.349	4.523	6.082	3.477	9.471
15	15.568	23.970	16.572	4.405	30.443	9.367	6.649	5.324	4.474	5.781	3.457	9.159
16	17.759	21.059	20.303	17.440	28.060	9.194	6.606	5.285	4.432	5.344	3.423	9.311
17	18.807	-	17.615	15.612	25.328	9.061	6.598	5.249	4.390	5.030	3.423	8.479
18	20.116	-	17.901	14.201	22.730	8.905	6.616	5.239	4.377	4.860	3.387	10.494
19	20.051	-	18.303	14.120	20.629	8.812	6.523	5.229	4.349	4.732	3.407	10.708
20	17.505	-	16.836	15.612	19.041	8.729	6.621	5.194	4.307	4.614	3.386	12.802
21	14.595	-	17.743	18.770	17.912	8.629	8.202	5.130	4.234	4.506	3.336	14.316
22	12.650	-	17.334	22.781	17.040	8.487	6.724	5.075	4.216	4.392	3.321	16.658
23	11.690	-	16.048	22.975	16.586	8.396	6.379	5.032	4.160	4.308	3.266	19.708
24	11.098	-	16.121	21.014	16.385	8.241	6.315	4.995	4.118	4.226	3.243	20.981
25	11.155	-	14.664	18.631	16.281	8.193	6.318	5.003	4.093	4.133	3.580	-
26	13.470	-	14.247	16.806	15.733	8.100	6.152	4.980	4.097	4.042	3.531	7.928
27	12.552	-	13.742	15.359	14.117	7.994	6.128	4.964	4.117	3.988	3.589	26.184
28	12.874	-	13.788	13.982	14.747	7.917	6.052	4.929	4.143	3.924	3.737	21.240
29	13.225		13.735	13.534	14.366	7.850	5.995	4.891	4.065	3.876	4.434	23.663
30	12.131		12.916	13.544	13.955	7.719	5.994	4.918	4.086	3.784	4.769	26.749
31	11.145		14.024		13.461		5.976	4.876		3.745		18.587
Mean	12.439	-	17.717	17.648	-	9.570	6.779	5.370	4.416	4.494	3.633	-
Flow (MCM)	33.317	-	47.454	45.744	-	24.806	18.157	14.383	11.447	12.037	9.416	-
Maximum	20.116	-	28.982	25.118	-	12.954	8.202	6.004	4.846	6.082	4.769	-
Minimum	5.123	-	7.953	4.405	-	7.719	5.976	4.876	4.065	3.745	3.243	-
Runoff (mm)	25.807	-	36.758	35.433	-	19.214	14.064	11.141	8.867	9.324	7.294	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

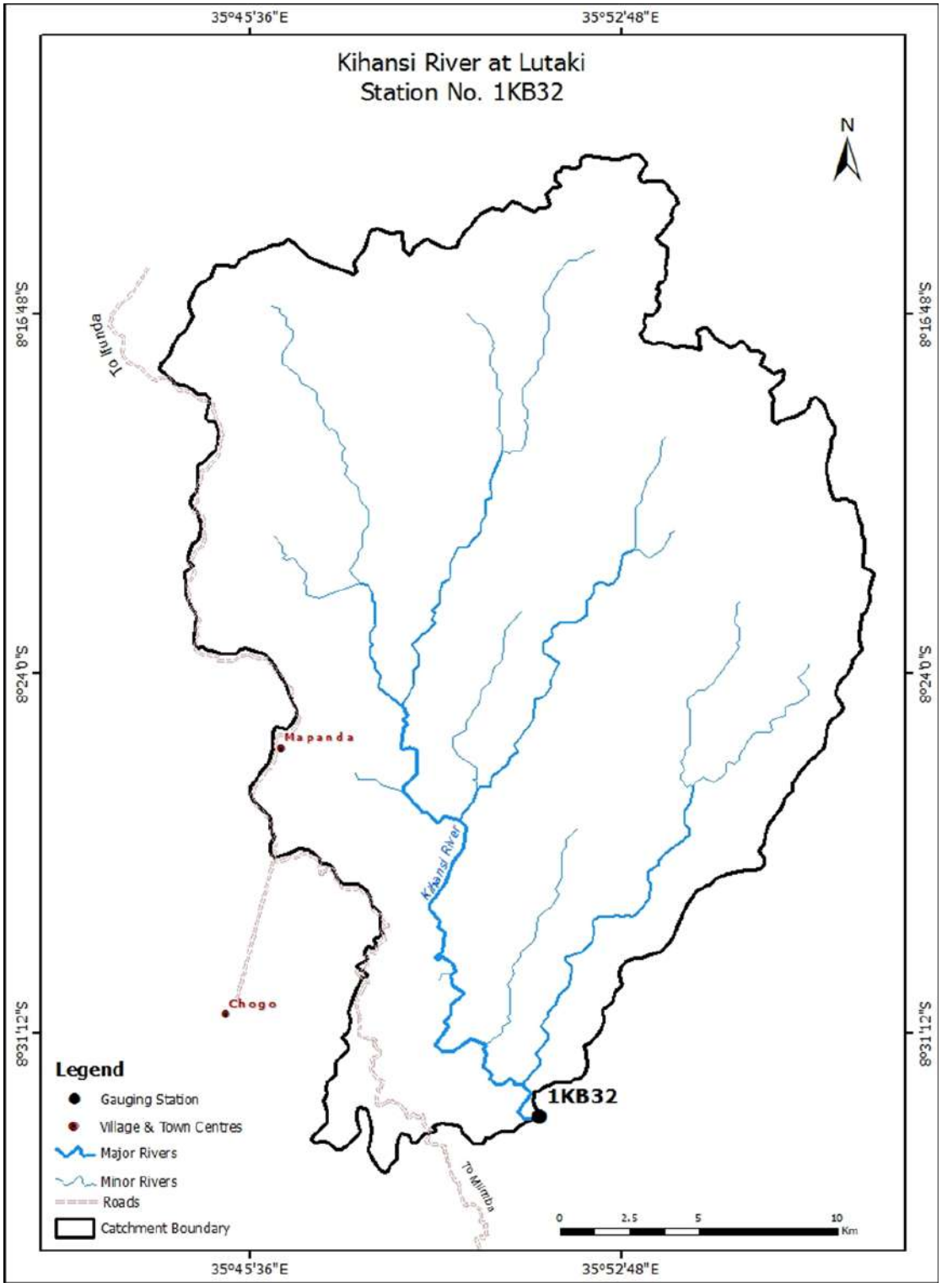
Kihansi River at Lutaki			
Station No: 1KB32		Established: 20/11/1984	
Coordinates:		Altitude (m.a.m.s.l): 1,385	
Lat: -8.5478	Long: 35.8534	Catchment Area (km²): 580	
Description of the Catchment:			
Mainly forest in the upper area wooded grassland and grassland in the lower Catchment.			

Station Details			
1. Staff Gauges	Range: 0 – 4m	A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical	MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini	Date installed: 2013	
3. Benchmark	Nail in concrete beacon		
BM Assumed Datum: 4.146m	N.M.M.S.L: -	TBM: -	
4. Control	Permanent consists of rock boulders across the stream		
5. Access	Accessible throughout the year, 130km from Iringa town to the station via Mafinga – Kihansi road		

Records	Period	Quality
Water Level:	01/01/2010 - 31/12/2019	2.2.3
Discharge:	01/01/2010 - 31/12/2019	2.2.3

Extremes:				
	Max. Recorded	90.523m³/sec	On 06/04/2015	WL 2.986m
	Min. Recorded	1.154m³/sec	On 24/11/2006	WL 1.42m

Remarks


Kihansi River at Lutaki
Station No. 1KB32
35°45'36"E
35°52'48"E
8°15'48"S
8°24'0"S
8°31'12"S
N
To Ilunda
Mapanda
Kihansi River
Chogo
1KB32
To Mlimba
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Catchment Boundary
0
2.5
5
10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2010
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	16.788	16.884	15.233	23.463	50.038	25.593	23.329	14.953	13.283	11.749	9.906	7.936
2	15.645	14.334	14.984	23.578	42.688	23.661	21.866	14.929	13.660	11.715	9.873	7.766
3	14.304	13.955	16.388	23.827	40.484	23.524	20.645	14.981	13.224	11.550	9.839	8.348
4	15.685	15.436	15.945	25.277	35.707	23.480	19.495	15.399	13.051	11.482	9.821	13.710
5	15.210	15.510	15.202	27.233	34.763	22.465	18.337	15.426	12.891	11.412	9.585	9.256
6	15.816	15.390	15.454	27.368	31.056	22.186	20.736	15.269	12.864	11.320	9.499	8.926
7	17.384	15.586	15.465	26.642	34.445	21.604	17.913	15.104	12.714	11.263	9.494	9.040
8	16.874	15.246	16.675	23.553	32.073	21.339	17.431	15.044	12.677	11.214	9.494	10.755
9	15.288	15.749	17.481	23.446	29.781	20.904	17.259	14.748	12.439	11.210	9.494	10.739
10	14.864	15.792	17.398	23.399	28.375	20.851	17.069	14.582	12.368	11.210	9.494	10.837
11	14.690	13.517	15.939	21.892	27.502	20.818	16.902	14.487	12.335	11.207	10.435	10.800
12	13.878	15.744	16.032	23.781	26.560	20.338	16.565	14.724	12.282	11.129	26.826	9.934
13	13.506	18.918	17.552	23.660	29.453	20.253	16.474	14.794	12.278	10.733	16.121	9.577
14	15.796	17.238	15.589	30.645	29.094	19.940	16.604	14.722	12.278	10.679	12.466	9.162
15	17.935	18.254	17.206	30.842	28.926	20.162	16.552	14.419	12.278	10.651	12.129	8.956
16	15.644	14.649	17.211	28.322	28.732	19.777	16.482	14.123	12.278	10.613	11.695	8.648
17	14.054	14.330	16.044	27.989	28.538	19.340	16.092	14.088	12.278	10.570	11.199	8.309
18	15.065	14.409	18.101	24.981	28.345	19.154	16.044	13.865	12.265	10.569	10.093	8.228
19	14.450	18.117	16.683	25.139	28.152	22.490	16.044	13.795	12.080	10.577	9.896	8.226
20	11.695	22.785	16.303	22.203	27.960	21.777	16.044	13.772	11.990	10.688	9.838	8.226
21	11.996	21.037	43.438	21.630	27.767	20.403	16.036	13.502	11.985	10.615	9.826	8.381
22	12.371	17.805	29.454	22.057	27.576	19.530	15.911	13.490	11.985	10.305	10.030	10.036
23	11.480	17.085	21.728	20.504	27.384	19.259	15.787	13.561	11.994	10.185	9.921	10.197
24	11.824	18.790	20.259	20.671	27.193	18.881	15.765	13.220	12.120	10.295	10.538	9.658
25	15.577	23.371	20.917	20.230	27.003	19.882	15.555	13.463	12.062	10.295	10.543	11.209
26	15.044	17.499	20.241	22.114	26.812	19.138	15.424	13.482	11.719	10.295	10.407	10.566
27	17.077	20.699	20.612	27.980	26.623	18.524	15.387	13.482	11.695	10.295	9.549	10.021
28	15.663	18.028	21.248	36.666	26.433	18.454	15.375	13.492	11.695	10.295	9.304	10.261
29	14.511		19.346	46.578	26.244	18.242	15.226	13.596	11.731	10.295	9.038	10.135
30	13.934		20.777	48.564	26.055	18.565	15.131	13.540	11.744	10.253	8.985	9.159
31	14.125		22.422		25.867		15.114	13.513		10.136		9.140
Mean	14.780	17.006	18.946	26.474	30.246	20.685	17.051	14.244	12.341	10.800	10.845	9.553
Flow (MCM)	39.586	41.140	50.745	68.622	81.011	53.614	45.670	38.151	31.989	28.927	28.109	25.587
Maximum	17.935	23.371	43.438	48.564	50.038	25.593	23.329	15.426	13.660	11.749	26.826	13.710
Minimum	11.480	13.517	14.984	20.230	25.867	18.242	15.114	13.220	11.695	10.136	8.985	7.766
Runoff (mm)	68.252	70.931	87.492	118.313	139.674	92.439	78.742	65.778	55.154	49.875	48.465	44.115

Flow (cumecs)

Annual Statistics

Maximum: 50.038 Minimum: 7.766 Mean: 16.914 cumecs
Total: 533.409 MCM Runoff: 919.671 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2011
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.949	9.585	13.050	12.828	30.815	20.818	14.738	12.733	12.706	15.106	8.306	9.821
2	10.445	9.595	11.573	13.050	30.570	20.327	14.568	12.668	12.739	15.092	8.246	9.710
3	9.362	10.094	11.295	13.986	30.039	19.775	14.497	12.302	12.386	15.092	8.349	9.644
4	8.811	10.017	11.695	16.720	28.895	18.843	14.473	12.298	11.753	15.090	8.605	9.638
5	8.706	9.816	13.498	18.865	28.342	18.557	14.592	12.335	11.459	15.062	10.390	10.999
6	9.614	9.488	12.969	25.354	28.089	19.388	14.558	12.330	11.409	15.060	10.664	8.723
7	10.345	8.861	13.440	38.005	27.544	19.291	14.157	12.341	11.409	15.060	10.679	8.521
8	10.469	9.944	13.247	39.827	27.045	19.227	14.106	12.361	11.391	15.058	10.961	8.545
9	10.417	10.911	13.268	33.066	26.411	17.771	14.104	12.111	11.143	15.029	10.845	8.886
10	11.245	11.062	13.842	28.677	25.925	16.800	14.106	12.078	11.125	15.027	10.828	8.896
11	10.589	9.609	13.260	28.237	26.616	16.924	14.133	12.115	11.020	15.027	10.615	9.051
12	10.878	9.063	12.465	35.945	43.747	16.741	14.133	12.036	10.994	14.969	10.657	11.210
13	10.759	10.397	14.159	48.552	37.578	16.400	14.106	12.003	10.688	14.161	11.143	11.453
14	10.933	10.221	14.576	34.549	35.133	16.400	14.084	12.078	10.638	14.104	10.929	11.577
15	12.199	9.954	14.461	33.473	28.556	16.692	13.811	12.107	10.901	14.104	10.896	11.889
16	12.634	10.669	14.465	28.765	25.364	16.086	13.840	12.060	11.357	14.098	10.702	11.623
17	13.118	10.045	14.519	29.069	32.774	16.044	13.801	11.823	14.263	14.016	10.617	14.000
18	13.563	12.222	15.776	31.718	35.054	16.044	13.791	11.789	14.509	13.992	10.612	14.157
19	12.598	13.284	24.762	32.568	34.633	16.044	13.791	11.762	14.471	13.747	10.588	14.477
20	10.418	13.178	24.416	44.967	34.130	16.024	13.789	11.753	14.722	13.729	10.426	14.546
21	10.116	15.819	26.626	45.982	33.488	15.734	13.749	11.748	14.942	13.581	10.355	14.600
22	9.709	16.768	27.289	42.516	32.856	15.713	13.679	11.796	15.226	11.551	10.368	14.530
23	9.376	16.374	22.504	22.740	33.387	15.713	13.600	11.872	16.077	11.391	10.347	14.598
24	8.752	13.282	15.845	47.448	40.845	15.713	13.203	11.838	15.618	11.143	10.224	14.516
25	10.042	12.319	13.157	43.229	23.670	15.692	13.176	11.534	15.738	11.090	10.143	14.658
26	10.447	12.291	13.276	50.468	22.639	15.405	13.176	11.455	15.506	10.603	10.085	17.407
27	9.965	12.118	14.089	39.486	22.090	15.364	13.157	11.393	15.259	10.534	10.097	14.493
28	9.950	12.997	35.916	35.062	21.293	15.080	12.893	11.191	15.106	10.059	9.800	14.040
29	8.939		25.737	32.137	20.976	15.040	12.874	11.215	15.106	9.926	9.828	13.366
30	8.456		21.904	30.535	20.874	14.758	12.874	11.171	15.151	8.568	9.838	13.196
31	8.557		17.906		20.851		12.866	11.260		8.525		12.891
Mean	10.399	11.428	16.935	32.594	29.362	16.947	13.820	11.921	13.160	13.213	10.205	12.118
Flow (MCM)	27.852	27.647	45.359	84.484	78.644	43.927	37.016	31.930	34.112	35.389	26.451	32.457
Maximum	13.563	16.768	35.916	50.468	43.747	20.818	14.738	12.733	16.077	15.106	11.143	17.407
Minimum	8.456	8.861	11.295	12.828	20.851	14.758	12.866	11.171	10.638	8.525	8.246	8.521
Runoff (mm)	48.021	47.667	78.205	145.662	135.593	75.736	63.821	55.051	58.813	61.016	45.605	55.961

Flow (cumecs)

Annual Statistics

Maximum: 50.468 Minimum: 8.246 Mean: 16.009 cumecs
Total: 504.845 MCM Runoff: 870.423 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2012
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	11.340	13.028	13.027	11.453	16.244	14.956	11.343	10.146	8.403	7.375	6.600	7.569
2	11.372	13.722	10.886	12.409	14.910	13.950	11.140	10.221	8.255	7.370	8.469	6.537
3	12.049	13.245	10.288	15.639	16.477	13.815	11.129	10.205	8.067	7.123	10.212	6.129
4	12.173	13.347	9.229	14.589	21.918	13.396	11.178	9.916	8.078	7.045	9.564	6.109
5	12.734	10.852	8.749	13.188	19.729	12.995	11.175	9.914	7.985	7.041	8.121	5.776
6	14.054	10.181	8.827	19.228	22.658	12.857	10.955	9.698	7.907	7.041	7.781	5.676
7	14.474	9.560	9.792	19.802	22.773	12.555	10.908	9.669	8.030	7.041	6.919	5.687
8	15.037	9.257	11.428	18.200	21.401	12.186	10.682	9.419	7.966	7.045	6.737	6.423
9	14.292	9.296	11.593	15.672	16.353	12.331	10.461	9.354	8.111	7.053	6.900	6.479
10	13.573	10.278	10.602	15.922	16.354	12.517	10.476	9.275	8.139	6.891	6.370	6.238
11	13.299	10.420	11.666	14.514	24.653	12.545	10.409	9.131	7.842	6.900	6.277	6.502
12	12.254	9.766	11.879	15.683	23.903	12.298	10.343	8.855	7.880	6.781	6.092	7.444
13	11.687	9.572	11.800	16.811	18.623	12.120	10.329	8.897	7.868	6.679	5.997	10.238
14	12.917	9.388	12.008	16.176	21.104	12.001	10.297	8.787	7.817	6.672	5.974	13.035
15	14.724	9.093	11.671	15.073	18.181	12.080	10.304	8.818	7.778	6.562	5.808	12.065
16	18.229	8.702	10.585	14.111	16.376	11.889	10.375	8.741	7.588	6.515	5.852	9.127
17	21.457	8.402	11.436	21.398	16.028	11.704	10.094	8.961	7.552	6.438	5.895	9.612
18	16.723	8.283	12.275	23.237	15.563	13.583	10.057	8.982	7.534	6.382	5.888	8.446
19	15.846	8.271	14.177	18.339	15.244	13.188	10.136	8.896	7.599	6.371	5.734	6.611
20	14.388	8.145	13.951	15.471	14.917	12.413	10.121	9.203	7.508	6.357	5.623	5.965
21	15.649	8.121	21.760	14.705	14.558	12.347	10.028	9.297	7.484	6.168	5.708	5.938
22	15.316	8.354	15.276	14.407	14.347	11.880	9.806	9.098	7.504	6.214	5.516	6.920
23	14.046	10.480	12.894	13.967	14.084	11.737	10.117	9.006	7.490	6.316	6.415	7.274
24	13.124	12.790	12.647	14.045	13.924	11.923	9.652	8.741	7.296	6.311	6.813	6.532
25	10.642	13.078	15.480	14.200	13.791	11.852	9.604	8.664	7.424	5.941	5.919	6.441
26	10.372	13.939	14.794	14.816	13.852	11.827	9.649	8.556	7.435	5.974	5.669	6.141
27	10.396	13.427	19.763	14.730	13.365	11.806	10.177	8.540	7.433	6.323	5.520	5.970
28	10.638	13.085	16.071	14.104	14.322	11.419	9.986	8.430	7.389	6.337	5.557	5.625
29	10.603	13.389	13.631	14.843	14.590	11.270	9.945	8.400	7.201	6.287	6.372	5.555
30	10.124		12.684	16.400	13.938	11.214	9.573	8.382	7.388	6.329	6.784	5.915
31	9.915		11.942		14.328		9.562	8.377		6.330		5.945
Mean	13.337	10.671	12.671	15.771	17.049	12.422	10.323	9.115	7.732	6.620	6.570	7.094
Flow (MCM)	35.722	26.738	33.939	40.879	45.663	32.197	27.649	24.415	20.041	17.730	17.028	19.001
Maximum	21.457	13.939	21.760	23.237	24.653	14.956	11.343	10.221	8.403	7.375	10.212	13.035
Minimum	9.915	8.121	8.749	11.453	13.365	11.214	9.562	8.377	7.201	5.941	5.516	5.555
Runoff (mm)	61.589	46.100	58.515	70.480	78.729	55.513	47.671	42.094	34.553	30.569	29.359	32.761

Flow (cumecs)

Annual Statistics

Maximum: 24.653 Minimum: 5.516 Mean: 10.781 cumecs
Total: 340.929 MCM Runoff: 587.808 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2013
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.959	12.688	9.024	32.915	36.120	18.744	14.602	13.234	10.947	9.286	8.615	8.386
2	5.824	12.293	9.264	28.912	35.375	18.369	14.513	13.171	10.875	10.570	7.748	11.566
3	6.860	11.282	8.908	23.792	30.929	18.293	14.423	13.097	10.457	14.856	7.647	12.486
4	7.735	11.158	9.596	23.986	32.037	18.185	14.388	13.354	10.503	15.056	7.822	9.917
5	6.726	11.342	11.132	23.599	34.580	17.753	14.358	13.196	10.440	13.586	8.005	9.107
6	7.207	10.437	14.135	24.021	31.589	17.366	14.354	12.874	10.414	12.831	8.944	8.760
7	8.741	9.616	12.596	31.476	29.956	16.976	14.324	12.634	10.363	11.839	8.536	8.455
8	9.351	8.711	12.653	28.327	27.565	14.502	14.277	12.428	10.283	11.404	7.937	11.566
9	10.227	8.297	11.790	25.189	23.820	14.834	14.029	12.260	10.116	10.249	7.644	12.062
10	11.820	9.012	17.783	24.139	24.103	16.855	14.037	12.199	10.251	10.093	7.532	11.789
11	12.562	8.793	26.281	45.260	23.674	16.465	13.982	11.994	10.256	9.870	7.524	9.368
12	14.468	7.936	17.086	38.576	23.889	16.369	13.586	11.909	10.482	9.652	7.605	8.656
13	14.791	7.790	16.094	35.617	25.572	16.210	13.745	11.942	10.147	9.488	7.526	8.523
14	14.931	8.515	15.500	40.503	23.674	16.343	13.727	11.936	9.961	9.318	7.455	9.008
15	12.147	9.638	23.726	37.230	23.524	16.239	13.664	11.566	9.851	9.115	7.385	8.982
16	9.249	9.449	31.701	32.579	23.436	16.053	13.546	11.575	9.692	8.928	7.293	8.630
17	10.271	12.302	24.668	27.256	23.060	15.982	13.457	11.416	9.958	8.658	7.256	8.343
18	11.985	11.192	24.072	23.743	22.706	15.893	13.452	11.364	9.750	8.576	7.034	7.907
19	12.614	10.828	22.445	29.769	22.950	15.765	13.452	11.117	9.672	8.461	7.027	11.527
20	12.238	12.679	22.351	12.158	23.257	15.713	13.450	11.255	9.573	8.700	7.040	12.489
21	13.112	11.225	40.272	23.528	22.482	15.606	13.419	11.161	9.508	8.586	7.011	10.482
22	10.954	9.625	32.426	23.531	21.704	15.481	13.356	11.279	9.971	8.389	6.986	9.587
23	10.100	9.069	39.319	24.328	21.894	15.535	13.239	11.288	9.727	8.224	6.933	9.880
24	16.120	9.645	32.053	24.952	21.025	15.701	13.148	11.096	9.690	8.231	7.040	9.206
25	12.585	10.156	30.699	29.250	20.854	15.524	13.087	11.165	9.684	7.971	10.114	9.293
26	10.789	10.612	28.348	28.984	20.782	15.362	13.044	11.288	9.522	8.105	12.017	9.677
27	10.927	9.948	28.804	24.284	20.432	15.248	12.976	11.057	9.254	8.142	10.174	10.278
28	13.291	9.044	29.954	23.524	19.918	15.015	12.669	11.052	9.224	8.118	9.487	10.656
29	15.598		36.106	23.308	19.915	14.806	12.459	11.050	9.083	8.105	8.927	11.951
30	15.715		31.472	23.536	19.443	14.818	12.705	11.013	8.904	7.924	8.587	11.727
31	15.963		35.000		18.952		12.761	10.983		8.211		10.668
Mean	11.318	10.117	22.750	27.942	24.813	16.200	13.620	11.837	9.952	9.695	8.028	10.030
Flow (MCM)	30.314	24.476	60.934	72.427	66.460	41.991	36.481	31.704	25.795	25.967	20.809	26.865
Maximum	16.120	12.688	40.272	45.260	36.120	18.744	14.602	13.354	10.947	15.056	12.017	12.489
Minimum	5.824	7.790	8.908	12.158	18.952	14.502	12.459	10.983	8.904	7.924	6.933	7.907
Runoff (mm)	52.266	42.199	105.059	124.873	114.587	72.398	62.897	54.663	44.475	44.771	35.878	46.318

Flow (cumecs)

Annual Statistics

Maximum: 45.260 Minimum: 5.824 Mean: 14.692 cumecs
Total: 463.327 MCM Runoff: 798.840 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2014
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.275	11.003	10.045	21.259	50.654	27.448	20.553	17.151	14.930	16.321	19.939	10.366
2	11.258	10.739	9.918	17.669	48.117	26.953	20.093	16.995	15.206	11.931	22.612	15.070
3	11.675	10.196	10.037	18.189	42.930	26.078	19.963	16.793	14.547	11.778	18.164	13.997
4	10.404	10.530	12.250	17.095	42.281	26.120	19.872	16.226	14.289	11.965	14.031	15.187
5	14.434	10.833	12.566	16.838	42.790	25.893	19.704	16.001	14.336	13.163	12.958	13.226
6	13.564	11.307	13.361	16.022	44.042	25.771	19.394	15.976	14.299	13.278	12.448	12.039
7	13.199	11.098	13.423	15.925	49.184	25.056	19.327	15.833	14.405	12.532	12.000	11.211
8	12.987	10.260	13.136	22.629	55.213	29.867	19.093	15.606	15.657	12.173	11.633	12.849
9	13.179	9.916	15.300	25.871	55.106	29.666	19.022	15.393	15.420	11.990	11.475	11.233
10	12.446	9.858	16.279	23.779	49.230	26.508	18.671	15.375	14.690	11.804	11.407	10.586
11	12.841	9.878	17.963	24.979	44.140	25.150	18.671	15.385	13.989	11.684	11.065	10.562
12	12.023	9.935	19.629	39.392	40.845	25.671	18.480	15.385	13.673	11.591	10.966	10.321
13	13.398	10.215	18.189	43.734	38.892	25.033	18.365	15.393	13.611	11.416	12.247	10.168
14	12.314	10.187	17.257	39.453	38.259	24.618	18.261	15.442	13.379	11.398	12.030	10.048
15	14.081	10.331	14.934	36.559	53.441	23.965	18.201	15.289	13.382	11.212	11.201	9.916
16	14.788	10.098	13.554	38.997	38.486	23.524	17.700	15.293	13.339	11.432	10.879	9.843
17	13.577	9.900	13.109	37.866	30.876e	23.426	17.662	15.212	13.159	13.093	10.792	9.947
18	11.924	10.074	13.975	43.771	33.769	22.552	17.612	15.145	13.091	11.272	10.807	9.498
19	10.434	10.632	15.413	57.373	33.751	22.056	17.496	15.074	12.925	14.970	10.708	9.501
20	11.446	13.569	16.174	17.515	33.054	22.110	17.365	14.909	12.861	20.015	10.605	9.649
21	12.753	12.799	15.164	35.710	32.536	23.572	17.272	14.742	12.800	17.887	10.746	9.720
22	14.633	12.844	13.911	17.575	31.654	25.923	17.272	14.680	12.654	14.079	13.435	10.370
23	15.497	14.116	13.515	34.651	31.180	27.610	17.293	14.695	12.331	13.068	11.875	12.099
24	20.474	14.047	13.466	65.784	30.513	24.410	17.187	14.469	12.795	12.376	11.093	12.386
25	23.268	14.174	15.519	56.475	29.849	23.633	16.961	14.346	12.887	12.163	10.607	10.739
26	19.604	13.642	15.881	52.111	29.722	22.616	16.821	14.390	12.684	11.600	10.267	10.054
27	14.588	11.606	16.336	51.990	29.657	22.093	16.574	14.344	12.524	11.419	10.305	10.475
28	13.537	10.389	17.673	48.866	29.371	21.581	16.440	14.346	12.483	11.680	10.195	11.255
29	12.982		18.187	45.237	28.430	21.349	16.562	14.320	12.241	11.994	10.163	15.328
30	12.544		21.209	43.885	27.911	20.841	18.777	14.261	12.490	11.789	10.032	15.304
31	12.801		23.698		27.921		18.032e	14.161		11.649		12.948
Mean	13.643	11.220	15.196	34.240	38.510	24.703	18.216	15.246	13.569	12.733	12.223	11.480
Flow (MCM)	36.541	27.145	40.701	88.750	103.145	64.031	48.790	40.835	35.172	34.104	31.681	30.749
Maximum	23.268	14.174	23.698	65.784	55.213	29.867	20.553	17.151	15.657	20.015	22.612	15.328
Minimum	10.275	9.858	9.918	15.925	27.911	20.841	16.440	14.161	12.241	11.212	10.032	9.498
Runoff (mm)	63.002	46.801	70.173	153.017	177.835	110.398	84.120	70.405	60.641	58.800	54.623	53.016

Flow (cumecs)

Annual Statistics

Maximum: 65.784 Minimum: 9.498 Mean: 18.415 cumecs
Total: 580.735 MCM Runoff: 1001.266 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2015
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	11.598	17.159	12.419	23.407	25.974	21.335	15.688	13.308	11.769	10.035	8.958	10.245
2	12.832	18.664	12.859	21.430	26.086	20.836	15.709	13.178	11.871	10.008	8.929	9.472
3	11.781	20.623	12.238	25.074	25.879	20.337	15.668	13.150	11.860	10.175	9.030	9.658
4	12.747	20.880	13.164	24.686	33.453	19.749	15.458	13.176	11.573	10.258	9.874	9.644
5	11.339	16.963	15.693	26.566	41.381	19.307	15.364	13.186	11.473	9.987	17.603	8.331
6	10.691	14.238	17.133	25.709	38.750	19.006	15.265	13.157	11.410	9.760	19.067	8.079
7	10.380	15.122	17.203	24.852	34.907	18.766	15.149	13.165	11.407	9.738	15.007	7.890
8	10.300	16.608	15.166	19.848	37.660	18.543	15.092	13.165	11.382	9.669	12.044	8.479
9	11.911	19.545	14.422	19.369	35.713	18.372	15.060	13.070	11.373	9.601	10.105	7.967
10	14.703	18.829	15.358	23.462	32.093	18.277	14.995	12.900	11.362	9.573	10.015	8.032
11	17.381	17.880	14.885	24.712	29.123	18.239	14.762	12.855	11.332	9.514	9.971	8.122
12	15.597	14.041	13.865	27.641	28.025	18.191	14.656	12.861	11.184	9.470	9.536	9.018
13	14.772	13.345	13.873	26.052	27.007	17.763	14.487	12.810	10.858	9.431	9.265	9.653
14	13.397	12.814	12.461	25.211	27.982	17.515	14.423	12.694	10.837	9.349	9.064	10.482
15	16.850	13.233	11.985	25.747	26.847	17.262	14.419	12.638	10.844	9.241	8.872	11.626
16	14.994	14.670	13.836	23.834	25.744	17.191	14.399	12.533	10.809	9.241	9.079	12.585
17	13.097	14.104	20.318	25.528	25.102	17.091	14.338	12.402	10.769	9.265	9.115	11.422
18	12.110	13.422	23.589	32.205	24.203	16.902	14.145	12.344	10.681	12.226	8.823	10.162
19	13.117	14.214	23.701	31.611	23.725	16.803	14.226	12.282	10.591	9.929	8.488	10.735
20	11.926	12.821	20.919	30.128	23.534	16.729	14.401	12.310	10.558	9.066	8.271	11.038
21	11.818	12.965	20.829	28.610	23.487	16.529	14.161	12.106	10.539	8.977	8.220	10.627
22	13.544	12.815	24.469	35.967	23.415	16.406	13.937	12.032	10.478	8.975	8.110	10.426
23	15.970	12.374	25.533	32.529	23.365	16.377	13.797	11.970	10.305	8.955	7.887	9.944
24	14.928	11.967	28.892	36.941	22.892	16.385	13.791	11.860	10.278	8.975	10.958	9.362
25	14.047	11.459	32.393	39.323	22.558	16.688	13.789	11.785	10.251	8.977	12.391	8.578
26	13.753	12.457	36.046	36.751	21.451	15.893	13.724	11.782	10.241	8.960	10.413	8.234
27	13.543	13.215	38.042	32.378	21.425	15.719	13.557	11.764	10.241	8.915	10.818	8.025
28	13.690	13.701	31.874	30.053	21.428	15.713	13.471	11.753	10.275	8.787	10.759	8.451
29	13.834		26.442	29.071	21.378	15.711	13.498	12.085	10.292	8.752	9.963	9.391
30	17.434		23.721	13.913	21.352	15.674	13.486	12.151	10.215	8.768	9.808	8.987
31	17.860		22.593		21.415		13.440	11.860		8.768		8.978
Mean	13.611	15.004	20.191	27.420	27.011	17.644	14.463	12.527	10.902	9.463	10.348	9.472
Flow (MCM)	36.456	36.299	54.079	71.073	72.348	45.732	38.738	33.552	28.258	25.345	26.822	25.371
Maximum	17.860	20.880	38.042	39.323	41.381	21.335	15.709	13.308	11.871	12.226	19.067	12.585
Minimum	10.300	11.459	11.985	13.913	21.352	15.674	13.440	11.753	10.215	8.752	7.887	7.890
Runoff (mm)	62.855	62.584	93.240	122.540	124.737	78.849	66.790	57.848	48.720	43.698	46.245	43.743

Flow (cumecs)

Annual Statistics

Maximum: 41.381 Minimum: 7.887 Mean: 15.671 cumecs
Total: 494.214 MCM Runoff: 852.093 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2016
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.915	14.213	13.578	15.106	29.947	17.515	14.925	12.735	11.332	10.037	8.283	7.149
2	13.897	14.219	12.833	14.959	29.868	17.446	14.738	12.645	11.375	9.913	8.218	7.184
3	14.525	12.774	12.370	15.413	28.066	17.306	14.437	12.578	11.343	9.838	8.149	7.871
4	14.246	13.884	12.677	30.521	26.961	16.930	14.390	12.572	11.311	9.785	8.041	8.168
5	14.050	14.560	19.930	39.467	26.152	16.976	14.380	12.546	11.260	9.783	7.988	8.405
6	13.632	15.166	18.620	34.353	25.146	16.778	14.267	12.543	11.161	9.760	8.043	7.942
7	12.033	15.850	15.259	32.130	24.262	17.234	14.230	12.520	11.504	9.756	8.019	7.979
8	11.948	15.840	13.665	28.476	23.643	17.359	14.198	12.571	11.652	9.700	8.225	8.040
9	12.187	16.300	13.896	36.658	22.824	17.138	14.155	12.626	12.239	9.563	8.357	7.942
10	10.409	14.891	14.171	36.586	22.347	16.763	14.106	12.776	11.008	9.629	8.222	7.656
11	10.565	16.030	13.376	35.039	22.003	16.547	14.082	12.733	10.851	9.485	8.046	7.591
12	10.988	20.823	13.310	33.356	21.776	16.385	14.041	12.571	10.818	9.405	7.961	7.526
13	15.012	26.825	14.449	39.184	21.501	16.339	14.010	12.494	10.771	9.288	7.934	7.517
14	16.796	26.613	16.088	43.566	21.035	16.190	13.965	12.418	10.705	9.211	7.949	9.189
15	16.201	20.693	17.151	48.800	20.690	16.046	13.867	12.550	10.627	9.197	8.064	7.822
16	14.701	19.912	16.282	48.919	20.347	15.930	13.824	12.511	10.596	9.157	8.365	7.461
17	16.753	16.726	15.827	44.847	19.914	15.742	13.821	12.276	10.567	9.121	8.369	7.470
18	21.849	17.382	16.035	43.911	19.591	15.649	13.793	12.387	10.515	9.063	8.197	7.655
19	17.751	17.651	15.621	45.329	19.414	15.622	13.770	12.256	10.457	9.028	7.993	7.403
20	20.452	18.790	17.592	38.900	19.233	15.744	13.716	12.208	10.367	8.995	7.981	7.610
21	19.783	21.773	15.736	35.223	19.211	15.715	13.617	12.138	10.297	8.975	7.957	7.526
22	18.521	19.388	16.589	32.596	19.221	15.604	13.527	12.052	10.270	8.940	7.902	7.155
23	19.337	18.410	18.141	33.163	19.240	15.657	13.471	11.976	10.268	8.847	7.942	7.047
24	20.022	14.725	18.042	30.348	18.725	15.369	13.421	11.925	10.266	8.719	7.853	7.149
25	18.033	13.784	15.894	29.473	19.003	15.265	13.402	11.851	10.231	8.665	7.607	7.046
26	16.815	13.402	16.118	28.387	18.280	15.297	13.390	11.854	10.182	8.649	7.465	6.824
27	13.643	14.252	15.190	27.006	18.112	15.214	13.325	11.925	10.064	8.684	7.359	6.659
28	13.021	13.706	15.463	27.691	17.854	15.167	13.194	11.878	9.980	8.632	7.295	6.747
29	14.806	15.016	16.292	30.940	17.669	15.082	13.027	11.784	10.141	8.549	7.248	6.743
30	14.979		17.348	29.545	17.615	15.015	12.889	11.706	10.185	8.461	7.189	6.781
31	15.049		15.384		17.565		12.823	11.423		8.337		6.819
Mean	15.223	17.021	15.578	33.663	21.523	16.168	13.832	12.291	10.745	9.199	7.941	7.486
Flow (MCM)	40.774	42.647	41.725	87.255	57.648	41.906	37.048	32.921	27.850	24.639	20.582	20.051
Maximum	21.849	26.825	19.930	48.919	29.947	17.515	14.925	12.776	12.239	10.037	8.369	9.189
Minimum	9.915	12.774	12.370	14.959	17.565	15.015	12.823	11.423	9.980	8.337	7.189	6.659
Runoff (mm)	70.300	73.529	71.940	150.439	99.392	72.252	63.876	56.760	48.017	42.481	35.487	34.571

Flow (cumecs)

Annual Statistics

Maximum: 48.919 Minimum: 6.659 Mean: 15.056 cumecs
Total: 476.101 MCM Runoff: 820.865 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2017
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.953	8.491	15.805	21.664	37.488	26.286	17.512	14.297	12.682	15.690	10.761	9.866
2	6.826	8.287	15.105	21.036	34.018	25.738	17.256	14.281	12.610	11.158	10.872	10.261
3	7.214	10.124	13.049	20.750	29.978	23.981	17.147	14.289	12.511	10.798	10.448	25.126
4	9.002	10.096	19.032	19.475	29.972	23.633	17.013	14.572	12.487	10.672	10.082	21.033
5	9.528	9.500	18.744	18.648	44.424	22.983	16.849	14.443	12.455	10.831	9.965	15.024
6	8.511	9.112	20.300	19.173	51.689	22.180	16.719	14.257	12.426	10.844	9.941	12.195
7	7.047	9.071	18.223	19.916	49.627	21.913	16.620	13.959	12.396	10.805	9.946	11.238
8	6.880	9.971	15.663	24.448	55.390	21.766	16.480	13.735	12.365	10.707	9.689	15.124
9	8.410	9.680	15.175	45.525	49.588	21.527	16.329	13.698	12.300	10.615	9.460	12.943
10	9.026	9.799	16.463	57.046	43.936	21.065	16.264	13.698	12.274	10.562	9.199	13.799
11	8.039	10.272	15.278	57.048	39.230	20.684	16.140	13.710	12.219	10.408	8.990	17.744
12	8.792	9.474	13.390	40.608	43.974	20.478	15.947	13.698	12.193	10.283	8.975	23.362
13	9.788	7.696	13.674	27.060	42.959	22.097	15.804	13.671	12.096	10.128	8.913	18.289
14	8.494	7.199	13.026	28.493	40.083	21.851	15.734	13.687	12.014	10.057	8.761	13.865
15	8.665	6.908	11.964	38.532	37.891	20.772	15.678	13.834	11.936	10.129	8.697	12.001
16	9.553	7.030	11.671	36.714	36.168	20.009	15.616	13.904	11.858	10.057	8.626	11.336
17	9.590	7.599	12.126	34.092	33.006	19.691	15.557	14.011	11.746	9.946	8.362	10.898
18	8.118	7.544	12.050	29.329	31.610	19.559	15.444	14.132	11.419	9.849	8.229	10.863
19	8.139	12.027	13.384	24.202	30.633	19.221	15.403	13.757	11.396	9.758	8.443	12.935
20	7.678	11.861	11.609	33.784	29.408	18.824	15.354	13.768	11.606	9.679	8.682	22.414
21	7.764	11.523	12.843	40.910	24.429	18.645	15.350	13.766	11.871	9.578	10.518	15.171
22	7.902	14.138	13.155	59.830	27.650	18.470	15.299	13.720	11.688	9.514	10.162	13.620
23	8.610	14.686	18.486	52.059	28.103	18.258	15.261	13.664	11.532	9.494	9.384	11.907
24	8.529	10.240	15.443	42.898	28.142	18.138	15.120	13.590	11.412	9.498	8.969	11.214
25	7.565	13.931	12.664	39.922	27.793	18.005	14.995	13.580	11.380	9.572	8.717	12.620
26	7.421	17.443	11.579	40.097	26.960	18.093	14.886	13.194	11.323	9.627	8.606	12.601
27	7.287	16.166	12.466	38.278	25.577	18.112	14.646	13.194	11.263	9.581	10.276	14.029
28	7.984	15.769	13.267	34.986	24.628	18.033	14.417	12.921	11.189	9.963	11.266	13.025
29	8.528		14.663	34.376	25.044	17.898	14.388	12.797	11.307	9.819	11.003	12.838
30	7.841		17.609	36.880	30.975	17.731	14.338	12.754	11.298	9.768	10.564	13.866
31	8.540		23.089		29.577		14.332	12.724		9.966		14.986
Mean	8.201	10.559	14.871	34.593	35.160	20.521	15.739	13.719	11.908	10.302	9.550	14.393
Flow (MCM)	21.965	25.543	39.830	89.664	94.172	53.191	42.154	36.746	30.867	27.592	24.754	38.551
Maximum	9.788	17.443	23.089	59.830	55.390	26.286	17.512	14.572	12.682	15.690	11.266	25.126
Minimum	6.826	6.908	11.579	18.648	24.429	17.731	14.332	12.724	11.189	9.494	8.229	9.866
Runoff (mm)	37.870	44.040	68.672	154.593	162.365	91.709	72.680	63.356	53.219	47.573	42.679	66.467

Flow (cumecs)

Annual Statistics

Maximum: 59.830 Minimum: 6.826 Mean: 16.626 cumecs
Total: 524.327 MCM Runoff: 904.012 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2018
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.125	15.063	11.631	15.326	21.270	17.578	14.135	12.032	10.493	9.458	8.687	25.133
2	13.242	14.590	11.777	14.696	20.517	17.328	14.100	11.983	10.409	9.798	8.809	11.583
3	12.122	12.981	11.532	18.492	26.909	17.203	14.004	11.910	10.302	9.476	8.681	10.204
4	11.414	12.339	11.925	19.359	26.921	16.874	13.973	11.749	10.449	9.496	8.484	10.155
5	12.456	12.295	12.142	16.933	23.652	16.519	13.889	11.697	12.303	9.725	8.095	9.799
6	15.990	13.034	11.697	14.997	22.548	16.105	13.840	11.683	24.823	9.511	8.010	9.409
7	16.295	12.785	11.022	14.315	21.830	16.360	13.756	11.632	21.153	9.494	7.975	8.711
8	13.184	15.719	11.562	16.757	21.927	16.172	13.780	11.498	14.799	9.491	7.805	8.154
9	12.097	20.536	16.022	19.374	21.329	16.032	13.621	11.412	12.843	9.366	7.723	7.982
10	12.649	19.041	16.701	17.295	20.641	15.880	13.515	11.407	11.927	9.239	7.793	8.174
11	15.128	15.189	16.710	15.631	21.253	15.771	13.484	11.384	11.448	9.234	8.007	8.549
12	18.069	13.199	15.552	17.423	25.073	15.727	13.480	11.423	11.325	9.234	7.875	10.247
13	17.952	12.842	16.464	33.532	22.428	15.727	13.417	11.537	10.913	9.228	7.742	10.527
14	17.197	11.879	16.174	30.070	21.372	15.752	13.270	11.428	10.641	9.068	7.626	10.278
15	17.098	11.462	16.564	26.948	21.644	15.522	13.154	11.407	10.384	8.975	7.539	10.088
16	14.864	11.407	15.461	29.832	20.799	15.964	13.184	11.373	10.273	8.894	7.538	10.457
17	14.433	11.225	13.746	29.428	19.737	15.173	13.074	11.361	10.138	8.731	8.287	11.731
18	15.100	10.752	13.768	36.320	19.006	15.064	13.159	11.214	10.052	8.700	9.380	11.715
19	13.704	10.164	12.413	37.860	18.426	15.056	13.135	11.110	10.133	8.698	10.534	12.438
20	14.262	10.495	13.744	36.169	18.280	14.981	12.942	11.071	12.751	8.681	11.174e	12.889
21	15.719	10.377	13.910	30.990	18.677	14.858	12.870	10.936	10.919	8.560	10.449	14.007
22	18.386	10.477	17.473	28.006	26.516	14.802	12.755	10.875	10.396	10.356	9.686	13.804
23	17.931	11.076	14.710	24.131	27.307	14.770	12.628	10.847	10.089	10.591	9.504e	12.956
24	17.051	10.589	13.443	25.397	26.637	14.640	12.574	10.849	10.025	9.902	10.725	15.885
25	16.476	10.663	12.581	23.681	22.047	14.507	12.513	10.894	9.996	9.344	12.081	15.960
26	15.594	11.476	12.770	22.139	20.832	14.423	12.429	10.835	9.911	9.173	13.510	13.718
27	16.400	13.422	14.778	21.567	20.002	14.405	12.424	10.759	9.753	9.033	15.012	12.651
28	16.907	14.138	18.588	21.154	19.502	14.320	12.396	10.648	9.695	8.853	16.675	11.220
29	15.568		19.225	20.709	18.527	14.192	12.355	10.617	9.636	8.723	18.970	10.441
30	15.504		15.668	20.989	18.264	14.165	12.284	10.752	9.493	9.362	21.450	9.684
31	14.804		14.956		18.009		12.118	10.760		8.616		9.478
Mean	15.249	12.829	14.345	23.317	21.674	15.529	13.170	11.261	11.582	9.258	10.194	11.549
Flow (MCM)	40.843	31.036	38.423	60.439	58.051	40.251	35.274	30.161	30.022	24.798	26.423	30.933
Maximum	18.386	20.536	19.225	37.860	27.307	17.578	14.135	12.032	24.823	10.591	21.450	25.133
Minimum	11.414	10.164	11.022	14.315	18.009	14.165	12.118	10.617	9.493	8.560	7.538	7.982
Runoff (mm)	70.419	53.510	66.246	104.205	100.087	69.399	60.816	52.001	51.762	42.755	45.557	53.333

Flow (cumecs)

Annual Statistics

Maximum: 37.860 Minimum: 7.538 Mean: 14.163 cumecs
Total: 446.650 MCM Runoff: 770.087 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KB32 **Year:** 2019
Station Name: Kihansi River at Lutaki
Time-Series Type: Flow (cumecs)

Latitude: 8:32:52 S Longitude: 35:51:12 E Elevation: 1385.0 metres Area: 580.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.517	12.397	15.427	14.543	53.862	32.848	21.660	16.679	14.116	12.478	11.380	15.679
2	9.298	12.979	16.062	12.557	44.713	32.510	21.584	16.747	14.057	12.343	11.357	13.377
3	10.211	13.858	16.446	17.707	45.682	31.239	21.791	16.630	13.930	13.369	11.403	12.013
4	11.300	15.089	15.814	15.270	47.075	34.395	21.378	16.413	13.834	13.683	11.384	11.381
5	10.742	15.350	14.193	13.756	56.955	29.693	21.174	16.211	13.758	13.406	11.396	10.957
6	10.172	14.559	16.185	20.107	57.378	29.118	20.861	16.049	13.675	13.891	10.850	10.926
7	13.078	14.036	16.731	15.237	64.064	28.744	20.717	16.011	13.809	13.940	11.194	10.771
8	14.405	12.790	15.356	17.537	58.241	28.174	20.386	15.974	13.547	13.159	11.950	11.472
9	20.320	14.820	14.531	23.417	51.095	27.953	20.152	15.829	13.784	12.700	12.308	12.463
10	16.091	31.759	13.423	23.858	56.753	28.071	19.911	15.725	13.640	14.052	12.621	13.660
11	15.053	25.670	13.331	22.458	64.618	27.112	19.704	15.666	13.786	19.672	11.714	13.452
12	16.082	23.942	13.288	21.204	64.436	26.826	19.481	15.549	13.729	25.297	11.277	12.241
13	16.455	19.296	14.617	23.938	60.050	26.488	19.269	15.422	13.658	23.209	11.006	11.366
14	15.868	16.425	15.159	29.333	54.446	26.379	18.996	15.373	13.417	18.515	10.837	10.941
15	14.192	15.675	15.334	25.929	49.610	26.082	18.910	15.283	13.110	14.949	10.748	11.057
16	14.948	14.330	14.547	22.106	46.858	25.597	18.801	15.311	13.066	13.771	10.644	10.944
17	15.022	13.924	12.787	18.321	44.716	25.136	18.808	15.534	13.232	16.100	10.764	15.180
18	15.954	13.263	12.334	18.100	43.905	24.632	18.782	15.121	13.178	15.679	10.510	15.049
19	16.175	14.052	12.829	30.626	43.497	24.367	18.737	15.046	13.025	14.525	10.418	14.486
20	16.882	14.603	13.139	38.647	43.465	24.004	18.477	14.933	12.874	14.196	10.287	18.052
21	13.965	17.020	13.720	42.235	41.543	24.230	18.267	14.842	12.754	13.681	10.207	16.778
22	13.333	21.319	13.039	34.793	45.917	23.636	18.018	14.744	12.638	12.991	10.156	16.565
23	12.512	14.621	13.889	32.793	43.896	23.524	17.769	14.738	12.593	12.866	10.070	18.762
24	12.142	20.468	12.584	30.266	40.697	23.500	17.634	14.744	12.526	12.840	10.052	19.173
25	13.397	19.167	11.690	24.003	37.349	23.317	17.465	14.931	12.520	12.789	10.728	19.035
26	13.354	18.643	11.493	22.404	38.821	22.807	17.268	14.828	12.995	12.900	10.573	17.925
27	12.926	18.723	11.880	17.033	37.122	22.605	17.169	14.602	13.921	12.551	11.159	16.082
28	14.071	18.681	11.834	22.326	35.198	22.110	17.163	14.443	13.375	12.109	11.034	16.805
29	14.420		11.589	48.170	34.538	21.893	17.113	14.419	12.895	11.882	14.224	17.349
30	15.395		11.923	59.518	33.502	21.770	16.964	14.378	12.720	11.650	16.118	16.537
31	13.114		12.300		33.218		16.772	14.068		11.421		12.487
Mean	13.884	17.052	13.789	25.273	47.523	26.292	19.070	15.363	13.339	14.407	11.279	14.289
Flow (MCM)	37.186	41.253	36.934	65.508	127.286	68.149	51.078	41.147	34.574	38.587	29.235	38.273
Maximum	20.320	31.759	16.731	59.518	64.618	34.395	21.791	16.747	14.116	25.297	16.118	19.173
Minimum	9.298	12.397	11.493	12.557	33.218	21.770	16.772	14.068	12.520	11.421	10.052	10.771
Runoff (mm)	64.114	71.125	63.679	112.944	219.459	117.499	88.065	70.943	59.610	66.530	50.406	65.987

Flow (cumecs)

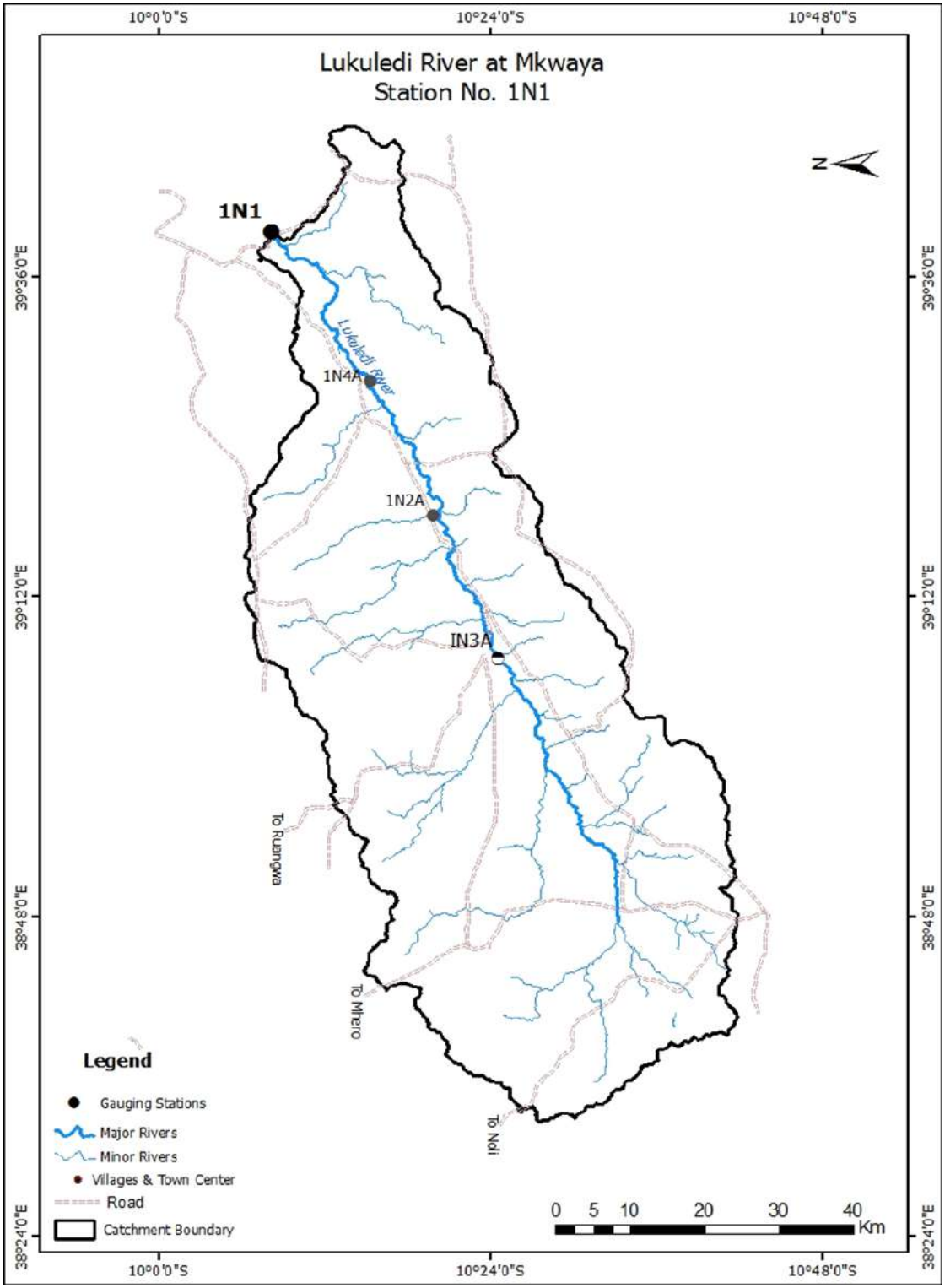
Annual Statistics

Maximum: 64.618 Minimum: 9.298 Mean: 19.297 cumecs
Total: 608.541 MCM Runoff: 1049.208 mm

Possible data flags

No data stored "-" Estimated values "e"

Lukuledi River at Mkwaya				
Station No: 1N1			Established: 09/01/1959	
Coordinates:			Altitude (m.a.m.s.l): 12	
Lat: -10.135	Long: 39.6569		Catchment Area (km²): 4,687	
Description of the Catchment:				
Forest, grassland and agricultural activities				
Station Details				
1. Staff Gauges	Range: 0 – 6m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus		Date installed:	
3. Benchmark	Bolt embeded in concrete foundation near the Data Logger house			
BM Assumed Datum: 7.692m		N.M.M.S.L: -	TBM: -	
4. Control	Straight river channel with Loamy Clay banks			
5. Access	Accessible throughout the year, the station is located 75km from Mtwara town via Mtwara – Lindi road			
Records	Period		Quality	
Water Level:	01/01/2015 - 31/12/2019		1.2.2	
Discharge:	01/01/2015 - 31/12/2019		2.2.2	
Extremes:	Max. Recorded	64.662m³/sec	On 05/04/2016	WL
	Min. Recorded	0.00m³/sec	On 31/10/1968	WL
Remarks				


Lukuledi River at Mkwaya
Station No. 1N1
10°0'0"S
10°24'0"S
10°48'0"S
39°36'0"E
39°12'0"E
38°48'0"E
38°24'0"E
N
1N1
Lukuledi River
1N4A
1N2A
IN3A
To Ruangwa
To Mtwara
To Ndi
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Road
Catchment Boundary
0 5 10 20 30 40
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1N1 **Year:** 2015
Station Name: Lukuledi River at Mkwaya
Time-Series Type: Flow (cumecs)

Latitude: 10: 8: 4 S Longitude: 39:39:24 E Elevation: 13.0 metres Area: 4687.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.956	3.207	3.043	11.808	1.820	1.187	1.017	0.959	0.925	0.785	1.183	0.896
2	1.151	2.993	2.688	21.485	1.738	1.179	0.994	0.959	0.903	0.785	1.217	1.006
3	1.394	3.052	2.443	18.458	1.683	1.154	0.986	0.959	0.896	0.785	1.238	1.159
4	1.585	2.908	2.256	12.597	1.774	1.150	0.959	0.959	0.874	0.785	1.183	1.006
5	1.440	2.787	2.103	8.519	1.851	1.145	0.940	0.959	0.870	0.785	1.121	0.907
6	1.996	2.431	2.120	6.254	1.861	1.121	0.982	0.959	0.870	0.785	1.088	0.867
7	3.873	2.250	2.187	5.192	1.989	1.113	0.990	0.959	0.870	0.785	1.084	0.820
8	2.795	2.109	2.372	4.152	2.772	1.088	0.990	0.959	0.870	0.785	1.080	0.813
9	2.189	2.131	2.460	3.606	2.730	1.080	0.990	0.959	0.870	0.785	1.044	0.813
10	2.064	1.994	2.656	3.214	2.479	1.056	0.990	0.959	0.870	0.785	0.971	0.810
11	2.823	1.856	2.954	2.896	2.177	1.048	0.990	0.963	0.867	0.785	0.959	0.789
12	2.917	1.698	3.013	2.643	1.946	1.021	0.990	0.986	0.845	0.785	0.959	0.789
13	3.358	1.556	2.870	2.460	1.758	0.994	0.986	0.986	0.841	0.785	0.959	0.820
14	2.381	1.504	3.059	2.407	1.698	0.990	0.963	0.963	0.841	0.785	0.955	0.892
15	1.957	1.466	4.200	2.413	1.658	0.990	0.959	0.959	0.841	0.785	0.933	0.925
16	1.739	1.429	4.631	2.261	1.614	0.990	0.959	0.959	0.838	0.785	0.929	0.929
17	1.595	1.393	5.809	2.131	1.551	0.990	0.959	0.959	0.817	0.785	0.925	0.929
18	1.845	1.427	7.529	2.297	1.537	1.001	0.959	0.955	0.813	0.785	0.903	0.929
19	3.294	1.806	6.195	3.532	1.504	1.060	0.959	0.933	0.813	0.785	0.899	0.929
20	8.157	1.708	6.397	2.824	1.466	1.005	0.959	0.929	0.813	0.785	0.892	0.929
21	3.726	1.580	5.289	2.551	1.429	1.017	0.959	0.929	0.813	0.782	0.849	0.929
22	2.840	1.718	4.536	2.234	1.397	1.021	0.959	0.929	0.813	0.761	0.841	0.948
23	4.955	3.303	5.985	2.054	1.388	1.017	0.959	0.929	0.813	0.758	0.838	1.077
24	11.123	3.541	10.129	2.032	1.357	0.994	0.959	0.929	0.813	0.758	0.817	1.227
25	11.847	3.214	13.034	2.032	1.325	0.994	0.959	0.929	0.813	0.758	0.813	1.601
26	8.949	3.120	17.458	2.032	1.316	1.017	0.959	0.929	0.813	0.758	0.813	1.683
27	7.309	2.614	21.856	2.026	1.286	1.021	0.959	0.929	0.813	0.772	0.810	1.619
28	8.049	2.381	-	1.989	1.255	1.021	0.959	0.929	0.813	0.867	0.789	1.500
29	5.818		12.471	1.946	1.251	1.021	0.959	0.929	0.810	0.967	0.785	1.197
30	4.232		12.471	1.898	1.247	1.021	0.959	0.929	0.789	1.101	0.799	1.184
31	3.528		-		1.217		0.959	0.929		1.150		1.384
Mean	3.932	2.256	-	4.731	1.680	1.050	0.970	0.948	0.842	0.811	0.956	1.042
Flow (MCM)	10.531	5.459	-	12.264	4.499	2.722	2.598	2.540	2.182	2.172	2.478	2.791
Maximum	11.847	3.541	-	21.485	2.772	1.187	1.017	0.986	0.925	1.150	1.238	1.683
Minimum	0.956	1.393	-	1.898	1.217	0.990	0.940	0.929	0.789	0.758	0.785	0.789
Runoff (mm)	2.247	1.165	-	2.617	0.960	0.581	0.554	0.542	0.466	0.463	0.529	0.596

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1N1 **Year:** 2016
Station Name: Lukuledi River at Mkwaya
Time-Series Type: Flow (cumecs)

Latitude: 10: 8: 4 S Longitude: 39:39:24 E Elevation: 13.0 metres Area: 4687.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.476	12.253	1.903	12.695	7.851	2.148	0.867	0.785	0.682	0.653	0.553	0.488
2	2.241	-	1.851	15.189	7.131	2.054	0.845	0.785	0.679	0.653	0.536	0.488
3	4.524	-	1.738	9.185	8.680	1.898	0.841	0.782	0.676	0.653	0.533	0.486
4	18.212	-	1.653	-	8.083	1.914	0.838	0.761	0.657	0.653	0.533	0.469
5	20.736	20.430	1.860	-	9.242	1.809	0.817	0.758	0.653	0.650	0.533	0.478
6	15.521	15.014	2.417	-	9.221	1.846	0.813	0.758	0.653	0.632	0.533	0.542
7	8.719	11.733	1.922	10.975	10.278	1.809	0.813	0.758	0.653	0.628	0.533	0.533
8	5.042	5.238	1.989	8.951	7.946	1.723	0.810	0.758	0.657	0.625	0.533	0.513
9	2.169	-	2.779	-	9.802	1.800	0.789	0.758	0.676	0.607	0.533	0.508
10	2.363	-	2.499	-	7.003	1.800	0.785	0.758	0.679	0.604	0.530	0.491
11	2.313	20.017	2.183	-	4.321	0.762	0.789	0.758	0.679	0.601	0.516	0.488
12	2.215	17.704	2.567	-	3.757	0.503	0.810	0.758	0.679	0.583	0.530	0.491
13	2.165	10.962	3.068	-	3.463	0.483	0.810	0.755	0.679	0.580	0.545	0.537
14	2.125	11.121	2.318	-	3.385	0.554	0.789	0.731	0.682	0.580	0.635	0.719
15	2.120	10.616	0.874	-	3.399	0.595	0.785	0.708	0.702	0.577	0.762	0.705
16	2.120	8.399	3.315	-	3.288	1.226	0.785	0.705	0.702	0.559	0.745	0.650
17	-	7.683	-	-	3.302	1.290	0.785	0.702	0.682	0.556	0.644	0.583
18	-	8.173	-	18.411	3.261	1.251	0.785	0.682	0.679	0.553	0.616	0.539
19	-	5.464	16.830	15.805	3.227	1.217	0.785	0.679	0.679	0.536	0.545	0.530
20	-	4.565	15.281	16.595	3.275	1.179	0.785	0.679	0.679	0.533	0.533	0.513
21	-	4.319	15.727	17.788	3.153	1.109	0.785	0.679	0.679	0.533	0.530	0.508
22	-	3.788	12.268	10.924	3.268	0.998	0.785	0.679	0.679	0.530	0.513	0.488
23	-	3.311	9.446	8.726	3.173	0.937	0.785	0.676	0.679	0.513	0.511	0.467
24	-	3.167	11.787	11.565	3.173	0.929	0.785	0.657	0.679	0.511	0.511	0.448
25	-	4.471	15.499	9.907	3.221	0.929	0.785	0.650	0.679	0.511	0.508	0.446
26	-	2.650	11.630	9.112	2.819	0.925	0.785	0.635	0.679	0.522	0.491	0.443
27	-	2.227	8.372	12.572	2.806	0.903	0.785	0.653	0.679	0.617	0.488	0.427
28	-	2.176	8.171	9.686	2.656	0.896	0.785	0.676	0.676	0.779	0.488	0.422
29	-	1.973	13.855	10.305	2.396	0.874	0.785	0.679	0.657	0.742	0.488	0.407
30	-		16.707	7.477	2.600	0.870	0.785	0.682	0.653	0.598	0.488	0.407
31	-		12.404		2.396		0.785	0.698		0.559		0.422
Mean	-	-	-	-	4.890	1.241	0.799	0.716	0.675	0.595	0.548	0.505
Flow (MCM)	-	-	-	-	13.096	3.217	2.140	1.917	1.749	1.593	1.421	1.351
Maximum	-	-	-	-	10.278	2.148	0.867	0.785	0.702	0.779	0.762	0.719
Minimum	-	-	-	-	2.396	0.483	0.785	0.635	0.653	0.511	0.488	0.407
Runoff (mm)	-	-	-	-	2.794	0.686	0.457	0.409	0.373	0.340	0.303	0.288

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1N1 **Year:** 2017
Station Name: Lukuledi River at Mkwaya
Time-Series Type: Flow (cumecs)

Latitude: 10: 8: 4 S Longitude: 39:39:24 E Elevation: 13.0 metres Area: 4687.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.441	0.702	-	-	4.575	1.117	0.679	0.556	0.446	0.415	0.347	0.598
2	0.534	0.705	11.481	-	3.893	1.084	0.679	0.553	0.446	0.405	0.351	0.556
3	0.516	0.702	5.512	-	3.291	1.052	0.679	0.536	0.446	0.405	0.387	0.533
4	0.511	0.682	4.677	-	2.853	1.021	0.679	0.533	0.443	0.405	0.435	0.534
5	0.511	0.685	6.469	-	2.287	0.986	0.679	0.533	0.427	0.405	0.427	0.657
6	0.511	0.793	7.737	-	1.978	0.933	0.676	0.530	0.425	0.402	0.425	0.679
7	0.511	1.734	-	20.297	2.160	0.899	0.657	0.513	0.425	0.387	0.425	0.720
8	0.508	5.178	-	22.361	2.342	0.874	0.653	0.508	0.425	0.385	0.425	0.988
9	0.491	4.228	17.050	21.208	2.216	0.867	0.653	0.491	0.425	0.385	0.425	1.240
10	0.486	1.740	10.643	21.992	2.076	0.845	0.653	0.488	0.425	0.385	0.425	2.212
11	0.469	0.926	9.533	10.114	1.956	0.841	0.653	0.488	0.425	0.385	0.425	2.820
12	0.467	0.738	15.425	-	1.898	0.838	0.653	0.488	0.425	0.385	0.425	2.786
13	0.464	0.657	19.832	-	1.830	0.817	0.650	0.488	0.425	0.385	0.425	1.911
14	0.448	0.616	15.428	-	1.809	0.810	0.632	0.488	0.425	0.385	0.425	1.514
15	0.446	0.667	6.667	-	1.738	0.789	0.628	0.488	0.425	0.385	0.425	1.291
16	0.446	0.796	4.231	23.597	1.663	0.782	0.628	0.488	0.441	0.385	0.425	1.102
17	0.446	0.919	4.342	11.912	1.619	0.758	0.628	0.488	0.539	0.382	0.425	0.864
18	0.446	1.626	6.803	-	1.580	0.731	0.628	0.488	0.553	0.368	0.446	0.762
19	0.454	3.101	13.203	-	1.542	0.705	0.628	0.488	0.536	0.365	0.569	0.711
20	0.494	4.951	9.659	-	1.504	0.682	0.625	0.486	0.533	0.365	0.522	0.705
21	0.454	7.384	6.641	-	1.466	0.679	0.607	0.469	0.533	0.365	0.508	0.702
22	0.465	11.221	4.375	-	1.434	0.682	0.604	0.467	0.530	0.365	0.491	0.682
23	0.599	9.027	3.990	-	1.425	0.702	0.604	0.467	0.513	0.365	0.486	0.676
24	0.712	-	13.621	-	1.388	0.705	0.601	0.464	0.508	0.363	0.467	0.657
25	0.708	7.436	-	21.515	1.325	0.705	0.583	0.448	0.491	0.349	0.448	0.653
26	0.702	9.254	-	17.218	1.290	0.705	0.580	0.446	0.488	0.347	0.446	0.653
27	0.682	7.613	-	12.370	1.281	0.702	0.580	0.446	0.488	0.347	0.446	0.650
28	0.679	-	-	9.735	1.247	0.682	0.580	0.446	0.488	0.347	0.462	0.632
29	0.679		-	7.424	1.191	0.679	0.577	0.446	0.488	0.347	0.584	0.628
30	0.679		-	5.466	1.179	0.679	0.559	0.446	0.478	0.347	0.712	0.628
31	0.682		16.560		1.150		0.556	0.446		0.347		0.668
Mean	0.537	-	-	-	1.909	0.812	0.628	0.488	0.469	0.376	0.454	0.981
Flow (MCM)	1.437	-	-	-	5.114	2.104	1.683	1.306	1.215	1.007	1.178	2.628
Maximum	0.712	-	-	-	4.575	1.117	0.679	0.556	0.553	0.415	0.712	2.820
Minimum	0.441	-	-	-	1.150	0.679	0.556	0.446	0.425	0.347	0.347	0.533
Runoff (mm)	0.307	-	-	-	1.091	0.449	0.359	0.279	0.259	0.215	0.251	0.561

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1N1 **Year:** 2018
Station Name: Lukuledi River at Mkwaya
Time-Series Type: Flow (cumecs)

Latitude: 10: 8: 4 S Longitude: 39:39:24 E Elevation: 13.0 metres Area: 4687.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.972	1.033	0.735	9.375	7.467	1.658	0.845	0.533	0.533	0.556	0.293	0.365
2	1.430	0.963	0.839	10.966	6.665	1.575	0.838	0.533	0.533	0.556	0.297	0.365
3	1.979	0.933	2.662	18.237	5.663	1.466	0.813	0.533	0.533	0.556	0.324	0.365
4	2.768	0.929	14.166	22.253	4.762	1.361	0.789	0.533	0.533	0.556	0.326	0.365
5	3.306	0.929	7.511	21.139	4.279	1.281	0.782	0.533	0.533	0.556	0.313	0.365
6	2.580	0.925	12.949	21.786	4.010	1.191	0.761	0.533	0.533	0.556	0.310	0.365
7	2.189	0.899	-	23.667	3.779	1.150	0.758	0.533	0.533	0.556	0.310	0.365
8	1.786	0.870	14.140	22.819	3.605	1.121	0.755	0.533	0.533	0.556	0.310	0.365
9	1.490	0.841	10.858	11.523	3.463	1.117	0.731	0.533	0.533	0.556	0.310	0.365
10	1.776	0.813	9.102	-	3.248	1.117	0.702	0.533	0.533	0.556	0.310	0.365
11	3.266	0.789	7.501	11.301	3.234	1.113	0.657	0.533	0.533	0.556	0.315	0.365
12	3.714	0.782	7.409	20.361	3.112	1.088	0.628	0.533	0.533	0.531	0.342	0.365
13	3.257	0.758	10.658	21.394	3.046	1.080	0.607	0.533	0.533	0.388	0.347	0.365
14	2.713	0.731	14.330	19.945	2.973	1.056	0.601	0.533	0.533	0.365	0.347	0.368
15	2.338	0.705	11.278	18.655	2.806	1.052	0.583	0.533	0.533	0.365	0.347	0.382
16	1.974	0.682	10.011	17.575	2.742	1.048	0.580	0.533	0.533	0.363	0.347	0.385
17	1.846	0.679	9.546	18.220	2.730	1.025	0.580	0.533	0.533	0.349	0.347	0.392
18	2.252	0.679	9.036	11.173	2.686	1.017	0.580	0.533	0.533	0.347	0.347	0.440
19	3.199	0.676	9.277	-	2.636	0.994	0.577	0.533	0.533	0.347	0.347	0.478
20	3.444	0.653	11.119	21.445	2.587	0.986	0.559	0.533	0.533	0.342	0.347	0.568
21	2.747	0.632	12.748	11.795	2.544	0.963	0.556	0.530	0.533	0.315	0.347	0.610
22	2.402	0.628	10.931	-	2.532	0.955	0.556	0.513	0.530	0.310	0.347	0.686
23	2.825	0.638	10.046	-	2.478	0.933	0.556	0.511	0.516	0.313	0.347	0.810
24	3.955	0.708	10.378	11.558	2.354	0.929	0.556	0.511	0.539	0.326	0.347	0.945
25	4.939	0.782	10.011	21.497	2.250	0.929	0.556	0.511	0.589	0.326	0.347	1.216
26	3.914	0.695	9.220	15.328	2.120	0.925	0.553	0.511	0.559	0.313	0.347	1.681
27	3.116	0.679	8.018	12.500	1.989	0.899	0.536	0.511	0.545	0.310	0.347	1.775
28	2.553	0.685	8.349	10.878	1.872	0.874	0.533	0.511	0.589	0.308	0.349	1.495
29	2.076		13.451	9.678	1.820	0.870	0.533	0.516	0.562	0.295	0.363	2.038
30	1.452		11.102	8.210	1.779	0.867	0.533	0.548	0.556	0.293	0.365	1.612
31	1.188		9.743		1.733		0.533	0.536		0.293		1.448
Mean	2.563	0.776	-	-	3.192	1.088	0.636	0.528	0.539	0.417	0.335	0.712
Flow (MCM)	6.864	1.877	-	-	8.550	2.820	1.705	1.414	1.398	1.116	0.867	1.908
Maximum	4.939	1.033	-	-	7.467	1.658	0.845	0.548	0.589	0.556	0.365	2.038
Minimum	0.972	0.628	-	-	1.733	0.867	0.533	0.511	0.516	0.293	0.293	0.365
Runoff (mm)	1.465	0.400	-	-	1.824	0.602	0.364	0.302	0.298	0.238	0.185	0.407

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1N1 **Year:** 2019
Station Name: Lukuledi River at Mkwaya
Time-Series Type: Flow (cumecs)

Latitude: 10: 8: 4 S Longitude: 39:39:24 E Elevation: 13.0 metres Area: 4687.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.461	2.915	2.508	2.067	3.153	0.785	0.427	3.099	-	1.504	1.167	0.694
2	1.466	2.889	3.147	1.815	2.928	0.779	0.425	2.993	-	1.504	0.712	0.469
3	1.466	2.889	2.981	1.581	2.699	0.725	0.425	2.902	-	1.504	0.696	0.491
4	1.461	2.935	2.662	1.371	3.562	0.635	0.425	2.882	-	1.490	0.572	0.574
5	1.462	3.193	2.478	1.264	8.252	0.586	0.425	2.831	-	1.406	0.516	0.827
6	1.669	3.112	2.212	1.242	5.768	0.577	0.425	2.742	-	1.393	0.511	0.586
7	1.909	3.046	1.712	1.191	4.455	0.559	0.425	2.692	-	1.393	0.508	0.490
8	1.723	3.039	1.314	1.244	3.996	0.553	0.425	2.686	-	1.474	0.488	0.664
9	1.624	3.241	1.133	1.621	4.074	0.533	0.425	2.673	-	2.084	0.467	0.740
10	1.585	3.033	1.184	1.629	6.879	0.513	0.425	2.599	-	2.783	0.446	1.356
11	1.575	2.718	1.977	1.614	5.523	0.511	0.425	2.587	-	2.889	0.427	2.019
12	1.621	2.587	4.134	1.575	3.684	0.511	0.425	2.587	-	2.889	0.433	1.763
13	2.304	2.472	11.407	1.508	2.904	0.508	0.425	2.587	-	2.889	0.506	0.945
14	3.948	2.279	17.375	1.645	2.698	0.488	0.425	2.587	-	2.889	0.661	0.600
15	4.799	2.215	7.920	2.728	2.630	0.472	0.566	2.581	-	2.889	0.595	0.478
16	3.606	2.198	3.648	2.546	2.532	0.486	1.827	2.544	-	2.876	0.577	0.491
17	3.220	2.126	2.750	2.183	2.401	0.486	3.645	2.538	3.200	2.725	0.556	0.793
18	3.092	2.076	2.569	1.962	2.301	0.469	3.890	2.364	3.113	2.235	0.533	1.234
19	3.258	2.032	2.500	1.861	2.199	0.451	3.838	1.398	2.819	1.888	0.569	3.571
20	5.223	1.989	3.459	1.925	2.032	0.376	3.830	1.251	2.661	1.748	0.978	9.240
21	5.614	1.940	4.809	2.965	1.872	0.449	3.823	-	2.407	1.683	1.395	6.749
22	4.023	1.866	3.934	4.042	1.779	0.448	3.764	-	2.183	1.547	1.556	5.207
23	3.400	1.809	3.345	3.029	1.683	0.446	3.662	-	1.832	1.434	1.294	5.911
24	3.186	1.683	3.040	2.575	1.513	0.446	3.597	-	1.576	1.357	0.867	9.122
25	3.255	1.476	2.858	2.466	1.384	0.446	3.533	-	1.541	1.290	0.623	11.534
26	3.548	1.330	3.345	2.273	1.226	0.446	3.441	-	1.541	1.255	0.539	17.872
27	3.296	1.247	3.428	2.165	1.105	0.446	3.420	-	1.537	1.251	0.528	20.751
28	3.153	1.330	3.087	2.258	0.945	0.446	3.371	-	1.508	1.251	0.601	15.133
29	3.175		2.750	3.324	0.867	0.446	3.316	-	1.504	1.251	0.769	11.458
30	3.768		2.968	3.365	0.796	0.443	3.261	-	1.504	1.251	2.069	7.985
31	3.183		2.542		0.785		3.200	-		1.251		4.445
Mean	2.841	2.345	3.715	2.101	2.859	0.515	1.998	-	-	1.847	0.739	4.651
Flow (MCM)	7.610	5.673	9.951	5.446	7.657	1.336	5.351	-	-	4.948	1.914	12.458
Maximum	5.614	3.241	17.375	4.042	8.252	0.785	3.890	-	-	2.889	2.069	20.751
Minimum	1.461	1.247	1.133	1.191	0.785	0.376	0.425	-	-	1.251	0.427	0.469
Runoff (mm)	1.624	1.210	2.123	1.162	1.634	0.285	1.142	-	-	1.056	0.408	2.658

Flow (cumecs)

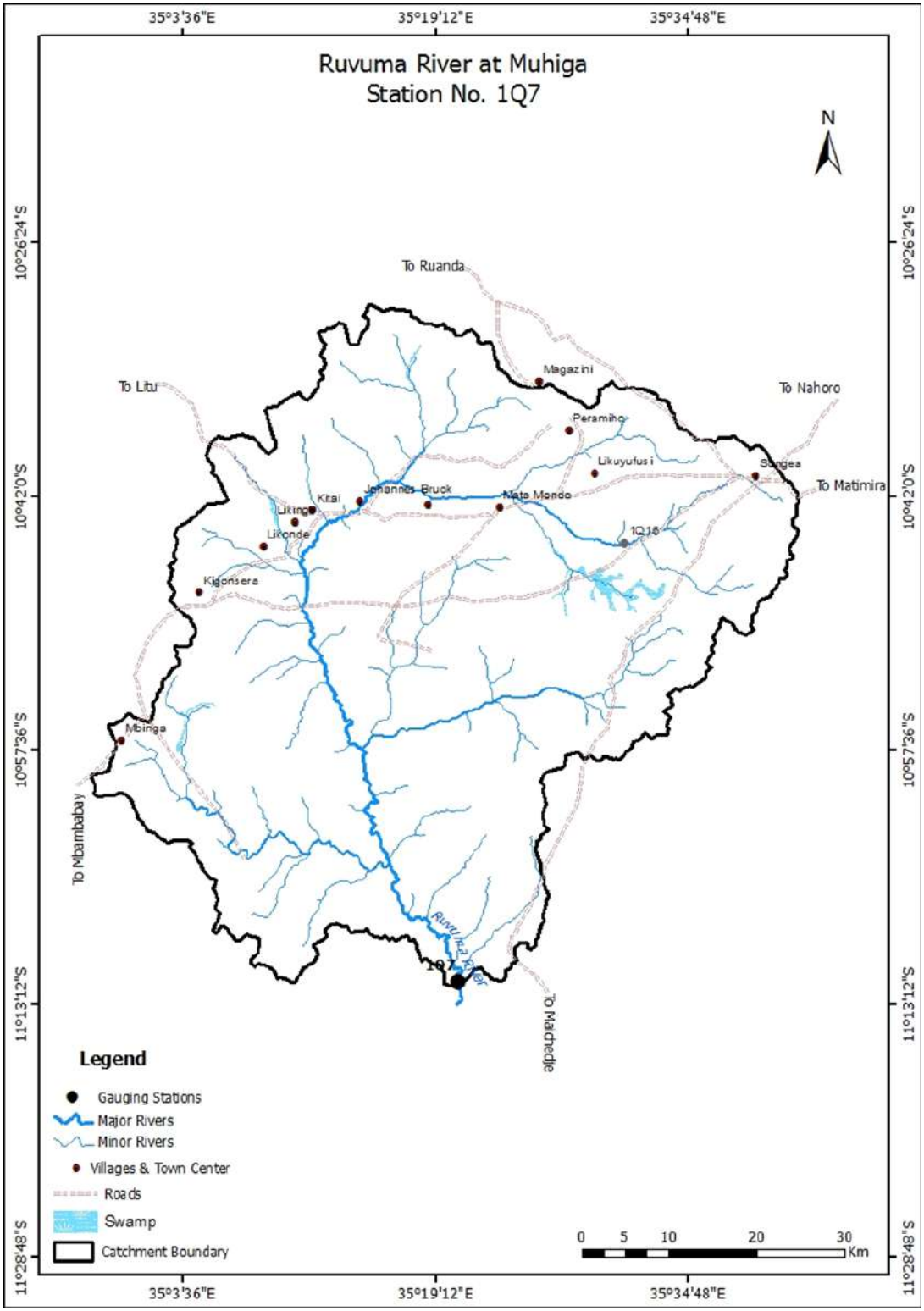
Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ruvuma River at Muhiga				
Station No: 1Q7			Established: 23/10/2971	
Coordinates:			Altitude (m.a.m.s.l): 739	
Lat: -11.197	Long: 35.3428		Catchment Area (km²): 3,602	
Description of the Catchment:				
Upstream High bush, Grassland, Woodland and Vegetation				
Station Details				
1. Staff Gauges	Range: 0 – 4m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus Mini		Date installed:	
3. Benchmark	Bolt embeded into concrete			
BM Assumed Datum: 2.275m		N.M.M.S.L: -	TBM: -	
4. Control	Rock boulders with overgrown vegetation			
5. Access	120km from Songea town to the station via Mozambique road			
Records	Period		Quality	
Water Level:	01/01/2011 – 31/12/2018		1.1.2	
Discharge:	01/01/2011 – 31/12/2018		2.1.2	
Extremes:	Max. Recorded	-	On 31/01/1980	WL 3.99m
	Min. Recorded	-	On 29/11/2016	WL 0.1m
Remarks				
Difficult to access during rainy season.				


Ruvuma River at Muhiga
Station No. 1Q7
N
35°3'36"E
35°19'12"E
35°34'48"E
10°26'24"S
10°42'0"S
10°57'36"S
11°13'12"S
11°28'48"S
To Ruanda
To Litu
To Nahoro
To Matimira
To Mbambabay
To Madaraje
Magazini
Peramiho
Likuyufusi
Songea
Johannes Bruck
Kitai
Liting'o
Likonde
Nata Mondo
1Q16
Kigonsera
Mbinga
1Q7
Ruvuma River
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Swamp
Catchment Boundary
0 5 10 20 30
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2011
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	64.255	75.664	104.860	132.467	96.756	85.866	75.580	67.672	61.108	52.547	40.756	42.971
2	63.706	83.169	112.661	130.465	96.756	85.866	75.580	67.474	59.982	52.547	40.600	41.858
3	64.238	102.745	101.832	126.596	96.756	85.866	75.580	67.474	59.795	52.372	40.444	40.601
4	66.040	132.083	99.750	133.036	96.756	85.646	75.580	67.474	59.795	51.324	39.515	39.568
5	60.742	-	104.228	123.583	96.756	84.329	75.373	67.474	59.795	51.149	39.360	40.310
6	59.795	66.009	118.824	108.520	96.756	84.110	74.132	67.474	59.795	52.875	39.360	44.165
7	59.795	114.945	125.536	107.854	96.523	83.892	73.720	67.474	59.795	64.990	39.569	46.897
8	60.675	117.488	128.512	117.546	95.131	82.587	72.491	67.474	59.609	75.112	41.673	48.069
9	67.977	113.965	-	119.644	94.899	82.370	72.287	67.474	58.496	72.498	47.115	47.906
10	78.524	117.789	-	116.236	94.899	82.370	72.287	67.474	58.311	69.264	48.347	52.385
11	68.871	115.320	-	112.706	94.899	82.370	72.287	67.474	58.311	67.475	48.238	56.120
12	81.017	106.552	141.436	111.461	94.899	81.940	72.287	67.278	58.127	65.905	46.897	58.202
13	86.635	99.578	129.365	106.057	94.899	79.368	72.287	66.100	57.027	64.545	44.751	74.626
14	91.358	98.394	102.542	99.578	94.703	78.942	72.287	65.904	56.844	63.967	44.262	78.804
15	96.387	96.989	96.989	98.394	93.495	80.750	72.287	65.904	56.844	61.115	43.292	79.176
16	97.643	96.523	96.756	96.989	92.865	89.861	72.287	65.904	56.844	57.214	42.971	76.092
17	100.333	95.131	96.756	96.989	91.463	80.091	72.287	65.904	56.844	55.575	42.015	67.424
18	114.383	94.899	96.756	98.394	91.236	75.743	72.287	65.904	56.844	55.394	41.699	67.260
19	111.148	94.669	96.989	98.629	91.236	65.737	72.287	65.710	56.844	54.859	40.756	70.733
20	100.066	93.749	98.394	98.629	91.236	65.000	72.287	64.545	56.844	51.502	40.444	73.502
21	96.757	98.517	100.629	98.629	91.236	77.062	72.287	64.351	56.844	49.941	39.515	68.403
22	95.281	115.611	113.517	98.394	91.009	78.973	72.287	64.159	56.844	49.769	39.207	69.709
23	95.261	134.318	119.645	96.989	89.655	78.942	72.084	63.007	56.844	49.769	38.291	84.846
24	88.084	123.171	120.325	96.756	89.429	78.942	70.868	62.625	56.662	49.429	37.988	95.609
25	68.297	108.985	120.325	96.756	89.429	78.942	70.666	61.486	55.575	47.231	37.085	96.546
26	61.614	104.000	120.843	96.756	89.429	78.836	70.666	61.297	55.215	45.899	36.935	84.388
27	59.526	103.062	122.153	96.756	89.205	78.201	70.666	61.297	54.140	45.734	36.935	72.734
28	59.573	105.354	112.471	96.756	87.718	77.990	70.666	61.297	53.785	45.734	37.289	64.756
29	61.706		112.463	96.756	86.552	77.148	70.465	61.297	52.723	45.406	39.845	60.360
30	64.015		104.848	96.756	85.943	75.789	69.262	61.297	52.547	43.294	42.710	59.861
31	65.859		104.160		85.866		68.863	61.297		41.858		60.253
Mean	77.728	-	-	106.836	92.529	80.118	72.395	65.128	57.301	55.042	41.262	63.359
Flow (MCM)	208.186	-	-	276.919	247.829	207.665	193.904	174.440	148.525	147.424	106.951	169.701
Maximum	114.383	-	-	133.036	96.756	89.861	75.580	67.672	61.108	75.112	48.347	96.546
Minimum	59.526	-	-	96.756	85.866	65.000	68.863	61.297	52.547	41.858	36.935	39.568
Runoff (mm)	57.797	-	-	76.879	68.803	57.653	53.832	48.429	41.234	40.928	29.692	47.113

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	-	2.494	2.303	2.599
2	-	-	-	-	-	-	-	-	-	2.494	4.320	3.249
3	-	-	-	-	-	-	-	-	-	2.538	6.125	3.437
4	-	-	-	-	-	-	-	-	-	2.781	6.463	3.795
5	-	-	-	-	-	-	-	-	-	2.736	6.557	3.172
6	-	-	-	-	-	-	-	-	-	3.109	6.167	2.678
7	-	-	-	-	-	-	-	-	-	3.884	5.679	3.373
8	-	-	-	-	-	-	-	-	-	3.855	5.727	2.566
9	-	-	-	-	-	-	-	-	-	3.803	6.056	1.748
10	-	-	-	-	-	-	-	-	-	3.648	5.643	1.640
11	-	-	-	-	-	-	-	-	-	3.622	4.965	2.507
12	-	-	-	-	-	-	-	-	-	3.564	4.432	4.276
13	-	-	-	-	-	-	-	-	-	3.136	4.061	5.151
14	-	-	-	-	-	-	-	-	-	2.569	3.804	6.112
15	-	-	-	-	-	-	-	-	-	2.470	3.446	6.889
16	-	-	-	-	-	-	-	-	-	2.668	3.249	6.071
17	-	-	-	-	-	-	-	-	-	3.147	3.201	5.859
18	-	-	-	-	-	-	-	-	-	3.177	3.057	5.818
19	-	-	-	-	-	-	-	-	-	2.764	2.965	5.638
20	-	-	-	-	-	-	-	-	-	1.951	2.497	5.782
21	-	-	-	-	-	-	-	-	-	1.722	2.063	7.346
22	-	-	-	-	-	-	-	-	-	1.699	2.192	13.803
23	-	-	-	-	-	-	-	-	-	1.677	3.601	20.764
24	-	-	-	-	-	-	-	-	-	1.713	5.001	23.822
25	-	-	-	-	-	-	-	-	-	1.639	4.902	22.487
26	-	-	-	-	-	-	-	-	-	1.992	4.311	18.380
27	-	-	-	-	-	-	-	-	-	2.294	3.665	16.457
28	-	-	-	-	-	-	-	-	-	2.074	3.317	17.829
29	-	-	-	-	-	-	-	-	-	1.745	3.138	15.790
30	-		-	-	-	-	-	-	-	2.373	2.583	13.020
31	-		-		-		-	-		2.225		28.754
Mean	-	-	-	-	-	-	-	-	-	2.631	4.183	9.058
Flow (MCM)	-	-	-	-	-	-	-	-	-	7.047	10.842	24.262
Maximum	-	-	-	-	-	-	-	-	-	3.884	6.557	28.754
Minimum	-	-	-	-	-	-	-	-	-	1.639	2.063	1.640
Runoff (mm)	-	-	-	-	-	-	-	-	-	1.956	3.010	6.736

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2013
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	34.395	24.377	15.410	11.056	9.367	9.328	-	-	-	-
2	-	-	19.159	21.285	14.719	11.013	9.367	9.367	-	-	-	-
3	-	-	16.891	19.982	14.379	11.013	9.367	9.367	-	-	-	-
4	-	-	15.862	19.053	14.621	11.013	9.395	9.367	-	-	-	-
5	-	-	15.260	19.366	14.670	10.928	9.655	9.367	-	-	-	-
6	-	-	15.645	25.481	14.817	10.423	10.258	9.367	-	-	-	-
7	-	-	15.087	49.108	15.660	10.340	10.427	9.367	-	-	-	-
8	-	-	15.453	81.617	15.425	10.340	10.469	9.355	-	-	-	-
9	-	-	17.897	68.748	14.759	10.340	10.645	9.257	-	-	-	-
10	-	-	26.206	34.763	14.010	10.340	10.632	9.042	-	-	-	-
11	-	-	60.971	23.866	13.852	10.340	10.423	8.782	-	-	-	-
12	-	-	88.513	24.627	13.569	10.340	10.619	8.744	-	-	-	-
13	-	-	87.367	38.099	13.475	10.340	10.557	8.744	-	-	-	-
14	-	-	83.275	40.604	13.149	10.340	10.328	8.641	-	-	-	-
15	-	-	64.531	44.213	12.827	10.340	10.052	8.134	-	-	-	-
16	-	-	67.209	46.490	12.735	10.299	10.011	8.490	-	-	-	-
17	-	-	63.633	42.890	12.463	10.052	10.011	7.691	-	-	-	-
18	-	-	55.897	36.706	12.386	10.011	10.011	7.456	-	-	-	-
19	-	-	63.309	49.024	12.184	10.011	10.011	7.297	-	-	-	-
20	-	-	61.494	26.925	12.072	9.982	9.970	7.272	-	-	-	-
21	-	-	44.698	20.843	12.059	9.828	9.727	7.272	-	-	-	-
22	-	-	41.787	19.652	12.059	9.897	9.687	7.307	-	-	-	-
23	-	-	39.699	18.524	12.059	9.913	9.687	7.521	-	-	-	-
24	-	-	38.767	17.585	12.059	9.844	9.647	7.556	-	-	-	-
25	-	-	49.773	17.147	12.059	9.435	9.407	7.521	-	-	-	-
26	-	-	28.955	17.027	12.059	9.367	9.367	7.307	-	-	-	-
27	-	-	25.384	16.586	12.072	9.407	9.328	7.237	-	-	-	-
28	-	-	27.022	16.252	12.082	9.647	9.092	7.003	-	-	-	-
29	-		43.057	15.911	11.640	9.647	9.053	6.848	-	-	-	-
30	-		73.336	15.810	11.387	9.407	9.053	6.969	-	-	-	-
31	-		31.799		11.314		9.092	6.993		-		-
Mean	-	-	42.978	30.419	13.162	10.175	9.829	8.193	-	-	-	-
Flow (MCM)	-	-	115.114	78.845	35.254	26.374	26.327	21.943	-	-	-	-
Maximum	-	-	88.513	81.617	15.660	11.056	10.645	9.367	-	-	-	-
Minimum	-	-	15.087	15.810	11.314	9.367	9.053	6.848	-	-	-	-
Runoff (mm)	-	-	31.958	21.889	9.787	7.322	7.309	6.092	-	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2014
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.062	65.710	58.814	50.277	58.498	27.953	22.870	18.371	13.522	10.674	9.300	7.557
2	15.161	61.912	45.382	75.544	56.845	27.495	22.513	18.371	13.522	10.381	8.890	7.283
3	15.898	81.995	37.452	95.160	55.279	27.365	22.394	18.371	13.555	10.299	8.755	7.100
4	16.437	62.554	33.197	103.416	52.921	26.931	22.040	18.317	13.815	9.840	8.744	7.171
5	14.969	29.821	24.358	103.393	49.979	27.346	21.981	17.994	14.220	8.640	8.519	7.665
6	18.168	25.074	23.291	99.106	48.005	34.469	21.922	17.887	14.282	8.964	7.206	7.544
7	14.700	22.879	22.990	-	45.115	47.553	21.572	17.568	14.282	9.053	6.993	9.455
8	16.138	20.482	23.111	70.061	42.431	28.251	21.513	17.515	14.282	9.053	6.969	11.720
9	20.760	20.082	26.183	64.816	40.656	24.946	21.455	17.462	14.282	9.053	6.780	13.385
10	14.964	19.690	38.147	-	39.209	25.277	21.108	17.095	14.282	9.053	6.493	14.100
11	15.165	19.810	35.107	100.226	37.236	25.058	21.050	16.730	14.282	9.053	6.449	14.045
12	23.186	22.819	32.582	76.579	36.786	24.903	20.993	16.678	14.282	9.053	6.473	12.407
13	24.230	22.694	32.654	49.162	35.750	24.884	20.649	16.678	14.282	9.053	6.658	9.915
14	26.458	21.892	36.634	58.285	34.727	24.884	20.592	16.678	14.282	8.937	6.948	7.766
15	32.805	27.871	49.881	56.854	34.437	24.884	20.592	16.627	14.282	7.863	6.993	7.410
16	35.445	28.752	60.164	53.282	33.432	24.884	20.535	16.318	14.092	5.916	6.924	6.983
17	38.186	29.153	58.733	54.575	32.300	24.884	20.195	16.267	12.921	8.085	6.483	6.451
18	41.444	29.214	57.075	58.528	31.324	24.822	20.138	16.216	12.418	9.539	6.218	5.928
19	39.210	27.209	67.235	60.267	31.068	24.450	20.138	15.911	12.059	13.435	6.218	5.395
20	38.618	24.715	70.934	64.165	30.349	24.389	20.138	15.861	11.750	15.572	6.483	4.768
21	37.301	23.103	73.734	67.578	30.110	24.327	20.138	15.810	11.705	15.302	7.137	4.454
22	33.867	22.099	64.256	70.668	29.954	23.959	20.138	15.509	11.705	16.449	8.783	4.411
23	33.823	29.350	61.204	69.362	29.146	23.898	20.138	15.409	11.705	15.827	10.478	6.621
24	42.586	38.152	58.479	69.062	29.012	23.898	20.082	15.111	11.705	14.625	9.837	8.629
25	56.697	51.792	52.754	67.624	28.879	23.837	19.745	15.027	11.705	13.199	9.687	9.145
26	49.696	64.525	49.150	58.873	28.084	23.472	19.634	14.890	11.705	12.018	9.647	8.181
27	78.192	79.425	46.318	55.424	28.084	23.412	19.301	15.201	11.662	10.803	9.527	7.390
28	95.575	78.428	43.376	53.875	28.879	23.351	19.190	14.792	11.357	10.340	9.895	7.396
29	71.426		42.985	56.398	28.945	22.990	18.806	14.345	11.056	10.052	8.147	7.867
30	70.337		48.590	60.267	28.546	22.930	18.425	14.187	10.970	9.930	7.809	8.979
31	68.914		48.324		28.414		18.371	13.616		9.447		9.914
Mean	35.981	37.543	45.906	-	36.916	26.057	20.592	16.349	12.999	10.629	7.848	8.291
Flow (MCM)	96.372	90.824	122.955	-	98.876	67.539	55.154	43.789	33.694	28.470	20.342	22.208
Maximum	95.575	81.995	73.734	-	58.498	47.553	22.870	18.371	14.282	16.449	10.478	14.100
Minimum	14.700	19.690	22.990	-	28.084	22.930	18.371	13.616	10.970	5.916	6.218	4.411
Runoff (mm)	26.755	25.215	34.135	-	27.450	18.750	15.312	12.157	9.354	7.904	5.648	6.165

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2015
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	11.929	68.988	44.757	38.375	23.291	17.094	14.331	12.015	9.423	5.698	1.904	3.018
2	15.375	52.416	38.441	36.046	22.513	17.094	14.331	11.706	9.629	6.327	1.828	2.966
3	19.549	42.826	34.434	39.083	21.981	17.094	14.573	11.531	8.435	5.388	1.607	2.425
4	57.490	35.039	36.204	60.535	21.572	17.042	14.331	12.194	8.144	5.333	1.894	2.493
5	65.034	32.382	47.564	60.281	21.554	16.730	14.282	11.794	7.604	4.804	2.318	2.832
6	57.568	37.917	53.146	37.377	21.758	16.627	14.282	11.705	7.307	3.586	2.860	2.491
7	62.279	45.470	56.943	32.864	21.554	16.318	14.282	11.705	7.404	3.293	2.418	2.606
8	43.852	50.003	58.813	37.347	21.340	16.216	14.282	11.406	7.968	3.232	1.835	2.190
9	39.382	58.101	47.624	71.797	20.309	15.861	14.234	9.854	6.771	3.324	1.981	1.805
10	38.972	58.913	42.632	66.335	20.138	15.509	13.900	10.803	6.967	3.936	1.967	1.277
11	68.647	58.824	43.821	62.474	20.138	15.459	13.569	11.013	6.615	4.041	2.812	1.422
12	67.710	49.342	47.883	49.878	20.138	15.409	13.522	10.928	8.488	4.041	4.558	3.039
13	50.074	40.717	55.694	36.909	20.138	15.111	13.475	10.423	8.908	4.041	3.244	1.835
14	36.119	36.134	60.541	28.225	20.082	15.062	13.195	10.217	6.924	3.954	2.331	1.522
15	33.801	33.458	56.593	39.538	19.690	15.062	13.149	9.487	7.341	3.696	1.595	1.567
16	19.234	31.862	48.152	47.130	19.301	15.013	13.103	9.487	7.341	5.086	2.060	3.756
17	17.638	40.133	45.353	56.622	19.190	14.719	12.827	10.217	6.575	4.550	2.202	3.912
18	17.242	79.612	41.768	51.802	18.806	14.670	12.781	10.381	6.517	4.009	2.495	1.265
19	20.174	72.393	40.079	45.880	18.425	14.670	12.735	10.632	6.856	3.221	3.067	0.822
20	26.303	56.952	39.514	42.331	18.317	14.670	12.463	10.632	6.517	1.956	4.970	1.405
21	39.644	44.291	40.585	39.268	17.941	14.670	12.418	10.340	6.449	2.093	6.201	5.633
22	40.018	41.670	44.996	35.759	17.568	14.670	12.373	9.971	6.449	1.993	5.573	6.914
23	41.644	53.814	47.828	37.265	17.515	14.670	12.104	9.527	6.449	2.647	3.604	17.444
24	53.558	56.173	55.921	62.969	17.462	14.670	12.059	9.930	6.449	1.862	4.001	20.762
25	86.544	53.430	64.180	45.010	17.147	14.670	12.015	10.011	6.439	2.014	5.270	17.420
26	104.823	48.730	71.242	34.233	17.094	14.670	11.750	9.970	6.366	2.188	3.452	15.463
27	88.792	45.738	68.760	40.167	17.094	14.670	11.794	9.727	6.235	2.409	3.269	17.840
28	68.323	43.835	63.029	26.742	17.094	14.670	12.328	8.674	5.883	2.258	2.828	12.879
29	61.079		50.694	24.266	17.094	14.670	12.373	3.857	5.297	2.485	2.010	11.011
30	65.035		43.867	23.533	17.094	14.621	12.104	6.660	5.071	2.032	2.017	17.482
31	70.673		42.021		17.094		12.059	8.990		1.540		17.033
Mean	48.016	48.899	49.454	43.668	19.369	15.403	13.130	10.187	7.094	3.453	2.939	6.598
Flow (MCM)	128.607	118.296	132.458	113.188	51.878	39.924	35.167	27.284	18.388	9.248	7.618	17.671
Maximum	104.823	79.612	71.242	71.797	23.291	17.094	14.573	12.194	9.629	6.327	6.201	20.762
Minimum	11.929	31.862	34.434	23.533	17.094	14.621	11.750	3.857	5.071	1.540	1.595	0.822
Runoff (mm)	35.704	32.842	36.773	31.424	14.402	11.084	9.763	7.575	5.105	2.567	2.115	4.906

Flow (cumecs)

Annual Statistics

Maximum: 104.823 Minimum: 0.822 Mean: 22.351 cumecs
Total: 704.853 MCM Runoff: 195.684 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2016
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	13.648	105.743	56.214	34.997	28.827	23.034	13.997	14.082	5.266	5.351	1.436	0.422
2	13.220	-	49.144	32.702	31.080	19.269	10.044	13.184	5.838	4.813	0.918	1.166
3	14.007	-	43.264	36.074	33.464	18.353	10.115	14.285	6.834	4.281	0.877	7.083
4	13.239	132.119	34.517	41.575	33.171	15.866	11.097	16.027	7.017	4.896	0.631	9.171
5	15.586	-	26.999	54.502	38.332	12.566	13.148	14.942	7.104	4.514	0.816	10.656
6	17.612	129.806	25.424	60.830	37.170	15.088	14.434	14.908	6.777	6.185	1.372	10.415
7	13.631	116.192	29.847	71.509	44.692	17.927	13.678	17.839	6.822	6.622	4.070	27.906
8	10.266	75.625	28.947	79.937	39.874	15.479	13.555	16.291	7.163	5.805	2.647	41.273
9	11.488	66.295	29.691	83.274	25.646	15.405	13.720	19.679	5.824	5.302	1.881	20.408
10	14.747	86.136	30.526	75.681	24.676	15.998	13.683	17.797	6.650	5.659	2.088	28.857
11	16.591	119.140	29.982	73.741	27.221	14.873	13.966	27.295	5.971	6.083	2.009	15.327
12	15.396	119.748	30.919	74.907	22.788	12.937	11.806	5.711	7.529	4.425	1.923	15.095
13	17.487	132.851	33.011	72.587	22.460	13.942	14.105	5.021	7.626	4.734	1.984	15.849
14	14.320	135.287	36.422	62.971	24.711	14.701	17.420	11.857	6.751	5.139	1.876	12.615
15	17.145	130.185	42.568	59.512	21.525	13.562	17.686	11.408	6.668	5.368	1.501	4.611
16	13.324	117.531	52.829	66.076	22.712	13.853	16.030	9.626	7.794	6.038	2.349	6.616
17	19.245	115.077	52.408	66.052	23.442	14.148	11.386	6.659	7.372	5.552	3.248	10.481
18	19.970	132.845	51.228	63.076	23.303	14.139	10.687	2.820	5.337	5.220	3.483	9.959
19	22.519	68.085	46.199	55.002	23.225	13.295	11.039	5.492	4.514	5.241	3.404	7.356
20	33.438	-	45.055	50.839	22.930	12.649	12.889	10.928	6.208	5.579	2.238	3.147
21	40.280	116.500	47.459	41.333	22.781	13.285	13.958	13.593	7.101	5.455	1.754	3.056
22	59.865	78.534	44.514	43.331	23.485	16.136	13.720	11.739	8.169	5.295	1.746	2.458
23	58.645	65.169	38.614	44.121	22.966	13.440	13.734	4.727	7.495	4.482	1.818	5.817
24	76.412	45.219	33.373	39.844	22.578	11.139	13.462	11.392	5.493	3.682	0.947	2.723
25	74.043	64.693	31.657	34.990	18.950	10.527	12.997	6.215	5.611	1.745	1.334	1.120
26	64.800	49.369	32.230	35.180	18.453	10.574	13.593	11.842	5.751	1.563	1.111	0.093
27	57.027	43.921	32.157	34.108	18.905	10.249	13.326	11.229	5.805	2.039	1.466	0.183
28	59.587	48.536	29.392	20.295	14.949	10.645	13.279	10.826	5.576	1.531	0.426	0.847
29	52.566	44.355	29.728	29.528	15.523	11.706	13.499	10.677	5.387	2.182	0.222	1.955
30	66.714		32.135	24.167	23.412	16.029	13.875	11.624	6.134	2.267	0.904	3.862
31	80.584		32.277		24.346		12.569	5.837		2.079		4.381
Mean	32.819	-	37.378	52.091	25.729	14.360	13.306	11.792	6.453	4.488	1.749	9.191
Flow (MCM)	87.904	-	100.114	135.021	68.912	37.222	35.640	31.583	16.726	12.021	4.534	24.616
Maximum	80.584	-	56.214	83.274	44.692	23.034	17.686	27.295	8.169	6.622	4.070	41.273
Minimum	10.266	-	25.424	20.295	14.949	10.249	10.044	2.820	4.514	1.531	0.222	0.093
Runoff (mm)	24.404	-	27.794	37.485	19.132	10.334	9.894	8.768	4.644	3.337	1.259	6.834

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2017
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.740	14.475	42.971	95.657	36.925	22.046	16.191	15.013	8.744	10.846	4.567	3.692
2	1.232	15.773	42.387	90.675	34.982	21.899	15.770	15.062	8.744	12.292	4.481	3.540
3	4.135	17.780	50.250	92.468	33.704	21.345	15.695	14.881	8.679	12.090	4.462	2.642
4	9.134	24.165	71.241	95.201	32.477	21.502	14.851	13.973	8.282	12.104	4.202	3.115
5	11.626	35.399	79.432	94.565	29.229	20.924	14.924	14.744	8.151	12.373	3.326	3.384
6	11.066	40.226	66.828	95.061	31.697	20.548	15.488	14.559	8.140	12.418	2.902	4.596
7	2.340	37.842	62.884	92.148	31.582	21.760	18.299	13.447	8.140	12.386	2.260	6.576
8	2.254	38.920	60.832	74.020	30.309	22.525	19.290	11.908	8.140	11.867	2.122	9.617
9	3.540	37.228	56.308	66.646	31.327	21.393	19.378	11.005	8.140	9.719	1.817	10.084
10	13.008	41.822	52.727	58.578	33.184	18.964	19.417	10.822	8.140	8.419	1.385	9.699
11	11.403	36.799	50.631	58.958	32.568	19.463	19.556	11.026	8.140	8.907	1.580	8.241
12	11.697	32.004	49.855	53.901	30.763	21.858	18.960	11.314	8.140	9.316	2.584	8.415
13	9.841	29.537	52.062	52.793	28.867	20.600	18.441	11.357	8.092	9.367	3.424	12.339
14	10.976	28.972	65.205	52.644	28.269	20.535	18.317	11.327	7.806	9.367	3.109	13.131
15	13.307	25.833	60.442	51.934	27.146	20.433	18.102	11.176	7.758	9.367	2.967	14.282
16	15.997	22.947	54.477	52.191	23.923	20.122	18.358	11.327	7.758	9.367	4.455	18.659
17	13.439	11.733	41.479	57.034	23.351	19.524	16.678	11.357	7.758	9.367	6.459	23.197
18	8.271	9.259	35.772	67.763	23.008	18.264	17.287	11.357	7.686	9.367	7.597	24.795
19	13.520	13.007	28.509	67.775	23.140	18.697	15.708	11.357	7.258	9.367	8.858	29.365
20	12.212	15.149	26.721	61.823	23.563	18.713	15.745	11.271	7.188	9.316	10.026	44.066
21	3.946	15.062	23.017	66.791	22.973	18.378	15.459	10.759	7.188	8.858	9.155	43.612
22	5.591	14.479	20.952	70.487	22.674	19.041	15.111	10.674	7.163	7.881	6.988	38.954
23	6.793	13.013	23.927	68.918	23.407	16.466	15.047	10.674	6.948	7.465	5.903	37.963
24	9.261	12.632	33.299	63.482	22.431	18.914	14.959	10.674	6.517	6.683	5.301	31.787
25	2.363	12.087	49.789	53.367	22.034	19.595	14.944	10.674	6.449	6.086	4.486	24.308
26	12.041	15.065	49.451	47.038	22.421	19.412	14.959	10.674	6.383	5.508	3.740	22.867
27	12.620	22.296	52.943	44.846	20.380	19.655	15.062	10.661	5.459	5.424	3.598	16.306
28	14.621	28.040	57.391	41.108	19.882	17.153	15.102	10.486	2.521	5.424	4.701	16.890
29	13.786		73.119	39.602	18.600	14.881	14.699	9.738	2.017	5.393	4.484	18.483
30	14.837		99.989	41.259	19.416	17.699	14.466	8.803	3.049	5.211	4.957	25.190
31	13.326		98.027		21.407		14.685	8.732		5.092		31.915
Mean	9.320	23.627	52.675	65.624	26.634	19.744	16.482	11.640	7.153	8.924	4.530	18.120
Flow (MCM)	24.963	57.157	141.084	170.098	71.335	51.175	44.146	31.176	18.539	23.902	11.741	48.532
Maximum	15.997	41.822	99.989	95.657	36.925	22.525	19.556	15.062	8.744	12.418	10.026	44.066
Minimum	0.740	9.259	20.952	39.602	18.600	14.881	14.466	8.732	2.017	5.092	1.385	2.642
Runoff (mm)	6.930	15.868	39.168	47.223	19.804	14.208	12.256	8.655	5.147	6.636	3.260	13.474

Flow (cumecs)

Annual Statistics

Maximum: 99.989 Minimum: 0.740 Mean: 22.039 cumecs
Total: 695.029 MCM Runoff: 192.956 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2018
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	33.348	139.469	50.650	44.417	44.303	24.085	23.521	22.471	7.336	6.089	2.115	7.399
2	40.429	124.234	60.841	60.538	43.070	24.259	23.490	22.277	7.456	5.189	2.315	7.535
3	42.102	105.384	76.494	84.243	40.977	23.959	23.837	21.224	7.357	4.869	2.267	8.534
4	32.875	64.828	75.048	88.009	41.193	24.149	23.898	21.050	7.697	5.130	2.272	6.971
5	39.153	54.985	65.117	84.849	37.964	24.785	23.898	21.050	7.708	5.190	3.562	6.267
6	71.468	37.839	59.148	79.314	39.578	24.131	23.898	20.693	7.503	5.226	6.560	7.244
7	66.856	54.148	48.718	66.517	38.299	23.929	23.898	18.180	8.041	5.106	6.997	7.536
8	59.496	59.971	44.980	49.672	34.602	24.698	23.898	15.436	8.103	4.963	6.850	6.367
9	62.499	69.310	45.088	43.644	35.342	24.623	23.837	14.924	7.882	5.632	8.668	7.294
10	51.049	84.367	46.747	41.866	37.252	24.822	23.472	14.719	7.835	9.894	8.143	6.628
11	46.522	85.785	41.670	39.353	35.436	24.791	23.454	14.772	8.120	8.932	7.167	5.807
12	40.050	71.942	49.292	52.639	34.726	24.853	23.709	15.188	9.981	8.075	6.153	6.773
13	44.487	63.339	54.604	79.853	35.017	24.021	23.709	17.369	8.794	7.618	5.561	11.033
14	44.824	54.414	72.158	120.463	35.145	23.849	23.454	16.017	9.980	7.521	5.783	13.454
15	44.709	49.740	100.712	140.669	37.356	24.370	23.412	15.023	9.070	7.145	5.847	12.624
16	49.001	40.571	112.068	137.711	33.480	24.698	23.412	15.017	7.994	6.085	6.285	21.787
17	47.837	38.136	123.336	121.037	31.346	24.082	23.412	17.530	7.846	5.456	5.748	24.836
18	51.087	33.049	-	102.721	30.773	24.346	23.412	21.183	7.809	5.068	4.432	25.868
19	53.806	30.204	-	83.549	30.979	23.997	23.393	17.151	7.592	4.694	2.968	32.381
20	54.808	25.036	79.930	69.375	30.246	21.260	23.243	10.840	7.556	5.423	2.331	48.182
21	45.904	23.525	63.473	63.300	30.192	22.755	22.972	15.578	7.556	5.603	2.142	45.706
22	45.980	28.577	64.720	61.364	29.940	23.465	22.930	10.440	7.545	6.985	2.292	30.674
23	79.865	31.286	64.518	60.375	29.670	21.381	22.930	8.779	7.456	7.543	4.878	30.653
24	61.884	32.610	55.571	59.767	29.153	23.144	23.008	8.581	7.297	8.040	6.093	31.352
25	62.811	31.630	50.903	58.140	28.480	23.261	22.658	7.738	7.237	6.979	5.184	32.106
26	73.522	31.978	48.171	52.824	27.512	23.032	18.020	7.784	7.027	6.573	5.576	30.604
27	68.743	32.892	43.703	55.555	26.295	23.351	17.269	7.657	6.993	5.517	6.809	33.884
28	103.370	35.318	43.049	52.227	31.394	23.412	16.967	7.567	6.993	4.358	6.396	32.260
29	103.085		45.905	47.546	26.095	23.412	22.365	7.371	6.993	2.892	7.536	31.971
30	107.810		40.980	45.710	23.694	23.430	22.948	6.261	6.880	2.960	6.529	29.021
31	114.721		40.781		21.178		22.620	6.147		2.543		30.483
Mean	59.487	54.806	-	71.575	33.248	23.812	22.805	14.388	7.788	5.913	5.182	20.427
Flow (MCM)	159.330	132.587	-	185.522	89.052	61.720	61.080	38.536	20.186	15.837	13.432	54.712
Maximum	114.721	139.469	-	140.669	44.303	24.853	23.898	22.471	9.981	9.894	8.668	48.182
Minimum	32.875	23.525	-	39.353	21.178	21.260	16.967	6.147	6.880	2.543	2.115	5.807
Runoff (mm)	44.234	36.809	-	51.505	24.723	17.135	16.957	10.698	5.604	4.397	3.729	15.189

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1Q7 **Year:** 2019
Station Name: Ruvuma River at Muhiga
Time-Series Type: Flow (cumecs)

Latitude: 11:11:49 S Longitude: 35:20:34 E Elevation: 739.0 metres Area: 3602.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	25.642	75.704	65.616	42.270	24.753	25.146	15.131	16.422	11.501	6.390	3.622	11.547
2	25.040	60.015	66.743	40.773	25.263	24.667	14.875	15.616	10.683	6.463	3.604	12.802
3	25.677	-	58.014	39.019	28.014	24.822	14.709	14.711	9.374	6.702	3.473	13.756
4	27.634	99.995	49.140	36.492	30.160	24.791	16.580	13.501	9.391	7.059	3.276	11.944
5	28.198	88.826	49.019	34.786	29.382	24.977	15.963	13.091	9.707	5.934	3.041	11.812
6	33.485	109.218	50.323	33.383	28.118	24.840	15.459	14.036	9.418	5.620	2.849	5.092
7	29.490	88.066	46.620	32.111	27.406	24.224	15.111	11.943	8.034	5.241	2.879	13.948
8	26.826	81.510	41.301	33.352	28.957	23.119	14.915	11.563	7.078	5.151	4.057	17.126
9	30.887	86.434	39.626	36.366	26.314	24.663	14.139	12.587	9.454	4.993	4.281	22.068
10	34.632	74.943	42.726	36.940	21.059	24.661	14.573	12.608	9.095	5.088	4.042	25.361
11	40.880	83.824	46.720	39.445	18.039	24.890	14.670	12.256	9.820	5.281	3.571	45.862
12	56.507	82.645	49.729	36.398	45.413	23.560	14.704	12.732	8.611	6.280	2.263	45.385
13	75.223	74.074	51.264	36.582	37.884	18.177	14.875	11.492	8.037	6.114	2.127	48.460
14	82.397	63.929	54.745	39.134	36.020	16.985	14.370	9.640	7.607	6.300	2.009	45.264
15	82.044	52.497	65.500	37.447	32.933	17.030	12.347	9.367	7.456	6.153	1.904	44.304
16	69.338	46.539	63.635	36.935	33.697	18.663	12.190	9.528	7.440	5.660	1.856	33.889
17	57.732	43.349	52.834	36.853	33.382	17.283	14.303	10.437	8.265	4.755	1.851	43.281
18	52.859	39.460	44.393	36.783	32.406	16.106	14.463	10.155	8.073	4.587	1.870	39.197
19	53.209	36.926	38.469	34.889	30.658	16.950	13.647	10.044	7.185	5.071	1.998	36.284
20	52.202	36.499	36.277	40.157	27.044	16.637	15.878	10.624	8.211	5.025	2.146	46.284
21	56.470	51.736	31.791	39.095	25.073	16.606	15.922	10.469	7.818	5.188	2.409	44.927
22	57.724	55.882	42.064	34.722	24.518	16.640	16.745	10.423	7.342	6.506	2.395	51.822
23	52.969	63.023	33.440	33.233	23.827	15.154	18.547	10.864	6.375	5.890	3.289	49.082
24	38.489	61.885	34.552	32.363	22.248	15.449	18.167	11.022	6.450	5.655	3.342	69.804
25	33.082	62.263	36.752	32.331	21.983	15.349	17.127	10.641	6.641	4.988	4.140	75.824
26	33.597	60.961	39.697	29.749	17.603	15.186	16.948	10.461	6.380	4.367	7.884	78.387
27	33.671	57.936	49.068	28.414	18.697	15.111	16.860	9.716	6.182	5.041	6.043	73.880
28	42.103	59.027	60.354	25.496	23.687	15.255	16.851	9.290	6.396	4.314	4.375	73.536
29	57.413		56.755	25.617	24.149	15.092	15.527	10.218	6.390	4.041	4.967	69.275
30	54.769		46.285	24.878	27.796	15.554	14.696	10.674	6.429	3.877	4.940	57.964
31	51.739		43.583		25.698		15.687	11.056		3.656		24.840
Mean	45.869	-	47.969	34.867	27.490	19.586	15.354	11.522	8.028	5.400	3.350	40.097
Flow (MCM)	122.855	-	128.480	90.376	73.628	50.767	41.125	30.861	20.809	14.463	8.684	107.396
Maximum	82.397	-	66.743	42.270	45.413	25.146	18.547	16.422	11.501	7.059	7.884	78.387
Minimum	25.040	-	31.791	24.878	17.603	15.092	12.190	9.290	6.182	3.656	1.851	5.092
Runoff (mm)	34.107	-	35.669	25.090	20.441	14.094	11.417	8.568	5.777	4.015	2.411	29.816

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

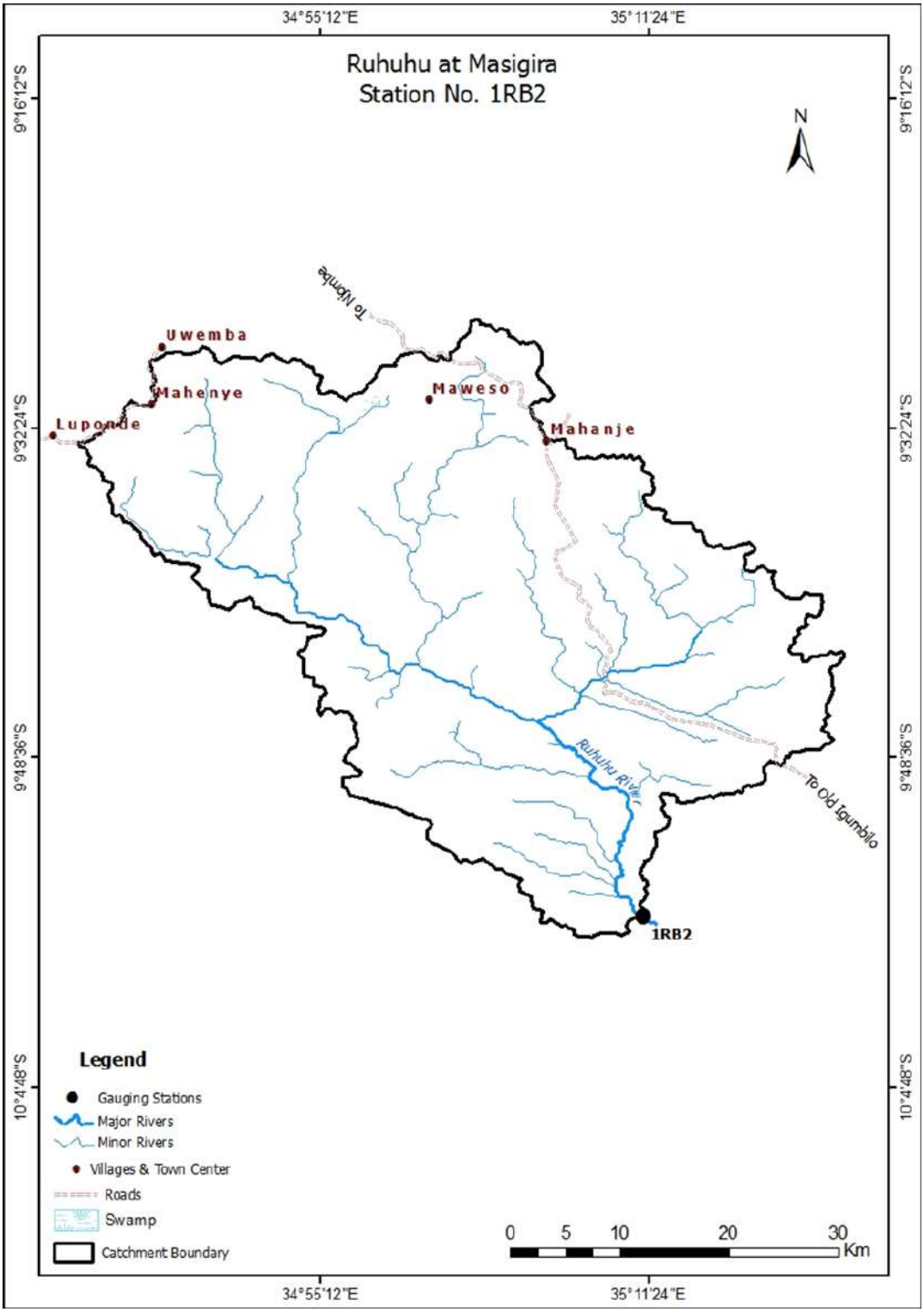
Ruhuhu River at Masigira			
Station No: 1RB2		Established: 28/10/2971	
Coordinates:		Altitude (m.a.m.s.l): 941	
Lat: -9.9396	Long: 35.1853	Catchment Area (km²): 1,966	
Description of the Catchment:			
Woodland and wooded grass land			

Station Details			
1. Staff Gauges	Range: 0 – 4m	A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical	MSL.Z.G.L: -	
2. Automatic Recorder	Thalimides float type	Date installed:	
3. Benchmark	Bolt in concrete foundation on the Left Bank upstream of gauges		
BM Assumed Datum: 3.790m	N.M.M.S.L: -	TBM: -	
4. Control	Rock bar across the channel		
5. Access	Accessible throughout the year, the station is located at Madaba village 174.4km from Songea town via Songea – Njombe main road		

Records	Period	Quality
Water Level:	01/01/2011 – 31/12/2018	1.2.2
Discharge:	01/01/2011 – 31/12/2018	2.3.2

Extremes:				
	Max. Recorded	228.05m³/sec	On 05/02/1998	WL 2.89m
	Min. Recorded	5.28 m³/sec	On 19/11/2013	WL 0.58m

Remarks


Ruhuhu at Masigira
Station No. 1RB2
34°55'12"E
35°11'24"E
9°16'12"S
9°32'24"S
9°48'36"S
10°4'48"S
N
To Njombe
Uwemba
Mahenye
Luponde
Maweso
Mahanje
Ruhuhu River
To Old Igumbilo
1RB2
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Swamp
Catchment Boundary
0 5 10 20 30
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2010
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	39.626	38.012	42.452	43.596	60.839	32.947	27.706	23.365	20.296	16.464	11.503	9.009
2	38.368	33.943	43.980	40.961	58.228	31.877	31.722	23.342	19.863	16.464	11.386	8.902
3	48.368	33.492	46.250	39.513	52.406	30.662	30.699	23.365	19.741	16.397	11.038	8.769
4	49.355	40.826	45.264	42.291	46.555	29.838	28.002	23.556	19.420	15.998	10.980	8.727
5	47.157	48.694	50.364	46.153	42.688	29.671	26.768	23.901	19.242	15.932	10.980	9.671
6	48.804	57.836	59.531	44.968	39.793	29.297	26.488	23.954	19.221	15.932	10.980	14.186
7	52.492	53.795	79.401	43.181	38.377	29.008	26.464	23.878	19.221	15.866	10.980	21.780
8	57.467	52.245	81.230	42.160	38.423	28.407	26.464	23.418	19.150	15.472	10.940	25.248
9	55.771	50.680	66.173	44.861	37.437	27.835	26.464	23.288	18.727	15.387	10.682	26.306
10	50.625	47.653	56.171	49.613	36.220	27.753	26.464	22.947	18.657	15.224	10.540	30.700
11	41.749	40.061	57.107	46.588	33.887	27.753	26.384	22.758	18.587	14.868	10.523	31.867
12	35.453	38.681	61.965	43.839	32.953	27.753	25.907	22.735	18.169	14.439	10.523	23.246
13	32.352	37.374	63.325	40.046	32.702	27.753	25.828	22.735	18.099	14.375	10.580	18.023
14	31.600	37.044	72.083	38.975	34.891	27.672	25.828	22.682	18.099	14.311	10.923	16.380
15	38.078	43.581	65.505	40.163	40.796	27.186	25.749	22.344	18.099	13.932	10.980	14.775
16	43.950	44.772	62.566	41.113	37.151	27.106	25.276	22.082	18.099	13.869	11.038	13.477
17	45.575	43.978	78.699	45.013	33.670	27.106	25.198	21.614	18.099	13.807	11.310	12.861
18	39.286	43.612	79.060	47.371	32.555	27.186	25.198	21.539	18.051	13.432	10.837	12.859
19	38.123	45.078	61.841	42.392	32.357	27.672	25.198	21.466	17.740	13.370	10.270	15.956
20	35.328	49.315	58.918	38.464	31.842	27.753	25.198	21.024	17.568	13.370	10.051	15.703
21	33.982	53.433	59.730	36.750	31.671	27.696	25.119	20.951	17.548	13.309	9.785	14.826
22	33.920	48.359	55.898	34.652	31.160	27.332	24.651	20.899	17.500	12.940	9.648	16.571
23	35.163	48.110	52.865	33.223	31.075	27.049	24.573	20.571	17.193	12.878	9.686	18.774
24	39.612	48.561	55.929	32.469	30.991	26.568	24.573	20.390	17.023	12.836	9.962	22.044
25	40.631	45.839	74.327	32.807	30.594	26.608	24.573	20.368	17.003	12.562	9.686	21.446
26	42.618	42.884	71.755	38.661	31.685	26.488	24.496	20.368	17.003	12.411	9.577	19.715
27	44.900	37.946	58.604	45.958	35.324	26.464	24.032	20.368	16.935	12.393	9.251	18.353
28	46.027	37.918	54.695	45.897	37.696	26.464	23.954	20.368	16.531	12.351	9.196	16.310
29	43.083		52.854	53.887	34.911	26.464	23.954	20.368	16.464	12.082	9.143	14.646
30	49.200		50.268	63.621	34.818	26.544	23.901	20.368	16.464	11.933	8.860	15.309
31	44.786		46.450		35.228		23.556	20.368		11.856		14.971
Mean	42.692	44.419	60.170	42.640	37.385	27.997	25.819	21.980	18.127	14.079	10.395	17.142
Flow (MCM)	114.346	107.458	161.158	110.522	100.131	72.569	69.153	58.871	46.986	37.710	26.943	45.914
Maximum	57.467	57.836	81.230	63.621	60.839	32.947	31.722	23.954	20.296	16.464	11.503	31.867
Minimum	31.600	33.492	42.452	32.469	30.594	26.464	23.556	20.368	16.464	11.856	8.860	8.727
Runoff (mm)	58.162	54.658	81.973	56.217	50.931	36.912	35.175	29.945	23.899	19.181	13.704	23.354

Flow (cumecs)

Annual Statistics

Maximum: 81.230 Minimum: 8.727 Mean: 30.237 cumecs
Total: 953.554 MCM Runoff: 485.022 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2011
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.195	34.094	30.721	88.363	45.044	26.881	22.112	19.914	16.484	14.311	9.495	16.848
2	17.274	33.633	27.537	78.464	45.512	25.963	21.614	20.166	16.464	13.932	9.197	21.700
3	18.933	35.856	30.948	61.505	44.784	25.852	21.539	20.346	16.511	13.825	8.918	24.921
4	19.894	41.251	31.583	53.918	41.718	26.266	21.539	20.317	16.814	13.544	8.769	26.346
5	20.800	39.609	35.215	48.088	39.051	27.877	21.539	19.993	16.962	13.389	8.622	28.017
6	19.270	32.669	36.101	48.969	37.683	27.705	21.517	19.813	16.814	14.326	8.386	30.279
7	22.146	32.824	35.669	65.118	36.866	26.881	21.333	19.741	16.511	20.769	8.470	32.765
8	26.265	32.376	42.274	94.609	36.281	25.908	21.002	19.420	16.464	24.183	9.767	33.248
9	25.821	37.322	46.754	91.424	38.337	25.418	20.973	19.242	16.464	22.172	13.564	34.229
10	25.248	39.005	56.791	71.920	44.046	25.166	21.230	19.200	16.417	19.718	14.794	36.573
11	23.239	40.937	48.388	76.877	43.558	24.791	22.008	19.023	16.118	17.822	13.109	38.615
12	25.443	36.734	40.067	79.216	40.001	24.596	22.134	18.706	15.952	15.569	12.352	33.954
13	30.670	32.947	32.609	66.317	37.178	24.573	22.112	18.657	15.866	14.536	11.667	30.339
14	33.969	28.640	28.462	56.219	34.776	24.496	21.977	18.657	15.472	15.225	11.461	28.041
15	36.156	25.746	30.897	51.939	33.833	24.032	22.052	18.608	15.406	14.238	11.444	26.513
16	36.577	23.796	37.380	50.883	33.484	23.931	22.637	18.294	15.406	13.155	11.386	25.473
17	37.346	22.893	37.058	50.519	34.863	23.739	22.735	18.120	15.406	12.836	11.038	24.924
18	37.304	26.113	34.734	49.585	34.289	23.395	22.735	18.079	15.361	12.454	10.940	24.086
19	33.381	26.665	33.514	62.086	33.171	23.342	22.660	17.906	15.068	12.393	10.682	23.824
20	28.109	25.751	38.868	66.889	32.203	23.395	22.135	17.596	14.907	12.333	10.540	22.970
21	25.771	28.434	37.987	69.624	31.220	23.686	21.614	17.548	14.887	11.975	10.467	22.344
22	22.654	33.916	35.709	76.231	31.075	23.533	21.466	17.548	14.887	11.915	10.129	21.852
23	19.999	36.484	37.404	80.639	31.075	23.365	21.024	17.548	14.887	11.897	10.018	20.871
24	18.060	45.286	39.401	82.400	30.991	23.342	20.929	17.527	14.952	11.749	9.686	20.764
25	18.817	43.482	38.957	77.117	30.484	23.342	20.746	17.356	15.296	11.485	9.577	22.806
26	22.693	38.102	39.004	67.777	30.341	23.288	20.419	17.050	15.068	11.386	9.213	23.258
27	23.167	37.215	41.310	59.258	29.939	22.947	20.368	17.003	14.887	11.020	8.918	24.111
28	22.604	33.465	44.633	54.712	29.522	22.735	20.368	17.003	14.707	10.819	8.930	25.814
29	25.101		50.833	50.108	29.016	22.577	20.368	17.003	14.420	10.506	10.052	26.512
30	24.870		49.304	46.694	28.259	22.502	20.368	16.955	14.375	10.091	12.368	27.390
31	29.496		55.525		27.705		20.296	16.652		9.769		29.003
Mean	25.364	33.759	38.892	65.916	35.365	24.517	21.469	18.419	15.641	13.979	10.465	26.722
Flow (MCM)	67.934	81.669	104.167	170.853	94.721	63.549	57.503	49.334	40.542	37.441	27.126	71.573
Maximum	37.346	45.286	56.791	94.609	45.512	27.877	22.735	20.346	16.962	24.183	14.794	38.615
Minimum	15.195	22.893	27.537	46.694	27.705	22.502	20.296	16.652	14.375	9.769	8.386	16.848
Runoff (mm)	34.554	41.541	52.984	86.904	48.179	32.324	29.249	25.093	20.621	19.044	13.798	36.405

Flow (cumecs)

Annual Statistics

Maximum: 94.609 Minimum: 8.386 Mean: 27.542 cumecs
Total: 868.573 MCM Runoff: 441.797 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2012
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	31.239	32.443	35.927	26.358	27.795	21.061	17.003	14.394	11.897	8.386	7.974	9.073
2	31.842	31.971	33.626	30.476	26.865	21.281	16.982	14.375	11.749	8.247	8.674	8.807
3	33.009	31.543	31.437	36.049	28.484	20.951	16.814	14.356	11.467	7.787	11.806	8.606
4	36.123	31.477	28.724	35.600	33.463	20.550	16.511	14.197	11.281	8.666	12.678	8.205
5	37.812	33.776	26.978	37.667	36.816	20.166	16.464	13.913	11.020	9.127	11.993	7.660
6	40.259	35.646	28.966	47.296	38.428	19.641	16.464	13.869	10.980	9.046	11.550	7.153
7	42.322	34.291	39.401	45.891	34.686	19.250	16.464	13.869	10.980	8.806	11.055	6.783
8	43.468	32.239	37.924	42.184	32.037	19.023	16.417	13.869	10.980	8.785	11.038	6.615
9	41.989	30.393	37.237	39.274	28.783	18.706	16.118	13.913	10.940	8.812	11.665	6.356
10	40.679	29.788	36.860	37.566	26.650	18.657	15.952	14.090	10.682	8.381	13.062	6.012
11	38.272	30.151	36.068	35.709	26.066	18.636	15.932	13.570	10.540	8.081	11.114	5.912
12	35.364	32.420	51.911	34.686	26.945	18.461	15.932	13.216	10.523	7.902	10.142	7.541
13	35.266	31.069	68.728	39.113	27.049	18.148	15.912	12.921	10.506	7.584	9.134	13.387
14	46.532	30.198	65.800	38.156	26.664	18.099	15.747	12.878	10.365	7.534	8.394	16.787
15	47.741	29.497	56.893	33.712	26.241	18.051	15.452	12.878	10.113	7.534	7.440	15.488
16	46.513	28.612	56.401	31.298	25.584	17.740	15.406	12.878	10.073	7.534	7.464	14.913
17	46.869	27.802	58.995	32.116	24.551	17.568	15.406	12.860	10.073	7.499	7.390	14.644
18	47.861	27.171	57.655	40.623	23.442	17.734	15.387	12.708	10.073	7.275	8.352	13.933
19	46.220	25.932	48.270	38.885	22.947	19.047	15.224	12.435	10.073	7.152	10.845	13.421
20	44.018	25.221	43.214	34.265	22.682	20.333	14.932	12.393	10.073	7.137	10.980	14.169
21	42.293	24.768	37.539	30.871	22.157	20.296	14.887	12.454	10.035	7.137	10.643	24.087
22	40.528	24.379	35.344	27.953	21.747	19.642	14.952	12.775	9.785	7.137	10.230	22.489
23	40.762	25.344	33.250	26.401	21.539	19.052	15.341	12.562	9.631	7.089	9.973	18.612
24	39.347	33.509	32.535	25.860	21.333	18.510	15.406	12.411	9.478	6.798	9.996	16.903
25	37.893	34.324	35.633	25.662	21.002	18.127	15.406	12.393	9.234	6.749	10.292	15.979
26	39.040	34.419	33.497	25.638	20.951	17.906	15.361	12.375	9.196	6.846	9.931	15.472
27	38.488	39.213	31.595	25.583	20.951	17.575	15.068	12.225	9.196	7.520	8.730	15.406
28	36.714	42.774	31.357	25.253	20.899	17.356	14.907	11.957	9.143	8.154	7.959	15.406
29	35.085	39.484	29.374	25.379	20.571	17.050	14.887	11.915	8.807	8.298	7.630	15.361
30	33.868		28.646	26.666	20.390	17.003	14.842	11.915	8.622	8.081	8.556	15.244
31	32.979		26.995		20.462		14.554	11.915		7.953		16.415
Mean	39.690	31.374	39.896	33.406	25.748	18.854	15.682	13.048	10.251	7.840	9.890	12.801
Flow (MCM)	106.306	78.611	106.858	86.589	68.963	48.870	42.002	34.947	26.570	20.998	25.634	34.287
Maximum	47.861	42.774	68.728	47.296	38.428	21.281	17.003	14.394	11.897	9.127	13.062	24.087
Minimum	31.239	24.379	26.978	25.253	20.390	17.003	14.554	11.915	8.622	6.749	7.390	5.912
Runoff (mm)	54.072	39.985	54.353	44.043	35.078	24.857	21.364	17.776	13.515	10.681	13.039	17.440

Flow (cumecs)

Annual Statistics

Maximum: 68.728 Minimum: 5.912 Mean: 21.540 cumecs
Total: 681.145 MCM Runoff: 346.462 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2013
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	18.325	54.257	33.511	65.648	-	-	19.221	18.932	14.823	14.210	7.138	6.235
2	19.668	57.603	29.038	53.062	-	-	19.221	19.200	14.439	16.582	6.798	6.983
3	21.929	55.887	29.723	51.906	-	22.712	19.221	19.221	14.375	16.464	6.783	6.903
4	20.945	58.677	29.924	54.016	-	22.524	19.221	19.221	14.330	15.998	7.050	10.533
5	20.347	52.547	38.460	56.144	-	22.187	19.200	19.150	14.064	15.886	7.419	13.834
6	20.058	58.003	42.937	66.316	-	22.060	19.023	18.657	14.064	15.505	7.236	13.888
7	23.424	53.154	35.831	64.404	-	21.614	18.636	18.120	14.330	14.709	7.449	13.544
8	37.751	50.913	38.598	69.375	-	21.539	18.169	17.740	14.311	13.739	7.226	13.514
9	38.262	50.802	41.956	85.703	-	21.466	18.099	17.521	13.932	12.904	6.812	14.204
10	35.585	51.918	45.291	78.065	-	21.024	18.099	17.193	13.869	12.285	6.716	14.046
11	34.141	48.450	46.985	66.850	-	20.951	18.030	17.003	13.869	11.897	6.501	13.826
12	35.308	43.260	53.003	93.644	-	20.951	17.617	16.814	13.825	11.520	6.431	13.371
13	32.911	39.072	61.136	100.557	-	20.878	17.548	16.464	13.544	11.491	6.668	12.940
14	28.707	37.475	64.139	86.183	-	20.441	17.548	16.118	13.327	10.981	6.455	12.878
15	25.189	36.855	55.139	70.848	-	20.368	17.548	15.952	12.879	10.422	6.058	12.836
16	23.003	43.417	47.584	59.421	-	20.368	17.548	15.932	12.394	10.113	5.952	12.562
17	21.615	43.949	41.213	53.445	-	20.368	17.548	15.866	11.975	10.073	5.679	12.926
18	20.892	43.612	36.763	47.914	-	20.441	17.568	15.472	11.915	10.018	5.603	15.995
19	21.172	45.346	38.241	42.960	-	20.951	17.692	15.406	11.915	9.686	5.403	16.105
20	22.399	50.473	38.728	39.173	-	21.414	17.692	15.406	11.915	9.577	5.292	16.721
21	20.968	-	40.848	37.519	-	21.083	17.568	15.406	11.874	9.213	5.279	17.962
22	20.216	-	41.922	36.929	-	20.462	17.548	15.452	11.608	8.865	5.279	18.581
23	19.914	-	42.447	36.613	-	20.368	17.479	15.747	11.461	8.418	5.279	19.571
24	20.611	45.553	39.147	36.020	-	20.368	17.071	15.912	11.444	8.350	5.538	20.369
25	22.421	46.204	37.228	35.707	-	20.368	17.003	15.866	11.386	8.350	7.139	21.283
26	23.345	63.899	37.959	35.244	-	20.317	17.003	15.472	11.038	8.365	7.281	23.002
27	34.293	61.110	45.027	34.756	-	19.993	17.003	15.341	10.980	8.407	6.451	24.111
28	41.119	43.857	76.060	34.201	-	19.742	17.003	14.952	10.980	8.046	6.030	26.644
29	42.447		97.891	32.868	-	19.292	17.003	14.887	11.038	7.599	5.915	33.233
30	48.391		99.832	31.305	-	19.221	17.118	14.887	11.726	7.534	5.998	38.841
31	48.907		89.289		-		17.955	14.887		7.484		34.115
Mean	27.879	-	48.253	55.227	-	-	17.878	16.587	12.788	11.119	6.362	17.147
Flow (MCM)	74.672	-	129.241	143.147	-	-	47.883	44.427	33.146	29.781	16.490	45.926
Maximum	48.907	-	99.832	100.557	-	-	19.221	19.221	14.823	16.582	7.449	38.841
Minimum	18.325	-	29.038	31.305	-	-	17.003	14.887	10.980	7.484	5.279	6.235
Runoff (mm)	37.982	-	65.738	72.811	-	-	24.356	22.598	16.859	15.148	8.388	23.360

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2014
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	26.971	30.421	54.143	74.475	61.052	31.594	25.875	23.342	19.292	15.452	14.688	11.975
2	33.129	25.895	52.379	72.258	59.771	32.349	25.804	23.418	19.720	15.387	14.198	11.915
3	40.341	25.378	50.306	69.365	58.714	33.101	25.607	23.878	19.791	15.224	13.570	11.975
4	36.106	32.065	46.722	67.600	58.231	33.973	25.253	23.954	19.770	14.932	13.216	12.394
5	30.393	32.965	41.036	66.971	57.132	34.474	25.198	23.931	19.591	14.887	12.921	12.817
6	26.965	26.362	35.066	58.422	55.755	34.960	25.198	23.739	19.271	14.823	12.817	12.817
7	27.621	24.620	30.930	57.662	54.120	35.422	25.174	23.395	19.271	14.439	12.454	12.454
8	30.180	23.964	28.836	68.152	52.462	35.734	24.978	23.342	19.591	14.375	12.393	12.393
9	27.324	22.443	28.039	80.772	50.853	36.298	24.628	23.342	19.749	14.330	12.333	12.333
10	26.635	22.010	27.534	89.125	49.484	36.271	24.573	23.288	19.591	14.046	11.975	11.975
11	33.648	24.871	27.049	84.729	48.360	35.396	24.573	22.947	19.221	13.888	11.915	11.915
12	33.139	29.256	28.354	76.507	47.116	34.044	24.573	22.758	18.854	13.850	11.874	11.915
13	30.756	28.909	33.806	71.229	46.228	32.651	24.573	22.735	18.678	13.694	11.608	11.915
14	30.518	28.398	28.328	69.010	45.229	31.280	24.519	22.682	18.636	13.414	11.461	11.915
15	29.034	28.814	24.694	67.026	44.133	29.981	24.170	22.344	18.461	13.370	11.403	11.897
16	27.544	31.259	25.292	62.154	42.883	29.008	23.978	22.157	18.148	13.389	11.142	11.749
17	26.465	29.744	35.930	55.693	41.458	28.169	23.954	22.134	18.051	13.563	10.980	11.485
18	25.844	33.079	41.022	63.009	40.331	27.494	23.954	22.060	17.740	14.084	10.819	11.444
19	27.223	37.015	49.646	88.912	39.124	26.985	23.954	21.614	17.500	15.720	10.775	11.461
20	37.807	40.783	55.202	-	37.720	27.267	23.901	21.539	17.071	21.132	12.273	11.727
21	36.617	61.661	56.115	-	36.496	27.550	23.556	21.539	17.003	23.367	14.900	12.982
22	-	78.092	53.395	52.205	35.555	28.063	23.365	21.466	17.023	21.596	21.612	14.898
23	-	82.316	50.885	101.603	34.845	28.063	23.342	21.024	17.193	19.575	26.007	16.072
24	46.042	77.155	48.922	96.249	34.298	27.575	23.342	20.899	17.432	17.477	22.283	16.888
25	51.505	72.366	47.325	86.969	33.649	27.437	23.342	20.499	17.071	16.092	18.264	16.935
26	49.692	68.342	47.542	76.918	33.109	27.074	23.266	19.885	16.982	15.747	14.821	16.713
27	46.152	64.132	57.406	69.377	32.503	26.792	22.811	19.791	16.814	15.452	13.341	18.098
28	45.144	58.274	69.068	60.460	32.254	26.289	22.758	19.791	16.491	15.361	12.903	20.584
29	41.666		70.614	57.976	32.091	26.209	22.947	19.720	16.257	15.068	12.708	22.166
30	37.203		69.903	60.891	31.569	26.161	23.288	19.292	15.794	14.907	12.375	23.742
31	33.438		72.746		31.483		23.342	19.221		14.868		25.042
Mean	-	40.735	44.782	-	43.807	30.589	24.187	21.991	18.202	15.597	13.801	14.342
Flow (MCM)	-	98.547	119.943	-	117.332	79.286	64.782	58.901	47.179	41.775	35.772	38.413
Maximum	-	82.316	72.746	-	61.052	36.298	25.875	23.954	19.791	23.367	26.007	25.042
Minimum	-	22.010	24.694	-	31.483	26.161	22.758	19.221	15.794	13.370	10.775	11.444
Runoff (mm)	-	50.126	61.009	-	59.680	40.329	32.951	29.960	23.998	21.249	18.195	19.539

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2015
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	25.544	72.840	31.492	41.684	35.860	25.119	21.024	18.099	14.375	11.038	11.701	10.326
2	26.584	63.841	31.077	41.373	34.308	24.573	21.414	18.099	14.394	10.980	14.710	10.326
3	26.162	59.536	32.955	43.163	33.153	24.032	21.156	18.030	14.509	10.980	16.383	10.057
4	25.323	61.452	32.490	45.582	33.494	23.931	20.900	17.617	14.509	10.980	20.150	9.648
5	25.096	55.820	35.606	46.573	38.581	23.739	20.390	17.548	14.331	10.980	21.298	9.348
6	24.488	48.714	37.556	48.080	38.592	23.342	19.993	17.548	13.932	10.940	17.483	9.229
7	24.333	45.573	38.640	48.961	35.295	22.947	19.813	17.548	13.869	10.682	14.870	9.386
8	23.955	44.142	45.774	50.497	32.747	22.705	19.741	17.500	13.869	10.540	13.223	10.065
9	23.579	42.883	52.164	51.394	32.417	22.419	19.420	17.193	13.825	10.506	15.360	11.417
10	23.579	41.695	60.249	53.029	31.561	22.682	19.242	17.023	13.544	10.326	15.342	11.698
11	23.847	39.699	65.536	54.349	30.982	22.682	19.221	17.003	13.346	9.824	12.610	10.943
12	23.479	38.738	60.712	56.030	30.417	22.344	19.221	16.955	13.050	9.593	10.937	12.716
13	22.758	42.346	59.036	58.298	30.274	22.157	19.221	16.652	12.897	9.251	10.130	15.864
14	22.157	50.932	58.392	60.144	29.897	22.134	19.200	16.484	12.878	9.196	9.769	17.861
15	21.651	55.832	58.972	55.436	29.630	22.134	19.023	16.464	12.878	9.159	9.457	18.661
16	20.575	54.361	59.230	53.547	29.124	22.060	18.706	16.464	12.860	8.918	8.919	16.502
17	18.438	52.410	58.553	52.842	28.194	21.614	18.657	16.397	12.708	8.785	8.496	16.231
18	17.235	50.539	57.888	52.255	27.462	21.539	18.657	15.952	12.435	8.785	8.205	15.912
19	16.652	47.753	57.099	52.667	26.680	21.539	18.657	15.590	12.333	8.865	7.831	15.472
20	16.297	46.052	56.515	52.018	26.376	21.539	18.657	15.426	11.975	8.785	7.519	15.671
21	16.334	44.008	56.431	51.015	26.042	21.539	18.657	15.406	11.915	8.717	7.153	17.484
22	18.628	42.617	57.729	50.171	25.852	21.539	18.657	15.341	11.856	8.402	6.918	19.246
23	20.537	40.027	59.070	49.263	25.828	21.539	18.657	14.952	11.503	8.350	7.149	21.138
24	23.171	37.357	57.281	47.792	25.749	21.539	18.657	14.887	11.444	8.350	8.337	23.102
25	20.207	36.137	56.040	46.318	25.276	21.539	18.636	14.887	11.444	8.402	10.128	24.841
26	23.567	34.969	53.820	44.443	25.198	21.466	18.461	14.868	11.444	8.717	10.974	27.079
27	31.255	33.799	50.603	43.209	25.119	21.024	18.148	14.707	11.444	8.769	14.072	29.559
28	42.892	32.496	47.130	41.582	24.651	21.024	18.099	14.420	11.444	8.769	15.283	31.314
29	55.401		44.677	39.895	24.573	21.392	18.099	14.375	11.444	8.822	12.646	30.980
30	55.929		42.874	37.485	24.651	21.024	18.099	14.375	11.386	9.143	11.057	25.538
31	54.791		41.902		25.119		18.099	14.375		9.489		24.706
Mean	26.272	47.020	50.242	48.970	29.455	22.295	19.180	16.200	12.795	9.517	11.937	17.172
Flow (MCM)	70.368	113.752	134.568	126.930	78.892	57.789	51.372	43.389	33.164	25.492	30.941	45.992
Maximum	55.929	72.840	65.536	60.144	38.592	25.119	21.414	18.099	14.509	11.038	21.298	31.314
Minimum	16.297	32.496	31.077	37.485	24.573	21.024	18.099	14.375	11.386	8.350	6.918	9.229
Runoff (mm)	35.793	57.859	68.447	64.562	40.128	29.394	26.130	22.070	16.869	12.966	15.738	23.394

Flow (cumecs)

Annual Statistics

Maximum: 72.840 Minimum: 6.918 Mean: 25.921 cumecs
Total: 817.452 MCM Runoff: 415.795 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2016
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	29.143	52.040	39.958	60.170	74.040	41.826	32.331	27.591	25.883	20.973	18.932	14.522
2	33.634	50.226	39.262	58.438	74.571	40.912	32.056	27.388	25.828	20.929	18.218	15.257
3	37.152	47.785	38.588	69.801	77.769	40.125	32.030	27.364	25.804	20.746	18.051	15.687
4	38.921	52.198	38.708	46.294	73.467	39.447	31.970	27.445	25.607	20.419	17.740	18.153
5	36.710	60.066	40.173	-	67.088	39.123	31.586	27.908	25.253	20.441	17.521	18.308
6	32.953	58.495	41.364	-	63.395	38.680	31.373	27.786	25.198	20.878	17.193	19.461
7	30.909	53.712	40.583	-	60.207	38.450	31.347	27.421	25.198	20.899	17.043	22.126
8	34.636	50.915	39.883	-	57.495	38.395	31.347	27.364	25.143	20.550	17.241	23.542
9	29.176	57.914	38.690	-	55.882	38.166	31.347	27.388	24.791	20.187	17.720	22.104
10	28.416	64.858	37.410	-	54.391	37.755	31.347	27.672	24.596	19.842	17.098	19.285
11	31.329	69.597	37.182	-	52.678	37.691	31.262	28.530	24.550	19.770	16.793	17.790
12	40.506	72.710	37.929	-	51.721	37.691	30.754	28.612	24.356	19.591	16.324	17.071
13	47.803	71.699	38.616	-	50.903	37.628	30.669	28.243	24.008	19.271	15.978	16.814
14	46.358	70.752	39.420	-	50.191	37.219	30.669	28.038	23.931	19.221	16.112	16.693
15	48.637	68.953	37.402	-	49.989	36.992	30.669	28.014	23.739	19.221	17.269	17.978
16	55.535	66.539	37.155	-	49.313	36.965	30.669	28.014	23.395	19.221	17.795	19.507
17	56.155	64.992	38.085	-	48.730	36.812	30.585	28.014	23.342	19.221	17.404	19.399
18	65.429	62.304	39.905	49.843	48.160	35.868	30.081	27.957	23.342	19.172	17.003	19.044
19	67.912	58.354	42.705	94.969	47.136	35.493	29.997	27.591	23.266	18.924	16.652	18.657
20	62.277	55.378	45.657	89.370	46.159	35.066	29.997	27.388	22.811	19.122	16.484	18.294
21	61.285	53.082	50.188	88.777	45.561	34.844	29.997	27.364	22.735	18.854	16.444	18.051
22	73.760	50.661	52.049	88.589	45.073	34.818	29.997	27.364	22.735	18.657	16.277	17.596
23	73.483	48.104	51.498	90.072	44.606	34.791	29.997	27.308	22.712	18.461	15.978	17.356
24	69.640	44.816	48.065	89.166	44.471	34.571	29.997	26.945	22.524	18.148	15.932	17.050
25	68.757	41.839	45.396	87.527	43.968	34.174	29.939	26.744	22.187	18.079	15.866	17.118
26	61.452	39.903	44.463	85.788	43.294	34.113	29.563	26.640	22.112	17.926	15.472	17.679
27	57.304	39.040	43.511	83.266	42.930	34.052	29.272	26.161	21.925	17.788	15.361	16.909
28	57.623	38.653	52.052	80.686	42.329	33.658	28.727	26.082	21.591	17.982	15.068	16.304
29	55.042	39.262	63.100	78.423	42.225	33.413	28.439	26.082	21.488	17.617	14.862	15.774
30	52.783		57.937	76.185	42.168	33.109	28.071	26.105	21.156	17.734	14.554	15.270
31	50.813		55.101		42.130		27.957	26.193		18.862		14.868
Mean	49.533	55.340	43.614	-	52.646	36.728	30.453	27.378	23.707	19.313	16.680	17.860
Flow (MCM)	132.670	138.659	116.816	-	141.008	95.200	81.565	73.329	61.448	51.728	43.233	47.837
Maximum	73.760	72.710	63.100	-	77.769	41.826	32.331	28.612	25.883	20.973	18.932	23.542
Minimum	28.416	38.653	37.155	-	42.130	33.109	27.957	26.082	21.156	17.617	14.554	14.522
Runoff (mm)	67.482	70.528	59.418	-	71.723	48.423	41.488	37.299	31.255	26.311	21.991	24.332

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2017
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	14.407	20.772	35.415	-	-	40.898	26.153	23.038	-	15.114	16.231	-
2	14.442	22.551	36.084	50.718	50.313	37.660	26.113	23.304	-	14.920	16.065	-
3	16.067	24.453	36.239	90.888	-	36.703	25.867	23.342	-	14.887	16.666	-
4	15.966	27.400	43.421	75.711	-	36.029	25.828	23.342	-	14.887	16.901	-
5	17.004	20.831	41.676	66.735	-	35.359	25.828	23.266	-	14.887	16.498	-
6	16.666	17.351	37.388	60.854	62.157	34.652	25.828	22.811	-	14.887	16.197	-
7	15.900	15.248	36.479	56.974	60.519	32.386	25.828	22.735	-	14.952	15.965	-
8	16.983	14.379	35.005	58.109	60.138	31.228	25.828	22.735	-	15.341	15.998	-
9	21.150	16.135	35.493	66.967	59.489	30.762	25.749	22.735	-	15.374	16.465	-
10	23.078	15.678	35.404	76.417	58.952	30.131	25.276	22.735	-	15.114	16.635	-
11	21.107	18.843	35.141	-	56.390	29.547	25.198	22.735	-	14.631	14.827	-
12	18.313	18.593	32.820	-	55.389	29.422	25.198	22.660	-	14.122	13.901	-
13	19.025	15.810	37.596	90.259	51.858	29.132	25.198	22.209	-	13.650	13.402	-
14	23.805	13.717	49.872	80.360	50.577	28.842	25.119	22.209	-	13.495	13.093	-
15	27.006	12.485	45.368	68.048	49.767	28.719	24.651	22.660	-	13.964	12.665	-
16	31.159	11.857	51.797	64.041	48.961	28.226	24.573	22.735	-	13.619	12.393	-
17	31.323	11.154	65.536	58.265	47.961	28.063	24.573	22.735	-	13.154	12.124	-
18	31.615	11.415	89.474	53.100	45.789	27.697	24.573	22.697	-	12.848	11.708	-
19	24.941	11.649	87.389	49.115	43.556	28.308	24.573	22.434	-	12.454	11.473	-
20	22.103	11.827	81.117	-	41.932	28.145	24.534	22.284	-	12.333	11.386	-
21	24.462	13.197	76.026	-	40.148	27.778	24.263	22.924	-	11.975	11.095	-
22	23.610	16.273	71.924	-	37.024	27.211	23.993	23.000	-	11.915	11.593	-
23	23.647	16.969	74.376	-	35.404	26.888	23.916	22.773	-	11.915	12.758	-
24	23.349	17.593	67.319	-	34.650	26.808	23.647	22.735	-	11.915	11.976	-
25	20.015	20.996	55.867	62.447	34.210	26.520	23.380	22.735	-	11.885	11.654	-
26	19.435	22.610	47.519	71.959	33.597	26.193	23.342	22.735	-	11.679	13.781	-
27	20.847	37.018	59.160	83.400	33.205	26.153	23.304	22.622	-	11.473	14.000	-
28	24.037	38.079	59.007	95.790	32.858	26.161	23.038	21.837	-	11.444	12.557	-
29	28.796		68.552	-	32.512	25.923	22.773	21.024	-	11.925	15.919	-
30	27.084		-	-	32.997	25.883	22.735	20.659	-	15.062	18.346	-
31	23.187		-		38.173		22.773	20.404		16.498		-
Mean	21.953	18.389	-	-	-	29.914	24.634	22.543	-	13.623	14.142	-
Flow (MCM)	58.798	44.486	-	-	-	77.538	65.979	60.380	-	36.488	36.657	-
Maximum	31.615	38.079	-	-	-	40.898	26.153	23.342	-	16.498	18.346	-
Minimum	14.407	11.154	-	-	-	25.883	22.735	20.404	-	11.444	11.095	-
Runoff (mm)	29.907	22.628	-	-	-	39.439	33.560	30.712	-	18.560	18.645	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RB2 **Year:** 2018
Station Name: Ruhuhu River at Masigira
Time-Series Type: Flow (cumecs)

Latitude: 9:56:22 S Longitude: 35:11: 7 E Elevation: 941.0 metres Area: 1966.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	51.868	48.823	36.263	45.554	27.908	24.534	21.539	19.613	14.343	12.423	19.578
2	-	51.314	46.343	37.074	43.230	27.380	24.263	21.466	19.292	14.598	12.393	18.554
3	37.138	59.984	41.996	37.759	41.421	27.259	23.993	20.987	19.221	14.598	12.393	17.107
4	42.149	70.451	39.135	40.530	42.368	26.977	23.954	20.659	19.221	14.407	12.393	16.100
5	43.383	66.017	37.075	38.861	42.845	26.696	23.954	20.368	19.186	14.343	12.357	14.697
6	45.078	58.813	36.217	35.594	40.998	26.616	24.032	20.079	18.938	14.121	12.117	13.682
7	41.344	54.824	36.219	34.881	39.225	26.336	24.496	19.827	18.622	13.901	11.939	13.154
8	37.644	51.763	38.077	33.346	38.951	26.058	24.534	19.756	18.169	13.869	11.856	13.094
9	31.735	51.611	36.535	32.178	41.518	26.034	24.263	19.506	18.065	13.932	11.503	14.218
10	28.706	47.778	34.397	33.957	39.229	26.090	23.993	19.257	17.823	14.311	11.532	15.124
11	34.091	44.823	33.308	34.355	36.985	25.867	23.954	19.221	17.548	14.343	12.034	18.890
12	41.399	42.465	37.354	37.760	35.591	25.828	23.954	19.257	17.275	14.121	12.004	22.630
13	43.060	40.110	37.582	39.283	35.102	25.788	23.916	19.506	17.003	13.838	12.485	24.111
14	51.742	37.171	42.618	46.126	34.791	25.512	23.647	19.684	16.733	13.432	13.464	26.732
15	65.436	33.916	44.918	54.366	34.703	25.237	23.380	19.292	16.464	13.339	13.588	31.450
16	68.219	32.092	-	58.552	34.527	25.198	23.342	19.221	16.197	13.124	13.401	27.265
17	60.490	31.237	-	68.638	34.792	25.198	23.342	19.221	15.932	12.909	13.370	26.412
18	49.580	30.308	-	77.048	33.475	25.158	23.304	19.221	15.668	12.878	13.370	30.474
19	56.912	29.432	-	74.227	32.650	24.885	23.038	19.221	15.439	12.817	13.370	39.247
20	55.098	27.642	-	65.625	32.005	24.768	22.773	19.186	15.374	12.454	13.370	37.584
21	59.814	26.516	-	72.261	31.577	25.631	22.735	19.009	15.146	12.545	13.621	44.993
22	69.201	29.754	-	83.148	30.982	25.512	22.735	19.186	14.920	13.433	15.684	53.685
23	63.969	33.874	34.571	79.694	30.644	25.237	22.735	19.221	14.887	13.401	19.231	68.980
24	56.526	33.918	33.216	68.256	30.560	25.198	22.697	19.186	14.855	13.339	20.045	-
25	55.459	37.853	31.323	56.224	30.265	25.158	22.434	18.938	14.630	13.124	21.504	-
26	55.354	38.682	33.494	50.040	29.889	24.885	22.172	18.657	14.407	12.909	21.245	-
27	54.412	44.991	45.854	45.705	29.223	24.612	22.134	18.378	14.375	12.878	20.587	-
28	53.749	50.391	47.724	43.521	28.439	24.573	22.134	18.134	14.311	12.878	19.542	-
29	61.242		44.054	47.230	28.562	24.573	22.097	18.099	13.932	12.878	19.046	-
30	60.774		40.392	47.622	28.562	24.573	21.836	18.204	13.932	12.848	20.479	-
31	55.880		37.986		28.275		21.576	18.939		12.635		-
Mean	-	43.200	-	50.338	35.063	25.691	23.289	19.433	16.573	13.502	14.745	-
Flow (MCM)	-	104.510	-	130.475	93.912	66.592	62.377	52.050	42.956	36.163	38.219	-
Maximum	-	70.451	-	83.148	45.554	27.908	24.534	21.539	19.613	14.598	21.504	-
Minimum	-	26.516	-	32.178	28.275	24.573	21.576	18.099	13.932	12.454	11.503	-
Runoff (mm)	-	53.158	-	66.366	47.768	33.872	31.728	26.475	21.850	18.394	19.440	-

Flow (cumecs)

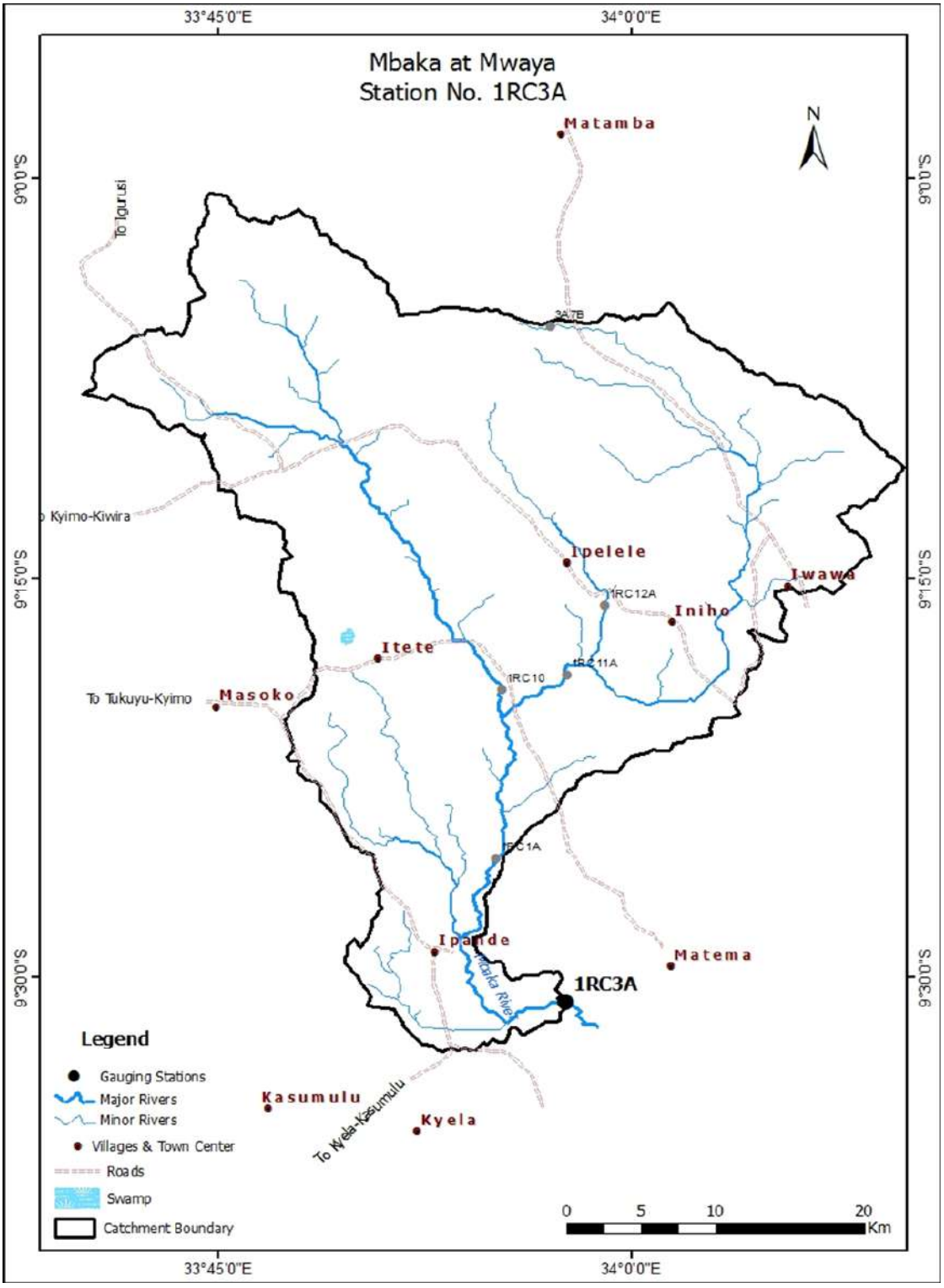
Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Mbaka River at Mwaya				
Station No: 1RC3A			Established: 02/10/1961	
Coordinates:			Altitude (m.a.m.s.l): 479	
Lat: -9.5154	Long: 33.9594		Catchment Area (km²): 1,434	
Description of the Catchment:				
Vegetation actively induced by natives and scattered settlement				
Station Details				
1. Staff Gauges	Range: 0 – 5m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2013	
3. Benchmark	Bolt on concrete near logger house			
BM Assumed Datum: 5.602m		N.M.M.S.L: -	TBM: -	
4. Control	Open channel			
5. Access	Accessible throughout the year, the station is located 57km from Tukuyu town via Tukuyu – Matema village			
Records	Period		Quality	
Water Level:	01/01/2014 – 31/12/2018		1.2.2	
Discharge:	01/01/2014 – 31/12/2018		2.2.2	
Extremes:	Max. Recorded	83.54m³/sec	On 11/05/2019	WL 5.86m
	Min. Recorded	1.66m³/sec	On 17/12/2007	WL 0.62m
Remarks				


Mbaka at Mwaya
Station No. 1RC3A
33°45'0"E
34°0'0"E
9°0'0"S
9°15'0"S
9°30'0"S
N
Matamba
To Igurusi
3A7B
Kyimo-Kiwira
Ipelele
Iwawa
1RC12A
Iniho
Itete
1RC10
1RC11A
To Tukuyu-Kyimo
Masoko
1RC1A
Ipande
Matema
1RC3A
Mbaka River
Kasumulu
Kyela
To Kyela-Kasumulu
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Swamp
Catchment Boundary
0
5
10
20
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC3A
Station Name: Mbaka River at Mwaya
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 9:30:55 S | Longitude: 33:57:33 E | Elevation: 479.0 metres | Area: 1434.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	55.682	24.348	20.073	21.126	9.342	6.420	8.796	6.118
2	-	-	-	-	53.730	23.499	18.649	20.242	12.482	6.294	8.733	6.015
3	-	-	-	-	55.027	22.890	18.133	18.336	12.026	6.162	8.733	5.789
4	-	-	-	-	48.945	22.423	17.597	16.661	11.117	5.956	8.624	6.652
5	-	-	-	-	48.052	21.958	17.161	13.781	10.592	5.825	7.818	7.260
6	-	-	-	18.816	-	21.384	16.789	12.643	10.378	5.767	6.921	7.146
7	-	-	-	19.864	56.961	22.172	16.392	12.467	10.148	6.015	7.329	7.010
8	-	-	-	29.152	55.813	31.198	16.059	12.108	10.003	6.044	6.532	6.890
9	-	-	-	49.064	55.705	39.187	15.560	11.967	9.859	5.956	6.800	6.770
10	-	-	-	56.257	-	38.493	15.221	11.751	9.619	5.942	6.770	6.665
11	-	-	-	28.950	48.075	33.638	15.108	11.660	9.364	5.927	6.651	6.643
12	-	-	-	-	44.833	32.754	14.944	11.602	9.111	5.825	6.531	6.546
13	-	-	-	-	43.159	31.799	14.616	11.578	8.890	5.745	6.427	6.199
14	-	-	-	-	40.330	29.639	14.564	11.437	8.827	5.825	6.398	5.949
15	-	-	-	58.522	39.191	27.496	14.547	11.166	8.608	5.612	6.309	5.764
16	-	-	-	57.779	38.141	25.793	14.427	11.224	8.343	5.450	7.383	5.565
17	-	-	-	57.393	38.018	24.965	14.272	12.084	8.017	5.304	14.118	5.354
18	-	-	-	-	39.886	26.200	14.015	12.050	7.863	-	14.710	5.225
19	-	-	-	-	43.674	22.252	13.742	11.768	7.740	-	13.520	5.125
20	-	-	-	-	43.631	21.559	13.436	11.298	7.618	-	12.296	5.097
21	-	-	-	-	41.932	21.943	12.937	10.684	7.503	-	9.143	5.026
22	-	-	-	-	42.268	25.712	12.492	10.465	7.427	34.173	7.948	5.890
23	-	-	-	-	45.831	27.369	12.266	10.230	7.313	22.670	8.218	10.054
24	-	-	-	58.467	45.765	26.771	12.125	10.029	7.184	17.174	7.863	6.253
25	-	-	-	57.657	43.225	25.413	12.000	9.852	7.025	13.916	7.374	5.461
26	-	-	-	56.850	30.319	23.519	11.933	9.772	6.950	12.141	6.905	7.086
27	-	-	-	55.715	27.843	24.189	11.917	9.708	6.890	11.263	6.576	6.711
28	-	-	-	54.035	27.543	21.535	11.867	9.644	6.823	10.756	6.517	6.353
29	-		-	53.829	27.349	21.055	12.432	9.573	6.710	10.764	6.354	6.413
30	-		-	57.194	26.617	23.551	16.553	9.421	6.584	10.020	5.942	6.561
31	-		-		25.507		20.906	9.081		9.269		6.726
Mean	-	-	-	-	-	26.157	14.927	12.110	8.678	-	8.141	6.333
Flow (MCM)	-	-	-	-	-	67.798	39.980	32.435	22.495	-	21.102	16.962
Maximum	-	-	-	-	-	39.187	20.906	21.126	12.482	-	14.710	10.054
Minimum	-	-	-	-	-	21.055	11.867	9.081	6.584	-	5.942	5.026
Runoff (mm)	-	-	-	-	-	47.279	27.880	22.619	15.687	-	14.716	11.828

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC3A
Station Name: Mbaka River at Mwaya
Time-Series Type: Flow (cumecs)

Year: 2015

Latitude: 9:30:55 S Longitude: 33:57:33 E Elevation: 479.0 metres Area: 1434.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.969	14.778	9.507	25.328	43.687	19.258	10.754	6.769	4.885	3.674	3.251	5.147
2	5.300	14.571	9.570	23.754	40.645	18.499	10.746	6.821	4.871	3.674	3.251	5.168
3	5.140	14.502	10.674	24.775	37.663	17.861	10.648	7.266	4.786	3.674	3.277	4.906
4	5.211	14.210	10.705	22.920	35.615	17.548	10.316	7.258	4.772	3.661	6.106	4.702
5	5.154	13.630	10.559	21.320	38.722	17.042	10.066	7.009	4.758	3.581	27.064	4.458
6	5.180	13.528	10.042	21.224	35.778	16.618	9.953	6.881	4.674	3.554	51.520	4.327
7	8.191	14.919	9.498	26.646	32.687	16.336	9.753	6.851	4.639	3.475	51.732	4.376
8	10.320	17.330	9.149	31.480	32.323	16.230	9.809	6.746	4.493	3.448	35.092	5.205
9	9.365	19.893	8.888	23.868	45.131	16.362	10.252	6.634	4.347	3.369	25.501	4.998
10	9.095	18.022	8.943	24.467	42.802	15.933	9.777	6.552	4.459	3.369	31.909	4.355
11	9.253	16.710	9.046	29.909	36.576	15.279	9.458	6.404	5.240	3.448	27.591	4.169
12	9.103	14.685	9.594	38.701	35.062	15.044	9.164	6.330	5.247	3.461	14.017	4.121
13	8.569	13.894	9.713	37.795	46.793	14.759	8.967	6.271	5.197	3.461	11.131	4.196
14	8.420	13.877	8.999	37.047	47.765	14.329	8.841	6.204	4.970	3.461	10.076	4.742
15	8.048	13.274	8.583	37.375	41.735	14.020	8.755	6.072	4.577	3.448	8.921	6.400
16	7.986	12.424	9.220	39.020	37.101	13.713	8.583	5.795	4.354	3.369	8.295	5.658
17	7.986	11.965	9.307	34.849	34.146	13.534	8.395	5.563	4.327	3.356	7.869	5.183
18	7.986	12.132	9.157	31.819	26.281	13.280	8.217	5.882	4.320	3.356	7.304	6.259
19	8.668	13.110	9.498	31.263	29.574	13.010	8.085	5.765	4.258	3.356	6.821	8.833
20	12.710	12.652	10.693	29.962	28.768	12.740	7.946	5.664	4.128	3.356	6.448	7.165
21	12.650	11.897	13.142	27.999	27.032	12.489	7.746	5.462	4.100	3.356	6.116	6.234
22	13.858	11.607	16.066	27.301	25.707	12.338	7.700	5.275	4.053	3.356	5.860	5.963
23	17.270	11.048	23.107	26.204	24.764	12.171	7.601	5.076	4.005	3.330	5.347	5.513
24	17.390	10.640	32.087	27.768	24.253	11.847	7.517	5.005	3.991	3.172	7.859	5.999
25	17.150	10.413	42.620	41.410	23.161	11.715	7.372	4.998	3.944	3.146	22.219	6.271
26	16.752	10.245	41.911	-	22.404	11.492	7.334	4.998	3.896	3.146	9.033	5.520
27	16.637	9.167	34.478	58.831	21.958	11.319	7.243	4.998	3.876	3.159	7.352	5.757
28	16.611	10.497	28.298	57.612	21.080	11.040	7.213	4.998	3.782	3.238	5.827	9.744
29	16.399		25.290	52.850	20.574	10.885	7.107	4.998	3.688	3.251	5.404	8.462
30	15.646		23.767	42.548	20.334	10.770	6.994	4.983	3.674	3.251	5.275	7.350
31	14.916		27.093		19.061		6.911	4.899		3.251		6.934
Mean	10.740	13.415	16.103	-	32.232	14.249	8.685	5.949	4.410	3.394	14.249	5.746
Flow (MCM)	28.766	32.454	43.131	-	86.329	36.933	23.261	15.934	11.432	9.090	36.933	15.389
Maximum	17.390	19.893	42.620	-	47.765	19.258	10.754	7.266	5.247	3.674	51.732	9.744
Minimum	5.140	9.167	8.583	-	19.061	10.770	6.911	4.899	3.674	3.146	3.251	4.121
Runoff (mm)	20.060	22.632	30.078	-	60.202	25.755	16.221	11.112	7.972	6.339	25.755	10.732

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC3A
Station Name: Mbaka River at Mwaya
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 9:30:55 S Longitude: 33:57:33 E Elevation: 479.0 metres Area: 1434.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.190	9.548	11.475	11.393	46.808	22.289	12.707	7.685	5.512	3.661	2.927	2.742
2	6.859	8.411	11.073	11.124	49.623	21.778	12.614	7.501	5.505	3.581	2.837	3.121
3	7.983	10.691	11.081	12.566	-	21.306	12.547	7.456	5.168	3.568	2.748	3.036
4	10.509	21.711	11.426	12.308	52.982	20.735	12.171	7.364	5.111	3.750	2.735	2.837
5	12.746	20.144	11.163	16.445	-	20.149	11.930	7.364	5.090	4.823	2.729	2.666
6	14.774	17.412	10.860	30.757	29.126	19.995	11.682	7.456	4.955	4.772	2.685	2.813
7	11.624	17.584	10.575	50.103	57.631	22.273	11.483	7.471	4.878	4.800	2.628	3.883
8	10.326	17.906	11.130	56.958	57.034	23.627	11.335	7.456	4.786	4.723	2.546	5.244
9	9.031	16.760	11.574	58.651	54.295	22.439	11.171	7.334	4.765	4.515	2.571	3.975
10	8.489	17.690	11.081	29.547	51.871	20.590	11.122	7.122	4.716	3.609	2.786	3.435
11	8.427	26.864	10.819	-	49.425	19.563	10.942	7.047	4.667	3.448	2.748	3.225
12	9.031	21.123	10.779	-	47.150	18.744	10.713	7.273	4.660	3.369	2.716	2.991
13	8.249	17.298	11.426	-	44.433	18.398	10.640	7.137	4.646	3.356	2.590	3.317
14	8.724	15.680	10.909	-	41.755	18.201	10.665	7.077	4.562	3.356	2.478	3.488
15	8.512	15.461	11.421	-	39.574	17.745	10.551	6.881	4.521	3.343	2.378	3.461
16	8.591	15.305	13.361	-	37.077	16.963	10.381	6.754	4.354	3.264	2.509	3.395
17	10.256	15.421	11.168	-	35.232	16.574	10.284	6.686	4.320	3.251	2.540	3.257
18	14.991	18.181	10.018	29.193	33.555	16.134	10.114	6.634	4.265	3.257	2.635	3.140
19	13.177	19.142	9.793	57.852	32.441	15.810	9.970	6.619	4.169	3.277	2.965	2.985
20	21.157	18.098	9.737	57.431	30.873	15.426	9.801	6.567	4.114	3.153	2.857	2.786
21	22.527	16.752	9.729	56.393	30.124	15.122	9.721	6.515	4.100	3.049	2.591	2.609
22	25.977	15.253	9.522	54.262	29.888	14.811	9.657	6.478	4.053	2.991	2.863	2.679
23	22.743	14.776	9.938	51.567	28.549	14.647	9.554	6.285	3.991	2.946	2.786	3.160
24	19.994	14.029	10.670	49.575	27.510	14.509	9.244	6.168	3.903	2.939	2.653	2.685
25	17.209	13.272	13.142	48.520	26.460	14.389	9.077	6.160	3.890	2.939	2.622	2.615
26	15.159	12.900	11.126	46.639	25.474	14.372	8.881	6.190	3.883	2.939	2.534	2.534
27	13.833	12.723	10.195	50.748	24.628	14.320	8.590	6.079	3.829	2.939	2.447	2.459
28	12.993	12.439	10.050	56.129	23.900	13.969	8.333	5.838	3.735	2.939	2.422	2.534
29	13.646	11.947	9.657	56.912	23.448	13.586	8.085	5.505	3.681	2.939	2.348	2.628
30	12.432		9.556	54.696	23.223	13.044	7.854	5.454	3.674	2.939	2.385	2.666
31	12.932		11.239		22.802		7.731	5.462		2.939		2.615
Mean	12.906	16.018	10.829	-	-	17.717	10.308	6.743	4.450	3.464	2.642	3.064
Flow (MCM)	34.568	40.135	29.004	-	-	45.922	27.609	18.059	11.535	9.277	6.848	8.207
Maximum	25.977	26.864	13.361	-	-	23.627	12.707	7.685	5.512	4.823	2.965	5.244
Minimum	6.859	8.411	9.522	-	-	13.044	7.731	5.454	3.674	2.939	2.348	2.459
Runoff (mm)	24.106	27.988	20.226	-	-	32.024	19.253	12.594	8.044	6.470	4.775	5.723

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean : - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC3A
Station Name: Mbaka River at Mwaya
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 9:30:55 S | Longitude: 33:57:33 E | Elevation: 479.0 metres | Area: 1434.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.716	4.549	8.646	48.867	55.642	51.277	16.002	10.018	7.258	3.674	8.036	6.639
2	2.735	5.048	9.117	44.563	54.412	47.774	15.505	9.426	7.092	3.674	8.629	5.527
3	2.799	5.333	9.299	43.685	53.264	44.460	15.140	9.331	6.881	3.654	7.916	5.414
4	3.245	5.869	9.212	42.639	52.429	39.311	14.845	10.325	6.859	3.514	4.069	4.056
5	5.118	4.635	8.743	38.300	57.787	36.708	14.535	10.706	7.304	3.362	3.409	3.462
6	12.995	3.958	6.594	39.930	57.230	33.789	14.406	9.946	6.650	3.264	3.647	3.180
7	6.187	3.535	6.050	44.059	55.675	32.344	14.440	9.299	6.567	3.238	5.258	4.095
8	4.321	3.356	6.103	48.303	54.741	29.902	14.072	9.259	6.315	3.153	4.745	7.760
9	3.782	3.715	8.660	51.973	52.872	28.153	13.526	9.434	6.271	3.094	4.239	12.078
10	3.782	3.622	7.558	-	50.956	26.548	13.212	8.897	6.249	3.049	3.397	7.838
11	3.278	4.252	6.920	55.556	48.376	25.724	13.010	9.196	6.021	3.043	3.069	9.026
12	2.940	4.203	7.848	53.865	46.183	24.715	13.077	8.857	5.376	3.043	2.972	9.228
13	3.199	3.649	7.078	50.423	44.423	23.959	12.481	8.559	4.934	3.030	2.799	9.007
14	3.780	3.218	7.048	42.819	43.811	22.888	12.196	8.528	4.828	2.952	2.672	7.880
15	6.583	2.946	7.940	38.013	42.104	22.374	11.947	8.575	4.758	2.927	2.503	6.347
16	4.092	2.748	7.236	37.457	38.044	21.493	11.756	8.637	4.618	2.843	2.428	5.640
17	2.687	2.659	7.380	49.825	37.537	20.784	11.566	8.818	4.541	2.786	2.335	5.075
18	2.534	2.729	7.994	51.844	47.489	21.057	10.860	7.985	4.451	2.729	2.237	12.899
19	2.534	2.767	9.126	50.086	46.093	29.041	10.697	7.808	4.437	2.647	2.176	14.526
20	2.913	2.742	9.930	49.301	39.925	24.548	10.681	8.743	4.423	2.622	2.286	14.785
21	4.944	3.096	10.902	53.087	37.214	21.365	10.632	15.600	4.341	2.534	2.164	14.872
22	3.364	3.749	10.350	54.412	44.679	20.197	10.592	16.013	4.320	2.440	2.140	15.672
23	2.780	3.917	8.882	53.850	39.991	19.352	10.332	13.744	4.258	2.385	2.140	13.496
24	2.761	3.972	8.513	51.136	34.130	18.442	9.849	11.380	4.114	2.341	2.140	11.999
25	3.064	4.661	9.173	51.188	30.803	17.897	9.450	10.107	4.005	2.323	2.152	10.512
26	3.966	4.964	8.842	-	28.221	17.531	9.641	9.426	3.944	2.249	2.312	10.324
27	3.803	7.539	9.443	-	26.338	17.228	9.530	8.967	3.896	2.237	2.851	11.142
28	3.551	7.923	10.026	29.642	24.450	16.892	9.705	8.559	3.890	2.237	2.929	13.479
29	4.768		-	58.783	27.564	16.600	9.833	8.054	3.863	2.243	3.570	14.967
30	4.383		-	55.610	49.275	16.318	9.793	7.739	3.701	2.286	7.708	14.561
31	4.341		-		52.583		9.562	7.563		3.109		13.519
Mean	3.998	4.120	-	-	44.330	26.289	12.028	9.661	5.206	2.861	3.631	9.645
Flow (MCM)	10.709	9.967	-	-	118.734	68.141	32.216	25.877	13.493	7.662	9.411	25.834
Maximum	12.995	7.923	-	-	57.787	51.277	16.002	16.013	7.304	3.674	8.629	15.672
Minimum	2.534	2.659	-	-	24.450	16.318	9.450	7.563	3.701	2.237	2.140	3.180
Runoff (mm)	7.468	6.950	-	-	82.799	47.518	22.466	18.045	9.409	5.343	6.563	18.015

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC3A
Station Name: Mbaka River at Mwaya
Time-Series Type: Flow (cumecs)

Year: 2018

Latitude: 9:30:55 S Longitude: 33:57:33 E Elevation: 479.0 metres Area: 1434.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.399	14.406	12.860	-	24.009	10.478	8.163	9.212	10.708	5.111	15.470	27.883
2	8.732	15.175	11.256	-	28.884	10.332	18.397	9.054	9.343	5.104	15.452	28.518
3	10.451	14.467	10.575	-	28.294	10.026	18.422	8.755	7.694	5.069	15.287	28.507
4	14.535	13.679	10.268	-	27.934	9.913	8.181	8.708	7.380	5.147	15.209	27.925
5	14.475	13.399	10.155	-	28.541	9.530	5.912	8.676	7.115	5.390	15.174	25.903
6	14.251	13.807	9.954	23.392	24.537	9.450	5.853	8.458	6.866	5.282	14.975	24.683
7	14.234	13.832	9.641	20.773	22.642	9.291	6.652	8.224	6.642	5.132	14.690	23.738
8	14.234	13.841	9.609	20.303	21.817	8.834	9.769	8.100	6.522	5.111	13.609	22.800
9	14.260	13.901	9.834	19.956	21.456	8.395	10.462	8.062	6.508	5.111	9.223	22.445
10	14.406	13.552	11.324	19.084	20.664	8.318	9.786	7.892	6.508	5.069	18.322	22.250
11	14.380	12.791	16.502	20.267	19.829	8.224	9.450	7.662	6.537	4.814	18.759	21.295
12	14.372	12.263	21.933	32.868	18.301	8.217	9.769	7.479	6.583	4.772	18.049	21.083
13	14.389	11.765	22.208	44.192	17.451	8.286	9.737	7.364	5.993	4.793	16.993	21.074
14	14.509	11.393	17.911	32.273	16.786	8.426	9.729	7.334	6.897	4.955	16.877	21.074
15	14.638	10.966	13.788	27.707	16.345	8.411	9.769	7.243	6.866	5.334	16.762	21.055
16	14.733	10.576	13.648	21.403	15.766	8.434	9.745	7.228	6.568	6.227	16.600	20.926
17	14.923	9.946	18.491	25.134	15.548	8.349	9.817	7.228	5.985	6.360	15.740	20.853
18	15.140	9.498	20.175	30.633	15.027	8.310	9.737	7.213	5.773	6.791	15.461	21.725
19	15.383	9.259	20.507	34.883	14.656	8.131	9.753	7.107	5.765	6.874	17.591	25.123
20	15.487	8.959	17.917	38.139	14.406	7.846	9.970	6.986	5.620	7.070	31.517	25.386
21	15.793	8.723	17.673	35.852	14.303	7.624	10.236	6.881	6.455	8.149	28.722	24.986
22	17.025	8.912	17.978	33.730	13.824	7.578	10.714	6.866	10.218	9.404	21.835	25.596
23	17.700	9.038	16.241	31.803	13.331	7.486	10.300	6.858	7.865	10.691	20.623	26.352
24	18.346	9.770	15.731	29.887	13.103	7.471	10.138	6.821	16.882	12.099	20.303	26.275
25	16.277	9.434	15.305	28.188	12.673	7.471	10.227	6.881	18.578	13.868	19.637	26.170
26	15.967	9.788	14.733	26.161	12.263	7.471	10.284	7.001	18.470	14.337	18.453	25.989
27	15.070	13.425	14.561	24.731	12.171	7.387	10.203	6.919	18.452	14.406	18.407	23.692
28	9.527	12.041	13.961	23.362	11.939	6.881	9.921	7.107	16.692	14.035	18.309	23.418
29	8.865		13.707	24.210	11.914	6.754	9.649	7.273	6.686	11.281	20.103	24.267
30	9.713		16.150	23.710	12.777	6.716	9.378	7.245	5.111	14.526	31.023	25.396
31	14.263		19.286		10.847		9.323	8.808		15.383		23.640
Mean	14.048	11.736	14.964	-	17.808	8.335	9.982	7.634	8.776	7.990	18.306	24.194
Flow (MCM)	37.625	28.392	40.079	-	47.696	21.604	26.736	20.446	22.747	21.401	47.449	64.802
Maximum	18.346	15.175	22.208	-	28.884	10.478	18.422	9.212	18.578	15.383	31.517	28.518
Minimum	8.732	8.723	9.609	-	10.847	6.716	5.853	6.821	5.111	4.772	9.223	20.853
Runoff (mm)	26.238	19.799	27.949	-	33.261	15.065	18.644	14.258	15.863	14.924	33.089	45.190

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC3A
Station Name: Mbaka River at Mwaya
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 9:30:55 S Longitude: 33:57:33 E Elevation: 479.0 metres Area: 1434.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12.597	15.844	11.179	8.193	54.087	25.643	13.102	9.117	7.016	6.271	4.998	-
2	9.547	16.354	11.140	8.478	52.383	29.398	13.010	9.085	6.956	6.271	4.969	-
3	9.228	16.002	11.074	10.791	51.850	29.054	12.875	9.070	6.776	6.256	4.800	-
4	8.794	14.864	10.878	11.344	51.731	27.577	12.740	8.959	6.746	6.168	4.744	-
5	8.178	10.765	10.657	11.114	52.756	25.884	12.589	8.849	6.746	6.153	4.576	-
6	8.085	10.106	10.624	10.754	56.648	23.635	12.338	8.810	6.746	6.153	4.521	-
7	8.155	10.066	10.624	10.999	56.151	23.230	12.063	8.661	6.746	6.153	4.354	-
8	8.645	9.801	10.608	10.986	53.496	23.732	11.789	8.559	6.746	6.123	4.341	-
9	9.141	9.506	10.494	13.825	53.946	27.076	11.797	8.356	6.731	5.948	4.423	-
10	9.180	8.740	10.381	16.762	28.695	27.083	11.806	8.263	6.642	5.918	4.437	-
11	8.959	8.163	10.332	18.570	-	25.990	11.773	8.155	6.612	5.904	4.437	-
12	8.723	-	10.106	29.732	-	23.561	11.541	8.085	6.522	5.816	4.437	4.107
13	8.598	-	9.865	36.990	28.153	22.818	11.294	8.023	6.493	5.758	4.396	4.093
14	8.582	-	9.721	31.441	54.108	22.101	11.130	7.969	6.404	5.498	4.135	4.012
15	8.772	-	9.585	26.064	53.309	20.836	10.909	7.954	6.389	5.454	4.012	3.998
16	9.906	-	9.418	21.930	52.895	18.760	10.803	7.900	6.382	5.454	4.122	4.122
17	10.082	14.234	9.347	18.795	52.481	14.382	10.648	7.838	6.330	5.454	4.886	4.886
18	10.229	14.013	9.323	14.714	53.136	17.197	10.624	7.777	6.278	5.426	5.040	5.040
19	10.108	12.842	9.196	14.029	49.679	17.424	10.616	7.723	6.271	5.254	4.702	4.702
20	10.496	13.518	8.975	13.619	46.603	17.246	10.543	7.715	6.271	5.197	4.562	4.562
21	10.227	13.433	8.849	-	44.027	17.175	10.389	7.715	6.263	5.026	4.604	4.604
22	9.833	12.573	8.818	-	44.988	17.051	10.332	7.715	6.212	4.998	4.871	4.871
23	9.713	12.205	8.716	26.371	46.399	16.266	10.138	7.715	6.160	4.998	4.493	4.493
24	9.609	11.972	8.629	25.091	46.443	15.522	10.074	7.715	6.153	4.998	4.354	4.354
25	9.593	11.905	8.465	24.069	49.246	15.053	9.881	7.700	6.153	5.026	4.707	4.707
26	9.577	11.706	8.318	21.420	48.119	14.612	9.833	7.593	6.153	5.197	6.407	6.378
27	9.466	11.640	8.201	18.644	45.394	14.380	9.721	7.486	6.160	5.225	6.360	6.183
28	9.355	11.409	8.661	20.614	40.475	14.132	9.593	7.463	6.212	5.197	6.570	5.787
29	9.339		8.575	41.421	37.369	13.357	9.466	7.410	6.263	5.026	9.968	5.368
30	9.339		8.349	55.583	34.951	13.010	9.355	7.342	6.271	4.998	5.886	5.154
31	10.256		8.224		23.689		9.307	7.213		4.998		2.598
Mean	9.429	-	9.591	-	-	20.440	11.035	8.063	6.460	5.558	4.970	-
Flow (MCM)	25.256	-	25.689	-	-	52.979	29.556	21.595	16.744	14.888	12.883	-
Maximum	12.597	-	11.179	-	-	29.398	13.102	9.117	7.016	6.271	9.968	-
Minimum	8.085	-	8.201	-	-	13.010	9.307	7.213	6.153	4.998	4.012	-
Runoff (mm)	17.612	-	17.915	-	-	36.945	20.611	15.059	11.677	10.382	8.984	-

Flow (cumecs)

Annual Statistics

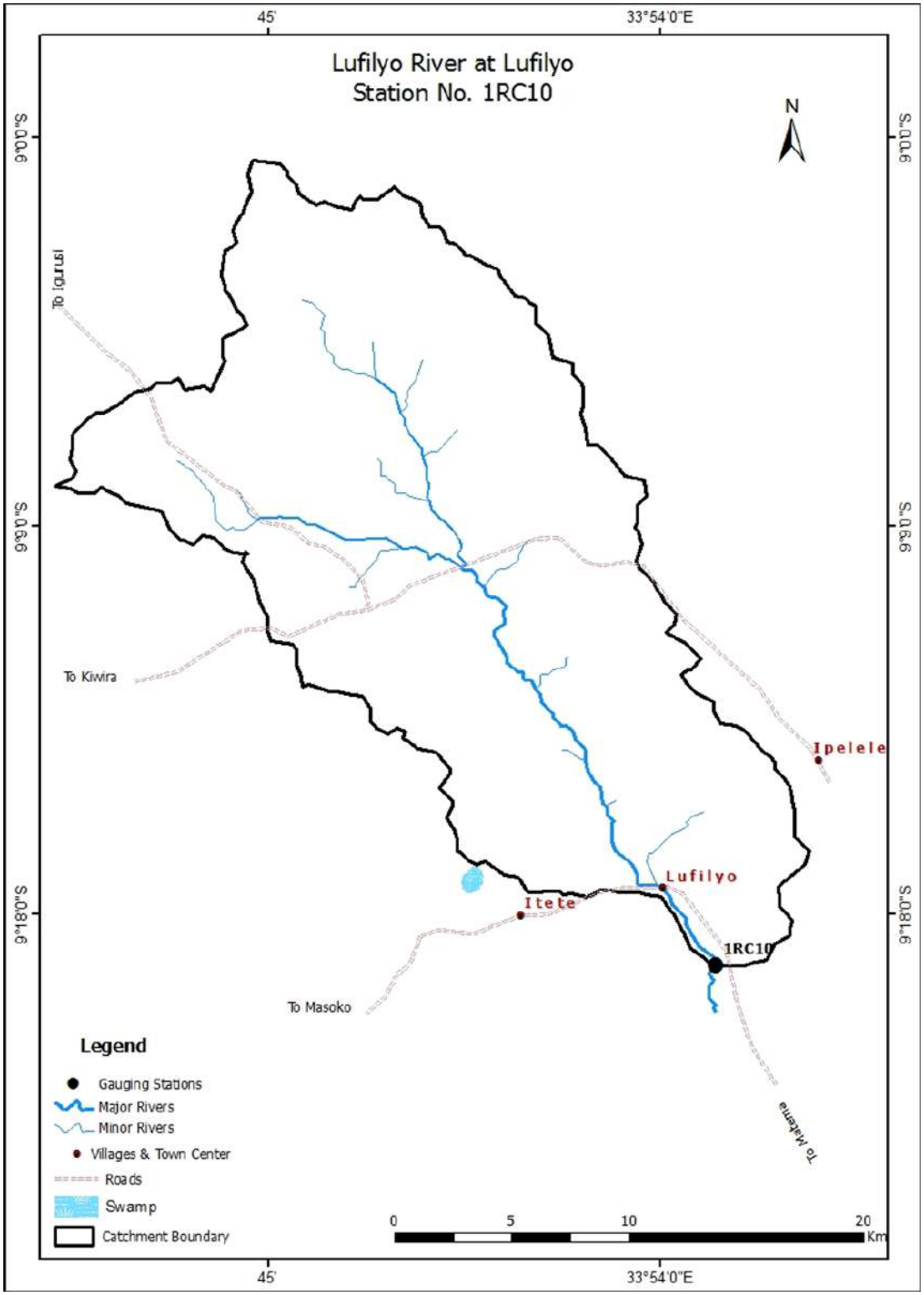
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Lufilyo River at Lufilyo				
Station No: 1RC10			Established: 18/09/1986	
Coordinates:			Altitude (m.a.m.s.l): 701	
Lat: -9.3199	Long: 33.9211		Catchment Area (km²): 477	
Description of the Catchment:				
Vegetation actively induced by natives plus scattered settlement				
Station Details				
1. Staff Gauges	Range: 0 – 4m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	-		Date installed: -	
3. Benchmark	Bolt on concrete near logger house			
BM Assumed Datum: 3.703m		N.M.M.S.L: -	TBM: -	
4. Control	Permanent consisting of Rock and Boulders			
5. Access	Accessible throughout the year, the station is located near Lufilyo Secondary school 60km from Tukuyu town via Tukuyu – Busokelo road			
Records	Period		Quality	
Water Level:	01/01/2010 – 31/12/2019		1.2.3	
Discharge:	01/01/2010 – 31/12/2019		2.1.3	
Extremes:	Max. Recorded	368.66m³/sec	On 09/04/1991	WL 3.96m
	Min. Recorded	2.99m³/sec	On 21/09/2019	WL 0.4m
Remarks				


Lufilyo River at Lufilyo
Station No. 1RC10
N
45'
33°54'0"E
9°0'0"S
9°3'0"S
9°18'0"S
To Igurusi
To Kiwira
To Masoko
To Mbeya
Ipelele
Lufilyo
Itete
1RC10
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Swamp
Catchment Boundary
0
5
10
20
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC10 **Year:** 2015
Station Name: Lufilyo River at Lufilyo
Time-Series Type: Flow (cumecs)

Latitude: 9:19:11 S Longitude: 33:55:15 E Elevation: 701.0 metres Area: 477.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	14.530	11.727	9.105	7.976	7.426	7.395	9.105
2	-	-	-	-	-	14.257	11.525	9.105	7.976	7.237	7.020	9.318
3	-	-	-	-	-	14.190	11.485	9.318	7.976	7.206	6.989	9.390
4	-	-	-	-	-	14.032	11.445	9.354	7.976	7.206	7.367	9.608
5	-	-	-	-	-	13.876	11.206	9.354	7.976	7.206	8.709	9.626
6	-	-	-	-	-	13.810	11.166	9.354	7.976	7.175	9.537	9.553
7	-	-	-	-	-	13.545	11.166	9.354	7.976	6.989	8.809	9.627
8	-	-	-	-	-	13.501	11.127	9.318	7.943	6.959	8.044	9.218
9	-	-	-	-	-	13.457	10.891	9.105	7.747	6.959	7.747	10.744
10	-	-	-	-	-	13.196	10.813	9.069	7.715	6.959	7.715	9.453
11	-	-	-	-	-	13.153	10.581	9.069	7.715	6.928	7.715	8.447
12	-	-	-	-	-	13.109	10.543	9.069	7.715	6.746	7.682	8.825
13	-	-	-	-	-	12.852	10.543	9.034	7.715	6.716	7.490	9.536
14	-	-	-	-	-	12.809	10.505	8.824	7.747	6.716	7.426	9.644
15	-	-	-	-	-	12.809	10.276	8.789	7.910	6.716	7.237	9.681
16	-	-	-	-	-	12.767	10.238	8.789	7.747	6.716	7.206	9.939
17	-	-	-	-	-	12.513	10.238	8.789	7.715	6.716	7.206	10.239
18	-	-	-	-	-	12.471	10.201	8.789	7.715	6.716	7.206	10.505
19	-	-	-	-	-	12.471	9.976	8.789	7.715	6.716	7.190	10.543
20	-	-	-	-	-	12.429	9.939	8.789	7.715	6.716	7.082	10.798
21	-	-	-	-	16.833	12.179	9.939	8.789	7.715	6.716	6.974	12.204
22	-	-	-	-	16.465	12.137	9.902	8.771	7.715	6.716	6.959	11.427
23	-	-	-	-	16.077	12.137	9.681	8.650	7.682	6.716	7.148	10.853
24	-	-	-	-	15.694	12.096	9.644	8.530	7.490	6.716	8.212	10.391
25	-	-	-	-	15.363	11.850	9.644	8.479	7.458	6.716	7.862	9.995
26	-	-	-	-	15.316	11.809	9.644	8.276	7.458	6.716	8.177	10.109
27	-	-	-	-	15.316	11.768	9.608	8.242	7.458	6.716	8.965	11.606
28	-	-	-	-	15.246	11.525	9.390	8.242	7.458	6.746	9.036	14.474
29	-		-	-	14.805	11.485	9.354	8.209	7.458	6.913	8.262	13.858
30	-		-	-	14.598	11.525	9.354	8.009	7.458	6.929	8.930	13.138
31	-		-		14.575		9.318	7.976		7.379		15.019
Mean	-	-	-	-	-	12.810	10.357	8.817	7.733	6.894	7.777	10.544
Flow (MCM)	-	-	-	-	-	33.202	27.741	23.617	20.044	18.464	20.157	28.242
Maximum	-	-	-	-	-	14.530	11.727	9.354	7.976	7.426	9.537	15.019
Minimum	-	-	-	-	-	11.485	9.318	7.976	7.458	6.716	6.959	8.447
Runoff (mm)	-	-	-	-	-	69.607	58.156	49.511	42.022	38.708	42.258	59.207

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC10
Station Name: Lufilyo River at Lufilyo
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 9:19:11 S | Longitude: 33:55:15 E | Elevation: 701.0 metres | Area: 477.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	21.555	30.322	12.229	8.115	6.107	5.023	4.237	-	-
2	-	-	-	20.772	29.443	11.940	8.082	6.107	5.023	4.237	-	-
3	-	-	-	20.854	-	11.614	8.049	6.078	5.023	4.237	-	-
4	-	-	-	21.329	-	11.293	7.851	5.909	5.023	4.273	-	-
5	-	-	-	22.317	-	10.977	7.819	5.881	5.023	4.475	-	-
6	-	-	-	30.487	-	10.705	7.802	5.853	5.023	4.439	-	-
7	-	-	-	33.965	-	10.666	7.689	5.687	5.023	4.403	-	-
8	-	-	-	34.473	-	10.627	7.576	5.659	5.023	4.261	-	-
9	-	-	-	38.197	-	10.398	7.560	5.659	5.023	4.237	-	5.037
10	-	-	-	48.107	-	10.360	7.560	5.659	5.023	4.237	-	4.489
11	-	-	-	49.600	-	10.322	7.560	5.659	4.997	4.214	-	4.261
12	-	-	-	51.616	-	10.096	7.528	5.659	4.845	4.075	-	4.214
13	-	-	-	51.167	18.595	10.058	7.338	5.659	4.820	4.052	-	4.075
14	-	-	-	47.506	18.258	10.058	7.291	5.632	4.820	4.052	-	4.052
15	-	-	-	44.353	18.001	10.040	7.181	5.470	4.820	4.052	-	4.052
16	-	-	-	43.070	17.619	9.891	7.072	5.443	4.820	4.052	-	4.052
17	-	-	-	40.371	17.216	9.633	7.026	5.443	4.807	4.052	-	4.052
18	-	-	-	37.152	16.794	9.452	6.843	5.443	4.720	4.052	-	4.052
19	-	-	-	34.586	16.256	9.218	6.812	5.443	4.633	4.052	-	4.052
20	-	-	-	31.909	15.800	9.183	6.812	5.416	4.621	4.052	-	4.052
21	-	-	-	30.050	15.093	9.183	6.782	5.257	4.621	4.052	-	4.075
22	-	-	-	29.310	14.539	9.183	6.602	5.230	4.621	4.052	-	4.214
23	-	-	-	28.516	14.884	9.147	6.573	5.230	4.621	4.052	-	4.408
24	-	-	-	27.476	14.222	8.935	6.558	5.230	4.621	4.052	-	5.502
25	-	-	-	26.267	13.708	8.900	6.454	5.230	4.597	4.052	-	5.853
26	-	-	-	25.363	13.598	8.848	6.352	5.230	4.451	4.052	-	5.909
27	-	-	-	25.148	13.313	8.520	6.337	5.230	4.427	4.052	-	6.107
28	-	-	-	24.843	13.097	8.367	6.337	5.230	4.403	4.030	-	6.308
29	-	-	-	26.950	12.797	8.350	6.323	5.230	4.261	3.894	-	6.323
30	-		-	31.326	12.585	8.316	6.222	5.204	4.237	3.850	-	6.165
31	-		-		12.312		6.121	5.049		3.717		5.729
Mean	-	-	-	33.288	-	9.884	7.104	5.523	4.766	4.116	-	-
Flow (MCM)	-	-	-	86.282	-	25.618	19.028	14.793	12.354	11.025	-	-
Maximum	-	-	-	51.616	-	12.229	8.115	6.107	5.023	4.475	-	-
Minimum	-	-	-	20.772	-	8.316	6.121	5.049	4.237	3.717	-	-
Runoff (mm)	-	-	-	180.885	-	53.707	39.891	31.013	25.900	23.113	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC10 **Year:** 2017
Station Name: Lufilyo River at Lufilyo
Time-Series Type: Flow (cumecs)

Latitude: 9:19:11 S Longitude: 33:55:15 E Elevation: 701.0 metres Area: 477.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.646	7.152	10.541	18.647	18.345	12.076	7.631	5.747	5.315	4.313	3.943	6.579
2	5.805	8.070	10.591	18.647	17.985	10.909	7.439	5.720	5.288	4.313	3.966	6.668
3	7.066	8.696	11.335	18.647	17.629	10.482	7.407	5.556	5.131	4.313	4.103	6.668
4	5.999	7.470	10.822	18.647	17.453	10.216	7.407	5.611	5.105	4.313	4.149	6.698
5	5.867	6.920	10.899	18.647	16.633	10.141	7.439	6.056	5.105	4.313	4.513	7.084
6	5.853	6.470	10.842	18.647	16.048	9.917	7.615	5.803	5.105	4.289	5.811	8.227
7	5.687	6.150	12.168	18.647	15.714	9.843	7.535	5.720	5.105	4.149	5.291	7.816
8	5.632	6.121	14.660	18.647	14.894	9.659	7.423	5.556	5.105	4.126	5.475	9.268
9	5.621	6.251	10.070	18.647	14.186	9.806	7.376	5.529	5.105	4.126	5.475	9.333
10	6.385	6.499	11.385	18.647	13.827	9.604	7.187	5.502	5.105	4.126	5.081	9.261
11	5.676	6.281	12.232	18.647	13.783	9.459	7.125	5.341	5.105	4.126	4.554	9.228
12	5.456	5.743	10.922	18.517	13.739	9.423	6.940	5.315	5.079	4.126	4.290	10.294
13	5.456	5.659	10.801	17.721	13.881	9.315	6.910	5.315	4.926	4.126	3.989	10.443
14	5.676	5.659	10.801	17.417	16.010	9.261	6.879	5.315	4.900	4.126	3.943	10.141
15	6.385	5.659	10.842	17.216	14.462	9.013	6.698	5.315	4.875	4.126	3.943	9.587
16	5.649	5.632	11.861	17.041	14.095	8.803	6.638	5.315	4.725	4.126	3.943	9.014
17	5.798	5.470	12.564	17.218	13.783	9.013	6.460	5.328	4.700	4.126	3.966	8.938
18	5.660	5.443	12.903	18.441	13.431	9.226	6.416	5.421	4.675	4.126	4.103	11.969
19	5.470	5.831	13.299	18.647	13.127	8.961	6.314	5.815	4.528	4.126	4.126	15.491
20	5.443	8.117	15.474	18.647	12.977	8.391	6.213	7.807	4.504	4.126	4.137	15.408
21	5.470	7.436	15.799	18.647	12.321	8.172	6.198	8.478	4.504	4.114	4.219	16.199
22	5.632	7.593	15.351	18.616	12.071	7.956	6.184	7.445	4.504	4.034	4.349	14.107
23	5.773	7.417	14.335	18.428	11.907	7.891	6.084	6.521	4.504	3.955	4.651	12.595
24	6.450	7.135	14.154	18.397	11.663	7.695	5.985	6.170	4.504	3.943	4.725	12.404
25	6.500	7.213	13.886	18.397	11.025	7.663	5.971	5.776	4.504	3.943	5.200	12.574
26	6.617	7.275	13.520	18.397	10.809	7.663	5.971	5.556	4.504	3.943	6.989	13.608
27	6.440	9.504	15.977	18.397	10.751	7.695	5.971	5.502	4.504	3.943	5.594	13.783
28	6.693	8.789	15.351	18.397	10.501	7.891	5.971	5.341	4.480	3.943	5.315	13.739
29	6.485		14.815	18.397	10.561	7.891	5.943	5.315	4.336	3.943	5.395	13.475
30	6.935		16.168	18.397	12.016	7.695	5.775	5.315	4.313	3.943	5.973	13.301
31	6.873		18.314		13.086		5.747	5.315		3.943		12.531
Mean	6.003	6.845	12.990	18.348	13.829	9.058	6.673	5.801	4.805	4.106	4.707	10.853
Flow (MCM)	16.079	16.559	34.792	47.559	37.041	23.477	17.872	15.537	12.454	10.998	12.201	29.068
Maximum	7.066	9.504	18.314	18.647	18.345	12.076	7.631	8.478	5.315	4.313	6.989	16.199
Minimum	5.443	5.443	10.070	17.041	10.501	7.663	5.747	5.315	4.313	3.943	3.943	6.579
Runoff (mm)	33.708	34.714	72.939	99.704	77.654	49.219	37.467	32.571	26.110	23.056	25.578	60.938

Flow (cumecs)

Annual Statistics

Maximum: 18.647 Minimum: 3.943 Mean: 8.668 cumecs
Total: 273.357 MCM Runoff: 573.075 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC10 **Year:** 2018
Station Name: Lufilyo River at Lufilyo
Time-Series Type: Flow (cumecs)

Latitude: 9:19:11 S Longitude: 33:55:15 E Elevation: 701.0 metres Area: 477.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12.279	16.779	14.566	18.036	17.578	11.764	7.793	6.343	4.800	4.230	4.011	4.444
2	11.684	16.363	14.732	17.985	17.376	11.502	7.793	6.285	4.800	4.313	4.034	4.278
3	12.576	15.762	15.477	17.985	17.151	10.888	7.793	6.113	4.800	4.396	4.057	4.408
4	13.563	14.917	15.571	18.036	16.978	10.790	7.793	6.056	4.800	4.384	4.195	4.577
5	13.702	14.411	15.430	18.345	17.731	10.770	7.760	5.886	4.800	4.242	4.173	4.565
6	15.840	14.479	16.194	18.397	17.227	10.635	7.567	5.858	4.775	4.195	3.899	4.337
7	15.244	14.457	16.000	18.397	16.928	10.463	7.534	5.831	4.638	4.057	3.854	4.230
8	14.276	14.185	15.666	18.397	17.427	10.216	7.534	5.665	4.700	4.057	3.854	4.219
9	14.051	14.095	15.714	18.397	17.276	10.178	7.534	5.638	4.787	4.195	3.854	4.219
10	13.519	13.237	16.538	18.397	17.477	10.178	7.503	5.638	4.775	4.219	3.854	4.219
11	13.883	9.926	18.142	18.397	17.176	10.141	7.313	5.610	4.626	4.219	3.922	4.266
12	16.818	10.230	18.397	18.397	16.779	9.917	7.281	5.448	4.601	4.219	4.314	4.578
13	17.986	11.776	18.397	18.397	16.412	9.861	7.250	5.421	4.601	4.219	4.242	4.800
14	17.604	11.784	18.397	18.397	16.193	9.714	7.063	5.421	4.577	4.195	4.242	4.977
15	17.226	11.663	18.397	18.397	16.170	9.477	7.032	5.421	4.432	4.057	4.384	5.002
16	17.176	11.143	18.397	18.397	16.953	9.405	7.527	5.395	4.408	4.011	4.408	5.287
17	17.327	10.829	18.397	18.397	16.583	9.190	10.620	5.236	4.408	3.876	4.384	7.139
18	18.217	10.751	18.345	18.397	16.072	9.136	10.307	5.209	4.408	3.854	4.289	7.744
19	18.165	10.482	18.036	18.397	15.810	9.013	7.904	5.209	4.408	3.854	4.553	7.633
20	17.807	10.369	17.985	18.397	14.596	8.890	7.528	5.183	4.408	3.899	4.601	6.791
21	17.603	11.184	17.985	18.397	13.872	8.838	7.464	5.028	4.408	4.173	4.577	7.188
22	17.578	11.066	17.985	18.397	13.761	8.630	7.275	5.002	4.408	4.219	4.432	7.204
23	17.629	12.115	17.934	18.397	13.606	8.595	7.063	5.002	4.384	4.219	4.384	6.670
24	17.883	11.705	17.629	18.397	13.453	8.561	7.017	5.002	4.242	4.195	4.219	6.156
25	17.629	11.126	17.578	18.397	13.387	8.357	6.910	5.002	4.219	4.057	4.034	6.056
26	17.528	12.302	17.578	18.397	13.127	8.323	6.803	5.002	4.219	4.034	3.876	5.886
27	17.226	12.095	17.578	18.345	13.041	8.289	6.788	5.002	4.219	4.034	3.854	5.790
28	17.101	11.498	17.578	18.036	12.763	8.089	6.758	4.977	4.219	4.011	3.888	5.369
29	16.632		17.680	17.959	12.572	8.022	6.579	4.825	4.219	3.876	4.115	5.223
30	16.509		18.294	17.781	12.383	7.825	6.549	4.800	4.219	3.854	4.313	5.209
31	17.027		18.345		12.071		6.519	4.800		3.876		5.223
Mean	16.106	12.526	17.256	18.295	15.482	9.522	7.489	5.397	4.510	4.105	4.161	5.409
Flow (MCM)	43.138	30.303	46.219	47.421	41.466	24.681	20.058	14.455	11.690	10.994	10.784	14.488
Maximum	18.217	16.779	18.397	18.397	17.731	11.764	10.620	6.343	4.800	4.396	4.601	7.744
Minimum	11.684	9.926	14.566	17.781	12.071	7.825	6.519	4.800	4.219	3.854	3.854	4.219
Runoff (mm)	90.437	63.528	96.895	99.414	86.931	51.742	42.051	30.305	24.508	23.047	22.608	30.373

Flow (cumecs)

Annual Statistics

Maximum: 18.397 Minimum: 3.854 Mean: 10.021 cumecs
Total: 316.036 MCM Runoff: 662.549 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1RC10 **Year:** 2019
Station Name: Lufilyo River at Lufilyo
Time-Series Type: Flow (cumecs)

Latitude: 9:19:11 S Longitude: 33:55:15 E Elevation: 701.0 metres Area: 477.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.328	7.858	10.011	10.559	18.190	13.696	8.056	5.886	4.370	3.987	3.473	-
2	5.529	8.290	9.369	10.713	18.190	13.257	7.825	5.858	4.346	3.841	3.452	-
3	5.692	8.561	9.280	11.242	18.190	12.912	7.793	5.858	4.205	3.818	3.328	-
4	5.624	8.630	9.807	11.663	18.190	12.572	7.793	5.831	4.181	3.796	3.328	-
5	6.190	8.838	9.298	11.724	18.190	12.237	7.760	5.665	4.170	3.665	3.452	-
6	7.222	8.943	9.441	12.532	18.190	11.907	7.535	5.610	4.089	3.644	3.473	-
7	6.640	9.424	9.696	13.214	18.190	11.582	7.313	5.364	4.009	3.654	3.494	-
8	6.314	9.880	9.732	13.832	18.190	11.262	7.281	4.841	3.998	3.730	3.622	-
9	6.113	10.254	9.732	15.575	18.165	11.024	7.281	4.760	3.998	3.807	3.644	-
10	6.113	10.178	9.958	16.242	18.036	11.222	7.281	4.760	3.998	3.818	3.644	-
11	6.300	10.395	11.265	16.878	18.165	11.222	7.281	4.760	3.998	3.796	3.644	-
12	6.431	12.412	11.064	16.977	18.190	10.946	7.250	4.785	3.998	3.665	3.644	-
13	6.534	11.870	11.162	16.927	18.190	10.674	7.063	4.936	3.998	3.644	3.644	-
14	6.549	10.715	10.752	16.632	18.190	10.635	7.032	4.961	3.975	3.665	3.644	-
15	6.549	10.066	10.123	16.389	18.165	10.597	7.032	4.936	3.841	3.819	3.644	-
16	6.549	9.696	10.028	15.151	18.036	10.367	7.002	4.785	3.841	4.068	3.644	-
17	6.519	9.226	9.954	14.277	18.113	10.292	6.819	4.760	3.975	4.637	3.873	-
18	6.343	9.119	9.514	13.388	17.731	10.066	6.788	4.760	3.942	4.539	5.103	-
19	6.651	8.907	9.441	13.614	17.077	10.028	6.788	4.760	3.580	4.462	4.029	-
20	9.075	8.838	9.441	16.012	16.927	9.991	6.758	4.760	3.298	5.851	3.818	-
21	11.071	8.630	9.405	17.280	16.583	9.732	6.579	4.735	3.028	5.828	3.796	-
22	10.072	8.630	9.190	15.624	16.290	9.477	6.549	4.587	2.988	5.425	3.665	-
23	9.121	9.164	9.262	14.686	16.607	9.405	6.549	4.562	2.988	4.258	4.012	-
24	9.735	10.956	9.918	13.984	16.929	9.172	6.519	4.562	2.988	3.987	6.931	-
25	10.295	9.665	10.028	13.431	15.930	9.013	6.343	4.562	3.431	3.819	9.854	-
26	9.087	9.190	9.954	12.976	15.383	8.855	6.314	4.562	6.715	3.665	6.123	-
27	8.872	9.336	9.514	12.912	14.823	8.630	6.314	4.562	8.410	3.644	4.837	-
28	8.872	10.370	9.441	13.541	14.962	8.561	6.285	4.562	5.083	3.644	4.611	-
29	8.769		9.514	17.500	14.663	8.357	6.113	4.562	4.358	3.622	4.735	-
30	8.123		9.954	18.190	14.276	8.289	6.084	4.538	4.112	3.494	4.785	-
31	7.825		10.104		14.480		6.056	4.394		3.473		-
Mean	7.423	9.573	9.850	14.455	17.143	10.533	6.950	4.930	4.130	4.025	4.231	-
Flow (MCM)	19.881	23.159	26.382	37.469	45.916	27.301	18.614	13.204	10.706	10.780	10.968	-
Maximum	11.071	12.412	11.265	18.190	18.190	13.696	8.056	5.886	8.410	5.851	9.854	-
Minimum	5.328	7.858	9.190	10.559	14.276	8.289	6.056	4.394	2.988	3.473	3.328	-
Runoff (mm)	41.680	48.550	55.309	78.551	96.260	57.234	39.022	27.681	22.444	22.599	22.993	-

Flow (cumecs)

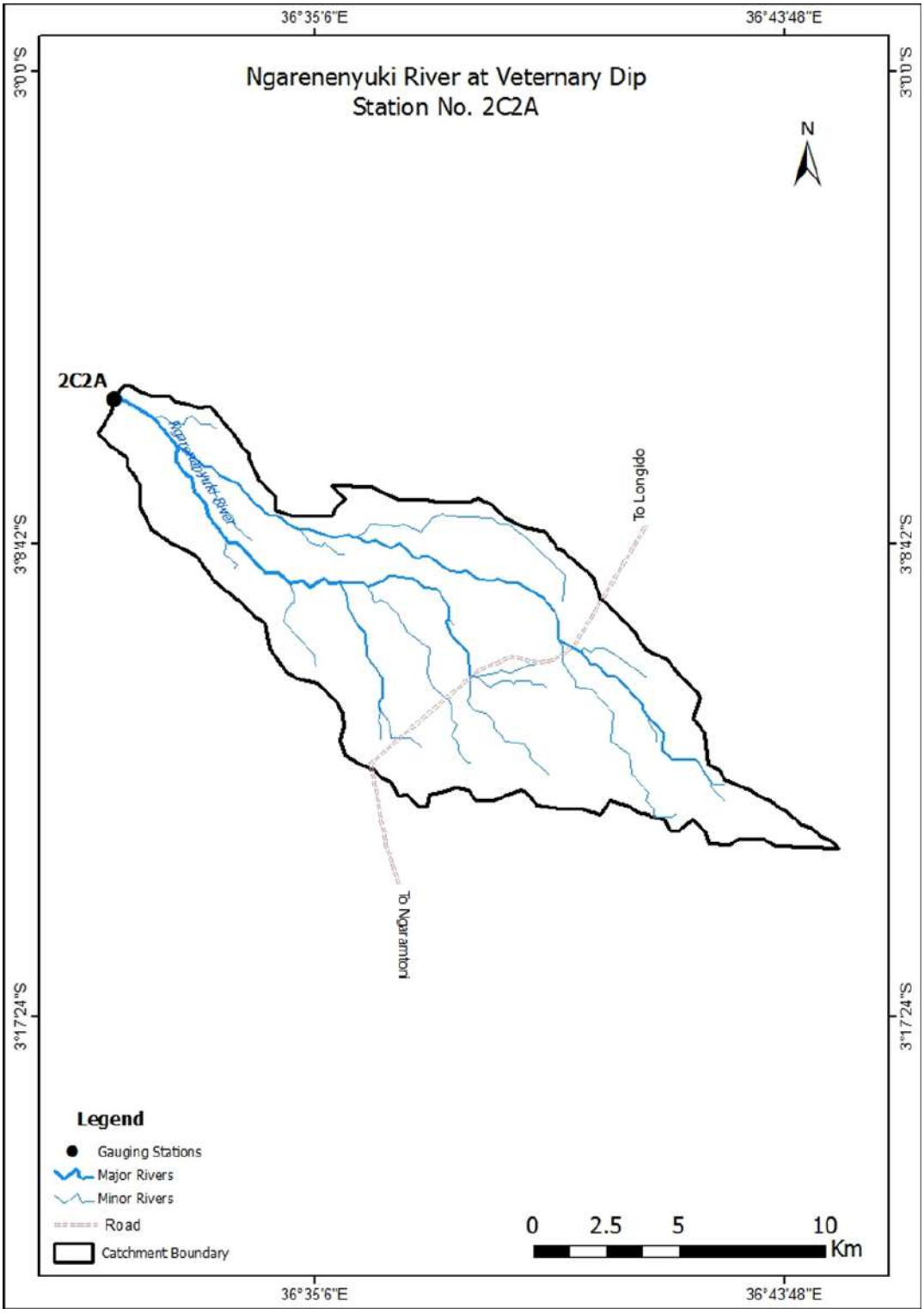
Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ngarenanyuki River at Veterinary Dip				
Station No: 2C2A			Established: 09/01/1976	
Coordinates:			Altitude (m.a.m.s.l): 1,327	
Lat: -3.1004	Long: 36.5233		Catchment Area (km²): 150	
Description of the Catchment:				
Woodland, grassland and some mountains				
Station Details				
1. Staff Gauges	Range: 0 – 3m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	-		Date installed: -	
3. Benchmark	Bolt in a concrete at right bank of the river			
BM Assumed Datum: -		N.M.M.S.L: -	TBM: -	
4. Control	Open channel with strong banks			
5. Access	Easily accessed throughout the year, approximately 65km from Arusha City via Momela road			
Records	Period		Quality	
Water Level:	31/03/2015 – 31/12/2019		1.2.2	
Discharge:	31/03/2015 – 31/12/2019		2.2.2	
Extremes:	Max. Recorded	30.468m³/sec	On 24/09/2018	WL 1.7m
	Min. Recorded	0.115m³/sec	On 03/12/2017	WL 0.12m
Remarks				


Ngarenenyuki River at Veternary Dip
Station No. 2C2A
N
36°35'6"E
36°43'48"E
3°0'0"S
3°8'42"S
3°17'24"S
2C2A
Ngarenenyuki River
To Longido
To Ngaramtoni
Legend
Gauging Stations
Major Rivers
Minor Rivers
Road
Catchment Boundary
0 2.5 5 10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2C2A **Year:** 2015
Station Name: Ngarenanyuki River at Veterinary
Time-Series Type: Flow (cumecs)

Latitude: 3: 6: 1 S Longitude: 36:31:23 E Elevation: 1327.0 metres Area: 150.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	0.360	0.885	0.535	0.403	0.297	0.310	0.205	0.369	0.579
2	-	-	-	0.306	3.714	0.505	0.403	0.297	0.320	0.193	0.295	0.428
3	-	-	-	0.308	1.320	0.485	0.459	0.297	0.257	0.151	0.277	0.336
4	-	-	-	0.413	0.856	0.505	0.520	0.299	0.247	0.190	0.263	0.288
5	-	-	-	0.594	1.906	0.544	0.429	0.320	0.245	0.255	0.259	0.316
6	-	-	-	0.373	1.573	0.547	0.410	0.365	0.231	0.280	0.320	0.430
7	-	-	-	0.333	1.709	0.532	0.392	0.372	0.238	0.304	0.317	0.316
8	-	-	-	0.394	1.784	0.547	0.372	0.388	0.356	0.350	0.319	0.332
9	-	-	-	0.755	1.884	0.550	0.367	0.463	0.298	0.311	0.352	0.665
10	-	-	-	0.538	1.257	0.550	0.460	0.351	0.227	0.433	0.366	0.655
11	-	-	-	0.530	1.093	0.538	0.566	0.315	0.223	0.433	0.254	0.448
12	-	-	-	0.361	1.023	0.468	0.496	0.297	0.194	0.281	0.259	0.469
13	-	-	-	0.331	0.959	0.456	0.479	0.282	0.200	0.161	0.276	1.417
14	-	-	-	0.317	0.914	0.453	0.365	0.275	0.201	0.195	0.368	1.029
15	-	-	-	0.345	0.827	0.440	0.322	0.251	0.205	0.220	0.443	0.946
16	-	-	-	0.519	0.748	0.448	0.333	0.247	0.223	0.247	0.424	0.592
17	-	-	-	0.432	0.734	0.416	0.345	0.251	0.205	0.198	0.379	0.465
18	-	-	-	0.403	0.709	0.395	0.319	0.280	0.217	0.200	0.669	0.434
19	-	-	-	0.343	0.667	0.392	0.315	0.308	0.307	0.196	1.129	0.429
20	-	-	-	0.336	0.566	0.390	0.315	0.315	0.267	0.169	0.537	0.494
21	-	-	-	0.368	0.550	0.374	0.313	0.430	0.235	0.189	0.343	0.374
22	-	-	-	0.477	0.547	0.372	0.299	0.544	0.235	0.223	0.279	0.175
23	-	-	-	0.459	0.532	0.372	0.304	0.595	0.245	0.249	0.169	0.150
24	-	-	-	0.426	0.544	0.372	0.345	0.456	0.175	0.440	0.242	0.171
25	-	-	-	0.362	0.526	0.369	0.350	0.311	0.172	0.342	0.306	0.243
26	-	-	-	0.402	0.499	0.355	0.336	0.267	0.174	0.267	0.766	0.223
27	-	-	-	0.686	0.462	0.352	0.329	0.263	0.169	0.324	0.551	0.235
28	-	-	-	0.490	0.456	0.352	0.301	0.263	0.146	0.336	0.406	0.259
29	-		-	0.523	0.459	0.352	0.297	0.263	0.176	0.267	0.482	0.199
30	-		-	0.470	0.476	0.360	0.297	0.263	0.220	0.293	0.499	0.257
31	-		0.355		0.488		0.297	0.269		0.250		0.225
Mean	-	-	-	0.432	0.989	0.444	0.372	0.329	0.231	0.263	0.397	0.438
Flow (MCM)	-	-	-	1.119	2.649	1.151	0.997	0.881	0.598	0.704	1.030	1.173
Maximum	-	-	-	0.755	3.714	0.550	0.566	0.595	0.356	0.440	1.129	1.417
Minimum	-	-	-	0.306	0.456	0.352	0.297	0.247	0.146	0.151	0.169	0.150
Runoff (mm)	-	-	-	7.461	17.662	7.675	6.647	5.870	3.985	4.696	6.865	7.823

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2C2A **Year:** 2016
Station Name: Ngarenanyuki River at Veterinary
Time-Series Type: Flow (cumecs)

Latitude: 3: 6: 1 S Longitude: 36:31:23 E Elevation: 1327.0 metres Area: 150.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.227	0.806	0.352	1.018	2.537	0.695	0.737	0.553	0.482	0.410	0.269	0.432
2	0.232	0.581	0.452	0.867	1.745	0.643	0.734	0.550	0.499	0.418	0.253	0.403
3	0.318	0.496	1.125	0.842	1.406	0.677	0.705	0.550	0.502	0.456	0.275	0.426
4	0.318	0.532	0.923	1.025	1.213	0.705	0.660	0.550	0.502	0.496	0.295	0.416
5	0.230	0.479	0.600	1.501	1.106	0.702	0.653	0.550	0.505	0.496	0.395	0.413
6	0.214	0.421	0.462	1.009	1.084	0.657	0.650	0.550	0.520	0.448	0.398	0.411
7	0.198	0.410	0.413	0.731	1.031	0.633	0.650	0.550	0.505	0.365	0.306	0.409
8	0.166	0.395	0.532	0.678	1.022	0.657	0.786	0.550	0.502	0.360	0.271	0.407
9	0.173	0.397	0.792	0.782	1.022	0.691	0.878	0.550	0.502	0.405	0.302	0.405
10	0.236	0.681	0.590	0.808	1.001	0.640	0.874	0.550	0.502	0.413	0.360	0.402
11	0.173	2.349	0.550	0.810	0.874	0.650	0.767	0.550	0.502	0.410	0.365	0.400
12	0.166	0.981	0.550	1.403	0.831	0.653	0.667	0.550	0.502	0.392	0.444	0.398
13	0.193	0.611	0.550	1.545	0.823	0.653	0.650	0.550	0.499	0.374	0.569	0.396
14	0.177	0.660	0.547	0.918	0.800	0.650	0.627	0.550	0.479	0.372	0.504	0.394
15	0.186	0.611	0.529	1.236	0.796	0.630	0.600	0.550	0.456	0.360	0.328	0.392
16	0.304	0.468	0.523	2.033	0.796	0.627	0.578	0.550	0.429	0.295	0.331	0.390
17	0.723	0.403	0.514	1.742	0.804	0.633	0.578	0.547	0.401	0.310	0.345	0.388
18	2.704	0.410	0.562	1.292	0.850	0.674	0.597	0.529	0.527	0.312	0.347	0.386
19	9.874	0.476	0.559	1.438	0.858	0.702	0.597	0.526	0.532	0.321	0.518	0.384
20	10.098	0.852	0.594	3.049	0.858	0.831	0.578	0.526	0.424	0.360	0.547	0.382
21	5.402	0.602	0.600	2.043	0.854	0.819	0.572	0.526	0.377	0.338	0.523	0.380
22	1.886	0.432	0.588	1.625	0.831	0.763	0.559	0.526	0.380	0.338	0.468	0.378
23	1.036	0.405	0.514	1.916	0.850	0.835	0.594	0.526	0.429	0.357	0.535	0.376
24	0.839	0.367	0.514	2.560	0.985	0.804	0.600	0.523	0.453	0.304	1.640	0.374
25	0.767	0.405	0.581	6.487	0.910	0.800	0.600	0.505	0.456	0.284	0.964	0.372
26	0.709	0.408	0.550	2.518	0.767	0.815	0.600	0.502	0.451	0.293	0.952	0.370
27	0.653	0.377	0.505	1.398	0.796	0.770	0.600	0.502	0.413	0.286	0.725	0.368
28	0.601	0.369	0.479	1.283	0.862	0.745	0.600	0.508	0.382	0.313	0.563	0.366
29	0.553	0.355	0.456	2.132	0.930	0.759	0.597	0.544	0.405	0.331	0.502	0.364
30	0.538		0.437	2.546	0.847	0.741	0.578	0.541	0.397	0.333	0.459	0.362
31	0.625		0.514		0.706		0.572	0.488		0.324		0.367
Mean	1.307	0.577	0.563	1.641	0.993	0.708	0.647	0.536	0.464	0.364	0.492	0.391
Flow (MCM)	3.501	1.446	1.508	4.254	2.661	1.836	1.732	1.436	1.202	0.974	1.275	1.046
Maximum	10.098	2.349	1.125	6.487	2.537	0.835	0.878	0.553	0.532	0.496	1.640	0.432
Minimum	0.166	0.355	0.352	0.678	0.706	0.627	0.559	0.488	0.377	0.284	0.253	0.362
Runoff (mm)	23.338	9.643	10.056	28.360	17.739	12.243	11.544	9.572	8.015	6.495	8.498	6.975

Flow (cumecs)

Annual Statistics

Maximum: 10.098 Minimum: 0.166 Mean: 0.724 cumecs
Total: 22.882 MCM Runoff: 152.547 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2C2A **Year:** 2017
Station Name: Ngarenanyuki River at Veterinary
Time-Series Type: Flow (cumecs)

Latitude: 3: 6: 1 S Longitude: 36:31:23 E Elevation: 1327.0 metres Area: 150.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.401	0.566	0.607	0.668	2.756	1.031	1.037	0.526	0.388	0.216	0.216	0.419
2	0.375	0.502	0.665	0.569	2.134	1.111	0.820	0.526	0.479	0.216	0.216	1.810
3	0.355	0.459	1.211	0.538	2.026	1.290	0.748	0.529	0.425	0.216	0.216	0.325
4	0.348	0.440	1.064	0.459	2.371	1.314	0.763	0.547	0.309	0.216	0.216	0.178
5	0.324	0.453	0.832	0.400	2.952	1.233	0.759	0.553	0.267	0.216	0.216	0.187
6	0.350	0.456	0.668	0.435	2.370	0.928	0.734	0.575	0.263	0.216	0.216	0.187
7	0.367	0.456	0.604	0.715	3.731	0.823	0.859	0.591	0.263	0.216	0.216	0.187
8	0.357	0.451	0.578	0.748	4.195	0.759	1.001	0.575	0.278	0.216	0.216	0.187
9	0.367	0.418	0.575	0.765	6.840	0.815	0.997	0.661	0.375	0.216	0.216	0.187
10	0.357	0.421	0.575	1.507	3.806	0.827	0.817	0.524	0.385	0.216	0.216	0.187
11	0.367	0.470	0.572	1.167	2.894	0.827	0.608	0.482	0.336	0.216	0.216	0.187
12	0.355	0.482	0.547	0.875	5.315	0.827	0.597	0.476	0.301	0.216	0.216	0.187
13	0.352	0.490	0.508	0.745	2.536	0.819	0.600	0.456	0.295	0.216	0.216	0.187
14	0.360	0.443	0.493	0.674	2.449	0.774	0.600	0.437	0.280	0.216	0.209	0.187
15	0.405	0.434	0.440	0.588	2.456	0.759	0.600	0.434	0.257	0.216	0.171	0.187
16	0.408	0.434	0.444	0.578	2.029	0.712	0.594	0.434	0.216	0.216	0.188	0.187
17	0.375	0.434	0.602	0.621	1.587	0.688	0.556	0.434	0.255	0.216	0.220	0.187
18	0.355	0.437	0.551	0.763	1.547	0.705	0.550	0.443	0.253	0.216	0.263	0.187
19	0.355	0.459	0.710	0.871	1.647	0.709	0.547	0.493	0.195	0.216	0.220	0.187
20	0.367	0.490	0.608	1.928	1.473	0.709	0.535	0.493	0.238	0.216	0.191	0.187
21	0.407	0.479	0.500	3.023	1.446	0.702	0.572	0.448	0.632	0.216	0.187	0.187
22	0.711	0.560	0.408	1.287	1.467	0.660	0.597	0.454	0.351	0.216	0.187	0.187
23	0.491	0.576	0.408	0.955	1.400	0.653	0.600	0.351	0.297	0.216	0.187	0.187
24	0.397	1.352	0.434	0.894	1.319	0.657	0.594	0.351	0.297	0.216	0.187	0.187
25	0.374	1.023	0.653	0.862	1.232	0.681	0.556	0.478	0.286	0.216	0.191	0.187
26	0.372	0.890	0.589	0.858	1.093	0.705	0.550	0.604	0.220	0.216	0.205	0.187
27	0.369	0.816	1.149	0.878	0.984	0.705	0.550	0.588	0.184	0.216	0.171	0.187
28	0.375	0.688	0.642	0.993	1.058	0.684	0.550	0.469	0.203	0.216	0.177	0.187
29	0.488		0.433	0.971	1.152	0.737	0.550	0.308	0.174	0.216	0.146	0.187
30	0.464		0.529	1.249	1.147	1.087	0.547	0.231	0.209	0.216	0.165	0.187
31	0.669		0.569		1.040		0.529	0.272		0.216		0.187
Mean	0.401	0.556	0.618	0.919	2.273	0.831	0.662	0.476	0.297	0.216	0.202	0.251
Flow (MCM)	1.073	1.346	1.656	2.383	6.087	2.154	1.773	1.274	0.770	0.578	0.525	0.673
Maximum	0.711	1.352	1.211	3.023	6.840	1.314	1.037	0.661	0.632	0.216	0.263	1.810
Minimum	0.324	0.418	0.408	0.400	0.984	0.653	0.529	0.231	0.174	0.216	0.146	0.178
Runoff (mm)	7.152	8.975	11.040	15.887	40.581	14.361	11.819	8.492	5.133	3.855	3.498	4.488

Flow (cumecs)

Annual Statistics

Maximum: 6.840 Minimum: 0.146 Mean: 0.642 cumecs
Total: 20.243 MCM Runoff: 134.951 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2C2A **Year:** 2018
Station Name: Ngarenanyuki River at Veterinary
Time-Series Type: Flow (cumecs)

Latitude: 3: 6: 1 S Longitude: 36:31:23 E Elevation: 1327.0 metres Area: 150.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.187	0.267	0.477	0.917	4.049	1.203	0.915	0.842	0.627	0.520	0.352	0.384
2	0.187	0.280	0.886	1.323	8.242	1.203	1.103	0.858	0.627	0.526	0.352	0.596
3	0.187	0.280	1.510	1.580	4.593	1.213	1.175	0.858	0.627	0.514	0.352	0.647
4	0.187	0.280	1.510	1.613	3.821	1.260	1.066	0.858	0.633	0.462	0.352	0.497
5	0.187	0.280	0.952	1.549	3.152	1.213	0.988	0.858	0.674	0.538	0.352	0.440
6	0.187	0.275	0.906	1.169	2.662	1.213	0.938	0.858	0.681	0.441	0.352	0.434
7	0.187	0.251	0.843	0.997	2.393	1.260	0.980	0.842	0.674	0.362	0.352	0.434
8	0.187	0.251	0.805	0.991	2.127	1.213	0.980	0.752	0.633	0.352	0.352	0.434
9	0.187	0.275	1.344	1.699	2.076	1.203	0.938	0.737	0.620	0.352	0.352	0.434
10	0.187	0.280	0.728	3.636	2.051	1.194	0.963	0.737	0.581	0.352	0.352	0.434
11	0.187	0.288	0.601	1.955	2.299	1.129	0.858	0.737	0.575	0.352	0.352	0.434
12	0.187	0.353	0.814	2.628	2.039	1.084	0.731	0.737	0.575	0.352	0.352	0.434
13	0.187	0.413	1.438	1.472	1.963	1.166	0.601	0.737	0.575	0.352	0.352	0.434
14	0.187	0.353	1.539	1.644	1.971	1.075	0.614	0.737	0.575	0.352	0.352	0.440
15	0.187	0.307	3.253	4.467	3.105	1.103	0.601	0.730	0.575	0.352	0.352	0.457
16	0.187	0.408	2.084	3.674	4.102	1.370	0.724	0.688	0.569	0.352	0.352	0.388
17	0.187	0.403	1.791	7.620	2.970	1.300	0.781	0.688	0.532	0.352	0.352	0.485
18	0.187	0.424	2.684	3.933	2.737	1.270	0.752	0.752	0.526	0.352	0.352	0.408
19	0.187	0.397	2.573	3.967	2.117	1.203	0.789	0.898	0.520	0.352	0.352	0.392
20	0.187	0.392	1.506	3.428	2.166	1.186	0.796	0.890	0.485	0.352	0.352	0.392
21	0.187	0.392	1.280	3.963	2.273	1.432	0.796	0.710	0.479	0.352	0.352	0.392
22	0.187	0.387	1.242	10.706	2.651	1.233	0.796	0.674	0.485	0.352	0.352	0.392
23	0.187	0.357	1.332	6.022	1.993	1.129	0.789	0.633	0.520	0.352	0.352	0.392
24	0.187	0.367	0.926	-	1.784	1.066	0.752	0.627	0.526	0.352	0.352	0.392
25	0.187	0.451	0.835	4.038	1.658	1.075	0.789	0.627	0.520	0.352	0.352	0.387
26	0.187	0.403	0.695	4.687	1.796	1.175	0.800	0.627	0.485	0.352	0.352	0.362
27	0.187	0.392	0.654	3.313	1.927	1.138	0.819	0.627	0.479	0.352	0.352	0.387
28	0.187	0.397	0.767	2.884	1.672	1.129	0.793	0.627	0.479	0.352	0.352	0.392
29	0.187		0.752	2.618	1.263	1.120	0.745	0.627	0.479	0.352	0.352	0.392
30	0.187		0.796	2.481	1.203	1.041	0.737	0.627	0.485	0.352	0.352	0.392
31	0.198		0.850		1.203		0.752	0.627		0.352		0.405
Mean	0.188	0.343	1.238	-	2.583	1.187	0.834	0.736	0.561	0.381	0.352	0.429
Flow (MCM)	0.503	0.830	3.315	-	6.917	3.076	2.234	1.972	1.453	1.021	0.913	1.148
Maximum	0.198	0.451	3.253	-	8.242	1.432	1.175	0.898	0.681	0.538	0.352	0.647
Minimum	0.187	0.251	0.477	-	1.203	1.041	0.601	0.627	0.479	0.352	0.352	0.362
Runoff (mm)	3.353	5.531	22.103	-	46.113	20.504	14.896	13.147	9.686	6.808	6.088	7.654

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2C2A
Station Name: Ngarenanyuki River at Veterinary
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 3: 6: 1 S Longitude: 36:31:23 E Elevation: 1327.0 metres Area: 150.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.479	0.392	0.453	0.429	0.650	0.862	0.502	0.355	0.280	0.662	0.559	0.796
2	0.432	0.395	0.448	0.488	0.554	0.874	0.541	0.362	0.267	0.449	0.550	0.756
3	0.365	0.410	0.517	0.490	0.493	0.760	0.544	0.416	0.280	0.367	0.547	0.800
4	0.382	0.410	0.544	0.529	0.529	0.611	0.508	0.380	0.290	0.403	0.535	0.713
5	0.480	0.397	0.529	0.465	0.776	0.535	0.517	0.369	0.263	0.570	0.550	0.661
6	0.563	0.410	0.526	0.443	2.153	0.523	0.628	0.355	0.237	1.699	0.441	1.162
7	0.436	0.413	0.526	0.470	2.489	0.502	0.727	0.352	0.247	0.817	0.367	3.838
8	0.313	0.413	0.564	0.459	2.238	0.499	0.593	0.350	0.261	0.685	0.392	3.899
9	0.304	0.413	0.773	0.456	1.213	0.621	0.419	0.350	0.263	1.702	0.424	4.689
10	0.345	0.413	0.577	0.453	1.089	0.734	0.410	0.458	0.265	1.166	0.449	2.617
11	0.352	0.416	0.490	0.440	2.435	0.815	0.410	0.560	0.280	1.341	0.793	1.910
12	0.355	0.434	0.505	0.459	3.548	0.823	0.397	0.436	0.290	1.204	0.820	1.872
13	0.369	0.451	0.547	0.502	3.216	0.782	0.410	0.313	0.271	1.477	0.602	1.778
14	0.369	0.451	0.572	0.544	2.530	0.678	0.413	0.295	0.290	1.841	0.538	1.596
15	0.357	0.532	0.595	0.538	1.889	0.695	0.410	0.282	0.284	1.024	0.545	1.547
16	0.367	0.529	0.727	0.473	1.141	0.653	0.403	0.284	0.288	0.882	0.447	1.405
17	0.357	0.523	0.793	0.479	0.942	0.607	0.451	0.317	0.255	1.897	0.649	1.280
18	0.372	0.499	0.658	0.385	1.072	0.594	0.465	0.355	0.257	2.127	0.677	1.161
19	0.392	0.454	0.538	0.345	1.771	0.553	0.403	0.306	0.235	2.095	0.396	1.040
20	0.405	0.408	0.496	0.297	1.315	0.538	0.392	0.295	0.231	2.076	0.348	1.072
21	0.372	0.451	0.457	0.345	1.454	0.585	0.395	0.280	0.237	1.906	0.384	1.386
22	0.336	0.479	0.535	0.554	1.132	0.553	0.410	0.263	0.276	1.334	0.804	1.420
23	0.319	0.499	0.590	2.028	0.980	0.532	0.405	0.251	0.288	1.071	0.731	1.276
24	0.336	0.505	0.825	2.455	1.018	0.547	0.360	0.278	0.253	1.015	0.835	1.098
25	0.365	0.520	0.742	2.027	1.214	0.550	0.352	0.393	0.342	1.337	0.874	1.635
26	0.355	0.499	0.618	0.777	2.151	0.550	0.357	0.393	0.965	1.522	0.931	6.084
27	0.365	0.462	0.479	0.972	1.417	0.569	0.390	0.278	0.565	1.228	0.724	2.499
28	0.440	0.456	0.482	1.089	1.045	0.710	0.410	0.249	0.297	1.177	0.760	2.644
29	0.437		0.523	0.923	0.918	0.828	0.413	0.249	0.284	0.861	0.939	1.791
30	0.429		0.535	0.749	0.797	0.619	0.408	0.265	0.298	0.713	0.866	1.277
31	0.397		0.462		0.720		0.375	0.290		0.627		0.565
Mean	0.385	0.451	0.569	0.702	1.448	0.643	0.446	0.335	0.305	1.202	0.616	1.815
Flow (MCM)	1.032	1.091	1.523	1.820	3.879	1.668	1.194	0.897	0.789	3.221	1.597	4.862
Maximum	0.563	0.532	0.825	2.455	3.548	0.874	0.727	0.560	0.965	2.127	0.939	6.084
Minimum	0.304	0.392	0.448	0.297	0.493	0.499	0.352	0.249	0.231	0.367	0.348	0.565
Runoff (mm)	6.881	7.277	10.152	12.133	25.858	11.118	7.959	5.978	5.263	21.470	10.644	32.410

Flow (cumecs)

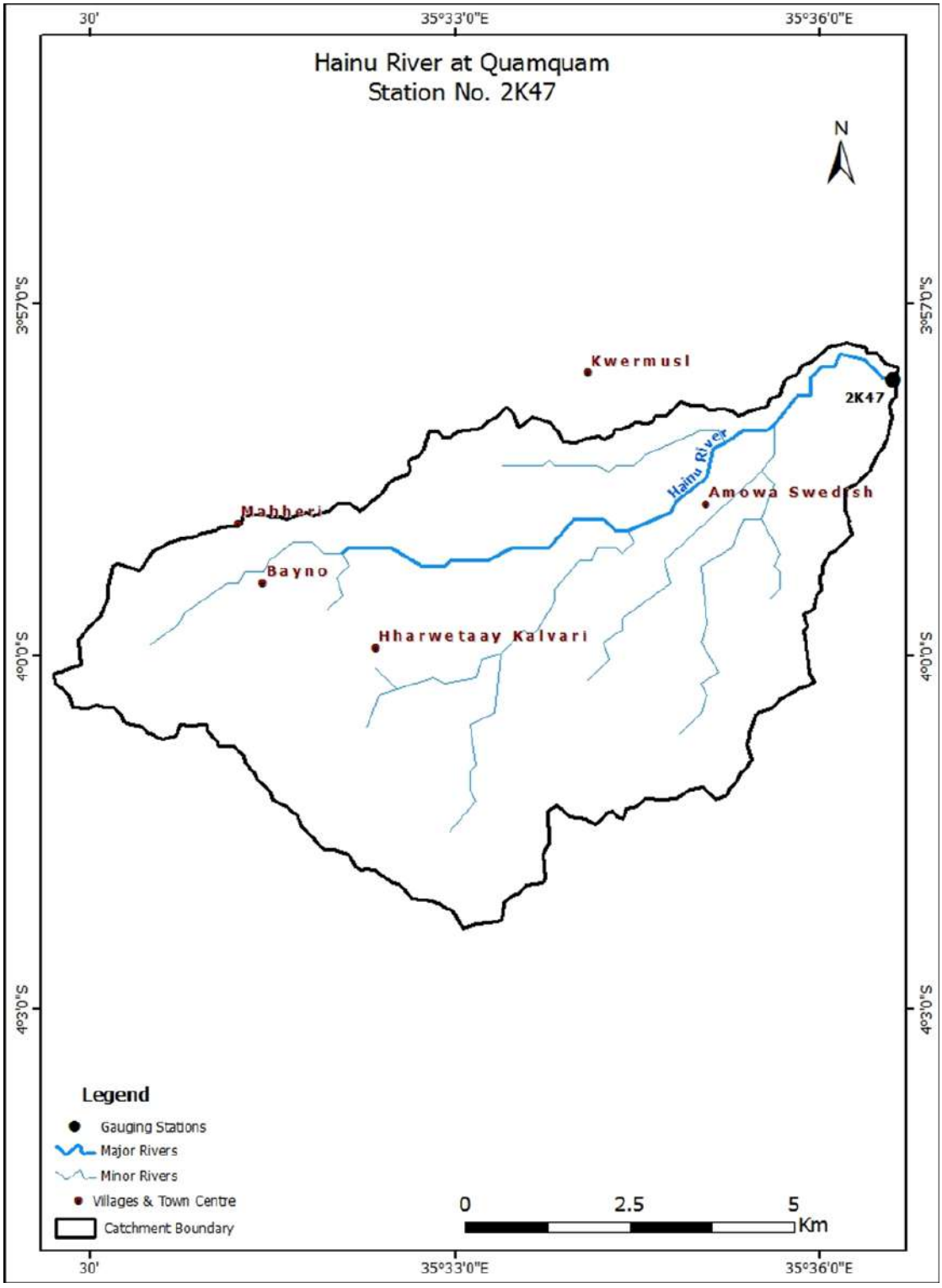
Annual Statistics

Maximum: 6.084 Minimum: 0.231 Mean: 0.743 cumecs
Total: 23.435 MCM Runoff: 156.231 mm

Possible data flags

No data stored "-" Estimated values "e"

Hainu River at Quamquam				
Station No: 2K47			Established: 17/04/1975	
Coordinates:			Altitude (m.a.m.s.l): 1,720	
Lat: -3.9608	Long: 35.6100		Catchment Area (km²): 62	
Description of the Catchment:				
Woodland, grassland and some mountains				
Station Details				
1. Staff Gauges	Range: 0 – 4m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	-		Date installed: -	
3. Benchmark	Bolt in concrete at right bank of the river near gauge 3-4m			
BM Assumed Datum: -		N.M.M.S.L: -	TBM: -	
4. Control	Open channel with base rocks scattered at downstream			
5. Access	Easily accessed throughout the year, approximately 40km from Mbulu Town to station			
Records	Period		Quality	
Water Level:	29/01/2013 – 31/12/2019		1.1.2	
Discharge:	29/01/2013 – 31/12/2019		2.1.2	
Extremes:	Max. Recorded	-	On 04/12/2013	WL 1.44m
	Min. Recorded	0.01m³/sec	On 19/02/2019	WL 0.22m
Remarks				


Hainu River at Quamquam
Station No. 2K47
N
30'
35°33'0"E
35°36'0"E
3°57'0"S
4°0'0"S
4°3'0"S
Kwermusl
2K47
Hainu River
Amowa Swedish
Mahheri
Bayno
Hharwetaay Kalvari
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Centre
Catchment Boundary
0
2.5
5
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2K47 **Year:** 2013
Station Name: Hainu River at Quamquam
Time-Series Type: Flow (cumecs)

Latitude: 3:57:38 S Longitude: 35:36:36 E Elevation: 1720.0 metres Area: 62.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	3.720	1.318	0.596	0.486	0.434	0.333	0.271	0.279	0.427
2	-	-	-	4.607	1.719	0.596	0.486	0.434	0.333	0.474	0.279	1.217
3	-	-	-	4.208	1.686	0.596	0.486	0.434	0.333	0.490	0.259	3.890
4	-	-	-	2.383	2.196	0.596	0.486	0.434	0.333	0.480	0.351	-
5	-	-	-	1.421	1.765	0.596	0.486	0.427	0.333	0.440	0.465	4.623
6	-	-	-	0.867	1.612	0.596	0.486	0.389	0.333	0.434	0.731	10.663
7	-	-	-	3.375	1.487	0.596	0.486	0.382	0.333	0.434	0.562	-
8	-	-	-	4.750	1.376	0.589	0.486	0.382	0.333	0.434	0.383	5.024
9	-	-	-	6.571	1.345	0.547	0.486	0.382	0.333	0.434	0.487	3.800
10	-	-	-	3.967	1.256	0.540	0.486	0.382	0.333	0.434	0.486	2.166
11	-	-	-	2.151	1.234	0.540	0.480	0.382	0.327	0.427	0.466	2.454
12	-	-	-	2.792	1.184	0.540	0.440	0.382	0.290	0.389	0.476	0.870
13	-	-	-	2.777	1.129	0.540	0.434	0.382	0.285	0.382	0.470	0.656
14	-	-	-	9.085	1.075	0.540	0.434	0.382	0.285	0.382	0.611	1.029
15	-	-	-	6.757	1.017	0.540	0.434	0.382	0.285	0.382	0.438	1.123
16	-	-	-	5.098	0.930	0.540	0.434	0.382	0.285	0.382	0.517	0.787
17	-	-	-	5.632	0.877	0.540	0.434	0.382	0.285	0.382	0.527	1.923
18	-	-	-	4.751	0.837	0.540	0.434	0.382	0.285	0.376	0.585	3.144
19	-	-	-	3.499	0.821	0.540	0.434	0.382	0.285	0.339	0.589	6.869
20	-	-	-	1.898	0.729	0.540	0.434	0.382	0.285	0.333	0.547	9.103
21	-	-	-	1.302	0.710	0.534	0.434	0.376	0.285	0.333	0.540	5.009
22	-	-	-	1.227	0.710	0.493	0.434	0.339	0.285	0.333	0.534	2.736
23	-	-	-	1.143	0.710	0.486	0.434	0.333	0.285	0.333	0.493	0.920
24	-	-	-	1.115	0.703	0.486	0.434	0.333	0.285	0.333	0.486	0.994
25	-	-	-	1.024	0.660	0.486	0.434	0.333	0.285	0.327	0.486	0.852
26	-	-	-	0.925	0.652	0.486	0.434	0.333	0.279	0.290	0.480	0.586
27	-	-	-	0.917	0.645	0.486	0.434	0.333	0.244	0.285	0.440	0.493
28	-	-	-	1.466	0.603	0.486	0.434	0.333	0.238	0.285	0.434	0.460
29	-		1.036	1.887	0.596	0.486	0.434	0.333	0.238	0.279	0.427	0.437
30	-		1.913	1.381	0.596	0.486	0.434	0.333	0.238	0.244	0.395	0.427
31	-		2.268		0.596		0.434	0.333		0.244		0.389
Mean	-	-	-	3.090	1.057	0.539	0.452	0.375	0.296	0.367	0.474	-
Flow (MCM)	-	-	-	8.009	2.832	1.397	1.212	1.003	0.767	0.983	1.229	-
Maximum	-	-	-	9.085	2.196	0.596	0.486	0.434	0.333	0.490	0.731	-
Minimum	-	-	-	0.867	0.596	0.486	0.434	0.333	0.238	0.244	0.259	-
Runoff (mm)	-	-	-	129.176	45.671	22.532	19.540	16.181	12.373	15.860	19.822	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2K47 **Year:** 2014
Station Name: Hainu River at Quamquam
Time-Series Type: Flow (cumecs)

Latitude: 3:57:38 S Longitude: 35:36:36 E Elevation: 1720.0 metres Area: 62.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.376	0.376	0.287	0.657	1.377	0.652	0.596	0.434	0.285	0.382	0.486	0.382
2	0.339	0.339	0.285	0.575	1.285	0.645	0.589	0.434	0.285	0.382	0.486	0.382
3	0.333	0.333	0.285	0.496	1.471	0.603	0.547	0.434	0.285	0.376	0.503	0.405
4	0.327	0.327	0.306	0.480	1.554	0.596	0.540	0.427	0.300	0.339	0.676	0.541
5	0.290	0.290	0.428	0.440	1.272	0.596	0.540	0.389	0.457	0.333	1.251	0.544
6	0.285	0.285	0.392	0.430	1.216	0.596	0.540	0.382	0.993	0.327	1.888	0.540
7	0.285	0.410	0.382	0.455	1.650	0.596	0.540	0.382	0.926	0.290	1.543	0.534
8	0.285	1.388	0.382	0.817	1.848	0.596	0.537	0.382	0.621	0.285	1.021	0.493
9	0.285	0.882	0.382	1.107	3.615	0.596	0.513	0.382	0.681	0.285	0.607	0.486
10	0.285	0.514	0.376	0.703	3.131	0.596	0.490	0.382	0.645	0.319	0.496	0.486
11	0.553	0.440	0.339	0.527	2.078	0.606	0.486	0.382	0.688	0.608	0.486	0.480
12	3.051	0.434	0.457	0.486	1.607	0.667	0.486	0.382	0.614	1.172	0.480	0.440
13	2.566	0.434	1.384	0.460	1.303	0.656	0.486	0.382	0.477	1.081	0.900	0.434
14	1.842	0.434	0.814	0.434	1.649	0.645	0.486	0.382	0.437	0.674	4.938	0.427
15	1.341	0.427	0.606	0.455	1.488	0.603	0.486	0.382	0.427	0.565	2.862	0.418
16	1.075	0.389	0.568	0.811	1.264	0.596	0.486	0.376	0.389	0.496	1.515	0.589
17	0.651	0.382	0.544	1.104	1.184	0.596	0.486	0.339	0.382	0.486	0.836	0.592
18	0.561	0.376	1.136	0.987	1.136	0.596	0.486	0.333	0.376	0.483	0.614	0.547
19	0.496	1.378	6.449	1.218	1.129	0.589	0.486	0.333	0.339	0.460	0.589	0.534
20	0.496	-	4.286	1.616	1.115	0.547	0.486	0.333	0.327	0.437	0.547	0.568
21	0.547	3.166	2.121	1.288	1.036	0.547	0.486	0.327	0.290	0.427	0.540	1.135
22	0.496	0.778	1.320	1.143	1.011	0.589	0.486	0.290	0.322	0.389	0.534	1.300
23	0.486	0.500	1.177	1.122	0.936	0.596	0.486	0.285	0.545	0.382	0.493	1.302
24	0.486	0.437	1.045	1.075	0.924	0.596	0.480	0.285	0.520	0.376	0.486	1.093
25	0.480	0.408	0.758	1.017	0.912	0.596	0.440	0.285	0.490	0.339	0.486	1.516
26	0.440	0.386	0.696	1.016	0.832	0.596	0.434	0.285	0.480	0.327	0.480	1.394
27	0.427	0.373	0.603	1.588	0.729	0.596	0.434	0.285	0.440	0.290	0.440	0.762
28	0.389	0.314	0.541	2.048	0.710	0.596	0.434	0.285	0.427	0.312	0.434	0.596
29	0.382		0.490	1.902	0.703	0.596	0.434	0.285	0.389	0.480	0.427	0.517
30	0.382		0.460	1.622	0.660	0.596	0.434	0.285	0.382	0.490	0.389	0.490
31	0.382		0.470		0.652		0.434	0.285		0.486		0.600
Mean	0.665	-	0.960	0.936	1.338	0.602	0.493	0.349	0.474	0.454	0.914	0.662
Flow (MCM)	1.782	-	2.572	2.426	3.584	1.562	1.320	0.936	1.228	1.216	2.370	1.774
Maximum	3.051	-	6.449	2.048	3.615	0.667	0.596	0.434	0.993	1.172	4.938	1.516
Minimum	0.285	-	0.285	0.430	0.652	0.547	0.434	0.285	0.285	0.285	0.389	0.382
Runoff (mm)	28.735	-	41.484	39.126	57.800	25.187	21.290	15.093	19.812	19.619	38.230	28.605

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2K47 **Year:** 2015
Station Name: Hainu River at Quamquam
Time-Series Type: Flow (cumecs)

Latitude: 3:57:38 S Longitude: 35:36:36 E Elevation: 1720.0 metres Area: 62.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.460	0.322	0.333	0.577	8.422	0.596	0.486	0.434	0.382	0.285	0.628	1.377
2	1.217	0.548	0.333	0.763	8.340	0.596	0.486	0.434	0.382	0.285	1.579	1.665
3	3.890	0.541	0.327	3.484	8.943	0.596	0.486	0.434	0.376	0.285	1.104	1.473
4	-	0.493	0.290	2.383	7.221	0.596	0.486	0.434	0.339	0.285	0.873	1.165
5	5.481	0.480	0.285	1.542	5.652	0.596	0.486	0.434	0.333	0.285	0.763	1.095
6	-	0.440	0.285	1.250	3.735	0.596	0.486	0.434	0.333	0.285	1.039	1.381
7	5.024	0.430	0.285	1.046	3.119	0.596	0.486	0.434	0.333	0.285	0.890	2.803
8	3.800	0.408	0.285	0.856	5.715	0.596	0.486	0.434	0.333	0.285	0.721	2.449
9	2.166	0.386	0.285	1.569	4.844	0.596	0.486	0.427	0.333	0.285	0.593	1.598
10	2.454	0.382	0.285	1.290	2.114	0.596	0.480	0.389	0.333	0.285	0.470	1.070
11	0.870	0.376	0.279	2.447	1.341	0.589	0.440	0.382	0.333	0.285	0.902	0.672
12	0.656	0.339	0.244	6.824	1.150	0.547	0.434	0.382	0.333	0.279	5.406	1.144
13	1.022	0.333	0.238	-	1.143	0.540	0.434	0.382	0.333	0.244	3.740	5.800
14	1.105	0.333	0.238	5.634	1.212	0.540	0.434	0.382	0.333	0.238	3.606	3.944
15	0.728	0.327	0.238	10.066	1.143	0.540	0.434	0.382	0.333	0.238	7.681	1.789
16	0.572	0.290	0.233	-	1.115	0.540	0.434	0.382	0.333	0.238	4.163	1.119
17	0.520	0.319	0.199	12.439	1.036	0.540	0.434	0.382	0.333	0.238	1.906	0.949
18	0.642	0.521	0.194	-	1.011	0.540	0.434	0.382	0.333	0.238	2.721	0.915
19	0.632	0.496	0.194	7.137	0.936	0.540	0.434	0.382	0.333	0.238	-	0.638
20	0.895	0.480	0.191	3.210	0.912	0.540	0.434	0.382	0.333	0.238	7.077	0.690
21	0.607	0.440	0.173	2.167	0.843	0.540	0.434	0.382	0.333	0.238	2.390	1.445
22	0.490	0.427	0.155	1.567	0.821	0.540	0.434	0.382	0.333	0.238	2.258	1.988
23	0.434	0.389	0.152	1.200	0.729	0.540	0.434	0.382	0.327	0.238	8.760	1.225
24	0.382	0.382	0.179	1.270	0.710	0.534	0.434	0.382	0.290	0.238	7.679	0.684
25	0.339	0.382	0.355	1.234	0.710	0.493	0.434	0.382	0.285	0.238	8.213	0.596
26	0.333	0.376	0.411	1.136	0.703	0.486	0.434	0.382	0.285	0.238	8.411	0.568
27	0.327	0.339	0.467	1.088	0.660	0.486	0.434	0.382	0.285	0.233	4.355	0.537
28	0.290	0.333	0.579	1.115	0.645	0.486	0.434	0.382	0.285	0.199	1.625	0.490
29	0.285		0.900	1.062	0.603	0.486	0.434	0.382	0.285	0.194	1.199	0.460
30	0.285		1.648	1.706	0.596	0.486	0.434	0.382	0.285	0.194	1.416	0.437
31	0.285		1.376		0.596		0.434	0.382		0.235		0.434
Mean	-	0.404	0.375	-	2.475	0.550	0.451	0.397	0.326	0.252	-	1.374
Flow (MCM)	-	0.977	1.005	-	6.628	1.425	1.207	1.064	0.846	0.674	-	3.681
Maximum	-	0.548	1.648	-	8.943	0.596	0.486	0.434	0.382	0.285	-	5.800
Minimum	-	0.290	0.152	-	0.596	0.486	0.434	0.382	0.285	0.194	-	0.434
Runoff (mm)	-	15.761	16.211	-	106.911	22.989	19.467	17.160	13.643	10.876	-	59.365

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2K47 **Year:** 2016
Station Name: Hainu River at Quamquam
Time-Series Type: Flow (cumecs)

Latitude: 3:57:38 S Longitude: 35:36:36 E Elevation: 1720.0 metres Area: 62.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.434	2.661	0.483	4.163	6.507	1.023	0.710	0.596	0.540	0.434	0.333	0.333
2	0.434	2.033	0.460	5.219	5.099	1.023	0.710	0.596	0.534	0.434	0.333	0.333
3	0.427	1.178	0.467	5.611	4.442	1.023	0.710	0.596	0.493	0.434	0.333	0.333
4	0.389	0.725	0.632	2.398	5.039	1.011	0.710	0.596	0.486	0.434	0.333	0.333
5	0.382	0.603	0.551	1.572	4.951	0.936	0.710	0.596	0.486	0.434	0.333	0.333
6	0.376	0.879	0.486	1.330	4.249	0.924	0.710	0.596	0.486	0.434	0.333	0.333
7	0.339	3.639	0.440	1.278	3.573	0.924	0.710	0.596	0.486	0.427	0.327	0.333
8	0.333	4.682	0.464	1.143	2.745	0.924	0.703	0.596	0.486	0.389	0.290	0.339
9	0.333	3.388	1.069	1.109	2.298	0.924	0.660	0.596	0.486	0.382	0.285	0.370
10	0.333	2.452	4.307	1.208	1.865	0.924	0.652	0.596	0.486	0.382	0.285	0.339
11	0.333	1.662	2.690	0.981	1.629	0.924	0.652	0.596	0.486	0.382	0.285	0.327
12	0.463	1.874	0.872	1.503	1.487	0.924	0.652	0.596	0.486	0.382	0.285	0.312
13	1.519	1.623	0.599	1.251	1.361	0.924	0.652	0.596	0.486	0.382	0.285	0.428
14	1.251	1.289	0.547	1.295	1.256	0.924	0.652	0.596	0.486	0.382	0.300	0.386
15	0.605	0.940	0.534	2.088	1.241	0.912	0.652	0.596	0.486	0.382	0.383	0.339
16	0.498	0.702	0.486	7.172	1.241	0.843	0.652	0.596	0.486	0.382	0.342	0.333
17	1.077	0.665	0.440	-	1.241	0.832	0.652	0.589	0.480	0.382	0.333	0.333
18	2.668	0.986	0.450	3.907	1.241	0.832	0.652	0.547	0.440	0.382	0.333	0.333
19	3.594	0.678	0.600	4.923	1.241	0.832	0.645	0.540	0.434	0.382	0.333	0.333
20	2.042	0.599	0.895	4.973	1.241	0.832	0.603	0.540	0.434	0.376	0.345	0.333
21	1.772	0.592	0.607	-	1.227	0.832	0.596	0.540	0.434	0.339	0.414	0.327
22	0.800	0.568	0.500	9.920	1.143	0.832	0.596	0.540	0.434	0.333	0.389	0.290
23	0.702	0.544	0.506	4.944	1.129	0.832	0.596	0.540	0.434	0.333	0.382	0.285
24	1.885	0.540	0.490	3.311	1.129	0.832	0.596	0.540	0.434	0.333	0.382	0.285
25	1.289	0.534	0.483	3.001	1.129	0.832	0.596	0.540	0.434	0.333	0.376	0.285
26	0.727	0.493	0.460	4.398	1.129	0.832	0.596	0.540	0.434	0.333	0.339	0.285
27	0.597	0.486	0.437	10.187	1.129	0.821	0.596	0.540	0.434	0.333	0.333	0.285
28	1.144	0.486	0.434	7.591	1.129	0.729	0.596	0.540	0.434	0.333	0.333	0.285
29	2.115	0.486	1.732	9.131	1.115	0.710	0.596	0.540	0.434	0.333	0.333	0.469
30	3.199		-	8.468	1.036	0.710	0.596	0.540	0.434	0.333	0.333	1.873
31	2.339		-		1.023		0.596	0.540		0.333		0.744
Mean	1.110	1.310	-	-	2.137	0.879	0.645	0.571	0.467	0.376	0.334	0.395
Flow (MCM)	2.972	3.282	-	-	5.725	2.279	1.729	1.529	1.211	1.008	0.865	1.057
Maximum	3.594	4.682	-	-	6.507	1.023	0.710	0.596	0.540	0.434	0.414	1.873
Minimum	0.333	0.486	-	-	1.023	0.710	0.596	0.540	0.434	0.333	0.285	0.285
Runoff (mm)	47.933	52.938	-	-	92.339	36.759	27.879	24.658	19.528	16.254	13.956	17.056

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2K47 **Year:** 2017
Station Name: Hainu River at Quamquam
Time-Series Type: Flow (cumecs)

Latitude: 3:57:38 S Longitude: 35:36:36 E Elevation: 1720.0 metres Area: 62.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.628	0.447	1.158	1.409	2.508	1.023	0.596	0.486	0.389	0.285	0.434	0.631
2	0.561	0.443	0.921	1.808	1.944	0.973	0.596	0.486	0.382	0.285	0.434	0.599
3	0.450	0.500	1.091	2.434	1.776	0.930	0.596	0.486	0.382	0.285	0.550	0.596
4	0.434	0.483	0.832	1.850	3.123	0.924	0.596	0.486	0.382	0.285	1.387	0.772
5	0.427	0.440	0.830	1.596	4.552	0.918	0.596	0.486	0.382	0.285	0.950	1.995
6	0.389	0.434	2.847	1.331	5.332	0.877	0.589	0.486	0.382	0.285	0.569	1.584
7	0.382	0.434	3.575	1.378	4.697	0.837	0.547	0.486	0.382	0.285	0.597	1.710
8	0.382	0.434	2.572	2.110	5.596	0.832	0.540	0.486	0.382	0.285	1.334	1.341
9	0.382	0.427	2.280	1.527	4.704	0.821	0.540	0.486	0.382	0.285	1.153	1.136
10	0.376	0.389	1.531	1.353	2.799	0.729	0.540	0.486	0.382	0.285	0.943	1.091
11	0.339	0.382	1.162	1.241	2.194	0.710	0.540	0.486	0.382	0.285	0.834	1.409
12	0.333	0.382	2.480	1.143	1.659	0.710	0.540	0.486	0.382	0.285	1.185	1.346
13	0.333	0.376	8.479	1.115	1.821	0.710	0.540	0.480	0.382	0.285	5.985	1.124
14	0.333	0.339	5.098	1.328	5.164	0.710	0.540	0.440	0.382	0.285	2.635	0.866
15	0.333	0.333	3.201	3.428	5.723	0.710	0.540	0.434	0.376	0.285	1.375	0.642
16	0.327	0.327	2.120	3.290	3.195	0.710	0.540	0.434	0.339	0.297	1.081	0.592
17	0.290	2.351	1.572	3.196	2.443	0.703	0.540	0.434	0.333	0.364	0.668	0.547
18	0.285	-	1.777	2.684	1.821	0.660	0.540	0.434	0.333	0.339	0.524	0.687
19	0.285	4.630	3.291	2.133	1.570	0.652	0.540	0.434	0.333	0.333	0.483	1.765
20	0.285	6.967	5.293	1.978	1.854	0.652	0.540	0.434	0.333	0.327	0.440	1.589
21	0.285	2.596	3.370	4.319	4.306	0.652	0.540	0.434	0.333	0.290	1.713	1.369
22	0.285	1.548	2.181	3.542	3.580	0.645	0.540	0.434	0.333	0.285	-	1.241
23	0.285	1.513	1.886	2.449	2.890	0.603	0.534	0.434	0.333	0.496	4.708	1.136
24	0.279	2.676	3.984	1.820	3.429	0.596	0.493	0.434	0.333	2.227	2.045	1.062
25	0.244	4.059	3.329	1.604	2.974	0.596	0.486	0.434	0.333	1.148	3.931	0.920
26	0.238	1.727	2.385	1.384	1.923	0.596	0.486	0.434	0.327	0.576	-	0.733
27	0.238	1.110	2.376	1.479	1.434	0.596	0.486	0.434	0.290	0.520	2.568	0.656
28	0.277	1.056	8.192	2.715	1.138	0.596	0.486	0.434	0.285	0.653	2.118	0.624
29	0.514		5.469	3.236	0.974	0.596	0.486	0.434	0.285	0.507	0.958	0.599
30	0.503		3.138	2.753	1.096	0.596	0.486	0.434	0.285	0.440	0.724	0.596
31	0.520		1.850		1.075		0.486	0.427		0.434		0.596
Mean	0.362	-	2.912	2.121	2.880	0.729	0.537	0.456	0.351	0.436	-	1.018
Flow (MCM)	0.969	-	7.799	5.498	7.715	1.889	1.439	1.220	0.910	1.167	-	2.726
Maximum	0.628	-	8.479	4.319	5.723	1.023	0.596	0.486	0.389	2.227	-	1.995
Minimum	0.238	-	0.830	1.115	0.974	0.596	0.486	0.427	0.285	0.285	-	0.547
Runoff (mm)	15.635	-	125.796	88.676	124.434	30.469	23.206	19.678	14.685	18.815	-	43.972

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2K47 **Year:** 2018
Station Name: Hainu River at Quamquam
Time-Series Type: Flow (cumecs)

Latitude: 3:57:38 S Longitude: 35:36:36 E Elevation: 1720.0 metres Area: 62.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.596	0.596	0.408	2.376	5.164	1.620	1.354	0.721	0.540	0.434	0.480	0.440
2	0.596	0.596	0.590	4.070	4.578	1.620	1.307	0.685	0.540	0.434	0.507	0.480
3	0.596	0.596	0.983	3.248	4.593	1.620	1.248	0.681	0.540	0.434	0.624	0.500
4	0.660	0.596	2.571	2.412	10.424	1.620	1.227	0.681	0.540	0.434	0.589	0.561
5	1.037	0.596	3.764	1.761	9.456	1.620	1.143	0.677	0.540	0.434	0.500	0.480
6	0.738	0.596	2.861	1.847	7.179	1.603	1.136	0.656	0.540	0.434	0.486	0.610
7	0.656	0.589	1.354	6.484	5.408	1.503	1.170	0.652	0.540	0.427	0.486	0.575
8	0.645	0.547	0.737	5.672	3.590	1.486	1.136	0.652	0.540	0.389	0.486	0.742
9	0.603	0.540	0.613	4.028	2.626	1.486	1.129	0.652	0.540	0.382	0.486	1.026
10	0.596	0.534	0.638	3.311	3.294	1.486	1.129	0.652	0.540	0.382	0.486	0.756
11	0.596	0.493	0.603	5.227	4.684	1.470	1.129	0.652	0.540	0.382	0.486	0.638
12	0.716	0.486	0.592	5.198	4.546	1.376	1.122	0.652	0.534	0.382	0.486	0.494
13	1.513	0.486	0.568	3.790	5.891	1.360	1.075	0.645	0.493	0.382	0.500	0.380
14	1.245	0.486	0.544	4.933	6.763	1.360	1.030	0.603	0.486	0.382	0.575	0.297
15	1.136	0.486	0.540	4.246	8.954	1.368	1.023	0.596	0.486	0.382	0.541	0.431
16	1.179	0.486	0.540	6.464	7.560	1.391	1.011	0.596	0.486	0.382	0.493	0.568
17	1.635	0.480	0.534	4.932	6.127	1.263	0.936	0.596	0.486	0.382	0.486	0.547
18	2.608	0.440	0.493	4.144	5.130	1.248	0.924	0.596	0.486	0.382	0.486	0.534
19	2.598	0.434	0.510	10.086	4.692	1.285	0.924	0.596	0.486	0.382	0.486	0.500
20	1.556	0.434	0.683	8.925	4.410	1.248	0.924	0.596	0.486	0.376	0.486	0.606
21	0.966	0.434	0.809	5.955	6.406	1.241	0.924	0.596	0.486	0.339	0.486	1.124
22	0.726	0.434	0.782	4.261	5.888	1.227	0.924	0.596	0.486	0.333	0.493	1.143
23	0.613	0.434	2.182	3.149	4.681	1.143	0.924	0.596	0.486	0.333	0.534	1.102
24	0.695	0.434	4.171	2.717	3.877	1.129	0.912	0.596	0.480	0.333	0.534	0.949
25	1.269	0.427	7.481	5.370	3.229	1.122	0.843	0.596	0.440	0.333	0.493	0.901
26	2.074	0.389	8.142	-	2.522	1.075	0.832	0.596	0.434	0.333	0.486	0.733
27	4.011	0.382	3.411	3.826	2.901	1.030	0.832	0.596	0.434	0.339	0.486	0.660
28	2.470	0.382	1.598	5.538	2.498	1.023	0.832	0.589	0.434	0.376	0.480	0.645
29	1.125		1.211	5.554	2.001	1.023	0.832	0.547	0.434	0.389	0.440	0.610
30	0.690		1.789	4.951	1.664	1.070	0.826	0.540	0.434	0.427	0.434	0.738
31	0.603		2.222		1.620		0.788	0.540		0.440		1.242
Mean	1.185	0.493	1.740	-	4.915	1.337	1.018	0.620	0.497	0.386	0.501	0.678
Flow (MCM)	3.175	1.193	4.659	-	13.164	3.466	2.726	1.661	1.289	1.034	1.298	1.816
Maximum	4.011	0.596	8.142	-	10.424	1.620	1.354	0.721	0.540	0.440	0.624	1.242
Minimum	0.596	0.382	0.408	-	1.620	1.023	0.788	0.540	0.434	0.333	0.434	0.297
Runoff (mm)	51.205	19.247	75.149	-	212.317	55.906	43.960	26.791	20.796	16.684	20.936	29.284

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2K47 **Year:** 2019
Station Name: Hainu River at Quamquam
Time-Series Type: Flow (cumecs)

Latitude: 3:57:38 S Longitude: 35:36:36 E Elevation: 1720.0 metres Area: 62.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.690	0.043	1.504	0.568	0.913	1.115	0.596	0.685	0.540	0.345	3.105	-
2	0.596	0.000	1.457	0.547	0.781	1.036	0.596	0.685	0.540	0.333	3.623	-
3	0.750	0.000	1.324	0.534	0.663	1.023	0.596	0.681	0.540	0.333	3.580	-
4	1.894	0.000	1.640	0.493	0.645	1.023	0.596	0.681	0.540	0.333	3.329	12.349
5	2.089	0.000	1.401	0.486	0.662	1.023	0.596	0.677	0.540	0.378	3.288	11.391
6	2.519	0.000	1.238	0.480	1.054	1.023	0.596	0.656	0.540	0.636	3.248	13.195
7	2.133	0.000	0.820	0.440	1.129	1.017	0.596	0.652	0.540	0.531	3.012	13.899
8	1.575	0.000	0.656	0.440	1.129	0.973	0.596	0.652	0.540	0.470	2.973	9.581
9	1.175	0.000	0.767	1.600	1.109	0.930	0.596	0.652	0.540	0.483	3.093	9.193
10	0.829	0.000	0.660	-	1.171	0.924	0.596	0.652	0.540	0.486	4.148	9.379
11	0.710	0.000	0.599	3.789	2.697	0.924	0.596	0.652	0.540	0.542	6.037	10.490
12	0.606	0.000	0.568	1.215	4.712	0.924	0.596	0.652	0.534	1.106	5.332	12.412
13	0.585	0.000	0.544	0.850	5.001	0.912	0.596	0.645	0.493	1.592	6.520	12.020
14	0.660	0.000	0.537	0.722	4.552	0.843	0.596	0.603	0.486	1.139	10.918	8.936
15	0.672	0.000	0.513	0.660	3.026	0.821	0.596	0.596	0.486	0.687	8.873	7.219
16	1.008	0.000	0.490	0.645	1.930	0.729	0.596	0.596	0.486	0.577	6.282	5.235
17	1.550	0.000	0.486	0.599	1.587	0.710	0.596	0.596	0.486	1.052	5.662	7.214
18	1.363	0.000	0.486	0.568	1.799	0.710	0.596	0.596	0.486	1.017	8.592	7.429
19	1.090	0.000	0.483	0.544	3.257	0.710	0.596	0.596	0.486	1.052	7.290	6.855
20	0.920	0.000	0.460	0.568	2.107	0.710	0.596	0.596	0.486	0.722	4.746	6.658
21	0.740	0.000	0.437	0.835	1.770	0.710	0.596	0.596	0.486	0.572	4.554	11.494
22	0.696	0.282	0.434	1.841	1.707	0.710	0.596	0.596	0.486	0.496	4.765	12.794
23	0.610	5.290	0.434	6.724	1.799	0.703	0.596	0.596	0.486	0.524	7.426	-
24	0.596	1.006	0.427	3.804	2.029	0.660	0.596	0.596	0.480	0.768	10.148	11.193
25	0.589	0.305	0.389	1.519	1.709	0.652	0.596	0.596	0.440	0.617	-	-
26	0.852	0.069	0.382	1.731	1.762	0.652	0.596	0.596	0.434	0.720	9.822	-
27	3.397	0.004	0.382	1.342	1.520	0.652	0.589	0.596	0.434	0.603	8.468	6.492
28	3.202	0.135	0.382	1.089	1.407	0.645	0.547	0.589	0.434	0.656	13.039	10.304
29	2.489		0.386	0.985	1.249	0.603	0.540	0.547	0.434	0.603	-	9.514
30	1.834		0.408	0.967	1.143	0.596	0.540	0.540	0.421	0.561	-	10.261
31	1.043		0.450		1.129		0.561	0.540		0.763		4.422
Mean	1.273	0.255	0.682	-	1.843	0.822	0.589	0.619	0.497	0.668	-	-
Flow (MCM)	3.410	0.616	1.827	-	4.938	2.131	1.578	1.658	1.288	1.788	-	-
Maximum	3.397	5.290	1.640	-	5.001	1.115	0.596	0.685	0.540	1.592	-	-
Minimum	0.585	0.000	0.382	-	0.645	0.596	0.540	0.540	0.421	0.333	-	-
Runoff (mm)	54.993	9.941	29.466	-	79.639	34.374	25.458	26.742	20.778	28.843	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Kou River at Darakuta

Station No: 2H25		Established: 11/01/2013	
Coordinates:		Altitude (m.a.m.s.l): 1,149	
Lat: -3.9731	Long: 35.6411	Catchment Area (km²): 151	
Description of the Catchment:			
Rocks, Woodland, grassland and some mountains			

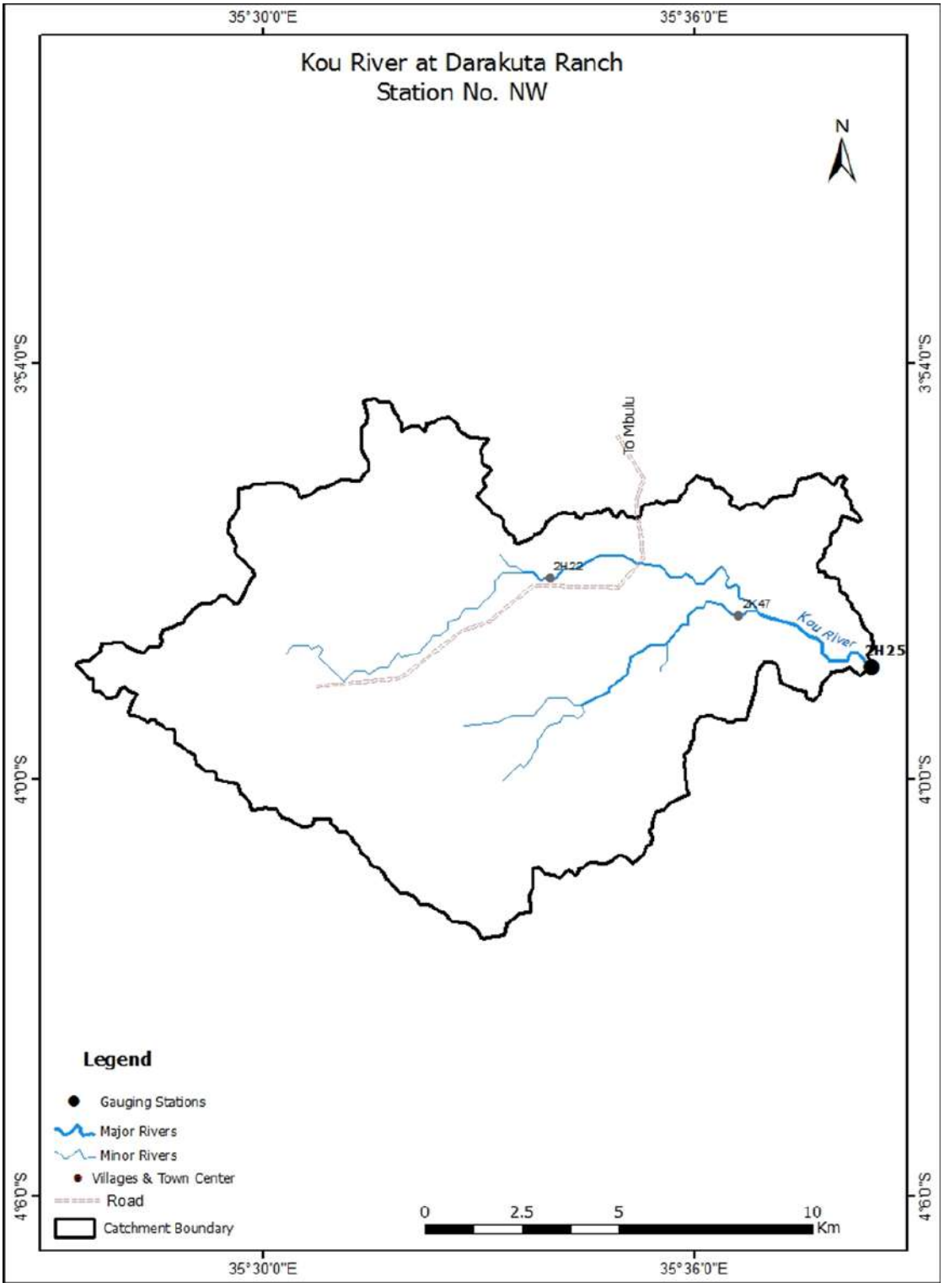
Station Details

1. Staff Gauges	Range: 0 – 2m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	-		Date installed: -	
3. Benchmark	Bolt in concrete at left bank of the river			
BM Assumed Datum: 3.272m		N.M.M.S.L: -	TBM: -	
4. Control	Open channel with rocks scattered at upper stream and downstream			
5. Access	Easily accessed throughout the year, approximately 60km from Babati town via Arusha road			

Records	Period	Quality
Water Level:	11/01/2013 – 31/12/2019	1.2.2
Discharge:	11/01/2013 – 31/12/2019	2.2.2

Extremes:	Max. Recorded	-	On 18/02/2017	WL 1.7m
	Min. Recorded	0.3211m³/sec	On 17/02/2017	WL 0.390m

Remarks


Kou River at Darakuta Ranch
Station No. NW
35°30'0"E
35°36'0"E
3°54'0"S
4°0'0"S
4°6'0"S
N
To Mbulu
2H22
2K47
Kou River
2H25
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Road
Catchment Boundary
0
2.5
5
10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2013
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	0.589	0.710	-	3.194	1.429	1.043	0.947	0.749	0.676	0.402	0.537
2	-	0.592	0.655	-	3.262	1.422	1.032	0.947	0.754	1.231	0.412	0.677
3	-	0.573	0.623	5.504	2.755	1.409	1.032	0.947	0.752	1.017	0.421	0.627
4	-	0.488	0.615	3.639	2.470	1.330	1.032	0.947	0.739	0.833	0.428	0.600
5	-	0.474	0.592	2.725	4.645	1.311	1.032	0.947	0.721	0.728	0.480	0.660
6	-	0.474	0.733	2.197	-	1.273	1.032	0.947	0.718	0.684	0.626	0.796
7	-	0.474	1.805	1.921	5.508	1.266	1.032	0.947	0.718	0.650	0.642	0.469
8	-	0.474	1.809	1.933	4.506	1.260	1.032	0.947	0.714	0.610	0.593	-
9	-	0.471	1.907	2.485	5.138	1.223	1.021	0.937	0.684	0.593	0.624	3.039
10	-	0.454	-	2.534	4.517	1.217	0.957	0.876	0.655	0.604	0.585	5.420
11	0.906	0.467	1.579	3.415	3.147	1.217	0.947	0.866	0.651	0.604	0.521	4.529
12	0.896	0.451	2.259	4.551	2.949	1.217	0.947	0.866	0.651	0.590	0.476	2.655
13	0.828	0.622	1.397	4.897	2.866	1.217	0.947	0.857	0.651	0.581	0.448	2.047
14	0.754	1.811	1.123	3.841	2.370	1.217	0.947	0.799	0.650	0.536	0.425	2.186
15	0.681	0.982	0.948	3.029	2.176	1.217	0.947	0.790	0.637	0.525	0.406	2.372
16	0.600	0.613	0.809	3.452	2.097	1.217	0.947	0.790	0.621	0.501	0.363	1.890
17	0.588	0.584	0.790	-	2.021	1.217	0.947	0.790	0.619	0.477	0.369	2.637
18	0.588	0.851	0.795	4.182	1.913	1.217	0.947	0.790	0.619	0.474	0.353	2.482
19	0.588	0.686	0.848	3.017	1.880	1.217	0.947	0.790	0.619	0.474	0.334	2.491
20	0.588	0.700	1.017	2.771	1.785	1.217	0.947	0.790	0.619	0.474	0.541	1.588
21	0.581	1.008	1.111	2.540	1.770	1.217	0.947	0.790	0.619	0.471	2.190	1.274
22	0.533	0.984	1.111	2.303	1.762	1.205	0.947	0.790	0.619	0.448	1.493	1.123
23	0.501	0.876	1.043	2.162	1.708	1.134	0.947	0.790	0.619	0.426	0.873	1.000
24	0.474	0.823	1.016	2.634	1.656	1.122	0.947	0.790	0.619	0.423	0.672	0.947
25	0.451	0.763	0.911	2.043	1.648	1.122	0.947	0.790	0.619	0.423	0.672	0.901
26	0.445	0.754	0.823	1.778	1.641	1.122	0.947	0.781	0.619	0.423	0.791	0.833
27	0.426	0.749	0.732	1.663	1.590	1.122	0.947	0.727	0.618	0.423	0.717	0.790
28	0.423	0.723	0.831	1.634	1.540	1.122	0.947	0.718	0.606	0.423	0.618	0.749
29	0.423		2.313	1.547	1.533	1.122	0.947	0.718	0.590	0.423	0.590	0.689
30	0.423		-	1.746	1.526	1.111	0.947	0.718	0.588	0.421	0.577	0.655
31	0.446		5.036		1.477		0.947	0.723		0.412		0.686
Mean	-	0.697	-	-	-	1.224	0.972	0.834	0.655	0.567	0.621	-
Flow (MCM)	-	1.686	-	-	-	3.172	2.603	2.234	1.699	1.519	1.611	-
Maximum	-	1.811	-	-	-	1.429	1.043	0.947	0.754	1.231	2.190	-
Minimum	-	0.451	-	-	-	1.111	0.947	0.718	0.588	0.412	0.334	-
Runoff (mm)	-	11.163	-	-	-	21.006	17.239	14.793	11.249	10.057	10.667	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2014
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.908	0.536	0.727	2.721	1.533	1.422	1.032	0.871	0.797	0.643	0.653	0.809
2	0.937	0.529	0.710	1.829	1.612	1.422	1.032	0.866	0.754	0.651	0.901	0.859
3	0.866	0.623	0.659	1.469	2.111	1.433	1.032	0.866	0.749	0.651	0.914	0.989
4	0.790	1.462	0.651	1.349	2.174	1.492	1.032	0.866	0.723	0.654	0.798	1.605
5	0.710	2.573	0.651	2.031	2.360	1.458	1.032	0.866	0.718	0.674	0.727	1.271
6	0.604	1.853	0.668	1.792	2.621	1.426	1.032	0.866	0.718	0.717	0.727	0.960
7	0.588	1.482	0.831	2.117	3.074	1.426	1.032	0.866	0.718	0.763	0.772	0.936
8	0.588	1.098	1.210	5.453	4.677	1.447	1.032	0.866	0.710	0.850	0.727	1.392
9	0.588	0.870	1.120	5.295	-	1.413	1.030	0.866	0.659	0.836	0.717	1.752
10	0.588	0.788	0.823	3.942	4.668	1.330	1.008	0.866	0.651	0.726	0.698	1.178
11	0.581	0.721	0.750	3.318	3.290	1.317	0.955	0.866	0.651	0.659	0.648	0.956
12	0.536	0.683	0.887	5.078	2.646	1.317	0.947	0.866	0.651	0.651	0.650	0.874
13	0.522	0.704	1.375	4.984	2.512	1.308	0.947	0.866	0.651	0.651	0.651	0.845
14	0.481	0.662	4.383	3.433	2.705	1.252	0.947	0.866	0.647	0.651	0.651	0.796
15	0.474	0.674	2.500	2.619	2.636	1.221	0.947	0.866	0.623	0.651	0.643	0.798
16	0.467	0.712	3.884	2.214	2.214	1.217	0.947	0.866	0.619	0.654	0.596	0.914
17	0.429	0.710	2.679	2.402	2.029	1.217	0.947	0.866	0.619	0.674	0.688	0.876
18	0.423	0.659	1.721	4.112	1.913	1.217	0.947	0.866	0.619	0.773	1.376	0.869
19	0.423	2.033	1.493	4.054	1.880	1.217	0.947	0.866	0.619	1.171	1.463	0.892
20	0.423	-	1.266	3.602	1.785	1.209	0.947	0.866	0.619	1.172	2.887	0.915
21	0.472	1.147	1.123	3.201	1.770	1.167	0.947	0.866	0.619	0.877	-	0.853
22	0.804	1.606	1.548	2.794	1.809	1.209	0.942	0.857	0.619	0.735	3.515	0.788
23	0.857	1.265	2.043	2.690	2.043	1.217	0.911	0.799	0.619	0.717	1.755	0.856
24	0.790	0.917	2.593	2.741	1.981	1.209	0.906	0.812	0.619	0.700	1.468	1.755
25	0.719	0.857	1.991	2.552	1.769	1.155	0.906	0.935	0.619	0.658	1.012	1.901
26	0.651	0.799	1.860	2.162	1.699	1.126	0.906	0.869	0.619	0.651	0.914	1.849
27	0.596	0.790	1.481	1.910	1.725	1.114	0.906	0.799	0.619	0.650	0.812	1.536
28	0.588	0.781	1.386	1.770	1.646	1.063	0.906	0.790	0.615	0.633	0.835	1.297
29	0.588		1.386	1.649	1.547	1.035	0.906	0.809	0.592	0.594	0.909	1.514
30	0.588		2.027	1.547	1.519	1.032	0.906	0.948	0.596	0.588	0.864	1.517
31	0.581		2.164		1.436		0.901	1.051		0.592		1.499
Mean	0.618	-	1.567	2.894	-	1.270	0.962	0.867	0.655	0.718	-	1.156
Flow (MCM)	1.655	-	4.198	7.502	-	3.291	2.576	2.321	1.698	1.924	-	3.098
Maximum	0.937	-	4.383	5.453	-	1.492	1.032	1.051	0.797	1.172	-	1.901
Minimum	0.423	-	0.651	1.349	-	1.032	0.901	0.790	0.592	0.588	-	0.788
Runoff (mm)	10.963	-	27.803	49.684	-	21.793	17.058	15.371	11.246	12.741	-	20.514

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2015
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.420	0.659	0.477	3.162	5.539	1.889	1.134	0.891	0.680	0.525	1.421	1.763
2	1.317	0.643	0.474	3.323	5.927	1.724	1.122	0.842	0.684	0.529	1.609	1.671
3	1.229	0.596	0.474	4.614	3.861	1.648	1.122	0.866	0.684	0.525	1.233	1.431
4	1.221	0.588	0.474	3.059	3.519	1.590	1.116	0.896	0.680	0.501	1.111	1.224
5	1.237	0.588	0.474	2.730	-	1.554	1.077	0.871	0.655	0.477	0.984	1.088
6	1.218	0.584	0.474	2.443	2.694	1.626	1.043	0.866	0.651	0.474	0.833	1.066
7	1.308	0.558	0.467	2.442	4.719	1.590	1.088	0.866	0.651	0.474	0.728	1.339
8	1.387	0.533	0.429	3.067	4.320	1.526	1.187	0.866	0.643	0.474	0.724	1.953
9	1.571	0.529	0.420	-	4.516	1.436	1.122	0.866	0.596	0.474	1.071	1.639
10	1.764	0.522	0.401	4.193	3.976	1.422	1.043	0.861	0.588	0.474	2.155	2.102
11	1.681	0.484	0.398	2.551	3.298	1.416	1.032	0.832	0.588	0.474	3.495	2.303
12	1.425	0.498	0.398	1.974	3.092	1.369	1.032	0.828	0.588	0.474	2.298	2.005
13	1.287	0.504	0.398	2.615	2.792	1.324	1.032	0.828	0.588	0.474	1.320	1.921
14	1.132	0.533	0.398	-	2.569	1.317	1.032	0.823	0.588	0.474	1.111	1.987
15	1.032	0.581	0.398	-	2.510	1.317	1.032	0.795	0.588	0.474	1.166	1.825
16	0.955	0.592	0.398	-	2.339	1.304	1.021	0.790	0.588	0.474	2.802	1.627
17	0.924	0.627	0.398	-	2.284	1.229	0.957	0.786	0.588	0.474	4.374	1.626
18	0.864	0.768	0.398	2.794	2.115	1.217	0.947	0.758	0.588	0.474	1.975	1.533
19	0.809	1.139	0.393	4.391	2.021	1.229	0.947	0.754	0.584	0.474	-	1.423
20	0.857	0.894	0.358	3.371	1.913	1.292	0.947	0.754	0.562	0.471	1.635	1.432
21	0.930	0.732	0.355	2.867	1.880	1.229	0.947	0.754	0.558	0.448	2.446	2.032
22	1.318	0.680	0.372	2.501	1.785	1.217	0.947	0.749	0.558	0.426	1.827	1.846
23	1.192	0.623	0.375	2.395	1.770	1.205	0.947	0.723	0.558	0.426	1.641	1.882
24	0.967	0.584	0.387	2.358	1.770	1.134	0.947	0.718	0.558	0.445	1.471	1.557
25	0.866	0.536	0.478	2.287	1.770	1.122	0.937	0.718	0.551	0.448	1.274	1.331
26	0.799	0.529	0.600	2.794	1.770	1.122	0.876	0.714	0.508	0.448	1.250	1.206
27	0.788	0.525	0.623	2.560	1.754	1.122	0.866	0.689	0.501	0.448	2.007	1.044
28	0.761	0.501	0.660	2.436	1.663	1.122	0.866	0.684	0.501	0.448	2.377	0.952
29	0.675		0.942	2.912	1.648	1.134	0.866	0.680	0.501	0.448	2.203	0.906
30	0.710		2.435	2.803	1.694	1.193	0.866	0.655	0.504	0.665	2.107	0.861
31	0.710		2.601		1.963		0.871	0.655		2.235		0.828
Mean	1.108	0.612	0.591	-	-	1.354	0.999	0.786	0.589	0.534	-	1.529
Flow (MCM)	2.968	1.480	1.584	-	-	3.510	2.676	2.106	1.526	1.430	-	4.096
Maximum	1.764	1.139	2.601	-	-	1.889	1.187	0.896	0.684	2.235	-	2.303
Minimum	0.675	0.484	0.355	-	-	1.122	0.866	0.655	0.501	0.426	-	0.828
Runoff (mm)	19.658	9.803	10.490	-	-	23.242	17.721	13.950	10.106	9.468	-	27.124

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 Year: 2016
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.001	1.980	0.790	-	-	2.311	1.641	1.229	0.968	0.795	0.529	0.573
2	1.011	2.159	1.108	2.774	-	2.293	1.597	1.292	1.021	0.869	0.529	0.575
3	0.881	2.286	3.265	3.075	2.756	2.185	1.590	1.229	1.027	1.103	0.533	1.002
4	0.828	1.852	1.666	-	5.151	2.150	1.590	1.217	0.989	0.807	0.551	2.141
5	0.790	1.493	1.101	4.296	4.818	2.046	1.590	1.217	0.952	0.763	0.529	1.180
6	0.754	1.359	0.952	3.520	4.702	2.029	1.590	1.217	0.947	0.813	0.494	0.663
7	0.719	1.719	0.896	3.219	4.239	2.029	1.590	1.217	0.937	0.786	0.435	0.566
8	0.684	1.535	1.469	2.534	3.907	2.020	1.590	1.229	0.871	0.727	0.448	0.635
9	0.848	1.293	4.816	2.248	3.741	1.978	1.590	1.292	0.828	0.718	0.471	1.108
10	2.233	1.435	3.151	2.177	3.817	2.020	1.583	1.229	0.795	0.714	0.474	0.869
11	1.969	2.860	1.964	2.623	3.520	2.029	1.540	1.217	0.795	0.684	0.474	0.750
12	1.423	2.655	1.500	3.104	3.330	2.012	1.533	1.217	0.828	0.643	0.474	0.676
13	0.992	1.951	1.274	2.993	3.284	1.913	1.533	1.217	0.861	0.569	0.488	0.719
14	0.970	1.599	1.128	3.266	3.147	1.896	1.512	1.205	0.866	0.569	0.589	0.608
15	1.577	1.377	1.032	2.283	3.114	1.896	1.389	1.134	0.866	0.631	0.685	0.592
16	1.642	1.212	1.031	-	3.081	1.896	1.376	1.122	0.866	0.592	0.604	0.607
17	1.979	1.132	1.441	-	3.227	1.896	1.416	1.122	0.866	0.562	0.581	0.566
18	2.746	1.580	1.183	-	2.972	1.896	1.422	1.111	0.866	0.558	0.544	0.547
19	2.430	1.437	1.146	-	2.801	1.896	1.422	1.043	0.861	0.577	0.592	0.481
20	1.851	1.279	1.077	-	2.780	1.896	1.422	1.032	0.828	0.681	0.656	0.448
21	1.725	1.242	1.236	-	2.780	1.896	1.422	1.032	0.795	0.604	0.627	0.426
22	1.438	1.294	1.312	-	2.780	1.896	1.422	1.032	0.790	0.588	0.897	0.423
23	1.280	0.996	1.599	-	2.780	1.880	1.422	1.032	0.790	0.588	0.582	0.417
24	1.478	0.937	1.605	-	2.760	1.785	1.409	1.032	0.790	0.588	0.530	0.381
25	1.463	0.876	1.332	-	2.638	1.754	1.330	1.032	0.790	0.588	0.665	0.375
26	1.627	0.866	1.123	2.837	2.618	1.663	1.317	1.032	0.790	0.581	0.552	0.375
27	1.671	0.857	0.963	5.354	2.598	1.656	1.317	1.032	0.790	0.584	0.529	0.375
28	1.478	0.799	0.916	2.461	2.481	1.693	1.317	1.032	0.790	0.833	0.522	0.375
29	1.280	0.790	1.913	-	2.442	1.656	1.304	1.032	0.790	0.576	0.487	0.806
30	1.308		-	-	2.330	1.648	1.229	1.032	0.790	0.529	0.529	4.360
31	2.099		-		2.311		1.217	1.021		0.529		1.930
Mean	1.425	1.478	-	-	-	1.927	1.459	1.133	0.858	0.669	0.553	0.824
Flow (MCM)	3.817	3.702	-	-	-	4.995	3.907	3.035	2.224	1.793	1.434	2.207
Maximum	2.746	2.860	-	-	-	2.311	1.641	1.292	1.027	1.103	0.897	4.360
Minimum	0.684	0.790	-	-	-	1.648	1.217	1.021	0.790	0.529	0.435	0.375
Runoff (mm)	25.276	24.518	-	-	-	33.082	25.875	20.102	14.730	11.873	9.497	14.618

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2017
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.453	0.979	1.873	4.264	2.867	1.905	1.117	0.947	0.650	0.477	0.653	0.809
2	0.998	1.018	1.636	2.980	2.663	1.785	1.163	0.947	0.623	0.494	0.901	0.859
3	0.634	0.748	1.357	2.250	2.246	1.770	1.152	0.947	0.625	0.477	0.914	0.989
4	0.588	0.631	1.357	2.107	3.238	1.754	1.066	0.952	0.664	0.473	0.798	1.605
5	0.588	0.611	1.556	1.771	2.180	1.663	1.152	0.978	0.668	0.456	0.727	1.271
6	0.577	0.548	1.306	1.754	-	1.634	1.169	0.952	0.654	0.406	0.727	0.960
7	0.508	0.427	1.205	1.731	-	1.547	1.163	0.947	0.654	0.401	0.772	0.936
8	0.484	0.350	1.088	1.883	-	1.533	1.128	0.937	0.674	0.420	0.727	1.392
9	0.529	0.387	1.084	2.509	-	1.519	1.114	0.876	0.692	0.423	0.717	1.752
10	0.569	0.372	1.332	3.791	2.788	1.436	1.058	0.866	0.589	0.423	0.698	1.178
11	0.505	0.337	1.136	3.411	5.720	1.422	0.997	0.864	0.631	0.426	0.648	0.956
12	0.445	0.331	0.953	2.422	-	1.429	0.989	0.848	0.588	0.441	0.650	0.874
13	0.390	0.334	0.815	2.057	2.618	1.463	0.989	0.814	0.544	0.426	0.651	0.845
14	0.408	0.347	0.648	1.622	4.207	1.422	0.989	0.796	0.573	0.423	0.651	0.796
15	0.367	0.331	0.889	1.403	3.522	1.369	0.989	0.816	0.547	0.423	0.643	0.798
16	0.390	0.311	2.750	1.542	3.126	1.324	0.989	0.864	0.592	0.423	0.596	0.914
17	0.375	0.148	2.655	2.500	2.833	1.317	0.989	0.884	0.521	0.420	0.688	0.876
18	0.355	-	1.922	3.346	2.822	1.317	0.984	0.793	0.546	0.404	1.376	0.869
19	0.350	1.602	1.425	3.787	2.619	1.317	0.952	0.812	0.572	0.420	1.463	0.892
20	0.334	1.878	1.305	-	2.405	1.317	0.947	0.937	0.515	0.418	2.887	0.915
21	0.331	1.535	1.271	4.949	2.320	1.304	0.947	0.814	0.539	0.391	-	0.853
22	0.329	2.861	1.744	3.713	2.311	1.229	0.947	0.790	0.614	0.377	3.515	0.788
23	0.316	2.345	1.507	2.882	2.320	1.217	0.947	0.788	0.550	0.381	1.755	0.856
24	0.329	1.222	1.300	2.287	2.367	1.217	0.957	0.770	0.455	0.423	1.468	1.755
25	0.331	-	1.670	2.021	2.284	1.229	1.010	0.720	0.537	0.739	1.012	1.901
26	0.331	-	-	1.793	2.055	1.311	0.957	0.677	0.529	2.711	0.914	1.849
27	0.329	2.936	-	1.716	1.970	1.343	0.947	0.671	0.504	1.289	0.812	1.536
28	0.335	2.023	3.734	1.708	1.937	1.236	0.947	0.671	0.500	0.830	0.835	1.297
29	0.543		2.994	1.701	1.858	1.193	0.947	0.667	0.489	0.986	0.909	1.514
30	0.996		3.343	1.821	2.213	1.066	0.947	0.646	0.476	0.744	0.864	1.517
31	0.882		3.622		2.098		0.947	0.664		0.608		1.499
Mean	0.513	-	-	-	-	1.420	1.019	0.828	0.577	0.586	-	1.156
Flow (MCM)	1.374	-	-	-	-	3.680	2.730	2.217	1.496	1.568	-	3.098
Maximum	1.453	-	-	-	-	1.905	1.169	0.978	0.692	2.711	-	1.901
Minimum	0.316	-	-	-	-	1.066	0.947	0.646	0.455	0.377	-	0.788
Runoff (mm)	9.096	-	-	-	-	24.369	18.077	14.680	9.907	10.386	-	20.514

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2018
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.420	0.659	0.947	2.210	-	2.939	2.029	1.547	1.128	0.891	0.861	1.406
2	1.317	0.643	1.001	2.387	-	2.974	2.029	1.533	1.077	0.909	0.804	1.133
3	1.229	0.596	1.359	2.064	2.963	3.487	2.055	1.533	1.032	0.919	0.509	0.766
4	1.221	0.588	1.942	1.889	6.018	3.060	2.185	1.526	0.989	0.877	0.718	0.693
5	1.237	0.588	1.670	2.483	6.107	3.048	2.055	1.491	0.952	0.884	0.859	0.706
6	1.218	0.584	1.161	-	5.124	2.761	2.029	1.512	0.947	0.869	1.222	0.681
7	1.308	0.558	1.129	3.744	4.672	2.760	2.029	1.437	0.937	0.861	2.100	0.782
8	1.387	0.533	0.974	2.619	4.430	2.698	2.029	1.424	0.871	0.828	3.257	0.668
9	1.571	0.529	0.947	2.588	4.422	2.628	2.029	1.418	0.828	0.786	2.212	0.623
10	1.764	0.522	0.942	2.462	5.454	2.608	2.029	1.628	0.795	0.736	1.290	0.619
11	1.681	0.484	0.916	2.778	4.955	2.529	2.012	1.450	0.795	0.772	0.979	0.627
12	1.425	0.498	0.991	2.676	4.530	2.395	1.913	1.369	0.828	0.727	0.937	0.747
13	1.287	0.504	1.390	-	4.130	2.320	1.888	1.324	0.861	0.714	0.866	1.236
14	1.132	0.533	1.846	-	1.972	2.311	1.848	1.317	0.866	0.693	0.782	1.362
15	1.032	0.581	1.363	-	-	2.311	1.888	1.324	0.866	0.714	0.668	1.424
16	0.955	0.592	1.095	-	-	2.311	1.872	1.350	0.866	0.718	0.647	1.821
17	0.924	0.627	1.230	-	-	2.311	1.724	1.285	0.866	0.714	0.619	2.186
18	0.864	0.768	1.268	5.093	2.789	2.311	1.656	1.304	0.866	0.689	0.581	2.091
19	0.809	1.139	1.610	3.950	5.045	2.311	1.648	1.279	0.861	0.680	0.519	1.319
20	0.857	0.894	2.320	3.855	4.600	2.311	1.648	1.311	0.828	0.650	0.555	1.370
21	0.930	0.732	3.645	1.870	4.675	2.311	1.641	1.311	0.795	0.610	0.928	1.511
22	1.318	0.680	2.312	-	5.387	2.293	1.590	1.267	0.790	0.594	3.624	2.784
23	1.192	0.623	1.573	2.615	4.779	2.194	1.547	1.223	0.790	0.626	2.558	1.781
24	0.967	0.584	1.280	2.838	4.078	2.220	1.575	1.188	0.790	0.709	1.692	3.373
25	0.866	0.536	1.140	-	3.893	2.176	1.540	1.044	0.790	0.941	5.141	2.084
26	0.799	0.529	1.324	-	3.779	2.150	1.547	1.188	0.790	1.824	5.355	1.500
27	0.788	0.525	2.645	-	3.593	2.046	1.634	1.242	0.790	1.708	5.608	1.262
28	0.761	0.563	2.155	-	3.396	2.029	1.648	1.370	0.790	1.140	3.776	1.066
29	0.675		1.402	-	3.188	2.029	1.648	1.242	0.790	0.952	2.417	1.038
30	0.710		1.254	-	3.043	2.029	1.648	1.217	0.804	0.871	1.877	0.872
31	0.710		1.498		2.960		1.634	1.205		0.837		1.011
Mean	1.108	0.614	1.494	-	-	2.462	1.814	1.350	0.866	0.853	1.799	1.308
Flow (MCM)	2.968	1.486	4.003	-	-	6.382	4.860	3.616	2.245	2.285	4.662	3.503
Maximum	1.764	1.139	3.645	-	-	3.487	2.185	1.628	1.128	1.824	5.608	3.373
Minimum	0.675	0.484	0.916	-	-	2.029	1.540	1.044	0.790	0.594	0.509	0.619
Runoff (mm)	19.658	9.838	26.509	-	-	42.263	32.183	23.949	14.864	15.130	30.874	23.197

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2019
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.490	0.906	1.357	1.865	1.786	2.284	1.317	0.950	0.659	0.554	0.881	2.796
2	1.276	0.861	1.330	1.297	1.584	2.230	1.317	0.947	0.701	0.569	0.814	-
3	1.448	0.795	1.409	1.929	1.403	2.106	1.317	0.947	0.659	0.623	0.776	2.854
4	1.021	0.758	1.501	1.342	1.409	2.037	1.311	0.947	0.651	0.614	0.716	4.380
5	0.947	0.741	1.979	1.270	1.468	2.020	1.279	0.947	0.650	1.116	0.679	3.784
6	0.947	0.662	1.847	1.156	2.115	1.962	1.298	0.947	0.650	1.384	0.661	5.110
7	0.937	0.641	1.472	0.963	2.580	1.888	1.229	0.947	0.708	1.060	0.668	4.433
8	0.874	0.650	1.178	0.881	2.729	1.785	1.223	0.947	0.718	0.669	0.678	4.691
9	0.845	0.655	1.438	1.560	2.485	1.770	1.254	0.947	0.718	0.696	0.653	3.306
10	0.798	0.668	1.293	-	2.459	1.770	1.211	0.947	0.718	0.853	1.162	3.651
11	0.786	0.600	1.205	3.282	-	1.754	1.134	0.942	0.710	1.042	1.864	3.113
12	0.749	0.588	1.088	1.938	-	1.663	1.122	0.911	0.659	1.935	1.481	2.697
13	0.685	0.590	1.027	1.459	2.606	1.648	1.122	0.901	0.651	2.989	1.339	3.096
14	0.627	0.602	0.952	1.277	-	1.648	1.122	0.866	0.650	1.990	1.541	2.538
15	1.503	0.594	0.937	1.189	2.523	1.641	1.122	0.832	0.633	1.337	3.080	2.272
16	-	0.631	1.056	1.070	4.358	1.594	1.122	0.828	0.594	0.980	1.752	2.118
17	1.777	0.723	0.858	1.012	3.257	1.565	1.116	0.828	0.588	0.946	1.173	2.036
18	2.637	0.648	0.790	0.955	3.286	1.537	1.088	0.830	0.581	1.422	1.150	2.071
19	1.831	1.027	0.754	0.947	5.162	1.526	1.116	0.848	0.536	1.607	1.457	2.028
20	2.217	5.377	0.719	0.996	4.197	1.477	1.116	0.848	0.533	1.209	1.405	2.419
21	2.533	4.962	0.689	1.307	3.357	1.429	1.077	0.830	0.557	1.005	1.352	-
22	1.951	2.822	0.680	1.942	3.130	1.422	1.043	0.828	0.568	0.937	1.341	3.737
23	1.649	2.442	0.651	-	3.898	1.422	1.065	0.816	0.535	0.908	1.951	4.458
24	1.716	4.643	0.623	4.520	3.693	1.416	1.032	0.743	0.533	1.362	1.710	4.919
25	1.531	4.019	0.611	2.951	3.526	1.382	0.997	0.702	0.553	1.687	1.712	-
26	1.309	2.585	0.562	3.480	4.398	1.416	1.003	0.761	0.553	1.703	2.402	-
27	1.173	1.982	0.538	2.679	3.494	1.409	0.955	0.759	0.572	1.300	2.866	2.487
28	1.082	1.644	0.571	2.019	2.919	1.330	0.947	0.775	0.515	1.169	4.273	3.930
29	1.027		0.619	1.573	2.740	1.317	0.947	0.788	0.525	1.088	-	3.086
30	0.957		0.824	1.965	2.406	1.317	0.950	0.772	0.533	0.972	6.207	3.525
31	0.942		0.981		2.212		0.966	0.668		0.877		2.744
Mean	-	1.565	1.017	-	-	1.659	1.126	0.856	0.614	1.181	-	-
Flow (MCM)	-	3.786	2.725	-	-	4.300	3.017	2.294	1.591	3.163	-	-
Maximum	-	5.377	1.979	-	-	2.284	1.317	0.950	0.718	2.989	-	-
Minimum	-	0.588	0.538	-	-	1.317	0.947	0.668	0.515	0.554	-	-
Runoff (mm)	-	25.071	18.046	-	-	28.475	19.981	15.190	10.535	20.945	-	-

Flow (cumecs)

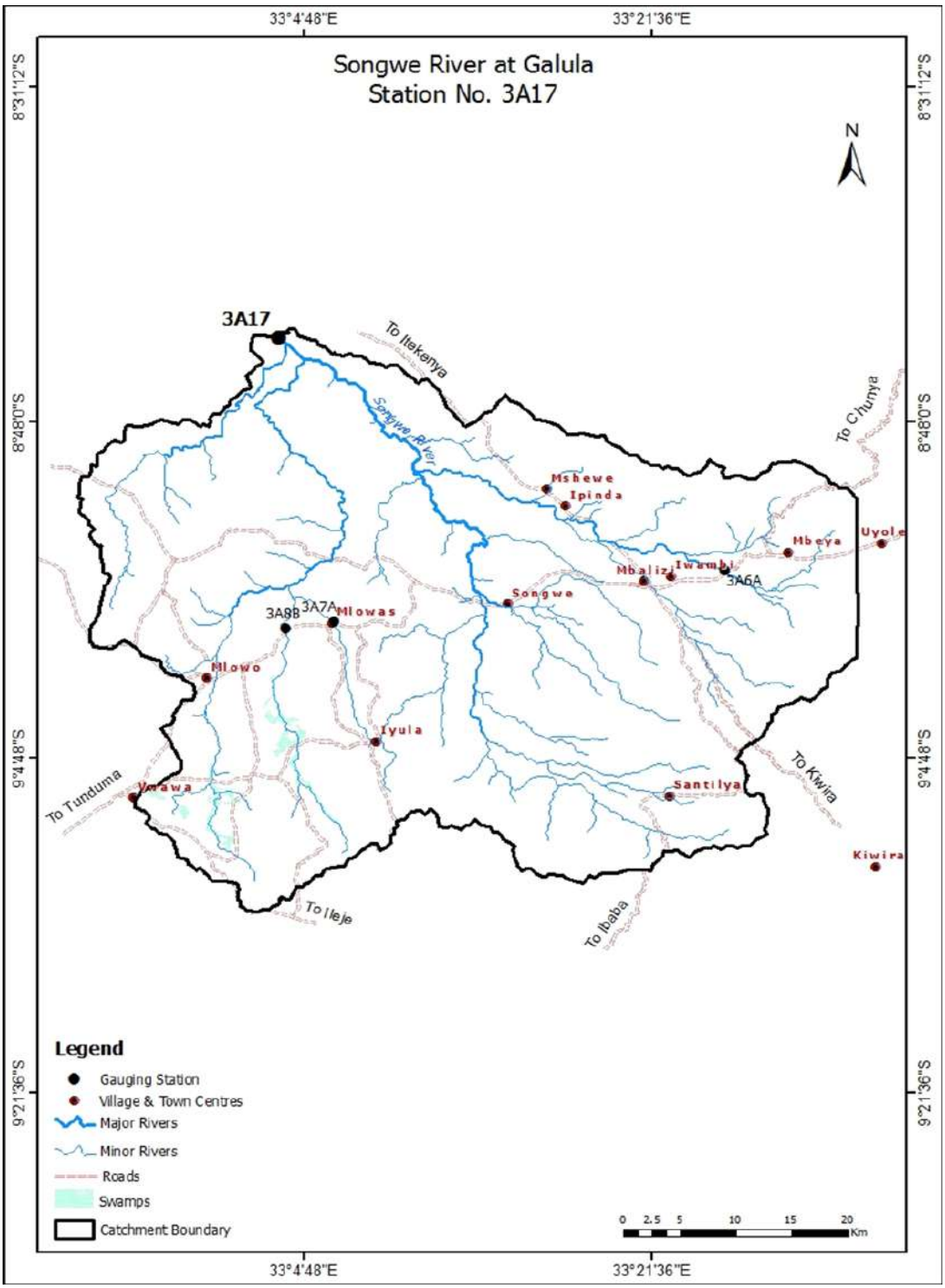
Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Songwe River at Galula				
Station No: 3A17A			Established: 1974	
Coordinates:			Altitude (m.a.m.s.l): 959	
Lat: -8.7346	Long: 33.0573		Catchment Area (km²): 2,478	
Description of the Catchment:				
Grassland, woodland and vegetation actively induced by natives				
Station Details				
1. Staff Gauges	Range: 0 – 4m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Thalimides float type		Date installed: -	
3. Benchmark				
BM Assumed Datum: 4.744m		N.M.M.S.L: -	TBM: -	
4. Control	Sand channel with riffles at low flows and high flows bridge serves as a control			
5. Access	Accessible throughout the year, 70km from Mbeya town to the station via Mbeya – Mbalizi road			
Records	Period		Quality	
Water Level:	08/09/2016 – 31/12/2018		1.2.2	
Discharge:	08/09/2016 – 31/12/2018		2.2.2	
Extremes:	Max. Recorded	-	On 12/02/2019	WL 3.98m
	Min. Recorded	-	On 29/10/2016	WL 0.23m
Remarks				


Songwe River at Galula
Station No. 3A17
33°4'48"E
33°21'36"E
8°31'12"S
8°48'0"S
9°4'48"S
9°21'36"S
N
3A17
To Ilekanya
Songwe River
To Chunya
Mshewe
Ipinda
Mbeya
Uyole
Mbaliz
Iwambi
3A6A
Songwe
3A8B
3A7A
Mlowas
Mlowo
Iyula
Santilya
To Kiwira
Kiwira
To Tunduma
Vwawa
To Ileje
To Ibaba
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Swamps
Catchment Boundary
0 2.5 5 10 15 20
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3A17A
Station Name: Songwe River at Galula
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 8:44: 4 S | Longitude: 33: 3:26 E | Elevation: 959.0 metres | Area: 2478.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	-	0.475	0.475	1.837
2	-	-	-	-	-	-	-	-	-	0.382	0.475	1.799
3	-	-	-	-	-	-	-	-	-	0.263	0.472	1.892
4	-	-	-	-	-	-	-	-	-	0.234	0.428	2.046
5	-	-	-	-	-	-	-	-	-	0.247	0.425	2.112
6	-	-	-	-	-	-	-	-	-	0.198	0.425	2.190
7	-	-	-	-	-	-	-	-	-	0.198	0.425	2.190
8	-	-	-	-	-	-	-	-	-	0.198	0.425	2.259
9	-	-	-	-	-	-	-	-	-	0.198	0.425	2.341
10	-	-	-	-	-	-	-	-	-	0.198	0.425	2.413
11	-	-	-	-	-	-	-	-	-	0.198	0.425	2.499
12	-	-	-	-	-	-	-	-	-	0.198	0.422	2.499
13	-	-	-	-	-	-	-	-	1.032	0.198	0.382	2.509
14	-	-	-	-	-	-	-	-	1.027	0.186	0.376	2.654
15	-	-	-	-	-	-	-	-	1.027	0.170	0.339	2.675
16	-	-	-	-	-	-	-	-	1.027	0.148	0.336	2.826
17	-	-	-	-	-	-	-	-	1.027	0.147	0.336	2.837
18	-	-	-	-	-	-	-	-	1.027	0.147	0.336	2.919
19	-	-	-	-	-	-	-	-	0.987	0.147	0.336	2.945
20	-	-	-	-	-	-	-	-	0.941	0.147	0.377	3.006
21	-	-	-	-	-	-	-	-	0.941	0.147	0.425	3.006
22	-	-	-	-	-	-	-	-	0.941	0.147	0.425	2.848
23	-	-	-	-	-	-	-	-	0.900	0.147	0.425	2.848
24	-	-	-	-	-	-	-	-	0.786	0.147	0.425	3.006
25	-	-	-	-	-	-	-	-	0.715	0.147	0.425	2.994
26	-	-	-	-	-	-	-	-	0.652	0.147	0.425	2.686
27	-	-	-	-	-	-	-	-	0.648	0.145	0.428	2.644
28	-	-	-	-	-	-	-	-	0.648	0.126	0.472	2.361
29	-	-	-	-	-	-	-	-	0.616	0.192	0.975	2.341
30	-		-	-	-	-	-	-	0.529	0.375	1.761	2.272
31	-		-		-		-	-		0.472		2.190
Mean	-	-	-	-	-	-	-	-	-	0.209	0.475	2.505
Flow (MCM)	-	-	-	-	-	-	-	-	-	0.559	1.231	6.708
Maximum	-	-	-	-	-	-	-	-	-	0.475	1.761	3.006
Minimum	-	-	-	-	-	-	-	-	-	0.126	0.336	1.799
Runoff (mm)	-	-	-	-	-	-	-	-	-	0.225	0.497	2.707

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2017
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.209	6.819	14.326	49.630	15.542	10.029	5.004	1.135	0.425	1.314	0.345	5.543
2	2.479	6.907	14.360	52.409	13.381	9.658	4.987	1.111	0.422	1.308	0.316	4.259
3	2.509	9.441	17.776	53.636	13.253	9.583	4.764	1.032	0.382	1.219	0.299	3.893
4	2.654	9.765	74.742	52.489	12.814	8.867	4.748	1.021	0.379	1.207	0.297	4.989
5	2.644	11.679	82.865	50.965	12.752	8.464	4.733	0.946	0.379	1.165	0.295	3.508
6	2.361	12.003	81.537	46.412	12.326	8.097	4.517	0.936	0.376	1.123	0.279	3.388
7	2.341	14.635	81.537	45.081	12.265	7.918	4.502	0.866	0.339	1.111	0.263	3.349
8	2.351	15.052	83.086	43.914	11.850	7.741	4.383	0.856	0.336	1.032	0.261	4.346
9	2.489	13.932	83.309	41.653	11.850	7.567	4.264	0.823	0.339	1.027	0.261	5.365
10	2.489	15.168	84.995	40.558	12.057	7.395	4.250	0.786	0.355	1.027	0.261	5.285
11	2.351	45.342	84.373	37.438	12.296	7.081	4.050	0.754	0.402	1.021	0.263	5.375
12	2.351	37.476	54.781	12.284	12.722	7.040	4.036	0.785	1.663	0.946	0.295	6.943
13	2.420	13.456	57.529	10.689	12.539	6.757	4.022	0.785	1.777	0.941	0.295	7.259
14	2.489	7.387	56.958	10.419	12.539	6.717	3.829	0.781	1.777	0.936	0.263	10.383
15	2.489	6.698	45.767	9.259	12.356	6.442	3.789	0.719	1.774	0.866	0.261	11.617
16	2.530	5.864	44.057	8.846	12.815	6.404	3.502	0.715	1.714	0.861	0.261	12.696
17	4.144	5.577	43.840	10.547	13.734	6.120	3.302	0.715	1.655	0.861	0.331	13.767
18	4.294	5.702	42.842	29.990	13.766	5.972	3.122	0.715	1.652	0.861	1.721	14.062
19	4.749	6.083	42.631	48.426	13.316	5.844	3.017	0.710	1.652	0.861	2.900	14.326
20	5.007	6.389	41.704	53.392	13.253	5.808	2.848	0.681	1.652	0.856	2.686	14.799
21	5.269	11.938	56.810	51.360	12.814	5.543	2.826	0.652	1.652	0.790	2.708	14.596
22	5.791	24.510	59.186	50.656	12.722	5.405	2.665	0.644	1.645	0.785	3.006	14.326
23	5.920	50.025	58.590	43.211	11.880	5.269	2.499	0.586	1.541	0.781	3.162	13.799
24	7.293	31.033	48.711	42.210	11.791	5.004	2.341	0.557	1.526	0.715	3.040	13.541
25	7.374	15.731	47.995	41.381	11.387	4.876	2.190	0.532	1.428	0.652	3.017	13.284
26	7.081	14.833	47.021	38.984	11.330	4.764	2.046	0.529	1.421	0.644	3.040	12.814
27	7.168	14.596	41.604	36.546	10.936	4.733	1.908	0.525	1.421	0.617	3.376	12.441
28	8.726	14.360	42.700	34.486	10.881	4.548	1.777	0.478	1.414	0.586	3.538	8.007
29	8.794		41.720	34.009	10.498	4.972	1.652	0.475	1.321	0.557	5.416	7.656
30	8.142		41.720	28.218	10.462	5.004	1.534	0.472	1.314	0.532	5.773	8.728
31	8.009		43.136		10.257		1.408	0.428		0.516		10.863
Mean	4.417	15.443	53.620	36.970	12.335	6.654	3.371	0.734	1.138	0.894	1.608	9.200
Flow (MCM)	11.830	37.360	143.615	95.826	33.038	17.247	9.030	1.966	2.949	2.395	4.167	24.642
Maximum	8.794	50.025	84.995	53.636	15.542	10.029	5.004	1.135	1.777	1.314	5.773	14.799
Minimum	2.209	5.577	14.326	8.846	10.257	4.548	1.408	0.428	0.336	0.516	0.261	3.349
Runoff (mm)	4.774	15.076	57.956	38.671	13.333	6.960	3.644	0.793	1.190	0.966	1.682	9.944

Flow (cumecs)

Annual Statistics

Maximum: 84.995 Minimum: 0.261 Mean: 12.199 cumecs
Total: 384.695 MCM Runoff: 155.244 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2018
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	14.111	51.280	42.745	47.088	41.933	12.295	5.791	3.205	-	-	4.207	17.321
2	39.421	49.931	54.260	47.536	41.581	12.295	5.302	3.205	-	-	2.914	42.489
3	41.100	49.307	56.697	48.608	40.618	12.029	5.268	3.193	-	-	2.381	58.013
4	40.551	48.609	71.545	48.531	40.550	11.387	5.268	3.110	-	-	2.331	101.062
5	39.537	46.406	91.070	46.406	40.213	11.302	5.252	3.028	-	-	2.199	126.417
6	40.699	46.182	93.413	46.182	42.352	10.913	5.020	3.017	-	-	2.249	113.442
7	59.097	45.147	90.091	45.221	41.324	10.473	4.987	3.006	-	-	3.043	108.029
8	59.283	44.928	68.858	45.664	42.700	9.659	4.764	2.848	-	-	3.087	95.009
9	58.134	42.913	49.026	46.182	41.720	9.232	4.748	2.826	-	-	3.133	92.133
10	58.572	42.631	64.279	46.331	41.581	8.866	4.748	2.675	-	-	3.833	110.211
11	59.098	40.688	59.490	46.798	40.618	8.842	4.733	2.654	-	-	5.755	144.925
12	58.572	40.482	53.337	44.108	40.152	8.794	4.517	2.509	-	-	11.704	45.207
13	57.872	39.471	52.169	57.286	34.739	8.142	4.502	2.499	-	-	11.962	38.031
14	56.493	38.939	47.768	59.186	34.243	8.096	4.502	-	-	-	7.654	31.886
15	55.898	38.476	47.384	59.363	33.407	8.074	4.502	-	-	-	7.041	31.073
16	55.898	37.783	47.110	61.448	32.514	7.762	4.487	-	-	-	6.563	31.267
17	56.322	32.034	58.604	73.703	31.528	7.740	4.279	-	-	-	9.178	39.900
18	55.136	11.424	60.708	74.706	30.676	7.740	4.264	-	-	2.341	41.413	40.482
19	53.801	10.020	63.524	76.166	30.563	7.718	4.250	-	-	2.437	54.446	37.602
20	53.144	9.658	86.114	75.162	29.784	7.567	4.150	-	-	3.914	95.865	14.590
21	52.489	11.020	76.817	60.290	28.691	7.416	4.050	-	-	2.589	82.832	14.263
22	51.843	23.198	72.785	59.186	15.687	7.374	4.036	-	-	2.420	57.346	42.330
23	51.522	36.200	47.972	57.959	14.833	7.227	4.022	-	-	2.351	42.076	93.627
24	53.161	38.152	46.182	57.871	14.360	7.061	3.829	-	-	2.331	14.803	89.706
25	55.056	34.611	45.147	57.871	14.293	6.757	3.816	-	-	2.199	12.326	68.077
26	57.699	36.000	44.928	57.699	13.831	6.678	3.789	-	-	2.190	11.792	62.977
27	57.785	61.601	42.773	55.305	13.766	5.882	3.607	-	-	2.181	10.965	40.611
28	56.493	62.068	41.658	54.643	13.316	5.826	3.426	-	-	2.118	11.052	12.034
29	55.136		40.756	63.106	13.221	5.826	3.388	-	-	2.055	35.652	9.621
30	53.801		41.100	200.408	12.356	5.826	3.217	-	-	2.046	38.454	23.590
31	53.062		41.936		12.295		3.205	-		2.167		24.084
Mean	51.961	38.184	58.072	60.667	29.660	8.493	4.378	-	-	-	19.942	58.065
Flow (MCM)	139.172	92.375	155.541	157.249	79.440	22.015	11.726	-	-	-	51.690	155.521
Maximum	59.283	62.068	93.413	200.408	42.700	12.295	5.791	-	-	-	95.865	144.925
Minimum	14.111	9.658	40.756	44.108	12.295	5.826	3.205	-	-	-	2.199	9.621
Runoff (mm)	56.163	37.278	62.769	63.458	32.058	8.884	4.732	-	-	-	20.859	62.761

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 2H25 **Year:** 2019
Station Name: Kow River at Darakuta
Time-Series Type: Flow (cumecs)

Latitude: 3:58:23 S Longitude: 35:38:27 E Elevation: 1149.0 metres Area: 151.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.140	30.360	31.392	26.859	13.831	11.850	4.264	-	-	-	8.815	6.428
2	11.605	26.498	41.836	25.257	13.734	11.763	4.250	-	-	-	11.009	48.764
3	25.902	28.058	47.169	30.239	12.846	10.965	4.050	-	-	-	8.007	82.998
4	25.444	31.169	48.228	30.619	12.752	10.881	4.022	-	-	-	5.714	14.686
5	13.527	41.968	44.205	30.676	12.326	10.498	3.829	-	-	-	5.738	2.467
6	14.428	42.842	44.131	31.414	12.722	10.444	3.802	-	-	-	5.121	11.723
7	43.643	43.840	48.800	30.964	19.212	10.258	3.617	-	-	-	4.414	10.941
8	45.664	43.984	72.468	35.802	19.713	10.046	3.591	-	-	-	4.108	11.365
9	44.582	45.000	71.196	33.643	19.713	9.658	3.413	-	-	1.908	4.767	41.939
10	36.625	47.579	56.289	33.281	19.671	9.633	3.388	-	-	1.908	5.774	51.787
11	32.520	102.237	54.485	31.643	19.096	9.583	3.217	-	-	1.908	6.101	286.338
12	29.897	350.981	52.631	31.585	19.096	8.890	3.193	-	-	1.900	6.300	108.480
13	29.408	163.164	47.986	32.396	19.354	8.818	3.028	-	-	1.785	9.023	158.918
14	24.264	116.239	66.365	32.338	15.482	8.487	3.006	-	-	1.777	9.231	151.386
15	13.925	62.679	97.523	30.733	17.551	8.440	2.927	-	-	1.777	9.333	113.396
16	14.215	47.191	112.340	30.563	19.395	8.097	2.848	-	-	1.777	10.801	114.409
17	29.974	46.452	106.803	29.784	19.713	7.762	2.837	-	-	1.777	12.838	55.231
18	43.160	34.166	102.334	29.674	19.671	7.697	2.826	-	-	1.777	49.140	61.650
19	100.662	32.513	77.743	28.911	19.096	7.102	2.675	-	-	1.777	48.379	75.617
20	139.255	32.513	71.349	28.966	18.975	6.981	2.664	-	-	1.785	14.772	59.598
21	47.423	32.926	66.550	30.508	17.864	5.901	2.654	-	-	1.900	8.416	65.333
22	47.088	33.340	60.539	30.563	17.747	5.791	2.581	-	-	1.917	8.638	56.256
23	47.536	33.459	52.591	29.784	17.479	5.302	2.509	-	-	2.037	12.049	52.032
24	50.948	34.123	46.563	29.408	17.211	5.235	2.489	-	-	2.037	16.929	42.163
25	94.377	31.702	45.002	25.057	16.954	4.780	2.351	-	-	1.917	135.533	41.479
26	90.108	31.528	42.773	24.613	14.001	4.733	2.341	-	-	1.900	18.023	59.707
27	94.137	31.528	40.688	22.126	13.766	4.517	2.331	-	-	1.785	14.190	151.224
28	94.871	31.471	40.482	15.276	13.316	4.502	2.199	-	-	1.811	12.826	158.890
29	101.743		38.544	14.360	13.221	4.487	2.190	-	-	2.304	5.972	102.823
30	99.963		25.602	14.293	12.356	4.279	2.181	-	-	2.331	5.790	62.371
31	88.020		24.904		12.265		2.055	-		2.535		66.057
Mean	51.292	58.197	57.404	28.378	16.456	7.913	3.011	-	-	-	15.925	75.047
Flow (MCM)	137.381	140.790	153.750	73.556	44.075	20.510	8.063	-	-	-	41.278	201.006
Maximum	139.255	350.981	112.340	35.802	19.713	11.850	4.264	-	-	-	135.533	286.338
Minimum	11.605	26.498	24.904	14.293	12.265	4.279	2.055	-	-	-	4.108	2.467
Runoff (mm)	55.440	56.816	62.046	29.683	17.787	8.277	3.254	-	-	-	16.658	81.116

Flow (cumecs)

Annual Statistics

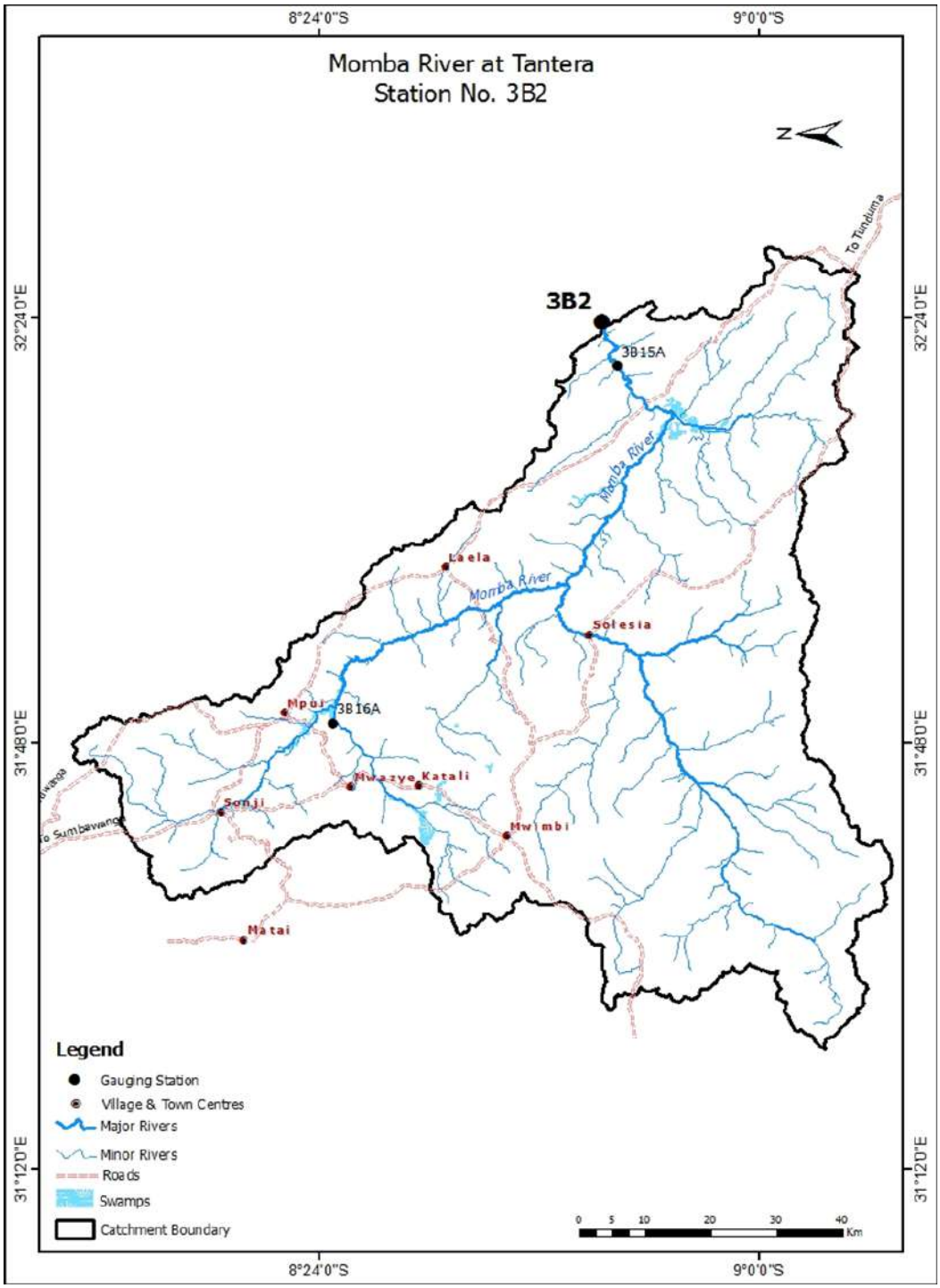
Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Momba River at Tontera				
Station No: 3B2			Established: 01/10/1974	
Coordinates:			Altitude (m.a.m.s.l): 959	
Lat: -8.7855	Long: 32.3926		Catchment Area (km²): 7,198	
Description of the Catchment:				
Upper part highly forests hills, wooded grassland and other part are bush and woodland				

Station Details				
1. Staff Gauges	Range: 0 – 6m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Thalimides float type		Date installed: -	
3. Benchmark	Bolt in concrete block upstream of the gauge at the right bank of the river			
BM Assumed Datum: 5.763m		N.M.M.S.L: -	TBM: -	
4. Control	Permanent with rocky bed and banks			
5. Access	Accessible throughout the year, 140km from Mbeya town Mbalizi road			
Records	Period		Quality	
Water Level:	16/12/2018 – 31/12/2019		1.2.2	
Discharge:	16/12/2018 – 31/12/2019		2.2.2	
Extremes:	Max. Recorded	40m³/sec	On 30/03/1979	WL 6.00m
	Min. Recorded	-	On 12/11/1983	WL 0.60m
Remarks				


Momba River at Tantera
Station No. 3B2
8°24'0"S
9°0'0"S
32°24'0"E
31°48'0"E
31°12'0"E
N
To Tunduma
3B2
3B15A
Momba River
Laela
Momba River
Solesia
Npuji
3B16A
Mwazye
Katali
Sonji
To Sumbawanga
Mwimbi
Matai
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Swamps
Catchment Boundary
0 5 10 20 30 40
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3B2 **Year:** 2019
Station Name: Momba River at Tontera
Time-Series Type: Flow (cumecs)

Latitude: 8:33: 0 S Longitude: 32:23:33 E Elevation: 959.0 metres Area: 7198.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	28.641	44.134	104.394	-	55.861	17.948	7.222	4.604	1.734	1.228	0.801	72.970
2	30.940	56.258	103.340	39.878	53.373	17.488	7.129	4.405	2.115	1.191	0.859	39.088
3	35.734	50.472	98.431	165.257	50.820	16.996	7.036	4.328	2.497	1.087	0.864	34.744
4	39.789	61.450	92.113	29.749	48.141	16.333	6.944	4.328	2.491	1.029	0.783	45.195
5	27.227	88.297	84.219	41.359	46.048	15.456	6.853	4.261	2.403	0.979	0.763	28.383
6	16.604	114.922	80.552	160.039	43.769	15.246	6.763	4.194	2.312	0.981	0.759	109.553
7	16.411	109.036	78.848	156.505	41.400	14.814	6.673	4.129	2.228	1.411	1.727	45.320
8	13.925	126.320	75.233	150.134	40.387	14.371	6.673	4.063	2.179	1.396	1.425	80.851
9	28.403	153.148	70.984	143.817	39.254	13.938	6.673	4.063	2.093	1.604	1.980	74.121
10	39.375	154.689	82.866	133.839	38.350	13.511	6.584	4.063	2.010	1.485	2.673	110.643
11	44.667	163.077	92.435	133.805	36.893	13.232	6.409	4.063	1.963	1.285	6.754	67.207
12	64.493	166.658	125.139	129.823	35.736	12.957	6.237	4.063	1.893	2.210	9.975	32.278
13	114.622	162.997	141.050	124.832	33.708	12.702	6.067	3.999	1.888	1.895	13.189	53.566
14	100.402	156.754	142.502	118.066	32.240	12.686	5.983	3.935	1.849	1.657	17.305	104.740
15	99.508	153.774	122.551	111.599	31.721	12.552	5.983	3.927	1.810	1.459	21.696	86.564
16	87.730	151.386	95.729	107.985	31.267	12.286	5.983	3.817	1.772	1.446	23.695	79.904
17	85.817	135.719	145.017	103.624	30.760	12.137	5.901	3.809	1.734	1.384	24.651	93.161
18	76.006	128.782	155.309	99.301	29.816	11.893	5.818	3.747	1.697	1.316	10.572	71.219
19	100.472	126.400	147.335	95.837	29.062	11.636	5.808	3.686	1.655	1.202	5.555	104.040
20	102.096	118.150	138.456	90.254	28.011	11.383	5.637	3.626	1.592	1.140	22.824	87.264
21	96.648	109.623	129.523	85.865	27.565	11.148	5.372	3.565	1.553	1.084	9.340	79.376
22	124.931	112.323	132.079	83.786	27.454	11.010	5.498	3.506	1.514	1.032	5.655	112.962
23	159.960	91.975	111.726	82.636	25.363	9.443	5.419	3.447	1.454	1.029	6.079	152.110
24	109.385	107.564	117.913	78.569	22.978	7.899	5.341	3.447	1.450	1.022	7.053	40.444
25	87.371	92.670	118.413	73.715	21.744	7.702	5.265	3.506	1.417	0.917	6.089	109.657
26	84.790	102.930	110.473	71.775	19.980	7.604	5.188	3.565	1.384	0.712	5.569	-
27	103.131	117.999	96.034	80.696	19.373	7.508	5.113	3.565	1.384	0.738	5.020	-
28	84.194	102.123	88.365	69.722	19.196	7.412	5.029	3.438	1.352	0.774	6.208	-
29	50.119		90.069	66.313	18.806	7.412	4.899	1.835	1.316	0.699	19.237	-
30	42.426		128.918	65.184	17.864	7.317	4.818	1.734	1.262	0.657	55.748	-
31	48.030		-		17.842		4.737	1.734		0.645		-
Mean	69.156	116.415	-	-	32.735	12.134	5.970	3.692	1.800	1.184	9.828	-
Flow (MCM)	185.228	281.632	-	-	87.677	31.451	15.989	9.889	4.666	3.170	25.475	-
Maximum	159.960	166.658	-	-	55.861	17.948	7.222	4.604	2.497	2.210	55.748	-
Minimum	13.925	44.134	-	-	17.842	7.317	4.737	1.734	1.262	0.645	0.759	-
Runoff (mm)	25.733	39.126	-	-	12.181	4.369	2.221	1.374	0.648	0.440	3.539	-

Flow (cumecs)

Annual Statistics

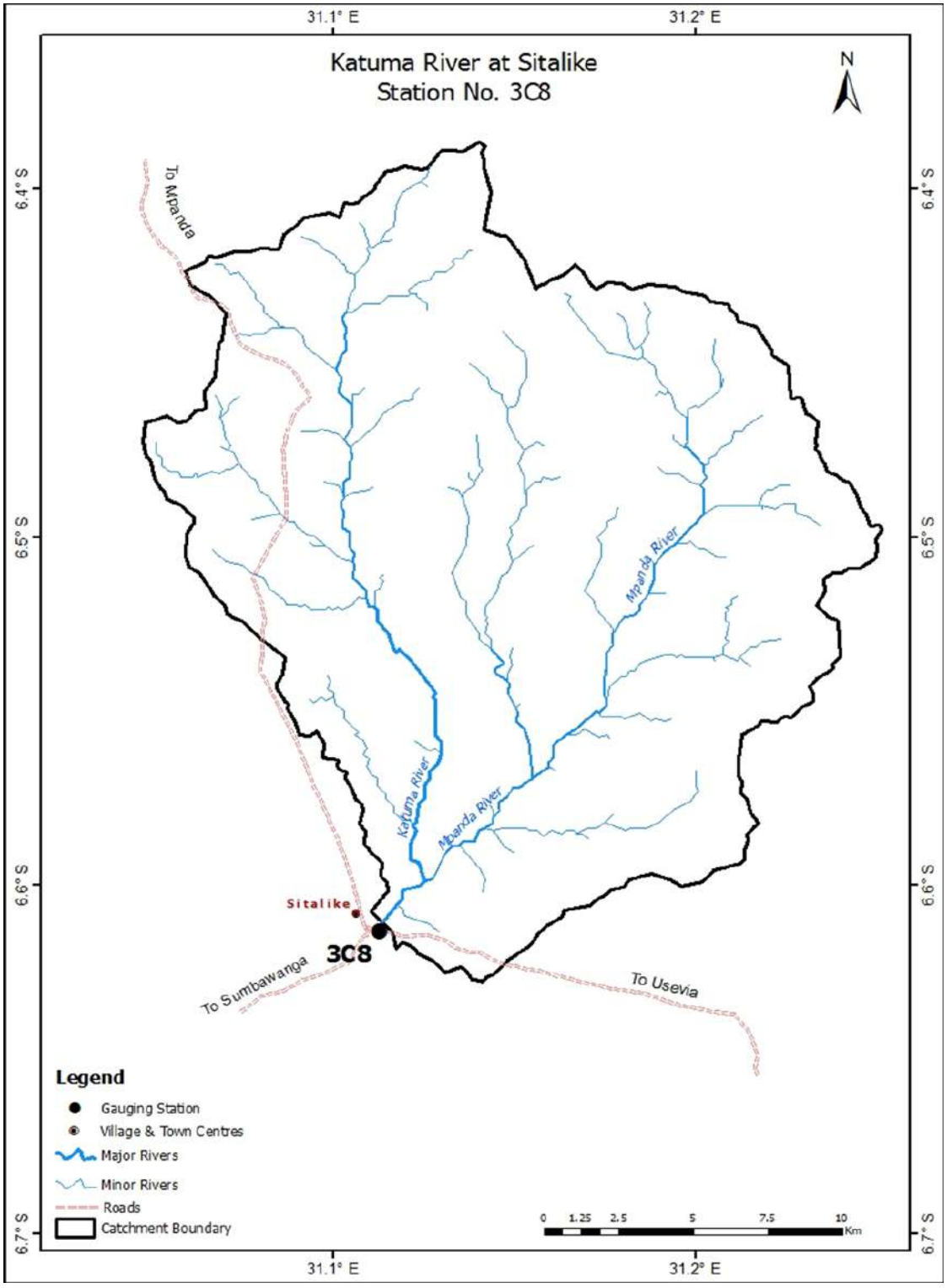
Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Katuma River at Sitalike				
Station No: 3C8			Established: 13/01/1976	
Coordinates:			Altitude (m.a.m.s.l): 975	
Lat: -6.6297	Long: 31.1469		Catchment Area (km^2): 422	
Description of the Catchment:				
Mainly rice vegetation upstream the catchment, grassland, woodland and induced by natives. Gauging station is located at Katavi National Park				
Station Details				
1. Staff Gauges	Range: 0 – 3m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Thalimides float type		Date installed: 2013	
3. Benchmark	Bolt set at left bank on the big rock			
BM Assumed Datum: 2.875m		N.M.M.S.L: -	TBM: -	
4. Control	Permanent rock boulders across the river			
5. Access	Accessible throughout the year, 200km from Sumbawanga town to the station via Sumbawanga – Mpanda road			
Records	Period		Quality	
Water Level:	06/06/2017 – 31/12/2019		1.1.2	
Discharge:	06/06/2017 – 31/12/2019		2.1.2	
Extremes:	Max. Recorded	-	On 21/04/1979	WL 2.99m
	Min. Recorded	0.00m^3/sec	On 24/10/1984	WL 0.00m
Remarks				
The flow fluctuation on the gauging station is controlled by the constructed weir upstream				


Katuma River at Sitalike
Station No. 3C8
N
31.1° E
31.2° E
6.4° S
6.5° S
6.6° S
6.7° S
To Mpanda
Mpanda River
Katuma River
Mpanda River
Sitalike
3C8
To Sumbawanga
To Usevia
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Catchment Boundary
0 1.25 2.5 5 7.5 10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3C8
Station Name: Katuma River at Sitalike
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 6:37:46 S | Longitude: 31: 8:48 E | Elevation: 975.0 metres | Area: 422.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	-	-	0.019	1.608
2	-	-	-	-	-	-	-	-	-	-	0.029	1.679
3	-	-	-	-	-	-	-	-	-	-	0.014	1.607
4	-	-	-	-	-	-	-	-	-	-	0.026	1.679
5	-	-	-	-	-	-	-	-	-	-	0.037	1.781
6	-	-	-	-	-	-	-	-	-	-	0.039	2.538
7	-	-	-	-	-	-	-	-	-	-	0.053	11.624
8	-	-	-	-	-	-	-	-	-	-	0.061	15.202
9	-	-	-	-	-	-	-	-	-	-	0.226	16.958
10	-	-	-	-	-	-	-	-	-	-	0.795	19.754
11	-	-	-	-	-	-	-	-	-	-	1.573	20.724
12	-	-	-	-	-	-	-	-	-	-	1.353	20.760
13	-	-	-	-	-	-	-	-	-	-	1.045	22.167
14	-	-	-	-	-	-	-	-	-	-	0.749	23.459
15	-	-	-	-	-	-	-	-	-	-	0.581	25.186
16	-	-	-	-	-	-	-	-	-	-	0.499	27.863
17	-	-	-	-	-	-	-	-	-	-	0.408	30.380
18	-	-	-	-	-	-	-	-	-	-	0.368	31.789
19	-	-	-	-	-	-	-	-	-	0.000	0.487	32.151
20	-	-	-	-	-	-	-	-	-	0.000	0.416	9.279
21	-	-	-	-	-	-	-	-	-	0.000	0.490	7.359
22	-	-	-	-	-	-	-	-	-	0.000	0.474	7.138
23	-	-	-	-	-	-	-	-	-	0.001	0.503	6.791
24	-	-	-	-	-	-	-	-	-	0.047	0.597	6.715
25	-	-	-	-	-	-	-	-	-	0.038	0.675	7.585
26	-	-	-	-	-	-	-	-	-	0.020	1.013	8.456
27	-	-	-	-	-	-	-	-	-	0.010	1.268	9.209
28	-	-	-	-	-	-	-	-	-	0.002	1.422	10.374
29	-		-	-	-	-	-	-	-	0.025	1.554	10.833
30	-		-	-	-	-	-	-	-	0.031	1.668	10.726
31	-		-		-		-	-		0.024		10.448
Mean	-	-	-	-	-	-	-	-	-	-	0.615	13.349
Flow (MCM)	-	-	-	-	-	-	-	-	-	-	1.593	35.754
Maximum	-	-	-	-	-	-	-	-	-	-	1.668	32.151
Minimum	-	-	-	-	-	-	-	-	-	-	0.014	1.607
Runoff (mm)	-	-	-	-	-	-	-	-	-	-	3.775	84.726

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3C8 **Year:** 2018
Station Name: Katuma River at Sitalike
Time-Series Type: Flow (cumecs)

Latitude: 6:37:46 S Longitude: 31: 8:48 E Elevation: 975.0 metres Area: 422.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	10.527	10.846	11.034	15.403	26.438	11.720	3.916	3.826	0.499	-	-	-
2	10.606	10.833	11.048	15.276	25.585	11.498	3.900	3.632	0.474	-	-	0.866
3	10.238	10.646	10.859	15.530	24.866	11.088	-	3.342	0.450	-	-	0.807
4	10.343	10.739	10.715	15.865	24.648	11.048	-	3.265	0.403	-	-	1.160
5	10.819	10.859	8.928	17.006	24.256	10.846	-	3.144	0.359	-	-	2.328
6	10.739	11.048	8.928	17.491	23.384	10.713	-	3.078	0.320	-	-	1.760
7	10.646	11.075	10.715	17.860	22.486	10.330	-	2.968	0.315	-	-	1.949
8	10.833	11.265	10.859	17.405	21.477	10.108	-	2.803	0.278	-	-	2.034
9	10.846	11.388	11.048	17.775	20.906	9.902	-	2.684	0.260	-	-	1.940
10	10.846	11.484	11.061	18.269	20.705	9.698	-	2.622	0.244	-	-	1.038
11	10.726	11.292	11.048	18.720	20.560	9.370	-	2.473	0.239	-	-	0.899
12	10.408	11.265	10.859	19.310	20.397	8.914	-	2.324	0.207	-	-	1.054
13	9.915	11.061	10.715	19.753	20.092	8.622	-	1.714	0.191	-	-	1.359
14	9.508	10.859	9.949	19.047	19.576	8.241	-	1.554	0.175	-	-	1.823
15	9.407	10.846	10.819	18.995	18.995	8.113	-	1.474	0.161	-	-	2.278
16	9.383	10.819	10.448	19.631	18.152	7.858	7.493	1.427	0.146	-	-	2.467
17	8.999	10.435	10.540	23.547	16.730	7.505	7.471	1.346	0.119	-	-	2.684
18	8.791	10.225	10.846	30.259	15.438	7.315	7.138	1.302	0.107	-	-	2.991
19	8.526	10.225	11.075	36.879	15.010	7.138	6.952	1.196	0.095	-	-	3.506
20	8.419	10.421	11.470	41.798	14.499	6.779	6.705	1.121	0.074	-	-	3.769
21	8.407	10.726	11.567	44.283	13.726	6.462	6.294	1.112	0.055	-	-	4.161
22	8.253	10.846	12.496	46.565	13.546	6.274	6.110	1.040	0.046	-	-	4.525
23	8.431	10.846	13.265	49.649	13.221	5.876	5.867	0.945	0.039	-	-	5.026
24	8.779	10.954	13.398	50.502	13.089	5.638	5.542	0.907	0.037	-	-	5.560
25	8.792	10.940	14.438	48.790	12.972	5.328	4.806	0.842	0.025	-	-	6.110
26	10.124	10.540	14.330	45.455	12.870	5.016	4.840	0.779	0.014	-	-	6.578
27	10.540	10.434	14.637	42.839	12.841	4.741	4.587	0.718	0.002	-	-	7.406
28	10.833	10.646	14.792	36.602	12.610	4.525	4.376	0.660	0.000	-	-	8.278
29	10.846		15.277	31.760	12.396	4.306	4.228	0.604	-	-	-	8.611
30	10.846		15.625	28.411	12.182	4.101	3.983	0.553	-	-	-	8.962
31	10.846		15.529		11.929		3.900	0.547		-		8.937
Mean	9.910	10.842	11.881	28.023	17.922	7.969	-	1.806	-	-	-	-
Flow (MCM)	26.544	26.228	31.823	72.634	48.002	20.656	-	4.838	-	-	-	-
Maximum	10.846	11.484	15.625	50.502	26.438	11.720	-	3.826	-	-	-	-
Minimum	8.253	10.225	8.928	15.276	11.929	4.101	-	0.547	-	-	-	-
Runoff (mm)	62.901	62.151	75.410	172.119	113.749	48.948	-	11.465	-	-	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3C8
Station Name: Katuma River at Sitalike
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 6:37:46 S Longitude: 31: 8:48 E Elevation: 975.0 metres Area: 422.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.270	14.041	17.623	21.291	15.292	8.324	3.639	0.550	0.000	0.000	-	-
2	9.420	14.193	17.928	20.434	14.901	8.136	3.512	0.502	0.000	0.000	-	-
3	9.889	14.638	18.424	19.949	14.514	8.031	3.334	0.474	0.000	0.000	-	-
4	10.108	15.010	18.838	19.400	14.057	7.857	3.205	0.427	0.000	0.000	-	-
5	10.304	15.276	19.258	18.752	13.696	7.686	3.085	0.381	0.000	0.000	-	-
6	10.421	15.545	19.504	18.116	13.428	7.663	2.961	0.338	0.000	0.000	-	-
7	10.633	15.929	18.995	16.874	13.074	7.505	2.796	0.298	0.000	0.000	-	-
8	10.846	16.301	18.527	16.430	12.624	7.404	2.582	0.243	0.000	0.000	-	-
9	10.967	16.659	18.996	15.816	12.182	7.226	2.407	0.177	0.000	0.000	-	-
10	11.265	16.741	19.522	15.529	11.942	7.039	2.214	0.133	0.000	0.000	-	-
11	11.512	16.058	19.841	15.371	11.733	6.801	2.101	0.118	0.000	0.000	-	-
12	11.929	15.561	20.127	15.026	11.608	6.694	1.914	0.081	0.000	0.000	-	-
13	12.182	15.387	20.397	14.715	11.498	6.450	1.774	0.017	0.000	0.000	-	-
14	12.624	15.151	20.433	15.010	11.388	6.212	1.646	0.007	0.000	0.000	-	-
15	13.074	14.792	20.705	15.057	11.279	6.109	1.591	0.006	0.000	0.000	-	-
16	13.339	14.529	20.997	15.625	11.265	5.957	1.511	0.006	0.000	0.000	-	-
17	13.592	14.392	21.309	15.929	10.967	5.806	1.427	0.006	0.000	0.000	-	-
18	14.058	14.042	21.735	16.284	10.833	5.776	1.307	0.002	0.000	0.000	-	-
19	14.979	13.726	22.033	16.561	10.540	5.491	1.158	0.001	0.000	0.000	-	-
20	15.342	13.846	22.466	16.956	10.317	5.327	1.112	0.028	0.000	0.000	-	-
21	14.132	14.270	22.655	17.121	10.199	5.184	1.049	0.052	0.000	0.000	-	-
22	12.643	14.638	23.093	17.725	10.018	5.091	1.009	0.026	0.000	0.000	-	-
23	12.098	15.026	23.535	17.996	9.992	4.877	0.941	0.019	0.000	0.000	-	-
24	11.942	15.293	23.709	17.640	9.812	4.740	0.903	0.014	0.000	0.000	-	-
25	11.761	15.641	23.981	17.354	9.698	4.588	0.846	0.013	0.000	0.000	-	-
26	12.168	16.041	23.904	17.088	9.483	4.367	0.810	0.007	0.000	0.000	-	-
27	12.510	16.577	24.002	16.823	9.208	4.168	0.775	0.003	0.000	0.000	-	-
28	12.856	17.205	23.963	16.561	9.097	4.033	0.722	0.000	0.000	0.000	-	-
29	13.192		23.420	16.300	8.901	3.900	0.689	0.000	0.000	0.000	-	-
30	13.339		22.769	15.897	8.695	3.768	0.632	0.000	0.000	0.000	-	-
31	13.785		22.034		8.431		0.600	0.000		0.000		-
Mean	12.135	15.232	21.120	16.988	11.312	6.074	1.750	0.127	0.000	0.000	-	-
Flow (MCM)	32.502	36.850	56.568	44.032	30.298	15.743	4.687	0.340	0.000	0.000	-	-
Maximum	15.342	17.205	24.002	21.291	15.292	8.324	3.639	0.550	0.000	0.000	-	-
Minimum	9.270	13.726	17.623	14.715	8.431	3.768	0.600	0.000	0.000	0.000	-	-
Runoff (mm)	77.019	87.323	134.048	104.341	71.796	37.305	11.107	0.805	0.000	0.000	-	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

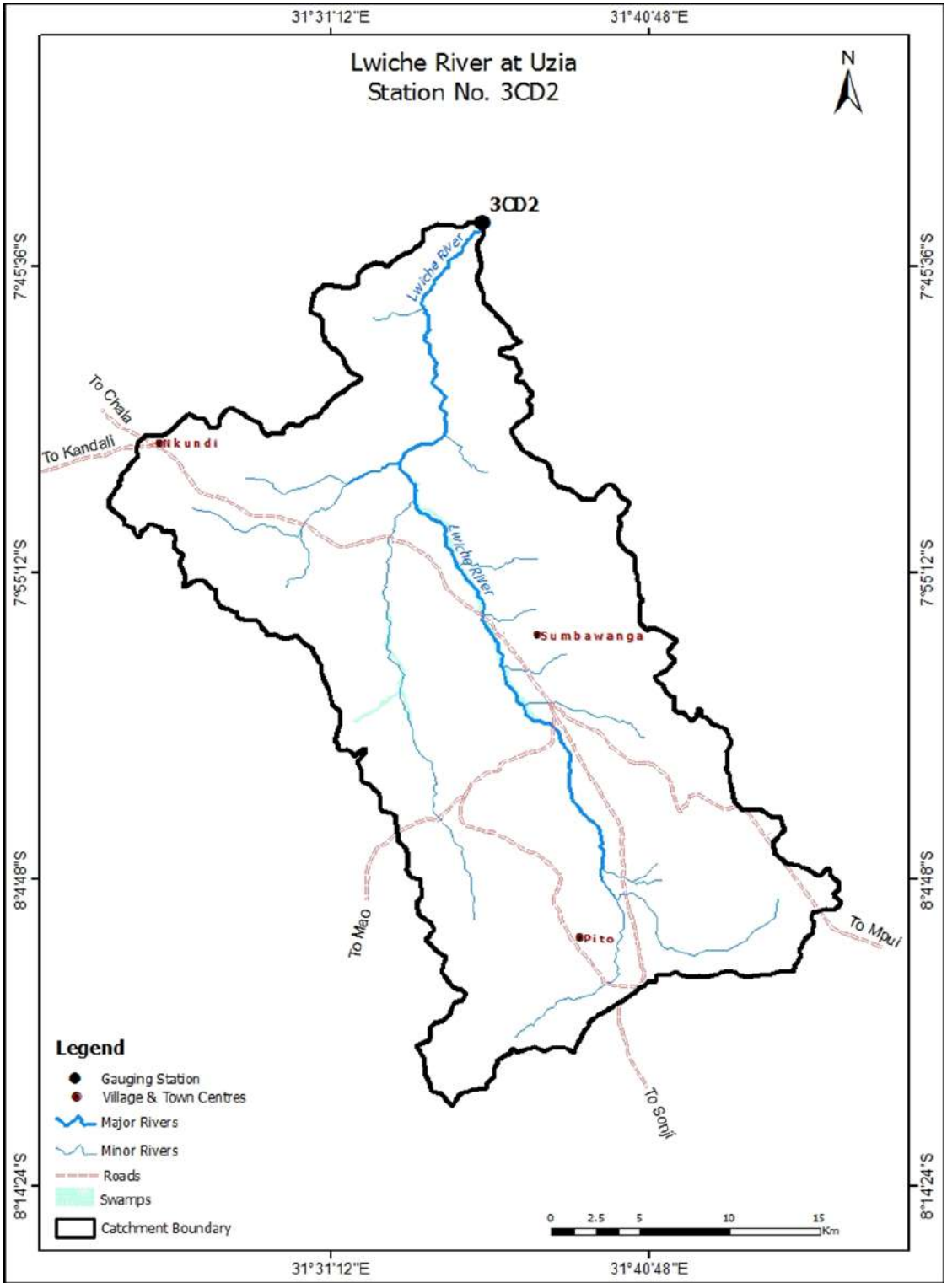
Lwiche River at Uzia			
Station No: 3CD2		Established: 24/05/1975	
Coordinates:		Altitude (m.a.m.s.l): 947	
Lat: -7.7372	Long: 31.5960	Catchment Area (km²): 843	
Description of the Catchment:			
Actively induced by natives, forest hills and mainly vegetation			

Station Details			
1. Staff Gauges	Range: 0 – 4m	A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical	MSL.Z.G.L: -	
2. Automatic Recorder	-	Date installed: -	
3. Benchmark	Iron pin in standard concrete beacon firmly embedded on ground near gauge 3 – 4m.		
BM Assumed Datum: 5.306m	N.M.M.S.L: -	TBM: -	
4. Control	Permanent with rocky bed and banks		
5. Access	Accessible throughout the year, 60km from Sumbawanga town to the station via Sumbawanga – Majimoto road		

Records	Period	Quality
Water Level:	01/02/2014 – 31/12/2019	1.2.2
Discharge:	01/02/2014 – 31/12/2019	2.2.2

Extremes:				
	Max. Recorded	42.08m³/sec	On 27/11/2019	WL 2.70m
	Min. Recorded	-	On 24/10/2012	WL 0.02m

Remarks


Lwiche River at Uzia
Station No. 3CD2
N
31°31'12"E
31°40'48"E
7°45'36"S
7°55'12"S
8°4'48"S
8°14'24"S
3CD2
Lwiche River
To Chala
To Kandali
Mikundi
Lwiche River
Sumbawanga
Pito
To Mao
To Mpui
To Sonji
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Swamps
Catchment Boundary
0 2.5 5 10 15
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3CD2 **Year:** 2014
Station Name: Lwiche River at Uzia
Time-Series Type: Flow (cumecs)

Latitude: 7:44:13 S Longitude: 31:35:45 E Elevation: 947.0 metres Area: 843.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	4.677	5.439	7.305	4.348	2.856	2.099	1.487	1.052	0.948	1.908	0.743
2	-	4.618	5.343	7.482	4.272	2.850	2.094	1.482	1.048	1.390	2.062	0.878
3	-	5.391	4.823	7.316	4.156	2.760	2.020	1.482	1.048	1.146	2.092	1.111
4	-	5.439	4.037	7.084	4.083	2.753	2.014	1.482	1.048	0.786	1.577	3.624
5	-	5.439	3.584	7.075	3.954	2.747	2.014	1.478	1.048	0.702	1.215	1.440
6	-	5.439	3.187	8.754	3.882	2.659	2.009	1.419	1.048	0.665	1.108	1.440
7	-	5.439	2.955	9.690	3.773	2.653	1.937	1.414	1.045	0.642	1.048	1.317
8	-	5.439	2.710	8.565	3.765	2.653	1.932	1.410	0.997	0.602	0.968	1.193
9	-	5.439	2.507	7.662	3.704	2.647	1.927	1.353	0.991	0.583	0.780	1.558
10	-	5.410	2.366	8.106	3.643	2.561	1.857	1.349	0.941	0.562	0.642	1.892
11	-	4.939	2.288	8.461	3.767	2.555	1.852	1.349	0.891	0.474	0.597	1.699
12	-	4.793	3.221	7.917	3.820	2.555	1.852	1.349	0.842	0.610	0.476	1.483
13	-	5.124	5.031	7.602	3.651	2.555	1.852	1.349	0.794	0.665	0.365	1.365
14	-	5.248	5.420	6.872	3.583	2.555	1.852	1.361	0.749	0.778	0.278	1.092
15	-	4.706	5.421	6.180	3.516	2.549	1.847	1.539	0.683	0.988	0.218	0.943
16	-	4.349	5.873	5.838	3.413	2.465	1.779	1.548	0.372	1.069	0.147	0.856
17	-	4.148	5.596	5.606	3.348	2.453	1.774	1.482	0.352	1.018	0.109	1.123
18	-	3.947	5.586	5.518	3.291	2.372	1.774	1.414	0.352	0.945	0.102	0.760
19	-	3.591	5.509	5.439	3.228	2.366	1.774	1.353	0.352	0.916	0.102	0.804
20	-	4.267	6.298	5.439	3.075	2.366	1.774	1.345	0.338	0.872	0.183	2.152
21	-	4.984	7.255	5.439	3.069	2.366	1.769	1.289	0.325	0.955	2.263	1.798
22	-	4.775	8.008	5.429	3.069	2.360	1.702	1.285	0.312	0.894	2.631	1.297
23	-	4.624	6.553	5.285	3.015	2.280	1.698	1.281	0.297	0.842	3.079	1.234
24	-	18.817	5.807	5.218	2.961	2.269	1.698	1.227	0.278	0.797	2.510	1.652
25	-	7.182	8.000	5.362	2.961	2.191	1.693	1.219	0.310	0.791	1.848	5.538
26	-	6.034	7.973	5.352	2.961	2.186	1.628	1.167	0.353	0.746	1.484	1.705
27	-	5.828	13.466	5.059	2.961	2.180	1.624	1.159	0.396	1.002	1.258	1.808
28	-	5.538	9.103	4.775	2.909	2.104	1.624	1.108	0.478	1.077	1.163	1.853
29	-		7.510	4.624	2.863	2.099	1.588	1.105	0.534	1.207	1.050	2.801
30	-		8.869	4.485	2.948	2.099	1.552	1.105	0.643	1.470	0.889	2.121
31	-		8.094		2.863		1.548	1.101		1.509		1.927
Mean	-	5.558	5.737	6.498	3.447	2.469	1.811	1.338	0.664	0.892	1.138	1.652
Flow (MCM)	-	13.446	15.365	16.843	9.232	6.399	4.852	3.584	1.721	2.389	2.951	4.424
Maximum	-	18.817	13.466	9.690	4.348	2.856	2.099	1.548	1.052	1.509	3.079	5.538
Minimum	-	3.591	2.288	4.485	2.863	2.099	1.548	1.101	0.278	0.474	0.102	0.743
Runoff (mm)	-	15.950	18.226	19.980	10.951	7.591	5.755	4.252	2.041	2.834	3.500	5.248

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3CD2 **Year:** 2015
Station Name: Lwiche River at Uzia
Time-Series Type: Flow (cumecs)

Latitude: 7:44:13 S Longitude: 31:35:45 E Elevation: 947.0 metres Area: 843.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.779	4.034	4.182	2.502	2.909	1.759	1.448	0.749	-	-	0.019	4.820
2	1.661	3.876	5.990	4.543	2.805	2.280	1.414	0.749	-	-	0.036	4.372
3	2.147	3.554	5.528	5.630	2.703	2.275	1.414	0.727	-	-	0.114	3.534
4	2.097	5.278	6.387	4.219	2.556	2.230	1.381	0.705	-	-	0.124	3.195
5	4.321	4.973	6.890	6.337	2.407	2.180	1.349	-	-	-	0.092	5.142
6	2.924	7.183	8.483	7.103	2.187	2.099	1.349	-	-	-	0.103	2.851
7	2.923	7.027	8.642	5.090	2.014	2.020	1.317	-	-	-	0.264	4.926
8	2.521	7.271	7.788	4.143	1.897	2.014	1.285	-	-	-	0.366	2.681
9	4.944	6.506	6.800	3.361	1.808	1.973	1.285	-	-	-	0.337	2.153
10	3.725	5.619	6.164	2.685	1.702	1.932	1.281	-	-	-	0.285	2.457
11	3.131	5.294	5.382	2.085	1.661	1.932	1.227	-	-	-	0.223	3.210
12	2.909	5.285	5.133	1.979	1.624	1.892	1.193	-	-	-	0.218	3.609
13	2.654	5.116	4.840	3.622	1.584	1.852	1.163	-	-	-	0.318	4.356
14	2.413	5.208	4.545	4.763	1.448	1.813	1.134	-	-	-	0.434	4.264
15	2.275	6.551	4.150	3.611	1.353	1.774	1.105	-	-	-	0.492	4.463
16	2.236	5.459	3.766	2.812	1.349	1.774	1.105	-	-	-	4.783	6.298
17	2.409	5.237	3.472	2.467	1.349	1.774	1.077	-	-	-	9.856	6.926
18	2.459	5.410	3.298	2.230	1.317	1.736	1.048	-	-	-	7.503	6.566
19	2.320	5.117	3.235	2.057	1.285	1.698	1.048	-	-	-	5.853	5.353
20	2.159	4.541	3.063	1.887	1.285	1.698	1.048	-	-	-	7.693	8.121
21	2.253	5.308	2.805	1.591	1.285	1.661	1.021	-	-	-	6.895	8.840
22	2.834	4.412	2.635	1.290	1.285	1.624	0.994	-	-	-	4.378	7.453
23	3.367	4.955	2.935	1.099	1.254	1.624	0.994	-	-	-	4.999	7.723
24	3.568	4.285	2.961	2.776	1.223	1.624	0.994	-	-	-	4.003	7.855
25	6.177	4.100	2.955	4.159	1.223	1.624	0.991	-	-	-	2.858	7.020
26	4.771	3.890	2.863	3.587	1.223	1.624	0.945	-	-	-	5.446	6.796
27	4.868	3.758	2.805	3.727	1.223	1.588	0.938	-	-	-	7.495	5.605
28	5.785	3.576	3.022	3.962	1.193	1.552	0.869	-	-	-	13.016	5.070
29	5.126		3.897	3.522	1.163	1.517	0.841	-	-	-	7.021	5.656
30	4.608		4.044	3.029	1.163	1.482	0.838	-	-	0.011	4.725	4.788
31	4.580		3.882		1.163		0.774	-		0.012		3.964
Mean	3.288	5.101	4.598	3.396	1.633	1.821	1.125	-	-	-	3.332	5.163
Flow (MCM)	8.808	12.340	12.316	8.801	4.375	4.719	3.013	-	-	-	8.636	13.830
Maximum	6.177	7.271	8.642	7.103	2.909	2.280	1.448	-	-	-	13.016	8.840
Minimum	1.661	3.554	2.635	1.099	1.163	1.482	0.774	-	-	-	0.019	2.153
Runoff (mm)	10.448	14.638	14.609	10.440	5.190	5.598	3.574	-	-	-	10.244	16.406

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3CD2 **Year:** 2016
Station Name: Lwiche River at Uzia
Time-Series Type: Flow (cumecs)

Latitude: 7:44:13 S Longitude: 31:35:45 E Elevation: 947.0 metres Area: 843.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.834	7.897	6.160	5.838	5.933	2.961	2.020	1.548	0.997	-	-	5.846
2	6.094	7.065	5.974	5.828	5.509	2.955	2.014	1.487	0.994	-	-	1.067
3	5.229	6.814	5.478	5.869	6.234	2.863	2.014	1.478	0.994	-	-	1.036
4	14.994	5.998	7.120	6.276	8.139	2.856	2.009	1.419	0.991	-	-	1.983
5	6.622	9.921	6.024	6.924	6.395	2.850	1.937	1.414	0.945	-	-	1.285
6	5.549	9.596	5.493	7.141	5.911	2.760	1.932	1.410	0.941	1.043	-	5.688
7	5.830	7.288	4.409	7.281	5.287	2.753	1.927	1.353	0.941	0.866	-	3.041
8	6.245	6.438	4.189	8.030	4.776	2.747	1.857	1.349	0.938	0.732	-	2.086
9	6.364	6.382	4.081	7.688	4.485	2.653	1.852	1.349	0.894	-	-	1.267
10	11.813	11.611	6.515	6.704	4.214	2.561	1.852	1.345	0.891	-	0.126	1.116
11	9.823	7.230	8.346	6.013	4.026	2.555	1.847	1.289	0.891	-	0.115	1.212
12	11.042	6.394	7.040	5.756	3.954	2.549	1.779	1.285	0.887	-	0.127	1.060
13	10.559	8.185	6.995	5.528	3.882	2.465	1.774	1.285	0.845	-	0.308	0.941
14	10.681	6.960	6.267	5.429	3.765	2.453	1.769	1.285	0.838	-	0.448	0.968
15	8.336	6.319	5.680	5.285	3.643	2.372	1.702	1.281	0.797	-	0.268	1.067
16	7.345	6.571	9.094	5.059	3.523	2.366	1.698	1.227	0.794	-	0.215	2.163
17	7.354	7.486	5.902	4.838	3.413	2.366	1.698	1.223	0.848	-	0.178	1.044
18	8.117	7.369	5.391	4.695	3.406	2.360	1.698	1.223	1.509	-	0.191	0.904
19	8.527	7.783	6.321	4.554	3.399	2.280	1.698	1.223	1.128	-	0.208	1.088
20	7.710	7.227	15.542	4.433	3.291	2.275	1.698	1.219	1.095	-	0.468	1.144
21	7.211	6.622	7.711	4.599	3.179	2.275	1.698	1.167	0.965	-	0.592	2.112
22	10.519	6.534	6.192	5.324	3.075	2.269	1.693	1.163	0.848	-	0.445	2.165
23	11.406	6.733	5.867	6.774	3.069	2.191	1.628	1.163	0.838	-	0.363	1.967
24	10.622	6.351	7.575	6.050	3.062	2.186	1.624	1.159	0.794	-	0.303	3.366
25	9.331	5.921	6.090	5.677	2.968	2.186	1.624	1.108	0.749	-	0.287	2.720
26	7.738	5.499	5.963	5.362	2.961	2.186	1.624	1.105	0.707	-	0.244	2.106
27	6.891	6.247	5.537	5.059	2.961	2.186	1.624	1.105	-	-	0.829	1.695
28	6.427	5.837	5.586	4.838	2.961	2.180	1.624	1.101	-	-	0.868	1.263
29	6.169	7.125	5.547	4.695	2.955	2.104	1.619	1.052	-	-	0.589	1.496
30	6.969		6.035	5.055	2.869	2.094	1.556	1.048	-	-	0.890	1.604
31	7.260		5.940		2.955		1.552	1.045		-		3.263
Mean	8.246	7.152	6.454	5.753	4.071	2.462	1.763	1.255	-	-	-	1.928
Flow (MCM)	22.085	17.919	17.286	14.913	10.904	6.381	4.721	3.361	-	-	-	5.163
Maximum	14.994	11.611	15.542	8.030	8.139	2.961	2.020	1.548	-	-	-	5.846
Minimum	5.229	5.499	4.081	4.433	2.869	2.094	1.552	1.045	-	-	-	0.904
Runoff (mm)	26.198	21.257	20.505	17.690	12.934	7.569	5.600	3.987	-	-	-	6.125

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3CD2
Station Name: Lwiche River at Uzia
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 7:44:13 S Longitude: 31:35:45 E Elevation: 947.0 metres Area: 843.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.670	4.381	5.830	5.921	2.909	1.163	0.622	0.251	0.102	0.035	0.180	0.426
2	5.283	3.228	5.658	6.507	2.703	1.159	0.585	0.251	0.102	0.035	0.146	0.313
3	3.046	5.204	6.482	5.848	2.555	1.108	0.583	0.250	0.102	0.035	0.053	1.514
4	2.299	5.884	7.282	5.676	2.459	1.105	0.580	0.232	0.102	0.035	0.121	0.774
5	2.253	6.414	7.824	5.508	2.366	1.101	0.547	0.231	0.102	0.035	0.138	0.660
6	2.005	6.028	6.861	4.987	2.269	1.052	0.545	0.231	0.102	0.034	0.312	0.564
7	1.950	5.353	6.076	4.418	2.110	1.045	0.545	0.230	0.102	0.029	0.382	0.443
8	1.555	4.716	5.383	3.893	2.099	0.997	0.545	0.215	0.102	0.034	1.885	0.615
9	1.836	5.277	4.734	3.465	2.057	0.991	0.543	0.213	0.101	0.028	0.714	1.913
10	5.029	4.832	3.355	3.131	2.009	0.945	0.511	0.199	0.091	0.028	0.672	1.227
11	6.030	4.211	3.446	2.915	1.932	0.941	0.507	0.198	0.090	0.035	6.741	-
12	4.898	2.583	2.815	2.811	1.857	0.941	0.475	0.198	0.090	0.043	0.714	-
13	6.242	3.192	2.318	2.843	1.813	0.916	0.444	0.197	0.090	0.082	0.303	-
14	6.375	3.512	2.022	3.010	1.774	0.891	0.440	0.184	0.090	0.194	0.242	-
15	5.271	2.903	4.992	6.543	1.736	0.887	0.412	0.182	0.090	0.123	0.214	-
16	4.994	2.936	4.796	3.469	1.661	0.845	0.409	0.169	0.080	0.096	0.198	-
17	4.799	2.754	6.041	3.477	1.588	0.838	0.381	0.167	0.079	0.079	0.175	-
18	3.905	2.557	6.487	9.406	1.552	0.794	0.352	0.154	0.079	0.070	0.154	-
19	3.225	2.188	6.180	5.761	1.517	0.751	0.327	0.153	0.079	0.064	0.147	-
20	2.860	1.849	6.171	5.461	1.482	0.749	0.325	0.153	0.079	0.060	0.139	-
21	2.546	2.351	6.159	6.211	1.482	0.749	0.325	0.153	0.070	0.059	0.130	-
22	2.489	4.820	5.984	5.238	1.448	0.749	0.323	0.140	0.069	0.051	0.158	-
23	2.320	4.944	5.606	4.911	1.414	0.746	0.301	0.127	0.069	0.043	0.523	-
24	2.121	4.113	5.498	4.556	1.381	0.707	0.299	0.126	0.060	0.042	0.492	-
25	2.699	2.956	5.068	4.214	1.317	0.705	0.299	0.126	0.060	0.042	0.522	-
26	2.231	2.613	4.830	3.954	1.254	0.702	0.299	0.126	0.060	0.042	0.418	-
27	2.062	2.095	5.450	3.645	1.223	0.665	0.297	0.126	0.060	0.047	0.430	-
28	2.441	5.265	5.247	3.406	1.193	0.662	0.276	0.115	0.055	0.265	0.617	-
29	1.716		5.488	3.291	1.163	0.662	0.275	0.114	0.035	3.827	0.606	-
30	1.773		5.677	3.124	1.163	0.660	0.273	0.113	0.035	0.399	0.468	-
31	3.323		8.124		1.163		0.253	0.108		0.186		-
Mean	3.298	3.899	5.416	4.587	1.763	0.874	0.416	0.175	0.081	0.199	0.600	-
Flow (MCM)	8.834	9.431	14.505	11.889	4.721	2.266	1.114	0.470	0.210	0.534	1.555	-
Maximum	6.375	6.414	8.124	9.406	2.909	1.163	0.622	0.251	0.102	3.827	6.741	-
Minimum	1.555	1.849	2.022	2.811	1.163	0.660	0.253	0.108	0.035	0.028	0.053	-
Runoff (mm)	10.479	11.188	17.207	14.103	5.601	2.688	1.322	0.557	0.249	0.633	1.845	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3CD2 **Year:** 2018
Station Name: Lwiche River at Uzia
Time-Series Type: Flow (cumecs)

Latitude: 7:44:13 S Longitude: 31:35:45 E Elevation: 947.0 metres Area: 843.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	5.401	4.520	-	3.531	2.186	1.552	-	-	0.191	0.515
2	-	-	5.439	4.713	-	3.516	2.186	1.548	-	-	0.470	0.261
3	-	-	5.439	5.211	-	3.413	2.180	1.487	-	-	0.220	0.248
4	-	-	5.410	4.821	-	3.391	2.104	1.478	-	-	0.183	1.859
5	-	-	5.165	5.136	5.439	3.242	2.094	1.419	-	-	0.168	1.058
6	-	-	4.514	4.530	5.439	3.179	2.020	1.410	-	-	0.156	0.394
7	-	5.439	4.092	4.298	5.439	3.075	2.014	1.353	-	-	0.167	0.296
8	-	5.439	3.767	4.332	5.439	3.062	2.009	1.341	-	-	0.167	1.184
9	-	5.439	3.487	5.231	5.439	2.968	1.932	1.227	-	-	0.154	3.179
10	-	5.439	3.413	5.439	5.429	2.961	1.857	1.163	-	-	0.153	1.364
11	-	5.420	3.457	5.439	5.285	2.955	1.852	1.105	-	-	0.153	2.644
12	-	5.239	3.691	5.439	5.133	2.856	1.852	1.048	-	-	0.141	1.846
13	-	4.478	5.194	-	4.993	2.760	1.852	0.997	-	-	0.140	2.046
14	-	2.891	5.420	-	4.975	2.753	1.847	0.994	-	-	0.141	2.051
15	-	3.236	5.439	-	4.884	2.753	1.779	0.991	-	-	0.165	2.258
16	-	2.922	5.439	-	5.401	2.747	1.774	0.945	-	-	0.154	3.562
17	-	2.703	5.439	-	5.439	2.659	1.769	0.938	-	-	0.154	3.066
18	-	2.507	5.439	-	5.429	2.647	1.702	0.891	-	-	0.166	3.732
19	-	2.309	5.439	-	5.343	2.561	1.698	0.845	-	-	0.156	3.961
20	-	2.036	5.439	-	5.068	2.555	1.698	0.841	-	-	0.187	3.117
21	-	2.062	5.439	-	4.847	2.549	1.693	0.841	-	-	0.164	2.855
22	-	2.137	5.439	-	4.695	2.465	1.628	0.841	-	-	0.174	4.215
23	-	2.104	5.439	-	4.554	2.459	1.624	0.841	-	-	0.189	4.471
24	-	2.088	5.439	-	4.425	2.453	1.619	0.838	-	-	0.311	4.362
25	-	2.063	5.439	-	4.407	2.372	1.556	0.797	-	-	0.295	4.254
26	-	3.590	5.429	-	4.281	2.366	1.552	0.794	-	0.153	0.227	4.148
27	-	5.262	5.294	-	4.148	2.360	1.552	0.791	-	0.153	0.199	4.044
28	-	4.726	5.333	-	4.093	2.280	1.556	0.751	-	0.153	0.183	3.941
29	-		5.068	-	4.971	2.269	1.619	0.749	-	0.153	0.211	3.840
30	-		4.847	-	3.839	2.191	1.619	-	-	0.141	1.394	4.041
31	-		4.749		3.643		1.556	-		0.154		3.004
Mean	-	-	4.982	-	-	2.778	1.806	-	-	-	0.231	2.639
Flow (MCM)	-	-	13.344	-	-	7.201	4.837	-	-	-	0.599	7.069
Maximum	-	-	5.439	-	-	3.531	2.186	-	-	-	1.394	4.471
Minimum	-	-	3.413	-	-	2.191	1.552	-	-	-	0.140	0.248
Runoff (mm)	-	-	15.829	-	-	8.542	5.737	-	-	-	0.711	8.385

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 3CD2 **Year:** 2019
Station Name: Lwiche River at Uzia
Time-Series Type: Flow (cumecs)

Latitude: 7:44:13 S Longitude: 31:35:45 E Elevation: 947.0 metres Area: 843.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.336	4.629	4.777	7.211	2.928	1.662	0.662	0.352	0.114	0.042	0.028	2.281
2	1.956	5.242	5.010	12.627	3.096	1.526	0.662	0.350	0.113	0.047	0.028	1.891
3	2.475	5.221	5.045	11.135	2.915	1.419	0.662	0.327	0.102	0.118	0.022	6.776
4	2.597	5.171	5.080	9.873	2.811	1.349	0.662	0.323	0.091	0.092	0.022	14.061
5	1.931	5.121	5.115	8.304	2.753	1.285	0.662	0.314	0.090	0.090	0.022	6.886
6	1.675	5.071	5.151	6.732	2.659	1.227	0.662	0.323	0.090	0.089	0.021	5.843
7	1.561	5.021	5.186	5.512	2.647	1.219	0.662	0.301	0.080	0.071	0.016	6.809
8	1.509	4.972	5.222	5.145	2.561	1.167	0.660	0.297	0.079	0.069	0.016	4.074
9	1.403	4.923	5.258	6.460	2.549	1.163	0.624	0.276	0.079	0.068	0.016	3.040
10	1.606	4.874	5.316	7.772	2.459	1.159	0.622	0.273	0.064	0.044	0.016	2.554
11	1.565	4.826	5.429	15.641	2.366	1.108	0.619	0.253	0.087	0.042	0.021	2.888
12	1.762	4.778	5.547	11.089	2.275	1.105	0.585	0.250	0.090	0.042	0.021	5.687
13	2.316	4.730	5.666	8.901	2.186	1.101	0.583	0.232	0.090	0.042	0.016	6.165
14	2.304	4.683	5.787	10.435	2.104	1.052	0.583	0.231	0.090	0.042	0.016	7.370
15	3.946	4.636	5.909	8.873	2.099	1.048	0.583	0.230	0.079	0.042	0.016	6.745
16	4.599	4.589	6.033	6.446	2.099	1.048	0.583	0.214	0.069	0.035	0.020	4.756
17	4.472	4.402	6.159	4.964	2.094	1.045	0.580	0.199	0.056	0.035	0.096	3.255
18	4.348	4.075	6.987	4.183	2.014	0.997	0.543	0.197	0.051	0.035	0.114	3.320
19	4.226	3.986	5.460	3.836	1.932	0.994	0.479	0.184	0.051	0.043	0.135	4.000
20	4.106	4.293	4.504	3.583	1.852	0.991	0.475	0.182	0.050	0.046	0.396	5.796
21	4.236	4.491	4.027	3.349	1.774	0.945	0.473	0.169	0.043	0.042	0.198	4.887
22	3.243	4.695	3.727	3.180	1.698	0.941	0.444	0.168	0.042	0.042	0.135	7.575
23	3.543	4.904	3.727	3.822	1.628	0.938	0.442	0.167	0.043	0.042	0.143	9.686
24	3.731	5.120	4.051	4.011	1.624	0.894	0.440	0.154	0.050	0.042	1.674	12.782
25	3.926	5.278	4.082	3.971	1.619	0.891	0.411	0.153	0.051	0.042	1.207	11.715
26	4.126	5.214	7.244	3.727	1.556	0.887	0.382	0.147	0.050	0.035	0.873	10.829
27	4.521	4.972	17.646	3.743	1.548	0.845	0.381	0.140	0.047	0.034	42.080	12.397
28	3.612	4.731	3.997	3.472	1.482	0.836	0.379	0.128	0.043	0.028	15.375	11.698
29	2.978		5.611	3.242	1.419	0.749	0.354	0.132	0.042	0.028	1.661	9.802
30	3.235		5.580	3.069	1.410	0.668	0.352	0.126	0.042	0.028	1.201	9.695
31	3.729		7.244		1.369		0.352	0.115		0.028		9.481
Mean	3.018	4.809	5.664	6.477	2.114	1.075	0.534	0.223	0.069	0.049	2.187	6.927
Flow (MCM)	8.085	11.634	15.170	16.789	5.662	2.787	1.431	0.597	0.179	0.132	5.668	18.554
Maximum	4.599	5.278	17.646	15.641	3.096	1.662	0.662	0.352	0.114	0.118	42.080	14.061
Minimum	1.403	3.986	3.727	3.069	1.369	0.668	0.352	0.115	0.042	0.028	0.016	1.891
Runoff (mm)	9.590	13.800	17.995	19.915	6.716	3.306	1.698	0.708	0.212	0.157	6.724	22.009

Flow (cumecs)

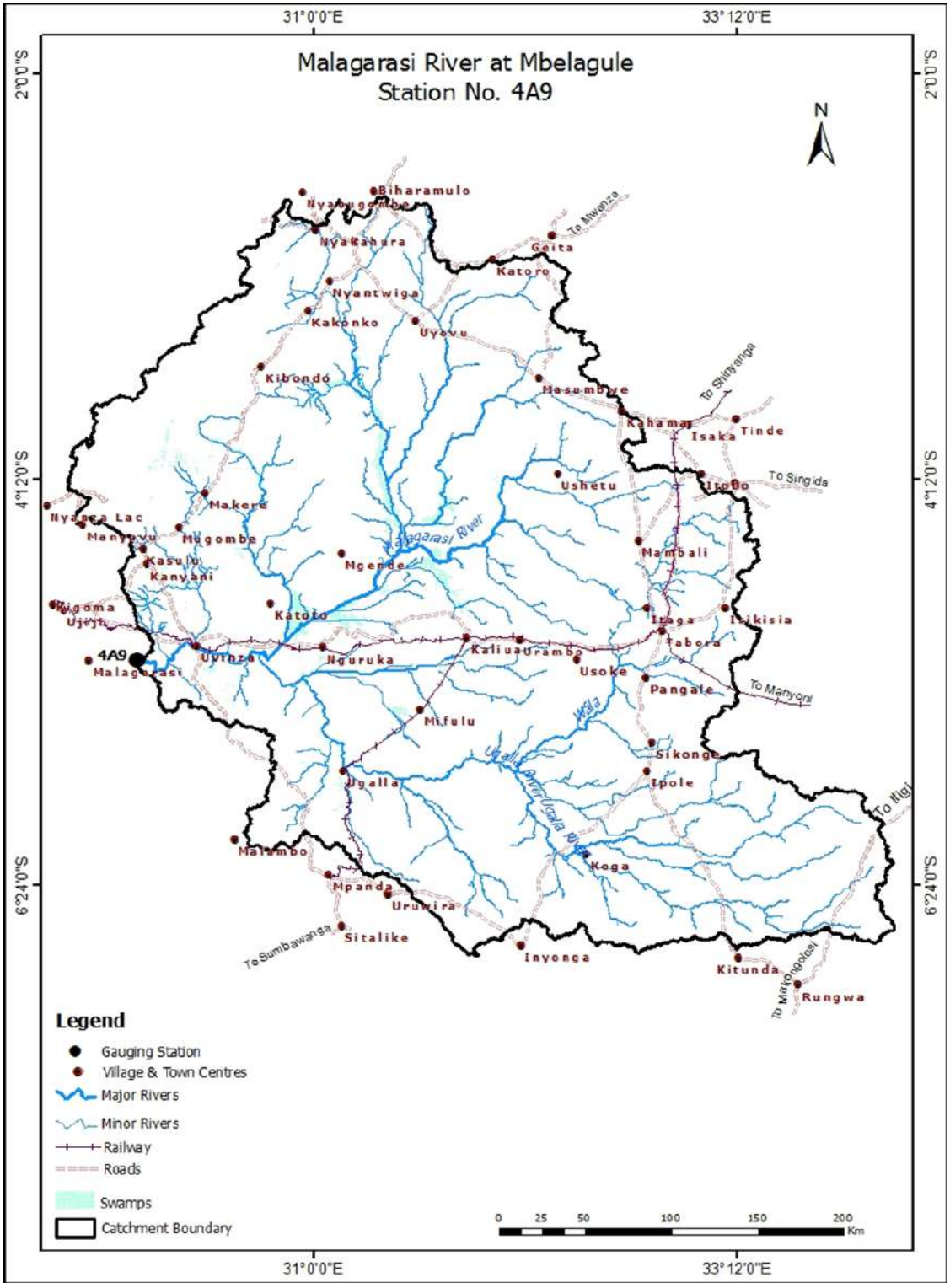
Annual Statistics

Maximum: 42.080 Minimum: 0.016 Mean: 2.762 cumecs
Total: 87.110 MCM Runoff: 103.333 mm

Possible data flags

No data stored "-" Estimated values "e"

Malagarasi River at Mbelagule				
Station No: 4A9			Established: 01/07/1974	
Coordinates:			Altitude (m.a.m.s.l): 857	
Lat: -5.1843	Long: 30.077		Catchment Area (km²): 126,332	
Description of the Catchment:				
Semiarid, hills, swamps and marshlands				
Station Details				
1. Staff Gauges	Range: 0 – 9m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed: 2012	
3. Benchmark	Bolt in concrete at the rock			
BM Assumed Datum: 9.215m		N.M.M.S.L: -	TBM: -	
4. Control	Rock down stream			
5. Access	Accessible throughout the year, 120km from Kigoma town to Kazaroho village via Kigoma – Uvinza road			
Records	Period		Quality	
Water Level:	01/07/2010 – 31/12/2019		1.2.2	
Discharge:	01/07/2010 – 31/12/2019		2.2.2	
Extremes:	Max. Recorded	691.251m³/sec	On 20/02/1998	WL 8.0m
	Min. Recorded	10.111 m³/sec	On 23/12/2005	WL 0.66m
Remarks				
During the maximum water level, water was above last gauge of 8m and was remarked as El nino				


Malagarasi River at Mbelagule
Station No. 4A9
N
31°0'0"E
33°12'0"E
2°0'0"S
4°12'0"S
6°24'0"S
Biharamulo
Nyakahura
Geita
Katoro
Nyantwiga
Kakonko
Uyovu
Kibondo
Nasumbwe
Kahama
Isaka
Tinde
Ushetu
Usoke
To Singida
To Shinyanga
To Mwanza
Makere
Nyamea Lac
Manyovu
Mugombe
Kasulu
Kanyani
Mgende
Malagarasi River
Mambali
Kigoma
Ujiji
Katoto
Itaga
Tabora
Ikikisia
4A9
Malagarasi
Uvinza
Nguruka
Kaliuadamba
Pangale
To Manyoni
Mifulu
Wala
Sikonge
Ugalla
Ugalla River
Ipole
To Itigi
Malambo
Koga
Mpanda
Urumira
Sitalike
To Sumbawanga
Inyonga
Kitunda
Rungwa
To Mbeya
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Railway
Roads
Swamps
Catchment Boundary
0 25 50 100 150 200
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 5:11: 3 S | Longitude: 30: 4:37 E | Elevation: 857.0 metres | Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	153.746	97.817	57.838	28.231	19.243	19.244
2	-	-	-	-	-	-	151.390	93.056	56.806	27.796	17.843	20.995
3	-	-	-	-	-	-	149.549	90.981	55.215	27.279	17.192	22.269
4	-	-	-	-	-	-	146.223	88.112	54.312	27.108	17.120	27.645
5	-	-	-	-	-	-	144.405	85.949	54.088	26.512	17.049	25.092
6	-	-	-	-	-	-	142.106	84.742	53.194	25.920	16.623	24.589
7	-	-	-	-	-	-	140.473	83.542	51.753	25.836	16.552	25.085
8	-	-	-	-	-	-	138.198	81.689	51.422	25.836	16.482	25.335
9	-	-	-	-	-	-	136.743	81.031	50.655	25.836	16.272	26.513
10	-	-	-	-	-	-	135.295	82.879	49.892	25.836	17.626	28.059
11	-	-	-	-	-	-	132.895	80.638	49.675	25.752	18.871	30.619
12	-	-	-	-	-	-	130.511	78.679	48.918	25.251	19.920	32.707
13	-	-	-	-	-	-	128.931	77.903	48.059	25.168	20.225	33.539
14	-	-	-	-	-	-	127.045	74.695	47.311	25.085	21.305	33.539
15	-	-	-	-	-	-	127.202	73.298	46.058	24.589	22.168	32.799
16	-	-	-	-	-	-	124.393	72.290	40.315	24.506	20.917	31.428
17	-	-	-	-	-	-	122.688	71.413	45.215	24.100	20.684	30.079
18	-	-	-	-	-	-	120.378	71.163	45.516	22.254	20.607	29.192
19	-	-	-	-	-	-	118.085	70.291	44.680	25.259	20.072	28.230
20	-	-	-	-	-	-	116.416	69.300	43.851	25.920	19.467	29.192
21	-	-	-	-	-	-	113.552	68.314	43.027	26.427	19.093	29.811
22	-	-	-	-	-	-	112.654	67.333	42.210	26.596	20.074	29.280
23	-	-	-	-	-	-	109.828	66.359	41.399	27.194	21.463	28.841
24	-	-	-	-	-	-	108.204	65.389	40.100	27.538	23.529	30.171
25	-	-	-	-	-	-	106.006	64.426	36.380	26.090	23.690	32.990
26	-	-	-	-	-	-	103.825	63.349	35.135	25.669	22.644	36.672
27	-	-	-	-	-	-	102.381	61.570	34.287	24.508	21.852	40.706
28	-	-	-	-	-	-	100.373	59.809	33.075	23.285	20.762	45.316
29	-		-	-	-	-	98.948	58.878	32.615	22.406	20.072	49.033
30	-		-	-	-	-	96.967	58.762	30.619	20.764	19.467	52.864
31	-		-		-		96.263	58.646		19.618		53.976
Mean	-	-	-	-	-	-	123.731	74.268	45.454	25.296	19.630	31.800
Flow (MCM)	-	-	-	-	-	-	331.402	198.919	117.817	67.752	50.880	85.174
Maximum	-	-	-	-	-	-	153.746	97.817	57.838	28.231	23.690	53.976
Minimum	-	-	-	-	-	-	96.263	58.646	30.619	19.618	16.272	19.244
Runoff (mm)	-	-	-	-	-	-	2.623	1.575	0.933	0.536	0.403	0.674

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	53.866	66.358	67.851	202.603	158.161	132.897	57.954	33.168	21.226	14.356	21.304	67.978
2	56.810	66.358	78.704	230.531	156.457	129.248	56.920	33.726	20.761	14.356	22.332	76.887
3	59.111	66.480	80.768	215.484	153.916	126.265	55.895	34.757	20.607	14.558	25.340	71.925
4	57.840	67.333	82.614	199.136	151.390	121.459	54.313	33.633	20.148	15.996	26.697	68.684
5	55.896	68.314	85.148	191.334	150.049	115.814	53.305	32.247	19.996	17.481	31.895	68.684
6	53.419	69.176	92.136	189.129	149.714	112.355	52.416	31.426	19.542	17.768	32.246	71.040
7	51.425	69.176	112.329	190.992	148.713	111.165	51.533	30.704	19.317	18.060	31.702	72.670
8	48.708	68.314	134.057	209.908	148.214	106.302	50.655	30.078	18.500	17.408	28.932	76.490
9	45.309	67.701	131.486	212.556	146.222	102.527	49.676	29.988	18.647	18.060	29.129	81.966
10	45.306	68.561	118.110	208.927	145.890	98.951	48.273	29.900	17.842	17.696	36.501	89.071
11	45.203	66.117	113.708	209.704	145.725	94.725	47.951	29.368	17.624	17.050	39.798	90.707
12	47.848	67.458	125.796	222.439	144.734	90.985	47.205	29.280	17.121	16.062	42.008	94.587
13	49.894	71.435	153.616	211.423	144.405	86.490	46.357	29.280	16.623	15.576	43.652	98.099
14	52.196	81.048	119.198	204.755	143.418	85.680	45.620	29.017	16.552	15.922	47.744	95.983
15	53.417	82.481	112.362	204.566	143.253	84.609	45.411	27.367	16.482	16.203	45.521	95.706
16	55.102	81.952	120.387	207.975	143.089	82.351	44.577	26.596	16.061	17.481	42.824	102.833
17	56.806	80.063	127.626	208.355	142.105	78.811	43.130	26.426	15.992	17.768	43.956	112.822
18	58.420	61.648	156.720	206.836	141.778	77.256	42.312	25.920	15.922	18.206	45.831	121.000
19	62.757	62.757	150.751	203.249	140.798	75.205	42.108	25.669	15.508	18.133	45.308	125.800
20	64.069	64.069	138.537	195.401	140.635	72.418	41.399	24.671	15.370	17.336	46.997	131.942
21	68.572	68.572	150.602	189.315	140.635	70.540	40.594	24.506	14.961	17.624	43.958	133.213
22	74.190	74.190	187.936	185.118	140.635	69.920	39.696	24.424	14.893	17.696	45.731	134.017
23	73.049	73.049	146.953	182.764	140.635	67.701	38.315	23.852	14.893	17.696	48.921	127.678
24	69.673	69.673	138.197	177.912	140.962	67.333	37.533	23.285	14.826	17.768	47.739	126.575
25	68.314	68.314	141.332	174.881	142.925	67.211	36.955	23.124	14.423	18.206	49.137	127.519
26	67.455	67.455	170.302	172.932	143.089	66.238	33.642	22.564	14.356	18.279	52.310	133.377
27	66.968	66.968	227.146	169.236	142.105	64.427	30.262	22.009	14.356	18.352	55.333	135.295
28	65.028	65.028	224.215	166.265	141.778	62.516	29.285	21.930	14.356	18.870	58.420	135.295
29	66.360		202.922	163.489	140.310	60.745	32.622	21.851	14.356	19.317	55.674	134.332
30	67.823		184.958	160.730	137.228	59.576	34.757	21.381	14.356	19.168	60.645	133.853
31	66.602		181.163		136.260		34.287	21.303		20.532		132.417
Mean	58.950	69.645	137.343	195.598	144.685	88.057	44.031	27.208	16.854	17.387	41.586	105.434
Flow (MCM)	157.891	168.484	367.859	506.991	387.524	228.245	117.932	72.874	43.685	46.568	107.791	282.393
Maximum	74.190	82.481	227.146	230.531	158.161	132.897	57.954	34.757	21.226	20.532	60.645	135.295
Minimum	45.203	61.648	67.851	160.730	136.260	59.576	29.285	21.303	14.356	14.356	21.304	67.978
Runoff (mm)	1.250	1.334	2.912	4.013	3.068	1.807	0.934	0.577	0.346	0.369	0.853	2.235

Flow (cumecs)

Annual Statistics

Maximum: 230.531 Minimum: 14.356 Mean: 78.898 cumecs
Total: 2488.129 MCM Runoff: 19.695 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2012
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	139.252	157.819	124.703	148.383	168.010	172.835	93.608	49.243	32.063	21.303	20.455	19.317
2	164.765	156.457	127.049	155.622	166.264	146.124	91.119	48.810	31.426	21.226	19.168	19.168
3	160.743	154.084	132.420	164.359	164.874	141.942	87.843	47.952	30.704	20.761	19.619	20.302
4	151.901	152.903	135.456	162.109	164.529	141.615	84.209	46.358	30.078	20.531	20.994	19.543
5	146.561	152.905	138.199	158.845	170.116	139.496	83.277	44.889	29.988	19.618	20.761	19.018
6	138.370	147.718	141.616	160.903	174.349	138.197	80.900	44.680	29.900	19.392	20.531	19.467
7	131.943	144.407	143.253	169.870	175.592	137.874	80.374	44.472	29.368	18.944	19.618	20.226
8	127.988	140.800	144.405	204.286	173.639	136.904	78.814	43.233	29.192	19.170	19.392	21.617
9	125.482	138.037	144.900	210.069	173.108	136.582	74.062	42.924	28.578	20.840	18.944	21.856
10	124.392	135.296	146.885	208.929	172.048	135.455	73.172	42.312	27.969	20.073	19.170	25.183
11	125.326	131.623	147.882	201.932	171.695	134.172	72.416	42.210	27.796	19.019	23.617	28.236
12	126.575	128.145	151.558	199.491	170.113	133.054	71.915	42.210	27.194	19.019	37.549	26.180
13	127.672	126.108	151.056	198.184	166.613	132.576	69.548	41.606	26.596	20.074	22.201	28.409
14	127.986	122.072	154.933	197.440	164.874	130.669	68.191	38.026	26.511	21.148	19.093	26.939
15	129.723	120.377	149.723	193.362	163.315	130.194	66.360	37.436	26.426	21.303	20.074	27.022
16	135.463	119.305	142.277	188.398	160.730	129.246	64.666	37.436	25.920	21.303	21.148	26.427
17	141.127	119.305	137.229	188.215	162.687	128.930	64.305	37.436	25.752	20.919	21.303	25.418
18	143.094	120.685	135.616	192.626	188.274	127.516	63.468	37.436	25.251	18.651	21.303	25.585
19	153.467	123.617	135.777	200.621	188.398	124.393	62.634	37.339	25.085	18.133	20.919	24.920
20	174.741	124.237	139.676	206.648	188.215	122.688	62.160	36.759	24.506	17.264	18.651	26.429
21	173.642	125.170	151.571	207.794	192.626	120.685	59.927	36.566	23.933	17.192	18.133	28.326
22	171.344	125.326	151.222	196.520	200.621	119.918	58.647	35.991	23.690	17.624	17.336	32.162
23	174.705	125.326	148.216	192.436	206.648	117.173	57.149	35.800	22.644	17.696	17.624	32.246
24	178.626	125.326	144.077	192.067	207.794	116.415	56.692	35.229	21.930	17.696	17.696	32.155
25	179.881	125.795	144.735	191.883	196.520	114.603	55.215	35.040	21.381	17.768	17.696	31.702
26	177.731	129.091	147.217	190.413	192.436	114.302	54.312	34.287	21.303	18.206	17.768	28.932
27	175.240	131.623	149.883	187.667	192.067	112.520	54.088	33.075	21.303	18.352	18.206	29.129
28	168.363	127.361	152.567	184.033	191.883	101.681	53.417	32.798	21.303	18.870	18.279	36.797
29	164.702	126.263	154.591	176.666	190.413	98.097	53.083	32.246	21.303	19.317	18.352	41.708
30	160.903		152.399	171.874	187.667	96.545	51.753	32.155	21.303	19.168	18.870	43.652
31	158.331		148.881		184.033		51.204	32.155		20.455		47.850
Mean	150.969	133.006	144.193	186.722	179.682	127.747	67.694	39.294	26.013	19.388	20.149	27.610
Flow (MCM)	404.355	333.260	386.206	483.982	481.261	331.120	181.313	105.244	67.426	51.929	52.226	73.952
Maximum	179.881	157.819	154.933	210.069	207.794	172.835	93.608	49.243	32.063	21.303	37.549	47.850
Minimum	124.392	119.305	124.703	148.383	160.730	96.545	51.204	32.155	21.303	17.192	17.336	19.018
Runoff (mm)	3.201	2.638	3.057	3.831	3.809	2.621	1.435	0.833	0.534	0.411	0.413	0.585

Flow (cumecs)

Annual Statistics

Maximum: 210.069 Minimum: 17.192 Mean: 93.539 cumecs
Total: 2957.926 MCM Runoff: 23.414 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2013
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	46.675	52.864	125.017	190.597	325.639	241.256	146.890	68.684	43.027	32.430	23.851	38.710
2	46.357	60.795	120.993	194.474	268.443	239.848	143.914	68.191	42.924	32.983	23.770	42.219
3	42.990	104.337	120.377	203.821	257.168	238.242	138.203	67.333	42.312	34.006	23.446	45.940
4	27.004	112.952	120.531	211.601	253.051	236.641	133.057	66.359	42.108	32.983	24.342	47.312
5	40.150	112.952	121.299	211.794	249.367	235.043	128.934	65.389	41.500	32.246	24.506	49.357
6	31.222	112.354	122.080	219.505	244.894	233.450	124.086	64.426	41.298	32.063	24.589	54.099
7	28.673	114.002	132.276	221.055	241.057	231.862	119.157	63.587	40.594	31.517	25.085	59.244
8	25.175	114.302	140.316	224.189	235.445	229.883	114.606	63.348	39.894	31.336	25.251	66.739
9	25.085	114.302	147.406	235.651	232.061	225.747	111.611	62.634	39.597	30.704	25.752	70.541
10	25.335	114.603	165.137	232.662	230.277	222.615	107.035	62.515	38.413	29.989	26.090	69.178
11	29.564	116.415	188.810	224.378	228.894	220.860	101.952	62.515	38.118	29.368	27.624	68.333
12	47.400	117.021	178.649	228.513	228.697	219.500	99.945	62.160	37.533	29.192	27.969	78.449
13	33.750	120.079	171.172	242.893	228.697	219.112	96.968	60.043	37.243	28.665	28.490	85.431
14	32.707	128.152	175.418	260.760	229.092	217.756	94.722	59.575	35.992	28.490	28.490	94.455
15	33.539	131.941	171.526	288.276	231.465	215.633	93.329	58.762	35.135	27.969	27.882	96.124
16	33.539	136.100	179.531	269.303	232.060	210.835	91.256	57.724	34.474	27.882	27.109	92.364
17	32.799	136.582	183.127	253.060	233.650	209.688	89.064	56.122	34.286	27.796	26.259	88.928
18	31.428	135.295	176.312	253.282	236.441	207.026	86.893	54.989	33.632	27.279	27.624	92.095
19	30.079	134.337	170.289	274.774	238.041	203.812	85.010	53.306	32.982	27.108	27.969	99.383
20	29.192	141.625	171.696	282.637	238.242	198.936	84.608	51.643	32.798	26.596	28.490	96.126
21	28.317	147.717	172.755	296.950	238.643	191.519	83.675	50.655	32.338	26.426	28.577	94.304
22	29.634	148.546	171.521	321.130	241.458	188.946	82.481	49.784	33.076	25.836	28.577	97.960
23	29.280	148.380	175.951	332.216	244.488	186.572	80.637	48.918	34.757	25.251	28.753	101.377
24	28.841	147.051	179.702	334.739	244.092	184.760	79.330	48.059	34.568	25.168	29.901	98.241
25	30.171	144.243	179.882	318.193	234.259	176.132	77.514	47.205	35.040	25.168	30.704	95.842
26	32.524	139.499	183.307	309.249	244.092	174.171	76.355	46.357	35.040	25.085	31.702	94.721
27	33.356	134.980	179.523	301.304	244.892	169.768	75.331	45.516	34.380	24.589	34.482	94.582
28	36.672	128.463	178.627	289.097	244.285	161.939	74.185	44.577	33.725	24.506	37.830	94.861
29	40.706		184.396	281.775	241.861	160.044	72.417	43.233	33.631	24.424	38.805	96.968
30	45.316		188.397	286.630	241.457	154.769	71.413	43.027	33.446	23.933	38.314	100.521
31	49.033		188.214		241.457		70.914	43.027		23.851		105.133
Mean	34.081	123.210	163.362	259.817	242.699	206.879	97.919	56.118	36.795	28.221	28.408	80.953
Flow (MCM)	91.283	298.071	437.550	673.445	650.045	536.230	262.267	150.307	95.373	75.586	73.633	216.824
Maximum	49.033	148.546	188.810	334.739	325.639	241.256	146.890	68.684	43.027	34.006	38.805	105.133
Minimum	25.085	52.864	120.377	190.597	228.697	154.769	70.914	43.027	32.338	23.851	23.446	38.710
Runoff (mm)	0.723	2.359	3.463	5.331	5.146	4.245	2.076	1.190	0.755	0.598	0.583	1.716

Flow (cumecs)

Annual Statistics

Maximum: 334.739 Minimum: 23.446 Mean: 113.205 cumecs
Total: 3570.039 MCM Runoff: 28.259 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2014
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	105.569	155.099	157.138	180.420	173.109	121.300	62.396	41.197	27.882	21.930	24.506	41.197
2	109.984	154.084	155.947	183.124	170.639	117.784	61.686	39.895	27.279	21.930	24.755	40.694
3	117.639	155.275	156.799	184.936	169.059	113.404	61.450	39.101	27.193	22.168	26.344	40.493
4	124.876	163.494	151.395	187.667	167.311	109.545	60.511	38.904	27.193	24.022	27.022	40.094
5	134.183	165.047	146.059	192.079	163.835	100.243	58.879	38.314	27.108	26.515	26.681	41.400
6	128.943	166.090	143.587	206.693	162.279	96.967	57.838	38.021	26.596	25.336	27.194	43.028
7	121.305	167.666	150.559	224.793	161.934	95.561	56.806	36.856	26.596	24.506	27.796	44.472
8	123.381	178.114	154.761	213.722	160.558	93.193	55.215	36.566	27.108	23.852	27.882	44.680
9	144.010	191.527	155.268	211.410	158.161	89.339	54.200	35.991	27.193	23.204	27.796	44.680
10	123.228	192.806	155.438	217.565	156.627	87.027	53.417	35.800	27.193	22.643	27.279	44.784
11	119.152	186.228	156.457	214.670	155.099	85.680	53.083	35.135	27.108	22.405	27.279	45.621
12	119.000	172.417	156.797	210.452	152.735	83.941	51.643	34.380	26.596	21.460	27.796	46.993
13	119.312	168.535	158.332	208.355	151.389	80.453	50.655	33.725	26.511	21.148	27.882	47.098
14	126.269	163.836	161.763	205.888	151.054	63.668	49.784	33.539	26.342	20.225	27.796	46.675
15	125.482	160.559	164.183	203.818	149.882	72.323	48.918	32.982	25.335	19.996	27.279	47.845
16	124.237	156.629	170.116	193.368	148.547	73.806	47.952	32.798	25.002	19.393	27.279	48.058
17	124.548	153.240	174.527	189.862	147.051	70.791	46.569	32.246	24.015	18.574	27.796	47.951
18	127.674	153.409	178.092	191.515	144.735	70.291	46.357	32.155	23.851	19.242	27.882	47.311
19	130.353	151.557	184.578	190.413	143.253	70.291	46.357	32.063	23.851	18.723	27.882	47.525
20	132.735	151.557	190.047	187.849	141.779	70.291	46.357	31.426	23.851	17.848	28.320	49.459
21	133.693	153.409	191.883	186.390	139.496	70.291	46.252	30.794	23.851	20.769	32.000	49.892
22	131.622	152.734	190.967	186.207	138.036	70.167	45.620	30.704	23.851	21.539	38.135	50.655
23	129.089	152.397	184.576	186.207	136.743	69.423	45.411	30.614	23.851	23.290	35.710	51.422
24	127.517	151.389	184.936	186.026	135.616	69.176	44.680	30.078	23.851	25.757	35.040	51.532
25	131.306	151.221	184.773	184.573	135.134	68.437	43.851	30.622	23.851	27.974	34.662	51.753
26	135.959	151.221	171.009	181.861	132.895	68.068	43.130	34.105	23.770	30.348	35.705	53.083
27	150.757	151.557	174.174	178.984	130.353	66.602	43.027	32.251	23.285	30.525	35.705	54.902
28	163.326	154.085	177.374	176.304	127.830	65.995	42.924	30.169	23.044	29.194	35.043	65.058
29	165.742		178.984	174.880	125.482	63.708	42.312	29.368	22.088	27.282	38.027	68.439
30	162.801		179.881	174.525	124.081	62.634	42.108	29.192	21.930	25.838	40.395	65.634
31	156.290		178.268		122.842		41.500	28.578		24.671		63.350
Mean	131.290	161.614	168.344	193.819	147.663	81.347	50.029	33.793	25.239	23.300	30.162	49.219
Flow (MCM)	351.647	390.976	450.893	502.378	395.500	210.850	133.997	90.510	65.420	62.407	78.180	131.827
Maximum	165.742	192.806	191.883	224.793	173.109	121.300	62.396	41.197	27.882	30.525	40.395	68.439
Minimum	105.569	151.221	143.587	174.525	122.842	62.634	41.500	28.578	21.930	17.848	24.506	40.094
Runoff (mm)	2.784	3.095	3.569	3.977	3.131	1.669	1.061	0.716	0.518	0.494	0.619	1.043

Flow (cumecs)

Annual Statistics

Maximum: 224.793 Minimum: 17.848 Mean: 91.318 cumecs
Total: 2879.807 MCM Runoff: 22.796 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2015
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	60.863	75.458	114.302	115.214	150.049	166.439	108.500	49.784	30.794	21.381	25.169	55.894
2	59.345	76.484	114.302	123.004	151.221	165.047	105.716	48.918	30.614	21.303	26.513	56.236
3	56.923	78.420	114.002	125.639	152.397	164.527	101.522	48.059	30.078	21.303	27.884	57.840
4	58.765	80.771	111.908	130.208	153.072	162.451	97.958	47.205	29.900	21.303	29.281	59.576
5	56.352	85.018	109.679	141.307	157.143	161.762	94.446	46.357	29.368	21.226	30.706	60.510
6	55.101	89.750	108.204	148.384	163.664	159.358	89.756	45.516	29.280	20.761	32.249	60.745
7	54.312	86.895	106.297	144.749	163.488	156.967	83.415	44.680	29.192	20.607	33.181	61.450
8	55.456	89.203	106.005	134.823	162.451	156.287	81.295	43.851	28.578	20.148	28.157	61.450
9	63.006	93.473	105.424	136.104	163.835	154.084	78.551	43.027	27.969	19.996	27.623	60.628
10	63.947	97.109	101.807	142.602	167.136	152.566	76.356	42.210	27.882	19.393	26.852	60.160
11	65.995	95.563	100.087	144.737	167.659	151.221	74.566	41.399	27.882	18.426	27.796	63.121
12	66.847	91.951	98.239	140.474	167.659	150.049	73.806	40.594	27.796	18.279	28.403	69.933
13	69.796	86.896	97.532	142.437	168.009	149.714	70.667	39.795	27.279	18.279	28.055	75.081
14	70.665	87.433	94.862	148.386	170.288	148.547	69.423	39.003	27.108	18.279	28.403	78.684
15	73.174	85.815	93.468	154.260	171.872	147.216	69.053	38.314	26.512	18.279	28.318	84.634
16	75.076	83.808	92.359	161.422	173.108	145.726	67.092	38.216	25.836	18.651	30.894	96.727
17	75.458	83.011	91.118	164.701	173.285	143.254	64.067	38.216	25.251	20.919	34.479	108.220
18	76.226	84.743	89.336	166.264	173.285	140.962	64.305	38.216	25.085	21.303	35.828	111.758
19	76.098	87.165	88.791	167.659	173.462	140.635	63.948	38.118	24.589	21.303	43.669	113.102
20	74.566	90.983	87.162	168.359	174.525	140.309	60.982	37.533	24.424	21.148	42.216	114.152
21	74.311	93.749	87.298	165.049	174.703	138.198	59.809	37.339	23.852	20.225	39.598	114.302
22	74.694	98.103	90.021	161.764	174.880	136.582	59.575	36.759	23.285	20.072	40.595	112.814
23	76.998	104.128	92.638	156.631	175.947	134.493	58.762	36.566	23.124	19.996	42.109	103.981
24	77.773	112.666	95.843	151.560	175.947	133.375	57.838	36.376	22.643	19.542	43.234	102.958
25	79.983	118.392	94.444	148.382	174.703	128.148	56.920	38.026	22.484	19.694	44.890	105.715
26	79.460	119.152	97.960	144.901	173.285	124.238	55.895	34.857	22.009	21.387	43.439	107.323
27	78.549	118.543	102.240	143.582	171.872	121.149	54.313	33.725	21.930	23.368	44.374	108.354
28	78.290	114.906	105.134	144.735	170.639	116.417	53.305	33.446	21.930	22.803	48.712	101.970
29	77.384		108.500	147.217	170.287	115.962	52.416	32.338	21.930	23.204	52.310	92.510
30	76.355		107.178	149.548	169.234	112.059	51.533	32.063	21.851	23.770	54.877	90.156
31	75.458		111.464		168.709		50.655	31.426		24.015		91.848
Mean	69.588	93.200	100.568	147.137	167.671	143.925	71.176	39.740	26.015	20.657	35.660	85.220
Flow (MCM)	186.384	225.468	269.361	381.378	449.091	373.053	190.637	106.439	67.431	55.327	92.432	228.254
Maximum	79.983	119.152	114.302	168.359	175.947	166.439	108.500	49.784	30.794	24.015	54.877	114.302
Minimum	54.312	75.458	87.162	115.214	150.049	112.059	50.655	31.426	21.851	18.279	25.169	55.894
Runoff (mm)	1.475	1.785	2.132	3.019	3.555	2.953	1.509	0.843	0.534	0.438	0.732	1.807

Flow (cumecs)

Annual Statistics

Maximum: 175.947 Minimum: 18.279 Mean: 83.380 cumecs
Total: 2629.462 MCM Runoff: 20.814 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2016
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	111.138	246.312	298.881	347.415	296.912	282.633	208.166	160.901	134.332	117.932	132.897	142.106
2	133.101	245.298	299.977	346.254	296.912	281.344	204.566	160.558	134.012	117.780	136.908	144.902
3	133.855	247.532	298.662	348.577	296.912	281.131	203.810	159.357	133.054	116.869	140.963	150.392
4	130.354	247.735	297.130	346.720	296.912	279.849	202.304	158.160	132.735	116.717	139.172	158.509
5	134.987	246.312	296.912	340.474	296.693	279.422	199.679	157.819	131.779	116.717	135.938	161.934
6	145.078	244.892	297.349	336.562	295.384	277.930	197.812	156.627	131.462	116.566	135.455	163.661
7	151.564	244.285	300.197	334.957	295.821	276.017	195.209	155.269	130.510	115.658	135.295	166.091
8	156.301	241.861	302.394	335.644	299.758	272.839	193.543	154.084	130.194	115.507	134.332	167.136
9	146.236	243.078	305.039	333.355	300.635	269.676	192.067	153.746	128.931	115.507	134.172	165.048
10	153.114	252.439	304.377	334.728	301.954	267.784	190.596	152.734	126.888	115.810	134.012	163.315
11	171.018	251.819	306.145	337.480	302.394	266.108	188.946	152.397	126.419	117.628	133.054	160.730
12	170.818	252.844	311.249	336.332	303.715	264.435	186.390	151.389	125.482	117.932	132.576	158.161
13	177.202	254.488	317.055	334.270	303.715	262.351	184.754	151.054	125.326	117.932	131.145	156.457
14	183.309	256.963	317.279	331.528	302.394	257.995	183.124	149.882	125.170	117.780	134.175	154.084
15	188.765	264.862	321.551	331.984	302.174	254.899	180.779	148.713	124.237	116.869	138.038	152.734
16	192.624	275.386	324.712	329.250	302.174	254.487	180.060	148.380	123.926	116.717	141.452	152.397
17	198.747	280.918	324.486	326.978	302.174	254.076	177.910	147.382	122.842	116.717	142.105	151.389
18	201.366	283.058	328.796	323.356	302.174	251.410	177.195	147.050	121.761	116.717	143.583	152.233
19	223.902	284.561	332.441	318.625	302.174	248.959	175.058	146.056	121.453	116.717	146.719	158.335
20	334.556	284.775	334.499	316.158	301.954	243.478	174.348	145.725	120.531	116.566	147.050	159.700
21	293.845	284.775	336.332	312.362	300.635	239.848	172.049	144.734	120.377	115.658	145.891	161.762
22	277.511	285.206	337.939	306.588	300.416	236.841	170.639	144.240	120.224	115.507	144.570	162.279
23	267.170	287.791	338.169	305.702	300.196	234.844	170.287	142.270	119.305	115.507	143.418	163.488
24	254.701	288.655	338.860	305.481	298.662	232.259	169.234	141.778	119.152	115.507	143.089	164.700
25	253.461	291.036	342.549	304.156	297.130	231.268	168.884	140.798	119.152	115.658	141.942	164.873
26	259.248	290.386	340.702	303.715	296.693	227.319	167.834	140.472	119.000	116.566	140.798	165.395
27	270.319	291.469	341.856	301.954	295.384	223.788	167.484	139.333	118.085	116.869	140.635	168.534
28	259.867	292.556	343.937	299.100	295.166	219.308	166.438	138.197	117.932	118.238	140.635	169.410
29	257.168	297.788	347.416	298.443	295.166	214.670	165.916	137.874	117.932	121.455	140.635	171.696
30	252.846		350.441	297.130	294.730	210.452	163.661	136.743	117.932	124.395	140.798	173.640
31	248.347		349.276		290.823		162.106	135.455		128.934		178.275
Mean	204.275	267.555	322.149	324.176	298.966	253.247	181.963	148.361	124.671	117.449	139.048	160.754
Flow (MCM)	547.129	670.385	862.843	840.264	800.750	656.417	487.369	397.369	323.148	314.577	360.413	430.563
Maximum	334.556	297.788	350.441	348.577	303.715	282.633	208.166	160.901	134.332	128.934	147.050	178.275
Minimum	111.138	241.861	296.912	297.130	290.823	210.452	162.106	135.455	117.932	115.507	131.145	142.106
Runoff (mm)	4.331	5.307	6.830	6.651	6.338	5.196	3.858	3.145	2.558	2.490	2.853	3.408

Flow (cumecs)

Annual Statistics

Maximum: 350.441 Minimum: 111.138 Mean: 211.884 cumecs
Total: 6700.294 MCM Runoff: 53.037 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2017
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	186.577	208.549	276.442	-	-	356.288	264.645	145.065	88.248	63.230	49.675	61.098
2	190.790	213.133	279.422	-	-	353.009	261.104	144.405	86.757	64.186	48.918	60.511
3	201.937	209.308	280.703	-	-	349.741	257.788	144.908	84.876	63.468	48.165	58.994
4	202.117	207.786	277.719	-	-	348.810	255.105	151.410	83.675	62.397	48.058	58.762
5	197.444	202.870	272.210	-	-	345.790	254.901	137.590	82.481	60.629	48.273	58.994
6	190.415	200.993	266.962	-	-	343.705	247.945	127.524	80.507	58.879	49.459	60.511
7	189.315	208.555	284.803	-	-	341.625	239.654	130.513	78.679	57.838	49.242	61.450
8	182.766	216.987	296.043	-	-	338.400	230.680	129.089	78.160	56.920	50.547	61.805
9	181.320	221.448	302.185	-	-	336.332	224.181	126.888	76.484	56.008	51.643	63.469
10	186.395	227.517	316.392	-	-	334.270	219.501	126.575	75.458	55.214	53.306	65.390
11	192.993	227.712	321.325	-	-	330.845	216.018	126.107	75.203	54.988	55.102	67.705
12	196.137	230.675	324.270	-	-	327.659	211.600	123.152	74.312	54.089	56.806	72.940
13	201.048	237.451	338.869	-	-	326.751	207.406	121.454	73.298	52.527	57.723	81.042
14	227.173	248.149	338.860	-	-	323.807	205.321	119.153	72.416	51.643	58.069	80.899
15	223.010	249.371	340.704	-	-	321.775	202.118	116.869	72.165	51.422	59.576	81.425
16	227.535	242.890	346.952	-	-	319.749	196.883	115.357	71.288	50.655	60.160	81.425
17	240.877	260.089	352.078	-	-	316.382	193.360	113.252	70.291	50.001	58.070	81.163
18	224.804	265.689	366.251	-	-	312.806	189.313	111.907	69.300	50.655	57.149	84.882
19	209.702	267.790	-	-	-	309.247	186.209	110.568	68.191	51.533	57.838	89.612
20	203.058	276.026	-	-	-	305.703	183.125	108.498	66.481	52.527	58.415	91.255
21	200.802	277.084	-	-	191.235	302.175	179.522	107.029	65.389	53.864	57.035	92.082
22	199.494	341.391	-	-	379.574	298.663	178.447	104.841	64.426	53.417	56.008	91.255
23	210.719	349.283	-	-	376.212	295.602	174.882	102.813	63.468	53.305	54.989	90.156
24	238.900	332.488	-	-	375.254	294.730	171.697	102.237	62.397	53.305	53.529	88.927
25	228.325	303.769	-	-	371.907	291.687	167.835	100.231	60.862	53.305	53.305	87.162
26	218.535	284.790	-	-	368.097	288.008	164.702	98.097	60.627	53.305	53.529	86.622
27	214.477	278.144	-	-	364.775	283.060	160.903	96.266	60.627	53.083	55.330	84.743
28	210.262	275.168	-	-	363.828	278.144	157.991	91.947	60.745	51.753	58.071	82.614
29	207.026		-	-	360.993	274.321	155.101	91.117	61.333	51.422	57.379	80.637
30	204.188		-	-	360.050	269.467	151.391	90.430	61.098	50.655	58.880	79.330
31	203.434		-		357.227		148.382	90.706		49.892		77.514
Mean	206.180	252.325	-	-	-	317.285	201.862	116.323	71.641	54.713	54.475	76.270
Flow (MCM)	552.232	610.425	-	-	-	822.403	540.666	311.558	185.694	146.544	141.199	204.282
Maximum	240.877	349.283	-	-	-	356.288	264.645	151.410	88.248	64.186	60.160	92.082
Minimum	181.320	200.993	-	-	-	269.467	148.382	90.430	60.627	49.892	48.058	58.762
Runoff (mm)	4.371	4.832	-	-	-	6.510	4.280	2.466	1.470	1.160	1.118	1.617

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2018
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	77.521	114.603	120.684	153.251	-	-	-	217.952	114.152	73.298	53.752	78.420
2	83.816	116.718	122.539	159.707	-	-	-	212.942	112.056	72.416	52.527	80.375
3	85.680	118.847	129.251	167.317	-	-	-	207.029	110.716	72.165	51.533	81.162
4	85.949	118.543	130.194	173.468	-	-	-	200.994	109.384	71.288	50.655	79.851
5	86.892	114.906	129.246	179.704	-	-	-	195.767	107.323	70.291	49.784	80.374
6	87.975	114.002	128.773	184.600	-	-	-	194.284	106.005	69.300	48.918	80.768
7	88.654	112.056	126.888	202.518	-	-	-	189.497	105.131	68.314	48.165	82.481
8	86.625	110.568	126.419	205.510	-	-	378.376	186.027	105.423	67.333	47.951	83.942
9	83.278	108.793	125.170	206.268	-	-	371.671	181.862	102.671	66.359	47.311	86.623
10	83.409	109.383	124.085	216.099	-	-	364.069	177.732	100.373	65.389	47.205	87.839
11	82.745	109.531	129.725	262.276	-	-	355.354	174.527	99.232	64.426	47.311	88.383
12	82.613	109.531	132.098	347.037	-	-	348.814	170.465	98.806	63.468	47.738	91.396
13	82.613	109.531	128.934	343.257	-	-	340.475	166.266	96.967	62.515	46.569	95.283
14	82.745	109.236	124.705	339.786	-	-	334.045	162.280	95.701	61.569	46.463	96.826
15	83.675	107.469	124.705	330.394	-	-	325.622	159.358	94.443	60.628	46.992	97.814
16	84.608	107.175	127.988	337.024	-	-	318.179	156.628	92.497	59.692	46.781	98.239
17	84.876	107.469	125.639	169.773	-	-	311.471	153.916	91.118	58.878	48.704	100.663
18	85.949	109.236	134.435	-	-	-	306.591	151.055	89.200	58.762	49.893	105.425
19	87.840	109.531	187.125	177.677	-	-	297.573	147.550	87.975	58.646	50.985	107.029
20	89.200	109.236	133.475	358.172	-	-	291.257	145.561	86.757	57.838	49.243	107.175
21	90.980	107.469	132.918	370.732	-	-	283.491	142.107	84.876	56.920	49.903	107.322
22	90.980	107.764	142.769	-	-	-	277.720	139.334	83.542	56.008	55.791	107.617
23	89.609	112.364	141.293	-	-	-	271.154	136.744	81.689	55.214	56.235	104.116
24	91.118	119.311	134.818	-	-	-	264.647	134.173	80.506	55.101	56.806	102.381
25	92.220	120.685	131.622	-	-	-	259.445	131.622	79.460	55.101	56.920	100.802
26	93.758	122.533	129.246	-	-	-	254.285	128.932	78.419	55.101	57.496	101.949
27	103.564	122.687	127.829	-	-	-	247.943	125.483	77.256	54.988	61.697	100.946
28	112.961	121.607	127.993	-	-	-	241.461	122.843	75.459	54.200	67.595	102.527
29	114.302		136.435	-	-	-	235.246	120.531	74.439	53.417	74.447	99.092
30	114.302		143.421	-	-	-	230.083	118.848	74.185	53.194	76.484	100.374
31	114.302		144.741		-		223.986	115.810		52.749		97.674
Mean	90.476	112.885	132.425	-	-	-	-	160.262	93.192	61.438	53.062	94.673
Flow (MCM)	242.331	273.092	354.686	-	-	-	-	429.246	241.554	164.555	137.536	253.573
Maximum	114.302	122.687	187.125	-	-	-	-	217.952	114.152	73.298	76.484	107.617
Minimum	77.521	107.175	120.684	-	-	-	-	115.810	74.185	52.749	46.463	78.420
Runoff (mm)	1.918	2.162	2.808	-	-	-	-	3.398	1.912	1.303	1.089	2.007

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean : - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 4A9 **Year:** 2019
Station Name: Maragalasi River at Mberagule
Time-Series Type: Flow (cumecs)

Latitude: 5:11: 3 S Longitude: 30: 4:37 E Elevation: 857.0 metres Area: 126332.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	99.377	125.796	125.343	183.322	169.059	123.771	68.068	43.027	29.104	21.303	25.836	90.983
2	103.831	120.842	138.072	194.854	167.834	123.926	66.481	42.924	28.056	21.303	26.512	94.171
3	108.353	117.933	151.069	204.003	167.484	122.996	65.269	42.312	27.882	21.303	27.022	100.378
4	107.178	115.810	154.930	203.999	166.438	122.687	63.588	42.108	27.882	21.303	26.512	101.951
5	112.065	115.507	155.608	202.492	166.090	121.454	62.515	41.500	27.882	21.226	25.920	106.453
6	118.547	115.356	157.649	200.429	164.701	118.698	61.569	41.298	27.882	20.761	25.752	111.622
7	122.229	114.452	158.160	195.952	162.107	113.854	60.745	40.694	27.796	20.531	25.251	102.685
8	128.305	114.302	159.186	196.323	159.700	112.952	60.393	40.493	27.279	19.618	25.085	99.233
9	130.352	114.302	159.528	195.767	158.845	112.056	58.763	39.795	27.108	19.392	24.671	99.818
10	131.303	114.603	160.730	190.054	155.271	111.757	57.035	39.003	26.512	18.944	25.252	110.439
11	130.037	116.718	162.106	181.505	151.391	109.979	56.121	38.216	25.836	18.869	26.258	117.227
12	126.578	119.615	164.532	178.984	148.714	103.122	56.007	37.533	25.168	18.869	26.089	137.603
13	123.152	124.550	170.647	177.731	147.216	94.174	55.781	37.243	24.589	18.869	27.282	141.621
14	121.607	124.859	163.322	177.373	145.891	94.862	54.313	35.992	24.424	18.795	29.017	134.179
15	120.377	121.610	160.558	176.303	144.077	92.361	53.305	35.135	23.933	18.426	29.457	134.179
16	119.611	118.542	158.161	175.238	139.985	89.473	52.416	34.474	23.851	18.944	33.606	140.483
17	122.385	119.000	156.288	169.588	139.170	88.926	51.643	34.380	23.851	20.074	51.446	132.115
18	131.011	119.152	152.904	166.265	138.197	87.975	51.422	34.286	23.851	21.148	43.379	124.708
19	140.979	119.000	151.054	163.489	138.035	86.892	50.655	33.632	23.851	21.460	41.504	121.455
20	131.953	118.085	148.548	160.559	137.874	85.281	49.784	32.890	23.690	22.405	38.417	117.935
21	129.088	117.932	145.892	157.138	136.904	81.034	48.918	32.246	22.565	22.723	40.096	115.967
22	127.829	118.237	143.254	156.797	136.743	79.460	47.952	32.155	21.460	23.690	40.397	122.694
23	126.419	120.224	141.288	157.990	136.582	78.290	46.569	32.063	21.303	24.015	43.235	122.996
24	124.548	121.453	143.090	159.357	135.616	76.356	46.357	31.517	21.303	25.085	43.130	123.463
25	125.639	121.607	144.570	161.074	135.134	74.439	46.252	31.336	21.303	25.921	43.233	127.834
26	128.774	121.607	146.057	164.702	133.054	73.298	45.516	30.794	21.303	27.023	44.786	132.899
27	130.352	121.453	149.050	168.011	131.462	72.290	44.784	30.614	21.303	27.108	47.101	137.390
28	131.462	120.992	155.962	172.226	129.246	71.164	44.576	30.078	21.303	26.427	52.340	139.834
29	131.462		166.448	170.815	127.829	69.424	43.851	29.900	21.303	25.335	76.382	156.444
30	130.037		170.288	170.287	126.108	68.437	43.130	29.368	21.303	25.168	86.497	195.355
31	127.046		173.116		122.534		43.027	29.280		25.251		212.757
Mean	123.932	119.055	154.433	177.754	145.784	95.380	53.445	35.687	24.496	21.977	37.382	126.028
Flow (MCM)	331.939	288.018	413.632	460.739	390.467	247.224	143.148	95.583	63.493	58.863	96.894	337.553
Maximum	140.979	125.796	173.116	204.003	169.059	123.926	68.068	43.027	29.104	27.108	86.497	212.757
Minimum	99.377	114.302	125.343	156.797	122.534	68.437	43.027	29.280	21.303	18.426	24.671	90.983
Runoff (mm)	2.628	2.280	3.274	3.647	3.091	1.957	1.133	0.757	0.503	0.466	0.767	2.672

Flow (cumecs)

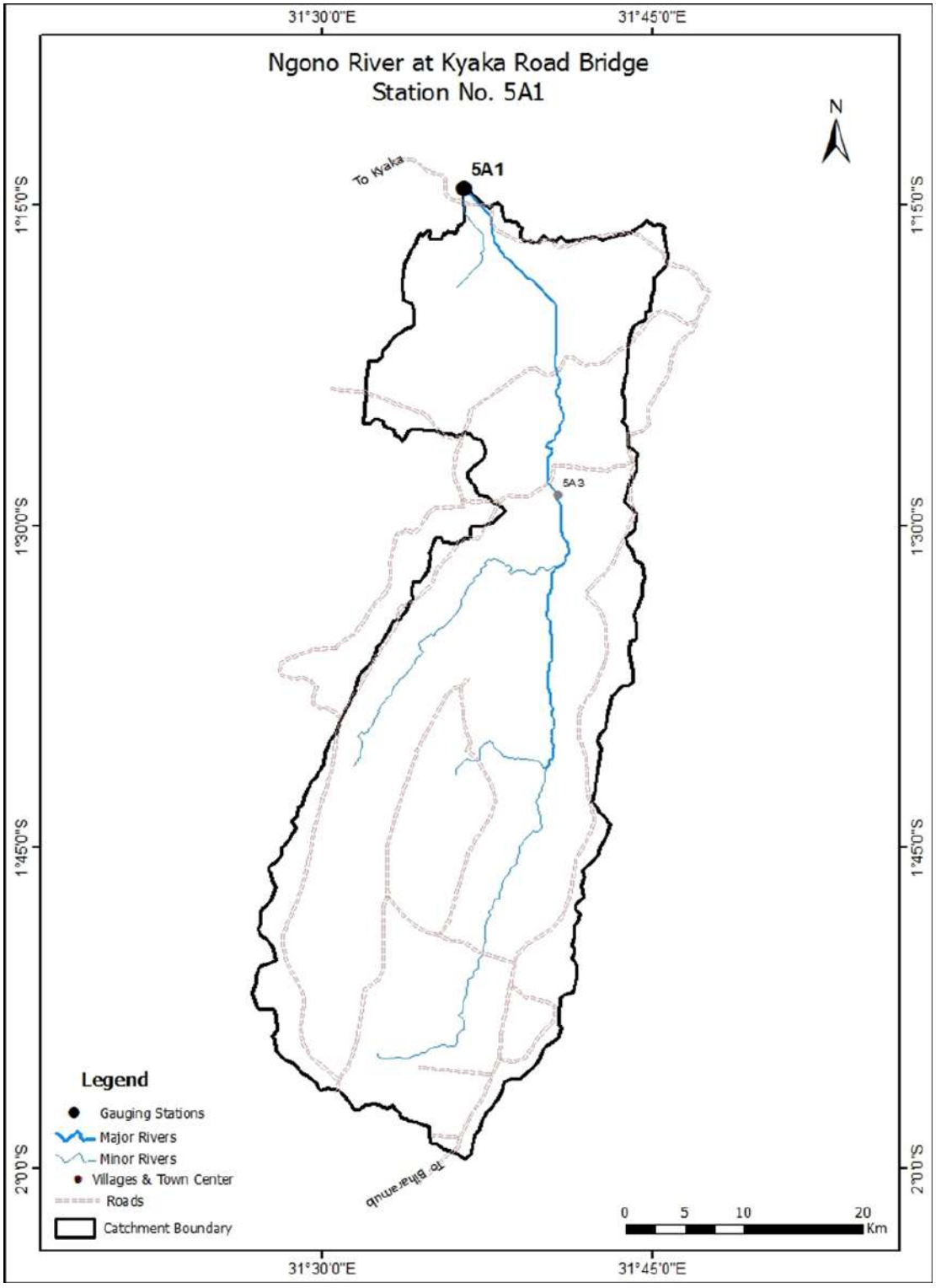
Annual Statistics

Maximum: 212.757 Minimum: 18.426 Mean: 92.946 cumecs
Total: 2931.145 MCM Runoff: 23.202 mm

Possible data flags

No data stored "-" Estimated values "e"

Ngono River at Kyaka Road Bridge				
Station No: 5A1			Established: 03/01/1969	
Coordinates:			Altitude (m.a.m.s.l): 1,147	
Lat: -1.2371	Long: 31.607		Catchment Area (km²): 1,622	
Description of the Catchment:				
Wooded grassland, actively induced vegetation and forest upstream				
Station Details				
1. Staff Gauges	Range: 10 – 18m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini		Date installed:	
3. Benchmark	Angle iron casted with concrete near the bridge on the left bank.			
BM Assumed Datum: 18.432m		N.M.M.S.L: -	TBM: -	
4. Control	Open channel			
5. Access	Access throughout the year, 45km from Bukoba town near Kyaka bridge along Kyaka road.			
Records	Period		Quality	
Water Level:	01/09/2018 – 31/12/2019		1.2.2	
Discharge:	01/09/2018 – 31/12/2019		2.2.2	
Extremes:	Max. Recorded	77.712m³/sec	On 16/12/2019	WL 14.85m
	Min. Recorded	-	On 07/07/2016	WL 10.11m
Remarks				


Ngono River at Kyaka Road Bridge
Station No. 5A1
N
31°30'0"E
31°45'0"E
1°15'0"S
1°30'0"S
1°45'0"S
2°0'0"S
To Kyaka
5A1
5A3
To Bihanub
Legend
Gauging Stations
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Catchment Boundary
0 5 10 20
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 5A1 **Year:** 2019

Station Name: Ngono River at Kyaka Road Bridge

Time-Series Type: Flow (cumecs)

Latitude: 1:14:13 S Longitude: 31:36:25 E Elevation: 1147.0 metres Area: 1622.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	18.389	20.559	16.433	20.076	42.242	72.724	17.880	9.287	8.633	7.737	62.558	69.658
2	21.225	19.896	16.585	20.640	43.819	72.308	17.201	9.271	8.503	7.721	65.392	67.905
3	22.458	19.218	16.719	20.984	42.311	71.671	16.567	9.172	8.487	7.611	68.015	66.000
4	23.423	18.506	16.777	21.187	40.503	71.035	15.844	9.156	8.390	7.501	69.795	64.271
5	27.991	18.114	17.027	21.473	39.642	70.511	15.223	9.139	8.374	7.691	70.731	62.821
6	26.748	17.665	17.200	21.534	40.000	69.630	14.627	9.041	8.374	9.161	71.228	61.859
7	24.350	17.220	17.355	20.742	39.309	68.342	14.056	9.024	8.374	10.755	71.643	61.033
8	16.777	16.892	17.510	19.357	38.124	66.788	13.617	9.024	8.374	11.374	71.809	61.352
9	20.370	16.566	17.646	18.624	39.358	64.865	13.308	9.024	8.374	11.287	71.394	61.299
10	20.539	16.147	17.743	18.153	41.683	62.715	13.020	9.008	8.374	10.924	70.511	61.592
11	19.915	15.825	18.172	17.782	43.673	60.213	12.733	8.909	8.374	10.856	69.191	62.848
12	19.536	15.504	18.035	17.220	44.455	56.769	12.465	8.893	8.374	12.568	67.468	64.838
13	19.118	15.092	18.153	16.777	44.996	54.071	12.287	8.893	8.358	16.793	65.513	66.597
14	18.920	14.794	18.467	16.585	45.168	51.154	12.040	8.893	8.246	19.839	63.438	68.096
15	18.782	14.608	18.920	16.452	44.799	47.826	11.881	8.877	8.118	21.412	61.620	70.187
16	18.742	14.350	19.158	16.547	44.088	45.296	11.741	8.779	7.990	22.252	59.551	75.888
17	18.624	14.184	18.369	17.181	43.525	41.014	11.601	8.763	7.863	22.582	57.813	71.233
18	18.663	14.037	19.497	16.912	43.697	37.000	11.444	8.763	7.752	22.438	58.417	69.877
19	19.039	13.909	19.735	16.566	46.083	34.307	11.200	8.746	7.737	22.026	60.052	69.191
20	19.257	13.927	19.855	16.204	47.503	31.533	11.028	8.649	7.737	22.088	61.060	68.123
21	19.535	14.166	19.875	16.549	52.098	29.127	10.804	8.633	7.737	23.834	61.939	66.842
22	19.715	14.350	19.875	19.054	54.044	26.791	10.752	8.633	7.721	25.909	61.912	65.540
23	19.915	14.627	19.875	23.989	56.588	25.056	10.633	8.633	7.626	27.331	62.853	64.217
24	20.337	14.887	19.895	25.438	60.983	23.811	10.496	8.665	7.611	28.267	69.282	62.741
25	20.660	14.961	20.015	26.494	62.154	22.686	10.343	8.976	7.611	29.840	73.840	61.326
26	20.862	15.261	20.055	30.977	65.380	21.841	10.106	9.754	7.611	35.615	74.928	60.423
27	21.106	15.806	20.176	33.046	68.097	21.187	9.938	10.190	7.611	41.521	74.928	59.655
28	21.004	16.242	20.176	33.296	70.208	20.620	9.703	10.326	7.611	45.048	74.229	58.259
29	20.842		20.035	33.939	71.422	19.736	9.553	10.207	7.626	48.379	72.781	56.637
30	20.680		19.875	37.661	72.280	18.881	9.420	9.938	7.721	52.636	71.229	55.155
31	20.559		19.775		72.724		9.304	9.471		57.074		27.034
Mean	20.583	15.975	18.677	21.715	50.353	45.984	12.284	9.120	8.043	22.583	67.171	63.306
Flow (MCM)	55.130	38.648	50.024	56.284	134.867	119.189	32.902	24.428	20.847	60.486	174.106	169.560
Maximum	27.991	20.559	20.176	37.661	72.724	72.724	17.880	10.326	8.633	57.074	74.928	75.888
Minimum	16.777	13.909	16.433	16.204	38.124	18.881	9.304	8.633	7.611	7.501	57.813	27.034
Runoff (mm)	33.989	23.827	30.841	34.701	83.148	73.483	20.285	15.061	12.853	37.291	107.340	104.537

Flow (cumecs)

Annual Statistics

Maximum: 75.888 Minimum: 7.501 Mean: 29.650 cumecs

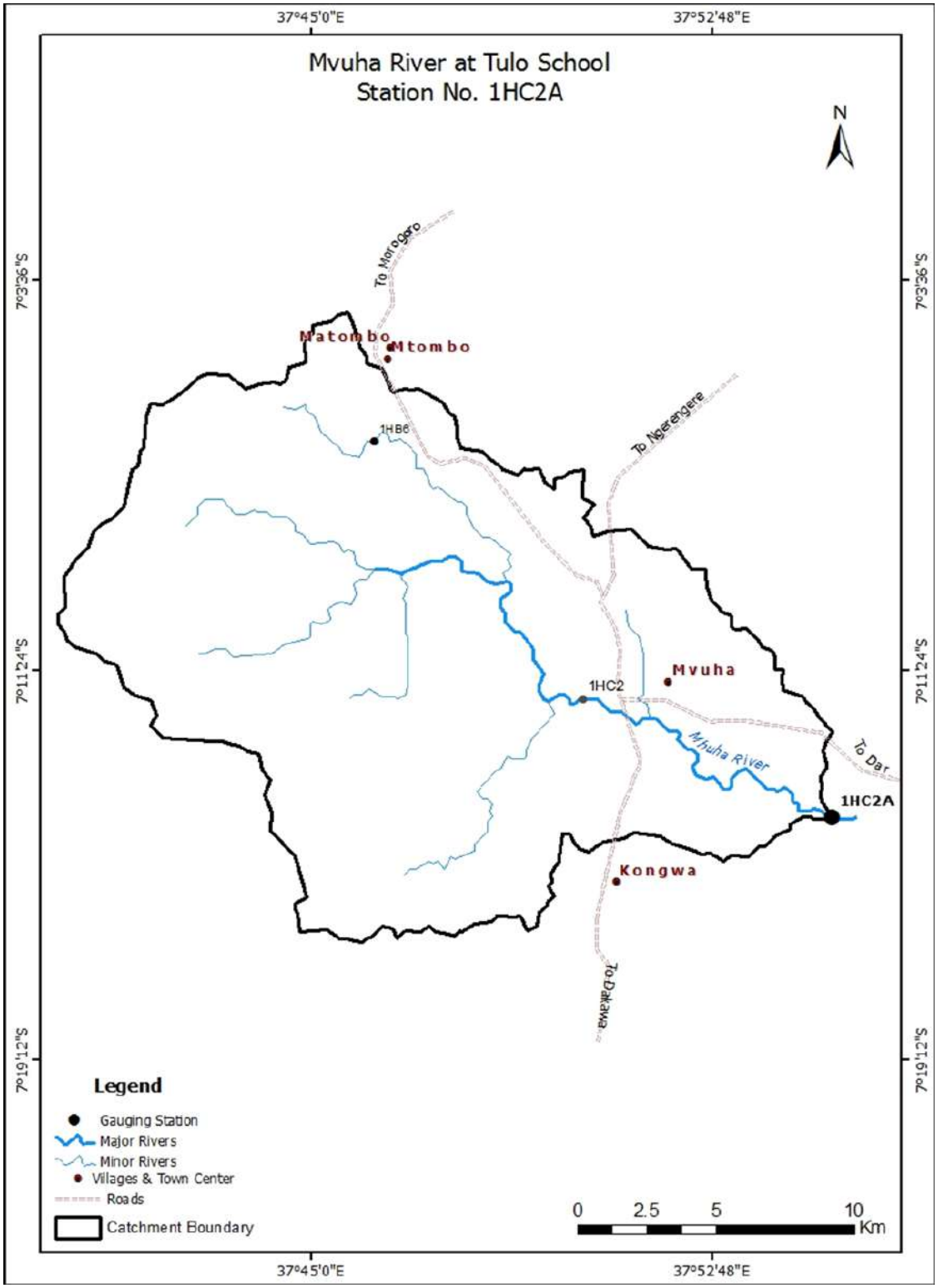
Total: 935.029 MCM Runoff: 576.467 mm

Possible data flags

No data stored "-" Estimated values "e"

SECONDARY STATIONS

Mvuha River at Tulo School				
Station No: 1HC2A			Established: 01/03/1953	
Coordinates:			Altitude (m.a.m.s.l): 114	
Lat: -7.2392	Long: 37.919		Catchment Area (km²): 374	
Description of the Catchment:				
Irregular shape with unstable riverbanks due to cattle encroachment				
Station Details				
1. Staff Gauges	Range: 0 – 5m		A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical		MSL.Z.G.L: -	
2. Automatic Recorder	-		Date installed: 05/12/2019	
3. Benchmark	Bolt embedded in concrete near to gauge 5m			
BM Assumed Datum: 4.024m		N.M.M.S.L: -	TBM: -	
4. Control	Drift/hard, structure located 10m downstream the gauges			
5. Access	The station is located 160km from Morogoro town to Mvuha			
Records	Period		Quality	
Water Level:	01/01/2010 – 31/12/2019		1.2.2	
Discharge:	01/01/2010 – 31/12/2019		2.2.2	
Extremes:	Max. Recorded	149.8m³/sec	On 07/05/2014	WL 4.78m
	Min. Recorded	-	On 30/11/2016	WL 0.81m
Remarks				
Not accessible during rainy season				


Mvuha River at Tulo School
Station No. 1HC2A
37°45'0"E
37°52'48"E
7°3'36"S
7°11'24"S
7°19'12"S
N
To Morogoro
Matombo
Mtombo
1HB6
To Ngerengere
Mvuha
1HC2
Mvuha River
To Dar
1HC2A
Kongwa
To Dakawa
Legend
Gauging Station
Major Rivers
Minor Rivers
Villages & Town Center
Roads
Catchment Boundary
0 2.5 5 10
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2010

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.780	3.294	6.663	6.748	23.737	5.986	3.831	2.566	1.697	1.258	1.059	1.782
2	6.049	3.180	17.208	7.157	-	5.700	3.874	2.353	1.705	1.276	1.076	1.741
3	6.056	3.100	-	8.276	21.292	5.541	3.608	2.463	1.887	1.258	1.056	1.664
4	5.760	3.104	23.187	14.352	13.719	5.626	3.441	2.509	2.215	1.258	1.504	1.648
5	7.137	3.790	13.801	11.746	12.694	5.407	3.400	2.650	1.921	1.272	4.162	1.616
6	8.130	6.709	6.934	12.159	12.177	5.203	3.277	2.519	1.754	1.232	1.547	1.561
7	7.719	13.244	-	15.377	12.841	5.013	3.267	2.528	1.664	1.961	1.259	1.537
8	6.339	33.035	-	13.330	21.537	4.838	3.298	2.435	1.660	6.152	1.582	1.601
9	5.856	10.264	15.982	10.495	-	4.791	3.126	2.454	1.705	1.907	1.407	5.059
10	6.680	5.260	18.411	8.976	6.961	5.206	3.096	2.344	1.684	1.168	1.468	26.560
11	9.679	5.369	13.612	8.399	12.007	5.951	3.091	2.272	1.648	1.164	5.092	10.426
12	8.049	9.340	11.852	7.752	11.323	4.982	3.061	2.327	1.596	1.139	34.006	5.586
13	11.525	8.339	10.621	7.970	10.674	4.653	3.041	2.641	1.596	1.115	30.954	4.646
14	8.357	6.396	9.513	12.072	11.015	4.749	2.948	2.247	1.677	1.108	7.991	3.534
15	6.821	5.480	8.257	11.640	9.478	5.716	2.909	2.061	1.861	1.083	4.070	3.072
16	5.942	4.751	11.449	12.424	9.095	4.864	2.928	2.001	1.758	1.059	6.474	2.831
17	5.437	4.555	28.237	31.127	9.185	4.471	2.928	2.026	1.660	1.080	5.301	2.673
18	5.030	5.137	13.007	15.992	7.842	4.307	3.071	1.933	1.652	1.262	3.653	2.537
19	4.734	6.209	9.095	14.973	7.153	4.358	3.096	1.916	1.795	1.445	3.013	2.313
20	4.475	8.485	8.247	29.244	5.852	4.545	3.056	1.916	1.665	1.204	2.832	2.161
21	4.318	31.641	8.158	13.138	5.936	4.224	2.812	1.916	1.565	1.125	3.141	2.326
22	4.233	41.589	7.549	8.825	6.528	4.048	2.706	1.916	1.526	1.164	3.067	4.029
23	4.516	36.911	8.428	9.411	9.552	4.070	2.640	1.916	1.498	1.233	2.759	4.375
24	5.327	13.548	7.898	9.803	7.767	3.993	2.621	1.907	1.483	1.581	2.528	3.478
25	5.059	9.611	7.412	9.488	7.016	4.407	2.556	1.849	1.407	2.231	2.417	5.757
26	4.731	8.237	6.911	15.361	6.610	5.374	2.491	1.807	1.339	2.253	2.537	7.743
27	4.797	8.893	7.633	35.096	6.469	4.691	2.481	1.899	1.261	1.704	2.354	7.602
28	4.091	6.774	11.338	18.781	7.379	3.985	2.481	1.899	1.232	1.433	2.049	22.440
29	3.729		9.535	-	7.991	3.340	2.463	1.799	1.250	-	1.916	9.217
30	3.583		7.573	15.390	7.705	3.630	2.584	1.782	1.254	-	1.824	4.665
31	3.437		6.861		6.446		3.768	1.770		-		4.269
Mean	5.948	10.937	-	-	-	4.789	3.031	2.149	1.621	-	4.803	5.176
Flow (MCM)	15.930	26.459	-	-	-	12.413	8.118	5.756	4.200	-	12.450	13.863
Maximum	11.525	41.589	-	-	-	5.986	3.874	2.650	2.215	-	34.006	26.560
Minimum	3.437	3.100	-	-	-	3.340	2.463	1.770	1.232	-	1.056	1.537
Runoff (mm)	42.595	70.747	-	-	-	33.190	21.705	15.390	11.231	-	33.289	37.067

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2011

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.891	2.790	2.275	-	10.813	8.534	5.308	3.134	2.344	6.914	2.946	3.154
2	3.551	2.685	2.221	16.854	12.509	8.113	5.129	3.015	2.783	5.241	2.892	3.262
3	3.519	2.657	2.306	16.172	11.014	7.523	5.023	3.039	2.389	4.273	2.951	2.721
4	3.561	2.714	2.411	16.589	9.798	7.840	4.923	2.956	2.151	3.932	2.868	2.526
5	3.232	2.587	2.579	17.048	8.892	9.270	4.795	2.931	2.094	3.680	2.951	2.662
6	4.181	2.591	3.253	17.279	8.302	8.635	4.679	3.090	2.059	3.648	2.868	4.160
7	11.711	2.781	4.650	36.960	8.570	7.803	4.485	3.404	2.029	7.586	2.767	4.703
8	9.204	2.892	10.296	35.545	11.902	7.461	4.367	3.512	2.016	32.461	2.743	4.822
9	9.329	2.695	6.003	18.667	9.988	7.233	4.222	3.150	1.991	10.667	2.676	4.265
10	7.036	2.554	4.051	12.882	16.370	6.967	4.188	2.985	2.155	7.980	2.721	7.530
11	6.797	2.524	3.292	12.107	29.345	6.666	4.100	2.863	2.279	6.781	3.379	8.114
12	11.331	3.202	3.020	15.495	14.729	6.414	3.942	2.728	2.222	7.027	3.999	21.653
13	10.506	3.045	2.786	15.364	15.094	6.242	3.861	2.676	2.184	7.612	7.773	-
14	8.739	3.185	2.610	16.439	13.937	6.532	4.057	2.648	3.935	9.408	7.770	17.831
15	8.685	2.811	6.403	13.872	18.901	8.841	3.969	2.666	10.737	7.546	6.798	5.443
16	6.666	2.839	28.756	12.422	-	6.160	3.797	2.633	5.903	6.545	6.644	6.663
17	5.689	2.615	13.382	14.435	21.386	5.661	3.786	2.582	3.750	5.749	5.190	6.238
18	5.240	2.615	11.132	12.764	35.754	5.465	3.711	2.615	3.095	5.091	4.362	6.188
19	4.809	3.194	27.838	20.528	18.681	5.320	3.775	2.540	2.776	5.061	4.278	14.178
20	4.545	6.934	18.316	-	15.536	5.302	3.685	2.517	2.634	4.734	3.761	-
21	4.313	4.257	17.486	19.194	15.677	5.490	3.590	2.452	2.494	4.537	3.403	22.108
22	4.268	3.211	-	19.193	13.984	5.655	3.481	2.383	12.562	4.266	3.189	15.381
23	4.141	2.815	17.226	-	15.066	7.464	3.424	2.338	-	4.106	3.030	-
24	3.741	2.610	18.702	-	29.808	8.478	3.362	2.275	20.223	3.942	2.951	16.285
25	3.478	2.493	12.184	18.199	16.419	7.811	3.302	2.239	8.036	3.797	3.084	16.889
26	3.344	2.424	10.353	18.399	12.547	6.831	2.918	2.235	5.946	3.596	2.917	11.832
27	3.252	2.411	10.804	12.743	11.383	6.287	3.415	2.235	4.916	3.398	2.762	10.142
28	3.136	2.370	9.379	9.063	11.025	6.027	3.733	2.230	4.620	3.270	2.685	12.687
29	3.022		9.435	11.967	10.276	5.716	3.754	2.199	4.501	3.184	2.885	28.260
30	2.943		9.983	11.502	9.575	5.502	3.450	2.173	5.905	3.104	3.999	20.859
31	2.890		15.365		9.064		3.240	2.204		3.025		32.202
Mean	5.508	2.946	-	-	-	6.908	3.983	2.666	-	6.199	3.775	-
Flow (MCM)	14.753	7.128	-	-	-	17.906	10.668	7.141	-	16.602	9.784	-
Maximum	11.711	6.934	-	-	-	9.270	5.308	3.512	-	32.461	7.773	-
Minimum	2.890	2.370	-	-	-	5.302	2.918	2.173	-	3.025	2.676	-
Runoff (mm)	39.446	19.059	-	-	-	47.877	28.524	19.092	-	44.392	26.160	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2012

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.626	4.519	5.041	7.127	5.576	11.085	5.088	2.629	2.173	1.555	1.493	26.903
2	11.254	4.373	4.807	6.634	6.447	7.068	5.082	2.601	2.155	1.505	1.653	13.629
3	9.799	4.200	4.531	6.767	15.341	6.556	4.685	2.563	2.094	1.489	3.115	8.251
4	9.446	4.035	4.812	9.432	29.097	6.147	4.639	2.540	2.025	1.579	6.205	8.127
5	12.104	3.921	4.836	11.558	21.715	5.760	4.356	2.586	1.969	1.619	4.767	8.128
6	10.905	3.733	5.795	10.965	-	5.484	4.172	2.554	1.982	1.764	2.703	7.176
7	9.799	3.627	10.267	9.784	15.076	5.405	4.089	2.484	1.965	1.781	1.843	6.155
8	8.424	3.675	8.147	8.892	13.747	5.344	3.910	2.610	1.978	1.740	1.425	5.735
9	7.809	3.486	6.178	9.227	9.302	5.213	3.823	2.800	1.944	1.772	1.718	5.043
10	7.220	3.372	5.228	7.509	7.900	5.064	3.834	2.969	1.995	1.719	2.227	4.197
11	6.823	3.403	4.659	7.558	16.181	4.946	3.759	3.684	3.338	1.631	2.253	3.587
12	6.523	3.291	6.268	11.787	-	5.177	3.632	2.940	12.005	1.567	1.911	3.408
13	6.433	3.119	6.434	8.904	-	5.177	3.481	2.624	5.252	1.536	1.671	5.864
14	6.977	3.225	7.863	7.789	-	4.709	3.383	2.554	3.299	1.532	1.579	7.740
15	7.748	3.154	6.299	7.201	22.659	4.542	3.270	2.466	2.616	1.524	3.086	5.413
16	5.807	3.094	9.272	6.473	14.256	4.559	3.189	2.443	2.484	1.474	11.370	4.169
17	5.455	3.000	9.253	6.385	12.418	4.458	3.164	2.383	2.411	1.439	5.894	4.190
18	7.946	2.975	10.036	7.559	11.065	4.935	3.235	2.352	2.343	1.409	3.306	3.844
19	8.364	2.887	9.508	7.288	10.291	4.824	3.149	2.678	2.434	1.409	2.635	4.760
20	8.196	2.724	7.650	6.467	9.940	4.953	3.064	4.437	2.249	1.544	2.352	3.802
21	7.976	2.824	11.061	6.015	8.678	4.514	2.985	3.531	2.107	1.428	2.160	3.450
22	6.767	7.372	26.718	5.741	8.301	4.334	2.907	2.622	2.055	1.375	1.978	3.179
23	6.103	34.622	11.043	5.484	8.155	5.324	2.863	2.402	1.978	1.322	1.922	3.154
24	5.883	9.726	12.210	5.363	7.585	9.244	2.995	2.397	1.843	1.285	1.940	3.373
25	5.642	9.086	13.193	5.591	6.922	8.056	2.980	2.315	1.818	1.234	2.165	3.100
26	5.369	27.799	-	8.588	7.133	6.190	2.921	2.325	1.785	1.213	1.869	2.936
27	5.147	10.564	21.488	7.437	7.267	5.908	2.926	2.573	1.727	1.242	1.772	2.767
28	4.865	6.120	10.286	6.068	7.592	6.084	2.829	2.334	1.695	1.206	2.065	2.676
29	4.731	5.394	9.122	6.557	6.668	5.436	2.724	2.347	1.675	1.342	4.024	2.601
30	4.599		8.429	6.358	9.452	5.141	2.671	2.253	1.579	1.429	9.329	2.526
31	4.656		7.892		27.932		2.615	2.226		1.447		2.527
Mean	7.561	6.321	-	7.617	-	5.721	3.497	2.652	2.566	1.487	3.081	5.562
Flow (MCM)	20.252	15.839	-	19.743	-	14.829	9.368	7.104	6.650	3.984	7.986	14.896
Maximum	15.626	34.622	-	11.787	-	11.085	5.088	4.437	12.005	1.781	11.370	26.903
Minimum	4.599	2.724	-	5.363	-	4.334	2.615	2.226	1.579	1.206	1.425	2.526
Runoff (mm)	54.150	42.349	-	52.788	-	39.651	25.047	18.994	17.781	10.652	21.353	39.829

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: -

Total: - Runoff: - mm cumecs

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2013

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.102	3.129	2.099	-	-	6.551	2.965	3.758	2.025	-	3.134	3.920
2	4.490	2.995	1.856	20.421	21.462	5.773	2.868	2.929	1.973	-	3.064	9.486
3	5.555	2.729	1.846	17.085	43.681	5.834	2.926	2.753	2.008	-	2.995	5.498
4	4.387	2.719	2.647	37.682	20.438	5.454	2.752	3.105	1.956	-	3.180	4.136
5	3.431	2.563	5.519	-	16.683	5.248	2.936	3.316	1.897	-	4.305	3.461
6	3.788	2.402	3.974	-	18.057	5.035	2.907	3.450	1.914	15.533	3.875	3.235
7	4.256	2.370	3.558	-	30.354	4.888	2.839	3.016	2.051	8.864	3.136	3.164
8	4.606	2.311	5.934	-	15.528	4.754	2.810	2.743	1.973	10.637	2.858	3.617
9	3.913	2.262	7.614	-	11.793	4.457	2.695	2.868	1.948	6.362	2.829	5.902
10	3.226	2.168	5.497	-	10.917	4.322	2.676	2.819	1.889	11.958	2.810	4.503
11	2.868	2.098	7.049	-	10.366	4.166	2.676	2.743	1.855	31.997	2.724	3.525
12	3.782	2.055	30.467	-	9.782	4.067	2.714	2.956	1.982	15.285	2.849	3.724
13	10.031	1.995	36.529	38.726	9.310	3.980	2.936	2.648	1.897	9.283	2.686	7.121
14	8.185	1.948	13.782	33.451	9.530	3.893	2.907	2.517	1.814	7.379	2.535	4.655
15	5.311	1.864	7.754	17.480	9.722	3.807	2.829	2.388	1.723	6.326	2.443	3.670
16	4.566	1.864	6.442	13.318	9.428	3.701	2.752	2.306	1.805	5.846	2.315	3.316
17	3.971	2.073	6.122	11.841	8.409	3.501	2.685	2.235	1.805	5.490	2.262	3.411
18	3.686	2.020	7.142	12.497	7.591	3.450	2.657	2.164	1.707	5.321	2.334	5.142
19	4.069	2.112	9.366	13.329	7.714	3.316	2.545	2.103	1.691	4.965	2.182	4.501
20	3.597	2.334	14.052	13.153	6.792	3.224	2.602	2.094	1.675	4.559	2.120	6.737
21	3.250	2.588	14.820	10.999	6.459	3.134	3.016	2.111	1.563	4.446	2.217	4.502
22	3.079	3.228	-	11.242	6.293	2.995	2.810	2.337	1.575	4.468	2.226	3.670
23	2.815	3.720	-	10.655	6.090	2.976	2.800	3.077	2.301	4.222	2.164	4.351
24	2.681	2.815	-	11.353	5.858	3.358	2.676	2.997	2.307	3.851	2.094	7.856
25	2.601	2.343	26.506	14.911	5.668	3.606	2.535	2.435	2.147	3.712	2.254	9.512
26	2.531	2.204	29.355	12.690	5.364	3.606	2.452	2.182	1.898	3.574	6.839	6.886
27	2.489	2.146	24.183	9.741	5.463	3.388	2.379	2.094	1.699	3.553	26.088	5.687
28	2.466	2.182	-	7.288	6.608	3.154	2.324	2.025	1.579	3.543	9.038	5.095
29	2.622		19.268	8.550	7.881	3.005	2.738	2.034	1.555	3.450	4.764	4.663
30	3.277		18.274	21.377	7.042	2.985	4.982	2.398	9.633	3.255	3.435	4.102
31	-		-		6.842		4.483	2.138		-		3.733
Mean	-	2.401	-	-	-	4.054	2.867	2.604	2.128	-	3.925	4.928
Flow (MCM)	-	5.809	-	-	-	10.509	7.679	6.976	5.516	-	10.174	13.200
Maximum	-	3.720	-	-	-	6.551	4.982	3.758	9.633	-	26.088	9.512
Minimum	-	1.864	-	-	-	2.976	2.324	2.025	1.555	-	2.094	3.164
Runoff (mm)	-	15.533	-	-	-	28.098	20.531	18.652	14.750	-	27.203	35.295

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: -

Total: - Runoff: - mm cumecs

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2014

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.491	2.839	2.762	13.086	-	7.173	7.001	5.790	4.381	2.605	-	8.014
2	3.377	2.810	2.714	14.666	-	6.790	6.633	5.486	4.594	2.507	21.417	15.909
3	3.235	2.676	2.871	12.152	-	7.080	6.698	5.033	4.374	2.507	10.838	31.741
4	3.144	2.545	5.678	12.733	-	6.882	6.478	4.315	3.840	2.914	7.864	14.763
5	3.045	2.517	8.829	9.971	-	6.672	6.401	4.018	3.749	5.868	6.644	12.837
6	2.858	2.800	11.420	9.967	-	6.568	6.582	4.079	3.845	5.234	8.356	9.082
7	2.819	4.725	13.894	15.096	-	6.517	6.350	4.503	4.523	5.117	6.210	7.437
8	2.743	3.636	34.522	-	-	6.261	6.071	4.818	9.076	3.741	8.577	6.759
9	2.619	3.055	34.628	25.813	-	6.046	5.921	4.503	5.399	3.080	8.177	6.117
10	2.591	3.015	18.633	35.208	-	6.521	5.661	4.289	4.069	2.931	6.137	6.740
11	2.526	2.781	36.181	18.413	-	10.875	5.477	4.117	3.659	2.951	5.143	5.769
12	2.443	2.714	16.983	-	-	12.460	5.441	3.991	3.491	2.800	5.446	5.273
13	2.343	2.849	11.575	-	-	9.113	5.381	3.937	3.653	2.681	10.284	5.656
14	2.443	2.686	13.111	-	22.537	7.484	5.417	3.920	3.684	2.591	7.358	7.640
15	2.507	2.545	18.504	-	15.348	6.803	5.284	4.013	4.809	2.457	7.080	5.626
16	2.517	2.573	30.838	-	14.571	6.465	5.236	3.824	5.174	2.347	6.690	8.570
17	2.888	3.902	14.179	-	13.778	6.248	5.094	3.701	5.099	2.271	5.319	5.738
18	3.174	10.045	9.697	-	13.395	6.046	5.046	3.706	4.170	2.143	4.743	4.721
19	3.075	5.620	10.166	-	12.869	5.846	4.882	3.627	3.728	2.018	4.356	4.670
20	2.583	3.982	7.341	-	12.095	14.778	4.714	3.475	3.455	4.227	4.111	6.145
21	6.166	3.799	5.836	-	11.119	-	4.651	3.352	3.336	7.490	4.310	4.671
22	29.439	4.482	6.326	-	10.186	15.431	4.588	3.265	3.179	5.304	6.582	4.172
23	12.780	4.080	6.855	-	9.574	16.110	4.418	3.196	3.005	8.122	5.906	4.641
24	33.609	3.575	6.659	-	9.179	11.615	4.211	3.189	3.036	5.292	5.048	8.027
25	9.145	3.245	6.350	-	8.790	10.353	4.073	3.119	3.523	3.966	4.458	6.395
26	4.224	3.064	6.250	-	8.690	9.479	4.013	2.998	3.429	3.482	4.112	8.074
27	3.851	2.917	10.431	-	8.393	8.963	4.128	2.941	3.220	3.039	3.856	5.978
28	3.754	2.829	29.285	-	8.057	8.492	4.144	2.892	3.000	3.568	3.959	5.722
29	3.409		16.707	-	7.878	7.974	4.419	3.445	2.868	5.257	4.345	5.927
30	3.144		24.917	-	8.380	7.577	5.239	6.322	2.747	5.769	4.367	6.068
31	2.926		15.675		7.687		5.915	5.486		11.759		9.359
Mean	5.447	3.511	14.188	-	-	-	5.341	4.044	4.004	4.066	-	8.008
Flow (MCM)	14.590	8.493	38.000	-	-	-	14.305	10.830	10.378	10.890	-	21.448
Maximum	33.609	10.045	36.181	-	-	-	7.001	6.322	9.076	11.759	-	31.741
Minimum	2.343	2.517	2.714	-	-	-	4.013	2.892	2.747	2.018	-	4.172
Runoff (mm)	39.012	22.709	101.605	-	-	-	38.249	28.958	27.749	29.117	-	57.347

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2015

Latitude: 7:14:21 S | Longitude: 37:55: 8 E | Elevation: 114.0 metres | Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.260	3.675	2.248	11.413	12.544	5.399	3.431	-	-	-	8.035	9.576
2	7.051	3.439	2.362	15.292	11.762	4.314	2.842	-	-	-	9.371	8.635
3	5.836	3.316	2.748	17.544	13.550	4.409	3.167	-	-	-	6.459	7.865
4	5.357	3.245	2.831	-	15.158	4.280	3.412	-	-	-	5.738	7.294
5	5.142	3.079	3.394	-	-	3.896	5.159	-	-	-	13.210	6.777
6	5.780	2.980	3.155	-	-	4.246	4.839	-	-	-	-	6.350
7	5.595	2.897	2.858	22.284	-	6.882	4.579	-	-	-	19.331	5.946
8	5.173	2.951	2.743	13.834	-	6.097	4.932	-	-	-	11.185	5.551
9	4.790	2.848	2.605	12.192	18.453	4.410	4.393	-	-	-	31.510	5.177
10	4.642	2.815	2.480	11.211	18.375	4.020	3.870	-	-	-	14.061	4.894
11	5.701	2.724	2.316	14.861	14.238	3.879	3.566	-	-	-	13.200	4.697
12	6.021	2.667	2.199	37.179	16.495	3.719	3.416	-	-	-	9.028	4.525
13	5.479	2.572	2.103	23.454	14.509	3.613	3.257	-	-	-	12.766	4.668
14	5.000	2.526	2.055	-	15.124	3.655	3.101	-	-	-	12.115	6.127
15	4.697	2.484	2.513	21.047	12.926	3.608	2.982	-	-	-	11.407	6.352
16	4.435	2.513	5.713	13.613	11.229	3.416	2.899	-	-	-	15.718	5.359
17	4.222	3.001	5.180	12.255	10.412	3.283	2.807	-	-	-	12.939	6.035
18	3.980	3.001	5.613	12.143	9.856	3.747	2.668	-	-	-	10.089	10.397
19	4.638	4.030	5.959	10.919	9.122	3.912	2.716	-	-	-	8.609	9.936
20	7.500	3.189	8.689	9.857	8.633	3.483	2.631	-	-	-	7.363	8.201
21	7.978	2.781	32.562	9.325	8.280	3.349	2.532	-	-	-	6.557	7.441
22	6.358	2.676	39.859	9.270	7.947	3.318	2.514	-	-	-	5.934	7.537
23	5.251	2.601	-	10.765	7.645	3.191	2.468	-	-	-	5.772	6.600
24	4.801	2.544	19.938	17.242	7.549	3.131	2.335	-	-	-	5.321	5.444
25	4.525	2.563	20.276	-	7.631	3.056	2.192	-	-	-	7.562	5.675
26	4.356	2.406	-	-	7.280	2.977	2.022	-	-	-	10.481	4.734
27	4.289	2.365	-	20.243	7.320	2.909	1.724	-	-	-	-	4.333
28	3.997	2.279	27.155	13.295	7.093	3.205	1.635	-	-	-	8.322	4.447
29	3.770		-	-	7.676	5.126	1.614	-	-	-	13.333	6.225
30	3.686		19.859	-	9.227	5.057	2.960	-	-	-	10.876	4.581
31	4.019		11.652		9.093		2.586	-		-		4.737
Mean	5.269	2.863	-	-	-	3.986	3.073	-	-	-	-	6.326
Flow (MCM)	14.111	6.927	-	-	-	10.332	8.230	-	-	-	-	16.945
Maximum	9.260	4.030	-	-	-	6.882	5.159	-	-	-	-	10.397
Minimum	3.686	2.279	-	-	-	2.909	1.614	-	-	-	-	4.333
Runoff (mm)	37.731	18.520	-	-	-	27.627	22.004	-	-	-	-	45.306

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2016

Latitude: 7:14:21 S | Longitude: 37:55: 8 E | Elevation: 114.0 metres | Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.569	11.885	5.039	16.136	-	6.855	4.982	3.154	2.235	3.260	1.683	2.819
2	4.746	11.009	4.863	-	-	6.659	4.743	3.074	2.235	2.763	1.532	2.752
3	4.929	13.364	5.853	21.266	-	6.465	4.519	3.025	2.226	2.462	1.536	2.792
4	19.095	11.271	13.332	-	-	6.337	4.356	2.980	2.168	2.248	1.439	3.379
5	-	11.498	12.960	-	-	6.159	4.300	2.907	2.129	2.129	1.553	3.080
6	21.512	14.362	7.906	-	-	6.186	4.095	2.858	2.125	2.012	2.028	2.734
7	10.062	28.677	13.595	-	25.330	6.896	4.024	2.956	2.266	1.831	2.490	2.531
8	10.581	16.846	-	-	16.452	6.647	3.975	2.907	2.213	1.715	2.464	2.598
9	7.870	30.323	24.108	-	15.207	6.147	3.888	2.858	2.190	1.740	3.038	3.847
10	8.989	15.435	40.871	-	14.114	5.698	3.775	2.951	2.133	1.695	2.294	3.970
11	7.162	11.967	17.685	-	13.020	5.550	3.727	2.878	2.090	1.655	1.749	3.349
12	6.738	14.575	13.979	22.114	11.307	5.453	3.711	2.824	2.029	1.599	1.639	2.937
13	6.077	11.857	10.782	17.011	10.747	5.368	3.653	2.752	1.990	1.585	1.643	2.762
14	6.607	10.957	10.042	19.373	11.086	5.332	3.669	2.695	1.969	1.684	8.634	2.667
15	12.005	9.233	9.042	15.978	11.288	5.177	3.664	2.743	2.008	1.688	-	2.568
16	9.845	8.385	9.567	-	11.243	5.058	3.775	2.743	1.961	1.663	14.284	2.695
17	10.860	7.856	8.670	-	12.491	4.813	3.717	2.676	1.927	1.651	11.742	2.948
18	14.851	7.595	7.953	-	12.735	4.369	3.601	2.610	1.927	1.907	9.664	4.194
19	11.123	7.446	7.474	21.869	10.808	8.458	3.517	2.610	1.944	4.128	12.881	4.149
20	15.870	7.569	6.979	-	9.737	28.830	3.465	2.667	1.889	5.477	11.985	2.958
21	27.657	6.993	6.677	23.616	9.325	11.472	3.393	2.657	1.830	2.839	10.949	2.448
22	23.669	6.561	6.664	11.246	9.106	7.351	3.331	2.545	1.847	2.073	9.799	2.275
23	-	6.317	6.769	-	9.006	6.162	3.565	2.507	1.991	1.806	8.638	2.164
24	22.684	6.038	9.563	-	8.534	5.667	5.620	2.397	1.956	1.667	6.920	2.059
25	13.568	5.820	27.410	-	8.182	5.417	4.782	2.374	1.893	1.595	4.954	1.948
26	11.295	5.598	12.191	-	7.946	5.339	4.718	2.338	1.851	1.536	3.611	1.801
27	10.234	5.476	7.696	-	7.726	5.667	3.595	2.293	1.869	1.528	3.225	1.960
28	11.723	5.331	7.072	-	7.522	5.605	3.270	2.365	3.439	1.675	2.995	3.362
29	13.601	5.158	6.756	-	7.387	5.484	3.149	2.374	10.265	1.707	2.848	6.254
30	28.623		6.535	-	7.186	5.255	3.074	2.333	5.293	1.525	2.829	23.941
31	16.454		6.865		6.987		3.079	2.248		1.757		7.990
Mean	-	10.876	-	-	-	6.863	3.895	2.687	2.463	2.084	-	3.804
Flow (MCM)	-	27.251	-	-	-	17.788	10.431	7.197	6.384	5.581	-	10.189
Maximum	-	30.323	-	-	-	28.830	5.620	3.154	10.265	5.477	-	23.941
Minimum	-	5.158	-	-	-	4.369	3.074	2.248	1.830	1.525	-	1.801
Runoff (mm)	-	72.863	-	-	-	47.561	27.891	19.243	17.068	14.923	-	27.244

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: -

Total: - Runoff: - mm cumecs

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2017

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.457	4.203	29.410	13.127	-	11.904	5.544	3.960	2.951	2.917	11.314	3.797
2	6.562	3.226	17.377	11.669	-	12.951	5.496	6.164	2.902	2.902	10.132	3.419
3	5.450	3.473	10.632	13.382	-	13.103	5.393	7.416	2.844	2.844	9.252	3.225
4	7.779	4.789	9.827	13.263	-	10.770	5.225	6.663	2.863	2.863	9.845	3.270
5	5.238	7.663	8.665	13.928	-	9.708	5.123	5.742	2.863	2.863	11.018	3.154
6	4.005	4.383	7.647	19.295	-	9.223	5.064	5.411	2.824	2.824	11.727	3.436
7	3.358	3.586	7.054	-	-	8.977	4.976	5.022	2.781	2.781	28.755	5.493
8	3.206	3.105	7.731	28.574	-	8.840	4.882	3.786	2.868	2.868	11.499	5.183
9	3.885	2.829	9.022	-	-	8.662	4.801	3.765	2.767	2.767	7.084	9.601
10	4.155	2.615	8.594	-	-	8.400	4.777	3.717	2.714	2.714	6.237	10.084
11	4.266	2.489	7.710	-	-	8.155	4.708	3.595	2.671	2.671	5.485	6.493
12	3.907	2.379	10.461	-	-	7.864	4.685	3.507	2.601	2.601	5.119	5.214
13	3.146	2.271	12.612	28.549	-	7.733	4.605	3.724	2.531	2.517	5.645	4.697
14	2.849	2.168	11.847	-	-	7.631	4.525	5.192	2.489	2.406	4.723	4.245
15	3.036	2.098	9.959	-	-	7.353	4.502	9.601	2.452	2.438	4.245	3.808
16	4.514	2.906	12.522	-	-	7.360	4.423	5.727	2.415	2.415	3.905	3.884
17	3.325	8.138	11.825	-	-	7.199	4.344	4.498	2.379	2.379	3.653	6.284
18	2.781	5.910	18.416	30.854	23.429	7.079	4.300	4.123	2.342	2.342	3.502	4.914
19	2.610	8.187	-	-	-	6.960	4.111	3.861	2.729	2.729	3.362	7.178
20	2.535	30.080	24.355	-	22.916	6.757	4.161	3.664	5.212	5.212	3.684	8.183
21	2.517	12.983	16.101	-	15.329	6.479	4.250	3.627	4.145	4.145	4.619	7.700
22	2.452	10.077	-	-	14.232	6.084	4.111	4.725	3.023	3.023	4.289	7.232
23	2.356	7.347	15.588	-	14.622	6.338	3.948	4.136	2.724	2.724	4.390	5.473
24	2.138	7.550	18.958	-	14.417	8.766	3.856	3.675	2.587	3.578	3.970	4.813
25	2.003	7.742	14.380	-	14.215	7.936	3.791	3.502	2.402	9.831	3.861	4.525
26	2.112	7.195	11.608	-	13.214	7.114	3.674	3.357	2.379	9.256	3.627	4.344
27	1.982	9.513	15.136	-	12.431	6.589	3.738	3.465	2.545	8.876	3.316	4.211
28	2.122	13.494	17.121	-	12.045	6.028	3.690	3.342	2.527	8.295	3.323	3.905
29	3.119		-	-	11.918	5.679	3.680	3.164	3.001	8.368	4.589	3.648
30	3.599		15.865	-	11.398	5.563	3.674	3.099	2.825	10.929	4.020	3.481
31	6.725		18.525		11.148		3.643	3.025		7.030		3.398
Mean	3.684	6.514	-	-	-	8.107	4.442	4.460	2.812	4.262	6.673	5.106
Flow (MCM)	9.866	15.759	-	-	-	21.013	11.897	11.945	7.288	11.414	17.296	13.677
Maximum	7.779	30.080	-	-	-	13.103	5.544	9.601	5.212	10.929	28.755	10.084
Minimum	1.982	2.098	-	-	-	5.563	3.643	3.025	2.342	2.342	3.316	3.154
Runoff (mm)	26.380	42.137	-	-	-	56.184	31.811	31.938	19.487	30.519	46.247	36.568

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs

Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A **Year:** 2018
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	3.486	18.894	-	7.726	8.219	3.388	4.134	3.123	2.757	4.131
2	-	-	3.724	-	-	7.576	9.575	3.377	3.440	4.054	2.629	5.241
3	-	-	3.509	-	-	7.713	9.540	3.316	2.716	4.003	2.448	5.772
4	-	-	5.514	-	24.700	7.220	7.038	3.295	2.635	3.441	2.262	5.144
5	-	-	4.112	20.669	16.629	6.836	6.459	3.230	4.270	3.174	2.226	4.237
6	-	-	3.419	16.036	16.575	6.607	6.695	3.179	10.846	3.124	2.164	3.431
7	-	-	3.184	12.688	15.405	6.408	8.694	3.094	7.962	2.985	2.103	3.372
8	-	-	3.179	14.253	12.472	6.242	7.043	2.951	6.449	2.829	2.676	3.398
9	-	-	3.266	30.498	11.714	6.052	5.897	2.839	4.547	2.709	6.032	3.844
10	-	-	4.818	17.776	12.953	5.889	5.557	2.786	3.959	2.762	3.698	4.770
11	-	-	3.920	13.384	12.323	5.691	5.339	2.777	4.401	2.671	3.184	4.021
12	-	-	4.397	12.323	14.509	5.490	5.047	3.080	4.278	2.540	2.927	5.240
13	-	-	5.789	14.321	19.959	5.496	4.888	3.054	3.698	2.480	2.762	11.797
14	-	-	5.346	17.358	-	5.490	4.777	2.907	3.065	2.420	2.676	10.093
15	-	-	5.401	18.823	-	5.399	4.605	2.762	3.060	2.540	2.596	8.338
16	-	-	7.193	-	21.748	5.260	4.429	2.685	2.724	2.352	2.602	6.478
17	-	-	6.806	-	14.340	5.129	4.283	2.671	2.577	2.222	3.305	10.324
18	-	-	6.116	-	12.482	5.064	4.117	2.633	2.365	2.439	3.881	9.092
19	-	-	8.242	-	11.445	5.005	3.986	2.568	2.311	2.573	3.713	12.741
20	-	-	10.431	-	11.211	5.088	3.893	2.540	3.540	2.321	11.563	14.849
21	-	-	10.201	-	12.737	5.023	3.813	2.582	9.686	2.112	31.212	19.096
22	-	-	6.942	-	15.842	4.929	3.759	2.535	4.943	2.122	10.850	-
23	-	-	5.687	-	13.992	4.841	3.680	2.521	3.308	2.621	10.446	-
24	-	-	5.552	-	11.079	4.789	3.590	2.480	3.157	2.603	28.927	21.935
25	-	-	8.029	19.170	10.155	4.720	3.496	2.392	3.972	3.772	14.323	11.413
26	-	-	8.788	19.083	10.195	4.531	3.543	2.370	4.036	6.764	7.659	8.097
27	-	-	11.394	14.999	12.510	4.423	3.548	2.306	4.595	4.994	6.138	7.686
28	-	-	9.532	14.031	9.751	4.333	3.517	2.235	4.157	3.820	5.126	6.923
29	-		7.089	12.740	8.748	4.300	3.507	2.164	3.571	3.851	4.531	6.357
30	-		6.024	17.738	8.295	5.034	3.465	2.120	3.140	3.338	4.328	5.927
31	-		5.692		7.960		3.398	2.495		2.937		5.716
Mean	-	-	6.025	-	-	5.610	5.142	2.753	4.251	3.087	6.391	-
Flow (MCM)	-	-	16.138	-	-	14.541	13.772	7.373	11.020	8.268	16.567	-
Maximum	-	-	11.394	-	-	7.726	9.575	3.388	10.846	6.764	31.212	-
Minimum	-	-	3.179	-	-	4.300	3.398	2.120	2.311	2.112	2.103	-
Runoff (mm)	-	-	43.149	-	-	38.881	36.823	19.713	29.465	22.107	44.296	-

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1HC2A
Station Name: Mvuha River at Tulo School
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 7:14:21 S Longitude: 37:55: 8 E Elevation: 114.0 metres Area: 374.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.679	5.576	12.321	7.354	-	14.930	4.166	2.667	1.819	1.361	5.300	14.842
2	6.156	5.165	10.523	7.645	21.259	14.231	4.073	2.634	1.834	1.425	4.972	16.176
3	8.106	5.879	9.313	14.090	-	13.285	4.056	2.752	1.939	1.659	4.801	10.669
4	7.757	12.611	8.310	26.769	19.170	10.880	4.183	2.667	1.753	6.469	4.738	9.051
5	8.345	12.597	7.659	15.547	19.313	9.000	4.002	2.503	1.703	29.100	5.062	8.407
6	5.529	8.766	7.850	11.142	-	7.271	3.893	2.420	1.729	12.533	7.145	8.462
7	4.623	8.676	7.550	9.562	-	7.741	3.807	2.374	1.627	5.390	12.092	7.730
8	5.054	11.700	7.390	9.107	-	7.441	3.722	2.311	1.621	6.851	37.486	7.108
9	10.817	30.616	10.025	9.328	-	7.199	3.643	2.270	1.672	29.702	-	7.815
10	7.624	13.112	7.459	8.032	-	7.079	3.595	2.230	1.692	16.805	-	10.294
11	7.004	8.995	6.300	8.155	-	6.980	3.548	2.173	1.746	-	16.679	11.028
12	11.354	7.621	5.859	7.769	-	6.914	3.475	2.155	1.913	-	15.793	10.386
13	7.335	6.869	5.527	10.652	-	6.744	3.419	2.103	1.719	15.730	10.753	9.220
14	6.534	6.262	5.083	31.741	-	6.129	3.321	2.094	1.624	15.904	9.459	8.205
15	18.044	5.760	4.737	12.597	-	5.430	3.295	2.085	1.555	10.800	8.535	7.482
16	-	5.375	4.639	7.826	23.472	5.189	3.255	2.033	1.477	9.195	7.919	7.189
17	20.170	5.135	4.514	7.014	16.307	5.189	3.367	2.025	1.134	10.483	7.795	8.137
18	9.647	5.023	4.350	6.556	-	5.296	3.372	2.029	1.528	13.654	7.455	8.469
19	7.846	5.432	4.078	6.300	-	5.088	3.275	2.042	1.507	11.780	6.800	7.364
20	10.097	8.208	4.089	7.016	21.778	4.964	3.219	1.969	1.434	11.777	6.390	8.254
21	12.244	6.697	4.018	7.758	14.982	5.040	3.149	1.952	1.400	11.228	6.415	14.375
22	10.631	5.541	3.899	6.343	15.315	4.976	3.089	1.922	1.336	8.974	6.311	13.931
23	9.212	6.161	3.807	5.809	20.077	4.888	2.951	1.897	1.362	8.963	5.946	13.284
24	8.060	6.608	3.733	5.833	31.856	4.830	2.824	2.001	1.376	12.441	6.035	15.228
25	7.068	12.609	3.711	5.809	19.517	4.748	2.695	2.467	1.386	9.834	8.277	14.439
26	6.672	-	3.680	5.587	15.226	4.737	2.671	2.258	1.490	8.954	6.179	16.031
27	6.453	28.952	4.514	5.674	14.895	4.911	2.638	2.079	1.648	7.792	6.259	14.404
28	6.966	14.144	8.653	6.493	15.431	4.760	2.615	2.036	1.567	7.010	10.358	13.729
29	10.630		8.648	8.211	15.050	4.622	2.667	1.949	1.446	6.521	18.327	12.192
30	7.243		8.548	20.680	14.725	4.350	2.676	1.827	1.425	6.014	-	12.369
31	6.135		8.114		15.484		2.676	1.810		5.619		7.972
Mean	-	-	6.416	10.080	-	6.828	3.334	2.185	1.582	-	-	10.782
Flow (MCM)	-	-	17.185	26.127	-	17.699	8.929	5.852	4.101	-	-	28.879
Maximum	-	-	12.321	31.741	-	14.930	4.183	2.752	1.939	-	-	16.176
Minimum	-	-	3.680	5.587	-	4.350	2.615	1.810	1.134	-	-	7.108
Runoff (mm)	-	-	45.949	69.859	-	47.322	23.873	15.647	10.964	-	-	77.215

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: -

Total: - Runoff: - mm cumecs

Possible data flags

No data stored "-" Estimated values "e"

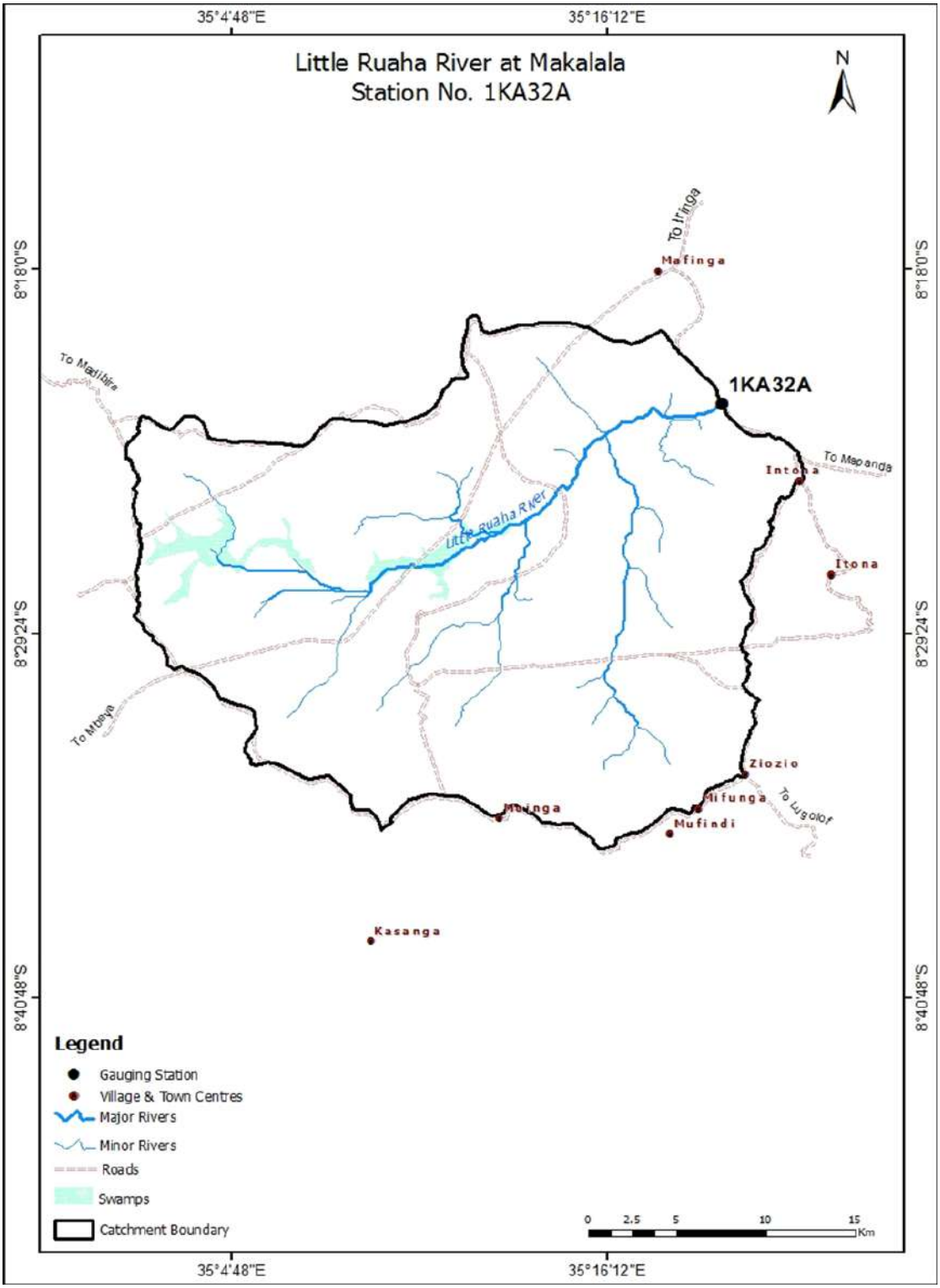
Little Ruaha River at Makalala			
Station No: 1KA32A		Established: 14/12/1964	
Coordinates:		Altitude (m.a.m.s.l): 1,806	
Lat: -8.3696	Long: 35.3277	Catchment Area (km²): 3782	
Description of the Catchment:			
Woodland, Wooded grassland, Bush land and thickets			

Station Details			
1. Staff Gauges	Range: 0 – 3m	A.D.Z.G.R: 0.00mm	
	Type of Gauges: Standard Vertical	MSL.Z.G.L: -	
2. Automatic Recorder	Pressure type Orpheus mini	Date installed:	
3. Benchmark	Iron bolt fixed in rock with concrete		
BM Assumed Datum: 3.871m	N.M.M.S.L: -	TBM: -	
4. Control	Rock bar across for low stages and medium and bridge for high flows		
5. Access	Accessible throughout the year 96km from Iringa town to the station via Mafinga – Mgololo road		

Records	Period	Quality
Water Level:	01/01/2010 – 31/12/2019	1.2.2
Discharge:	01/01/2010 – 31/12/2019	2.2.2

Extremes:				
	Max. Recorded	27.18m³/sec	On 07/04/2019	WL 2.983m
	Min. Recorded	0.1788 m³/sec	On 09/01/1997	WL 0.08m

Remarks


Little Ruaha River at Makalala
Station No. 1KA32A
N
35°4'48"E
35°16'12"E
8°18'0"S
8°29'24"S
8°40'48"S
To Iringa
Mafinga
To Makambire
1KA32A
To Mapanda
Itona
Little Ruaha River
To Mbeya
Ziozio
Mufindi
To Lugoloi
Kasanga
Legend
Gauging Station
Village & Town Centres
Major Rivers
Minor Rivers
Roads
Swamps
Catchment Boundary
0 2.5 5 10 15
Km

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2010
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.759	8.458	12.615	13.238	9.016	6.117	4.022	2.854	1.766	1.049	0.602	0.474
2	6.145	8.470	12.028	12.990	8.837	6.080	3.998	2.773	1.734	1.040	0.585	0.489
3	6.637	9.021	11.840	12.732	8.606	5.991	3.971	2.639	1.706	1.030	0.577	0.504
4	6.915	9.955	11.735	12.381	9.239	5.879	3.923	2.618	1.682	1.007	0.560	0.519
5	7.548	11.394	11.830	12.107	10.168	5.768	3.883	2.607	1.672	1.002	0.548	0.534
6	8.409	12.280	12.627	11.885	9.959	5.678	3.841	2.582	1.649	0.983	0.531	0.549
7	9.332	13.581	11.346	11.678	9.650	5.608	3.769	2.531	1.617	0.971	0.512	0.565
8	9.700	12.846	-	11.434	9.421	5.527	3.726	2.503	1.596	0.963	0.509	0.581
9	9.134	11.567	11.879	11.272	9.245	5.463	3.660	2.454	1.570	0.936	0.504	0.597
10	8.640	11.722	-	10.941	8.981	5.350	3.648	2.410	1.545	0.922	0.487	0.613
11	8.786	11.638	-	10.946	8.700	5.213	3.645	2.380	1.519	0.903	0.476	0.629
12	8.934	11.387	-	10.800	8.539	5.129	3.628	2.333	1.491	0.880	0.475	0.646
13	8.769	11.166	-	10.647	8.340	5.001	3.578	2.315	1.465	0.873	0.475	0.662
14	8.571	10.943	-	10.575	8.234	4.943	3.517	2.283	1.438	0.855	0.471	0.679
15	8.609	10.704	-	10.330	8.054	4.847	3.485	2.254	1.410	0.830	0.466	0.696
16	8.508	10.499	-	10.218	7.881	4.781	3.449	2.199	1.399	0.815	0.473	0.714
17	8.690	10.360	-	10.184	7.819	4.668	3.370	2.169	1.382	0.805	0.465	0.721
18	8.829	9.935	-	10.108	7.735	4.542	3.335	2.137	1.336	0.793	0.461	0.686
19	8.845	10.867	-	10.160	7.476	4.484	3.286	2.115	1.302	0.773	0.458	0.667
20	8.978	11.069	-	10.120	7.182	4.450	3.244	2.069	1.196	0.759	0.455	0.682
21	8.804	11.707	-	10.097	7.007	4.395	3.199	2.032	1.244	0.751	0.454	0.775
22	8.751	11.818	-	9.982	6.890	4.345	3.169	2.010	1.237	0.733	0.474	0.787
23	8.991	12.047	-	9.765	6.804	4.286	3.118	1.981	1.213	0.721	0.517	0.822
24	8.292	12.280	4.036	9.674	6.736	4.235	3.099	1.953	1.189	0.704	0.542	0.871
25	8.157	12.969	15.901	9.596	6.595	4.195	3.041	1.923	1.169	0.690	0.560	0.848
26	7.950	13.224	15.504	9.554	6.508	4.155	2.966	1.887	1.142	0.684	0.566	1.062
27	7.900	12.582	14.944	9.330	6.456	4.129	2.924	1.849	1.134	0.668	0.559	1.199
28	7.853	12.650	14.348	9.268	6.377	4.115	2.913	1.842	1.115	0.660	0.541	1.219
29	7.764		13.904	9.172	6.313	4.098	2.883	1.822	1.097	0.642	0.483	1.176
30	7.975		13.752	9.104	6.283	4.066	2.836	1.805	1.079	0.633	0.466	1.224
31	8.165		13.473		6.214		2.814	1.793		0.620		1.277
Mean	8.269	11.326	-	10.676	7.912	4.918	3.417	2.230	1.403	0.829	0.508	0.757
Flow (MCM)	22.148	27.401	-	27.673	21.191	12.747	9.153	5.972	3.637	2.220	1.318	2.027
Maximum	9.700	13.581	-	13.238	10.168	6.117	4.022	2.854	1.766	1.049	0.602	1.277
Minimum	5.759	8.458	-	9.104	6.214	4.066	2.814	1.793	1.079	0.620	0.454	0.474
Runoff (mm)	28.322	35.039	-	35.387	27.098	16.301	11.705	7.637	4.651	2.839	1.685	2.593

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2011
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.293	3.205	5.884	5.995	6.139	3.075	1.852	1.249	0.777	0.552	0.343	0.342
2	1.283	3.377	5.521	6.160	6.073	3.014	1.823	1.227	0.773	0.548	0.335	0.321
3	1.236	3.517	5.208	5.815	5.926	2.908	1.805	1.213	0.763	0.538	0.320	0.313
4	1.202	3.546	5.090	5.590	5.707	2.837	1.783	1.200	0.756	0.532	0.311	0.303
5	1.143	3.431	5.049	5.356	5.487	2.800	1.752	1.184	0.754	0.530	0.312	0.285
6	1.059	3.452	5.115	5.296	5.213	2.750	1.720	1.176	0.747	0.529	0.322	0.275
7	1.116	4.863	5.458	5.646	5.072	2.708	1.689	1.164	0.735	0.528	0.329	0.275
8	1.019	5.319	5.840	6.105	4.857	2.625	1.660	1.157	0.724	0.523	0.348	0.291
9	1.017	5.212	5.887	6.171	4.774	2.575	1.637	1.143	0.718	0.518	0.337	0.488
10	1.086	4.641	5.747	5.908	4.657	2.557	1.611	1.133	0.705	0.490	0.304	0.951
11	1.115	4.172	5.711	5.933	4.608	2.518	1.592	1.107	0.693	0.482	0.282	1.199
12	1.265	3.979	6.002	6.297	4.469	2.480	1.581	1.091	0.687	0.475	0.275	1.173
13	1.632	4.295	6.177	6.907	4.329	2.391	1.558	1.078	0.679	0.466	0.269	1.180
14	1.948	4.745	5.843	7.426	4.239	2.337	1.541	1.039	0.667	0.463	0.254	1.277
15	2.178	4.774	5.536	7.389	4.145	2.310	1.518	1.021	0.658	0.463	0.258	1.412
16	2.601	4.627	6.316	7.402	4.074	2.287	1.501	1.004	0.643	0.463	0.285	1.416
17	3.004	4.459	6.625	7.248	3.926	2.258	1.482	0.988	0.638	0.477	0.296	1.262
18	2.647	4.122	6.672	7.048	3.863	2.204	1.468	0.965	0.631	0.469	0.292	1.089
19	2.592	3.801	6.457	6.979	3.768	2.151	1.441	0.956	0.621	0.460	0.285	1.041
20	2.885	3.482	6.019	6.683	3.698	2.115	1.427	0.944	0.609	0.455	0.280	1.132
21	3.941	3.234	6.135	6.448	3.621	2.104	1.423	0.938	0.593	0.450	0.272	2.033
22	3.393	3.064	7.084	6.301	3.582	2.079	1.417	0.929	0.584	0.440	0.276	3.367
23	3.321	3.650	7.370	6.194	3.487	2.068	1.400	0.895	0.587	0.438	0.304	3.547
24	3.687	4.459	6.820	6.067	3.405	2.060	1.380	0.878	0.584	0.430	0.322	3.276
25	3.537	4.795	6.668	6.047	3.345	2.037	1.353	0.870	0.579	0.428	0.354	3.290
26	3.264	5.759	6.483	6.222	3.321	2.008	1.326	0.861	0.574	0.480	0.378	3.125
27	3.030	5.657	6.054	6.273	3.300	1.963	1.317	0.844	0.570	0.401	0.387	2.728
28	2.949	5.790	5.910	6.332	3.184	1.940	1.299	0.831	0.563	0.386	0.384	2.585
29	3.050		5.906	6.339	3.141	1.923	1.283	0.818	0.560	0.381	0.375	2.523
30	3.134		5.886	6.264	3.110	1.888	1.275	0.806	0.558	0.366	0.360	2.576
31	3.123		5.743		3.103		1.269	0.784		0.352		3.566
Mean	2.250	4.265	6.007	6.328	4.246	2.366	1.522	1.016	0.658	0.468	0.315	1.569
Flow (MCM)	6.026	10.319	16.089	16.402	11.372	6.132	4.077	2.721	1.705	1.254	0.817	4.202
Maximum	3.941	5.790	7.370	7.426	6.139	3.075	1.852	1.249	0.777	0.552	0.387	3.566
Minimum	1.017	3.064	5.049	5.296	3.103	1.888	1.269	0.784	0.558	0.352	0.254	0.275
Runoff (mm)	7.707	13.195	20.574	20.975	14.542	7.841	5.213	3.479	2.180	1.604	1.044	5.374

Flow (cumecs)

Annual Statistics

Maximum: 7.426 Minimum: 0.254 Mean: 2.584 cumecs
Total: 81.493 MCM Runoff: 104.212 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2012
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.649	1.882	5.462	7.983	5.175	3.160	2.078	1.356	0.896	0.536	0.255	0.404
2	2.371	2.194	5.614	7.378	5.060	3.081	2.049	1.325	0.882	0.533	0.284	0.378
3	2.140	2.391	5.748	7.247	4.980	3.003	2.014	1.309	0.870	0.527	0.317	0.356
4	1.900	2.844	5.936	7.424	4.919	2.938	1.976	1.295	0.860	0.520	0.330	0.307
5	1.714	3.046	5.863	7.931	4.829	2.884	1.939	1.282	0.844	0.509	0.320	0.242
6	1.580	3.902	5.548	8.149	4.775	2.837	1.911	1.269	0.823	0.499	0.311	0.239
7	1.512	4.340	5.374	8.368	4.715	2.820	1.877	1.249	0.794	0.485	0.304	0.252
8	1.472	4.226	5.060	8.963	4.612	2.816	1.845	1.233	0.776	0.479	0.300	0.196
9	1.454	4.207	4.846	9.202	4.569	2.800	1.818	1.229	0.759	0.471	0.294	0.188
10	1.406	4.652	4.873	9.207	4.542e	2.769	1.801	1.213	0.752	0.461	0.285	0.195
11	1.352	4.267	4.827	9.193	4.433	2.720	1.791	1.200	0.744	0.453	0.280	0.478
12	1.310	3.871	5.019	8.866	4.426	2.633	1.765	1.195	0.734	0.448	0.278	0.855
13	1.308	3.588	5.243	8.414	4.369	2.611	1.745	1.174	0.724	0.439	0.259	1.153
14	1.277	3.239	5.328	8.015	4.332	2.549	1.700	1.170	0.717	0.432	0.213	1.170
15	1.278	3.383	6.048	7.585	4.298	2.451	1.677	1.171	0.705	0.422	0.205	1.463
16	1.601	3.845	6.635	7.445	4.251	2.375	1.667	1.165	0.691	0.409	0.198	1.784
17	2.107	4.009	6.563	7.556	4.186	2.363	1.639	1.195	0.684	0.399	0.188	2.045
18	2.111	4.146	6.464	7.539	4.162	2.345	1.609	1.192	0.670	0.387	0.177	2.150
19	2.066	4.640	6.603	7.309	4.132	2.322	1.594	1.175	0.658	0.378	0.167	2.357
20	2.294	4.617	7.750	7.064	4.070	2.305	1.572	1.153	0.652	0.369	0.163	2.512
21	2.857	4.299	9.857	6.722	4.013	2.284	1.551	1.121	0.644	0.354	0.175	2.513
22	3.253	4.169	11.623	6.493	3.974	2.261	1.543	1.078	0.642	0.334	0.224	2.454
23	3.474	4.111	11.743	6.493	3.934	2.253	1.527	1.063	0.642	0.313	0.291	2.597
24	3.354	4.339	10.367	6.520	3.818	2.234	1.511	1.035	0.639	0.286	0.389	2.857
25	3.167	4.980	9.435	6.485	3.723	2.211	1.489	1.019	0.623	0.270	0.395	2.640
26	2.801	5.282	9.344	6.379	3.661	2.186	1.458	0.977	0.607	0.256	0.426	2.625
27	2.501	5.550	8.851	6.099	3.544	2.230	1.438	0.966	0.598	0.231	0.465	2.626
28	2.273	5.455	8.465	5.851	3.389	2.128	1.413	0.959	0.586	0.224	0.488	2.630
29	2.004	5.301	8.287	5.694	3.303	2.117	1.392	0.947	0.573	0.217	0.488	2.645
30	1.838		8.265	5.460	3.234	2.103	1.375	0.932	0.550	0.211	0.443	2.755
31	1.810		8.207		3.208		1.367	0.906		0.204		2.555
Mean	2.072	4.027	7.073	7.435	4.214	2.526	1.682	1.147	0.711	0.389	0.297	1.536
Flow (MCM)	5.550	10.089	18.943	19.270	11.287	6.548	4.504	3.072	1.844	1.042	0.770	4.115
Maximum	3.474	5.550	11.743	9.207	5.175	3.160	2.078	1.356	0.896	0.536	0.488	2.857
Minimum	1.277	1.882	4.827	5.460	3.208	2.103	1.367	0.906	0.550	0.204	0.163	0.188
Runoff (mm)	7.097	12.902	24.224	24.642	14.433	8.373	5.760	3.928	2.358	1.332	0.984	5.262

Flow (cumecs)

Annual Statistics

Maximum: 11.743 Minimum: 0.163 Mean: 2.759 cumecs
Total: 87.246 MCM Runoff: 111.568 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2013
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.324	3.743	7.776	6.671	5.142	3.594	2.039	1.330	0.915	0.601	0.315	1.088
2	1.966	3.651	7.417	6.319	4.990	3.514	2.020	1.327	0.893	0.582	0.296	1.096
3	1.884	3.490	6.275	6.320	4.912	3.435	1.998	1.327	0.874	0.561	0.285	1.007
4	1.808	3.682	5.678	7.061	4.826	3.357	1.969	1.324	0.854	0.562	0.278	0.908
5	1.679	4.646	5.055	7.387	4.781	3.280	1.943	1.328	0.840	0.561	0.272	0.821
6	1.557	4.952	4.559	7.257	4.748	3.203	1.923	1.335	0.837	0.556	0.264	0.767
7	1.487	4.733	4.378	6.503	5.125	3.128	1.906	1.325	0.829	0.550	0.257	0.725
8	1.423	4.318	4.393	6.416	5.074	3.053	1.850	1.320	0.813	0.547	0.249	0.694
9	1.394	4.046	4.478	6.848	5.364	2.980	1.838	1.311	0.800	0.536	0.244	0.678
10	1.364	3.904	5.103	6.986	5.386	2.907	1.806	1.290	0.786	0.526	0.235	0.662
11	1.336	3.778	6.714	7.669	5.272	2.835	1.778	1.279	0.777	0.514	0.227	0.635
12	1.410	3.914	6.196	8.602	5.164	2.764	1.735	1.267	0.774	0.509	0.220	0.620
13	1.781	4.376	5.771	8.453	5.113	2.694	1.742	1.251	0.771	0.507	0.213	0.641
14	1.952	4.341	6.171	8.203	5.092	2.624	1.687	1.238	0.763	0.495	0.209	0.707
15	1.944	4.288	6.601	7.959	5.052	2.556	1.667	1.222	0.743	0.503	0.200	0.744
16	1.911	4.317	6.398	7.884	4.978	2.488	1.640	1.209	0.726	0.500	0.190	0.827
17	1.866	4.400	6.409	8.230	4.894	2.431	1.615	1.193	0.715	0.503	0.179	0.972
18	1.816	4.295	6.449	8.810	4.801	2.393	1.512	1.178	0.704	0.497	0.169	1.142
19	2.226	4.187	6.818	9.637	4.710	2.359	1.541	1.139	0.688	0.499	0.182	1.171
20	2.797	4.171	7.102	8.934	4.619	2.329	1.499	1.111	0.668	0.499	0.180	1.157
21	2.768	4.041	8.157	7.941	4.528	2.301	1.477	1.103	0.660	0.493	0.177	1.137
22	2.746	3.976	8.546	7.284	4.439	2.262	1.457	1.093	0.653	0.483	0.168	1.104
23	2.703	3.834	6.400	6.744	4.351	2.219	1.433	1.070	0.644	0.470	0.175	1.050
24	2.849	4.488	6.008	6.316	4.263	2.201	1.412	1.048	0.638	0.456	0.176	1.105
25	3.062	5.918	7.664	6.114	4.176	2.188	1.403	1.031	0.631	0.443	0.253	1.158
26	3.365	6.398	7.260	5.974	4.090	2.173	1.389	1.012	0.622	0.428	0.379	1.232
27	3.543	6.834	7.219	5.860	4.006	2.144	1.364	0.990	0.611	0.409	0.431	1.447
28	3.559	7.025	7.313	5.684	3.921	2.122	1.358	0.967	0.601	0.392	0.536	1.659
29	3.563		7.239	5.467	3.838	2.096	1.357	0.969	0.588	0.368	0.675	2.012
30	3.618		7.323	5.286	3.756	2.070	1.352	0.948	0.580	0.349	0.880	2.637
31	3.686		7.187		3.674		1.340	0.932		0.334		3.929
Mean	2.303	4.491	6.453	7.161	4.680	2.657	1.647	1.176	0.733	0.491	0.284	1.146
Flow (MCM)	6.168	10.864	17.285	18.560	12.535	6.886	4.411	3.151	1.901	1.316	0.736	3.070
Maximum	3.686	7.025	8.546	9.637	5.386	3.594	2.039	1.335	0.915	0.601	0.880	3.929
Minimum	1.336	3.490	4.378	5.286	3.674	2.070	1.340	0.932	0.580	0.334	0.168	0.620
Runoff (mm)	7.887	13.893	22.103	23.734	16.030	8.806	5.640	4.029	2.430	1.683	0.941	3.926

Flow (cumecs)

Annual Statistics

Maximum: 9.637 Minimum: 0.168 Mean: 2.769 cumecs
Total: 87.309 MCM Runoff: 111.648 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2014
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.138	5.126	5.976	11.414	10.041	5.455	3.524	2.175	1.382	1.796	1.296	1.453
2	3.990	4.883	6.315	-	9.475	5.353	3.514	2.143	1.364	1.763	1.268	1.468
3	3.661	4.807	6.674	15.558	9.239	5.172	3.482	2.116	1.350	1.744	1.219	1.481
4	2.930	4.767	6.627	15.193	8.908	5.106	3.445	2.081	1.343	1.686	1.145	1.491
5	2.632	5.363	6.492	14.485	8.686	5.028	3.393	2.059	1.326	1.664	1.127	1.720
6	2.514	5.780	6.326	13.717	8.555	4.916	3.312	2.034	1.312	1.640	1.107	2.185
7	2.265	5.111	6.076	13.261	8.370	4.814	3.244	2.015	1.295	1.622	1.095	2.146
8	2.031	4.510	5.715	13.087	8.231	4.706	3.210	1.999	1.279	1.594	1.080	2.123
9	1.943	4.063	5.531	12.838	8.172	4.642	3.117	1.986	1.260	1.569	1.071	2.367
10	1.964	3.688	5.340	12.179	8.139	4.563	3.071	1.973	1.445	1.546	1.058	2.335
11	2.042	3.396	5.148	12.031	8.096	4.436	2.930	1.931	1.633	1.508	1.038	2.189
12	2.019	3.172	5.169	11.801	8.056	4.362	2.891	1.891	1.839	1.478	1.023	2.021
13	2.006	3.048	5.503	11.414	8.150	4.266	2.873	1.827	1.977	1.457	1.001	2.014
14	2.068	2.945	5.496	11.146	8.216	4.200	2.847	1.800	1.974	1.439	0.987	1.999
15	2.093	2.916	5.337	10.710	8.144	4.140	2.825	1.777	1.970	1.427	0.970	1.979
16	2.312	2.857	5.188	10.358	8.008	4.074	2.782	1.760	1.967	1.417	0.938	1.958
17	2.586	2.783	5.424	10.147	7.747	3.975	2.679	1.740	1.965	1.396	0.907	1.935
18	2.668	2.638	6.111	9.949	7.496	3.953	2.649	1.702	1.965	1.354	0.883	1.920
19	2.768	2.634	6.598	10.088	7.796	3.919	2.631	1.656	1.964	1.328	0.867	1.906
20	2.833	2.617	7.640	10.288	7.137	3.865	2.628	1.620	1.952	1.483	0.865	1.891
21	2.833	2.654	8.339	11.354	6.952	3.815	2.624	1.591	1.949	1.588	1.160	1.955
22	2.784	3.358	8.256	11.208	6.733	3.768	2.585	1.569	1.934	1.577	1.216	2.051
23	2.970	4.305	8.073	11.307	6.508	3.759	2.496	1.549	1.901	1.560	1.253	2.305
24	3.156	4.232	7.582	11.767	6.315	3.729	2.421	1.529	1.893	1.545	1.261	2.492
25	3.689	4.244	7.590	12.449	6.120	3.703	2.388	1.501	1.888	1.525	1.258	2.646
26	4.079	5.326	8.708	12.427	5.991	3.664	2.355	1.478	1.866	1.505	1.452	3.710
27	4.319	5.671	12.404	12.301	5.919	3.633	2.315	1.463	1.849	1.487	1.389	3.752
28	4.852	5.622	12.996	12.195	5.806	3.602	2.292	1.440	1.844	1.450	1.350	3.685
29	5.042		12.802	11.803	5.729	3.555	2.270	1.430	1.833	1.413	1.396	3.388
30	5.332		12.480	10.971	5.646	3.534	2.250	1.411	1.814	1.371	1.416	3.459
31	5.469		12.623		5.532		2.214	1.396		1.318		3.526
Mean	3.096	4.018	7.437	-	7.546	4.257	2.815	1.763	1.711	1.524	1.137	2.308
Flow (MCM)	8.293	9.721	19.918	-	20.210	11.034	7.539	4.721	4.435	4.082	2.946	6.182
Maximum	5.469	5.780	12.996	-	10.041	5.455	3.524	2.175	1.977	1.796	1.452	3.752
Minimum	1.943	2.617	5.148	-	5.532	3.534	2.214	1.396	1.260	1.318	0.865	1.453
Runoff (mm)	10.605	12.431	25.471	-	25.844	14.110	9.641	6.037	5.672	5.221	3.767	7.905

Flow (cumecs)

Annual Statistics

Maximum: - Minimum: - Mean: - cumecs
Total: - Runoff: - mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2015
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.479	5.725	8.233	7.941	5.717	3.848	3.192	2.109	1.241	0.604	0.428	0.811
2	3.410	5.669	8.188	7.997	5.714	3.785	3.205	2.077	1.217	0.592	0.414	0.800
3	3.329	5.625	8.140	7.927	5.746	3.729	3.165	2.046	1.193	0.672	0.391	0.776
4	3.101	5.608	8.098	7.827	5.743	3.684	3.129	2.015	1.169	0.687	0.478	0.734
5	2.839	5.571	8.340	7.778	5.712	3.635	3.091	1.984	1.145	0.648	0.676	0.697
6	2.769	6.155	9.238	7.734	5.694	3.553	3.042	1.954	1.121	0.621	0.640	0.685
7	2.615	8.466	9.200	7.685	5.588	3.455	2.991	1.924	1.098	0.601	0.596	0.753
8	2.366	8.376	9.197	7.629	5.357	3.367	2.932	1.894	1.075	0.578	0.575	0.695
9	2.128	8.195	9.729	7.690	5.292	3.329	2.876	1.864	1.052	0.553	0.633	0.724
10	2.051	8.093	9.620	7.654	5.183	3.271	2.823	1.834	1.029	0.532	0.659	0.878
11	2.030	7.882	9.607	7.638	5.241	3.227	2.795	1.805	1.006	0.516	0.664	1.077
12	2.056	7.313	9.991	7.691	5.316	3.185	2.752	1.776	0.984	0.499	0.715	1.436
13	2.103	7.220	11.555	7.098	5.359	3.127	2.716	1.747	0.962	0.483	0.739	2.405
14	2.133	7.172	11.142	6.862	5.380	3.075	2.675	1.718	0.940	0.468	0.756	2.810
15	2.196	7.130	9.999	6.665	5.355	3.050	2.659	1.690	0.918	0.458	0.773	2.807
16	2.303	7.102	8.696	6.653	5.286	3.011	2.638	1.662	0.897	0.451	0.786	2.883
17	2.345	7.040	8.213	6.810	5.172	2.933	2.607	1.634	0.876	0.447	0.791	2.942
18	2.371	7.663	8.530	6.918	5.089	2.884	2.572	1.606	0.855	0.439	0.761	3.011
19	2.418	8.329	8.527	7.020	4.958	2.837	2.538	1.579	0.834	0.431	0.705	3.082
20	2.469	8.563	7.942	6.925	4.853	2.817	2.503	1.551	0.813	0.421	0.626	3.153
21	2.643	8.457	7.407	6.811	4.707	2.807	2.469	1.524	0.793	0.410	0.579	3.225
22	3.912	8.282	7.056	6.698	4.607	2.777	2.435	1.497	0.773	0.391	0.555	3.298
23	4.405	7.970	6.920	6.728	4.523	2.754	2.401	1.471	0.753	0.385	0.540	3.372
24	5.263	7.321	6.882	6.954	4.437	2.729	2.368	1.445	0.734	0.381	0.519	3.446
25	5.649	7.842	7.050	6.323	4.354	2.712	2.335	1.419	0.714	0.371	0.501	3.522
26	6.000	9.955	6.896	6.082	4.262	2.701	2.302	1.393	0.695	0.363	0.542	3.598
27	5.679	8.241	6.760	5.926	4.138	2.673	2.269	1.367	0.676	0.350	0.585	3.674
28	5.877	7.261	6.595	5.812	4.097	2.647	2.237	1.341	0.657	0.343	0.627	3.752
29	5.609		6.479	5.805	4.040	2.631	2.204	1.316	0.639	0.338	0.730	3.831
30	5.583		6.512	5.774	3.977	2.661	2.172	1.291	0.621	0.319	0.800	3.910
31	5.642		7.554		3.924		2.140	1.266		0.346		3.990
Mean	3.444	7.437	8.332	7.035	4.994	3.096	2.653	1.671	0.916	0.474	0.626	2.348
Flow (MCM)	9.225	17.991	22.317	18.235	13.376	8.026	7.105	4.475	2.374	1.270	1.623	6.288
Maximum	6.000	9.955	11.555	7.997	5.746	3.848	3.205	2.109	1.241	0.687	0.800	3.990
Minimum	2.030	5.571	6.479	5.774	3.924	2.631	2.140	1.266	0.621	0.319	0.391	0.685
Runoff (mm)	11.797	23.006	28.538	23.319	17.105	10.263	9.086	5.723	3.036	1.624	2.075	8.041

Flow (cumecs)

Annual Statistics

Maximum: 11.555 Minimum: 0.319 Mean: 3.586 cumecs
Total: 113.072 MCM Runoff: 144.594 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2016
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.209	5.663	6.870	11.795	9.027	4.785	3.074	2.186	1.404	0.708	0.302	0.210
2	4.638	5.213	6.879	11.472	8.214	4.764	2.858	2.119	1.392	0.696	0.306	0.232
3	4.119	4.788	7.041	11.347	8.066	4.746	3.136	2.070	1.374	0.687	0.308	0.247
4	3.602	4.400	7.403	12.339	7.965	4.669	3.149	2.047	1.354	0.679	0.308	0.295
5	3.083	4.103	6.942	14.503	7.998	4.608	3.094	2.025	1.268	0.666	0.300	0.432
6	3.326	4.112	6.339	15.247	7.651	4.552	3.054	2.010	1.272	0.641	0.294	0.598e
7	5.435	4.007	6.038	14.706	7.511	4.484	2.992	1.979	1.224	0.633	0.290	0.897
8	9.084	4.346	5.673	14.600	7.348	3.865	2.932	1.954	1.264	0.629	0.288	0.951
9	7.863	4.269	5.504	14.453	7.254	4.102	2.874	1.942	1.251	0.626	0.285	1.184
10	6.664	4.192	5.425	13.861	7.123	4.372	2.798	1.918	1.225	0.622	0.279	1.201
11	5.629	4.072	5.458	12.634	7.040	4.301	2.752	1.886	1.188	0.604	0.271	1.168
12	5.014	4.041	5.436	12.091	6.773	4.236	2.716	1.864	1.163	0.543	0.266	1.141
13	4.651	5.156	5.702	11.767	6.632	4.197	2.675	1.846	1.138	0.532	0.263	1.112
14	4.705	6.770	6.186	11.571	6.479	4.176	2.672	1.819	1.116	0.524	0.256	1.057
15	5.504	7.172	6.796	11.077	6.384	4.139	2.659	1.799	1.079	0.514	0.253	0.918
16	5.549	7.486	7.737	10.750	6.299	4.073	2.638	1.779	1.059	0.486	0.251	0.819
17	4.910	7.498	8.609	10.409	6.066	4.014	2.618	1.760	1.038	0.469	0.249	0.838
18	4.859	7.468	10.401	10.321	5.986	3.915	2.602	1.749	1.017	0.452	0.246	0.835
19	4.667	6.909	10.159	10.293	5.876	3.874	2.586	1.736	0.993	0.444	0.246	0.837
20	4.418	6.190	9.543	10.326	5.727	3.815	2.562	1.717	0.961	0.434	0.244	0.810
21	4.328	6.269	9.488	10.803	5.647	3.748	2.519	1.692	0.919	0.425	0.244	0.809
22	4.660	7.499	3.851	11.381	5.537	3.694	2.483	1.666	0.899	0.411	0.244	0.846
23	5.496	7.170	3.706	11.674	5.442	3.636	2.436	1.613	0.868	0.398	0.238	1.053
24	7.746	6.634	3.248	12.909	5.378	3.580	2.406	1.592	0.844	0.390	0.233	1.184
25	6.837	6.348	6.504	11.447	5.323	3.539	2.379	1.581	0.836	0.378	0.228	1.374
26	5.752	6.497	10.174	10.566	5.241	3.487	2.358	1.566	0.814	0.365	0.224	1.563
27	5.277	6.281	10.266	10.201	5.120	3.419	2.336	1.550	0.793	0.345	0.217	1.419
28	4.749	6.448	10.569	10.086	4.980	3.353	2.310	1.518	0.772	0.323	0.213	1.283
29	4.924	6.708	10.748	9.882	4.941	3.305	2.287	1.489	0.746	0.309	0.210	1.223
30	5.194		10.735	9.470	4.882	3.254	2.263	1.454	0.722	0.305	0.205	1.160
31	5.572		11.324		4.815		2.235	1.426		0.303		1.117
Mean	5.241	5.783	7.444	11.799	6.411	4.023	2.660	1.786	1.066	0.501	0.259	0.929
Flow (MCM)	14.037	14.490	19.937	30.584	17.170	10.429	7.124	4.782	2.764	1.343	0.671	2.489
Maximum	9.084	7.499	11.324	15.247	9.027	4.785	3.149	2.186	1.404	0.708	0.308	1.563
Minimum	3.083	4.007	3.248	9.470	4.815	3.254	2.235	1.426	0.722	0.303	0.205	0.210
Runoff (mm)	17.950	18.530	25.495	39.110	21.957	13.336	9.110	6.115	3.535	1.717	0.858	3.183

Flow (cumecs)

Annual Statistics

Maximum: 15.247 Minimum: 0.205 Mean: 3.992 cumecs
Total: 126.231 MCM Runoff: 161.421 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2017
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.133	3.106	5.985	5.505	4.232	2.944	1.748	1.040	0.584	0.338	0.143	0.549
2	0.921	3.018	6.144	5.739	4.113	2.891	1.804	1.028	0.567	0.328	0.139	0.533
3	0.894	2.913	5.900	6.039	4.032	2.842	1.805	1.014	0.554	0.318	0.137	0.511
4	0.877	2.878	5.728	6.423	3.976	2.773	1.779	0.994	0.546	0.308	0.133	0.506
5	0.868	2.889	5.941	6.440	3.931	2.709	1.745	0.980	0.534	0.298	0.130	0.463
6	0.862	2.912	6.138	6.208	3.880	2.648	1.697	0.962	0.525	0.288	0.241	0.445
7	0.864	2.934	6.202	6.087	3.851	2.607	1.658	0.953	0.503	0.279	0.397	0.424
8	0.890	2.967	5.998	5.947	3.819	2.569	1.625	0.940	0.492	0.273	0.485	0.422
9	0.865	3.020	5.643	5.711	3.756	2.536	1.593	0.926	0.482	0.271	0.492	0.449
10	0.837	3.121	5.353	5.437	3.857	2.489	1.553	0.916	0.472	0.264	0.480	0.444
11	0.822	4.452	5.102	5.170	4.420	2.439	1.513	0.900	0.455	0.256	0.450	0.487
12	0.833	5.226	4.844	4.958	5.152	2.399	1.476	0.888	0.440	0.242	0.469	0.529
13	0.851	5.066	4.485	4.868	5.363	2.358	1.453	0.877	0.429	0.232	0.444	0.551
14	1.195	4.947	4.202	4.793	5.225	2.305	1.417	0.870	0.417	0.225	0.372	0.542
15	1.324	4.843	4.140	4.756	4.968	2.270	1.386	0.862	0.409	0.216	0.332	0.529
16	1.461	4.645	4.098	4.756	4.675	2.223	1.362	0.859	0.399	0.211	0.305	0.545
17	1.517	3.892	4.557	4.869	4.455	2.188	1.338	0.857	0.389	0.209	0.286	0.543
18	1.550	3.750	4.934	4.956	4.247	2.146	1.315	0.847	0.383	0.207	0.275	0.791
19	1.608	3.666	5.146	4.946	4.095	2.109	1.292	0.839	0.376	0.198	0.268	1.062
20	1.927	3.655	5.145	5.022	3.962	2.063	1.275	0.827	0.365	0.189	0.264	1.110
21	2.160	3.828	5.070	5.155	3.824	2.015	1.260	0.807	0.360	0.179	0.264	1.071
22	2.970	4.189	5.032	5.058	3.712	1.959	1.234	0.782	0.358	0.176	0.262	1.165
23	3.686	4.236	6.827	4.817	3.591	1.915	1.202	0.758	0.351	0.171	0.269	1.224
24	3.637	3.908	7.311	4.594	3.481	1.858	1.177	0.754	0.368	0.162	0.313	1.182
25	3.576	3.829	7.336	4.398	3.361	1.810	1.153	0.734	0.393	0.160	0.629	1.231
26	3.493	4.060	7.046	4.260	3.257	1.773	1.128	0.707	0.387	0.157	0.648	1.355
27	3.192	4.226	6.367	4.260	3.152	1.740	1.106	0.683	0.377	0.153	0.620	1.304
28	3.272	4.730	5.790	4.386	3.058	1.707	1.091	0.666	0.362	0.151	0.579	1.141
29	3.228		5.398	4.460	3.018	1.679	1.080	0.652	0.352	0.145	0.558	1.240
30	3.192		5.291	4.427	3.007	1.668	1.063	0.637	0.345	0.139	0.554	1.268
31	3.164		5.376		2.978		1.050	0.611		0.138		1.207
Mean	1.860	3.818	5.565	5.148	3.950	2.254	1.399	0.844	0.432	0.222	0.365	0.801
Flow (MCM)	4.983	9.237	14.907	13.344	10.579	5.843	3.748	2.261	1.121	0.594	0.945	2.145
Maximum	3.686	5.226	7.336	6.440	5.363	2.944	1.805	1.040	0.584	0.338	0.648	1.355
Minimum	0.822	2.878	4.098	4.260	2.978	1.668	1.050	0.611	0.345	0.138	0.130	0.422
Runoff (mm)	6.372	11.812	19.062	17.064	13.529	7.472	4.793	2.891	1.433	0.760	1.209	2.742

Flow (cumecs)

Annual Statistics

Maximum: 7.336 Minimum: 0.130 Mean: 2.222 cumecs
Total: 70.061 MCM Runoff: 89.592 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A **Year:** 2018
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.790	4.617	4.734	3.799	2.797	1.630	1.054	0.779	0.426	0.225	0.381	0.351
2	2.106	4.461	4.582	3.799	2.729	1.587	1.041	0.766	0.420	0.219	0.419	0.555
3	1.947	4.159	4.510	4.053	2.698	1.561	1.031	0.755	0.410	0.218	0.398	0.549
4	1.878	4.040	4.380	4.353	2.627	1.531	1.020	0.748	0.403	0.216	0.334	0.447
5	1.821	4.485	4.237	4.386	2.548	1.506	1.007	0.724	0.393	0.215	0.291	0.422
6	1.750	4.807	4.175	4.260	2.544	1.477	0.997	0.713	0.387	0.210	0.292	0.416
7	1.707	4.556	4.487	4.064	2.518	1.447	0.989	0.697	0.384	0.208	0.305	0.411
8	1.923	4.309	5.015	3.917	2.501	1.421	0.981	0.684	0.381	0.258	0.316	0.415
9	2.273	3.996	5.507	3.868	2.484	1.400	0.970	0.670	0.375	0.259	0.291	0.449
10	2.585	3.912	5.488	3.896	2.471	1.384	0.955	0.658	0.364	0.254	0.276	0.490
11	2.741	4.636	5.406	3.866	2.456	1.365	0.943	0.637	0.361	0.250	0.270	0.534
12	2.665	5.094	5.078	3.762	2.428	1.346	0.937	0.614	0.359	0.244	0.262	0.536
13	2.628	5.290	4.781	3.737	2.384	1.322	0.935	0.603	0.355	0.228	0.307	0.667
14	2.573	5.404	4.568	3.862	2.291	1.308	0.935	0.595	0.350	0.201	0.300	0.830
15	2.440	4.887	4.256	3.985	2.238	1.290	0.946	0.583	0.346	0.197	0.268	0.781
16	2.759	4.753	4.218	4.132	2.187	1.275	1.018	0.570	0.340	0.197	0.252	0.806
17	2.977	4.518	4.067	4.110	2.138	1.269	0.925	0.555	0.328	0.191	0.240	0.831
18	4.383	4.195	4.139	4.035	2.118	1.258	0.917	0.542	0.319	0.212	0.227	0.865
19	4.874	3.853	4.307	3.976	2.101	1.242	0.906	0.529	0.313	0.243	0.219	0.973
20	4.368	3.618	4.511	4.089	2.077	1.232	0.901	0.515	0.305	0.261	0.224	1.099
21	3.887	3.414	4.482	4.204	2.047	1.218	0.889	0.504	0.298	0.259	0.239	1.259
22	3.811	3.244	4.375	4.173	2.018	1.207	0.878	0.497	0.287	0.250	0.284	1.264
23	3.792	3.352	4.309	4.062	2.000	1.199	0.867	0.491	0.279	0.235	0.373	1.257
24	4.448	3.302	4.470	3.948	1.952	1.177	0.854	0.482	0.272	0.225	0.476	1.415
25	5.750	3.292	4.632	3.783	1.911	1.159	0.843	0.474	0.267	0.215	0.568	1.484
26	5.298	3.705	4.602	3.572	1.849	1.127	0.828	0.467	0.261	0.211	0.582	1.562
27	4.793	4.709	4.417	3.425	1.807	1.116	0.816	0.456	0.253	0.209	0.563	1.766
28	4.620	5.044	4.176	3.257	1.762	1.096	0.808	0.450	0.246	0.204	0.509	1.577
29	4.807		4.106	3.147	1.722	1.082	0.800	0.444	0.239	0.195	0.441	1.392
30	4.923		4.081	2.989	1.692	1.065	0.797	0.437	0.232	0.187	0.404	1.276
31	4.841		3.921		1.666		0.787	0.431		0.193		1.190
Mean	3.328	4.273	4.517	3.884	2.218	1.310	0.922	0.583	0.332	0.222	0.344	0.899
Flow (MCM)	8.913	10.338	12.097	10.066	5.941	3.396	2.469	1.562	0.860	0.595	0.891	2.408
Maximum	5.750	5.404	5.507	4.386	2.797	1.630	1.054	0.779	0.426	0.261	0.582	1.766
Minimum	1.707	3.244	3.921	2.989	1.666	1.065	0.787	0.431	0.232	0.187	0.219	0.351
Runoff (mm)	11.397	13.220	15.470	12.873	7.597	4.342	3.157	1.997	1.100	0.761	1.139	3.079

Flow (cumecs)

Annual Statistics

Maximum: 5.750 Minimum: 0.187 Mean: 1.903 cumecs
Total: 59.999 MCM Runoff: 76.725 mm

Possible data flags

No data stored "-" Estimated values "e"

Ministry of Water

Annual Report of Daily Data: Mean Daily Flow

Station Number: 1KA32A
Station Name: Little Ruaha River at Makalala
Time-Series Type: Flow (cumecs)

Year: 2019

Latitude: 8:22:10 S Longitude: 35:19:39 E Elevation: 1806.0 metres Area: 782.0 sq km

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.155	4.713	9.996	9.748	7.339	5.501	2.966	1.833	1.103	0.661	0.415	0.612
2	1.128	6.987	11.809	10.094	7.156	5.406	2.908	1.814	1.080	0.649	0.407	0.628
3	1.141	8.405	13.716	11.739	7.015	5.295	2.859	1.798	1.055	0.637	0.398	0.533
4	1.191	8.199	12.842	13.638	7.022	5.170	2.801	1.769	1.039	0.627	0.391	0.485
5	1.258	7.426	11.567	12.525	7.246	5.067	2.761	1.748	1.021	0.623	0.383	0.474
6	1.511	6.946	10.232	11.478	7.484	4.938	2.726	1.720	1.002	0.619	0.372	0.467
7	1.783	6.146	9.771	2.671	7.509	4.832	2.692	1.695	0.981	0.608	0.364	0.459
8	1.730	6.068	9.281	2.382	7.419	4.708	2.653	1.659	0.968	0.601	0.351	0.546
9	1.445	7.040	8.767	9.323	7.275	4.589	2.638	1.639	0.954	0.591	0.346	0.613
10	1.258	9.519	8.378	8.947	7.227	4.502	2.617	1.624	0.941	0.585	0.344	0.633
11	1.159	9.114	8.539	8.664	7.283	4.363	2.579	1.596	0.927	0.579	0.341	0.635
12	1.120	9.117	7.558	8.360	7.360	4.284	2.515	1.571	0.917	0.580	0.335	0.641
13	1.096	8.799	7.040	8.041	7.957	4.214	2.464	1.532	0.906	0.572	0.320	0.712
14	1.162	8.443	7.036	7.905	7.979	4.121	2.422	1.495	0.895	0.565	0.310	0.820
15	1.571	7.817	7.555	7.800	7.874	4.033	2.362	1.465	0.862	0.560	0.311	0.856
16	2.097	7.238	9.349	7.721	7.822	3.940	2.318	1.437	0.778	0.492	0.333	0.880
17	2.489	6.681	10.842	7.618	7.874	3.846	2.304	1.414	0.844	0.543	0.380	0.935
18	2.446	6.112	10.675	7.418	7.948	3.772	2.282	1.383	0.828	0.550	0.469	1.134
19	2.350	5.771	11.222	7.257	7.789	3.735	2.255	1.357	0.815	0.554	0.526	1.393
20	2.433	5.766	13.160	7.155	7.593	3.667	2.210	1.322	0.798	0.547	0.493	2.159
21	2.714	6.148	3.185	7.267	7.292	3.591	2.169	1.295	0.781	0.534	0.443	2.454
22	3.229	5.478	12.586	7.247	7.073	3.513	2.124	1.275	0.768	0.524	0.402	2.610
23	3.386	5.294	13.632	7.129	6.792	3.454	2.076	1.262	0.754	0.508	0.372	2.596
24	3.312	6.604	12.819	6.949	6.596	3.381	2.034	1.245	0.735	0.500	0.392	3.234
25	3.089	7.047	11.562	6.765	6.391	3.301	2.006	1.231	0.717	0.491	0.540	3.456
26	2.903	7.215	10.375	6.767	6.178	3.242	1.969	1.213	0.708	0.482	0.592	3.543
27	3.037	7.478	9.210	6.954	6.038	3.217	1.932	1.200	0.703	0.474	0.528	3.591
28	2.777	8.268	8.644	7.552	5.918	3.127	1.913	1.189	0.693	0.466	0.490	3.419
29	3.020		8.364	7.645	5.803	3.070	1.882	1.173	0.684	0.458	0.529	3.277
30	3.035		8.252	7.480	5.696	3.017	1.858	1.153	0.670	0.451	0.559	3.531
31	3.300		9.150		5.604		1.843	1.127		0.434		3.768
Mean	2.107	7.137	9.907	8.075	7.082	4.096	2.359	1.459	0.864	0.551	0.414	1.648
Flow (MCM)	5.644	17.266	26.534	20.930	18.969	10.618	6.319	3.908	2.240	1.475	1.074	4.414
Maximum	3.386	9.519	13.716	13.638	7.979	5.501	2.966	1.833	1.103	0.661	0.592	3.768
Minimum	1.096	4.713	3.185	2.382	5.604	3.017	1.843	1.127	0.670	0.434	0.310	0.459
Runoff (mm)	7.217	22.080	33.931	26.764	24.257	13.578	8.081	4.998	2.865	1.886	1.374	5.645

Flow (cumecs)

Annual Statistics

Maximum: 13.716 Minimum: 0.310 Mean: 3.808 cumecs
Total: 120.101 MCM Runoff: 153.582 mm

Possible data flags

No data stored "-" Estimated values "e"

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