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गोदावरी बेसीन / GODAVARI BASIN

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DISCHARGE YEAR BOOK (Vol. I)

(जून 2017 - मई 2018)

(JUNE 2017– MAY 2018)

गोदावरी परिमंडल / GODAVARI CIRCLE

हैदराबाद / HYDERABAD

दिसम्बर 2018

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PREFACE

India's National Water Policy emphasises the importance of a well-developed information system as the prime requisite for water resources planning, development and management. Reliable and continuous records of water resources data are essential for the optimum development of water resources. Conducting hydrological observations in all-important river basins of India has, therefore, been one of the main activities of the Central Water Commission (CWC).

Hydrological observations of Godavari basin have started by CWC in the early 1960's and the discharge data in the form of Water Year Book has been published since then. This water yearbook contains discharge data for the year 2017-18 (June 2017 to May 2018) collected at 55 hydrological stations maintained by CWC in Godavari basin.

Basic details about the site, like the name of the tributary on which the site is located, the latitude and longitude of the site, the catchment area up to the site, and the date of commencement of observations, annual maximum and minimum discharges observed from inception of site are shown in history sheet.

Apart from the daily discharge, the ten daily and monthly summaries of the discharges, current year monthly runoff, superimposed pre-monsoon and post-monsoon cross sections, water level hydrograph of the highest observed flood during the year, annual runoff bar chart from inception, Histogram-Hydrograph showing maximum, minimum and average monthly runoff since inception of the sites have also been included in the data sheets.

Three field divisions of CWC, viz., Upper Godavari Division and Lower Godavari Division with headquarters at Hyderabad under the control of Godavari Circle and Wainganga Division with headquarter at Nagpur under the control of Superintending Engineer (Co-ordination), Nagpur are responsible for the maintenance of the hydrological stations in Godavari basin. The efforts put forth by the officers and staff of these field offices in bringing out this Water Year Book is acknowledged.

Hyderabad
December - 2018

(M. RAGHURAM)
Superintending Engineer
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प्रस्तावना

भारत की राष्ट्रिय जल नीति पूर्ण रूप से विकसित सूचना प्रणाली के महत्व पर जोर देती है, क्योंकि जल संसाधन के लिए योजना, विकास और प्रबंधन मुख्य आवश्यकता है। जल संसाधन के इष्टतम विकास के लिए जल संसाधन आंकड़ों के विश्वसनीय और निरंतर अभिलेख (Record) आवश्यक है। भारत की सभी महत्वपूर्ण नदी घाटियों में जल विज्ञान (Hydrological) संबंधी अवलोकन केन्द्रीय जल आयोग की मुख्य गतिविधिओं में से एक रहा है।

गोदावरी बेसिन की जल विज्ञान संबंधी अवलोकन की शुरुआत केन्द्रीय जल आयोग द्वारा वर्ष 1960 में की गई एवं जल निस्सारण संबंधी आंकड़ें जल वार्षिक पुस्तक के रूप में तभी से प्रकाशित की जा रही है। इस जल वर्ष पुस्तक में गोदावरी बेसिन में केन्द्रीय जल आयोग द्वारा संचालित 55 जल विज्ञान केन्द्रों से एकत्रित वर्ष 2017-18 (जून 2017- मई 2018) के जल निस्सारण आंकड़ें शामिल हैं।

स्थल के बारे में बुनियादी विवरण, जैसे कि सहायक नदी का नाम, जहाँ स्थल स्थित है, स्थल का अक्षांश और देशांतर, स्थल का जलग्रहण क्षेत्र और अवलोकन के प्रारंभ होने की तिथि, एवं स्थल की स्थापना से वार्षिक अधिकतम एवं न्यूनतम जल निस्सारण इतिहास पत्रक में दर्शाया गया है।

दैनिक जल निस्सारण के अलावा निस्सारण के दस दिवसीय और मासिक सारांश, चालू वर्ष मासिक जल अपवाह, मानसून पूर्व और मानसून पश्चात क्रास सेक्शन, वर्ष के दौरान बाढ़ के समय उच्चतम जल स्तर के अवलोकन से सम्बंधित हाड्रोग्राफ, हिस्टोग्राम- हाड्रोग्राफ, वार्षिक जल अपवाह (स्थापना से), स्थल की स्थापना से अधिकतम, न्यूनतम और औसत मासिक जल अपवाह का प्रतिशत भी इस इतिहास पत्रक में शामिल किया गया है।

केन्द्रीय जल आयोग के तीन क्षेत्रीय मंडल यथा - ऊपरी गोदावरी मंडल और निचली गोदावरी मंडल जो गोदावरी परिमंडल के नियंत्रणाधीन है एवं इसका मुख्यालय हैदराबाद में है तथा अधीक्षण अभियंता (समन्वय), नागपुर के नियंत्रणाधीन वैनगंगा मंडल, गोदावरी नदी घटी में स्थित जल विज्ञान केन्द्रों के रख-रखाव के लिए उत्तरदायी हैं। इस जल-वर्ष पुस्तक (water year book) के प्रकाशन में इन क्षेत्रीय कार्यालयों के अधिकारियों और कर्मचारियों का बहुत-बहुत आभार है, जिनके अथक प्रयासों से यह पूर्ण रूप में बन पाया है।

एम रघुराम

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हैदराबाद
दिसम्बर -2018

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1. INTRODUCTION

1.1 GODAVARI RIVER SYSTEM

The river Godavari, the largest of the peninsular rivers, and third largest in India, drains about 10% of India's total geographical area. The catchment area of the river is 3,12,812 sq.km. and is spread in the states of Maharashtra (48.8%), Andhra Pradesh (3.7%), Telangana(20%), Madhya Pradesh (7.9%), Chhattisgarh (12.4%), Orissa (5.7%) and Karnataka (1.5%). The basin lies in the Deccan plateau and is situated between latitude 16^0 16' 00" North and 22^0 36' 00" North and longitude 73^0 26' 00" East and 83^0 07' 00" East.

The river Godavari rises at an elevation of 1,067 m in the Western Ghats near Thriambak Hills in the Nasik district of Maharashtra. After flowing for about 1,465 km., in a generally south-east direction, it falls into the Bay of Bengal.

About 64 km. from its source, the Godavari receives the waters from Dharna, on its right bank and a short distance down stream the Kadana joins it from the left. The combined waters of the Pravara and Mula which rise in the hills of Akola join the river from left about 217 km. from its source. About 338 km. from its source, the river receives the combined waters from the Purna and Dudhna rivers and after a further 138 km. at the border of Maharashtra and Telangana, the waters of the Manjira river joins it from the South. At this point, Godavari flows at an elevation of about 329 m.

The river Pranhita, conveying the combined waters of Penganga, the Wardha and Wainganga, which drain Nagpur and southern slopes of the Satpura ranges, falls into Godavari about 306 km below its confluence with the Manjira. The waters of the Indravathi join the river Godavari 48 km downstream. The last major tributary is the Sabari from Orissa, which joins the Godavari, 1]
00 km. up-stream of Rajahmundry.

The largest tributary of the Godavari is the Pranhita with about 34.87% coverage of drainage area. The Pravara, Manjira and Maner are right bank

1. परिचय

1.1 गोदावरी नदी प्रणाली

गोदावरी प्रायद्वीपीय नदियों में सबसे बड़ी तथा भारत की तीसरी सबसे बड़ी नदी है, जो भारत के कुल भौगोलिक क्षेत्र के लगभग 10 प्रतिशत में बहती है । इसका कुल प्रवाह क्षेत्र 3,12,812 वर्ग किमी है और यह महाराष्ट्र (48.8%), आंध्रप्रदेश (3.7%), तेलंगाना (20%), मध्यप्रदेश (7.9%), छत्तीसगढ़ (12.4%), उड़ीसा (5.7%) और कर्नाटक (1.5%) राज्यों में फैला है । यह नदी घाटी दक्कन के पठार में $16^0$16'00" उत्तरी अक्षांस से $22^0$36'00" उतरी अक्षांश तथा $73^0$26'00" पूर्वी देशांतर से $83^0$07'00" पूर्वी देशांतर के बीच स्थित है ।

गोदावरी नदी का उद्गम महाराष्ट्र के नासिक जिले के त्रियम्बक पहाड़ी के नजदीक, पश्चिमी घाट में 1,067 मीटर की ऊँचाई से है। सामान्यतः दक्षिण पश्चिम दिशा में 1,465 किमी बहने के बाद, बंगाल की खाड़ी में मिलती है ।

यह अपने उद्गम स्रोत से लगभग 64 किमी दूरी पर दायें किनारे से धारना नदी से मिलती है, तथा नीचे प्रवाह में बाएं किनारे से काढना नदी इसमें मिलती है । गोदावरी नदी के उद्गम स्थल से 217 किमी की दुरी पर प्रवरा और मूला नदियों का संयुक्त जल, गोदावरी के बाएं तरफ से मिलती है । उद्गम स्थल से 338 किमी की दूरी तय करने के बाद पूर्णा और दूधना का संयुक्त जल गोदावरी नदी में मिलती है और आगे 138 किमी दूरी पर महाराष्ट्र और तेलंगाना की सीमा पर मंजीरा नदी दक्षिण दिशा की ओर से मिलती है । गोदावरी एवं मंजीरा नदियों का संगम स्थल समुद्र तल से 329 मी की ऊँचाई पर स्थित है ।

पेनगंगा , वर्धा और वैनगंगा नदियां (जिससे नागपुर और सतपुड़ा श्रृंखला के दक्षिण ढाल वाले क्षेत्रो में सिचाई होती है) , का संयुक्त जल प्राणहिता नदी के साथ गोदावरी एवं मंजीरा नदियों के संगम स्थल से 306 किमी नीचे प्रवाह में मिलता है । इसके साथ हीं इंद्रावती नदी गोदावरी नदी तथा प्राणहिता नदी संगम स्थल से 48 किमी दूर निचली प्रवाह में मिलती है । इसकी अंतिम प्रमुख सहायक नदी उड़ीसा की सबरी नदी है जो राजमुंदरी से 100 किमी पहले गोदावरी नदी में मिलती है ।

प्राणहिता नदी गोदावरी की सबसे बड़ी सहायक नदी है जिसका कुल प्रवाह क्षेत्र लगभग 34.87 प्रतिशत है । प्रवर, मंजीरा और मनेर दायीं किनारे की सहायक नदियां हैं, जिसका प्रवाह क्षेत्र लगभग 16.14 प्रतिशत हैं तथा पूर्णा, प्राणहिता, इन्द्रावती और सबरी बायें किनारे

tributaries covering about 16.14%, the Purna, Pranhita, Indravathi and Sabari are important left bank tributaries, covering nearly 59.7% of the total catchment area of the basin. The Godavari in the upper, middle, and lower reaches make up for the balance 24.16%. The particulars of the catchment area, length, elevation of the source points of the river and its tributaries in the order of their occurrence along the length of the main river were indicated in the Table-1.

Table - 1 Important Tributaries of Godavari

Sl. No	Name of the River	Elevation of Source	Length of Tributary (km)	Catchment area (sq.km.)	Average annual rainfall (mm)
1	Upper Godavari (source to Manjira confluence)	1,067	675	33502	770
2	Pravara	1,050	208	6537	606
3	Purna	838	373	15579	797
4	Manjira	823	724	30844	846
5	Middle Godavari (between confluence points Manjira and Pranhita)	323	328	17205	955
6	Maner	533	225	13106	932
7	Penganga	686	676	23898	960
8	Wardha	777	483	24087	1055
9	Pranhita	640	721	61093	1363
10	Lower Godavari (Pranhita confluence to sea)	107	462	24869	1208
11	Indravati	914	535	41665	1588
12	Sabari	1,372	418	20427	1433
	Total			312812	

की प्रमुख नदियाँ हैं जिसमें गोदावरी नदी घाटी के कुल प्रवाह क्षेत्र का लगभग 59.7 प्रतिशत सम्मिलित है शेष 24.16 प्रतिशत प्रवाह क्षेत्र का संतुलन बनाते हुए गोदावरी नदी उपरी, मध्य और निचली क्षेत्रों में पहुचती है । गोदावरी नदी के प्रवाह क्षेत्र, लम्बाई, समुद्र तल से ऊँचाई और उसकी सम्पूर्ण लम्बाई में मिलने वाली सहायक नदियों का विवरण निम्न तालिका - 1 में दिया गया है -

तालिका - 1 गोदावरी नदी की प्रमुख सहायक नदियां

क्रम सं.	नदी का नाम	समुद्र तल से ऊँचाई (मी)	सहायक नदी की लंबाई (किमी)	प्रवाह क्षेत्र (वर्ग किमी)	वार्षिक औसत वर्षा (मिमी)
1	Upper Godavari (source to Manjira confluence)	1,067	675	33502	770
2	Pravara	1,050	208	6537	606
3	Purna	838	373	15579	797
4	Manjira	823	724	30844	846
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11	Indravati	914	535	41665	1588
12	sabari	1,372	418	20427	1433
	Total			312812	

1.2 Rainfall pattern in the basin.

The Godavari basin receives its maximum rainfall during the Southwest monsoon. The monsoon currents strike the West Coast of the peninsula from West and South-West; meet the Western Ghats or Sahyadri Range, which present almost an uninterrupted barrier ranging from 600 m. to 2100 m. in height. Before surmounting this barrier, the currents deposit most of their moisture on its windward side, and then sweep across the interior of the peninsula on the Easterly course. Rainfall is governed largely by the orography of the area, which leads to variation in the amount of precipitation. In crossing the Ghats, the monsoon wind loses a large part of their moisture. The monsoon currents follow the Eastward slope of the country from the crest of the Ghats, which form the watershed. Conditions in the interior area, therefore, somewhat unfavorable for heavy precipitation except in association with the depression from the Bay of Bengal. The north-east part of the Godavari basin also receives some rain in association with monsoon depressions, which move west-north-west across the Orissa coast.

The Godavari receives the flows from a length of about 129 km. of the high rainfall zone in the Western Ghats. The annual rainfall varies from 1,000 to 3,000 mm in this reach. East of the Western Ghats, the rainfall decreases rapidly to less than 600 mm. There is a belt some distance East of the Western Ghats and in width varying from about 80 km. in the South to about 97 km. in the North with less than 600 mm. of normal annual rainfall. The belt, which is about 10,360 sq.km. in area, includes portions of Aurangabad and Ahmednagar districts of Maharashtra. After this area the rainfall again gradually increases to about 900 mm towards the East coast.

January and February are almost entirely dry in the Godavari basin, the rainfall during these two months being less than 15 mm. During the next three months, up to end of May, it varies from 20 mm to about 50 mm, in most parts of the basin. All parts of the basin receive the maximum rainfall in the period from June to September. The Godavari basin as a whole receives 84% of the annual rainfall on an average, during the Southwest monsoon, which sets in mid June and ends by mid October. The Indravati and Pranhita sub-basins receive upto 86% and 88% of the annual rainfall during the same period due to influence of the cyclonic storms which predominantly pass through these sub-basins. Long term annual average rainfall in Godavari catchment is about 1100mm.

1.2 गोदावरी नदी घाटी की वर्षा संरचना :-

गोदावरी घाटी में सर्वाधिक वर्षा दक्षिण - पश्चिम मानसून से होती है , पश्चिमी तथा दक्षिण -पश्चिमी मानसून की धारायें प्रायद्वीप के पश्चिमी घाट या सहयाद्री श्रेणी (600 मी. से 2100 मी. की ऊँचाई युक्त निरंतर अवरोध) से टकराती है । इस अवरोध को पार करने से पहले मानसून धारायें प्रायद्वीप की पूर्वी आंतरिक भाग की हवा से नमी संग्रह करती है और ; प्रायद्वीप के पूर्वी क्षेत्र के आंतरिक भाग को पार करती है । घाट को पार करते समय, मानसून की धरायें नमी का अधिकांश भाग खो देती है । मानसून धारायें देश के पूर्वी ढाल की तरफ घाट की उपरी सतह में बहती है, जिससे जल क्षेत्र का निर्माण होता है । गोदावरी नदी घाटी का उत्तरी- पूर्वी क्षेत्र मानसून धाराओं में से कुछ वर्षा प्राप्त करता है जो उड़ीसा तट के पश्चिम- उत्तर पश्चिम के ओर बढ़ जाता है ।

पश्चिमी घाट के 129 किमी लम्बाई के उच्च वर्षा वाले क्षेत्र से गोदावरी नदी में पानी का निकास होता है . पश्चिमी घाट के पूर्वी क्षेत्र में वर्षा तेजी से घट कर 600 मिमी से कम रह जाती है इस क्षेत्र में वार्षिक वर्षा 1000-3000 मिमी है ।

महाराष्ट्र के औरंगाबाद तथा अहमदनगर जिलों का कुछ क्षेत्र, जिसका क्षेत्रफल 10360 वर्ग मीटर है, पश्चिमी घाट के पूर्वी में कुछ दूरी पर स्थित है, औसत वर्षा 600 मिमी से भी कम प्राप्त करता है । इस क्षेत्र के बाद उत्तरी तट की ओर बढ़ने पर वर्षा धीरे-धीरे बढ़ कर लगभग 900 मिमी हो जाती है ।

गोदावरी घाटी में जनवरी और फरवरी माह के दौरान वर्षा 15 मिमी से भी कम रह जाती है, जिससे ये दोनों माह लगभग सूखे रह जाते हैं । घाटी के अधिकांश क्षेत्रों में, अगले तीन माह के दौरान मई के अंत तक वर्षा 20 मिमी से 50 मिमी के मध्य होती है । जून से सितम्बर अवधि के बीच नदी घाटी का अधिकांश क्षेत्र अधिकतम वर्षा प्राप्त करता है । दक्षिण - पश्चिमी मानसून जो कि जून के मध्य से होकर अक्टूबर माह के मध्य तक रहता है, गोदावरी नदी घटी वार्षिक वर्षा का लगभग 84 % हिस्सा प्राप्त करता है। प्राणहिता तथा इन्द्रावती नदी का उपघाटी क्षेत्र वार्षिक वर्षा का 88% तथा 86% भाग चक्रवाती तूफान के प्रभाव में प्राप्त करता है । गोदावरी प्रवाह क्षेत्र में काफी लम्बे समय से वार्षिक वर्षा का औसत लगभग 1100 मिमी दर्ज किया जा रहा है ।

1.3 Water Resources Development in the Basin

The water resources potential in Godavari basin has been assessed to be 110.54 km^3 and out of this 76.3 km^3 is utilizable. There is a vast potential for irrigation development and hydropower generation in the basin.

Prior to independence only a few irrigation projects were constructed in Godavari basin. Important among these are Godavari delta system (with Dowlaiswaram weir as head works), Nizamsagar reservoir, Kadana dam and Pravara dam. After independence, under various five-year plans a good number of multi-purpose and irrigation projects have been taken up. The most important among them are the Jaikwadi, Sriramsagar, Kadam, Upper Indravati, Singur and Godavari Barrage (by modernising the existing gated weir at Dowlaiswaram).

Since the mid-1960's, the Central Water Commission is conducting hydrological observations in Godavari basin. Hydrological observation stations have been established on main Godavari River as well as on all the important tributaries. During the year 2017-18, Discharge observations are carried out at 55 stations in Godavari Basin. Out of 55 stations, 9 stations are on the main Godavari and the remaining 46 are on its tributaries. In addition to gauge and discharge observations, sediment load at 16 stations and Water Quality at 27 stations are also being monitored. The location of the hydrological observation sites is shown in the basin map.

The hydrological observation stations in the Godavari basin are under the control of three field divisions of Central Water Commission. Upper Godavari Division with head quarters at Hyderabad maintains 14 stations in the upper catchment of Godavari and 23 stations in the Indravathi, Sabari sub-basins and in the Lower Godavari catchments are maintained by the Lower Godavari Division with head quarters also at Hyderabad. These two divisions are under the control of Godavari Circle at Hyderabad. The remaining 18 stations mostly in the Pranhita sub-basin are maintained by Wainganga Division with head quarters at Nagpur, which is under the control of Superintending Engineer (Co-ordination) at Nagpur.

The daily gauge and discharge data of 55 stations collected during 2017-18 have been presented in this Year Book. Sediment and Water Quality data are presented in Suspended Sediment Year Book (Volume II) and Water quality Year Book (Volume III) respectively. Bed material analysis is also included in Sediment water yearbook.

1.3 गोदावरी नदी घाटी में जल संसाधन विकास :-

गोदावरी घाटी की जल संसाधन की कुल क्षमता 110.54 km^3 है, जिसका 76.3 km^3 ही उपयोग योग्य है। गोदावरी घाटी में सिंचाई के विकास तथा जल विध्युत के उत्पादन की अपार संभावनाएं हैं ।

स्वतंत्रता से पुर्व केवल कुछ सिंचाई परियोजनाएं ही घाटी में बनाई गई थी जिनमें गोदावरी डेल्टा प्रणाली (दावलेश्वरम बांध), निजाम सागर जलाशय , काढना बांध और प्रवरा बांध प्रमुख है । स्वतंत्रता प्राप्ति के बाद पंचवर्षीय योजनाओं के माध्यम से बड़ी संख्या में बहुउद्देशीय एवं सिंचाई परियोजनाएं शुरू की गई है । उनमे से जायकवाड़ी , श्रीरामसागर , कदम , ऊपरी इंद्रावती, सिंगुर और गोदावरी - बैराज (दावलेश्वरम बांध के आधुनिकीकरण का कार्य) सवार्धिक महत्वपूर्ण है ।

केंद्रीय जल आयोग बर्ष 1960 के मध्य से इस घाटी में जलीय गतिविधियों का निरीक्षण कर रहा है । गोदावरी नदी के साथ - साथ इसकी प्रमुख सहायक नदियों में भी जलविज्ञान केंद्र स्थापित किये गए है । वर्ष 2017-18 के दौरान ऐसे 55 निरीक्षण केन्द्रो का संचालन किया जा रहा है जिनमे से 9 गोदावरी और शेष 46 इसकी सहायक नदियों पर स्थित है । गेज और निस्सारण निरीक्षण के अलावा 16 स्टेशनो पर तलछट भार (sediment load) का अवलोकन और 27 स्टेशनों पर जल गुणवत्ता की निगरानी भी की जा रही है । इन जल विज्ञान केन्द्रो को घाटी के मानचित्र में दर्शाया गया है ।

गोदावरी नदी घाटी में स्थित जल विज्ञान केंद्रों का नियंत्रण तीन क्षेत्रीय मंडलो के द्वारा , केंद्रीय जल आयोग करता है । ऊपरी गोदावरी जल प्रवाह क्षेत्र में स्थित 14 केन्द्रों की निगरानी उपरी गोदावरी मंडल करता है, जिसका मुख्यालय हैदराबाद में है। इन्द्रावती, सबरी उपघाटी और निचली गोदावरी प्रवाह क्षेत्र में स्थित 23 केन्द्रों का नियंत्रण निचली गोदावरी मंडल द्वारा किया जाता है जिसका मुख्यालय भी हैदराबाद में है। इन दोनों मंडलो का नियंत्रण गोदावरी परिमंडल हैदराबाद के अंर्तगत है। प्राणहिता उपघाटी के 18 केन्द्रों को वैनगंगा मंडल, जिसका मुख्यालय नागपुर में है तथा अधीक्षण अभियंता (समन्वय) नागपुर द्वारा नियंत्रित किया जाता है ।

इस वार्षिक पुस्तक में सभी 55 स्टेशनों के 2017-18 वर्ष के दैनिक निस्सारण सूचनाएं प्रदर्शित की गई है। तलछट एवं जल गुणवत्ता सम्बन्धी आंकड़े अलग से तलछट वर्ष पुस्तक पुस्तक (भाग -2) और जल गुणवत्ता वर्ष पुस्तक (भाग-03) में क्रमशः प्रदर्शित की जाती है । गाद परीक्षण का परिणाम भी तलछट वर्ष पुस्तिका में दर्शाया जाता है ।

1.4 Observation Techniques

The standard methods being adopted for collecting data are explained briefly below.

1.4.1 Gauge Observation

Water level or stage of the river is measured as its elevation above MSL datum. Water level measurement is done by reading non-recording gauges. Series of vertical staff gauges are fixed at three sections at every site. Enameled gauge plates with metric unit markings are fixed on the gauge posts so that gauges can be read up to three decimals. Out of the three gauging lines, the central one is used as station gauge line and readings of the other two lines are used for calculation of water slope. During monsoon season, gauges are read hourly at the station gauge line. During non-monsoon season gauges are read at the station gauge line thrice daily at 0800 hours, 1300 hours and 1800 hours.

1.4.2 Discharge Observation

Discharge observations are conducted once a day at 0800 hours by area-velocity method on all days except on Sundays and holidays.

The river width is generally divided into 15 to 25 segments based on the degree of accuracy as outlined in IS: 1192-1981. The width of the river is measured by steel/metallic tape or wire rope stretched across the river with segment markings indicated thereon, when the river width is quite small and the flow depths permit wading. For larger widths with deeper flow conditions as in floods, pivot point method is used for aligning the Boats / Launches at the desired position in the station gauge line.

The depth measurements are carried out by using sounding rod for depths up to 3 metre and with the help of long bamboo for depths between 3 metre and 6 metre. For depths exceeding 6 metre sounding reel measurements at segment points are resorted to, and in impracticable situations the depths are measured by echo sounder or computed from the most recent cross-sections of the river.

1.4 निरीक्षण तकनीक -

आंकड़ों के संग्रहण के लिए अपनाई गई मानक विधि संक्षिप्त रूप में नीचे दी गई है ।

1.4.1 गेज निरीक्षण

नदी का जल स्तर समुद्र तल से उसकी ऊंचाई के आधार पर नापा जाता है । जल स्तर की माप गैर रिकॉर्डिंग गेज को पढ़ कर किया जाता है । प्रत्येक स्थल पर तीन उर्ध्वाधर (vertical) गेज लाइन की श्रृंखला स्थापित की जाती है । सभी गेज पोस्ट पर मीटरिक इकाई के साथ इनेमल्ड गेज प्लेट लगाई गई है जिससे कि गेज को दशमलव के तीन अंको तक पढ़ा जा सके । इन तीनों गेजिंग श्रृंखला में, मध्य लाइन को स्टेशन गेज लाइन के रूप में प्रयोग किया जाता है । वहीं अन्य दो लाइनों का रीडिंग पानी ढलान की गणना के लिए उपयोग किया जाता है । मानसून के दौरान , स्टेशन गेज लाइन प्रति घंटा पढ़ा जाता है जबकि गैर मानसून समय में इसे 08.00, 13.00 और 18.00 बजे प्रतिदिन तीन बार पढ़ा जाता है ।

1.4.2 निस्सारण निरीक्षण:-

निस्सारण का अवलोकन रविवार एवं छुट्टी के दिनों को छोड़कर शेष दिनों में एक बार 08.00 बजे क्षेत्र गति विधि (area velocity method) द्वारा किया जाता है । नदी की चौड़ाई सामान्यतः 15 से 25 खंडो में शुद्धता की माप के आधार पर विभाजित होती है जिसे कि IS : 1192-1981 में उल्लिखित किया जाता है । जब नदी की चौड़ाई अपेक्षाकृत छोटी हो तथा वेडिंग संभव हो, तब नदी की चौड़ाई की माप स्टील या धातु के फीते अथवा रस्सीनुमा तार पर कई निशान लगे चिन्हों की सहायता से किया जाता है ।

नदी की अधिक चौड़ाई की स्थिति में तथा बाढ जैसी स्थितियों में जहां जल प्रवाह गहराई तक हो, ऐसी स्थिति में पिवोट पॉइंट विधि का उपयोग से नाव / जहाज को स्टेशन गेज लाइन में संरेखित कर वांछित स्थान पर नदी का वेग (velocity) को मापा जाता है ।

गहराई जब 3 मीटर तक हो, तब उसकी माप ध्वनि छड़ (Sounding Rod) की सहायता से की जाती है वही 3-6 मीटर की गहराई की स्थिति में एक लम्बे बांस का उपयोग किया जाता है । 6 मीटर से अधिक गहराई की स्थिति में ध्वनि रील जिसपर कई खण्ड के निशान होते हैं, को अंदर प्रविष्ट कराया जाता है वही असामान्य स्थिति में गहराई की माप इको साउंडर (eco sounder) अथवा नदी के क्रॉस सेक्शन के माप से की जाती है ।

The velocity is measured as per IS 3918 - 1966 by using a cup type current meter conforming to IS 3910 - 1992. The current meter is lowered to the requisite depth i.e. 0.6 of total depth down the vertical at every segment point by suspension equipment as specified in IS: 6064 - 1971 and where the depth is less than 0.3 metre, the velocity is observed just below the water surface.

At medium and high stages with significant flow velocities, boats fitted with power engines are used. At some stations cableway has been established for navigating the boat. At cableway stations, no power engines are required for the boats. Measurements of velocity are some times carried out from road bridges, wherever feasible, when it becomes difficult to keep the boat stable for velocity observations due to the river flow conditions. When none of the above procedures is possible, float observation is resorted to.

The data observed as above at the site is entered in the prescribed standard forms to compute the total river discharge and it is then computerized using Surface Water Data Entry System (SWDES) and on line entry in e-SWISS software at each Sub-divisional data processing centre. After Primary validation at division level, the data is processed & finalized in Regional data processing centre using the HYMOS software.

1.4.3 Computation of discharge for non-observed days

The stages and corresponding discharges measured during each season (monsoon or non-monsoon) are exported to HYMOS from SWDES. Stage-Discharge curves (S-D) are generated in HYMOS giving weightage to all the observation points and discarding such observations which appear inaccurate. The S-D curve for the current season is scrutinized such that it is free from bias and passes all the goodness of fit tests. It is also compared by superimposition with the previous year's S-D curve and shift, if any, of the current year's curve is studied with reference to changes in the river cross-section and using the stage-area and stage-velocity graphs for verification. On satisfactory conclusion of the appropriateness of the shift, the S-D curve of the current season is finalized. Such S-D curve is used for computation of discharge for non observed days and for the discarded points.

IS: 3910-1992 के अनुसार Cup Type Currentmeter (कपनुमा करंट मीटर) के उपयोग से IS: 3918-1996 के अनुरूप वेग मापा जाता है । करंट मीटर IS:- 6064-1971 के निर्देशानुसार निलंबन उपकरण द्वारा प्रत्येक खण्ड बिंदु पर (सेगमेंट प्वाइंट) कुल उर्ध्वाधर (vertical) गहराई का 0.6 तक अर्थात आवश्यक गहराई से नीचे और जहां गहराई 0.3 मीटर से कम है, तो वेग पानी की सतह के बिल्कुल नीचे अवलोकित किया जाता है ।

मध्यम और उच्च महत्वपूर्ण वेग की अवस्था में विद्युत शक्ति इंजन युक्त नौकाओं का उपयोग किया जाता है । कुछ महत्वपूर्ण स्टेशनों पर नाव को चालने के लिए केबल टावर की स्थापना की गई है । केबल टावर स्टेशनो पर नौकाओं के लिए विध्युत शक्ति इंजन की जरुरत नहीं है । जहां कहीं भी नदी प्रवाह की स्थिति में वेग अवलोकन के लिए नाव को स्थिर रखना संभव न हो तथा जहाँ संभव हो कभी-कभी सड़क पूल से वेग मापन किया जाता है । उपर्युक्त प्रक्रियाओं में से जब कोई संभव न हो तो फ्लोट निरीक्षण का सहारा लिया जाता है ।

उपर्युक्त के अनुसार केंद्र पर अवलोकित आकड़ा को निर्धारित मानक फॉर्म में लिखा जाता है और तब इसे सर्फेस वाटर डाटा इन्ट्री सिस्टम (SWDES) के प्रयोग से कम्प्युट्रीकृत किया जाता है और प्रत्येक उपमंडलीय डाटा प्रोसेसिंग केंद्र में ऑनलाइन e-SWISS सॉफ्टवेअर में इंट्री किया जाता है । मंडल स्तर पर प्राथमिक मान्यता के बाद आकडा को क्षेत्रीय डाटा प्रोसेसिंग केंद्र में HYMOS Software के उपयोग से परिवर्तित और परिपूर्ण किया जाता है ।

1.4.3 गैर अवलोकित दिनों में निस्सारण की गणना

प्रत्येक सत्र (मानसून या गैर मानसून) के दौरान मापा स्तर और तदनुसार निस्सारण को SWDES से HYMOS भेजा जाता है । सभी अवलोकित बिन्दुओं को वेटेज देते हुये और ऐसे अवलोकनो को छोड़कर जो असंगत हो, Hymos में स्तर-निस्सारण वक्र (Stage discharged Curve) का निमार्ण किया जाता है । वर्तमान सत्र के लिए एस-डी (Stage discharged) वक्र की जाँच इस प्रकार करते है कि यह सभी परीक्षणों के अनुकूल होते हुए त्रुटिरहित होता है । पिछले वर्ष के एस-डी वक्र के साथ अध्यारोपित करके भी इसकी तुलना की जाती है और वर्तमान वर्ष के वक्र में यदी कोई परिवर्तन देखा जाता है तो इसके सत्यापन के लिए अनुप्रस्थ काट (cross section) का परिवर्तन, स्तर-क्षेत्र और स्तर-वेग आरेखों का उपयोग करके सत्यापन किया जाता है । संतोषजनक परिवर्तन की उपयुक्त निष्कर्ष पर वर्तमान सत्र के एस-डी वक्र को अंतिम रूप दिया जाता है तथा इसका उपयोग गैर अवलोकित दिनों में और अस्वीकृत बिन्दुओं के लिए निस्सारण की गणना के लिए प्रयोग किया जाता है ।

1.5 Explanatory Notes

The explanatory notes given below are to assist in the interpretation of the hydrological parameters contained in the data presented subsequently.

i. Water year commences from 1st of June of a calendar year and extends to 31st of May of the next calendar year.

ii. Discharges given are daily-observed flows. For non-observations days, discharges are estimated against 0800 hours gauge reading in cubic metre per second (cumec).

iii. The zero RL of gauge is a reference point datum level fixed for each site and is kept 1 or 2 metre lower than the lowest water level of a perennial stream. In a non-perennial stream, it is kept 1 metre lower than the bed level of the stream.

iv. Discharge is rounded off to
   a) Nearest full integer when it exceeds 1000 cumec.
   b) Nearest first decimal value when it is between 100-999 cumec.
   c) Nearest second decimal value when it is between 10-99 cumec.
   d) Nearest third decimal value when it is less than 10 cumec.

v. Maximum and minimum discharges (observed / computed) of the month are taken from daily discharges.

vi. Annual Run-off in millimetres (mm) is the notional depth of water over the drainage area up to the discharge measurement station converted as equivalent to the calculated Annual run-off, which is computed using the following relation.

$$\text{Run-off (mm)} = \frac{\text{Annual run-off (Million cubic metre)} * 1000}{\text{Catchment area (sq.km)}}$$

1.5 स्पष्टीकरण टिप्पणी

नीचे दिए गए स्पष्टीकरण टिप्पणी प्रस्तुत आकड़ा एवं उसके बाद उसमें निहित जल विज्ञान पैरामीटर की व्याख्या में सहायता करता है -

(i) जल वर्ष कैलेण्डर वर्ष की घोषणा कैलेण्डर के 01 जून से लेकर अगले वर्ष के 31 मई तक विस्तारित होता है ।

(ii) दिए गए निस्सारण दैनिक अवलोकित प्रवाह है । गैर- अवलोकित दिनों के लिए निस्सारण का अनुमान 08.00 बजे की गेज रीडिंग से घन मीटर प्रति सेकेण्ड (cumec) में की जाती है ।

(iii) गेज का Zero RL प्रत्येक केंद्र पर एक सन्दर्भ बिंदु के रूप में निश्चित किया जाता है जिसे स्थाई धारा के निम्न जल स्तर से एक या दो मीटर नीचे रखा जाता है ।

(iv) निस्सारण को निम्न तरह अंकित किया जाता है :-

(a) जब यह 1000 क्यूमेक (घन मीटर प्रति सेकेण्ड) से अधिक हो तो निकटतम पूर्ण अंक तक ।

(b) जब यह 100 से 99 क्यूमेक के बीच हो तो दशमलव के प्रथम मान तक ।

(c) जब यह 10 से 99 क्यूमेक के बीच हो तो दशमलव के द्वितीय मान तक

(d) जब यह 10 क्यूमेक से कम हो तो दशमलव के तृतीय मान तक

(v) माह के अधिकतम और न्यूनतम निस्सारण (observed/computed) की गणना दैनिक निस्सारण से की जाती है।

(vi) प्रवाह क्षेत्र में पानी की काल्पनिक गहराई से निस्सारण मापन केंद्र तक वार्षिक रनऑफ मिमी में गणनात्मक (calculated) वार्षिक रनऑफ के समतुल्य है जिसकी गणना निम्न सम्बन्ध के उपयोग से की जाती है-

$$\text{रनऑफ (मिमी)} = \frac{\text{वार्षिक रनऑफ (मिलियन क्यूबिक मी.)} \times 1000}{\text{प्रवाह क्षेत्र (वर्ग किमी)}}$$

vii. The peak and the lowest discharge on record correspond to the measuring time (Discharge measuring time is generally from 0800 hours to the end of discharge measurement) and are not corresponding to absolute peak and lowest observed water

viii. The gauging site's code number is a unique seven-column alphanumeric reference number, which facilitates storage and retrieval of flow data in data banks. The first character is identifier of either an integral river basin or for convenience a region having several contiguous river catchments. This is followed by a character, which identifies an independent river system, which either has one or more outlets to the sea or crosses international border to enter another country. The third, fourth and fifth character denotes first, second and third order of tributaries respectively from the sea/international boundary moving upstream. The sixth and seventh characters indicate the location of gauging site earmarked on the river. Blank spaces, if any, are filled by zeros.

1.6 Highest Flood level of the year

Highest Flood level occurred with date and time of occurrence and corresponding discharge has been introduced in History sheet of each site from this year.

1.7 Interpretation of Graphical representations

Histogram-Hydrograph, Bar Chart and a pie diagram etc; are automatically generated by the software based on the data entered, which are briefly interpreted below.

i. **Histogram-Hydrograph:** This graphical representation reveals (a) Maximum discharge historical, which means, highest discharge observed, on a day, in each month of water year, in the entire period of available data. (b) Similarly minimum historical discharge means, lowest discharge observed, on a day, in each month of water year, in the entire period of

(vii) अभिलेख (Record) में लिखित मापने के समय अनुसार (सामान्यत: निस्सारण मापन का समय 08.00 बजे से निस्सारण मापन के अंत तक) अधिकतम और न्यूनतम निस्सारण, और पानी का वास्तविक अधिकतम और न्यूनतम निस्सारण है ; और नहीं है ।

(viii) गेजिंग केंद्र का कोड संख्या एक अद्‌वितीय सात कौलम वाला वर्ण अंक सन्दर्भ संख्या है जो आकड़ा बैंकों में प्रवाह आकड़ा के भंडारण और पुन: प्राप्ति की सुविधा प्रदान करता है । जिसका पहला अक्षर या तो सम्पूर्ण नदी घाटी का या कई नदियों से संलगन उपयुक्त प्रवाह क्षेत्र के लिए संकेतक है । इसके बाद का अक्षर स्वतंत्र नदी प्राणाली जिसका या तो या एक से अधिक समुद्री निकास है या अन्य देश में प्रवेश के लिए अंर्तराष्ट्रीय सीमा पार करती है, कि पहचान करता है । तृतीय, चतुर्थ और पंचम अक्षर समुद्र से या अंर्तराष्ट्रीय सीमा से उपरी धारा में क्रमशः प्रथम, द्‌वितीय और तृतीय सहायक नदियों को सूचित करता है । षष्ठ और सप्तम अक्षर नदी पर निर्धारित गेजिंग केंद्र का स्थान इंगित करता है । रिक्त स्थान, यदि कोई हो तो, शून्य से भरे जाते है ।

1.6 वर्ष का सर्वाधिक बाढ़ स्तर :-

इस वर्ष से प्रत्येक केंद्र के वृतांत (History sheet) में तिथि और समय के साथ क्रमशः सर्वोच्च बाढ़ स्तर और निस्सारण आरम्भ किया जा रहा है ।

1.7 चित्रात्मक प्रस्तुति की ब्याख्या :-

हिस्टोग्राम- हाईड्रोग्राफ, बार चार्ट और एक पाई आरेख आदि सॉफ्टवेयर में दर्ज आकडा के आधार पर स्वयं उत्पन्न होता है, जिनकी संक्षेप ब्याख्या निम्न है -

(i) हिस्ट्रोग्राम- हाइड्रोग्राफ :-

(क) उपलब्ध आकड़ा के सम्पूर्ण अवधि में, जल वर्ष के प्रत्येक माह में, किसी दिन का ऐतिहासिक अधिकतम निस्सारण (इसका अर्थ अवलोकित अधिकतम निस्सारण) को चित्रात्मक प्रस्तुति बतलाता है ।

(ख) ठीक इसी तरह से उपलब्ध आकड़ा के सम्पूर्ण अवधि में जल वर्ष के प्रत्येक माह में, किसी दिन का ऐतिहासिक न्यूनतम निस्सारण (इसका अर्थ न्यूनतम अवलोकित निस्सारण) को चित्रात्मक प्रस्तुति बतलाता है ।

available data. (c) Mean discharge-Historical means, average value of discharge, for each month, in a water year, for the entire period of available data including current year. (d) Mean discharge current year means, average value of daily discharge in each month, in current water year. Therefore this graph represents maximum, minimum discharge observed on a day and mean of each month discharge for all years for which data is available and comparing these values with current year monthly mean values.

ii. **Bar chart of Runoff:** This is the graphical representation of annual runoff of each water year, for all years of available data, including current year, in million cubic meter (MCM) using the following formula.

Runoff of the day in MCM = Daily discharge (in Cubic meter per second) X ((60*60*24)/ 1000000)

iii. Sum of daily Run off, in a year, gives annual runoff in MCM.

iv. **Pie Diagrams:** Pie diagram of monthly average runoff represents average percentage of annual run off, for each month of water year, of all years, for which data is available including current year. Similarly current year pie diagram represents percentage of annual runoff of each month in current water year. This representation shows monthly contribution of water yield, in annual runoff, at a particular site. The monthly run off may vary from one site to another site depending up on rain fall in the upper in that region.

v. **Superimposed cross section:** The profile of riverbed along standard discharge section is recorded, at on set and off set of monsoon at each site and the same are superimposed, to find out cross sectional variations of riverbed.

vi. **Water level Vs Time Charts:** Hydrograph of site, 3 highest peak floods at each stations have been represented by these charts, showing water level, date and time of occurrence with a time span of 72 hours (3 days) for each flood.

(ग) वर्तमान वर्ष के साथ उपलब्ध आकड़ा के सम्पूर्ण अवधि में जल वर्ष के प्रत्येक माह में ऐतिहासिक माध्य निस्सारण (इसका अर्थ निस्सारण का मासिक औसत मान) की चित्रात्मक प्रस्तुति बतलाता है ।

घ) वर्तमान वर्ष के माध्य निस्सारण का अर्थ वर्तमान जल वर्ष के प्रत्येक माह में दैनिक औसत निस्सारण के मान को चित्रात्मक प्रस्तुति बतलाता है । इस प्रकार यह ग्राफ सभी वर्षों, (जिसका आकड़ा उपलब्ध है) के किसी दिन अवलोकित अधिकतम, न्यूनतम निस्सारण और मासिक माध्य निस्सारण के मान की तुलना वर्तमान वर्ष के साथ प्रस्तुत करता है ।

(ii) **रनऑफ का बार चार्ट** - यह निम्न सूत्रों का उपयोग करते हुए घन मिलीयन मीटर (MCM) में वर्तमान वर्ष सहित सभी वर्षों के उपलब्ध आंकड़ों के लिए, प्रत्येक जल वर्ष के वार्षिक रनऑफ को चित्रात्मक प्रदर्शन है।

$$\text{दैनिक रनऑफ (MCM)} = \frac{\text{दैनिक निस्सारण (daily discharge) X (60x60x24)}}{1000000}$$

(iii) किसी वर्ष के दैनिक रनऑफ का योगफल वार्षिक रनऑफ (घन मीटर प्रति सेकेण्ड) के बराबर होता है।

(iv) किसी वर्ष में दैनिक रन-ऑफ के योग से वार्षिक रन-ऑफ का पता चलता है । किसी केंद्र पर उपलब्ध आकड़ा के सभी वर्षों के वार्षिक रन- ऑफ की तुलना भी हो जाती है ।

(v) **पाई आरेख**- वर्तमान वर्ष के साथ सभी वर्षों का जिसका आकड़ा उपलब्ध है मासिक औसत रनऑफ का पाई आरेख जल वर्ष के प्रत्येक माह के लिए वार्षिक औसत रनऑफ का प्रतिशत प्रस्तुत करता है । ठीक इसी तरह से वर्तमान जल वर्ष के प्रत्येक माह का वार्षिक रनऑफ का प्रतिशत, वर्तमान वर्ष पाई आरेख प्रस्तुत करता है । यह प्रस्तुतीकरण किसी विशेष केंद्र पर वार्षिक रनऑफ में मासिक जल प्राप्ति के योगदान को दर्शाता है । किसी एक केंद्र का मासिक रनऑफ दुसरे केंद्र से भिन्न हो सकता है क्योकिं यह उपरी क्षेत्र में वर्षा पर निर्भर करता है ।

(vi) **अध्यारोपित अनुप्रस्थ काट** - प्रत्येक केंद्र पर मानसून के प्रारम्भ और अंत में नदी तल का प्रोफाइल, मानक निस्सारण के साथ में दर्ज कर नदी तल के अनुप्रस्थ काट का परिवर्तन ज्ञात करने के लिए इसे अध्यारोपित करते है ।

1.8 **Method of presentation**

Site-wise hydrological data history sheets, flow tables and pictorial summary is presented in this volume. The serial order of hydrological stations is arranged along the river moving upstream from the sea or confluence with main river / international boundary towards its source, giving due priority to sites on intermediate tributary in similar way.

The flow tables indicate the following.

a) Daily discharges (in cumec)
b) Ten-daily mean discharges (in cumec)
c) Monthly mean discharge (in cumec)
d) Monthly maximum and Minimum discharges (in cumec)
e) Annual Run-off (in MCM and mm)

(vii) **जलस्तर बनाम समय चार्ट**- प्रत्येक केंन्द्र का हाईड्रोग्राफ तीन शीर्षतम चोटी के बाढ़ का निरुपण इन चार्टो के द्वारा प्रत्येक केन्द्रों में प्रत्येक बाढ़ के लिए 72 घंटे (3 दिन) की अवधि में जलस्तर, तिथि और घटना का समय को दर्शाया जाता है ।

1.8 प्रस्तुतिकरण की विधि :-

इस भाग में केंन्द्रानुसार जलविज्ञान आंकड़ा इतिहास, प्रवाहतालिका और चित्रमय सारांश प्रस्तुत किया गया है। जलविज्ञान केंद्रों को क्रमानुसार समुद्र से नदी की ओर उपरी प्रवाह या मुख्य नदी संगम के साथ/ अंतर्राष्ट्रीय सीमा से नदी के उदगम की ओर, मध्यवर्ती सहायक नदियों पर स्थित केन्द्रों को समान प्राथमिकता देते हुए व्यवस्थित किया जाता है।

प्रवाह सारणी से निम्न संकेत मिलता है -

(क) दैनिक निस्सारण (क्यूमेक)

(ख) दस दिवसीय माध्य निस्सारण (क्यूमेक)

(ग) मासिक माध्य निस्सारण (क्यूमेक)

(घ) मासिक अधिकतम और मासिक न्यूनतम निस्सारण (क्यूमेक)

(ड.) वार्षिक रन- ऑफ (एम सी एम और मिमी)

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Polavaram (Teriminal site of River Godavari)**	**Code**	:	**AG000C3**
State	:	Andhra Pradesh	District		West Godavari
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Godavari
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 2, Rajahmundry
Drainage Area	:	307800 Sq. Km.	Bank	:	Right
Latitude	:	17°14'45"	Longitude	:	81°39'35"
Zero of Gauge (m)	:	10.897 (m.s.l)	01.01.1966	:	
		Opening Date	Closing Date		
Gauge	:	01.01.1966	**HFL During 2017-18**	:	**22.067 Meter**
			Corres. Discharge	:	**18133 Cumecs (Estimated)**
Discharge	:	01.01.1966	**Date & Time of**	:	**21.07.2017**
			Occurance	:	**09:00 hrs.**
Sediment	:	25.10.1966			
Water Quality	:	25.10.1966			

HFL Recorded so far in m : 28.017 m 16/08/1986

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1966-1967	29760	25.217	06.09.1966	46.51	12.247	04.06.1966
1967-1968	35161	24.687	05.08.1967	62.28	12.357	12.06.1967
1968-1969	26189	22.427	19.08.1968	51.11	12.387	22.06.1968
1969-1970	35462	25.142	23.09.1969	100.6	12.517	22.05.1970
1970-1971	38701	26.297	23.08.1970	140.7	12.729	01.06.1970
1971-1972	16881	21.745	03.09.1971	46.93	12.282	31.05.1972
1972-1973	27949	23.870	07.07.1972	48.43	12.280	01.06.1972
1973-1974	30564	24.417	28.08.1973	77.53	12.207	01.06.1973
1974-1975	18110	22.270	13.08.1974	97.90	12.467	19.05.1975
1975-1976	39364	25.192	11.09.1975	133.5	13.032	29.05.1976
1976-1977	46299	26.517	23.07.1976	114.1	12.962	14.06.1976
1977-1978	34964	24.442	25.08.1977	115.8	13.287	19.04.1978
1978-1979	38229	25.542	18.08.1978	131.4	13.205	13.06.1978
1979-1980	32864	24.897	07.08.1979	114.3	13.002	25.05.1980
1980-1981	29468	24.075	05.08.1980	118.1	13.007	02.06.1980
1981-1982	43841	25.922	13.08.1981	156.3	12.957	15.05.1982
1982-1983	15247	21.817	19.08.1982	115.4	12.767	06.05.1983
1983-1984	40716	26.627	15.08.1983	128.5	12.832	18.06.1983
1984-1985	19943	22.702	04.08.1984	125.9	13.422	14.05.1985
1985-1986	16442	21.957	15.08.1985	89.91	13.322	04.06.1985
1986-1987	87500	28.017	16.08.1986	111.6	13.112	12.06.1986
1987-1988	15169	21.705	11.07.1987	74.88	13.297	25.05.1988
1988-1989	43506	25.525	30.07.1988	69.03	13.177	08.06.1988
1989-1990	35936	24.477	27.07.1989	136.2	13.777	09.06.1989
1990-1991	61658	27.277	25.08.1990	314.0	14.657	26.05.1991
1991-1992	29469	23.637	19.08.1991	138.3	13.997	30.05.1992

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1992-1993	39003	24.967	17.08.1992	123.9	13.917	16.06.1992
1993-1994	19062	21.832	06.08.1993	83.90	13.697	31.05.1994
1994-1995	43105	26.002	07.09.1994	69.05	13.627	03.06.1994
1995-1996	35259	24.912	23.10.1995	356.2	13.707	29.05.1996
1996-1997	11290	20.317	23.07.1996	184.1	13.297	11.06.1996
1997-1998	13266	21.117	03.08.1997	142.7	12.902	13.06.1997
1998-1999	16477	22.082	18.09.1998	87.27	13.167	28.05.1999
1999-2000	22714	22.987	09.08.1999	78.35	13.147	06.06.1999
2000-2001	35217	25.297	31.08.2000	55.11	13.287	23.04.2001
2001-2002	33764	24.967	23.08.2001	65.20	13.527	01.06.2001
2002-2003	29786	24.127	27.08.2002	56.84	12.597	13.05.2003
2003-2004	25862	24.342	28.07.2003	49.42	12.637	13.06.2003
2004-2005	18725	21.742	04.08.2004	227.2	13.067	16.04.2005
2005-2006	43703	25.897	21.09.2005	183.9	13.307	27.06.2005
2006-2007	52811	27.297	07.08.2006	220.4	13.347	07.05.2007
2007-2008	47249	24.712	10.08.2007	93.83	13.227	27.05.2008
2008-2009	26975	23.957	08.08.2008	34.00	13.127	01.05.2009
2009-2010	11249	20.217	29.08.2009	74.63	13.772	03.06.2009
2010-2011	39047	25.707	09.08.2010	94.94	13.847	09.06.2010
2011-2012	23943	23.502	03.09.2011	156.1	13.247	28.04.2012
2012-2013	26290	23.692	07.09.2012	167.1	13.787	16.06.2012
2013-2014	38328	26.087	04.08.2013	155.8	14.377	16.12.2013
2014-2015	34000	25.007	09.09.2014	154.8	13.997	02.03.2015
2015-2016	22433	22.822	23.06.2015	94.34	13.247	24.04.2016
2016-2017	32116	24.512	13.07.2016	127.6	13.707	06.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Polavaram in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**		2093	2093
2	**1966-1967**	75195	3698	78893
3	**1967-1968**	90368	5761	96129
4	**1968-1969**	64969	3463	68432
5	**1969-1970**	91030	4156	95185
6	**1970-1971**	101809	4184	105992
7	**1971-1972**	53792	2815	56607
8	**1972-1973**	46298	2307	48605
9	**1973-1974**	105366	4843	110209
10	**1974-1975**	38576	3190	41765
11	**1975-1976**	125934	4899	130833
12	**1976-1977**	102821	3818	106638
13	**1977-1978**	81536	5532	87068
14	**1978-1979**	113837	6255	120093
15	**1979-1980**	62405	4007	66412
16	**1980-1981**	98147	4499	102646
17	**1981-1982**	99335	5004	104339
18	**1982-1983**	52085	4708	56793
19	**1983-1984**	143131	7376	150507
20	**1984-1985**	50678	4398	55077
21	**1985-1986**	52336	4150	56486
22	**1986-1987**	88602	3992	92594
23	**1987-1988**	32296	2928	35224
24	**1988-1989**	131246	4223	135470
25	**1989-1990**	89028	6080	95108
26	**1990-1991**	175117	8724	183841
27	**1991-1992**	66195	5572	71766
28	**1992-1993**	81468	4469	85937
29	**1993-1994**	54536	3861	58397
30	**1994-1995**	139658	8446	148103
31	**1995-1996**	78271	7692	85963
32	**1996-1997**	52992	5843	58835
33	**1997-1998**	39337	7954	47291
34	**1998-1999**	69386	4970	74355
35	**1999-2000**	89710	6197	95906
36	**2000-2001**	72852	2845	75697
37	**2001-2002**	77047	3827	80874
38	**2002-2003**	49256	2216	51472
39	**2003-2004**	82402	6599	89001
40	**2004-2005**	45441	5144	50584
41	**2005-2006**	98327	8276	106603
42	**2006-2007**	124615	7245	131860
43	**2007-2008**	88589	5255	93844
44	**2008-2009**	55646	2834	58479
45	**2009-2010**	26655	2368	29023
46	**2010-2011**	110940	6231	117171
47	**2011-2012**	51771	4047	55818
48	**2012-2013**	86227	5471	91698
49	**2013-2014**	142718	7156	149873
50	**2014-2015**	54049	4289	58338
51	**2015-2016**	49533	3258	52791
52	**2016-2017**	81829	4390	86219
Average		81086	4876	84403

Stage-Discharge Data for the period 2017 - 2018

Station Name : Polavaram (AG000C3) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 2, Rajahmundry**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	13.892	149.9	15.817	2079	15.967	2205	19.347	9462	16.037	2432 *	14.712	914.0
2	13.857	191.1	15.837	2439	15.832	2042	18.717	7656 *	15.907	2251 *	14.607	762.3 *
3	13.907	285.8	16.052	2439	15.857	2026	18.707	7632 *	15.887	2301	14.507	676.3 *
4	13.937	273.1 *	16.357	2986	15.792	1989	18.097	6141	15.967	2428	14.447	626.8 *
5	13.902	264.4	16.312	2771	15.837	1958	17.482	4856	16.207	2414	14.407	594.7 *
6	13.847	228.2	15.982	2194	15.727	2006 *	16.902	3709	16.135	2555	14.407	594.7 *
7	13.797	198.2 *	15.752	2057	15.802	1921	16.792	3656	16.047	2587	14.387	579.0 *
8	13.737	169.3 *	15.587	1824 *	16.037	2572	16.700	3322	16.407	2983 *	14.317	525.2 *
9	13.767	183.5 *	15.397	1588 *	16.012	2475	16.467	3078 *	16.270	2847	14.337	540.3 *
10	13.837	218.6 *	15.162	1269	15.884	2122	16.297	2814 *	16.135	2580	14.297	510.2 *
11	13.847	223.8 *	15.002	1085	15.982	2339	16.077	2277	16.327	2825	14.247	473.6 *
12	13.917	261.8 *	14.992	1031	16.357	2906 *	15.897	2237 *	16.187	2739	14.247	473.6 *
13	13.977	296.3 *	14.942	1010	16.477	3094 *	15.817	2127 *	16.077	2614	14.167	417.4 *
14	13.997	308.2 *	14.997	1090	17.482	5044	15.509	1725 *	16.237	2723 *	14.157	410.6 *
15	13.957	284.6 *	15.167	1251	17.937	5844 *	15.477	1686 *	16.317	2844 *	14.177	424.3 *
16	14.007	314.3 *	15.317	1493 *	16.992	4034	15.517	1735 *	16.477	3291	14.187	431.2 *
17	14.107	377.3 *	16.355	3165	16.527	3186	15.807	2113 *	16.437	3161	14.117	383.9 *
18	14.257	480.8 *	17.237	4806	16.422	2897	16.212	2686 *	16.267	2801	14.127	390.5 *
19	14.322	547.1	19.045	8725	16.992	3977	16.397	2968 *	15.947	2307 *	14.097	370.8 *
20	14.322	550.6	19.967	10365	18.177	6376 *	16.497	3126 *	15.697	2055	14.137	397.1 *
21	14.297	510.2 *	22.042	18518	18.947	8234	16.777	3590 *	15.547	1892	14.087	364.3 *
22	14.207	445.1 *	21.127	14238	18.377	6879	16.537	3190 *	15.597	1836 *	14.067	399.2
23	14.152	431.5	19.862	10224	17.915	6034	16.427	3015 *	15.375	1664	14.067	351.5 *
24	14.197	509.0	18.652	7299	17.907	5905	16.497	3126 *	15.307	1584	14.047	338.9 *
25	14.257	480.8 *	17.692	5034	17.617	5169 *	16.617	3321 *	15.262	1530	14.057	345.2 *
26	14.367	563.4 *	17.097	4134	17.432	4792	17.067	4103 *	15.382	1661	13.997	308.2 *
27	14.522	788.6	16.657	3285	17.037	4049 *	17.137	4232 *	15.257	1502	13.927	300.9
28	15.112	1194	16.337	2706	17.327	4824	16.947	3887 *	15.182	1451	13.897	250.7 *
29	15.262	1402	16.037	2132	18.282	6841	16.570	3244 *	15.047	1191 *	13.957	284.6 *
30	15.467	1699	16.017	2403 *	18.987	8678	16.227	2708 *	14.942	1151	14.027	326.5 *
31			16.072	2391	19.517	10286			14.792	973.0		
Ten-Daily Mean												
I Ten-Daily	13.848	216.2	15.826	2165	15.875	2132	17.551	5233	16.100	2538	14.443	632.4
II Ten-Daily	14.071	364.5	16.302	3402	16.935	3970	15.921	2268	16.197	2736	14.166	417.3
III Ten-Daily	14.584	802.4	17.963	6579	18.122	6517	16.680	3442	15.245	1494	14.013	327.0
Monthly												
Min.	13.737	149.9	14.942	1010	15.727	1921	15.477	1686	14.792	973.0	13.897	250.7
Max.	15.467	1699	22.042	18518	19.517	10286	19.347	9462	16.477	3291	14.712	914.0
Mean	14.168	461.0	16.738	4130	17.014	4281	16.717	3647	15.828	2231	14.207	458.9

Annual Runoff in MCM = 43691 Annual Runoff in mm = 142

Peak Observed Discharge = 18518 cumecs on 21/07/2017 Corres. Water Level :22.042 m

Lowest Observed Discharge = 43.56 cumecs on 19/04/2018 Corres. Water Level :12.727 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Polavaram (AG000C3) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 2, Rajahmundry**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	14.047	368.5	13.717	257.9	13.527	186.7	13.547	275.8	13.317	215.5 *	13.197	149.7
2	14.047	358.5 *	13.697	253.5 *	13.487	179.6	13.537	272.5 *	13.327	211.1	13.217	143.8
3	14.007	345.5 *	13.687	252.5 *	13.487	182.4	13.547	270.1	13.267	205.1	13.267	137.8
4	13.997	343.6	13.667	250.5 *	13.517	210.5 *	13.517	265.0 *	13.217	151.1	13.337	125.9
5	13.987	340.5 *	13.657	245.5 *	13.537	214.5	13.527	265.2	13.207	149.9	13.407	96.65
6	13.977	338.5 *	13.617	230.5 *	13.507	208.4	13.487	244.7	13.177	141.1	13.487	112.5 *
7	13.917	335.5 *	13.597	228.5 *	13.487	204.6	13.497	246.4	13.237	168.0	13.602	124.5
8	13.897	325.0 *	13.587	191.2	13.547	259.3	13.467	244.9	13.257	168.1 *	13.672	162.7
9	13.867	305.0 *	13.577	191.0 *	13.517	225.1	13.467	245.2	13.277	170.7	13.677	163.3
10	13.827	299.0 *	13.577	191.0 *	13.517	225.1 *	13.447	243.5 *	13.227	159.0	13.657	172.5
11	13.757	284.0	13.567	185.5 *	13.527	230.5 *	13.437	242.7 *	13.197	159.1	13.637	167.3
12	13.727	278.0 *	13.577	191.0 *	13.487	216.6	13.437	242.8	13.197	157.5	13.607	162.5 *
13	13.717	267.0 *	13.547	190.5 *	13.437	214.8	13.417	238.2	13.197	162.2	13.577	175.5 *
14	13.747	262.0 *	13.657	240.5 *	13.437	220.4	13.417	233.8	13.177	160.5 *	13.517	171.9
15	13.737	257.0 *	13.717	254.0 *	13.417	209.6	13.387	221.2	13.147	147.5 *	13.487	189.9
16	13.717	252.0 *	13.717	254.0	13.397	221.8	13.377	218.8	13.207	158.4	13.427	189.2
17	13.697	250.0 *	13.737	255.0 *	13.427	224.0	13.377	200.3	13.207	156.5	13.357	169.2
18	13.757	266.4	13.707	255.0 *	13.417	209.6 *	13.377	200.5 *	12.852	73.57	13.377	169.0
19	13.767	267.5 *	13.697	250.0 *	13.437	196.7	13.357	218.5	12.727	43.56	13.412	166.9
20	13.737	262.0 *	13.707	255.0 *	13.437	215.4	13.327	207.5	12.832	62.90	13.417	167.5 *
21	13.737	265.0 *	13.697	255.1 *	13.437	224.8	13.347	215.8	13.045	133.0	13.427	167.9
22	13.707	257.0 *	13.697	255.0	13.477	214.8	13.357	224.9	13.207	156.4 *	13.427	167.9 *
23	13.697	250.0 *	13.657	244.1 *	13.477	221.9	13.357	211.2	12.947	95.74	13.427	167.9 *
24	13.697	250.0 *	13.657	244.1	13.597	260.2	13.367	229.9	13.007	110.1	13.457	168.0 *
25	13.717	252.0 *	13.647	250.3	13.597	265.5 *	13.357	224.9 *	13.057	144.5	13.537	169.3
26	13.727	255.1	13.617	235.5 *	13.597	271.1	13.347	219.0	13.067	140.2	13.507	172.5
27	13.727	255.0 *	13.597	227.0	13.567	264.6	13.297	209.4	13.087	143.7	13.487	170.5 *
28	13.697	252.0 *	13.577	198.8 *	13.537	251.6	13.257	201.2	13.087	144.4	13.517	176.5
29	13.717	254.0 *	13.567	196.2			13.217	201.2 *	13.097	146.5 *	13.577	185.5 *
30	13.727	255.0 *	13.527	181.9			13.267	215.5 *	13.147	147.5 *	13.687	199.5 *
31	13.717	254.0 *	13.537	173.6			13.297	220.0			13.837	220.5 *
Ten-Daily Mean												
I Ten-Daily	13.957	336.0	13.638	229.2	13.513	209.6	13.504	257.3	13.251	174.0	13.452	138.9
II Ten-Daily	13.736	264.6	13.663	233.0	13.442	215.9	13.391	222.4	13.074	128.2	13.482	172.9
III Ten-Daily	13.715	254.5	13.616	223.8	13.536	246.8	13.315	215.7	13.075	136.2	13.535	178.7
Monthly												
Min.	13.697	250.0	13.527	173.6	13.397	179.6	13.217	200.3	12.727	43.56	13.197	96.65
Max.	14.047	368.5	13.737	257.9	13.597	271.1	13.547	275.8	13.327	215.5	13.837	220.5
Mean	13.800	284.0	13.638	228.5	13.494	222.5	13.401	231.3	13.133	146.1	13.491	164.0

Peak Computed Discharge = 7656 cumecs on 02/09/2017 Corres. Water Level :18.717 m

Lowest Computed Discharge = 112.5 cumecs on 06/05/2018 Corres. Water Level :13.487 m

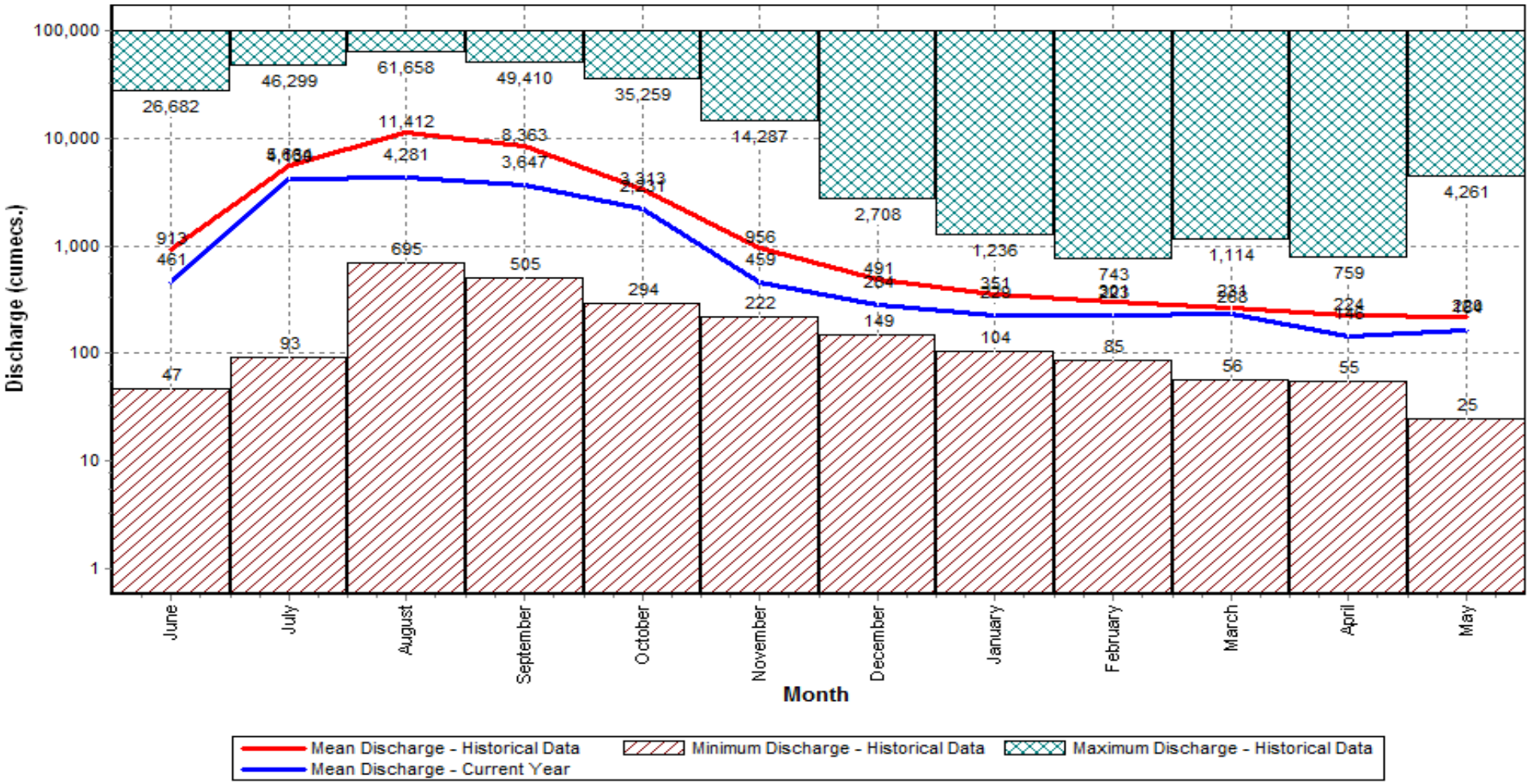
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Polavaram (AG000C3) | **Data considered : 1966-2018** | **Division : Lower Godavari Div., Hyderabad**

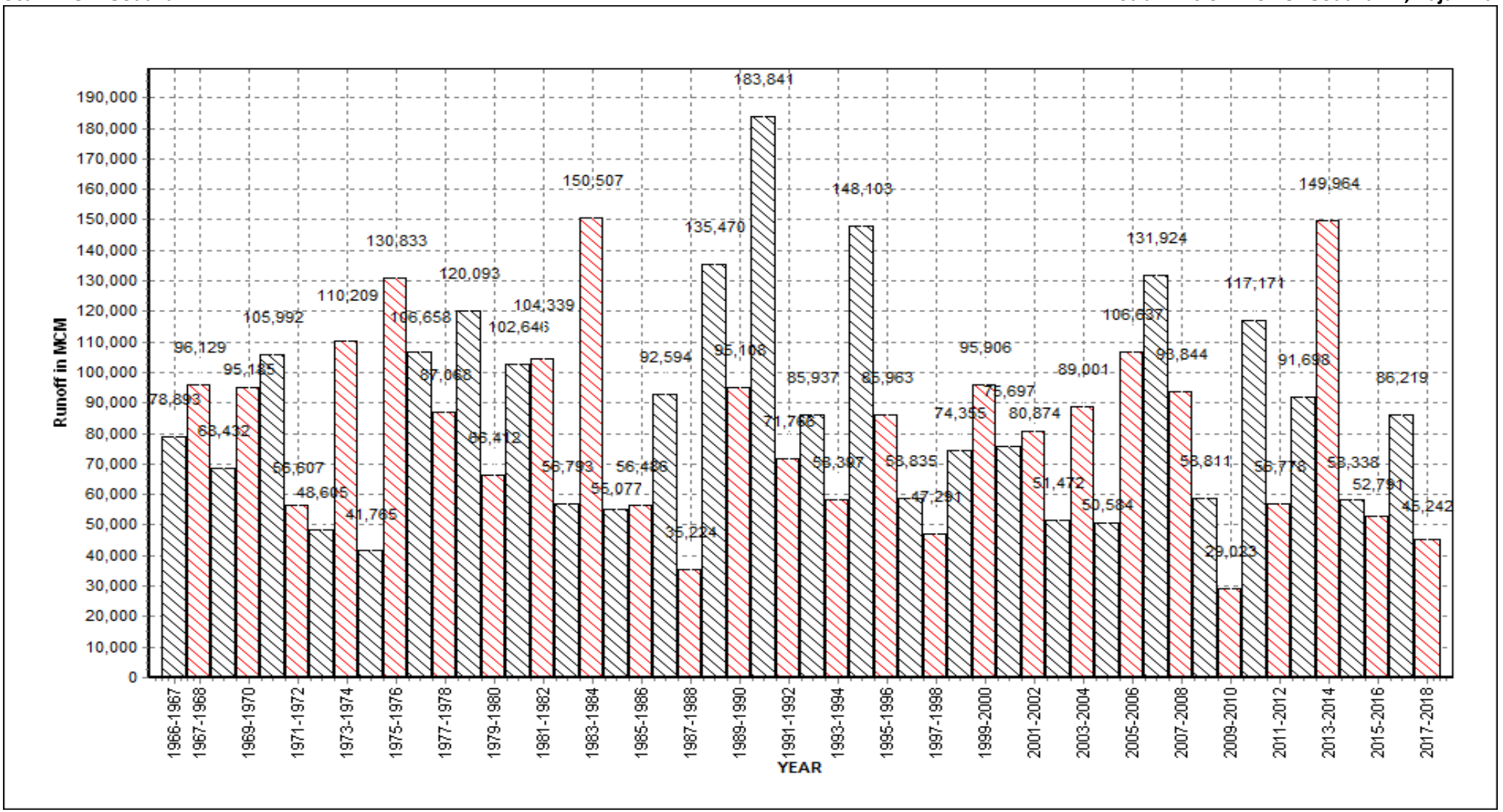
Local River : Godavari | **Sub-Division : Lower Godavari 2, Rajahmundry**



Annual Runoff Values for the period: 1966 - 2018

Station Name : Polavaram (AG000C3) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 2, Rajahmundry**



Note: Missing values have not been considered while arriving at Annual Runoff

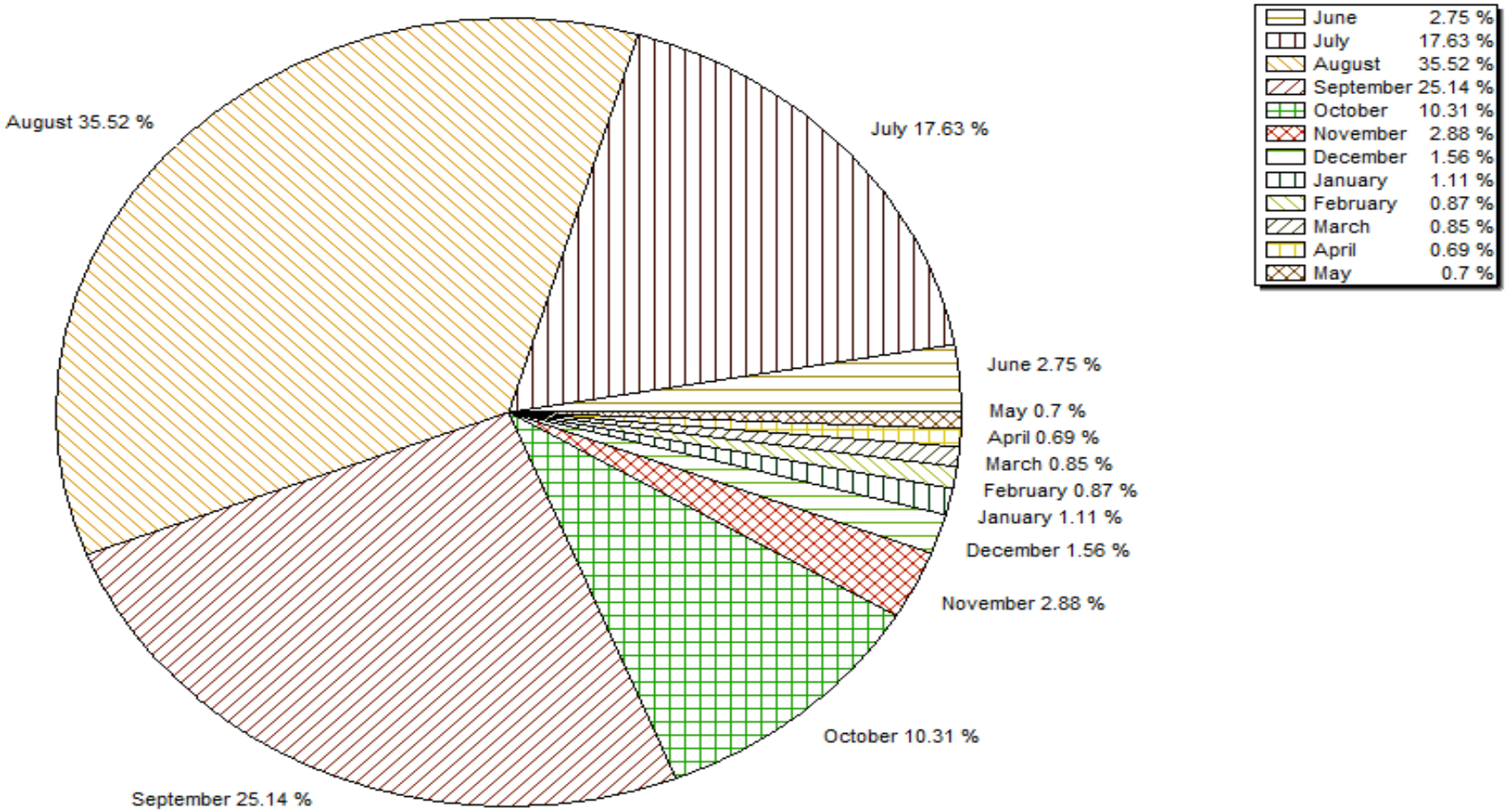
Monthly Average Runoff based on period : 1966-2017

Station Name : Polavaram (AG000C3)

Local River : Godavari

Division : Lower Godavari Div., Hyderabad

Sub-Division : Lower Godavari 2, Rajahmundry



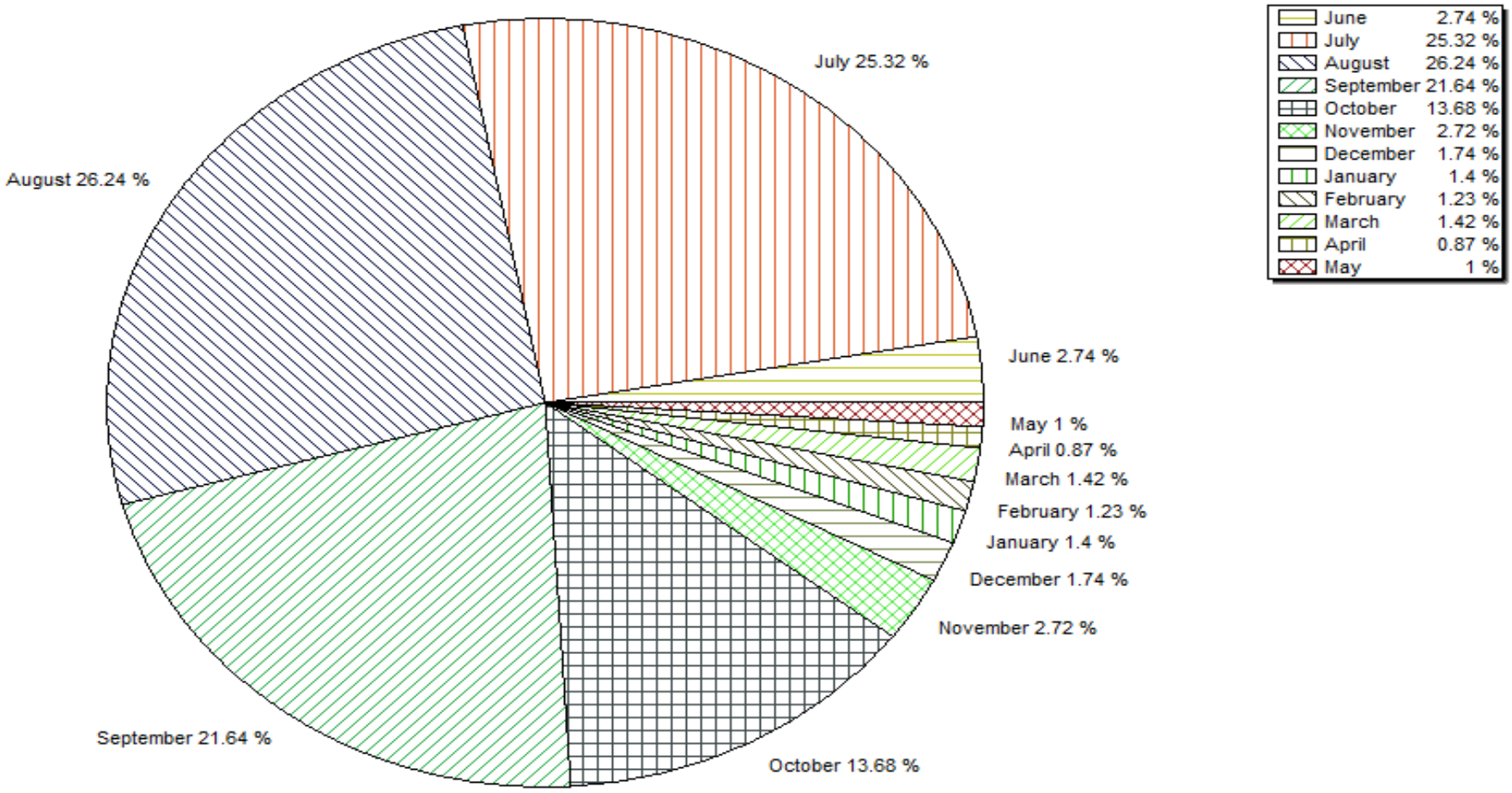
Monthly Runoff for the Year : 2017-2018

Station Name : Polavaram (AG000C3)

Division : Lower Godavari Div., Hyderabad

Local River : Godavari

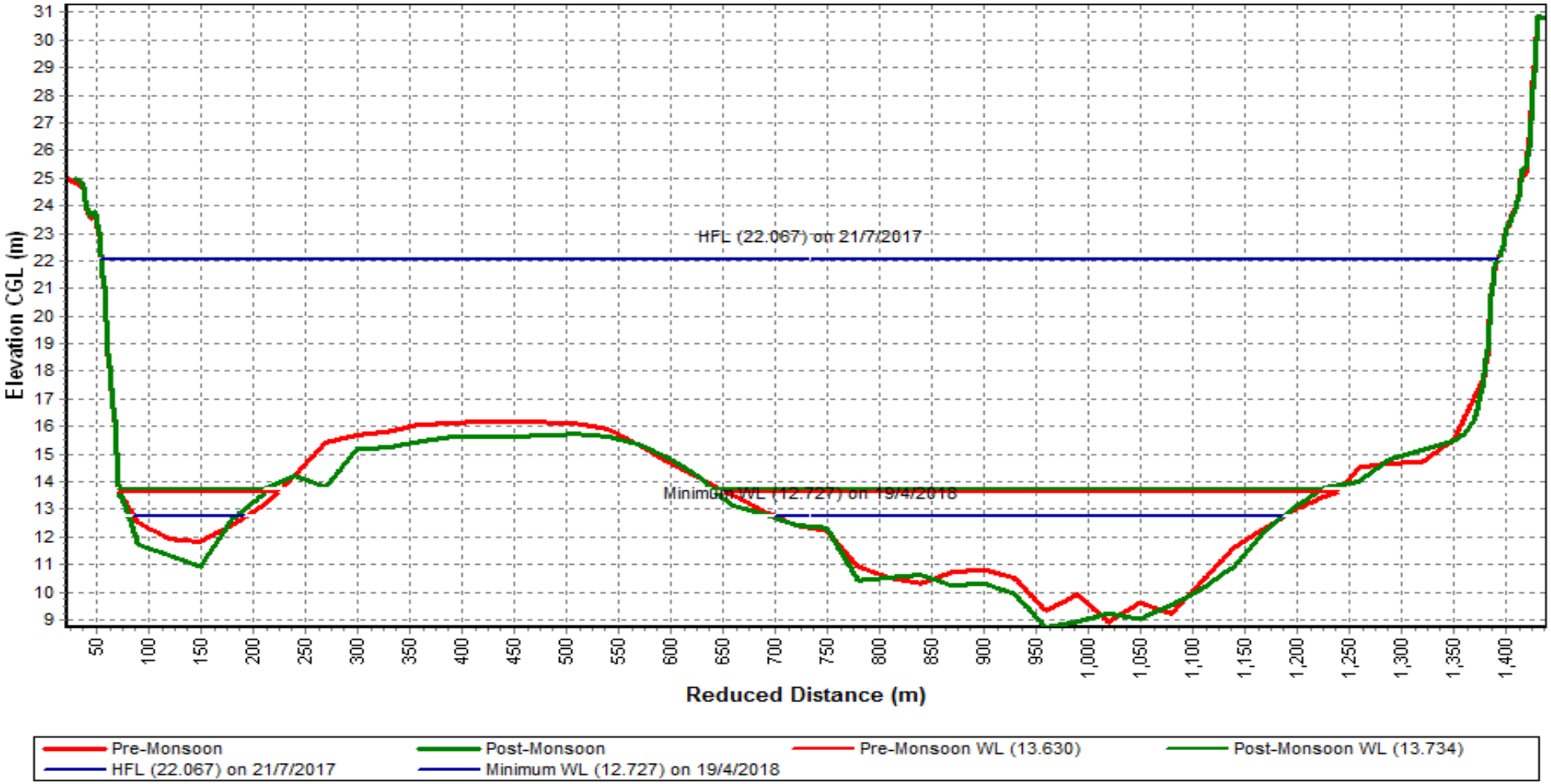
Sub-Division : Lower Godavari 2, Rajahmundry



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Polavaram (AG000C3) **Division : Lower Godavari Div., Hyderabad**

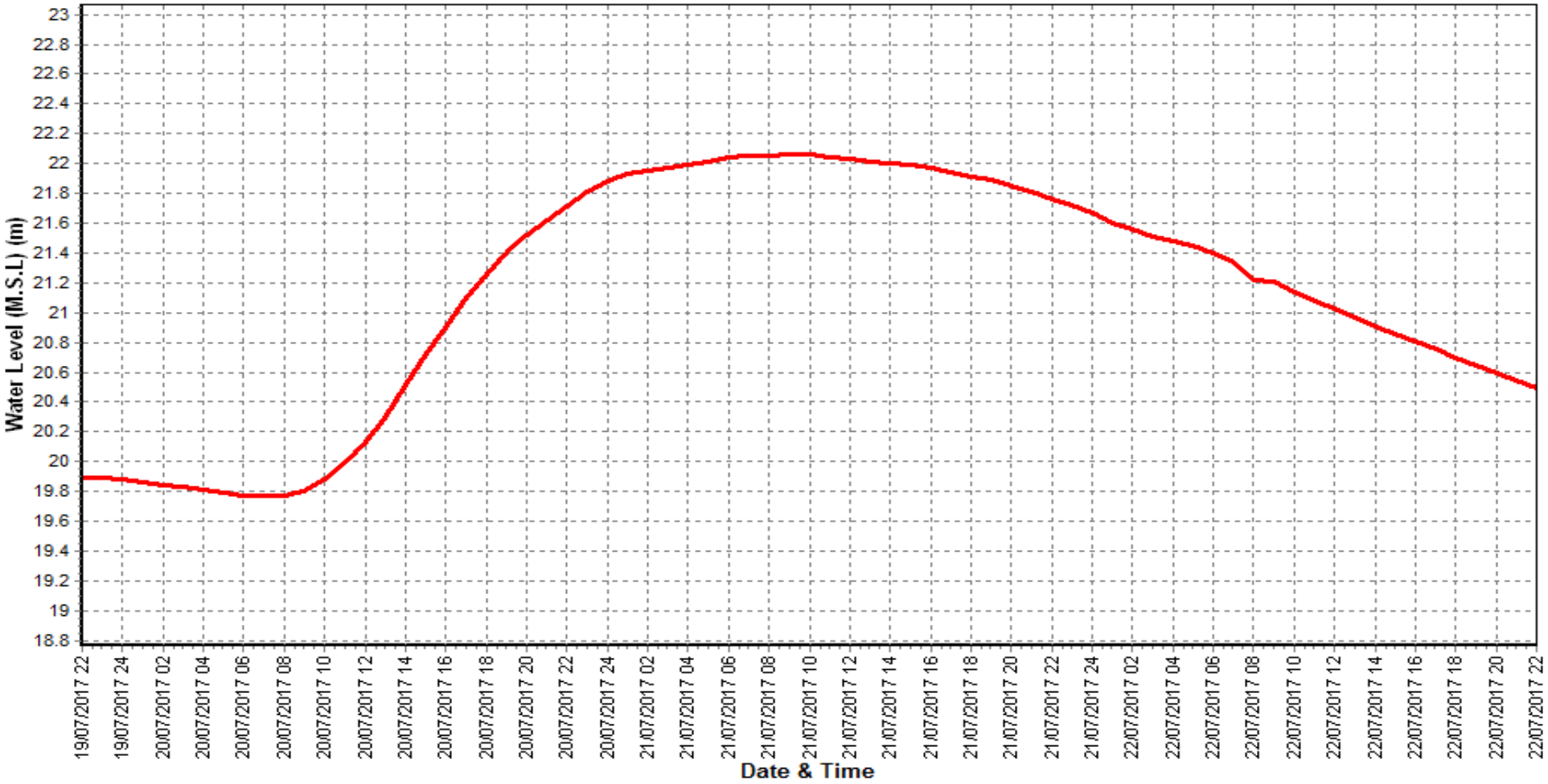
Local River : Godavari **Sub-Division : Lower Godavari 2, Rajahmundry**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Polavaram (AG000C3) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 2, Rajahmundry**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Valamuru**	**Code**	:	
State	:	Andhra Pradesh	District		East Godavari
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Pamuleru
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	LGSD II, Rajahmundry
Drainage Area	:	5232.0 Sq. Km.	Bank	:	Left
Latitude	:	17°38'0"	Longitude	:	81°38'10"
Zero of Gauge (m)	:	90.000 (Arbitary)	01.06.2017		
		Opening Date	Closing Date		
Gauge	:	25.06.2016			
Discharge	:	01.07.2017			
Sediment	:				
Water Quality	:				

Daily Discharge Data for the period 2017 - 2018

Station Name : Valamuru (AGCVALAMURU) **Division : Lower Godavari Div., Hyderabad**

Local River : Pamuleru **Sub-Division : Lower Godavari 2, Rajahmundry**

Day	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1		16.57	7.551	36.06	14.35	8.427	4.869	4.394	1.954	1.500	1.050 *	1.191
2		11.87 *	7.852	33.20 *	13.87 *	8.459	4.850 *	4.407	1.937	1.517	1.046	2.524
3		9.753	7.606	29.20 *	14.35	8.593	4.850 *	2.336	1.896	1.489	1.132	1.369
4		8.019	8.976	20.56	13.16	6.533 *	4.846	2.475 *	1.900 *	1.490 *	1.114	1.557
5		6.388	8.572	19.25	15.59	5.867 *	4.908	2.407	3.941	8.087	1.050	1.559
6		4.645	8.533 *	15.61	15.52	6.533 *	4.796	2.430	1.822	1.356	1.336	1.370 *
7		9.641	7.450	15.78	14.69	5.200 *	4.663	2.430 *	1.827	1.312	1.036	1.374
8		6.687	6.702	19.70	15.87 *	4.533 *	4.666	3.112	1.792	1.317	1.040 *	1.090
9		1.867 *	5.138	22.53 *	14.37	4.533 *	4.670 *	2.419	1.828	1.302	1.399	1.071
10		3.981	5.551	19.87 *	13.74	3.867 *	4.550 *	2.412	1.830 *	1.300 *	1.186	2.051
11		3.304	5.443	14.77	14.86	3.867 *	4.008	2.347	1.830 *	1.300 *	1.415	1.765
12		3.391	3.200 *	13.03	15.52	3.200 *	4.620	2.296	3.741	1.365	1.409	1.450 *
13		4.297	3.200 *	15.25	14.75	3.200 *	4.673	2.300 *	1.690	1.313	2.365	1.440 *
14		4.027	12.06	17.07	20.53 *	11.20 *	4.736	2.300 *	1.684	1.317	1.950 *	1.460
15		5.266	9.867 *	14.96	17.20 *	5.200 *	5.309	4.100	1.571	1.234	1.550 *	1.972
16		11.87 *	7.567	15.11	14.51	4.533 *	5.294	2.123	1.565	1.162	1.440	1.698
17		46.17	6.484	17.87 *	13.14	3.867 *	4.340 *	2.175	1.556	1.213	1.433	1.391
18		154.6	6.774	15.13	11.70	3.867 *	4.339	2.135	1.560 *	1.210 *	1.583	1.280
19		74.35	17.63	14.32	9.560	3.200 *	4.815	2.191	3.967	1.153	1.298	1.145
20		48.24	37.20 *	12.78	13.71	7.502	4.782	2.015	1.525	1.311	1.491	1.120 *
21		33.50	24.48	12.01	14.72	6.957	4.519	2.010 *	1.538	1.273	1.327	1.061
22		22.65	18.63	11.69	20.55	5.518	4.463	4.132	1.573	1.161	1.200 *	0.965
23		23.20 *	14.88	10.52	12.25	5.170	4.399	2.112	1.489	1.208	1.198	1.376
24		15.46	14.83	9.867 *	11.94	5.432	4.400 *	2.046	1.475	1.117	1.135	1.570
25		15.18	15.87 *	11.96	12.98	5.258	4.400 *	2.062	1.475 *	1.120 *	2.319	1.275
26		10.68	13.16	10.48	11.21	5.189	4.351	2.060 *	3.821	1.123	1.580	1.031
27	12.89	11.15	13.20 *	15.95	10.01	5.189	4.489	1.997	1.434	1.025	1.332	1.030 *
28	10.59	9.824	20.54	14.14	9.777	5.532	4.412	1.100 *	1.494	1.017	1.334	1.036
29	9.900	10.29	52.37	14.58	8.533 *	4.803	4.424	3.992		1.010 *	1.330 *	1.066
30	11.16	9.200 *	53.78	12.53 *	9.481	4.729	4.324	1.976		1.150 *	1.330 *	1.046
31		7.421	38.21		9.815		4.320 *	1.967		1.182		0.931
Ten-Daily Mean												
I Ten-Daily		7.942	7.393	23.18	14.55	6.255	4.767	2.882	2.073	2.067	1.139	1.516
II Ten-Daily		35.55	10.94	15.03	14.55	4.964	4.692	2.398	2.069	1.258	1.594	1.472
III Ten-Daily	11.13	15.32	25.45	12.37	11.93	5.378	4.409	2.314	1.787	1.126	1.409	1.126
Monthly												
Min.	9.900	1.867	3.200	9.867	8.533	3.200	4.008	1.100	1.434	1.010	1.036	0.931
Max.	12.89	154.6	53.78	36.06	20.55	11.20	5.309	4.407	3.967	8.087	2.365	2.524
Mean	11.13	19.47	14.95	16.86	13.62	5.532	4.616	2.524	1.990	1.472	1.380	1.363

Annual Runoff in MCM = 226 Annual Runoff in mm = 698

Peak Observed Discharge = 154.6 cumecs on 18/07/2017 Corres. Water Level :4.540 m

Lowest Observed Discharge = 0.931 cumecs on 31/05/2018 Corres. Water Level :1.890 m

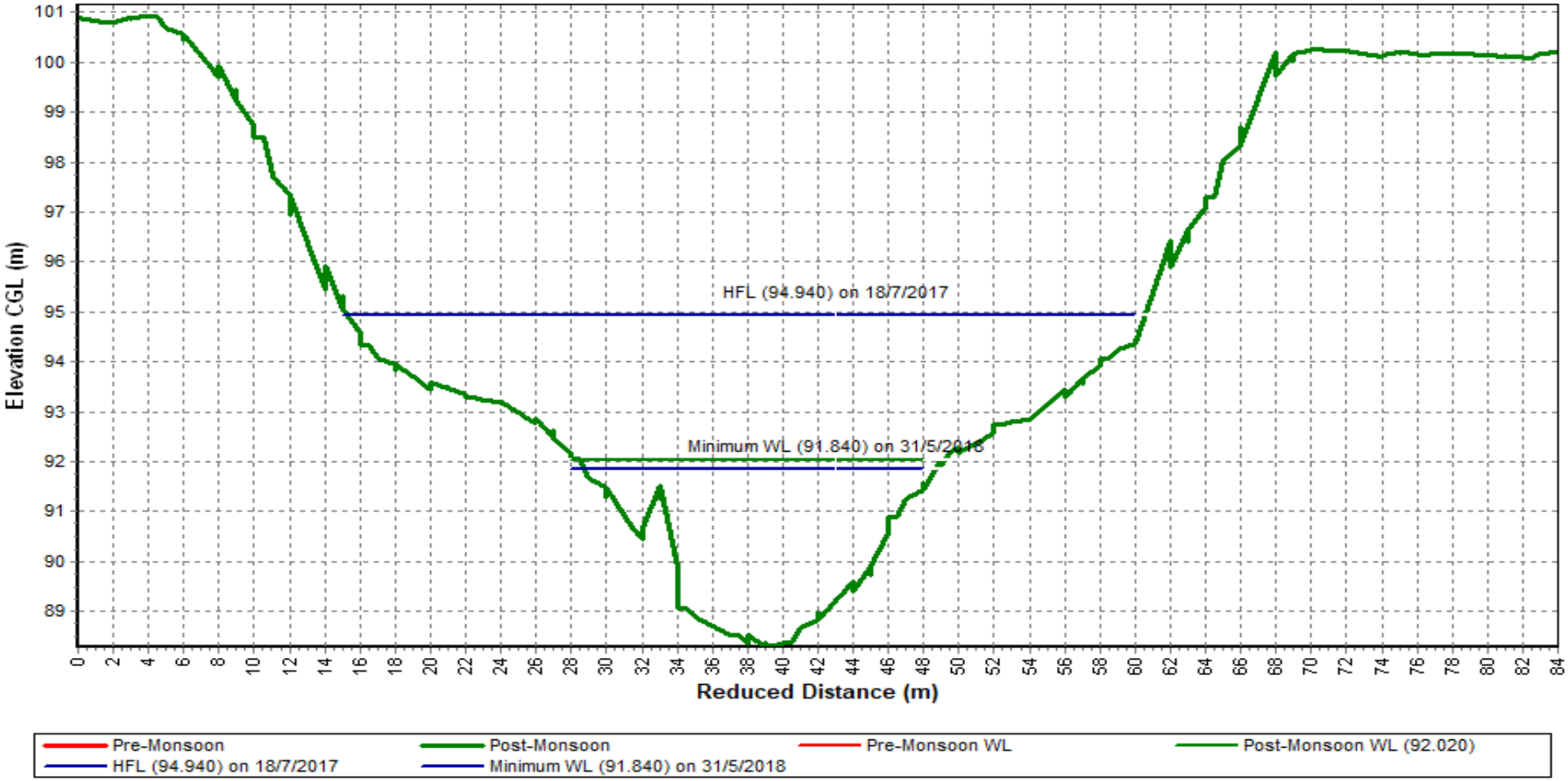
* : Computed Discharge

Note: Missing values have not been considered while arriving at Annual Runoff

Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Valamuru (AGCVALAMURU) **Division : Lower Godavari Div., Hyderabad**

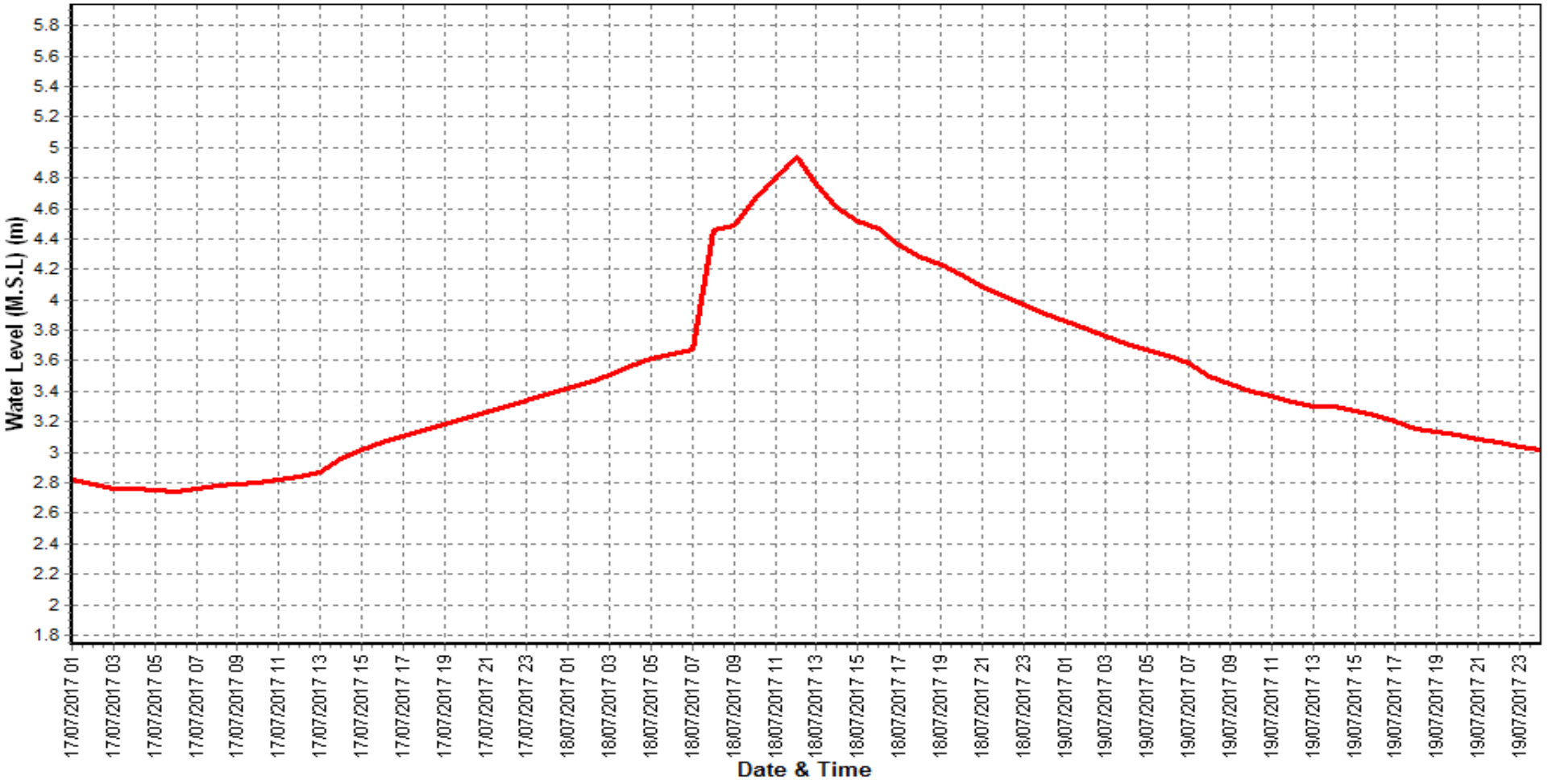
Local River : Pamuleru **Sub-Division : Lower Godavari 2, Rajahmundry**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Valamuru (AGCVALAMURU) **Division : Lower Godavari Div., Hyderabad**

Local River : Pamuleru **Sub-Division : Lower Godavari 2, Rajahmundry**



Time Span: 72 Hrs

HISTORY SHEET

Water Year : 2017-2018

Site	:	**Konta (Teriminal site of River SABARI)**	**Code**	:	**AGC00C5**
State	:	Chhattisgarh	District		Dantewara
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Sabari	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Sabari
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 1, Bhadrachalam
Drainage Area	:	19550 Sq. Km.	Bank	:	Left
Latitude	:	17°48'00"	Longitude	:	81°23'00"
Zero of Gauge (m)	:	30.100 (m.s.l)	05.02.1964		31.05.1976
		30.430 (m.s.l)	01.06.1976		31.05.1997
		29.000 (m.s.l)	01.06.1997		
		Opening Date	Closing Date		
Gauge	:	05.02.1964	**HFL During 2017-18**	:	**40.210 Meter**
			Corres. Discharge	:	**5661 Cumecs (Estimated)**
Discharge	:	28.10.1965	**Date & Time of**	:	**19.07.2017**
			Occurance	:	**08:00 hrs.**
Sediment	:	01.01.1968			
Water Quality	:	05.05.1968			

HFL Recorded so far in m : 50.13 16/08/1986 back water effect
47.18 05.08.2006
Corresponding Discharge (cumecs) :13172*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1966-1967	14416	44.940	08.09.1966	23.81	30.700	15.05.1967
1967-1968	7913	41.600	02.08.1967	28.91	30.795	18.04.1968
1968-1969	10414	43.170	04.10.1968	31.61	30.720	04.06.1968
1969-1970	9788	43.480	30.07.1969	43.01	30.805	17.04.1970
1970-1971	4938	40.675	20.08.1970	45.15	30.990	29.03.1971
1971-1972	3051	37.625	06.09.1971	26.52	30.930	03.04.1972
1972-1973	6889	40.423	07.07.1972	17.64	30.990	28.03.1973
1973-1974	5210	39.800	15.07.1973	43.68	31.150	10.06.1973
1974-1975	2247	36.435	10.08.1974	34.48	31.260	22.01.1975
1975-1976	7762	42.585	10.09.1975	69.06	31.515	01.04.1976
1976-1977	7413	41.945	02.09.1976	52.97	31.740	05.06.1976
1977-1978	5867	40.715	23.08.1977	66.76	31.780	18.04.1978
1978-1979	7992	43.410	16.08.1978	101.6	31.945	12.06.1978
1979-1980	2942	37.655	26.06.1979	47.68	31.745	26.02.1980
1980-1981	4991	39.432	22.08.1980	78.28	31.895	05.06.1980

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1981-1982	5762	40.535	03.08.1981	40.30	31.675	12.04.1982
1982-1983	6291	40.400	29.08.1982	46.20	31.660	04.04.1983
1983-1984	5958	41.115	05.10.1983	40.20	31.725	16.06.1983
1984-1985	8037	41.840	03.08.1984	63.10	31.760	01.05.1985
1985-1986	3213	37.830	02.08.1985	27.60	31.580	26.05.1986
1986-1987	20187	49.910	17.08.1986	52.20	31.708	04.05.1987
1987-1988	3759	38.770	11.07.1987	33.40	31.490	17.05.1988
1988-1989	6494	41.410	29.07.1988	41.67	31.620	07.06.1988
1989-1990	5915	40.790	23.07.1989	89.70	31.995	08.05.1990
1990-1991	8568	43.170	05.10.1990	194.5	32.430	20.01.1991
1991-1992	2198	37.165	09.08.1991	78.11	31.900	28.05.1992
1992-1993	6593	41.765	16.08.1992	83.08	31.890	14.06.1992
1993-1994	1696	36.400	16.07.1993	35.64	31.605	05.04.1994
1994-1995	5317	44.660	06.09.1994	37.01	31.650	05.06.1994
1995-1996	5725	41.000	23.07.1995	169.6	32.330	01.04.1996
1996-1997	3254	38.770	23.07.1996	130.8	32.280	30.05.1997
1997-1998	2022	36.820	31.07.1997	60.00	31.305	02.06.1997
1998-1999	2053	36.510	12.07.1998	59.95	31.300	13.06.1998
1999-2000	3552	38.960	09.08.1999	122.6	31.840	24.04.2000
2000-2001	5563	40.770	30.08.2000	52.46	31.445	20.04.2001
2001-2002	3291	38.460	22.08.2001	70.16	31.620	06.06.2001
2002-2003	1745	36.260	25.08.2002	22.74	31.260	30.05.2003
2003-2004	7512	42.760	27.07.2003	22.76	31.190	08.06.2003
2004-2005	5804	40.510	05.08.2004	71.23	31.550	09.05.2005
2005-2006	8854	44.180	20.09.2005	136.4	31.955	25.05.2006
2006-2007	12181	46.450	06.08.2006	121.0	31.770	22.02.2007
2007-2008	6924	41.600	06.10.2007	106.3	31.700	26.05.2008
2008-2009	4193	39.010	30.07.2008	58.86	31.340	20.05.2009
2009-2010	1832	36.040	16.07.2009	9.349	31.040	01.01.2010
2010-2011	7021	42.020	09.08.2010	77.47	31.500	07.06.2010
2011-2012	3494	38.390	03.09.2011	62.49	31.390	21.12.2011
2012-2013	5730	40.380	06.08.2012	111.6	31.780	31.01.2013
2013-2014	6201	41.040	22.07.2013	0.000	42.250	03.08.2013
2014-2015	9768	40.520	09.09.2014	119.4	31.850	12.05.2015
2015-2016	7468	40.500	21.06.2015	49.11	31.300	12.05.2016
2016-2017	4638	38.900	13.07.2016	66.51	31.555	25.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Konta in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**		906	906
2	**1966-1967**	14302	1074	15376
3	**1967-1968**	13868	1265	15132
4	**1968-1969**	9564	1370	10934
5	**1969-1970**	16204	1786	17990
6	**1970-1971**	13213	1444	14657
7	**1971-1972**	8811	1096	9907
8	**1972-1973**	9393	1102	10495
9	**1973-1974**	10572	1746	12317
10	**1974-1975**	5093	1172	6265
11	**1975-1976**	14975	2146	17120
12	**1976-1977**	12694	1930	14624
13	**1977-1978**	11335	2761	14096
14	**1978-1979**	15870	3373	19243
15	**1979-1980**	8570	1837	10407
16	**1980-1981**	14834	3310	18144
17	**1981-1982**	9964	2264	12228
18	**1982-1983**	11379	2061	13440
19	**1983-1984**	14124	3831	17955
20	**1984-1985**	12243	2737	14980
21	**1985-1986**	10269	2273	12542
22	**1986-1987**	17750	2951	20701
23	**1987-1988**	5665	1823	7489
24	**1988-1989**	9465	3338	12803
25	**1989-1990**	10591	3645	14235
26	**1990-1991**	20083	4237	24320
27	**1991-1992**	11055	4288	15343
28	**1992-1993**	10354	4018	14372
29	**1993-1994**	8121	2087	10207
30	**1994-1995**	17549	4760	22309
31	**1995-1996**	13130	4255	17385
32	**1996-1997**	10394	3878	14273
33	**1997-1998**	7582	3321	10903
34	**1998-1999**	10280	3028	13307
35	**1999-2000**	13007	3638	16645
36	**2000-2001**	13000	1981	14981
37	**2001-2002**	10003	3080	13083
38	**2002-2003**	5090	1683	6773
39	**2003-2004**	13796	4243	18039
40	**2004-2005**	11720	2755	14475
41	**2005-2006**	10218	3523	13741
42	**2006-2007**	19994	3109	23103
43	**2007-2008**	15951	3575	19526
44	**2008-2009**	10692	2342	13034
45	**2009-2010**	6090	1482	7572
46	**2010-2011**	15738	3730	19468
47	**2011-2012**	7784	1932	9716
48	**2012-2013**	14287	3393	17680
49	**2013-2014**	18226	3332	21557
50	**2014-2015**	16179	3340	19520
51	**2015-2016**	13750	2939	16688
52	**2016-2017**	11097	3222	14319
Average		12077	2700	14545

Stage-Discharge Data for the period 2017 - 2018

Station Name : Konta (AGC00C5) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	32.110	186.2	33.825	777.6	33.630	763.6	34.860	1276	33.570	771.5 *	32.510	287.3
2	32.600	308.9	33.300	583.1 *	33.500	666.8	34.550	1185 *	33.310	587.3 *	32.410	264.6
3	32.585	314.0	34.845	1385	33.730	801.9	34.130	964.7 *	33.590	778.3	32.400	259.9 *
4	32.360	248.0 *	35.050	1503	34.210	1070	33.830	799.7	33.745	836.2	32.350	245.0 *
5	32.240	217.9	34.470	1197	33.910	905.9	33.585	720.5	33.870	916.3	32.400	259.9 *
6	32.180	205.0	34.000	911.3	34.100	949.6 *	33.800	849.9	34.390	1140	32.475	274.8
7	32.135	185.9	33.720	742.5	34.150	1008	34.300	1025	35.025	1489	32.550	309.1
8	32.160	193.9	33.540	685.7 *	34.460	1195	33.830	854.1	34.370	1089 *	32.620	312.4
9	32.280	254.7	33.300	583.1 *	34.470	1217	34.240	1021 *	33.870	904.5	32.420	258.5
10	32.160	191.6 *	32.820	363.7	34.370	1138	33.770	790.0 *	33.470	689.6	32.560	335.4
11	32.320	236.3 *	32.930	418.2	33.985	917.6	33.310	540.2	34.665	1248	32.520	297.1 *
12	32.380	284.6	33.135	458.7	33.540	685.7 *	33.400	560.0	33.940	889.3	32.340	242.1 *
13	32.330	264.7	33.555	650.4	33.450	646.5 *	33.330	522.4	33.870	896.3	32.450	263.3
14	32.200	212.6	33.315	495.0	35.750	1910 *	33.340	531.3	33.820	813.5 *	32.400	249.9
15	32.300	258.5	33.285	503.2	35.450	1716 *	33.330	510.0	33.870	837.2 *	32.375	249.3
16	32.320	262.2	34.220	1011 *	34.350	1082	33.625	752.2	33.770	851.7	32.410	274.9
17	32.500	275.1	34.780	1323	34.055	953.9	33.680	748.5 *	33.670	811.6	32.450	280.6
18	32.650	339.4 *	36.640	2531 *	34.130	975.2	34.250	1064	33.325	555.0	32.290	235.8
19	32.555	293.8	40.210	5661 *	35.630	1832 *	34.200	1043	33.070	491.1 *	32.340	242.1 *
20	32.340	246.4	39.360	4829 *	38.600	4129 *	33.820	934.0	32.800	361.4	32.350	241.3
21	32.160	191.4	37.140	2910 *	36.130	2167 *	33.675	805.1	33.710	822.3	32.335	233.3
22	31.980	151.9	35.150	1606	34.730	1275	33.485	707.7	33.330	595.6 *	32.315	235.0
23	32.230	220.5	34.270	1036 *	34.150	968.2	33.360	545.3	33.440	609.4	32.250	216.3 *
24	32.200	221.3	33.660	751.9	34.040	942.9	33.400	625.1 *	33.100	456.8	32.250	216.3 *
25	32.410	262.9 *	33.425	663.5	34.220	1011 *	33.040	447.6	33.325	532.0	32.060	165.7 *
26	32.760	377.0 *	33.280	490.4	34.395	1093	33.280	547.2	33.190	492.6	32.000	150.8 *
27	33.800	837.6	33.150	501.6	34.570	1196 *	33.525	752.2	33.050	457.1	32.300	218.6
28	34.090	882.9	33.090	479.7	36.440	2386 *	33.910	926.6	32.725	382.7	32.325	234.6
29	34.440	1031	33.275	472.1	38.760	4273 *	33.615	798.3	32.600	322.9 *	32.235	216.4
30	34.450	1008	33.540	685.7 *	38.050	3650 *	33.730	771.5 *	32.525	295.2	32.065	158.6
31			33.825	838.2	36.290	2279 *			32.775	388.4		
Ten-Daily Mean												
I Ten-Daily	32.281	230.6	33.887	873.2	34.053	971.7	34.090	948.6	33.921	920.2	32.470	280.7
II Ten-Daily	32.389	267.4	35.143	1788	34.894	1485	33.629	720.5	33.680	775.5	32.392	257.6
III Ten-Daily	33.052	518.4	33.982	948.6	35.616	1931	33.502	692.6	33.070	486.8	32.214	204.5
Monthly												
Min.	31.980	151.9	32.820	363.7	33.450	646.5	33.040	447.6	32.525	295.2	32.000	150.8
Max.	34.450	1031	40.210	5661	38.760	4273	34.860	1276	35.025	1489	32.620	335.4
Mean	32.574	338.8	34.326	1195	34.879	1478	33.740	787.3	33.541	719.7	32.359	247.6

Annual Runoff in MCM = 15431 Annual Runoff in mm = 789

Peak Observed Discharge = 1606 cumecs on 22/07/2017 Corres. Water Level :35.150 m

Lowest Observed Discharge = 93.14 cumecs on 02/05/2018 Corres. Water Level :31.475 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Konta (AGC00C5) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	31.995	144.5	32.375	250.0	31.860	122.0	32.130	189.8	32.100	178.4 *	31.500	101.5
2	31.950	150.5 *	32.278	202.7	31.955	128.4	32.350	233.0 *	31.890	152.8	31.475	93.14
3	32.000	159.4 *	32.170	195.4	32.180	195.9	32.300	221.2 *	31.900	142.5	31.695	116.6
4	32.000	149.9	32.335	237.8	32.300	221.2 *	32.180	194.8 *	31.935	151.8	31.800	113.7
5	31.850	121.3	32.160	180.0	31.925	128.9	32.210	203.5	31.910	146.2	32.020	181.4
6	31.915	124.0	32.125	172.0	32.200	198.3	32.270	214.7	32.100	180.2	32.200	199.0 *
7	31.825	118.0	32.240	207.7 *	32.445	271.7	32.120	189.8	31.990	157.8	32.260	216.8
8	31.950	137.7	32.100	171.2	32.015	143.2	32.220	214.5	32.250	209.9 *	32.000	171.6
9	31.900	141.9 *	31.950	139.6	32.100	163.5	32.250	201.7	32.040	169.3	31.980	170.0
10	31.980	155.8 *	31.910	136.5	32.200	199.0 *	32.300	221.2 *	32.195	202.2	32.090	194.4
11	31.905	131.4	32.125	172.7	31.950	150.5 *	32.250	209.9 *	32.180	193.2	32.025	185.9
12	31.870	120.4	32.145	178.5	32.010	143.3	32.215	208.8	31.975	154.6	32.100	178.4 *
13	32.180	200.1	32.300	221.2 *	32.025	158.5	32.170	195.3	31.925	151.0	31.830	130.5 *
14	32.195	201.3	32.240	207.7 *	31.840	124.4	32.100	179.8	32.100	178.4 *	31.835	124.4
15	32.215	195.6	32.150	188.5 *	32.160	196.7	32.090	189.5	32.120	182.4 *	31.650	105.8
16	32.120	168.7	32.300	233.8	32.050	161.4	32.100	195.1	32.220	207.4	31.510	96.96
17	32.180	194.8 *	32.075	149.8	32.075	158.1	32.185	200.0	32.270	218.9	31.910	153.7
18	32.180	194.8 *	32.160	180.9	32.270	214.4 *	32.100	178.4 *	32.165	192.5	31.700	104.4
19	32.075	167.1	32.250	207.1	32.040	162.4	32.360	240.0	32.400	245.2 *	32.025	187.7
20	32.325	231.9	32.060	147.2	32.200	200.1	31.970	153.8	32.030	163.4	32.000	159.4 *
21	32.190	196.3	32.150	188.5 *	32.370	244.8	32.150	195.6	31.950	152.1	31.950	160.8
22	32.245	216.0	32.020	142.7	32.290	222.5	32.140	194.9	31.990	157.6 *	31.500	95.08
23	32.175	195.0	31.950	140.3	32.480	276.8	32.265	211.3	31.900	142.5	32.150	203.4
24	32.350	233.0 *	31.860	127.1	32.250	215.0	32.180	203.4	31.990	157.6 *	31.960	170.7
25	32.300	221.2 *	31.825	123.0	32.320	225.9 *	32.350	233.0 *	31.800	137.6	31.915	152.6
26	32.255	215.2	32.000	159.4 *	32.265	214.9	31.950	156.4	31.955	156.3	32.000	173.3
27	32.290	218.1	32.025	144.2	32.115	188.0	31.935	151.7	31.985	161.4	32.000	159.4 *
28	32.400	245.2 *	32.000	159.4 *	32.205	208.3	31.940	151.3	31.830	139.7	32.050	186.1
29	32.250	209.9 *	31.870	126.5			32.200	199.0 *	31.950	150.5 *	32.150	199.0
30	32.250	209.9 *	31.890	130.1			32.210	201.2 *	31.750	118.2 *	32.015	178.0
31	32.300	221.2 *	31.990	141.0			32.140	189.2			32.140	198.4
Ten-Daily Mean												
I Ten-Daily	31.936	140.3	32.164	189.3	32.118	177.2	32.233	208.4	32.031	169.1	31.902	155.8
II Ten-Daily	32.125	180.6	32.181	188.8	32.062	167.0	32.154	195.1	32.138	188.7	31.858	142.7
III Ten-Daily	32.273	216.5	31.962	143.8	32.287	224.5	32.133	189.7	31.910	147.3	31.985	170.6
Monthly												
Min.	31.825	118.0	31.825	123.0	31.840	122.0	31.935	151.3	31.750	118.2	31.475	93.14
Max.	32.400	245.2	32.375	250.0	32.480	276.8	32.360	240.0	32.400	245.2	32.260	216.8
Mean	32.117	180.3	32.098	173.0	32.146	187.1	32.172	197.5	32.027	168.4	31.917	156.8

Peak Computed Discharge = 5661 cumecs on 19/07/2017 Corres. Water Level :40.210 m

Lowest Computed Discharge = 118.2 cumecs on 30/04/2018 Corres. Water Level :31.750 m

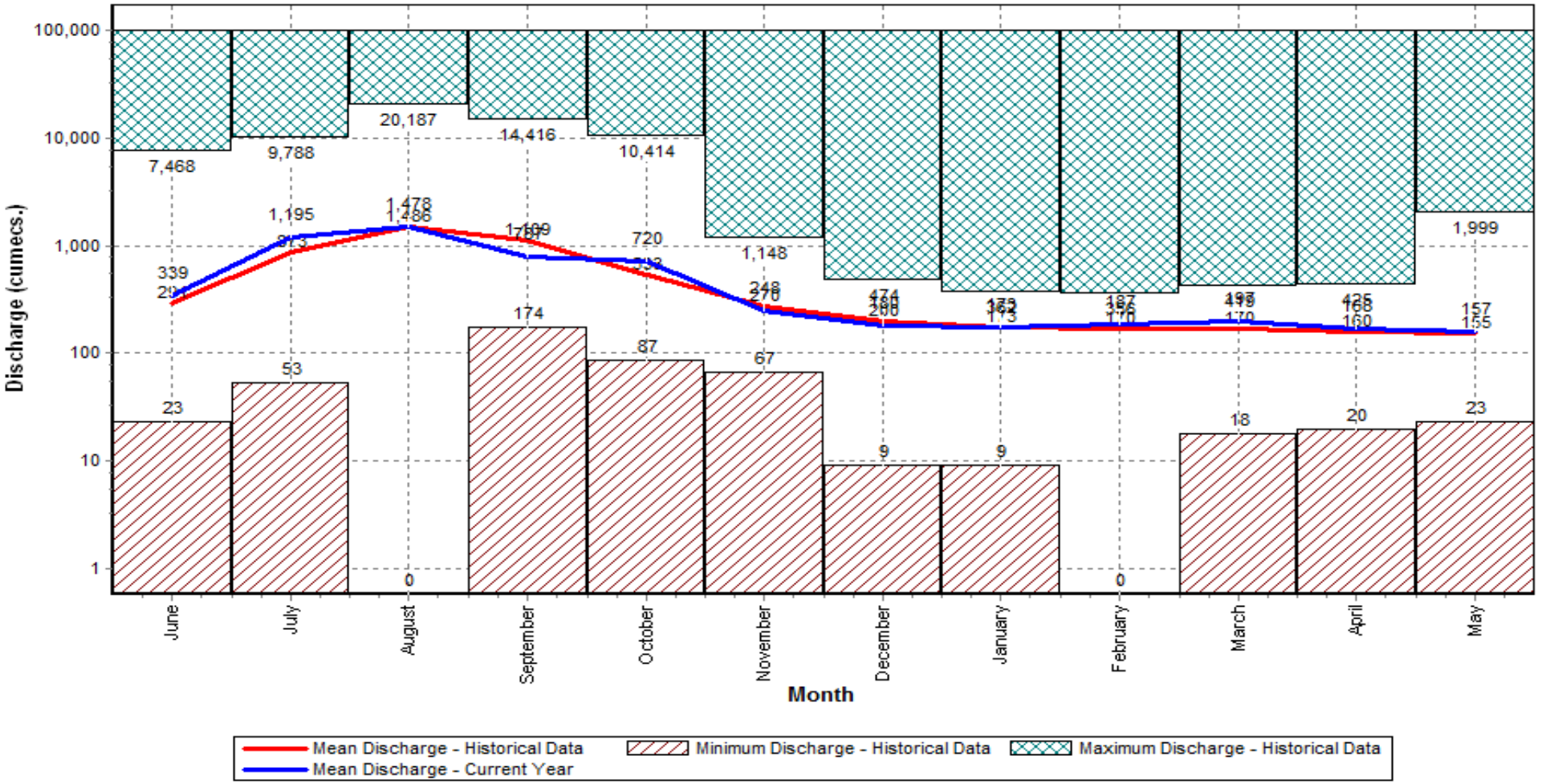
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Konta (AGC00C5) **Data considered : 1966-2018** **Division : Lower Godavari Div., Hyderabad**

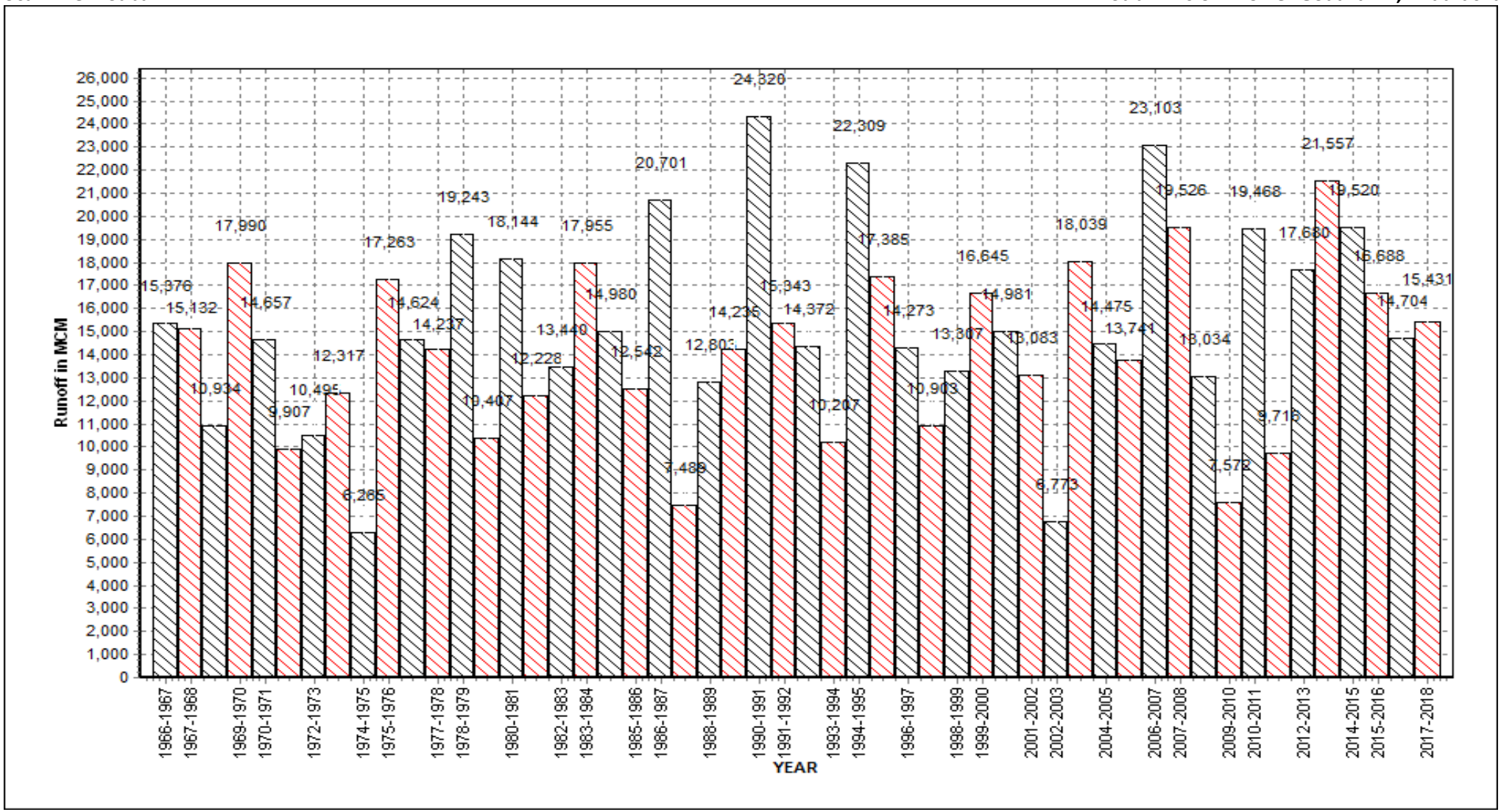
Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Annual Runoff Values for the period: 1966 - 2018

Station Name : Konta (AGC00C5) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Note: Missing values have not been considered while arriving at Annual Runoff

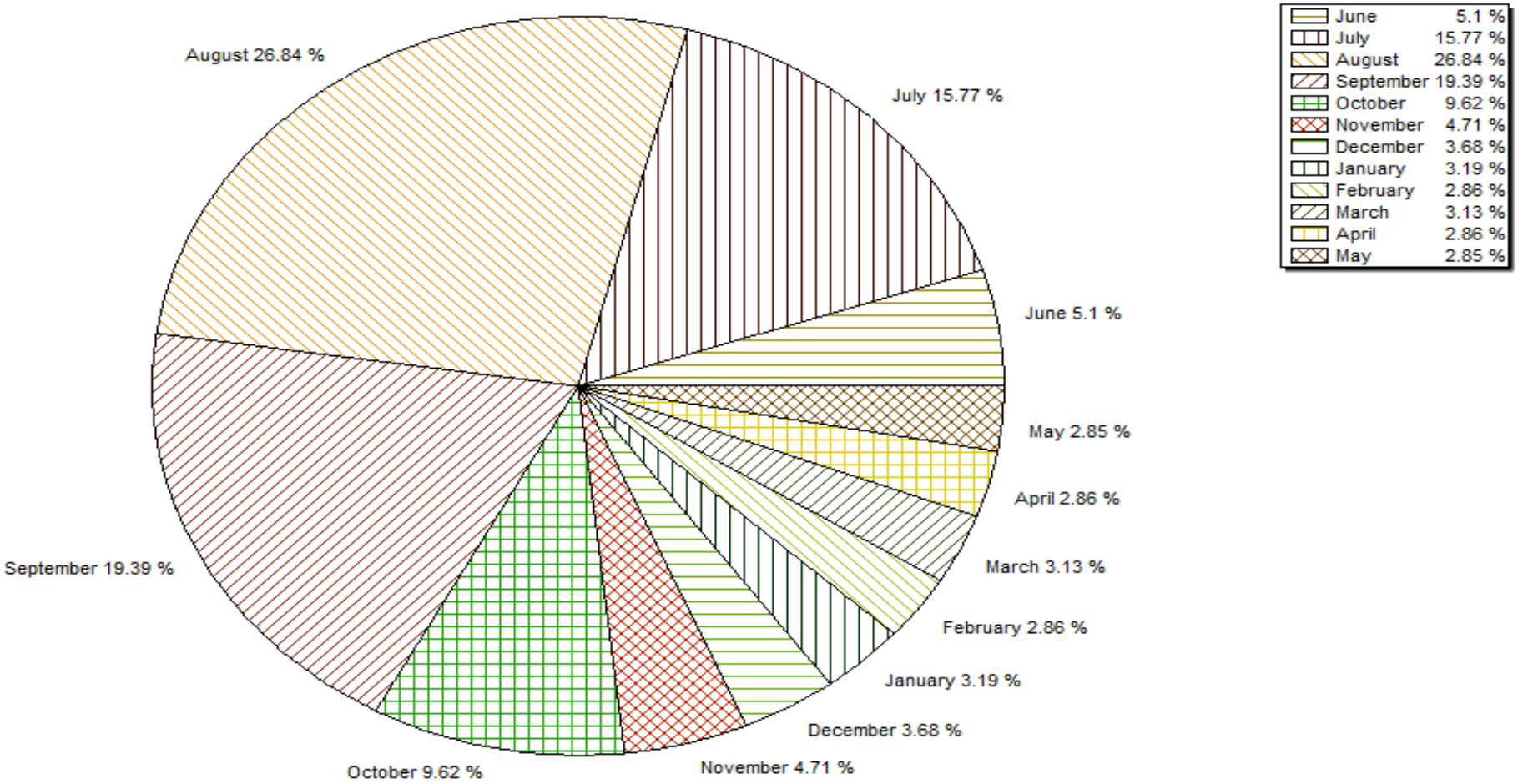
Monthly Average Runoff based on period : 1966-2017

Station Name : Konta (AGC00C5)

Local River : Sabari

Division : Lower Godavari Div., Hyderabad

Sub-Division : Lower Godavari 1, Bhadrachalam



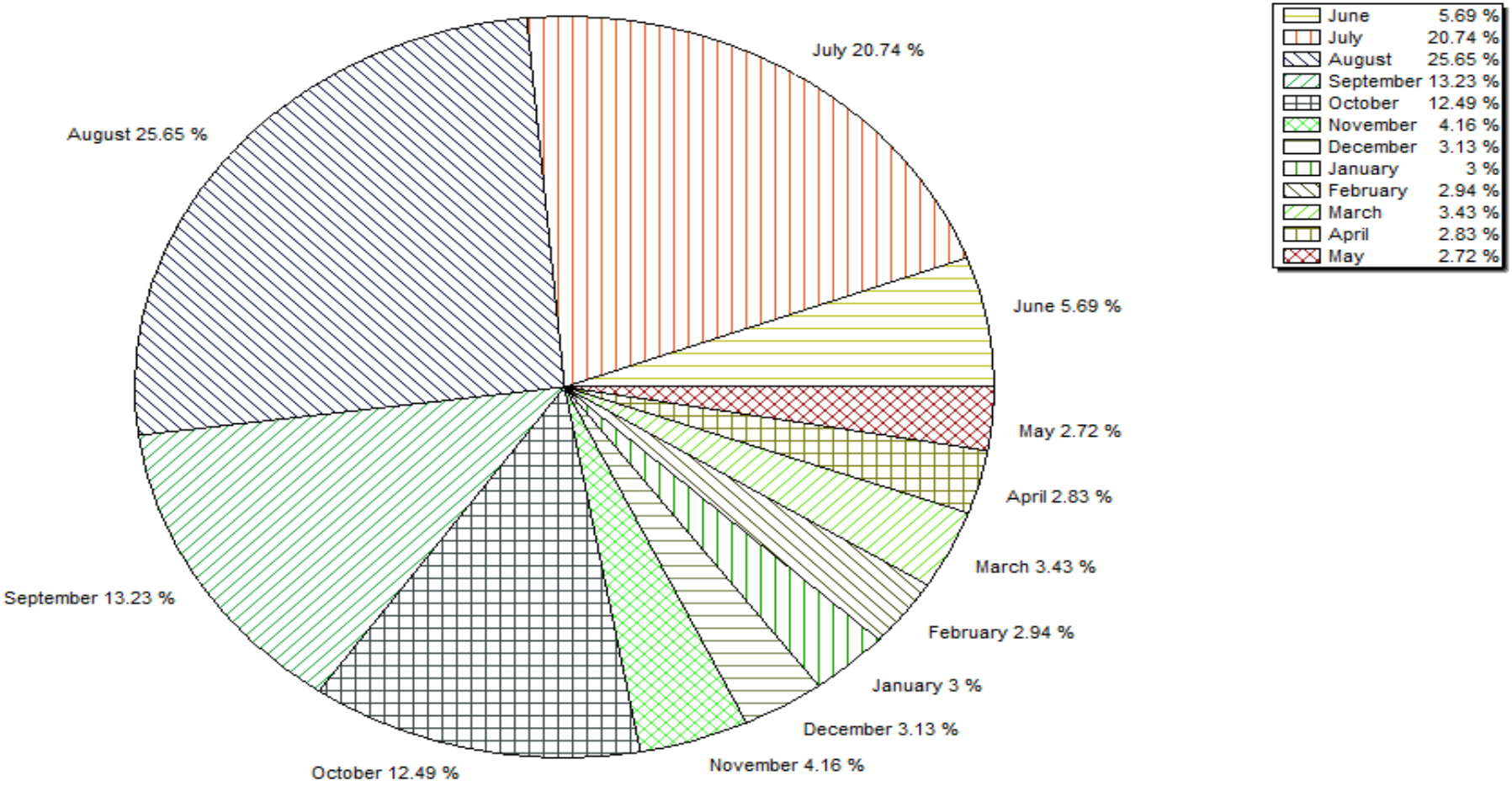
Monthly Runoff for the Year : 2017-2018

Station Name : Konta (AGC00C5)

Local River : Sabari

Division : Lower Godavari Div., Hyderabad

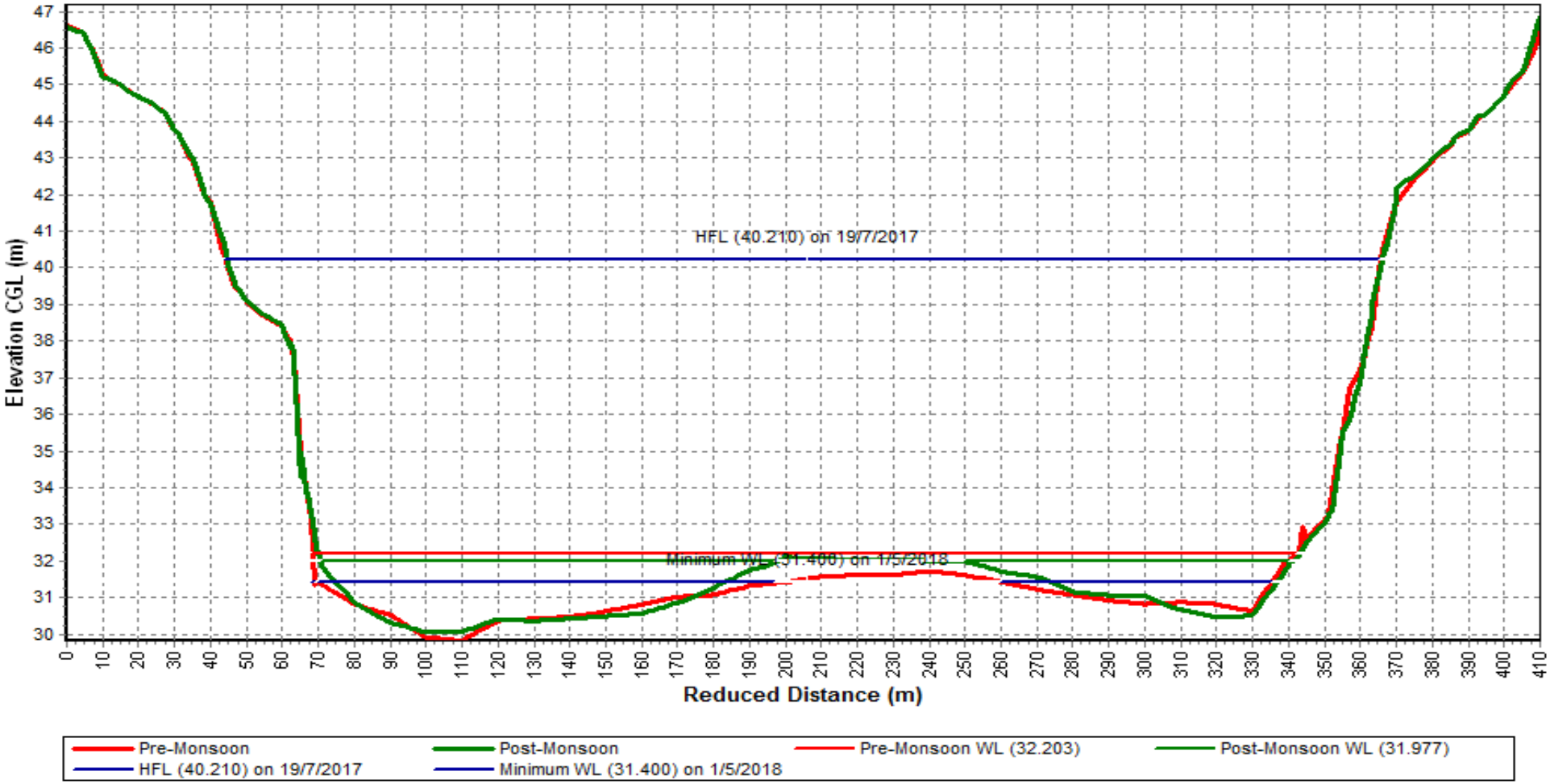
Sub-Division : Lower Godavari 1, Bhadrachalam



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Konta (AGC00C5) **Division : Lower Godavari Div., Hyderabad**

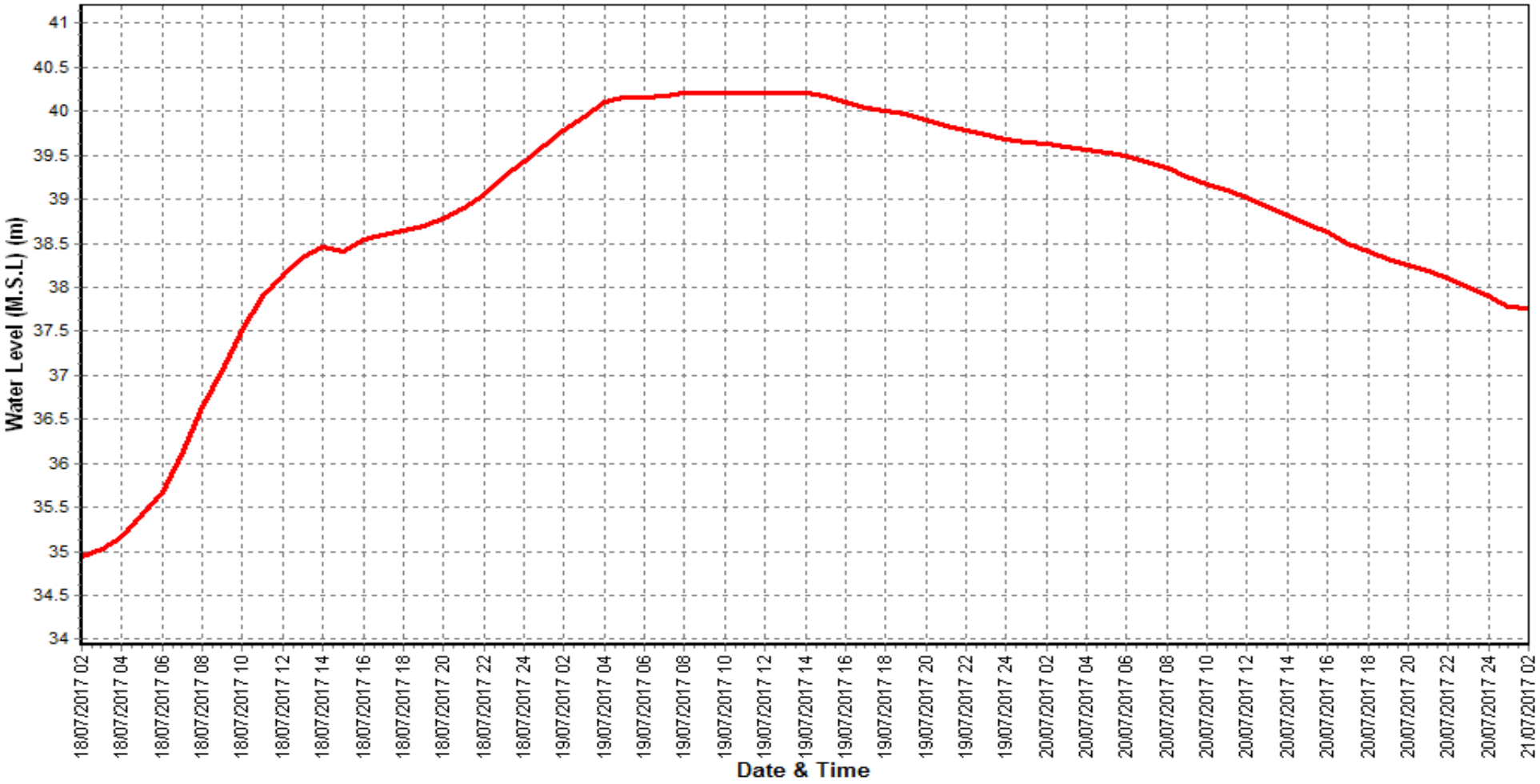
Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Konta (AGC00C5) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**

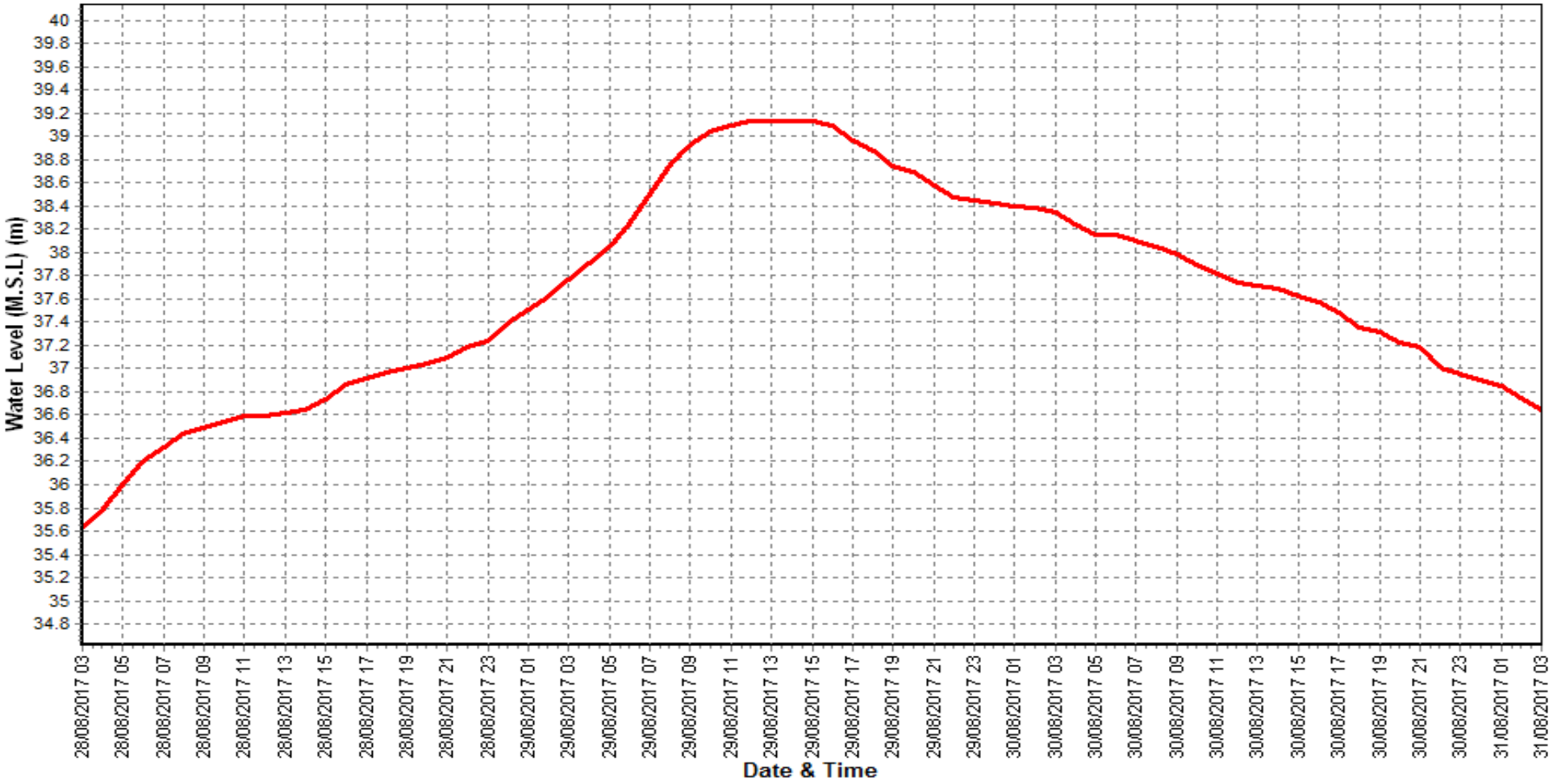


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Konta (AGC00C5) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**

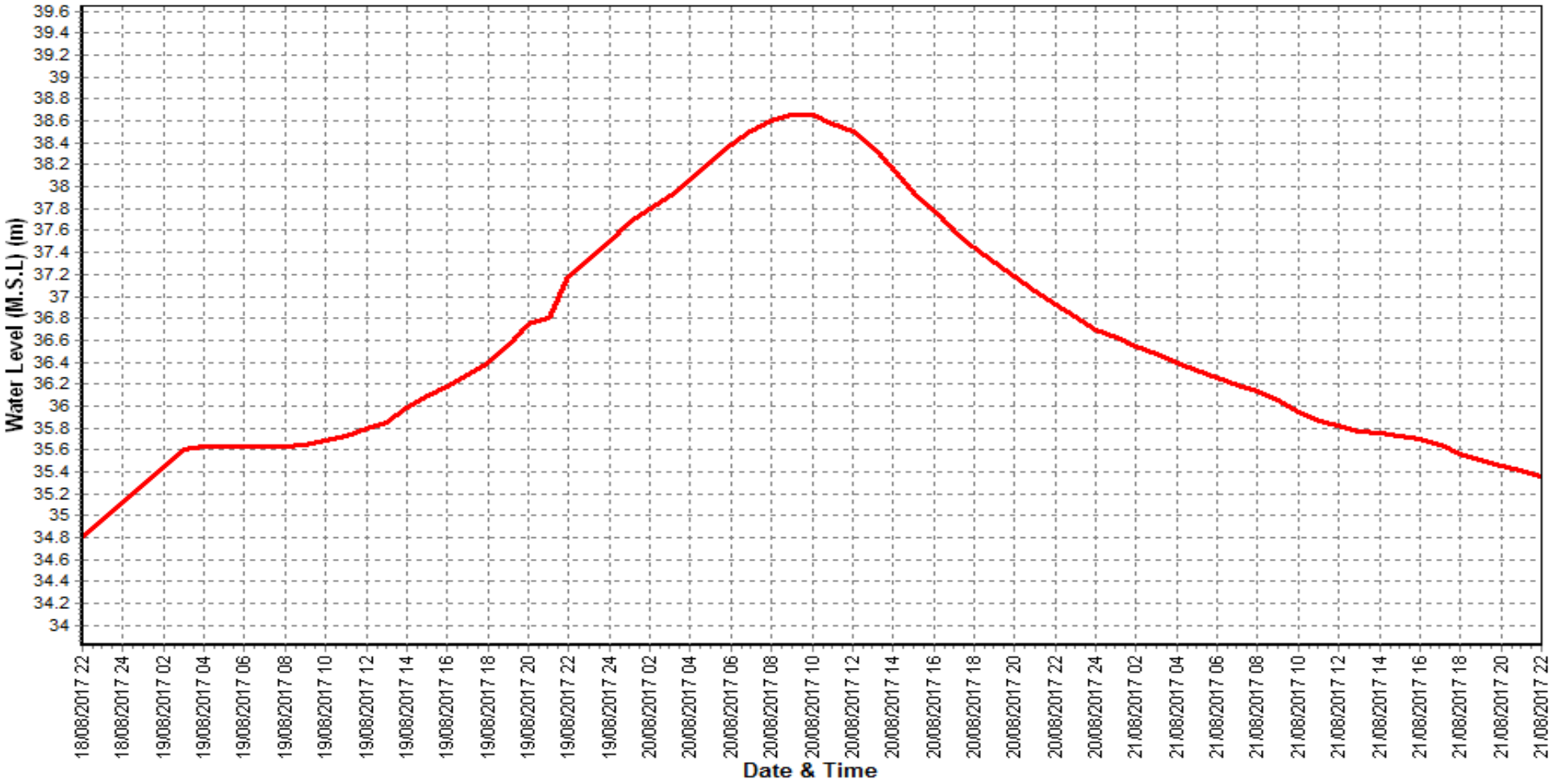


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Konta (AGC00C5) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Potteru (Seasonal)**	**Code**	:	**AGC20H2**
State	:	Orissa	District		Malkangiri
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Sabari	Sub Tributary	:	Potteruvagu
Sub-Sub Tributary	:	-	Local River	:	Potteru vagu
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 2, Rajahmundry
Drainage Area	:	1120 Sq. Km.	Bank	:	Right
Latitude	:	18°10'13"	Longitude	:	81°47'40"
Zero of Gauge (m)	:	120.5 (m.s.l)	26.03.1989		
		120.5 (m.s.l)	01.01.2006		
		120.5 (m.s.l)	01.02.2001	-	31.12.2005
		Opening Date	Closing Date		
Gauge	:	26.03.1989	**HFL During 2017-18**	:	**128.780 Meter**
			Corres. Discharge	:	**1222 Cumecs (Estimated)**
Discharge	:	20.05.1997	**Date & Time of**	:	**19.08.2017**
			Occurance	:	**18:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 132.030 04/08/2006
Corresponding Discharge (cumecs) : 3359 *

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1997-1998	542.8	125.460	28.08.1997	0.013	121.480	02.06.1997
1998-1999	211.7	123.560	06.10.1998	8.689	121.720	26.05.1999
1999-2000	793.3	126.250	18.06.1999	7.220	121.700	26.04.2000
2000-2001	217.9	123.615	13.07.2000	6.003	123.055	19.02.2001
2001-2002	439.5	126.180	18.08.2001	5.137	123.015	11.05.2002
2002-2003	305.0	125.325	09.08.2002	0.964	122.915	27.05.2003
2003-2004	1657	129.150	06.08.2003	3.860	122.820	07.06.2003
2004-2005	941.4	127.600	04.08.2004	11.52	123.140	22.03.2005
2005-2006	638.6	126.850	20.09.2005	6.819	123.070	19.07.2005
2006-2007	3331	131.990	04.08.2006	7.144	122.970	10.07.2006
2007-2008	1087	128.100	07.10.2007	26.45	123.360	14.07.2007
2008-2009	783.3	127.540	10.08.2008	6.313	122.900	27.03.2009
2009-2010	289.1	125.400	31.08.2009	4.100	123.030	16.11.2009
2010-2011	1024	128.140	25.07.2010	9.639	123.150	30.10.2010
2011-2012	308.1	125.420	01.09.2011	1.812	123.045	25.11.2011
2012-2013	512.1	126.520	21.09.2012	3.000	122.820	02.06.2012

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2013-2014	389.0	125.980	06.08.2013	27.04	123.380	19.10.2013
2014-2015	893.8	128.200	13.10.2014	9.955	123.100	07.10.2014
2015-2016	994.6	127.800	20.06.2015	4.860	123.140	09.11.2015
2016-2017	358.5	125.670	12.09.2016	6.269	123.090	18.10.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Potteru (Seasonal) in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1997-1998**	1253	682	1935
2	**1998-1999**	1131	729	1860
3	**1999-2000**	1764	1198	2962
4	**2000-2001**	1259	586	1846
5	**2001-2002**	1361	835	2196
6	**2002-2003**	622	474	1095
7	**2003-2004**	1926	1155	3081
8	**2004-2005**	1674	776	2450
9	**2005-2006**	1117	925	2042
10	**2006-2007**	2319	927	3246
11	**2007-2008**	2495		2495
12	**2008-2009**	1302	520	1822
13	**2009-2010**	992		992
14	**2010-2011**	1728		1728
15	**2011-2012**	1380		1380
16	**2012-2013**	1297		1297
17	**2013-2014**	2251		2251
18	**2014-2015**	2011		2011
19	**2015-2016**	1427		1427
20	**2016-2017**	1204		1204
Average		1526	801	1966

Stage-Discharge Data for the period 2017 - 2018

Station Name : Potteru (Seasonal) (AGC20H2) **Division : Lower Godavari Div., Hyderabad**

Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	124.510	150.1	124.455	120.3	124.165	102.1	124.525	131.6	123.980	72.82 *	123.160	11.11
2	124.450	150.5	125.130	243.3 *	124.110	92.74	123.870	61.59 *	123.780	53.03 *	123.485	31.75
3	124.490	147.3	125.570	333.2 *	124.505	128.1	124.330	114.1 *	124.585	159.6	123.490	29.72
4	124.520	139.9 *	125.130	240.0	124.800	195.8	124.155	101.7	125.015	199.0	123.500	30.16 *
5	124.520	145.4	124.360	116.2	124.205	99.67	124.345	121.2	124.285	101.9	123.280	16.36 *
6	124.420	130.1	124.445	138.6	124.680	163.5 *	124.145	82.22	124.200	81.85	123.560	34.58 *
7	124.340	117.9	124.425	121.0	124.455	134.1	124.260	96.82	125.200	190.7	124.550	144.2 *
8	124.240	104.3	124.100	86.03 *	123.830	56.10	124.270	98.54	124.140	90.66 *	123.790	53.95 *
9	124.480	134.5	123.660	42.53 *	124.105	91.12	124.340	115.4 *	123.860	62.71	123.530	32.34 *
10	124.520	139.9 *	124.235	109.0	124.330	119.8	124.480	134.3 *	126.190	370.0 *	123.750	50.31 *
11	124.410	124.7 *	124.490	138.5	124.030	71.11	124.580	144.9	124.085	91.11	123.450	26.70 *
12	124.485	146.2	124.155	100.1	124.540	142.8 *	124.510	135.1	124.125	87.74	123.660	42.53 *
13	124.515	142.8	124.355	123.3	124.540	142.8 *	124.390	138.9	124.485	123.1	123.750	50.31 *
14	124.500	145.3	124.510	151.1	128.000	973.3 *	124.450	122.7	124.270	106.4 *	123.690	45.05 *
15	124.400	134.6	124.695	170.8	124.410	124.7 *	124.335	109.7	123.870	61.59 *	123.540	33.08 *
16	124.300	106.0	124.700	166.6 *	124.390	109.9	124.460	121.9	123.840	58.89	123.600	37.67 *
17	124.440	134.9	124.860	190.7	124.325	114.8	124.460	131.5 *	123.910	65.74	123.530	32.34 *
18	124.500	137.1 *	125.690	359.3 *	124.625	150.8	124.735	168.5	124.120	90.10	123.600	37.67 *
19	124.520	141.4	125.500	313.8	126.000	429.7 *	124.110	77.44	123.850	59.64 *	123.600	37.67 *
20	124.280	107.7 *	124.750	167.3	125.480	314.0 *	124.010	73.00	123.410	21.50	123.400	23.42 *
21	123.680	44.20 *	123.720	55.95	124.880	203.0	124.495	125.0	123.540	31.30	123.530	32.34 *
22	124.450	136.0	124.135	91.50	124.600	143.8	124.380	111.3	123.770	52.11 *	123.500	30.16 *
23	124.305	106.0	124.550	144.2 *	124.265	108.0	124.115	78.51	123.415	22.61	123.450	26.70 *
24	124.435	120.5	124.185	106.2	124.870	188.3	124.070	82.64 *	123.470	31.80	123.450	26.70 *
25	124.450	130.1 *	124.025	76.35	125.650	350.5 *	123.895	65.39	124.030	78.89	123.370	21.55 *
26	124.570	147.1 *	123.565	35.39	124.700	164.1	124.335	107.8	123.900	60.52	123.390	22.79 *
27	124.675	161.2	124.540	139.4	124.540	142.8 *	125.520	294.7	123.475	30.64	123.300	17.45 *
28	124.805	180.5	124.460	138.0	124.505	132.6	124.500	114.2	123.485	29.01	123.500	30.16 *
29	124.750	170.2	124.520	141.1	125.530	311.9	124.800	198.8	123.470	28.06 *	123.480	28.75 *
30	124.685	158.2	124.600	151.5 *	125.240	249.6	124.650	159.0 *	123.520	30.08	123.500	30.16 *
31			124.550	142.3	124.950	199.9			123.200	11.69		
Ten-Daily Mean												
I Ten-Daily	124.449	136.0	124.551	155.0	124.319	118.3	124.272	105.7	124.524	138.2	123.609	43.45
II Ten-Daily	124.435	132.1	124.771	188.2	125.034	257.4	124.404	122.4	123.997	76.59	123.582	36.64
III Ten-Daily	124.480	135.4	124.259	111.1	124.885	199.5	124.476	133.7	123.570	36.97	123.447	26.68
Monthly												
Min.	123.680	44.20	123.565	35.39	123.830	56.10	123.870	61.59	123.200	11.69	123.160	11.11
Max.	124.805	180.5	125.690	359.3	128.000	973.3	125.520	294.7	126.190	370.0	124.550	144.2
Mean	124.455	134.5	124.518	150.1	124.750	192	124.384	120.6	124.015	82.41	123.546	35.59

Annual Runoff in MCM = 1890 Annual Runoff in mm = 1688

Peak Observed Discharge = 313.8 cumecs on 19/07/2017 Corres. Water Level :125.500 m

Lowest Observed Discharge = 11.11 cumecs on 01/11/2017 Corres. Water Level :123.160 m

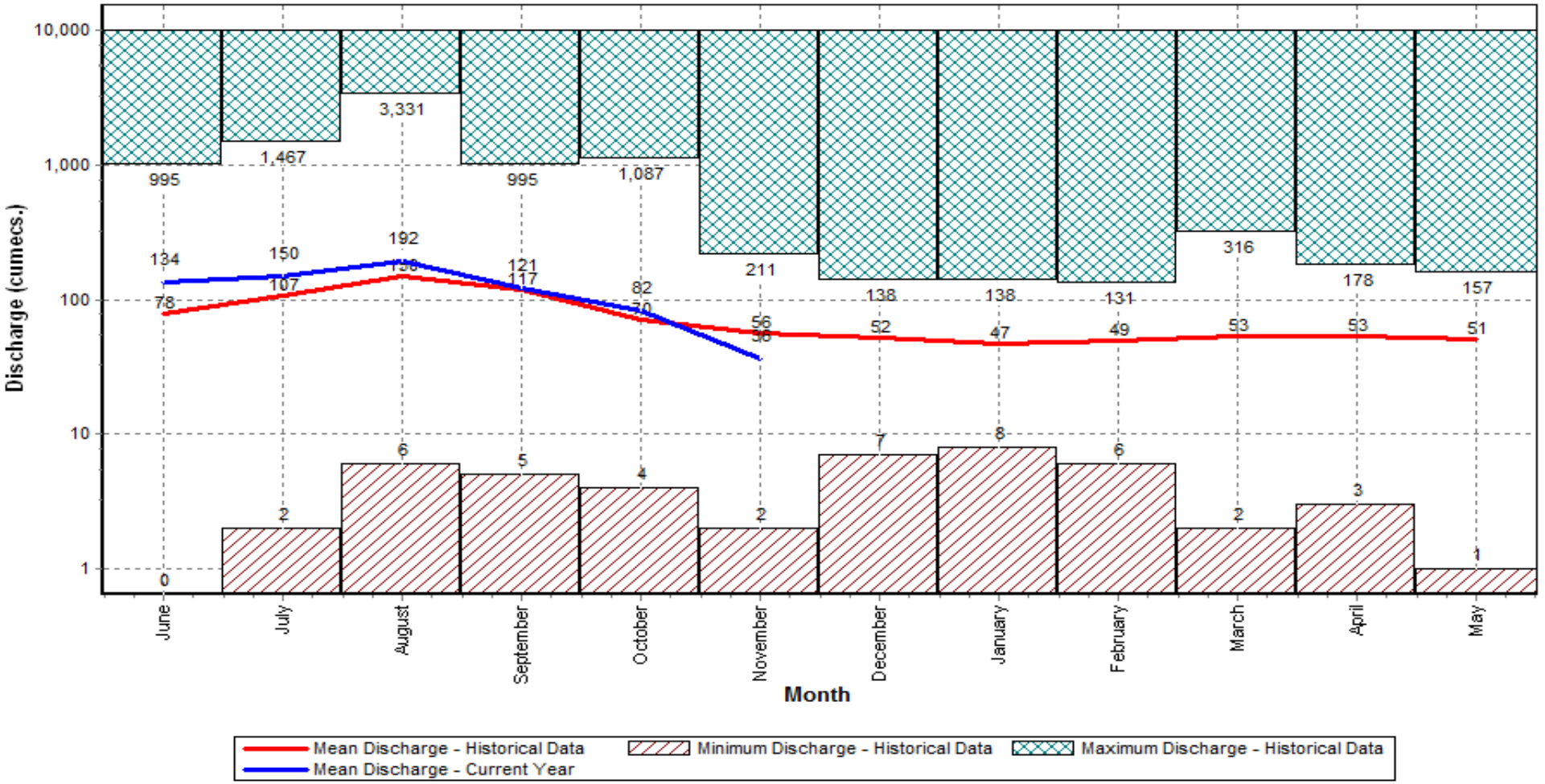
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Potteru (Seasonal) (AGC20H2) **Data considered : 1997-2018** **Division : Lower Godavari Div., Hyderabad**

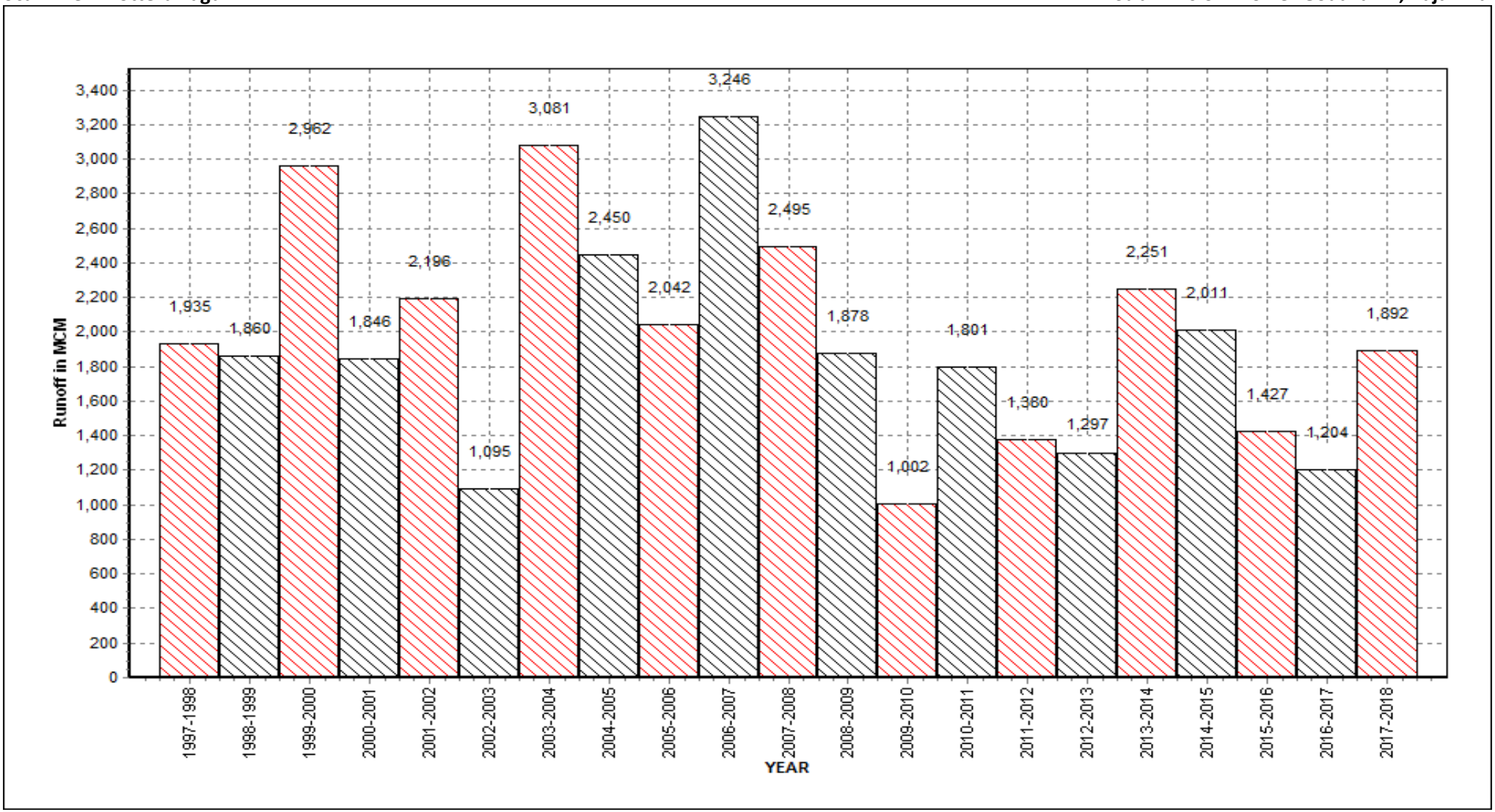
Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**



Annual Runoff Values for the period: 1997 - 2018

Station Name : Potteru (Seasonal) (AGC20H2) **Division : Lower Godavari Div., Hyderabad**

Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**

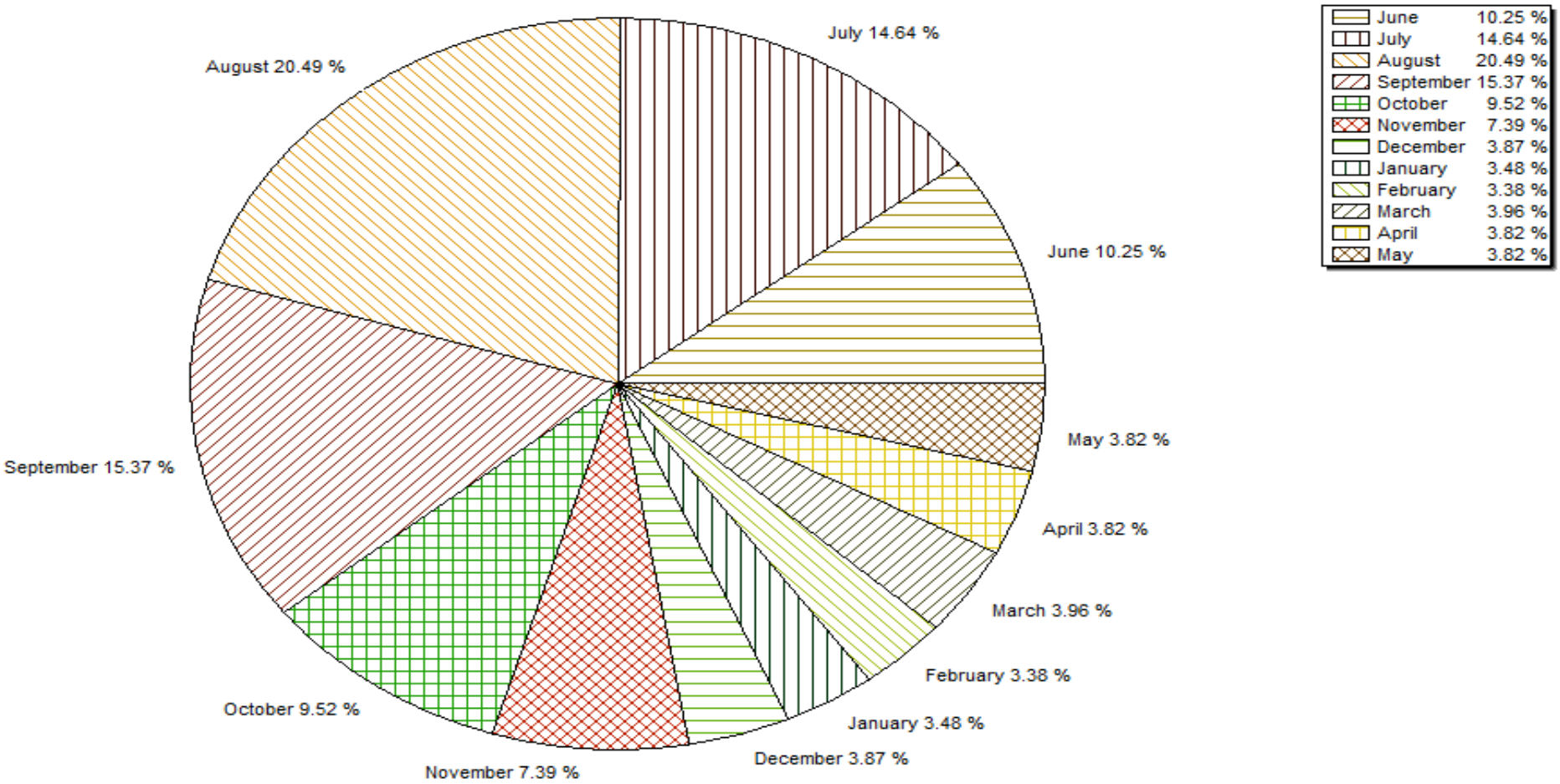


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1997-2017

Station Name : Potteru (Seasonal) (AGC20H2) **Division : Lower Godavari Div., Hyderabad**

Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**



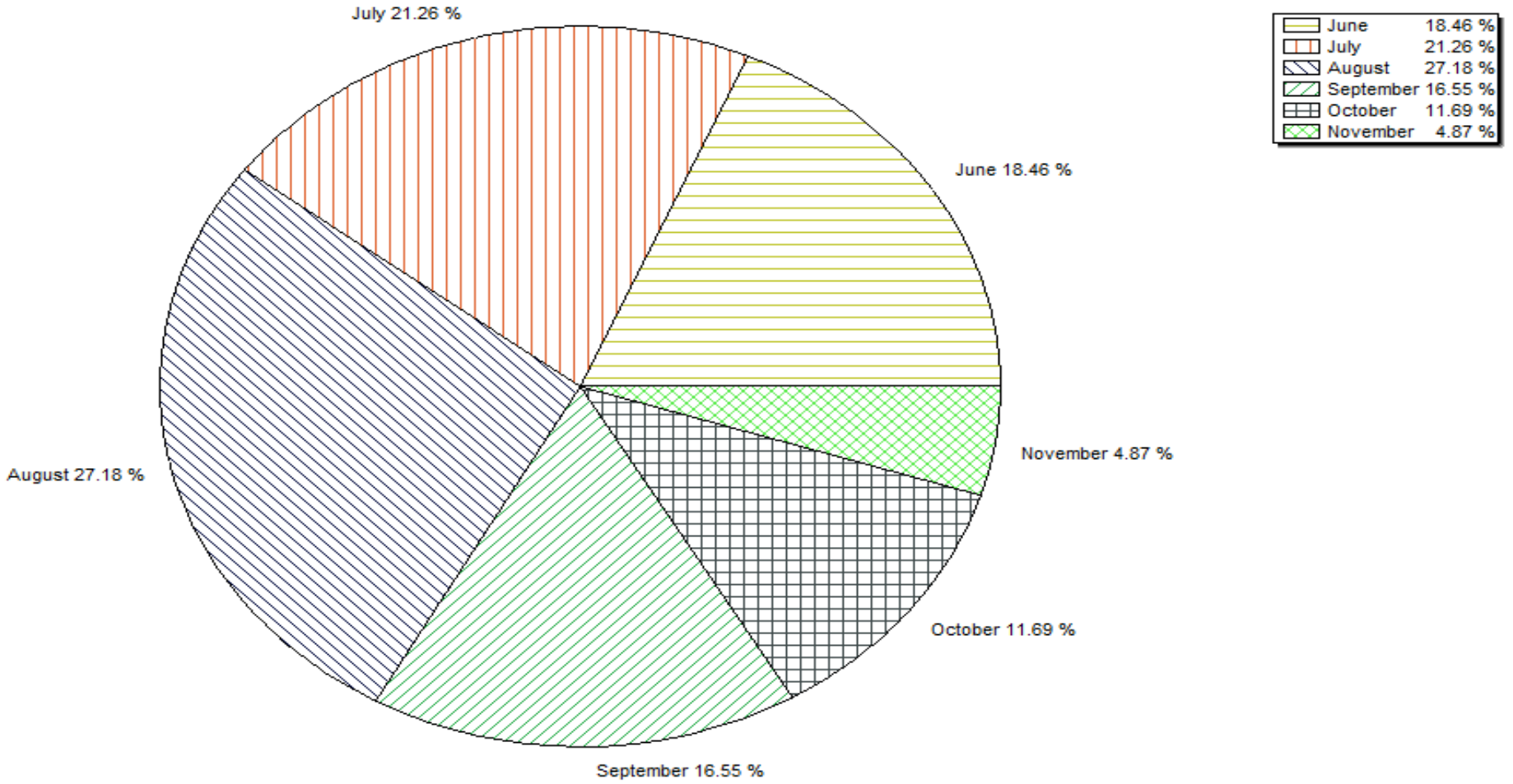
Monthly Runoff for the Year : 2017-2018

Station Name : Potteru (Seasonal) (AGC20H2)

Division : Lower Godavari Div., Hyderabad

Local River : Potteru vagu

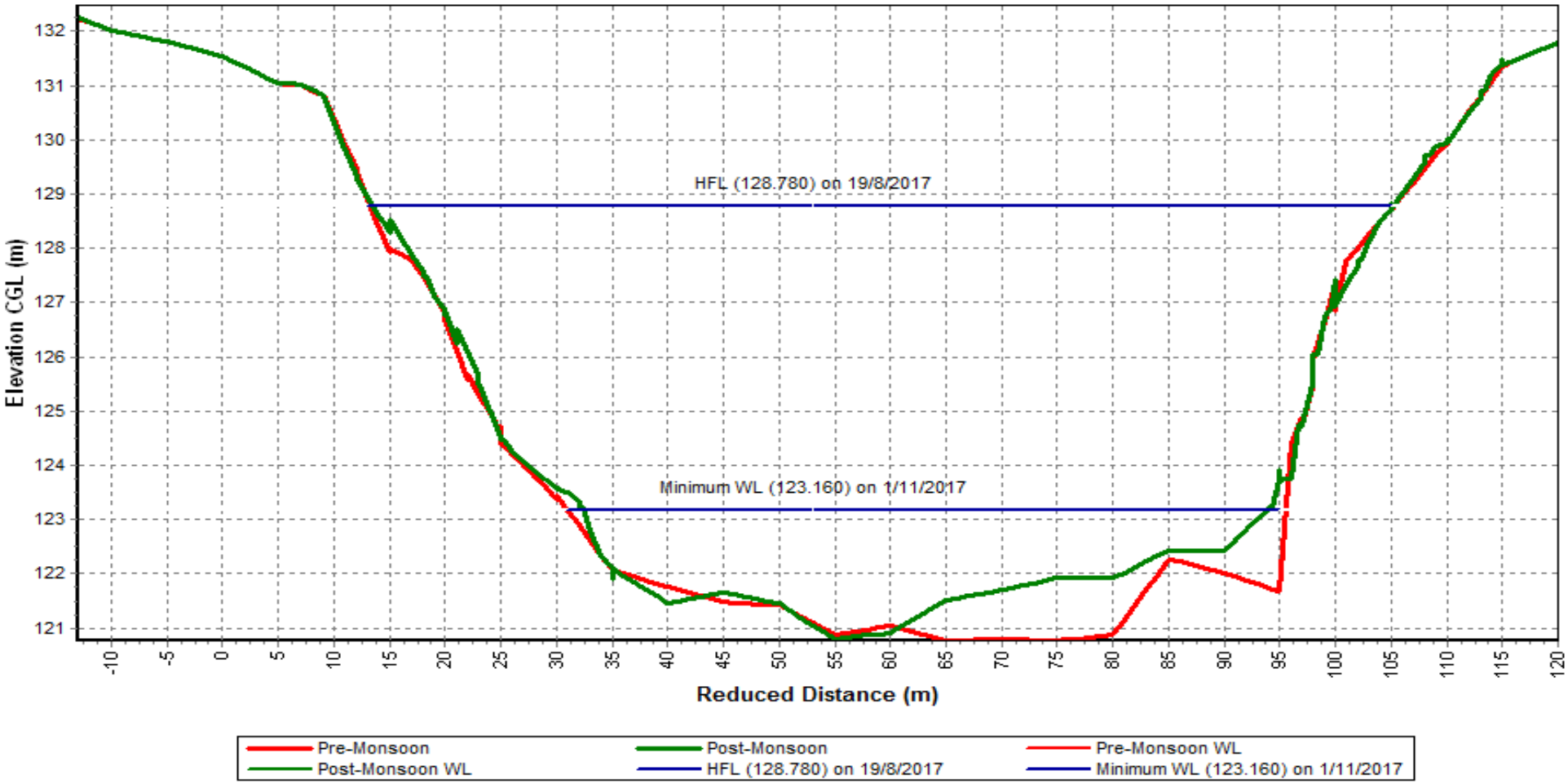
Sub-Division : Lower Godavari 2, Rajahmundry



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Potteru (Seasonal) (AGC20H2) **Division : Lower Godavari Div., Hyderabad**

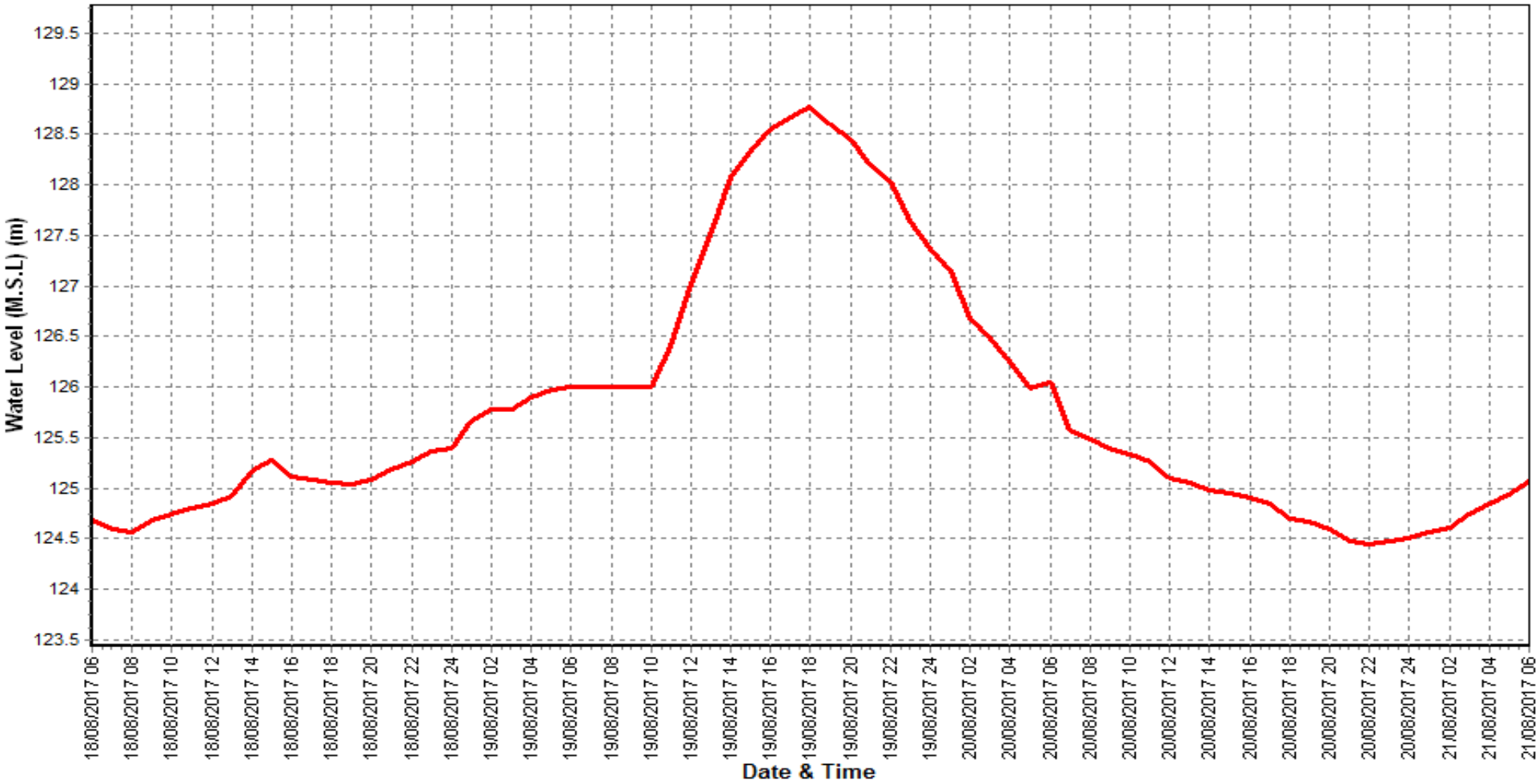
Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Potteru (Seasonal) (AGC20H2) **Division : Lower Godavari Div., Hyderabad**

Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**

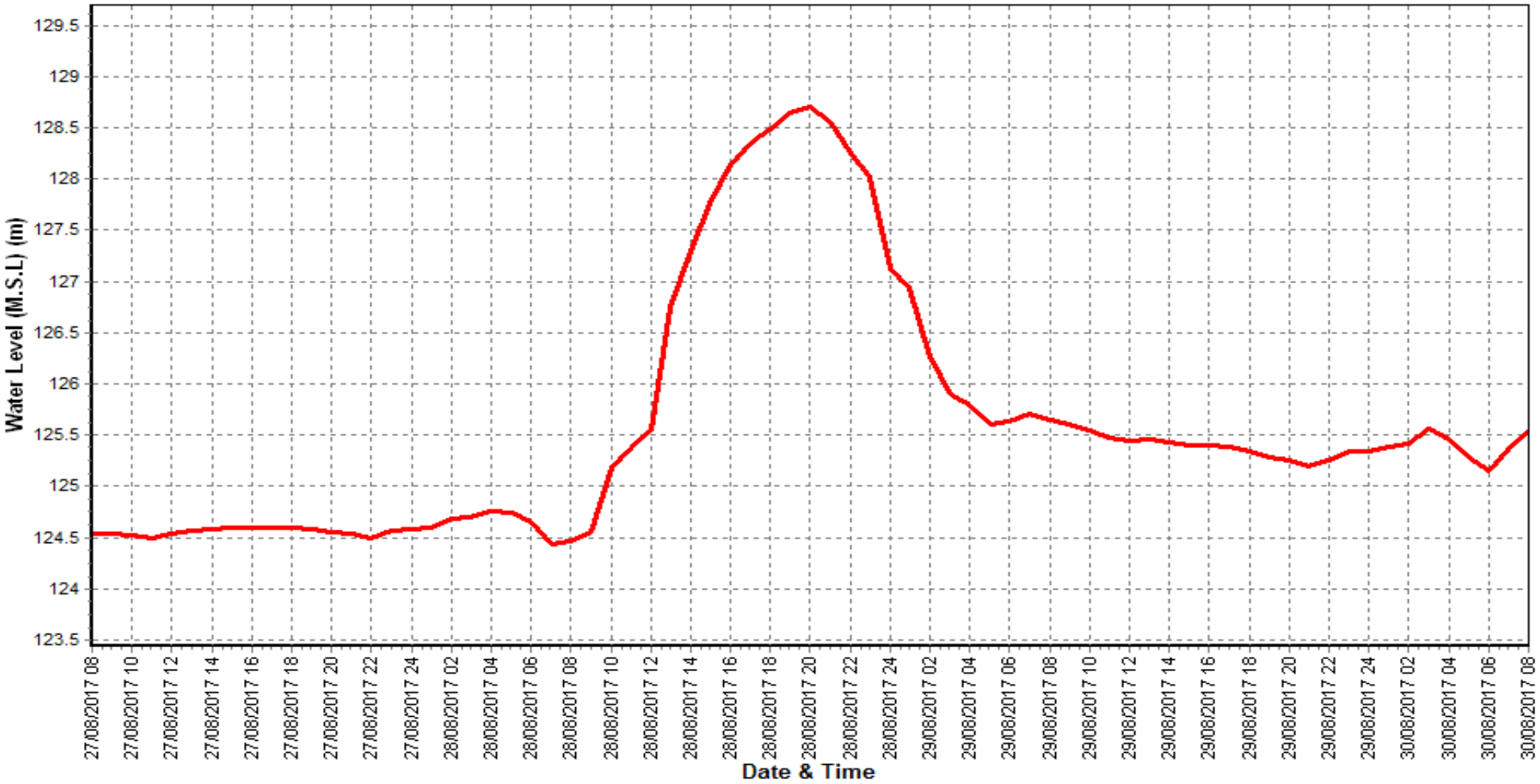


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Potteru (Seasonal) (AGC20H2) **Division : Lower Godavari Div., Hyderabad**

Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**

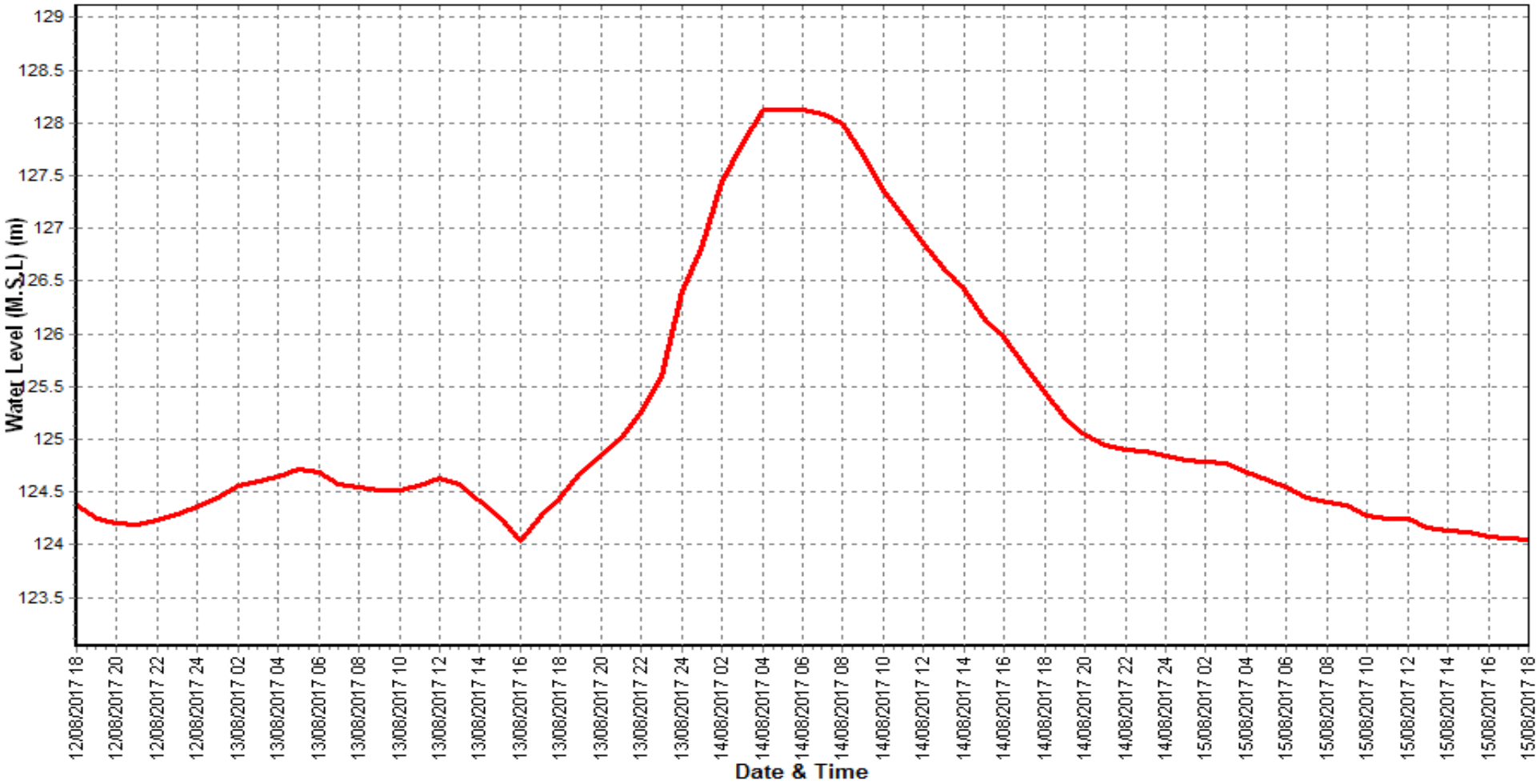


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Potteru (Seasonal) (AGC20H2) **Division : Lower Godavari Div., Hyderabad**

Local River : Potteru vagu **Sub-Division : Lower Godavari 2, Rajahmundry**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Kerlapal**	**Code**	:	**KERALAPAL**
State	:	Chhattisgarh	District		Sukma
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Sabari	Sub Tributary	:	Malinger
Sub-Sub Tributary	:	-	Local River	:	Malinger
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	766.0 Sq. Km.	Bank	:	Left
Latitude	:	18°17'48"	Longitude	:	81°34'21"
Zero of Gauge (m)	:	90.000 (Arbitary)	01.06.2017		
		Opening Date	Closing Date		
Gauge	:	04.11.2015			
Discharge	:	01.07.2017			
Sediment	:				
Water Quality	:				

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kerlapal (KERALAPAL) **Division : Lower Godavari Div., Hyderabad**

Local River : Malinger **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1			92.100	6.821	92.270	17.42	92.700	30.49 *	92.430	21.17 *	91.920	5.333
2			93.110	52.93 *	92.560	25.24 *	92.870	38.34 *	92.390	20.06 *	91.900	6.384
3			93.690	115.0 *	92.490	22.96 *	92.650	28.50 *	92.560	25.24 *	91.900	6.477
4			93.410	79.13 *	92.480	22.65 *	92.590	26.28 *	92.710	30.90 *	91.900	6.500 *
5			92.860	37.82 *	92.240	14.73	92.770	33.51 *	93.700	116.6 *	91.900	6.500 *
6			92.440	21.46 *	93.250	63.87 *	93.380	76.02 *	93.800	133.2 *	91.960	5.686
7			92.300	14.15	92.800	34.89 *	92.900	39.92 *	93.860	144.3 *	91.950	5.429
8			92.160	14.69 *	92.480	22.65 *	93.330	71.10 *	92.800	34.89 *	91.930	5.187
9			92.100	13.54 *	92.190	12.99	92.730	31.75 *	92.460	22.05 *	91.920	4.939
10			92.040	6.127	92.350	19.04	92.410	20.61 *	92.810	35.36 *	91.920	4.869
11			92.190	12.00	92.230	13.92	92.250	16.45	92.700	30.49 *	91.910	4.732
12			92.100	8.230	92.090	9.424	92.170	11.40	92.510	23.59 *	91.900	4.450 *
13			92.020	5.015	92.620	27.37 *	92.130	9.250	92.420	20.89 *	91.900	4.457
14			91.990	3.731	92.750	32.62 *	92.225	7.700	92.510	23.59 *	91.890	4.304
15			92.110	9.152	92.790	34.42 *	92.130	11.81	92.760	33.06 *	91.890	4.300 *
16			92.600	26.64 *	92.560	25.24 *	92.130	10.14	92.550	24.90 *	91.890	4.300 *
17			92.370	18.73	92.650	28.50 *	92.120	13.91 *	92.350	20.14	91.890	4.300 *
18			92.490	22.96 *	92.480	22.65 *	92.360	19.26 *	92.250	15.09	91.880	4.800 *
19			94.840	528.6 *	92.760	33.06 *	92.730	31.75 *	92.180	15.09 *	91.880	4.800 *
20			94.070	190.8 *	94.140	209.4 *	92.480	22.65 *	92.150	10.19	91.880	5.167
21			93.210	60.53 *	93.480	86.90 *	92.270	17.27	92.460	22.05 *	91.880	5.028
22			92.680	29.68 *	92.660	28.89 *	92.180	8.117	92.390	20.06 *	91.870	4.672
23			92.360	19.26 *	93.100	52.23 *	92.470	22.35 *	92.180	12.49	91.870	4.398
24			92.200	11.60	93.020	46.91 *	92.100	13.54 *	92.140	10.20	91.870	4.065
25			92.150	9.578	92.980	44.45 *	92.510	23.59 *	92.470	22.35 *	91.870	4.039
26			92.060	8.184	92.630	27.74 *	92.510	23.59 *	92.345	19.53	91.870	4.040 *
27			92.000	5.747	92.810	35.36 *	92.510	23.59 *	92.460	22.05 *	91.860	4.045
28			92.040	7.160	94.240	239.1 *	92.810	35.36 *	92.175	10.80	91.860	4.148
29			92.090	8.710	93.900	152.2 *	92.510	23.59 *	92.040	8.150 *	91.860	4.112
30			92.120	13.91 *	93.700	116.6 *	92.380	19.79 *	92.050	8.242	91.860	3.859
31			92.150	10.84	93.000	45.66 *			92.000	6.340		
Ten-Daily Mean												
I Ten-Daily			92.621	36.17	92.511	25.65	92.833	39.65	92.952	58.38	91.920	5.730
II Ten-Daily			92.678	82.59	92.707	43.66	92.272	15.43	92.438	21.70	91.891	4.561
III Ten-Daily			92.278	16.84	93.229	79.64	92.425	21.08	92.246	14.75	91.867	4.241
Monthly												
Min.			91.990	3.731	92.090	9.424	92.100	7.700	92.000	6.340	91.860	3.859
Max.			94.840	528.6	94.240	239.1	93.380	76.02	93.860	144.3	91.960	6.500
Mean			92.518	44.28	92.829	50.61	92.510	25.39	92.536	31.07	91.893	4.844

Annual Runoff in MCM = 428 Annual Runoff in mm = 558

Peak Observed Discharge = 20.14 cumecs on 17/10/2017 Corres. Water Level :92.350 m

Lowest Observed Discharge = 0.000 cumecs on 05/04/2018 Corres. Water Level :91.400 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kerlapal (KERALAPAL) **Division : Lower Godavari Div., Hyderabad**

Local River : Malinger **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	91.860	4.110	91.660	1.264	91.520	0.697	91.460	0.582	91.380	0.225 *	91.390	0.000
2	91.860	4.110 *	91.650	1.205	91.510	0.662	91.460	0.580 *	91.380	0.225	91.390	0.000
3	91.860	4.050 *	91.650	1.164	91.510	0.820	91.460	0.561	91.380	0.219	91.390	0.000
4	91.860	3.954	91.650	1.263	91.510	0.820 *	91.460	0.560 *	91.380	0.227	91.390	0.000
5	91.840	3.713	91.640	1.232	91.510	0.788	91.440	0.455 *	91.400	0.000	91.390	0.000
6	91.840	3.780	91.630	1.150	91.510	0.774	91.440	0.455	91.400	0.000	91.390	0.000
7	91.840	3.887	91.630	1.150 *	91.500	0.552	91.440	0.432	91.390	0.000	91.390	0.000
8	91.840	3.824	91.630	0.570	91.530	1.260	91.430	0.466	91.410	0.000	91.390	0.000
9	91.830	3.493	91.630	0.539	91.540	1.627	91.430	0.451	91.410	0.000	91.390	0.000
10	91.830	3.200 *	91.630	0.540 *	91.500	0.788	91.430	0.450 *	91.410	0.000	91.390	0.000
11	91.830	2.957	91.630	0.540 *	91.490	0.570 *	91.430	0.450 *	91.400	0.000	91.380	0.000
12	91.830	2.769	91.620	0.720 *	91.500	0.693	91.400	0.420	91.400	0.000	91.380	0.000
13	91.820	2.672	91.620	0.720 *	91.490	0.571	91.400	0.406	91.420	0.000	91.380	0.000
14	91.810	2.651	91.620	0.720 *	91.490	0.570 *	91.400	0.388	91.420	0.000	91.380	0.000
15	91.810	2.591	91.620	0.720 *	91.490	0.715	91.400	0.431	91.420	0.000	91.380	0.000
16	91.800	2.558	91.620	0.923	91.480	0.535	91.420	0.494	91.420	0.000	91.380	0.000
17	91.800	2.560 *	91.620	0.902	91.480	0.513	91.420	0.476	91.410	0.000	91.380	0.000
18	91.770	2.117	91.640	1.434	91.480	0.510 *	91.420	0.470 *	91.410	0.000	91.370	0.000
19	91.760	2.057	91.640	1.451	91.480	0.625	91.400	0.373	91.410	0.000	91.370	0.000
20	91.750	1.969	91.630	0.792	91.480	0.614	91.400	0.400	91.410	0.000	91.370	0.000
21	91.750	1.722	91.540	0.540 *	91.480	0.603	91.400	0.400 *	91.400	0.000	91.370	0.000
22	91.730	1.731	91.540	0.537	91.470	0.517	91.400	0.285	91.400	0.000	91.370	0.000
23	91.720	1.615	91.530	0.613	91.470	0.348	91.400	0.251	91.400	0.000	91.370	0.000
24	91.720	1.610 *	91.520	0.734	91.470	0.492	91.400	0.246	91.400	0.000	91.370	0.000
25	91.710	1.580 *	91.520	0.719	91.470	0.490 *	91.400	0.245 *	91.410	0.000	91.370	0.000
26	91.700	1.532	91.520	0.720 *	91.460	0.626	91.380	0.294	91.420	0.000	91.380	0.000
27	91.700	1.656	91.510	0.755	91.460	0.610	91.380	0.245	91.420	0.000	91.380	0.000
28	91.690	1.519	91.510	0.760 *	91.460	0.585	91.380	0.233	91.400	0.000	91.380	0.000
29	91.680	1.463	91.520	0.662			91.380	0.233 *	91.400	0.000	91.390	0.000
30	91.670	1.428	91.520	0.608			91.380	0.233 *	91.390	0.000	91.390	0.000
31	91.670	1.430 *	91.520	0.611			91.380	0.306			91.380	0.000
Ten-Daily Mean												
I Ten-Daily	91.846	3.812	91.640	1.008	91.514	0.879	91.445	0.499	91.394	0.090	91.390	0.000
II Ten-Daily	91.798	2.490	91.626	0.892	91.486	0.592	91.409	0.431	91.412	0.000	91.377	0.000
III Ten-Daily	91.704	1.571	91.523	0.660	91.468	0.534	91.389	0.270	91.404	0.000	91.377	0.000
Monthly												
Min.	91.670	1.428	91.510	0.537	91.460	0.348	91.380	0.233	91.380	0.000	91.370	0.000
Max.	91.860	4.110	91.660	1.451	91.540	1.627	91.460	0.582	91.420	0.227	91.390	0.000
Mean	91.780	2.591	91.594	0.847	91.491	0.678	91.414	0.396	91.403	0.030	91.381	0.000

Peak Computed Discharge = 528.6 cumecs on 19/07/2017 Corres. Water Level :94.840 m

Lowest Computed Discharge = 0.225 cumecs on 01/04/2018 Corres. Water Level :91.380 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

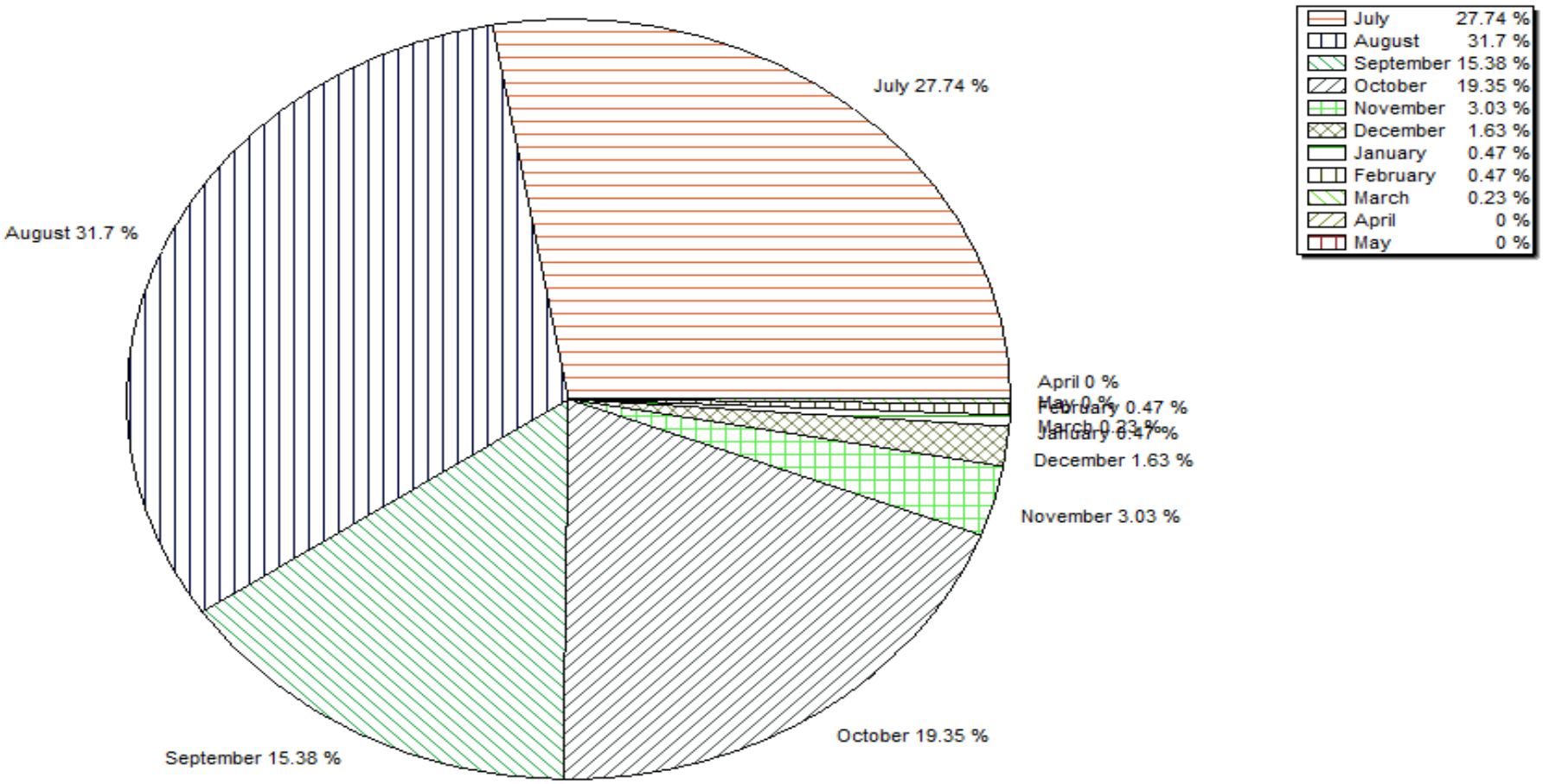
Monthly Runoff for the Year : 2017-2018

Station Name : Kerlapal (KERALAPAL)

Local River : Malinger

Division : Lower Godavari Div., Hyderabad

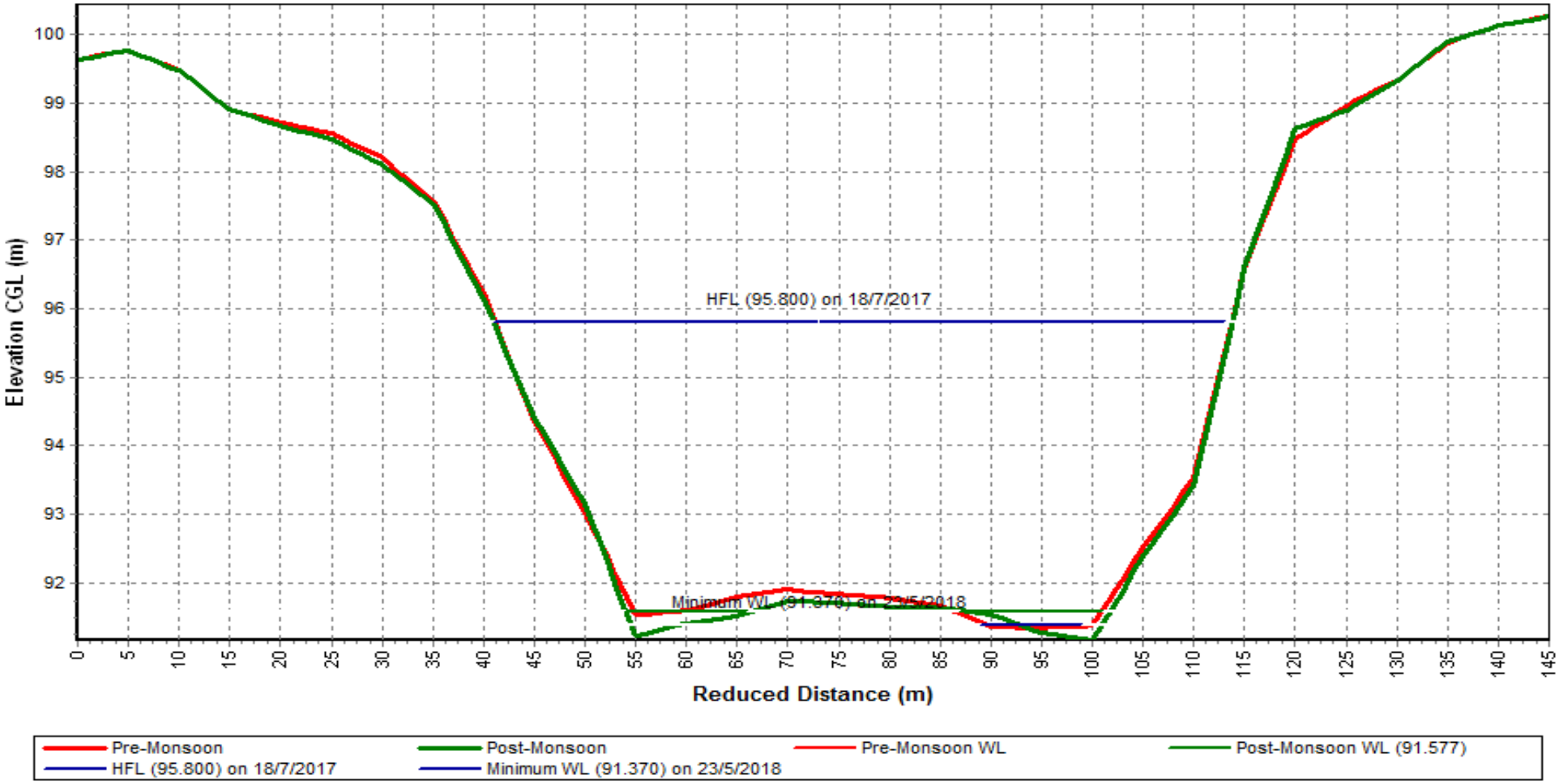
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Kerlapal (KERALAPAL) **Division : Lower Godavari Div., Hyderabad**

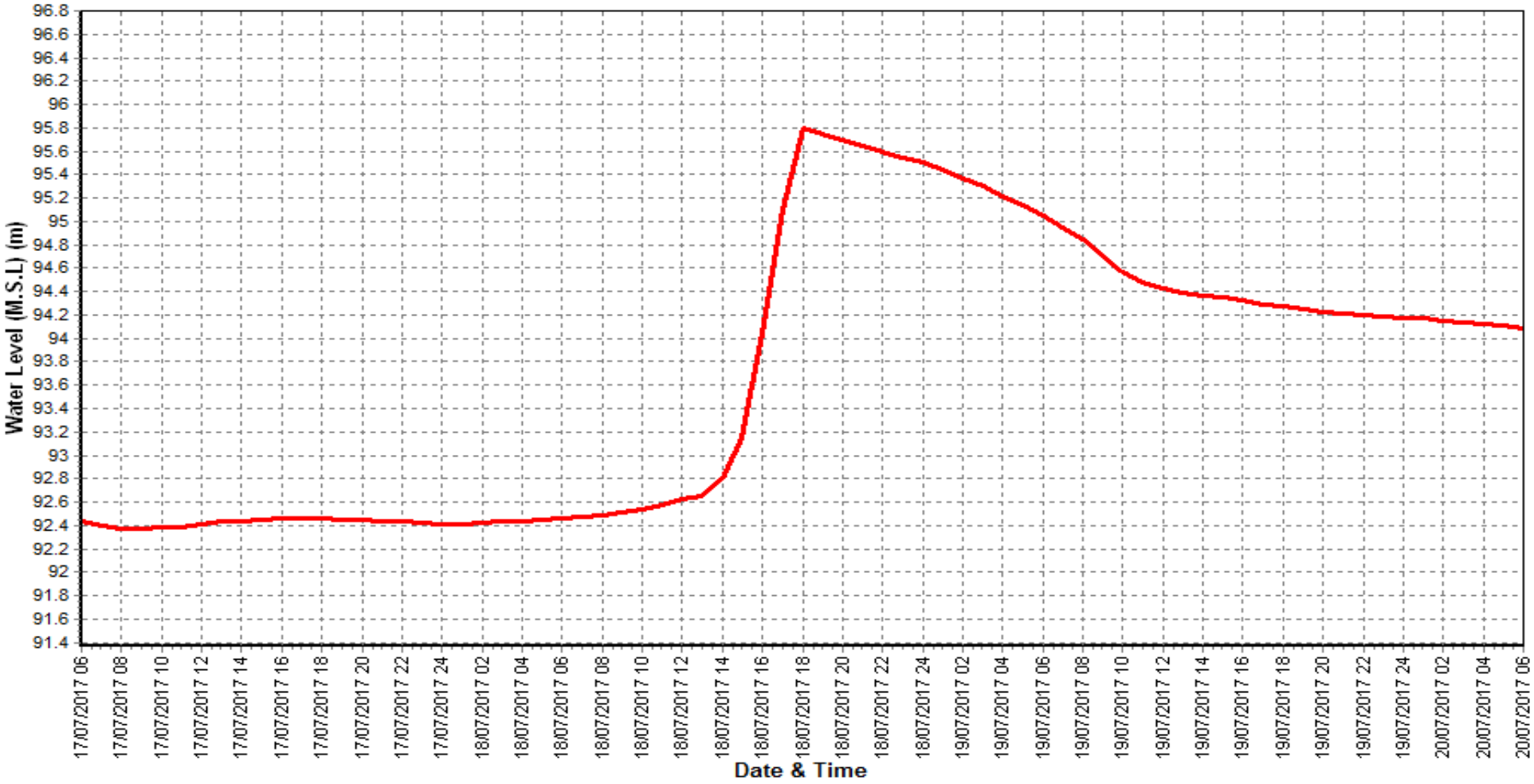
Local River : Malinger **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Kerlapal (KERALAPAL) **Division : Lower Godavari Div., Hyderabad**

Local River : Malinger **Sub-Division : Indravati SD, Jagdalpur**

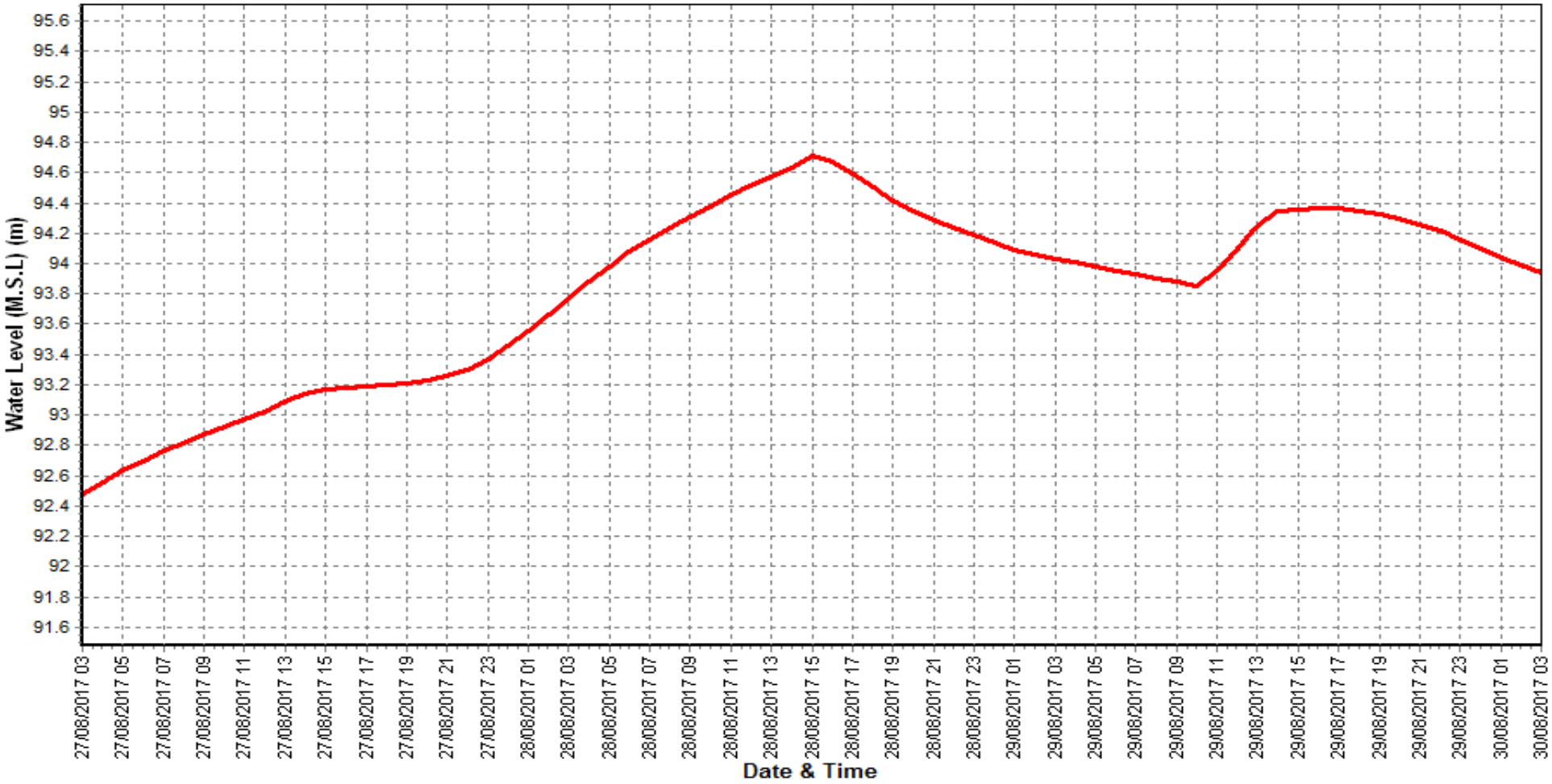


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Kerlapal (KERALAPAL) **Division : Lower Godavari Div., Hyderabad**

Local River : Malinger **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Saradaput**	**Code**	:	**AGC00N4**
State	:	Orissa	District		Malkangiri
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Sabari	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Sabari
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 2, Rajahmundry
Drainage Area	:	3047 Sq. Km.	Bank	:	Left
Latitude	:	18°36'00"	Longitude	:	82°08'00"
Zero of Gauge (m)	:	223.627 (m.s.l)	01.01.1970	-	31.05.1975
		223.972 (m.s.l)	01.06.1975	-	31.05.1997
		225.465 (m.s.l)	01.06.1997	-	20.08.1997
		224.000 (m.s.l)	21.08.1997	-	
		Opening Date	Closing Date		
Gauge	:	11.01.1968	**HFL During 2017-18**	:	**235.420 Meter**
			Corres. Discharge	:	**3222 Cumecs (Estimated)**
Discharge	:	05.09.1970	**Date & Time of**	:	**19.07.2017**
			Occurance	:	**05:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 239.65 04/08/2006
Corresponding Discharge (cumecs) : 6600*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1970-1971	2324	232.377	28.08.1970	11.80	224.847	10.05.1971
1971-1972	1663	230.915	05.09.1971	8.093	224.757	28.05.1972
1972-1973	3116	233.377	06.07.1972	6.520	224.747	17.05.1973
1973-1974	2616	232.827	14.07.1973	6.032	224.737	12.05.1974
1974-1975	1118	229.127	10.08.1974	6.164	224.667	25.05.1975
1975-1976	2853	232.887	09.09.1975	7.908	225.122	08.05.1976
1976-1977	2209	233.092	21.07.1976	6.704	225.102	23.03.1977
1977-1978	4792	237.182	22.08.1977	5.133	225.067	09.06.1977
1978-1979	2819	234.532	16.08.1978	5.715	225.032	11.06.1978
1979-1980	2285	232.210	25.06.1979	5.700	225.017	27.05.1980
1980-1981	3281	234.552	24.07.1980	9.891	225.167	26.05.1981
1981-1982	2063	232.457	09.08.1981	9.733	225.152	11.05.1982
1982-1983	3617	234.477	28.08.1982	7.314	225.112	10.06.1982
1983-1984	3120	233.837	26.06.1983	8.500	225.107	10.06.1983
1984-1985	5134	237.372	02.08.1984	9.227	225.127	07.05.1985
1985-1986	1396	230.332	17.08.1985	7.997	225.192	25.05.1986
1986-1987	7052	236.692	14.08.1986	9.700	225.157	20.04.1987
1987-1988	897.6	229.612	05.09.1987	9.480	225.177	30.03.1988
1988-1989	1411	231.037	18.07.1988	15.35	225.342	01.06.1988

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1989-1990	1469	231.092	14.09.1989	17.19	225.312	30.01.1990
1990-1991	3153	234.112	05.10.1990	32.68	225.472	13.05.1991
1991-1992	1386	230.632	31.07.1991	25.75	225.412	26.05.1992
1992-1993	2846	234.072	15.08.1992	24.91	225.442	05.05.1993
1993-1994	1129	230.752	16.07.1993	15.60	225.242	26.04.1994
1994-1995	4570	237.147	05.09.1994	28.17	225.302	11.06.1994
1995-1996	2382	233.302	01.09.1995	31.25	225.422	29.04.1996
1996-1997	1815	232.472	21.07.1996	28.64	225.452	30.05.1997
1997-1998	879.7	231.175	22.08.1997	10.25	226.710	31.05.1998
1998-1999	1029	231.470	11.07.1998	9.934	226.690	06.03.1999
1999-2000	2593	234.350	18.06.1999	10.69	226.700	22.05.2000
2000-2001	1383	231.915	18.07.2000	9.069	226.650	31.03.2001
2001-2002	2012	233.400	08.07.2001	17.83	226.840	03.01.2002
2002-2003	1593	232.665	18.07.2002	7.157	226.690	09.01.2003
2003-2004	3187	234.850	08.10.2003	5.742	226.510	04.06.2003
2004-2005	3671	235.830	14.06.2004	25.43	226.830	12.01.2005
2005-2006	1766	232.870	13.09.2005	23.32	226.810	09.03.2006
2006-2007	6480	239.530	04.08.2006	29.90	226.920	06.03.2007
2007-2008	3046	234.950	07.10.2007	23.41	226.900	23.05.2008
2008-2009	1369	232.440	11.08.2008	19.47	226.800	14.02.2009
2009-2010	1013	231.335	21.07.2009	1.451	226.460	12.01.2010
2010-2011	2641	234.650	08.09.2010	15.28	226.750	09.06.2010
2011-2012	1615	233.060	02.09.2011	8.207	226.620	15.04.2012
2012-2013	2588	234.930	06.08.2012	10.77	226.580	08.06.2012
2013-2014	2849	235.200	14.06.2013	30.83	226.920	16.04.2014
2014-2015	1725	234.050	29.07.2014	22.35	226.850	04.04.2015
2015-2016	1768	234.550	16.09.2015	0.000	232.320	21.06.2015
2016-2017	1565	232.270	06.08.2016	7.717	226.650	06.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Saradaput in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1970-1971**	5291	345	5636
2	**1971-1972**	3405	280	3685
3	**1972-1973**	4059	287	4346
4	**1973-1974**	4217	318	4535
5	**1974-1975**	2202	219	2421
6	**1975-1976**	5286	353	5639
7	**1976-1977**	3953	292	4245
8	**1977-1978**	5322	357	5679
9	**1978-1979**	5437	312	5749
10	**1979-1980**	3688	251	3940
11	**1980-1981**	6349	383	6732
12	**1981-1982**	3260	334	3594
13	**1982-1983**	3927	274	4201
14	**1983-1984**	4618	412	5030
15	**1984-1985**	5511	341	5852
16	**1985-1986**	5091	786	5877
17	**1986-1987**	4669	328	4997
18	**1987-1988**	1940	334	2274
19	**1988-1989**	2815	952	3767
20	**1989-1990**	3676	894	4570
21	**1990-1991**	7717	1106	8823
22	**1991-1992**	5029	1275	6304
23	**1992-1993**	4065	1099	5164
24	**1993-1994**	3500	661	4161
25	**1994-1995**	7223	1448	8671
26	**1995-1996**	4925	1264	6188
27	**1996-1997**	3455	1072	4527
28	**1997-1998**	2783	1023	3806
29	**1998-1999**	2514	558	3072
30	**1999-2000**	5049	628	5677
31	**2000-2001**	3900	304	4204
32	**2001-2002**	4711	651	5362
33	**2002-2003**	2948	250	3198
34	**2003-2004**	4965	993	5958
35	**2004-2005**	4825	771	5596
36	**2005-2006**	3106	690	3796
37	**2006-2007**	6754	846	7600
38	**2007-2008**	6227	907	7134
39	**2008-2009**	3416	549	3965
40	**2009-2010**	2446	302	2748
41	**2010-2011**	4675	874	5548
42	**2011-2012**	2966	320	3286
43	**2012-2013**	4882	695	5577
44	**2013-2014**	6188	782	6970
45	**2014-2015**	4695	708	5403
46	**2015-2016**	3579	604	4183
47	**2016-2017**	4497	502	4999
Average		4378	616	4993

Stage-Discharge Data for the period 2017 - 2018

Station Name : Saradaput (AGC00N4) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 2, Rajahmundry**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	227.140	59.66	227.860	159.3	228.560	274.6	229.070	340.5	227.850	152.9 *	227.220	64.03
2	227.250	67.18	227.400	88.39 *	228.500	269.6	229.000	354.1 *	228.500	253.3 *	227.210	63.35
3	227.205	66.81	228.540	253.2	228.570	277.2	228.750	301.5 *	228.030	176.5	227.180	61.43
4	227.180	59.16 *	228.640	255.0	229.000	362.1	228.480	249.3	228.230	214.9	227.230	65.64 *
5	227.090	39.78	228.400	230.2	229.300	403.9	228.230	203.4	228.225	212.9	227.300	74.88 *
6	227.250	65.78	228.090	187.0	229.400	447.3 *	228.540	273.7	228.140	198.7	227.180	59.16 *
7	226.970	33.25 *	227.965	168.1	230.010	583.8	228.515	263.4	228.270	224.4	227.140	54.06 *
8	227.095	50.69	227.720	133.7 *	229.550	455.0	228.430	240.0	228.140	197.0 *	227.350	81.59 *
9	227.350	74.69	227.610	117.8 *	229.800	510.3	228.220	209.4 *	228.030	181.4	227.400	88.39 *
10	227.520	105.0 *	227.580	108.8	229.055	360.2	228.020	178.5 *	227.880	162.8	227.160	56.60 *
11	227.080	46.54 *	227.745	132.3	228.490	257.4	228.130	189.3	228.695	282.6	227.210	63.04 *
12	227.425	99.19	227.870	139.7	228.230	211.0 *	228.035	183.7	228.465	253.1	227.180	59.16 *
13	227.030	43.30	227.680	121.5	228.030	180.0 *	228.165	198.4	228.460	242.7	227.130	52.79 *
14	227.180	59.43	228.160	185.9	228.575	274.6	228.365	231.1	229.020	358.5 *	227.130	52.79 *
15	227.130	55.10	228.420	244.8	229.340	432.6 *	228.740	292.1	228.830	317.9 *	227.110	50.28 *
16	227.565	108.0	228.360	231.5 *	229.045	358.9	228.840	299.3	228.235	220.8	227.170	57.88 *
17	227.320	79.63	229.515	448.2	229.155	384.5	229.120	380.9 *	227.880	170.3	227.200	61.74 *
18	227.400	88.39 *	231.410	1244	229.890	557.0	228.860	313.5	227.580	125.8	227.120	51.53 *
19	227.110	52.32	235.340	5362	230.490	801.4	228.860	308.3	227.540	107.9 *	227.260	69.58 *
20	227.100	50.15	232.800	2207	230.980	924.9 *	228.610	275.3	227.510	108.7	227.025	34.18
21	227.070	46.69	230.840	840.1	229.750	490.9	228.385	233.8	228.015	175.1	227.050	40.85
22	227.120	51.53 *	229.340	405.5	229.100	369.4	228.310	224.9	227.860	154.4 *	227.060	42.98
23	227.650	94.92	228.750	301.5 *	228.700	300.4	228.020	172.8	227.930	164.9 *	227.020	38.31
24	228.100	181.1	228.250	211.1	228.860	323.9	227.860	154.4 *	228.050	181.0	227.020	38.06
25	228.500	253.3 *	228.035	189.9	228.650	281.7 *	228.225	206.4	227.845	156.5	227.060	41.75
26	229.050	365.2 *	227.830	145.2	229.300	370.3	227.830	161.0	227.560	126.5	226.960	32.08 *
27	228.500	249.8	227.690	131.2	230.850	878.9 *	227.890	171.9	227.500	104.5	226.995	35.57
28	228.870	313.7	227.925	169.0	229.930	568.6	227.750	133.2	227.430	99.55	226.970	34.90
29	228.560	263.1	227.830	150.4	232.250	1786	227.670	114.4	227.430	92.51 *	226.945	32.07
30	228.220	204.5	228.120	193.9 *	230.800	775.6	227.650	123.5 *	227.450	99.24	227.055	43.14
31			228.195	206.5	229.755	488.4			227.315	76.32		
Ten-Daily Mean												
I Ten-Daily	227.205	62.21	227.980	170.2	229.175	394.4	228.526	261.4	228.129	197.5	227.237	66.92
II Ten-Daily	227.234	68.21	229.730	1032	229.223	438.2	228.573	267.2	228.221	218.8	227.153	55.30
III Ten-Daily	228.164	202.4	228.437	267.7	229.813	603.2	227.959	169.6	227.671	130.0	227.013	37.97
Monthly												
Min.	226.970	33.25	227.400	88.39	228.030	180.0	227.650	114.4	227.315	76.32	226.945	32.07
Max.	229.050	365.2	235.340	5362	232.250	1786	229.120	380.9	229.020	358.5	227.400	88.39
Mean	227.534	110.9	228.707	482.6	229.417	482.6	228.352	232.7	227.997	180.4	227.135	53.4

Annual Runoff in MCM = 4547 Annual Runoff in mm = 1492

Peak Observed Discharge = 5362 cumecs on 19/07/2017 Corres. Water Level :235.340 m

Lowest Observed Discharge = 1.979 cumecs on 06/01/2018 Corres. Water Level :226.475 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Saradaput (AGC00N4) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 2, Rajahmundry**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	227.030	40.81	227.055	42.41	226.870	24.07	226.830	23.06	226.880	25.57 *	226.770	17.92
2	227.020	39.57 *	227.000	36.50	226.870	23.65	226.830	20.23	226.890	27.88	226.820	21.83
3	226.980	35.29 *	226.915	26.12	226.860	24.25	226.820	20.54	226.960	35.98	227.080	45.19
4	226.970	34.74	226.860	21.30	226.850	22.93 *	226.820	20.42 *	227.015	40.90	227.130	50.32
5	226.950	31.99	226.790	15.01	226.850	21.30	226.800	19.60	226.910	28.72	227.185	63.49
6	226.920	27.97	226.475	1.979	226.850	21.71	226.760	16.75	226.910	28.36	227.060	44.06 *
7	226.920	28.46	226.470	1.424 *	226.850	22.04	226.780	15.94	226.920	29.82	226.980	37.18
8	226.950	32.16	226.780	16.99	226.850	23.16	226.780	16.23	226.930	30.25 *	227.050	44.39
9	226.910	28.34 *	226.500	2.035	226.850	23.04	226.810	20.04	226.940	30.91	226.995	38.18
10	226.980	35.29 *	226.820	19.38	226.900	27.40 *	226.840	22.08 *	226.920	28.37	227.020	39.27
11	226.950	32.59	226.820	18.73	226.900	27.40 *	226.870	24.67 *	226.940	31.93	227.030	42.22
12	226.920	27.69	226.780	16.82	226.890	28.31	226.860	26.59	226.890	26.49	226.930	30.25 *
13	226.950	33.24	226.810	19.61 *	226.880	26.44	226.860	26.36	226.950	33.03	226.950	32.22 *
14	226.930	27.80	226.880	25.57 *	226.880	28.42	226.860	25.56	226.930	30.25 *	226.960	34.89
15	226.965	33.08	226.910	27.14	226.860	24.16	226.860	25.70	226.950	32.22 *	226.940	31.92
16	226.945	30.03	226.875	23.28	226.850	23.48	226.830	20.81	227.020	43.58	226.945	32.80
17	227.040	41.79 *	226.765	13.93	226.840	21.44	226.820	19.93	227.105	51.97	226.920	31.03
18	226.950	30.88	226.820	19.38	226.850	22.93 *	226.820	20.42 *	227.000	40.65	226.880	26.86
19	226.910	27.81	226.805	18.42	226.850	22.85	226.870	25.08	226.900	27.38	226.980	37.75
20	226.910	26.90	226.810	18.88	226.840	20.93	226.830	21.25	226.980	37.04	227.040	41.79 *
21	226.875	22.45	226.820	20.42 *	226.840	20.83	226.770	15.99	226.940	29.88	227.500	100.0
22	226.955	32.17	226.860	25.40	226.840	19.28	226.780	17.81	226.910	28.34 *	227.060	45.64
23	226.920	27.04	226.820	19.60	226.840	20.69	226.770	15.87	226.900	28.34	227.355	87.07
24	226.940	31.23 *	226.840	21.07	226.840	20.68	226.810	20.04	226.880	26.57	227.240	69.20
25	226.910	28.34 *	226.840	21.32	226.830	21.24 *	226.810	19.61 *	226.870	25.99	227.025	40.99
26	226.990	35.44	226.840	22.08 *	226.810	20.08	226.825	21.50	226.840	23.99	227.130	51.32
27	226.955	33.77	226.840	21.26	226.810	19.92	226.860	23.03	226.840	23.63	227.060	44.06 *
28	226.925	29.47	226.830	21.24 *	226.850	21.86	226.840	22.91	226.810	22.29	227.040	45.42
29	226.930	28.04	226.880	26.87			226.840	22.08 *	226.830	21.24 *	227.070	45.22 *
30	226.970	35.78	226.840	21.20			226.840	22.08 *	226.840	22.08 *	227.315	78.43
31	226.910	28.34 *	226.880	26.11			226.800	18.62			226.950	32.60
Ten-Daily Mean												
I Ten-Daily	226.963	33.46	226.767	18.31	226.860	23.35	226.807	19.49	226.927	30.68	227.009	40.18
II Ten-Daily	226.947	31.18	226.828	20.18	226.864	24.64	226.848	23.64	226.967	35.45	226.958	34.17
III Ten-Daily	226.935	30.19	226.845	22.41	226.833	20.57	226.813	19.96	226.866	25.23	227.159	58.18
Monthly												
Min.	226.875	22.45	226.470	1.424	226.810	19.28	226.760	15.87	226.810	21.24	226.770	17.92
Max.	227.040	41.79	227.055	42.41	226.900	28.42	226.870	26.59	227.105	51.97	227.500	100.0
Mean	226.948	31.56	226.814	20.37	226.854	23.02	226.822	20.99	226.920	30.45	227.045	44.63

Peak Computed Discharge = 924.9 cumecs on 20/08/2017 Corres. Water Level :230.980 m

Lowest Computed Discharge = 1.424 cumecs on 07/01/2018 Corres. Water Level :226.470 m

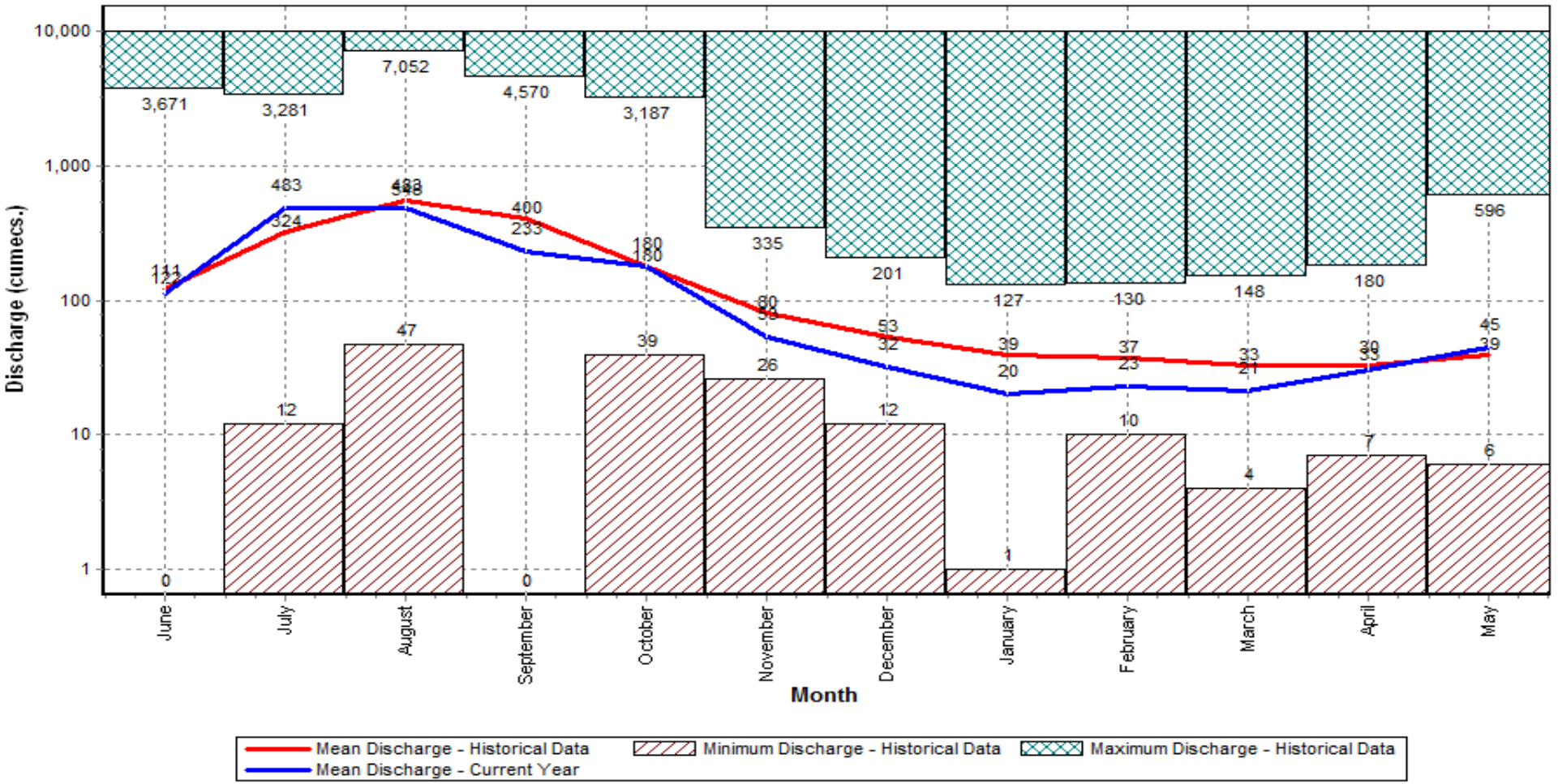
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Saradaput (AGC00N4) | **Data considered : 1970-2018** | **Division : Lower Godavari Div., Hyderabad**

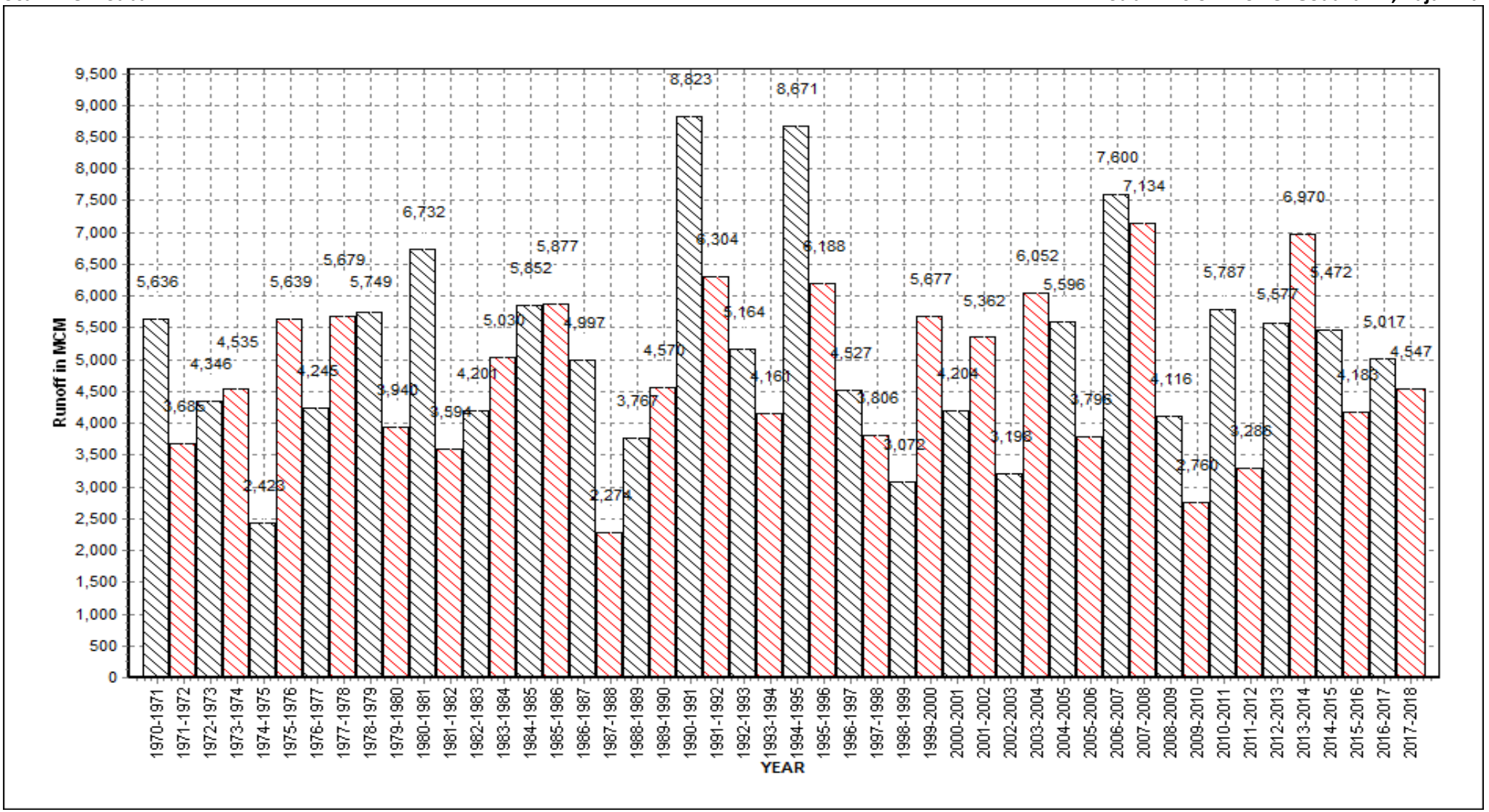
Local River : Sabari | **Sub-Division : Lower Godavari 2, Rajahmundry**



Annual Runoff Values for the period: 1970 - 2018

Station Name : Saradaput (AGC00N4) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 2, Rajahmundry**



Note: Missing values have not been considered while arriving at Annual Runoff

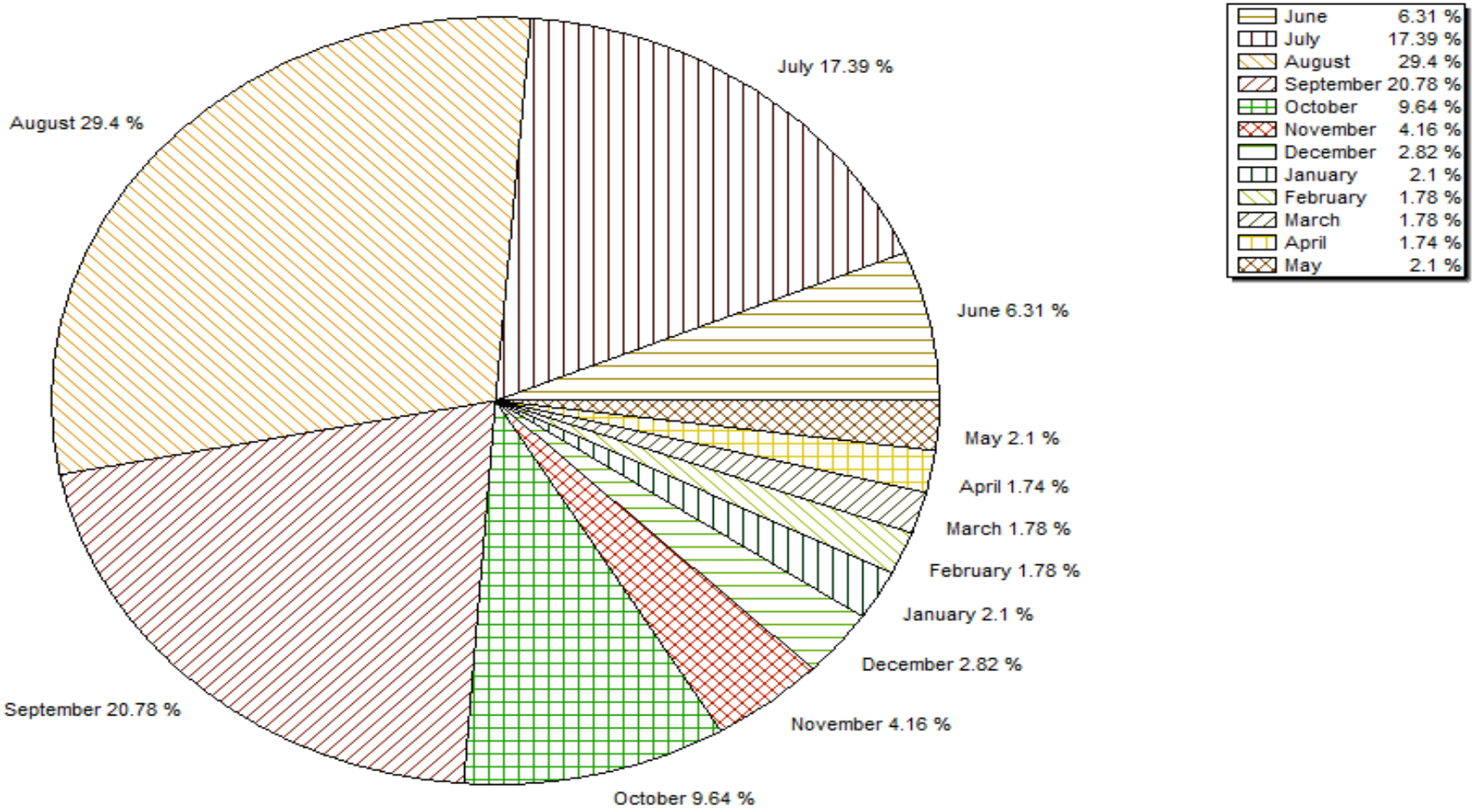
Monthly Average Runoff based on period : 1970-2017

Station Name : Saradaput (AGC00N4)

Division : Lower Godavari Div., Hyderabad

Local River : Sabari

Sub-Division : Lower Godavari 2, Rajahmundry



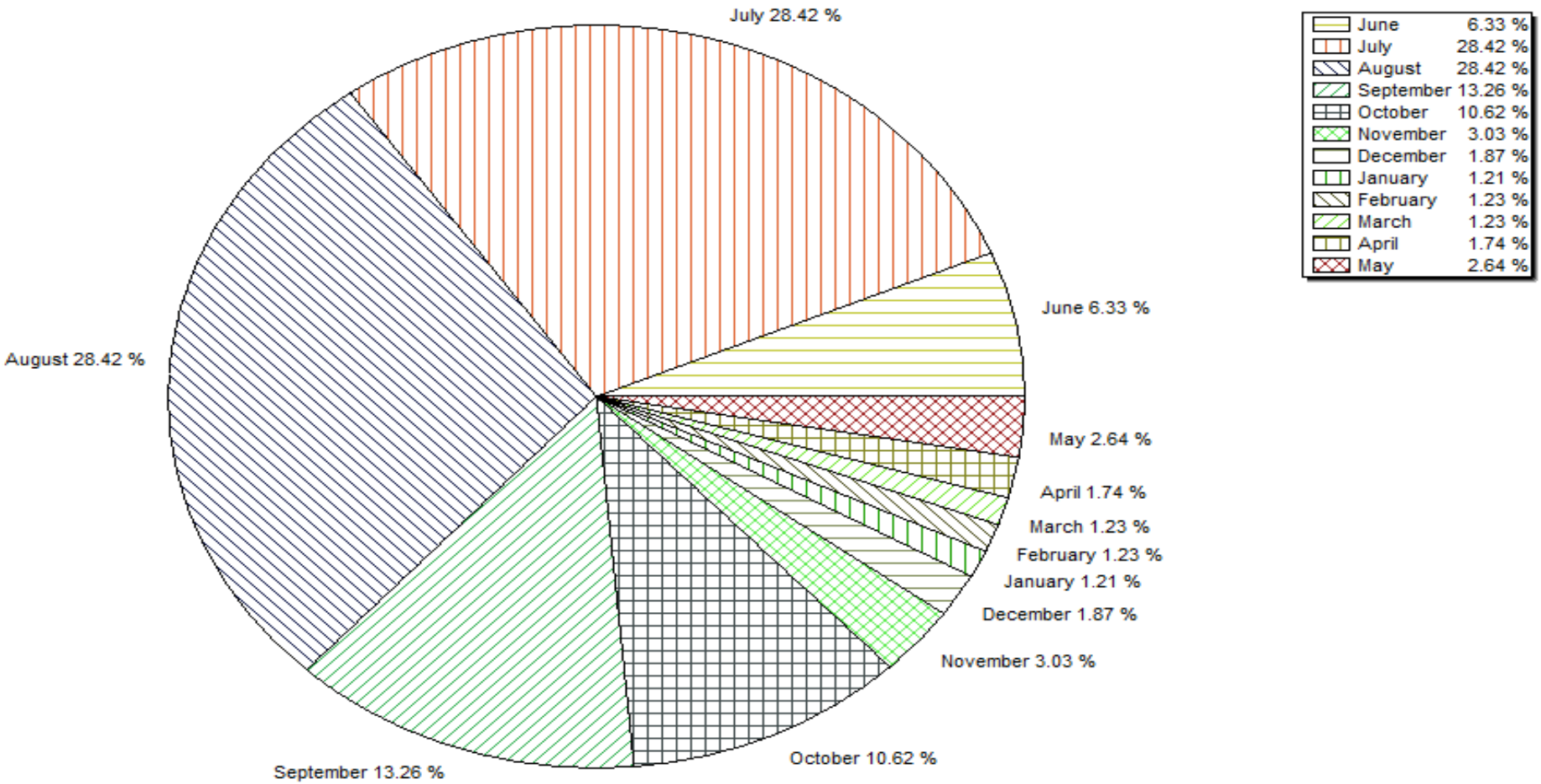
Monthly Runoff for the Year : 2017-2018

Station Name : Saradaput (AGC00N4)

Division : Lower Godavari Div., Hyderabad

Local River : Sabari

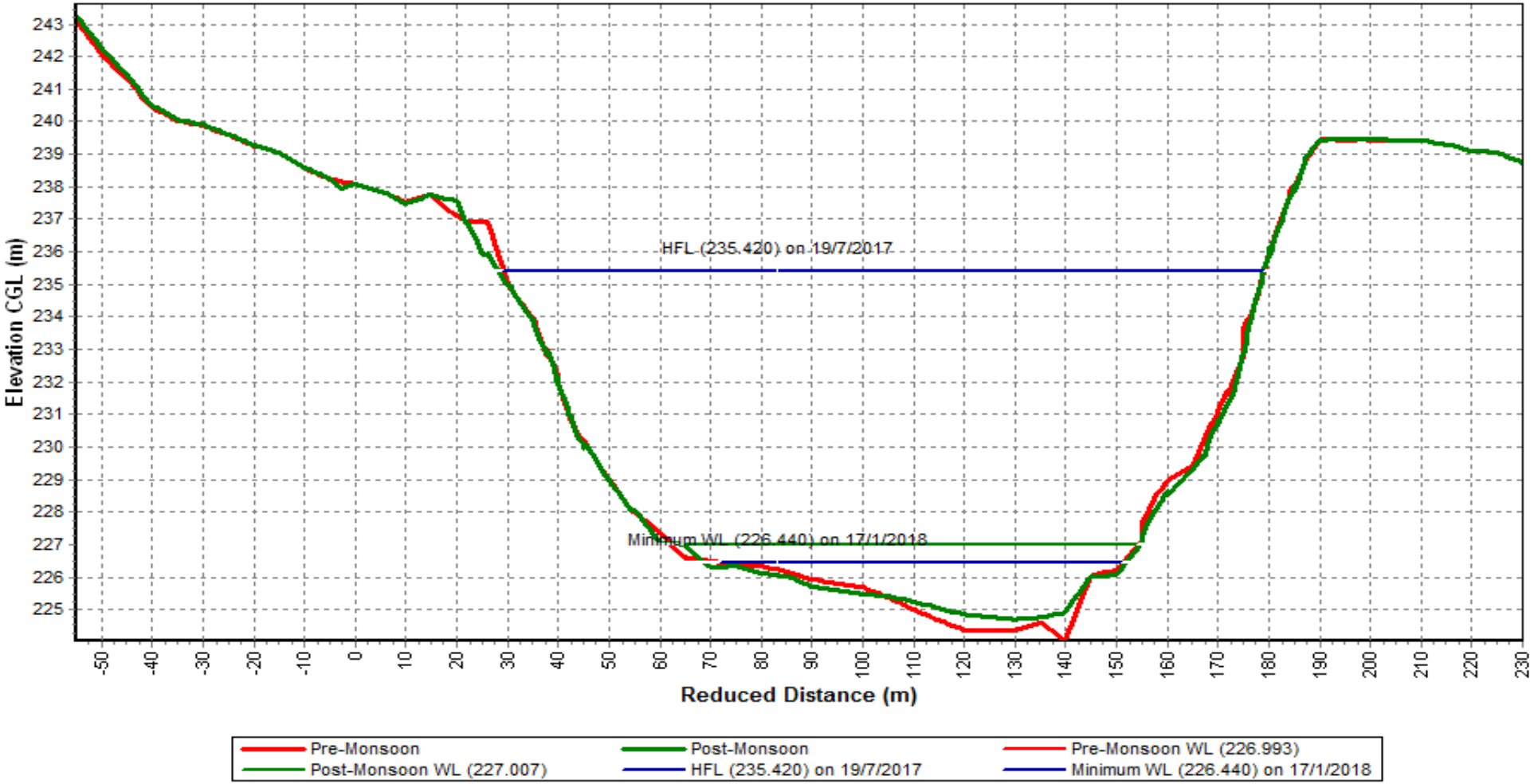
Sub-Division : Lower Godavari 2, Rajahmundry



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Saradaput (AGC00N4) **Division : Lower Godavari Div., Hyderabad**

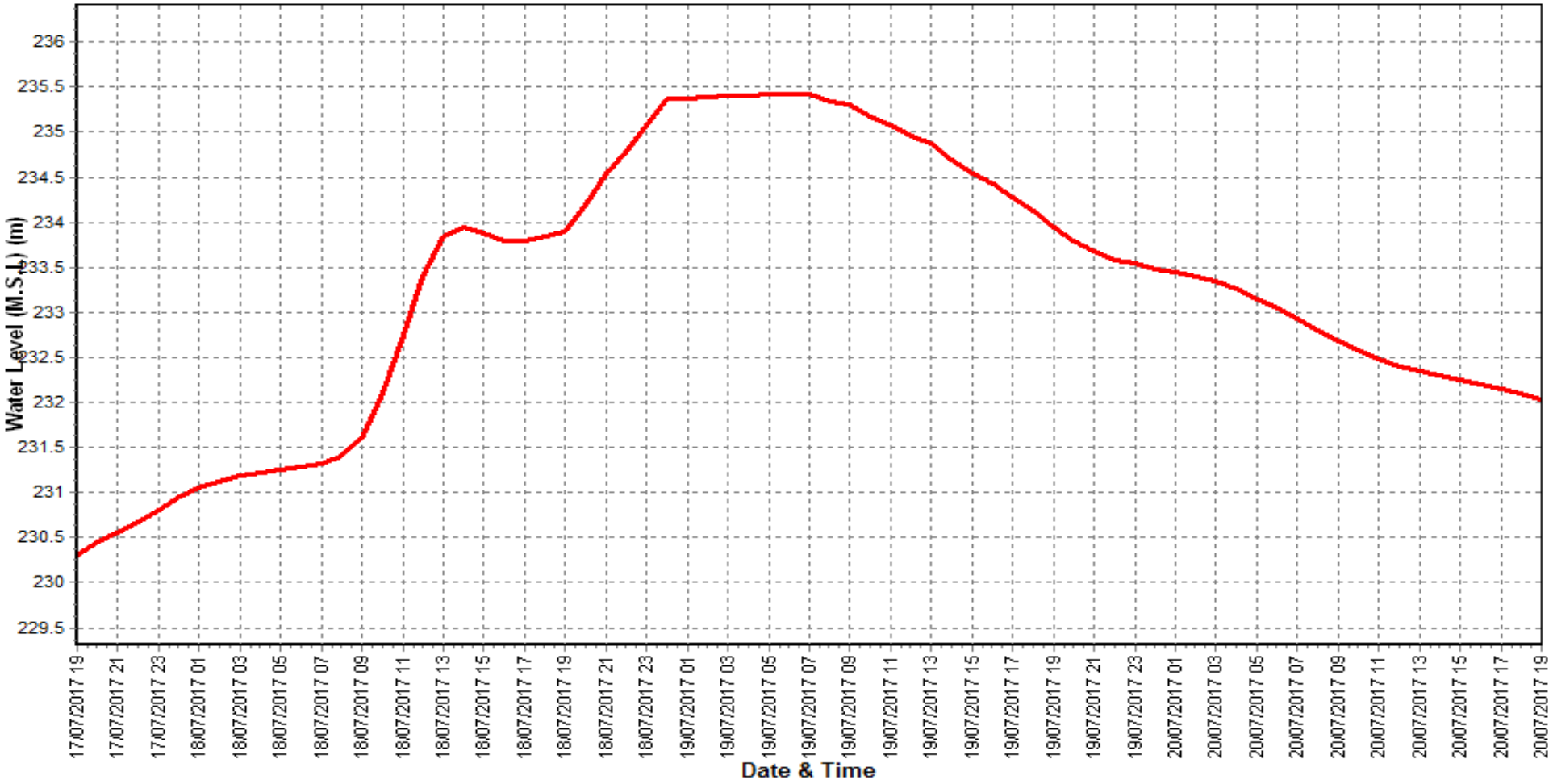
Local River : Sabari **Sub-Division : Lower Godavari 2, Rajahmundry**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Saradaput (AGC00N4) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 2, Rajahmundry**

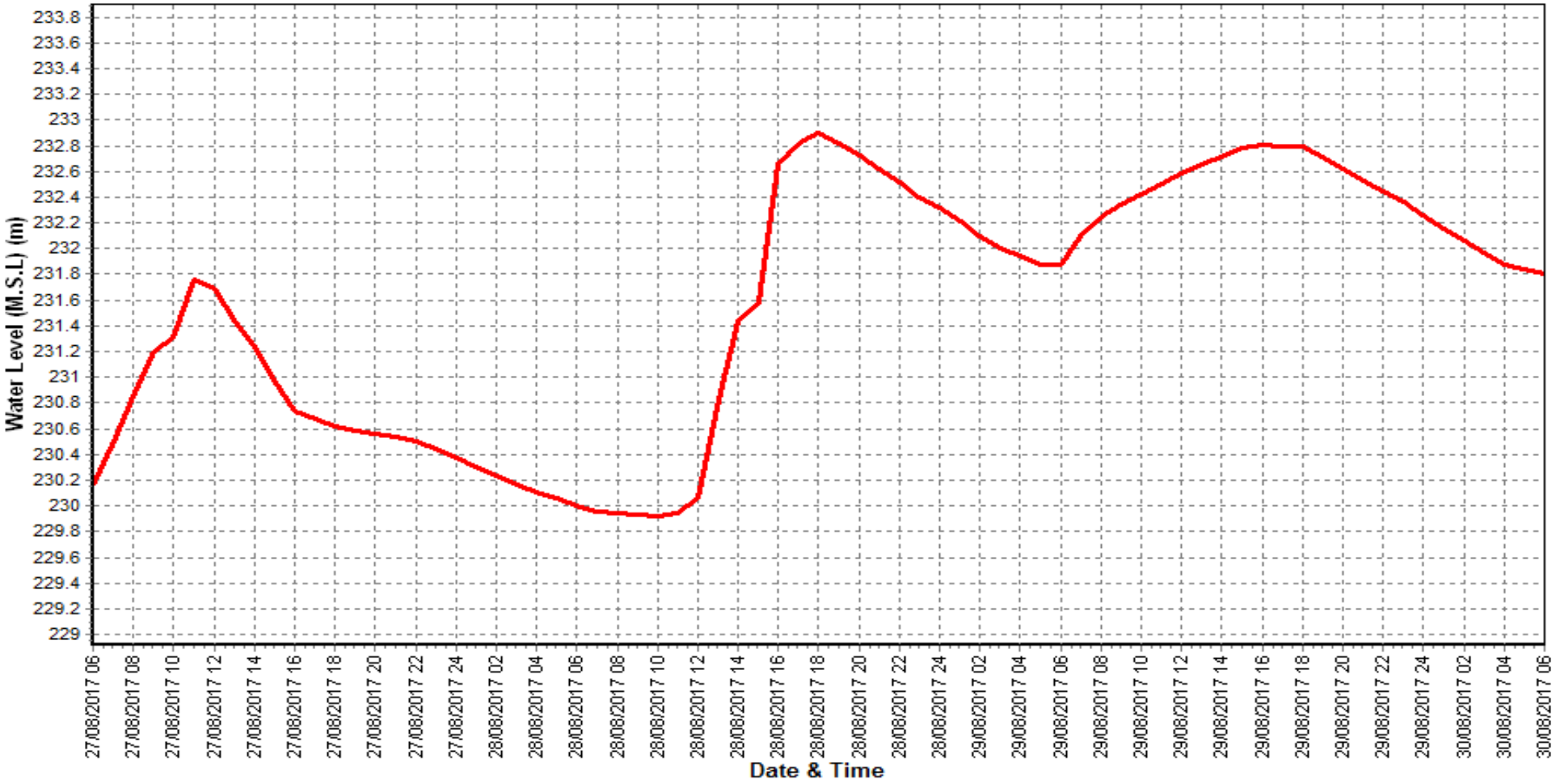


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Saradaput (AGC00N4) **Division : Lower Godavari Div., Hyderabad**

Local River : Sabari **Sub-Division : Lower Godavari 2, Rajahmundry**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Sangam**	**Code**	:	**Sangam**
State	:	Andhra Pradesh	District		Khammam
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Kinnerasani	Sub Tributary	:	Murredu
Sub-Sub Tributary	:	-	Local River	:	Murredu
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 1, Bhadrachalam
Drainage Area	:	1565 Sq. Km.	Bank	:	Left
Latitude	:	17°35'50"	Longitude	:	80°49'40"
Zero of Gauge (m)	:	53.000 (m.s.l) 51.000 (m.s.l)	01.06.1996 01.06.2010	:	31.05.2010
		Opening Date	Closing Date		
Gauge	:	11.06.1996	**HFL During 2017-18**	:	**54.780 Meter**
			Corres. Discharge	:	**99.51 Cumecs (Estimated)**
Discharge	:	24.08.1996	**Date & Time of Occurance**	:	**17.07.2017 14:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 58.55 20/09/2005
Corresponding Discharge (cumecs) : 1101*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1996-1997	269.2	56.750	11.09.1996	0.000		31.03.1997
1997-1998	92.57	55.120	27.07.1997	0.000		20.01.1998
1998-1999	335.5	56.315	10.07.1998	0.000		14.03.1999
1999-2000	219.9	55.680	20.08.1999	0.000		08.03.2000
2000-2001	348.6	56.320	28.08.2000	0.000		05.03.2001
2001-2002	228.2	55.770	04.08.2001	0.000		24.03.2002
2002-2003	254.9	55.880	13.08.2002	0.000		16.02.2003
2003-2004	285.6	56.050	22.08.2003	0.000		08.04.2004
2004-2005	410.8	56.070	24.07.2004	0.000		27.02.2005
2005-2006	970.6	58.250	21.09.2005	0.000	52.520	24.05.2006
2006-2007	449.6	56.370	05.08.2006	0.000		19.05.2007
2007-2008	128.7	54.910	20.09.2007	0.000		11.03.2008
2008-2009	253.8	56.880	10.08.2008	0.000		01.03.2009
2009-2010	100.9	55.200	22.05.2010	0.000		08.11.2009
2010-2011	198.0	55.400	30.08.2010	0.000	53.020	13.04.2011
2011-2012	127.4	54.980	18.08.2011	0.000		21.03.2012
2012-2013	121.2	55.180	03.11.2012	0.000	52.760	20.04.2013

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2013-2014	125.3	55.400	26.10.2013	0.000		03.04.2014
2014-2015	130.6	54.780	28.08.2014	0.000	51.000	25.02.2015
2015-2016	302.6	55.710	21.06.2015	0.000	51.000	22.04.2016
2016-2017	183.3	55.400	23.09.2016	0.000		22.03.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Sangam in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1996-1997**	415	10	424
2	**1997-1998**	87	5	92
3	**1998-1999**	344	5	349
4	**1999-2000**	361	4	365
5	**2000-2001**	331	7	338
6	**2001-2002**	118	2	120
7	**2002-2003**	147	1	148
8	**2003-2004**	278	15	293
9	**2004-2005**	404	2	406
10	**2005-2006**	437	13	450
11	**2006-2007**	229	18	247
12	**2007-2008**	164	36	200
13	**2008-2009**	260	11	271
14	**2009-2010**	22	19	41
15	**2010-2011**	454	42	496
16	**2011-2012**	146	5	151
17	**2012-2013**	268	15	283
18	**2013-2014**	220	35	255
19	**2014-2015**	155	9	163
20	**2015-2016**	251	7	258
21	**2016-2017**	273	7	279
Average		255	13	268

Stage-Discharge Data for the period 2017 - 2018

Station Name : Sangam (Sangam) **Division : Lower Godavari Div., Hyderabad**

Local River : Mureru **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	52.710	0.000	52.650	6.051	52.510	4.357	52.790	26.10	52.830	18.29 *	52.555	5.030
2	52.700	0.000	52.770	15.88 *	52.490	3.869	52.700	13.08 *	52.740	14.68 *	52.560	4.829
3	52.690	0.000	52.735	7.704	52.800	14.91	52.620	9.914 *	52.710	13.52	52.555	4.726
4	52.690	0.000	52.810	9.013	52.630	14.13	52.830	21.66	53.005	33.99	52.550	4.720 *
5	52.680	0.000	52.745	7.086	52.535	11.55	52.920	33.15	52.750	17.82	52.550	4.720 *
6	52.680	0.000	52.740	5.175	52.570	7.949 *	52.890	23.10	52.680	14.65	52.540	4.094
7	52.670	0.000	52.690	3.828	52.660	10.08	52.745	14.74	52.650	14.35	52.540	3.421
8	52.360	2.493	52.750	15.08 *	53.990	66.14 *	52.680	13.33	53.020	25.97 *	52.510	3.207
9	52.620	5.586	52.810	17.48 *	53.005	32.11	52.660	11.50 *	52.845	27.15	52.500	2.252
10	53.200	33.33 *	52.670	3.064	52.835	18.33	52.610	9.520 *	52.670	16.02	52.510	2.320
11	52.560	7.558 *	52.855	6.606	52.710	17.15	52.550	7.085	52.630	13.01	52.510	2.320 *
12	52.960	25.31	52.810	6.551	52.710	13.48 *	52.530	6.890	52.670	16.60	52.510	2.320 *
13	52.770	14.74	52.740	6.125	52.700	13.08 *	52.520	6.604	52.650	12.79	52.520	2.950 *
14	52.770	14.60	52.830	18.29 *	52.685	11.88	52.565	7.292	52.600	9.126 *	52.530	3.550 *
15	52.750	14.35	53.210	33.74 *	52.770	15.88 *	52.595	9.187	52.580	8.341 *	52.520	2.920 *
16	52.690	16.61	52.930	22.32 *	52.665	10.85	52.580	9.546	52.600	10.45	52.510	2.800
17	52.750	15.47	53.650	51.93 *	53.025	29.43	52.570	7.949 *	52.600	9.994	52.510	2.792
18	53.170	32.10 *	53.625	47.15	52.740	13.13	52.625	11.59	52.540	8.337	52.500	2.769
19	52.800	19.17	53.380	33.96	53.380	40.93	52.705	14.19	52.520	6.000 *	52.500	2.770 *
20	52.860	12.04	52.965	30.39	53.170	32.10 *	52.580	9.656	52.530	7.513	52.510	2.858
21	52.760	7.050	52.790	22.77	52.970	27.84	52.535	8.995	52.550	7.557	52.500	2.717
22	52.550	5.334	52.685	21.79	52.800	24.00	52.500	8.011	52.530	6.388 *	52.500	2.809
23	52.505	2.552	52.620	9.914 *	52.705	15.18	52.490	7.822	52.520	5.017	52.490	2.826
24	52.520	2.547	52.560	8.057	53.060	34.43	52.490	4.840 *	52.560	4.598	52.495	2.803
25	52.800	17.08 *	52.540	7.475	53.680	53.18 *	52.450	3.891	52.550	4.445	52.515	3.239
26	52.670	11.89 *	52.510	5.914	52.980	36.67	52.530	6.078	52.610	7.113	52.500	2.770 *
27	52.790	6.036	52.485	4.648	52.850	19.09 *	52.710	10.94	52.580	6.845	52.500	2.770
28	53.100	45.09	52.450	4.765	52.780	16.11	52.780	17.39	52.565	6.743	52.490	2.440
29	52.890	20.34	52.600	5.369	52.790	16.49	52.845	20.13	52.560	6.950 *	52.480	2.569
30	52.750	11.67	52.580	8.341 *	53.190	32.92 *	53.280	36.62 *	52.565	5.137	52.470	2.595
31			52.520	4.453	52.995	35.61			52.565	5.154		
Ten-Daily Mean												
I Ten-Daily	52.700	4.141	52.737	9.036	52.803	18.34	52.744	17.61	52.790	19.64	52.537	3.932
II Ten-Daily	52.808	17.19	53.099	25.71	52.855	19.79	52.582	8.999	52.592	10.22	52.512	2.805
III Ten-Daily	52.734	12.96	52.576	9.408	52.982	28.32	52.661	12.47	52.560	5.995	52.494	2.754
Monthly												
Min.	52.360	0.000	52.450	3.064	52.490	3.869	52.450	3.891	52.520	4.445	52.470	2.252
Max.	53.200	45.09	53.650	51.93	53.990	66.14	53.280	36.62	53.020	33.99	52.560	5.030
Mean	52.747	11.43	52.797	14.55	52.883	22.35	52.663	13.03	52.644	11.76	52.514	3.164

Annual Runoff in MCM = 206 Annual Runoff in mm = 131

Peak Observed Discharge = 47.15 cumecs on 18/07/2017 Corres. Water Level :53.625 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :52.710 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Sangam (Sangam) **Division : Lower Godavari Div., Hyderabad**

Local River : Mureru **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	52.490	2.565	52.370	0.402		0.000		0.000		0.000		0.000
2	52.460	2.150 *	52.380	0.416		0.000		0.000		0.000		0.000
3	52.460	2.150 *	52.370	0.400		0.000		0.000		0.000		0.000
4	52.460	1.987	52.350	0.387		0.000		0.000		0.000		0.000
5	52.470	1.975	52.330	0.360		0.000		0.000		0.000		0.000
6	52.450	1.638	52.310	0.190		0.000		0.000		0.000		0.000
7	52.450	1.635	52.300	0.190 *		0.000		0.000		0.000		0.000
8	52.440	1.646	52.280	0.081		0.000		0.000		0.000		0.000
9	52.450	1.690 *	52.260	0.070		0.000		0.000		0.000		0.000
10	52.450	1.690 *	52.200	0.000		0.000		0.000		0.000		0.000
11	52.450	1.755	52.180	0.000		0.000		0.000		0.000		0.000
12	52.440	1.535	52.150	0.000		0.000		0.000		0.000		0.000
13	52.440	1.487		0.000		0.000		0.000		0.000		0.000
14	52.420	1.284		0.000		0.000		0.000		0.000		0.000
15	52.420	1.271		0.000		0.000		0.000		0.000		0.000
16	52.420	1.270		0.000		0.000		0.000		0.000		0.000
17	52.410	1.260 *		0.000		0.000		0.000		0.000		0.000
18	52.420	1.262		0.000		0.000		0.000		0.000		0.000
19	52.420	1.251		0.000		0.000		0.000		0.000		0.000
20	52.410	1.182		0.000		0.000		0.000		0.000		0.000
21	52.410	1.177		0.000		0.000		0.000		0.000		0.000
22	52.410	1.156		0.000		0.000		0.000		0.000		0.000
23	52.405	1.153		0.000		0.000		0.000		0.000		0.000
24	52.410	1.150 *		0.000		0.000		0.000		0.000		0.000
25	52.390	0.530 *		0.000		0.000		0.000		0.000		0.000
26	52.380	0.533		0.000		0.000		0.000		0.000		0.000
27	52.390	0.526		0.000		0.000		0.000		0.000		0.000
28	52.390	0.535		0.000		0.000		0.000		0.000		0.000
29	52.380	0.487		0.000				0.000		0.000		0.000
30	52.390	0.528		0.000				0.000		0.000		0.000
31	52.370	0.520 *		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	52.458	1.913	52.315	0.250		0.000		0.000		0.000		0.000
II Ten-Daily	52.425	1.356	52.165	0.000		0.000		0.000		0.000		0.000
III Ten-Daily	52.393	0.754		0.000		0.000		0.000		0.000		0.000
Monthly												
Min.	52.370	0.487	52.150	0.000		0.000		0.000		0.000		0.000
Max.	52.490	2.565	52.380	0.416		0.000		0.000		0.000		0.000
Mean	52.424	1.322	52.290	0.081		0		0		0		0

Peak Computed Discharge = 66.14 cumecs on 08/08/2017 Corres. Water Level :53.990 m

Lowest Computed Discharge = 0.190 cumecs on 07/01/2018 Corres. Water Level :52.300 m

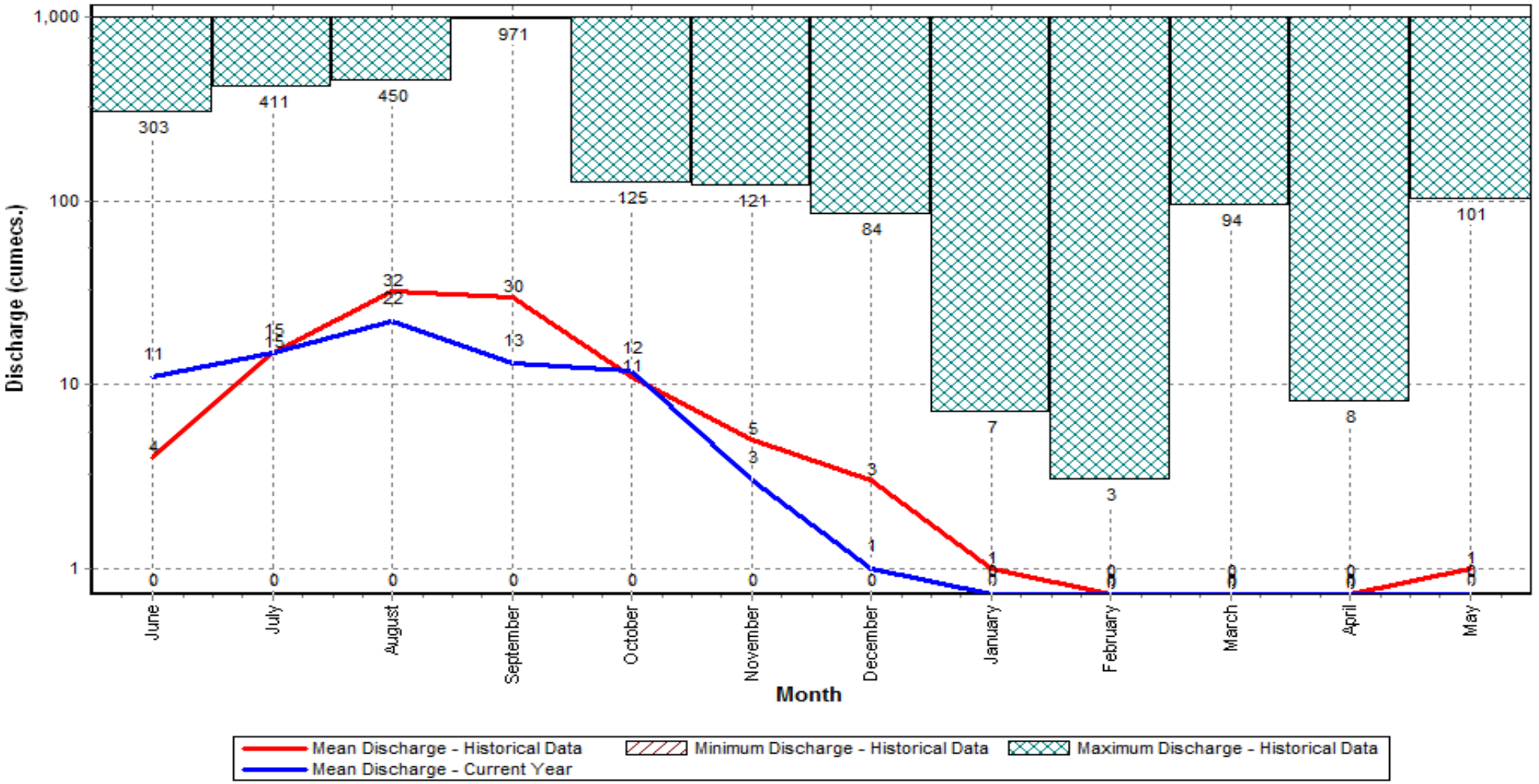
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Sangam (Sangam) | **Data considered : 1996-2018** | **Division : Lower Godavari Div., Hyderabad**

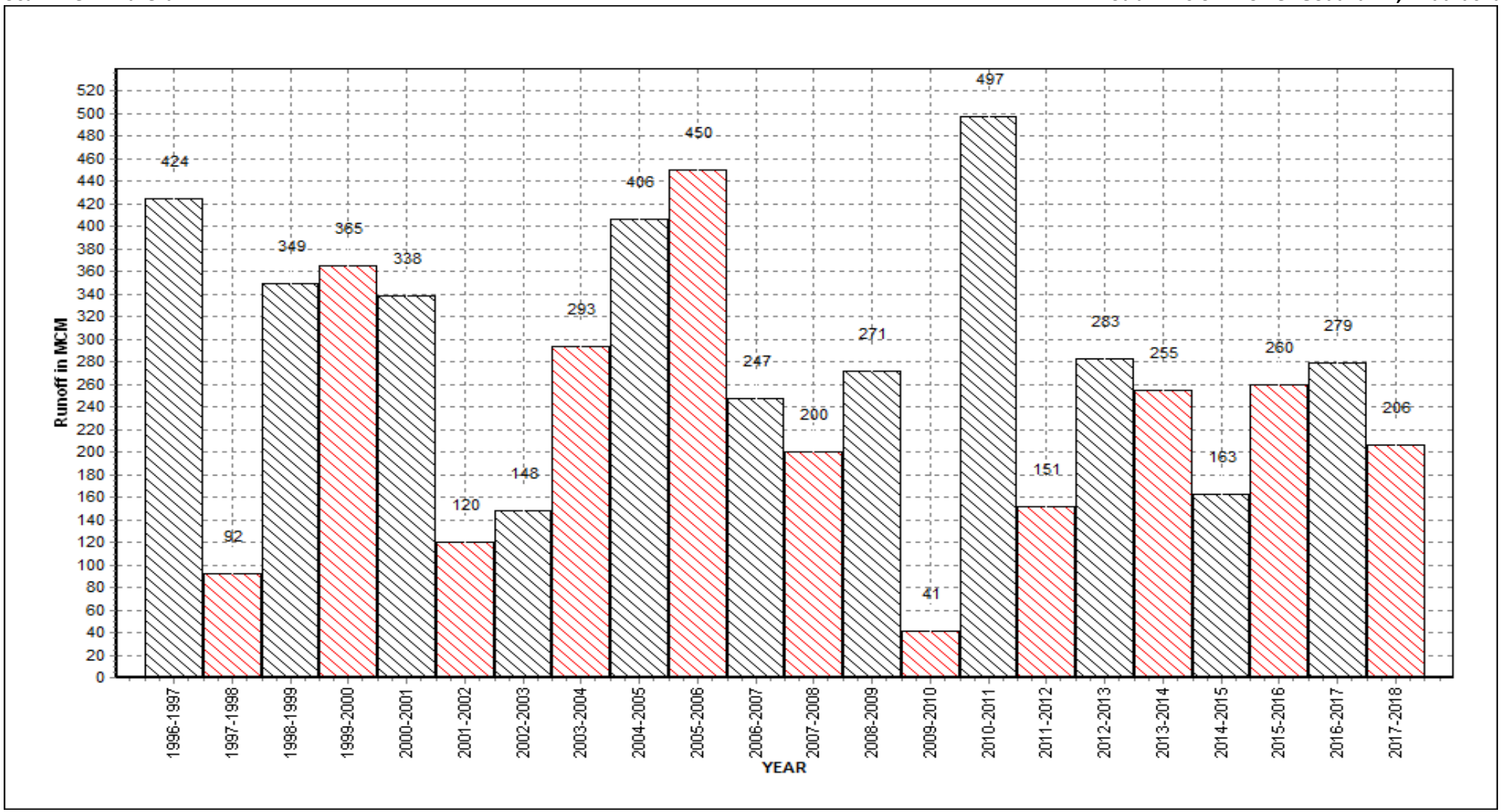
Local River : Mureru | **Sub-Division : Lower Godavari 1, Bhadrachalam**



Annual Runoff Values for the period: 1996 - 2018

Station Name : Sangam (Sangam) **Division : Lower Godavari Div., Hyderabad**

Local River : Mureru **Sub-Division : Lower Godavari 1, Bhadrachalam**

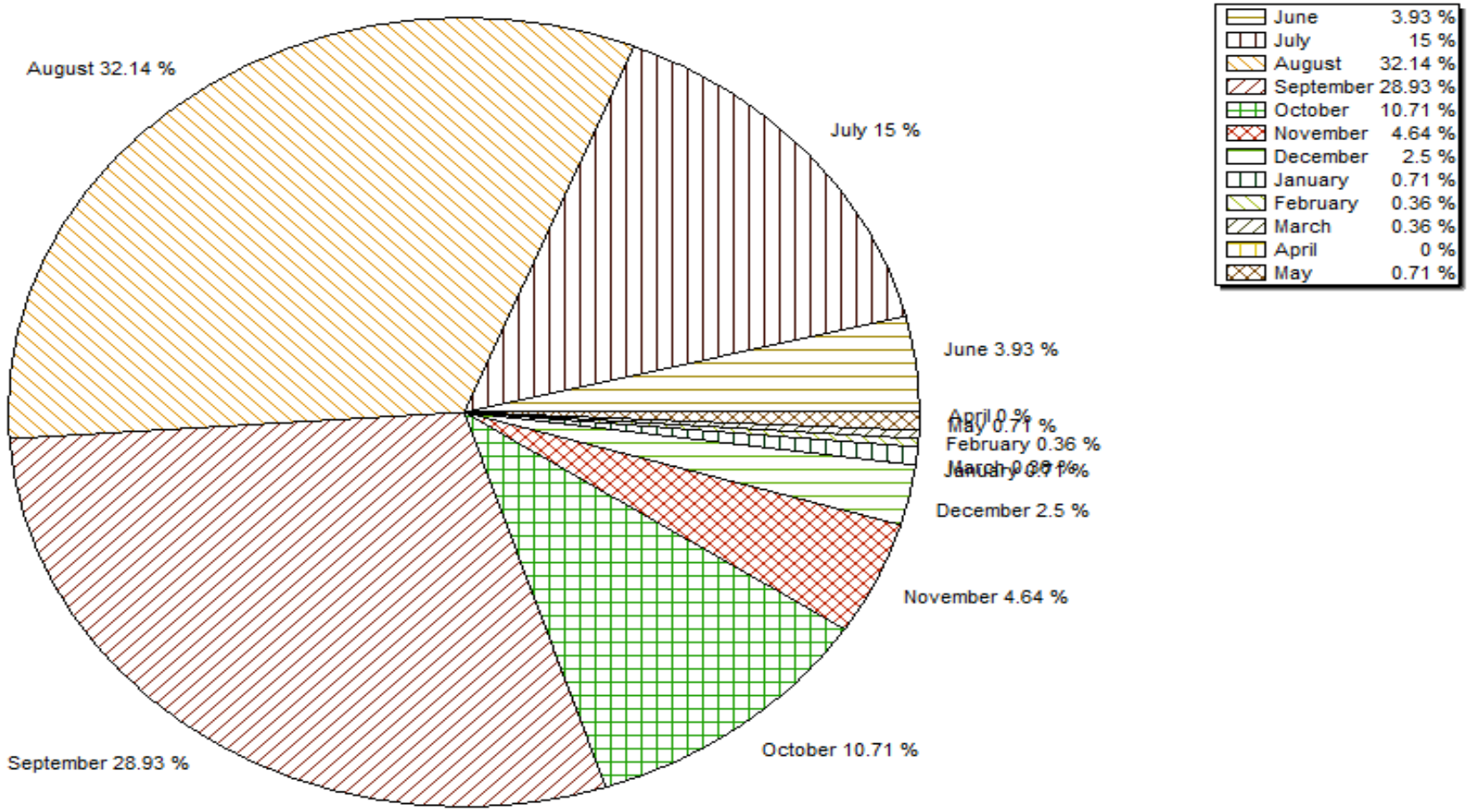


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1996-2017

Station Name : Sangam (Sangam) **Division : Lower Godavari Div., Hyderabad**

Local River : Mureru **Sub-Division : Lower Godavari 1, Bhadrachalam**



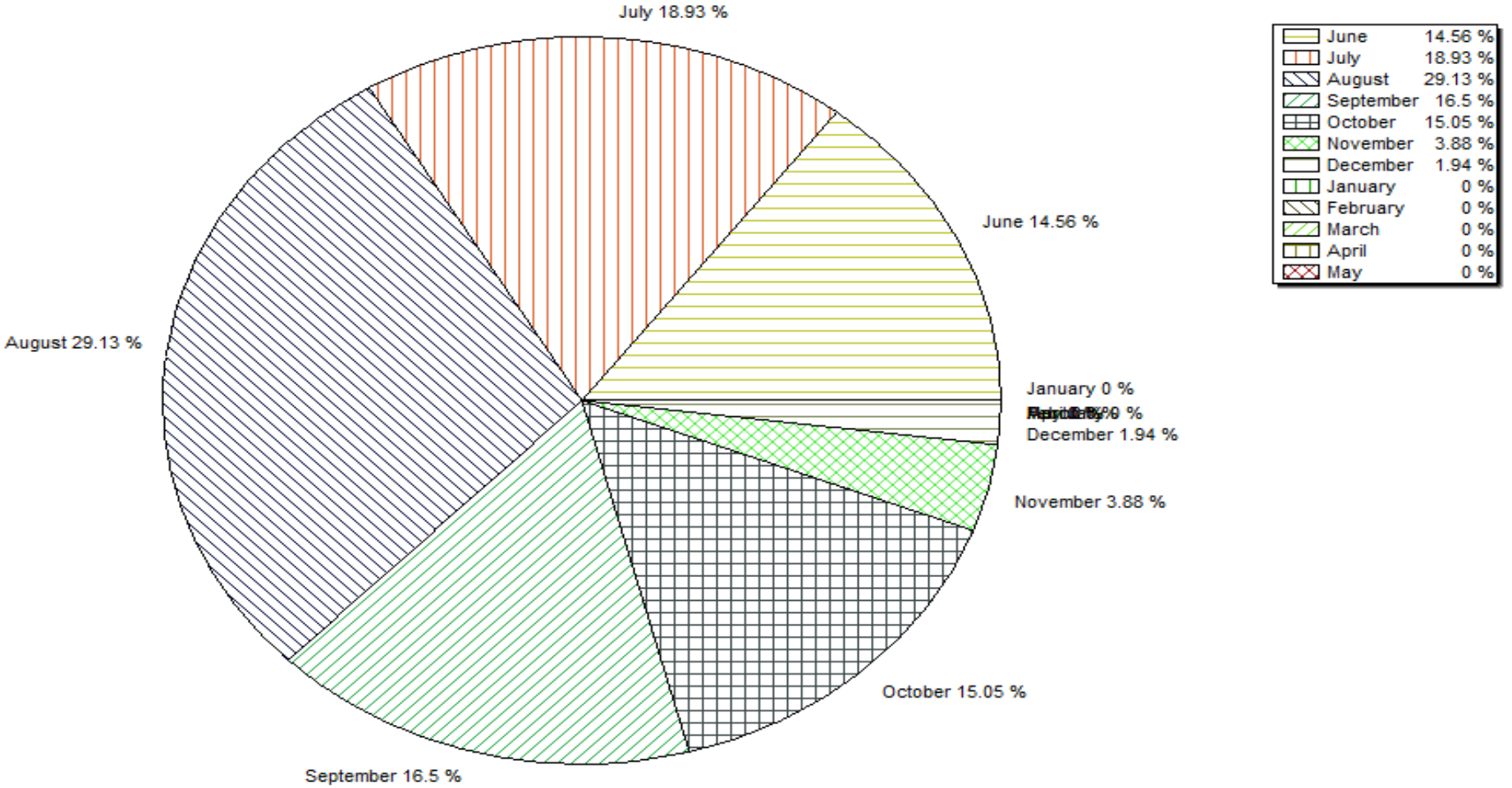
Monthly Runoff for the Year : 2017-2018

Station Name : Sangam (Sangam)

Local River : Mureru

Division : Lower Godavari Div., Hyderabad

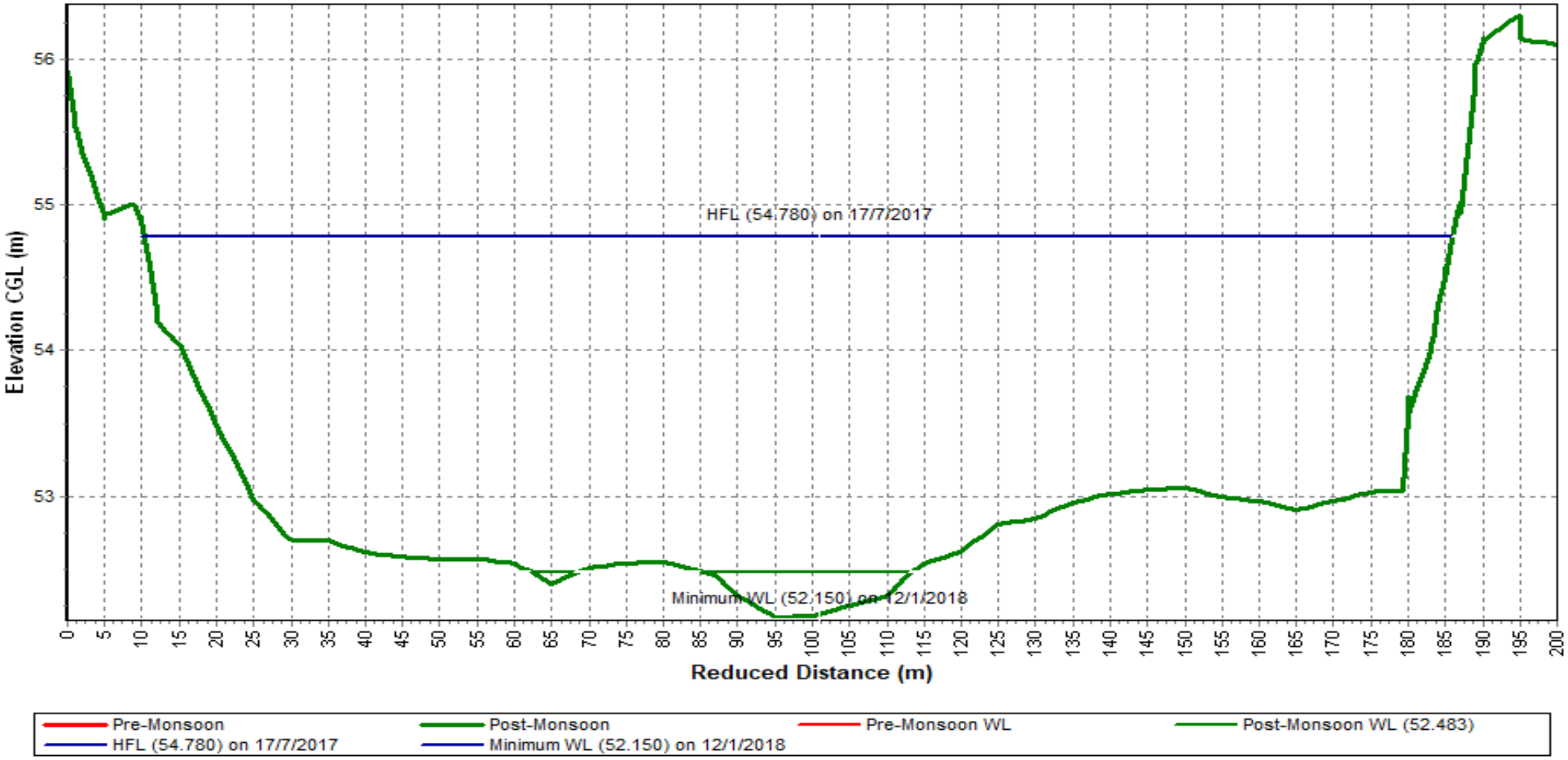
Sub-Division : Lower Godavari 1, Bhadrachalam



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Sangam (Sangam) **Division : Lower Godavari Div., Hyderabad**

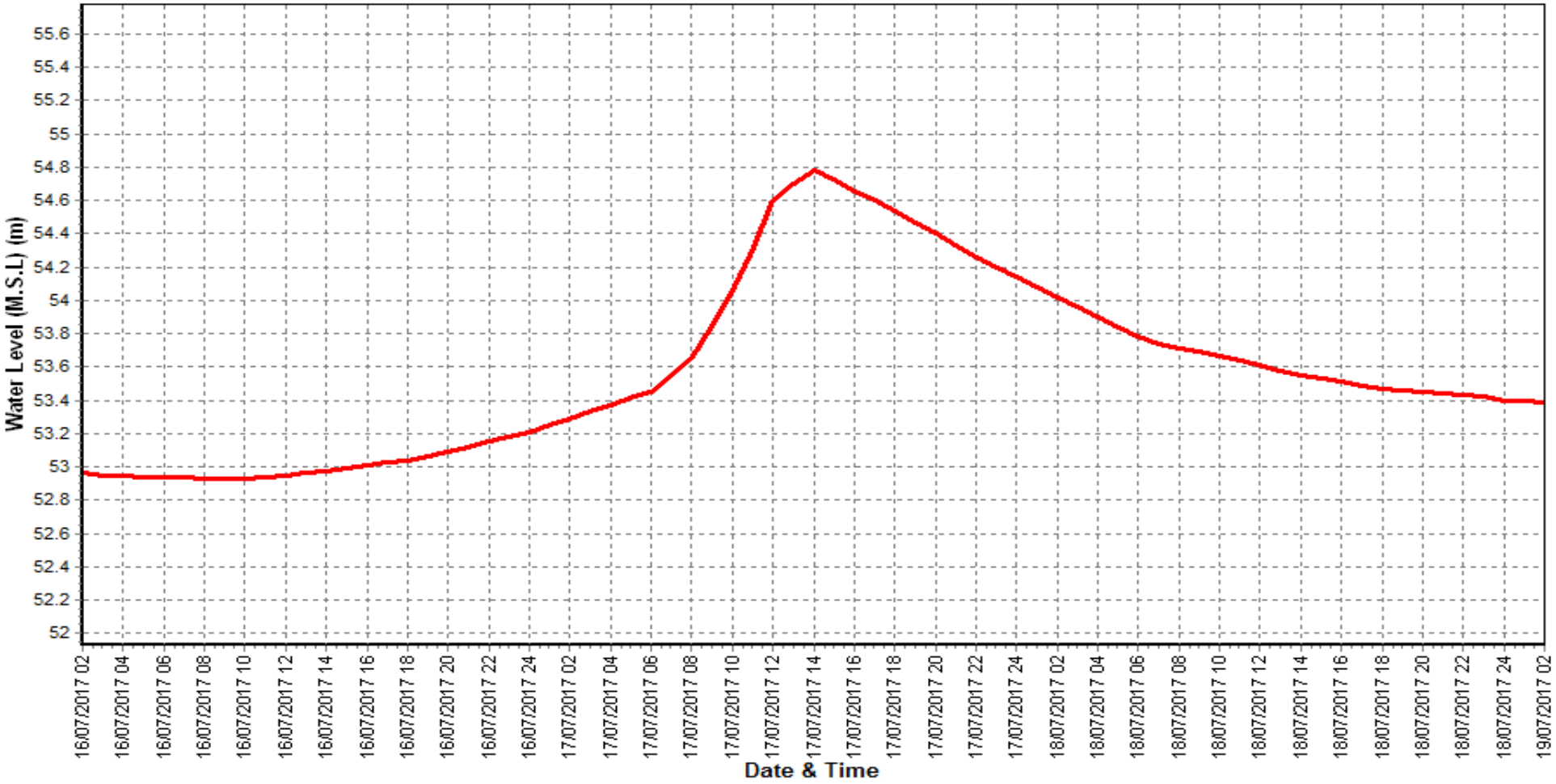
Local River : Mureru **Sub-Division : Lower Godavari 1, Bhadrachalam**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Sangam (Sangam) **Division : Lower Godavari Div., Hyderabad**

Local River : Mureru **Sub-Division : Lower Godavari 1, Bhadrachalam**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Bhadrachalam**	**Code**	:	**AG000E7**
State	:	Andhra Pradesh	District		Khammam
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Godavari
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 1, Bhadrachalam
Drainage Area	:	280505 Sq. Km.	Bank	:	Left
Latitude	:	17°39'57"	Longitude	:	80°53'02"
Zero of Gauge (m)	:	32.610 (m.s.l)	01.06.2007		
		Opening Date	Closing Date		
Gauge	:	15.06.2007	**HFL During 2017-18**	:	**43.390 Meter**
			Corres. Discharge	:	**16191 Cumecs (Estimated)**
Discharge	:	11.07.2007	**Date & Time of**	:	**20.07.2017**
			Occurance	:	**15:00 hrs.**
Sediment	:				
Water Quality	:	03.10.2006			

HFL Recorded so far in m : 50.96 03/08/2013

Corresponding Discharge (cumecs) : 49161*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2008-2009	25440	45.010	12.08.2008	10.30	33.190	27.05.2009
2009-2010	11661	41.390	29.08.2009	0.346	32.770	02.05.2010
2010-2011	51444	50.140	08.08.2010	7.811	33.160	06.06.2010
2011-2012	24066	44.960	03.09.2011	4.210	33.410	31.05.2012
2012-2013	28082	46.285	22.08.2012	7.499	33.410	04.06.2012
2013-2014	49188	50.960	03.08.2013	1.631	33.460	05.06.2013
2014-2015	39656	48.700	09.09.2014	18.03	33.500	08.05.2015
2015-2016	21030	44.360	23.06.2015	5.320	33.430	22.05.2016
2016-2017	40088	48.110	12.07.2016	5.667	33.410	01.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Bhadrachalam in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**2007-2008**	70604	2752	73356
2	**2008-2009**	48106	1051	49157
3	**2009-2010**	25079	977	26056
4	**2010-2011**	105890	2291	108181
5	**2011-2012**	46440	1066	47506
6	**2012-2013**	73189	1916	75105
7	**2013-2014**	139610	3181	142791
8	**2014-2015**	48293	1563	49856
9	**2015-2016**	41829	687	42517
10	**2016-2017**	78950	1881	80830
Average		67799	1736	69536

Stage-Discharge Data for the period 2017 - 2018

Station Name : Bhadrachalam (AG000E7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	33.620	6.975	36.105	905.8	36.300	1823	39.780	7990	36.550	2051 *	35.220	699.5
2	33.630	6.750	35.910	1300 *	36.300	1832	39.610	7147 *	36.590	2102 *	35.140	686.2
3	33.630	6.721	36.445	1601	36.195	1747	39.210	6356 *	36.500	1913	35.080	669.9
4	33.720	18.21 *	36.395	1551	36.090	1492	38.525	5100	36.750	2474	35.030	532.6 *
5	33.750	35.63	36.240	1534	35.955	1164	37.740	3384	36.535	2301	34.990	510.3 *
6	33.790	16.26	36.045	897.5	35.930	1321 *	37.375	2995	36.440	2125	34.925	545.8
7	33.940	31.20	35.940	1053	35.950	1126	37.130	2864	36.610	2385	34.930	477.5 *
8	33.975	33.80	35.830	1215 *	36.100	1469	37.200	2912	36.770	2337 *	34.890	456.1 *
9	33.910	25.40	35.600	983.7 *	35.940	1268	36.770	2337 *	36.695	2442	34.870	445.5 *
10	33.980	77.44 *	35.445	761.8	36.165	1651	36.730	2284 *	36.515	2153	34.760	389.0 *
11	34.030	91.94 *	35.280	662.0	37.020	3075	36.530	1979	36.415	2041	34.710	364.2 *
12	34.050	70.71	35.150	484.7	37.090	2778 *	36.310	1532	36.555	2261	34.710	364.2 *
13	34.040	70.18	35.060	522.8	38.340	4757 *	36.075	1473	36.655	2400	34.710	364.2 *
14	34.040	76.82	35.185	645.0	38.180	4940	35.910	1377	36.840	2431 *	34.690	354.4 *
15	34.505	268.9 *	35.345	777.6	37.610	3554 *	35.965	1377	37.080	2764 *	34.670	344.8 *
16	34.530	280.0 *	35.810	1194 *	37.060	3072	36.325	1559	37.160	2704	34.610	316.4 *
17	34.440	240.9 *	36.650	2059	36.895	2803	36.560	2064 *	37.090	2649	34.520	397.7
18	34.240	162.0 *	37.265	2946	36.795	2734	36.855	2763	36.685	2440	34.510	378.2
19	34.505	241.5	39.130	6281	38.195	5001	37.065	2827	36.490	1975 *	34.520	378.5 *
20	34.375	218.5	42.990	15807	39.010	5973 *	37.545	3357	36.205	1610	34.475	353.2
21	34.700	266.6	43.190	15350	39.035	5650	37.385	3136	36.095	1503	34.490	368.6
22	34.695	267.2	41.660	10851	38.785	5437	37.215	3020	35.980	1376 *	34.500	381.4
23	34.650	264.7	40.310	8613 *	38.645	5157	37.365	3417	35.770	1219	34.460	339.0
24	34.615	255.5	38.830	4981	38.455	4895	37.400	3232 *	35.855	1233	34.375	300.1
25	34.560	293.4 *	37.990	3743	37.980	4148 *	38.135	4304	35.935	1349	34.255	265.2
26	34.680	349.6 *	37.540	2998	37.600	3423	38.105	4334	35.875	1289	34.250	250.5 *
27	34.855	291.6	37.135	2622	37.730	3743 *	37.670	3217	35.830	1247	34.310	282.9
28	34.995	331.8	36.705	2010	38.210	4916	37.185	2728	35.700	1177	34.300	275.7
29	35.170	373.5	36.614	2259	37.970	4267	36.870	2566	35.590	974.0 *	34.320	286.3
30	36.015	901.7	36.710	2258 *	39.105	6857	36.600	2115 *	35.435	931.1	34.310	282.3
31			36.450	1962	40.510	9419			35.310	845.7		
Ten-Daily Mean												
I Ten-Daily	33.795	25.84	35.996	1180	36.092	1489	38.007	4337	36.596	2228	34.984	541.2
II Ten-Daily	34.276	172.1	36.786	3138	37.619	3869	36.514	2031	36.717	2327	34.612	361.6
III Ten-Daily	34.894	359.6	38.467	5241	38.548	5265	37.393	3207	35.761	1195	34.357	303.2
Monthly												
Min.	33.620	6.721	35.060	484.7	35.930	1126	35.910	1377	35.310	845.7	34.250	250.5
Max.	36.015	901.7	43.190	15807	40.510	9419	39.780	7990	37.160	2764	35.220	699.5
Mean	34.321	185.8	37.128	3253	37.456	3597	37.305	3192	36.339	1894	34.651	402.0

Annual Runoff in MCM = 34100 Annual Runoff in mm = 122

Peak Observed Discharge = 15807 cumecs on 20/07/2017 Corres. Water Level :42.990 m

Lowest Observed Discharge = 2.666 cumecs on 09/05/2018 Corres. Water Level :33.170 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Bhadrachalam (AG000E7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	34.310	244.3	33.870	95.32	33.805	62.75	33.580	29.06	33.300	7.389 *	33.160	2.887
2	34.290	263.6 *	33.870	95.21	33.765	55.48	33.600	33.91 *	33.310	7.664	33.170	2.908
3	34.260	249.1 *	33.880	96.26	33.750	53.22	33.610	34.53	33.305	6.847	33.200	3.561
4	34.260	280.3	33.880	124.8	33.650	41.47 *	33.620	36.80 *	33.295	7.932	33.190	3.414
5	34.230	269.2	33.870	94.94	33.440	15.52	33.640	39.12	33.290	7.693	33.195	3.406
6	34.200	189.1	33.870	98.15	33.650	38.60	33.640	39.19	33.290	7.623	33.180	3.153 *
7	34.140	164.2	33.870	90.63 *	33.650	39.66	33.520	26.69	33.280	6.965	33.175	2.977
8	34.100	156.6	33.860	93.64	33.640	37.12	33.500	22.57	33.260	5.685 *	33.170	2.872
9	34.060	160.7 *	33.870	94.48	33.600	32.36	33.365	11.15	33.250	5.741	33.170	2.666
10	34.070	164.8 *	33.865	92.74	33.440	16.30 *	33.360	10.60 *	33.210	3.958	33.290	7.131
11	34.100	161.4	33.850	84.88	33.460	18.02 *	33.340	9.435 *	33.210	3.833	33.350	11.87
12	34.110	171.8	33.870	99.92	33.400	11.20	33.340	10.72	33.200	3.702	33.400	13.23 *
13	34.070	158.7	34.090	173.0 *	33.380	10.82	33.340	10.53	33.180	3.197	33.460	18.02 *
14	34.050	163.6	34.110	181.4 *	33.380	10.84	33.330	10.33	33.170	2.908 *	33.430	14.47
15	34.030	151.5	34.120	185.7 *	33.380	9.799	33.310	7.237	33.180	3.153 *	33.390	13.61
16	34.000	131.9	34.155	218.8	33.390	11.55	33.320	7.788	33.170	2.940	33.370	12.79
17	34.000	137.0 *	34.165	221.8	33.390	12.04	33.340	8.156	33.180	3.166	33.360	13.17
18	34.000	131.0	34.160	220.4	33.410	13.96 *	33.330	8.889 *	33.170	3.026	33.350	10.83
19	34.000	129.9	34.090	195.3	33.450	16.45	33.330	8.698	33.170	3.024	33.360	11.38
20	33.965	117.9	34.050	162.7	33.450	16.02	33.330	9.369	33.170	3.025	33.360	10.60 *
21	33.950	116.6	34.050	156.6 *	33.480	18.69	33.330	9.130	33.180	3.127	33.360	11.38
22	33.950	113.1	34.030	147.7	33.510	22.29	33.310	8.167	33.180	3.153 *	33.360	11.26
23	33.950	114.2	34.030	146.8	33.510	22.16	33.310	8.268	33.170	2.962	33.365	11.58
24	33.940	114.7 *	34.020	144.3	33.550	27.53	33.330	8.456	33.170	2.967	33.365	11.47
25	33.910	104.1 *	34.010	142.7	33.570	29.88 *	33.310	7.867 *	33.185	3.048	33.365	11.43
26	33.890	89.40	33.940	114.7 *	33.580	29.49	33.310	7.397	33.185	3.059	33.380	12.20
27	33.890	105.3	33.880	88.99	33.570	28.36	33.310	7.403	33.180	2.972	33.350	10.00 *
28	33.880	92.39	33.850	84.13 *	33.560	27.26	33.310	7.193	33.185	3.005	33.330	9.228
29	33.860	96.05	33.810	60.33			33.310	7.867 *	33.170	2.908 *	33.320	8.842
30	33.880	97.73	33.830	67.11			33.300	7.389 *	33.170	2.908 *	33.260	5.726
31	33.880	93.94 *	33.820	65.97			33.300	6.768			33.300	7.343
Ten-Daily Mean												
I Ten-Daily	34.192	214.2	33.870	97.62	33.639	39.25	33.543	28.36	33.279	6.750	33.190	3.498
II Ten-Daily	34.032	145.5	34.066	174.4	33.409	13.07	33.331	9.115	33.180	3.197	33.383	13.00
III Ten-Daily	33.907	103.4	33.934	110.8	33.541	25.71	33.312	7.810	33.177	3.011	33.341	10.04
Monthly												
Min.	33.860	89.40	33.810	60.33	33.380	9.799	33.300	6.768	33.170	2.908	33.160	2.666
Max.	34.310	280.3	34.165	221.8	33.805	62.75	33.640	39.19	33.310	7.932	33.460	18.02
Mean	34.040	152.7	33.956	127.1	33.529	26.03	33.393	14.86	33.212	4.319	33.306	8.884

Peak Computed Discharge = 8613 cumecs on 23/07/2017 Corres. Water Level :40.310 m

Lowest Computed Discharge = 2.908 cumecs on 14/04/2018 Corres. Water Level :33.170 m

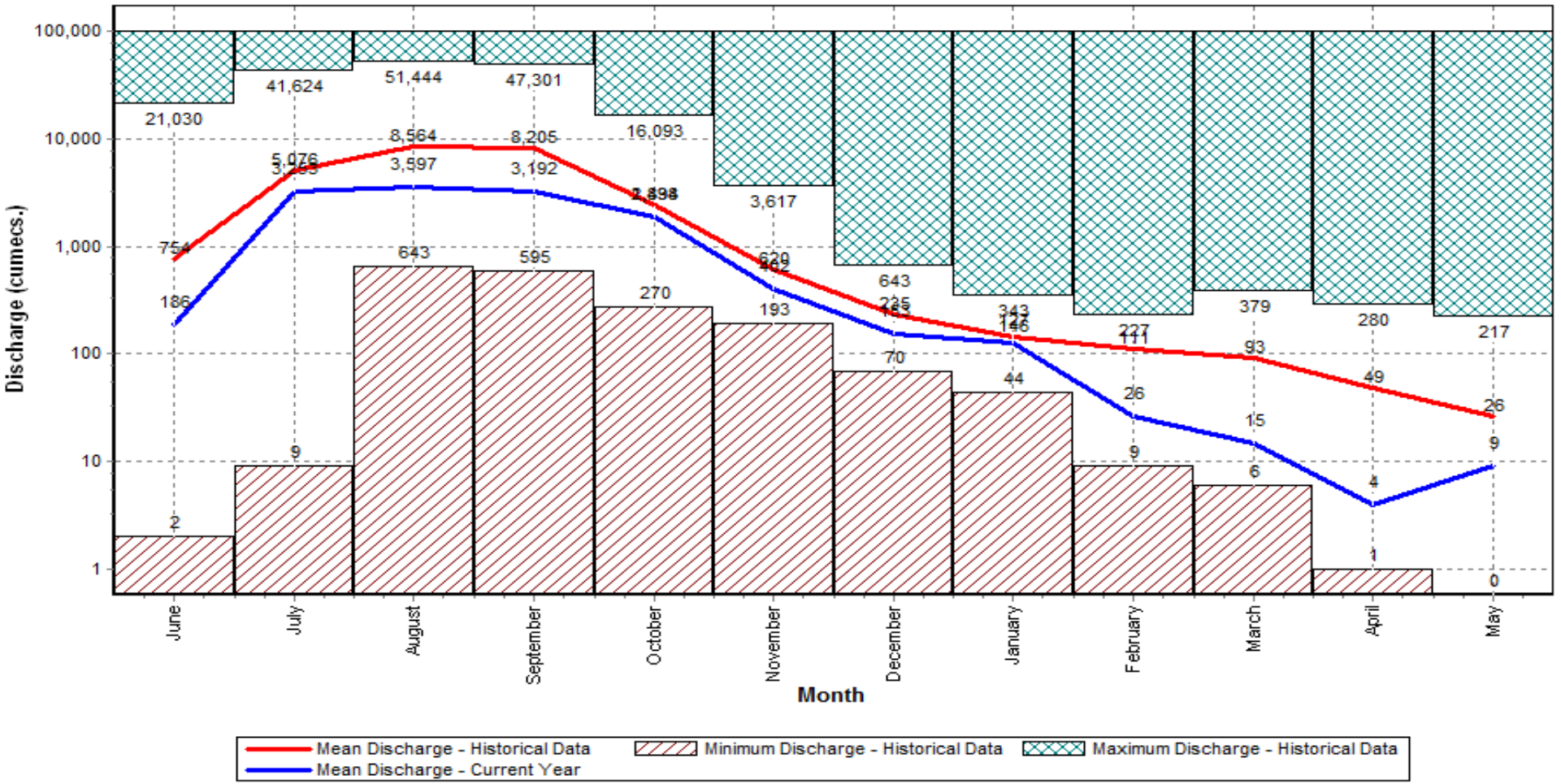
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Bhadrachalam (AG000E7) **Data considered : 2008-2018** **Division : Lower Godavari Div., Hyderabad**

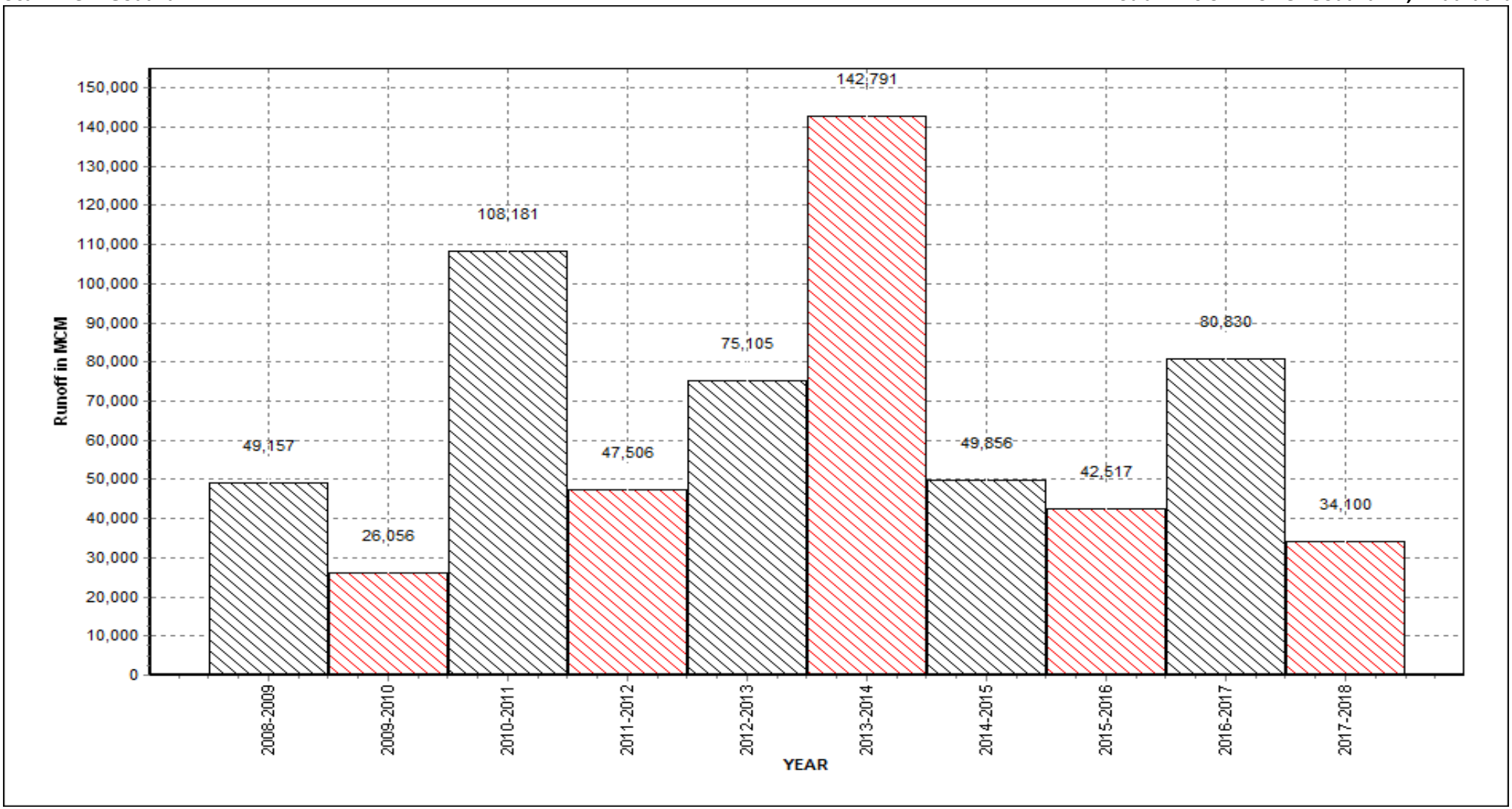
Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Annual Runoff Values for the period: 2008 - 2018

Station Name : Bhadrachalam (AG000E7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Note: Missing values have not been considered while arriving at Annual Runoff

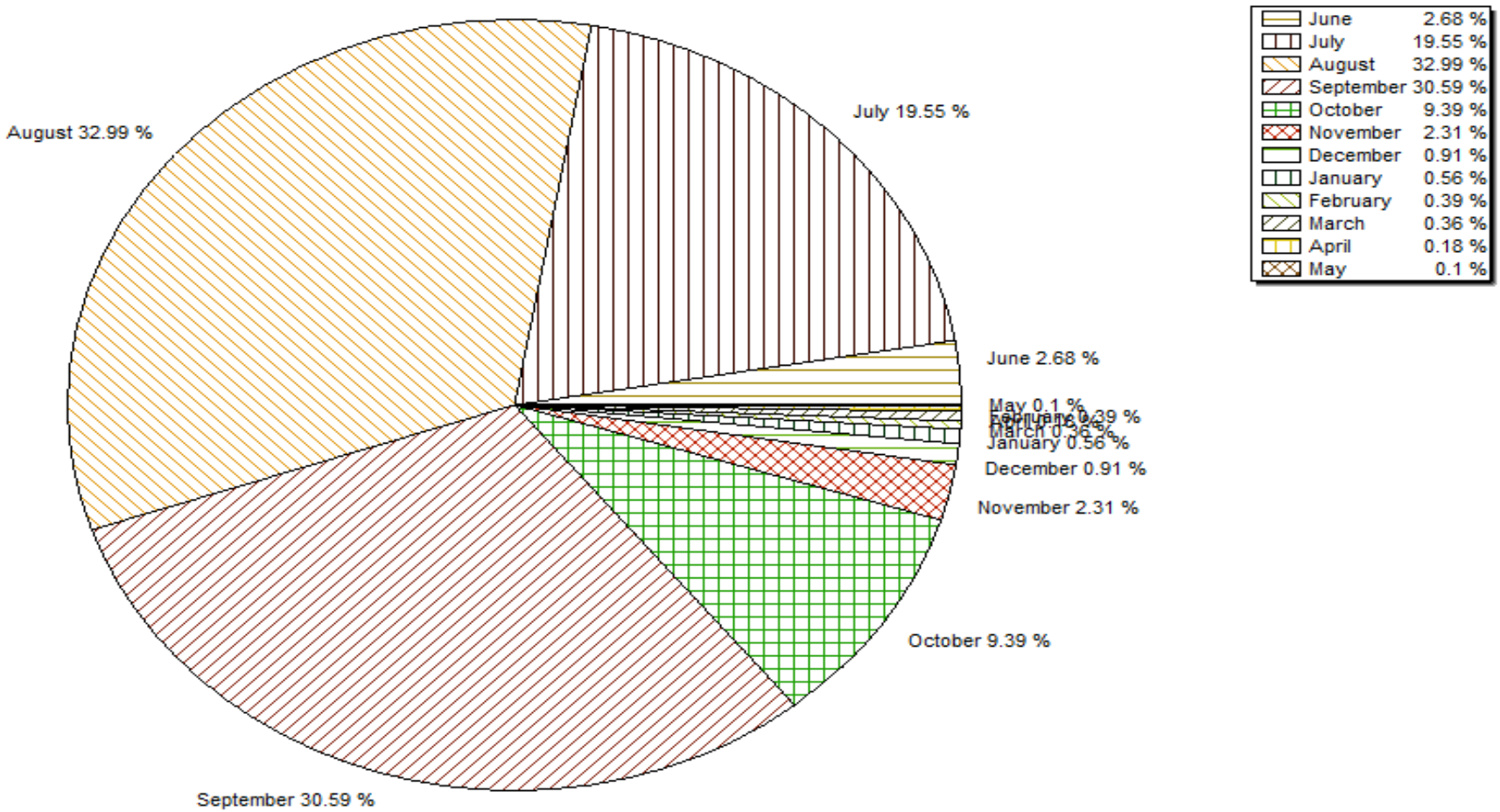
Monthly Average Runoff based on period : 2008-2017

Station Name : Bhadrachalam (AG000E7)

Division : Lower Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : Lower Godavari 1, Bhadrachalam



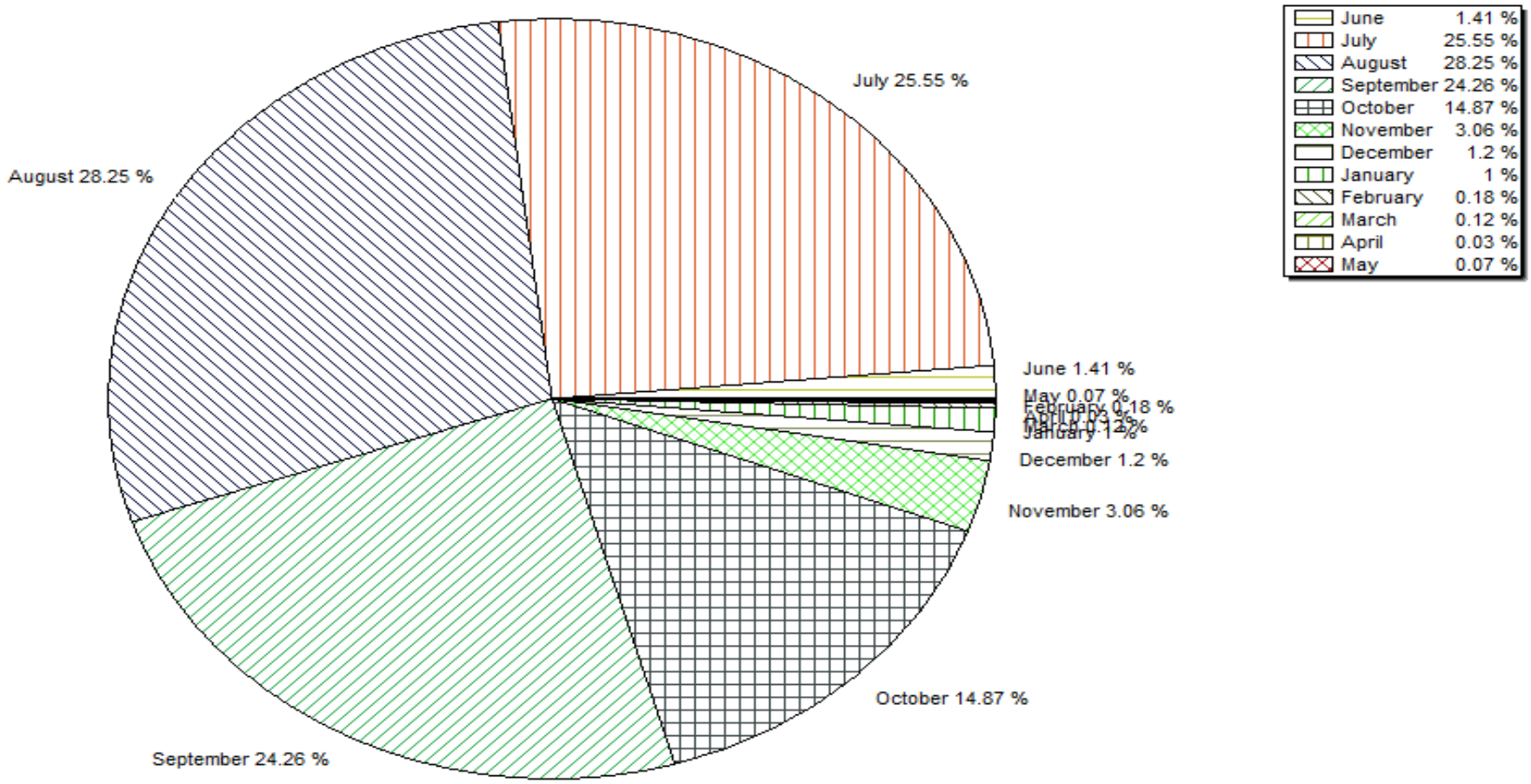
Monthly Runoff for the Year : 2017-2018

Station Name : Bhadrachalam (AG000E7)

Local River : Godavari

Division : Lower Godavari Div., Hyderabad

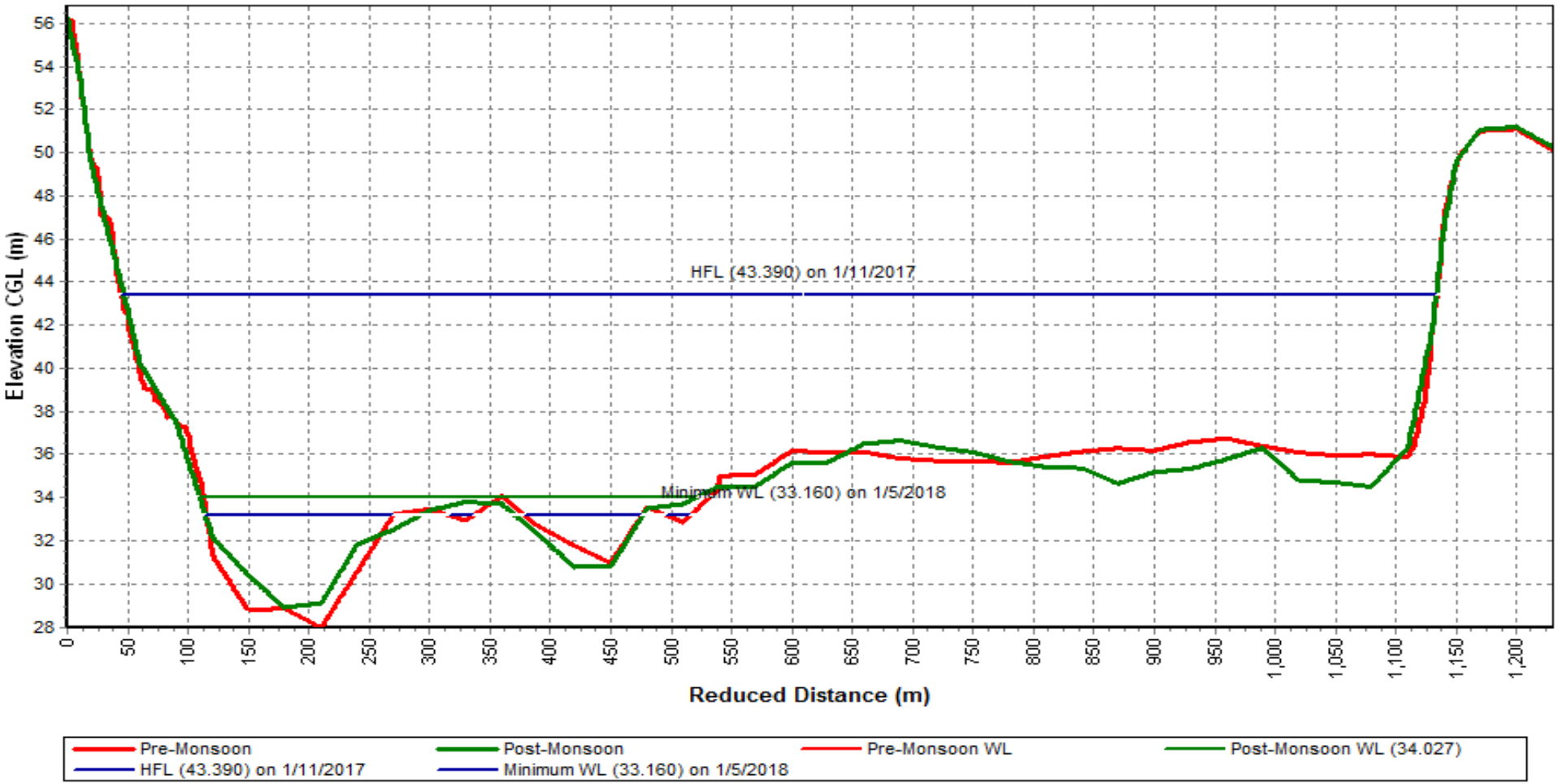
Sub-Division : Lower Godavari 1, Bhadrachalam



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Bhadrachalam (AG000E7) **Division : Lower Godavari Div., Hyderabad**

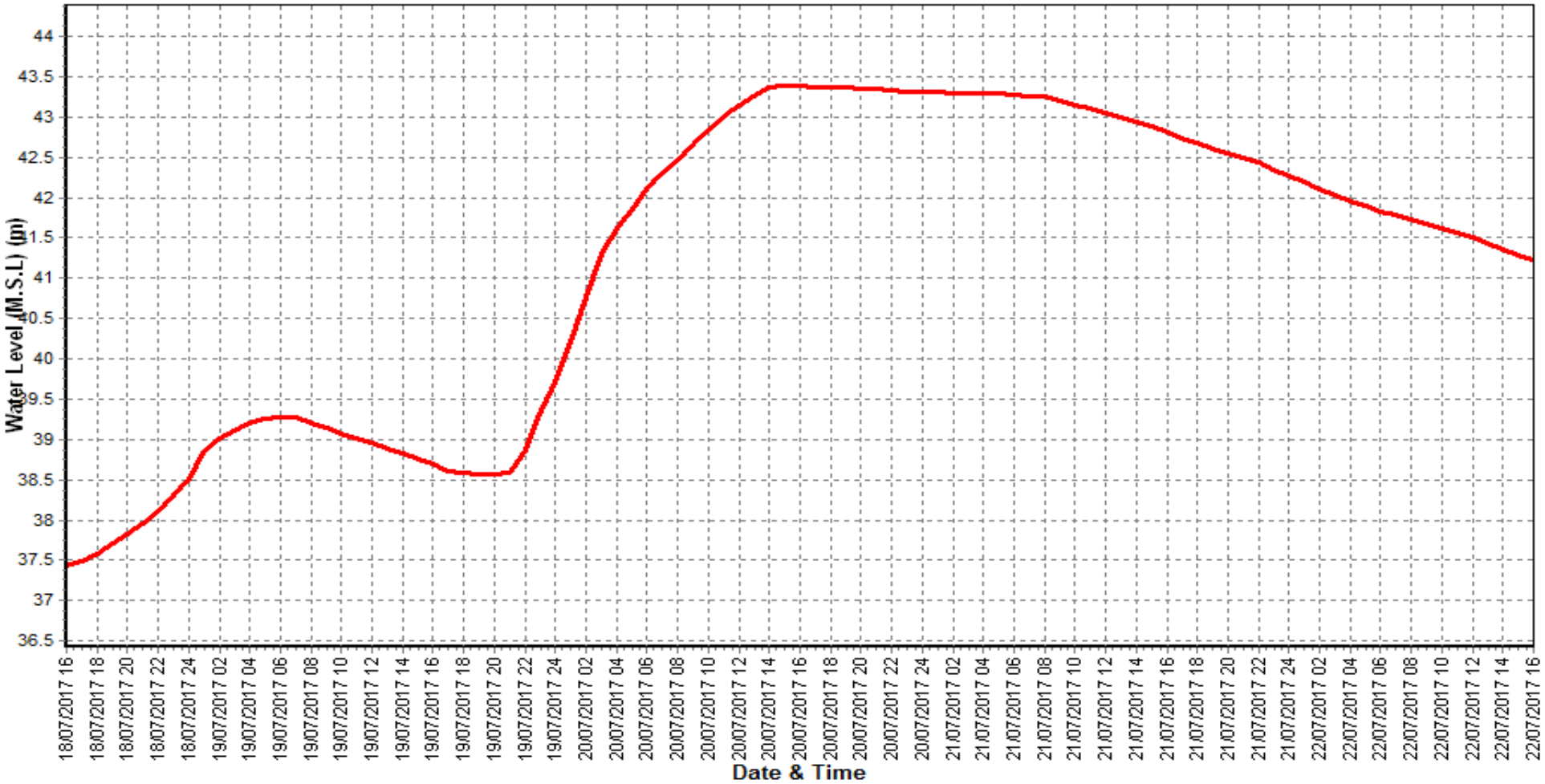
Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Bhadrachalam (AG000E7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**

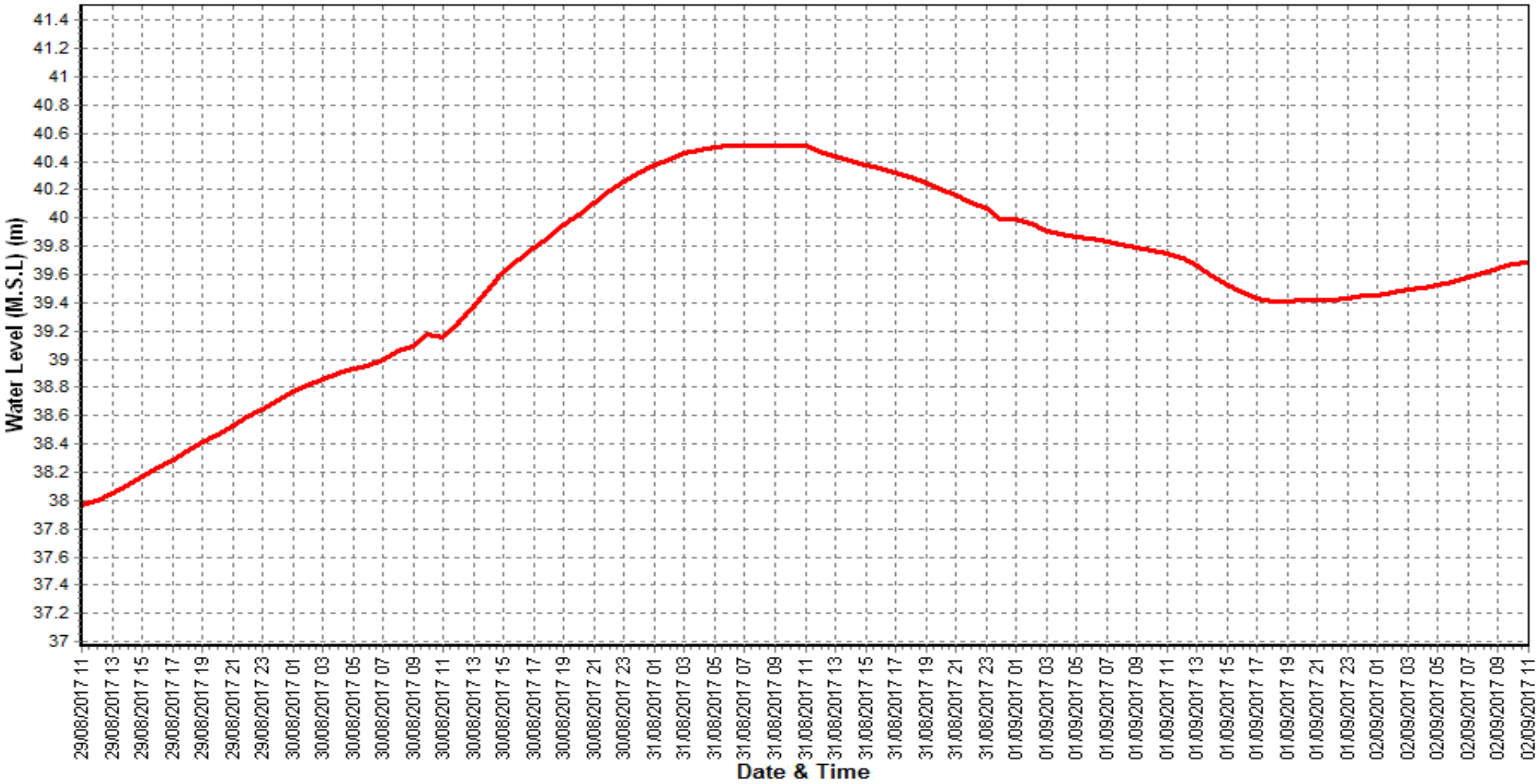


Time Span: 96 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Bhadrachalam (AG000E7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Time Span: 96 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**ALLAMVARI GHANPUR**	**Code**	:	**043-LGDHYD**
State	:	Telangana	District		Warangal
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Jampannavagu
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 1, Bhadrachalam
Drainage Area	:	1537 Sq. Km.	Bank	:	Left
Latitude	:	18°23'10	Longitude	:	80°23'34"
Zero of Gauge (m)	:	90.000 (Arbitary)	01.06.2017		
		Opening Date	Closing Date		
Gauge	:	01.06.2017			
Discharge	:	01.07.2017			
Sediment	:				
Water Quality	:				

Daily Discharge Data for the period 2017 - 2018

Station Name : ALLAMVARI GHANPUR (043-LGDHYD) **Division : Lower Godavari Div., Hyderabad**

Local River : **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1		8.500 *	2.675	15.53 *	15.20 *	5.738	2.220	0.888	1.009	0.528	0.400 *	1.513 *
2		8.500 *	2.929	14.00 *	9.250 *	4.766	2.220 *	0.905	1.058	0.530 *	0.400 *	1.616 *
3		14.46	29.00 *	8.500 *	14.51	4.027	2.210 *	0.901	1.847	0.492	0.400 *	4.500 *
4		8.260	10.81	7.669	20.56 *	4.500 *	1.982	0.936	1.850 *	0.490 *	0.400 *	31.50 *
5		5.038	5.935	29.00 *	17.65 *	4.500 *	1.878	0.917	1.356	0.489	0.400 *	10.50 *
6		3.252	42.86 *	20.40	33.00 *	4.600 *	1.722	0.904	1.115	0.448	0.420 *	4.100 *
7		2.074	23.64	42.50 *	74.56 *	4.400 *	1.947	0.900 *	0.850	0.417	0.450 *	2.230 *
8		3.000 *	14.06	35.00 *	58.00 *	4.200 *	1.736	0.897	0.881	0.415	0.450 *	1.080 *
9		3.000 *	23.00 *	27.00 *	23.50 *	4.000 *	1.730 *	0.908	0.582	0.412	0.430 *	1.070 *
10		1.465	29.65 *	12.50 *	37.50 *	4.100 *	1.730 *	0.921	0.580 *	0.522	0.430 *	0.890 *
11		1.494	19.50 *	10.02	17.64	4.200 *	1.616	0.887	0.560 *	0.520 *	0.460 *	1.050 *
12		2.224	17.68 *	8.243	20.23 *	4.100 *	1.289	0.920	0.542	0.554	0.550 *	1.200 *
13		1.978	15.75 *	6.122	39.86 *	4.100 *	1.376	0.920 *	0.541	0.521	0.604 *	1.090 *
14		7.595	8.927	12.79	15.23 *	4.100 *	1.644	0.920 *	0.518	0.410	0.604 *	1.090 *
15		34.14 *	15.75 *	9.223	23.23 *	4.000 *	1.510	0.920 *	0.545	0.431	0.580 *	1.090 *
16		11.65 *	11.78	8.225	19.00 *	4.100 *	1.513	0.604	0.536	0.430 *	0.550 *	1.080 *
17		32.00 *	9.068	13.00 *	14.22	2.487	1.510 *	0.591	0.519	0.430 *	0.500 *	1.081
18		38.00 *	12.03	13.45	9.381	2.308	1.439	0.496	0.520 *	0.420 *	0.522 *	1.086
19		45.50 *	32.85 *	8.122	9.860 *	2.015 *	1.438	0.572	0.455	0.420 *	0.448 *	0.791
20		29.00 *	171.0 *	7.074	6.324	2.015	1.391	0.522	0.408	0.420 *	0.420 *	0.790 *
21		14.63	64.25 *	4.688	6.328	2.587	1.292	0.380 *	0.559	0.420 *	0.420 *	0.806
22		8.603	39.00 *	3.769	6.240 *	2.404	1.393	0.380	0.524	0.420 *	0.431 *	0.882
23		4.000 *	27.85 *	3.879	6.441	2.267	1.213	0.484	0.501	0.420 *	0.448 *	0.832
24		2.924	24.95 *	3.500 *	6.154	2.654	1.210 *	0.510	0.488	0.420 *	0.655 *	0.832
25		2.465	62.32 *	4.385	16.72	2.564	1.210 *	0.522	0.480 *	0.420 *	0.785 *	0.850
26		2.060	28.54 *	28.00 *	10.49	2.175 *	1.052	0.508	0.440	0.420 *	0.785 *	0.842
27		1.337	15.85 *	27.50 *	8.794	2.175	1.080	0.494	0.440	0.400 *	0.888 *	0.840 *
28		1.431	32.56 *	12.09	7.349	2.215	1.068	0.490 *	0.534	0.400 *	0.908 *	0.830
29		2.629	31.20 *	27.00 *	6.420 *	2.234	1.043	0.481		0.400 *	1.390 *	1.013
30		3.000 *	21.50 *	17.50 *	7.062	2.118	0.962	0.885		0.400 *	1.450 *	1.276
31		2.779	18.87 *		6.349		0.960 *	1.023		0.400 *		1.346
Ten-Daily Mean												
I Ten-Daily		5.755	18.46	21.21	30.37	4.483	1.938	0.908	1.113	0.474	0.418	5.900
II Ten-Daily		20.36	31.43	9.627	17.50	3.343	1.473	0.735	0.514	0.456	0.524	1.035
III Ten-Daily		4.169	33.35	13.23	8.031	2.339	1.135	0.560	0.496	0.411	0.816	0.941
Monthly												
Min.		1.337	2.675	3.500	6.154	2.015	0.960	0.380	0.408	0.400	0.400	0.790
Max.		45.50	171.0	42.50	74.56	5.738	2.220	1.023	1.850	0.554	1.450	31.50
Mean		9.903	27.93	14.69	18.29	3.388	1.503	0.729	0.723	0.446	0.586	2.571

Annual Runoff in MCM = 214 **Annual Runoff in mm =**

Peak Observed Discharge = 23.64 cumecs on 07/08/2017 **Corres. Water Level :0.915 m**

Lowest Observed Discharge = 0.380 cumecs on 22/01/2018 **Corres. Water Level :0.420 m**

Peak Computed Discharge = 171.0 cumecs on 20/08/2017 **Corres. Water Level :3.160 m**

Lowest Computed Discharge = 0.380 cumecs on 21/01/2018 **Corres. Water Level :0.420 m**

* : Computed Discharge

Note: Missing values have not been considered while arriving at Annual Runoff

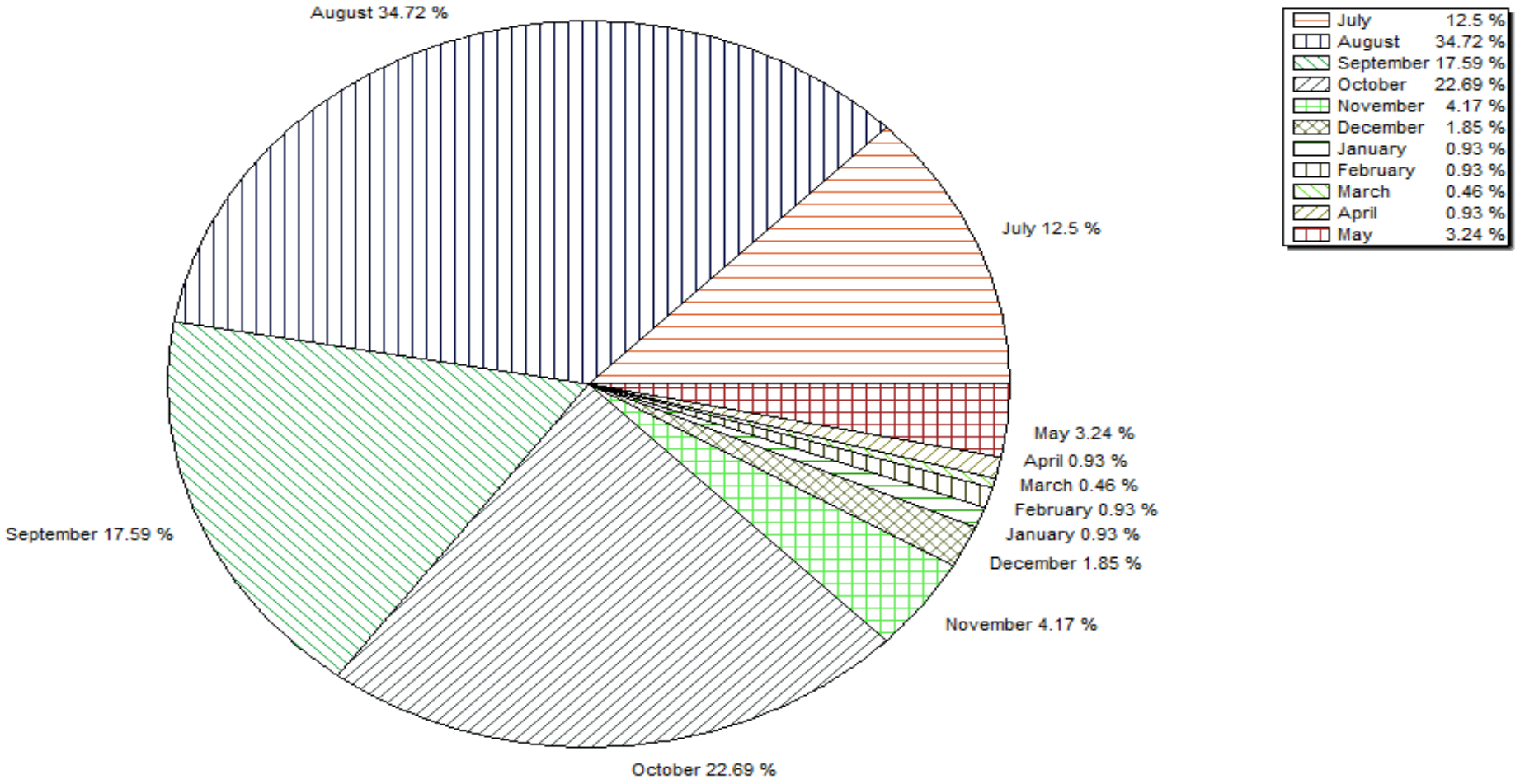
Monthly Runoff for the Year : 2017-2018

Station Name : ALLAMVARI GHANPUR (043-LGDHYD)

Division : Lower Godavari Div., Hyderabad

Local River :

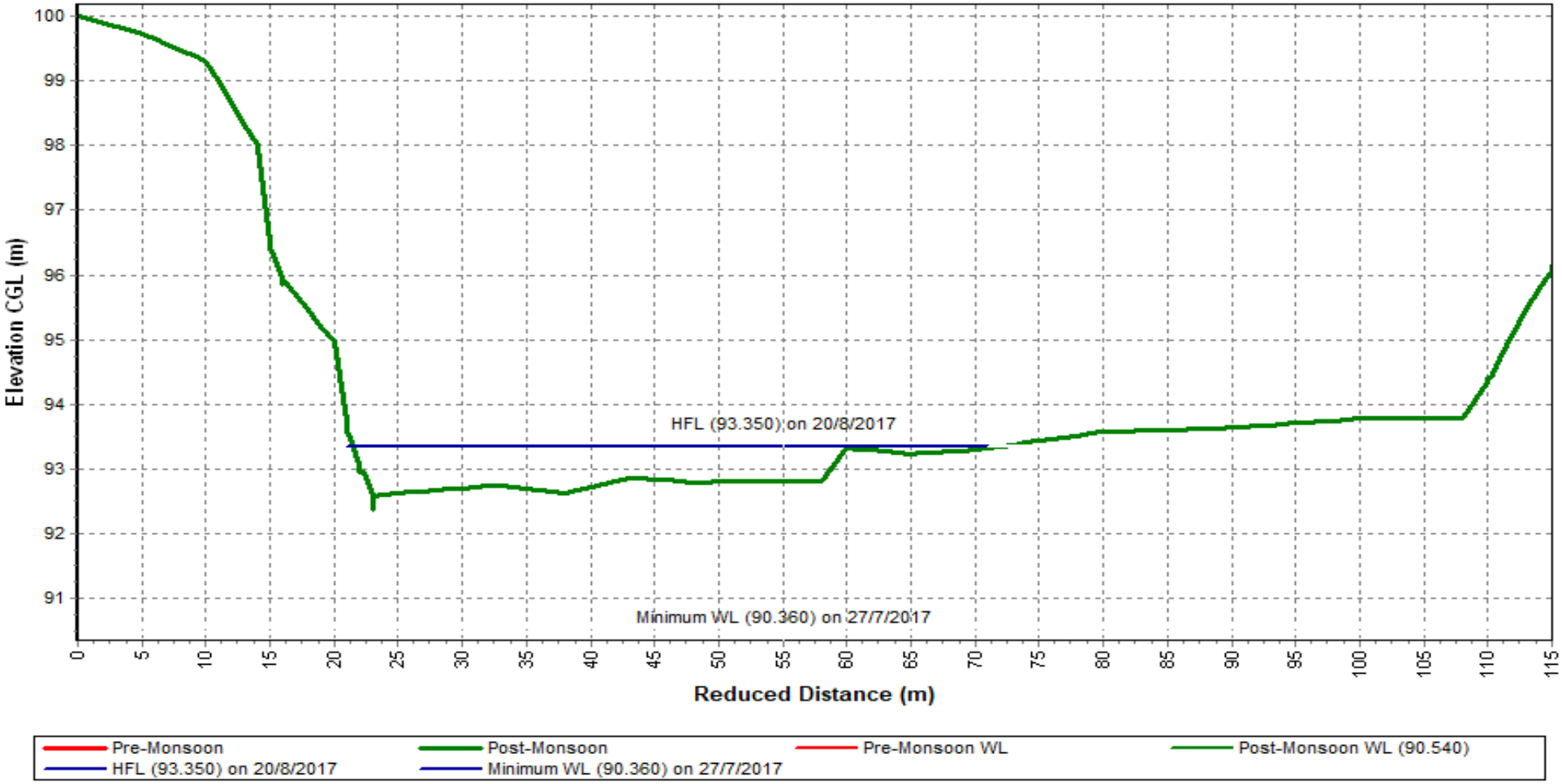
Sub-Division : Lower Godavari 1, Bhadrachalam



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : ALLAMVARI GHANPUR (043-LGDHYD) **Division : Lower Godavari Div., Hyderabad**

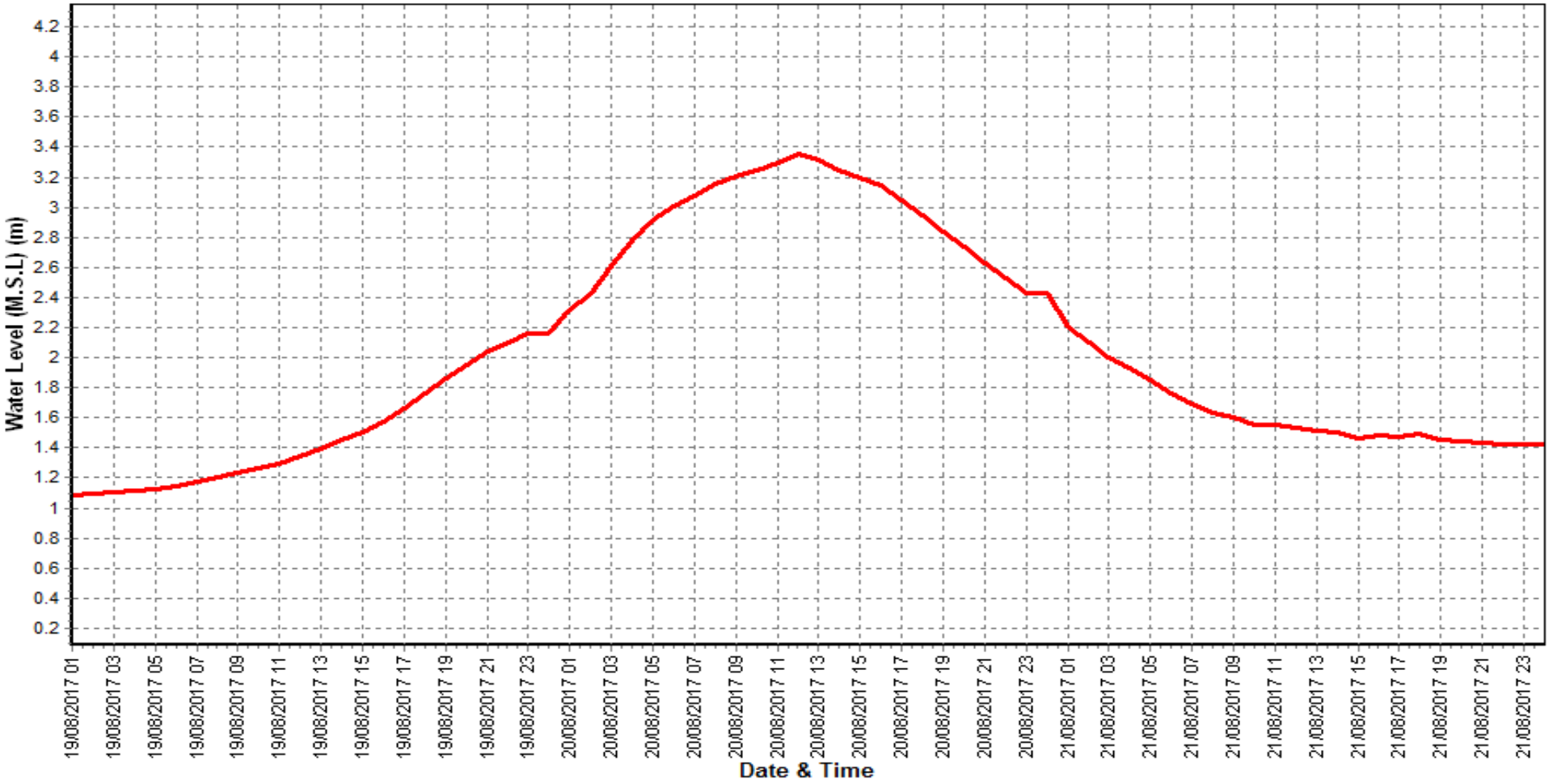
Local River : **Sub-Division : Lower Godavari 1, Bhadrachalam**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : ALLAMVARI GHANPUR (043-LGDHYD) **Division : Lower Godavari Div., Hyderabad**

Local River : **Sub-Division : Lower Godavari 1, Bhadrachalam**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Perur**	**Code**	:	**AG000G7**
State	:	Andhra Pradesh	District		Khammam
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Godavari
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 1, Bhadrachalam
Drainage Area	:	268200 Sq. Km.	Bank	:	Left
Latitude	:	18°33'00"	Longitude	:	80°22'00"
Zero of Gauge (m)	:	83.000 (m.s.l) 68.475 (m.s.l) 68.150 (m.s.l)	11.03.1964 17.09.1965 11.07.1976		
		Opening Date	Closing Date		
Gauge	:	11.03.1964	**HFL During 2017-18**	:	**79.490 Meter**
			Corres. Discharge	:	**21731 Cumecs (Estimated)**
Discharge	:	17.09.1965	**Date & Time of**	:	**19.07.2017**
			Occurance	:	**20:00 hrs.**
Sediment	:	24.02.1968			
Water Quality	:	24.10.1968			

HFL Recorded so far in m : 87.42 15/08/1986
Corresponding Discharge (cumecs) : 62843.089*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1966-1967	44418	85.455	06.09.1966	14.20	68.490	13.06.1966
1967-1968	30194	82.465	04.08.1967	13.07	69.120	12.06.1967
1968-1969	20662	80.045	18.08.1968	26.33	69.160	14.06.1968
1969-1970	33577	82.680	21.09.1969	23.43	69.890	22.05.1970
1970-1971	46078	83.875	20.08.1970	24.14	70.080	01.06.1970
1971-1972	18005	79.310	02.09.1971	12.10	69.130	31.05.1972
1972-1973	22129	80.355	06.07.1972	10.88	69.085	10.06.1972
1973-1974	32738	81.990	26.08.1973	12.44	68.995	01.06.1973
1974-1975	15559	79.760	12.08.1974	21.60	69.065	28.05.1975
1975-1976	34115	82.675	12.09.1975	29.03	69.143	03.06.1975
1976-1977	39427	84.040	22.07.1976	32.26	69.530	16.06.1976
1977-1978	27766	81.765	24.08.1977	45.74	69.678	04.06.1977
1978-1979	38329	83.230	01.09.1978	35.10	70.235	11.05.1979
1979-1980	36269	82.760	05.08.1979	38.90	70.185	20.06.1979
1980-1981	26480	82.015	03.08.1980	47.05	69.930	31.05.1981
1981-1982	51496	84.025	11.08.1981	30.60	70.520	12.05.1982

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1982-1983	11750	77.750	18.08.1982	13.50	69.970	11.05.1983
1983-1984	43879	85.080	13.08.1983	12.60	69.960	17.06.1983
1984-1985	14784	79.510	22.08.1984	24.80	70.130	25.05.1985
1985-1986	12986	78.120	13.08.1985	24.57	69.560	31.05.1986
1986-1987	62889	87.420	15.08.1986	18.30	70.460	27.05.1987
1987-1988	11809	78.515	10.07.1987	21.12	70.500	07.06.1987
1988-1989	39623	83.450	01.08.1988	24.40	70.050	31.05.1989
1989-1990	31414	82.750	25.07.1989	23.11	70.025	03.06.1989
1990-1991	62800	87.020	24.08.1990	27.15	70.745	23.05.1991
1991-1992	24830	81.655	18.08.1991	17.41	70.130	31.05.1992
1992-1993	35140	82.920	16.08.1992	11.94	70.170	30.05.1993
1993-1994	17642	80.070	05.08.1993	8.743	69.260	22.05.1994
1994-1995	41042	83.980	13.07.1994	9.615	69.260	03.06.1994
1995-1996	40205	83.750	21.10.1995	40.57	70.870	27.05.1996
1996-1997	8996	77.170	25.08.1996	32.97	70.300	31.05.1997
1997-1998	12350	78.270	23.08.1997	14.97	70.225	15.06.1997
1998-1999	18132	79.380	17.09.1998	40.79	69.850	14.05.1999
1999-2000	19223	80.280	12.08.1999	27.66	69.965	08.05.2000
2000-2001	40942	83.340	21.07.2000	12.90	70.690	31.05.2001
2001-2002	36288	82.730	22.08.2001	11.65	70.480	31.05.2002
2002-2003	24840	81.540	26.08.2002	11.07	70.420	31.05.2003
2003-2004	20116	80.160	27.07.2003	5.129	70.390	07.06.2003
2004-2005	16746	79.120	23.08.2004	18.67	69.840	31.05.2005
2005-2006	24436	81.130	18.09.2005	2.837	69.720	19.06.2005
2006-2007	51917	85.600	06.08.2006	26.65	70.600	31.05.2007
2007-2008	37378	82.810	09.08.2007	0.000	69.920	20.05.2008
2008-2009	25946	81.970	06.08.2008	4.467	69.760	19.05.2009
2009-2010	12393	77.750	28.08.2009	4.420	69.750	08.06.2009
2010-2011	44201	83.670	07.08.2010	12.42	69.630	07.06.2010
2011-2012	26113	80.930	02.09.2011	4.728	69.460	31.05.2012
2012-2013	27119	81.480	22.08.2012	2.557	69.410	14.06.2012
2013-2014	57245	85.080	02.08.2013	7.256	69.190	01.06.2013
2014-2015	44940	83.650	08.09.2014	28.23	69.350	30.05.2015
2015-2016	22779	80.080	22.06.2015	1.627	68.920	03.05.2016
2016-2017	35393	82.760	12.07.2016	6.034	69.050	09.05.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Perur in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**		1132	1132
2	**1966-1967**	66596	3442	70038
3	**1967-1968**	74120	5252	79372
4	**1968-1969**	51383	1877	53259
5	**1969-1970**	88114	1852	89966
6	**1970-1971**	109640	2528	112169
7	**1971-1972**	42701	1433	44134
8	**1972-1973**	34303	865	35168
9	**1973-1974**	110674	2957	113632
10	**1974-1975**	29471	1766	31238
11	**1975-1976**	103062	2345	105407
12	**1976-1977**	80553	1655	82208
13	**1977-1978**	60853	3810	64663
14	**1978-1979**	94801	3875	98675
15	**1979-1980**	60206	2672	62878
16	**1980-1981**	79557	2180	81737
17	**1981-1982**	82560	2427	84987
18	**1982-1983**	39648	1826	41474
19	**1983-1984**	120647	3582	124229
20	**1984-1985**	34670	1874	36544
21	**1985-1986**	41328	2155	43483
22	**1986-1987**	69856	1479	71336
23	**1987-1988**	22728	1494	24222
24	**1988-1989**	109733	2019	111752
25	**1989-1990**	63518	2326	65845
26	**1990-1991**	133867	2879	136746
27	**1991-1992**	43626	1342	44968
28	**1992-1993**	61093	1397	62490
29	**1993-1994**	35224	1517	36740
30	**1994-1995**	106573	4558	111131
31	**1995-1996**	62604	2737	65342
32	**1996-1997**	39988	2231	42219
33	**1997-1998**	32539	6053	38592
34	**1998-1999**	64435	2386	66821
35	**1999-2000**	70732	2343	73075
36	**2000-2001**	62775	1143	63918
37	**2001-2002**	63538	1319	64857
38	**2002-2003**	43073	953	44027
39	**2003-2004**	63632	1980	65612
40	**2004-2005**	31796	1415	33212
41	**2005-2006**	82213	1926	84139
42	**2006-2007**	106875	2011	108886
43	**2007-2008**	63327	1605	64931
44	**2008-2009**	40177	919	41097
45	**2009-2010**	22493	857	23350
46	**2010-2011**	97825	2405	100229
47	**2011-2012**	51532	1041	52573
48	**2012-2013**	78956	1635	80590
49	**2013-2014**	146055	3041	149096
50	**2014-2015**	52042	1404	53445
51	**2015-2016**	41929	655	42584
52	**2016-2017**	82394	1425	83820
Average		67687	2154	68539

Stage-Discharge Data for the period 2017 - 2018

Station Name : Perur (AG000G7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	69.120	13.31	71.370	901.5	72.160	1408	75.690	7350 *	72.490	1719 *	70.470	475.9
2	69.120	16.47	71.750	1180 *	71.825	1253	75.550	6991 *	72.310	1581 *	70.400	450.0
3	69.110	15.93	71.860	1255 *	71.605	1046	74.690	5020 *	72.620	1594	70.350	388.4
4	69.110	16.91 *	71.720	1160 *	71.660	1058	73.840	3448 *	72.245	1429	70.290	366.7 *
5	69.110	15.07	71.730	1167 *	71.595	980.9	73.370	2728 *	72.040	1317	70.260	353.9 *
6	69.110	14.63	71.510	1058	71.350	922.7 *	73.060	2234	72.265	1553	70.230	351.3
7	69.110	14.76	71.205	805.1	71.255	824.7	72.670	1828	72.300	1518	70.180	307.7
8	69.110	15.60	71.010	723.5 *	71.350	927.6	72.440	1769	72.190	1491 *	70.180	349.3
9	69.150	20.99	70.770	594.4 *	71.935	1294	72.660	1853 *	72.125	1349	70.110	319.7
10	69.410	71.68 *	70.585	508.1	73.070	2204	72.370	1626 *	72.040	1205	70.070	277.0 *
11	69.550	106.4 *	70.465	442.8	73.030	2234	72.035	1308	72.260	1508	70.020	258.0 *
12	69.530	89.48	70.495	483.6	74.690	5020 *	71.705	1105	72.480	1704	69.950	232.3 *
13	69.510	95.76	70.680	571.0	74.230	4124 *	71.575	985.7	72.780	1968	69.910	259.8
14	69.600	98.94	70.650	521.1	73.300	2657	71.650	1018	73.090	2348 *	69.870	205.4
15	69.580	175.2	70.480	458.0	72.970	2195 *	72.205	1488	73.170	2453 *	69.820	191.3
16	69.560	94.47	72.580	1789 *	72.900	2139	72.690	1849	72.905	2039	69.780	185.8
17	69.560	96.74	72.820	2187	72.750	1862	73.010	2245 *	72.615	1828	69.800	212.3
18	69.930	225.1 *	72.155	1702	72.640	1719	73.185	2312	72.255	1510	69.780	201.5
19	70.160	286.5	75.370	6545 *	74.280	4216 *	73.890	3530 *	71.930	1304 *	69.750	164.7 *
20	70.065	257.9	78.950	19085 *	74.830	5314 *	73.580	3037 *	71.683	1130	69.730	158.4 *
21	70.040	253.4	78.110	15408 *	74.690	5306	73.445	2883	71.423	984.7	69.700	149.2 *
22	69.945	220.2	76.790	9776	74.650	4938 *	73.595	2805	71.310	898.3 *	69.680	143.2 *
23	70.085	278.1	75.320	6425 *	74.550	4736 *	73.620	3070	71.673	1048	69.660	170.9
24	70.150	308.5	74.490	3937	73.595	2964	74.420	4481 *	71.553	980.8	69.640	178.6
25	70.090	284.8 *	73.460	3136	73.500	2917 *	74.230	4071	71.500	926.9	69.620	161.1
26	69.970	239.5 *	73.080	2508	73.625	3098	73.770	3167	71.465	894.5	69.610	152.0 *
27	70.155	318.7	72.680	1787	73.360	2714 *	73.165	2238	71.268	789.5	69.590	148.4
28	71.605	1076	72.710	1812	73.380	3004	72.745	1754	71.043	724.8	69.570	130.9
29	71.790	1202	72.710	1949	74.790	5207	72.420	1482	70.850	636.3 *	69.550	129.2
30	71.645	1068	72.310	1581 *	76.580	9898 *	72.400	1649 *	70.685	524.3	69.530	127.6
31			72.100	1587	75.990	8158 *			70.545	490.4		
Ten-Daily Mean												
I Ten-Daily	69.146	21.54	71.351	935.3	71.781	1192	73.634	3485	72.262	1476	70.254	364.0
II Ten-Daily	69.704	152.7	72.464	3379	73.562	3148	72.553	1888	72.517	1779	69.841	206.9
III Ten-Daily	70.548	525.0	73.978	4537	74.428	4813	73.381	2760	71.210	809.0	69.615	149.1
Monthly												
Min.	69.110	13.31	70.465	442.8	71.255	824.7	71.575	985.7	70.545	490.4	69.530	127.6
Max.	71.790	1202	78.950	19085	76.580	9898	75.690	7350	73.170	2453	70.470	475.9
Mean	69.799	233.1	72.642	3001	73.295	3108	73.189	2711	71.971	1337	69.903	240.0

Annual Runoff in MCM = 28752 Annual Runoff in mm = 107

Peak Observed Discharge = 9776 cumecs on 22/07/2017 Corres. Water Level :76.790 m

Lowest Observed Discharge = 0.000 cumecs on 01/04/2018 Corres. Water Level :68.700 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Perur (AG000G7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	69.510	130.7	69.330	68.63	69.110	28.98	69.070	24.85	68.700	0.000	68.750	2.099 *
2	69.500	126.5 *	69.340	70.53	69.090	26.69	68.970	12.50 *	68.700	0.000	68.750	2.099
3	69.490	117.5 *	69.340	70.12	69.050	19.94	68.890	4.920	68.690	0.000	68.760	2.502
4	69.480	105.3	69.330	69.41	69.030	18.50 *	68.890	4.920 *	68.690	0.000	69.020	30.74
5	69.460	101.6	69.320	68.11	69.030	17.57	68.890	5.023	68.700	0.000	69.285	94.71
6	69.450	99.90	69.270	55.92	69.030	18.07	68.870	4.785	68.700	0.000	69.100	84.50 *
7	69.430	90.99	69.280	60.50 *	69.030	17.58	68.860	4.303	68.700	0.000	68.790	8.342
8	69.420	101.0	69.290	61.21	69.010	15.65	68.820	4.324	68.690	0.000	68.750	3.370
9	69.400	83.50 *	69.610	151.0	68.990	14.11	68.820	3.806	68.690	0.000	68.750	3.943
10	69.390	81.50 *	69.530	126.9	68.960	10.50 *	68.820	3.800 *	68.690	0.000	68.780	5.642
11	69.380	82.66	69.510	114.8	68.930	8.380 *	68.810	3.700 *	68.690	0.000	68.840	10.36
12	69.370	83.54	69.520	130.8	68.910	6.674	68.780	3.356	68.690	0.000	68.860	11.50 *
13	69.380	84.94	69.510	125.5 *	69.535	131.3	68.770	2.528	68.690	0.000	68.920	21.50 *
14	69.360	81.04	69.500	120.5 *	68.940	11.44	68.760	2.229	68.690	0.000	68.890	17.08
15	69.360	66.78	69.500	120.5 *	68.890	7.001	68.740	1.842	68.690	0.000	68.870	15.03
16	69.360	74.75	69.490	119.6	68.900	5.994	68.740	1.794	68.710	0.000	68.870	16.15
17	69.360	74.75 *	69.480	111.1	68.890	5.626	68.730	1.928	68.710	0.000	68.840	11.42
18	69.350	69.39	69.450	108.3	69.300	62.50 *	68.730	1.930 *	68.710	0.000	68.790	8.242
19	69.350	70.47	69.410	92.82	69.330	86.58	68.730	1.812	68.700	0.000	68.750	3.300
20	69.350	70.87	69.390	84.66	69.170	52.44	68.720	1.861	68.700	0.000	68.730	2.100 *
21	69.350	71.48	69.320	70.50 *	69.170	52.27	68.720	1.922	68.710	0.000	68.710	1.600
22	69.340	67.81	69.290	66.08	69.190	53.18	68.720	1.698	68.710	0.000	68.700	1.265
23	69.330	66.11	69.270	55.52	69.210	59.67	68.710	0.576	68.720	0.000	68.680	0.880
24	69.320	65.50 *	69.270	57.80	69.220	60.13	68.710	0.406	68.720	0.000	68.680	0.000
25	69.310	63.50 *	69.260	55.35	69.200	57.50 *	68.710	0.406 *	68.720	0.000	68.670	0.000
26	69.300	62.48	69.250	52.50 *	69.160	47.30	68.710	0.406	68.730	0.000	68.670	0.000
27	69.300	60.14	69.230	51.32	69.130	39.40	68.700	0.579	68.730	0.000	68.690	0.000
28	69.280	55.12	69.180	40.50 *	69.090	31.84	68.700	0.569	68.730	0.000	68.730	3.280
29	69.270	56.24	69.170	38.22			68.700	0.570 *	68.730	0.000	68.760	4.324
30	69.300	61.77	69.160	37.84			68.700	0.570 *	68.730	0.000	68.750	4.101
31	69.330	66.50 *	69.140	34.70			68.700	0.560			68.740	3.468
Ten-Daily Mean												
I Ten-Daily	69.453	103.8	69.364	80.24	69.033	18.76	68.890	7.323	68.695	0.000	68.873	23.79
II Ten-Daily	69.362	75.92	69.476	112.9	69.079	37.79	68.751	2.298	68.698	0.000	68.836	11.67
III Ten-Daily	69.312	63.33	69.231	50.94	69.171	50.16	68.707	0.751	68.723	0.000	68.707	1.720
Monthly												
Min.	69.270	55.12	69.140	34.70	68.890	5.626	68.700	0.406	68.690	0.000	68.670	0.000
Max.	69.510	130.7	69.610	151.0	69.535	131.3	69.070	24.85	68.730	0.000	69.285	94.71
Mean	69.374	80.46	69.353	80.36	69.089	34.53	68.780	3.370	68.705	0.000	68.802	12.05

Peak Computed Discharge = 19085 cumecs on 20/07/2017 **Corres. Water Level :78.950 m**

Lowest Computed Discharge = 0.406 cumecs on 25/03/2018 **Corres. Water Level :68.710 m**

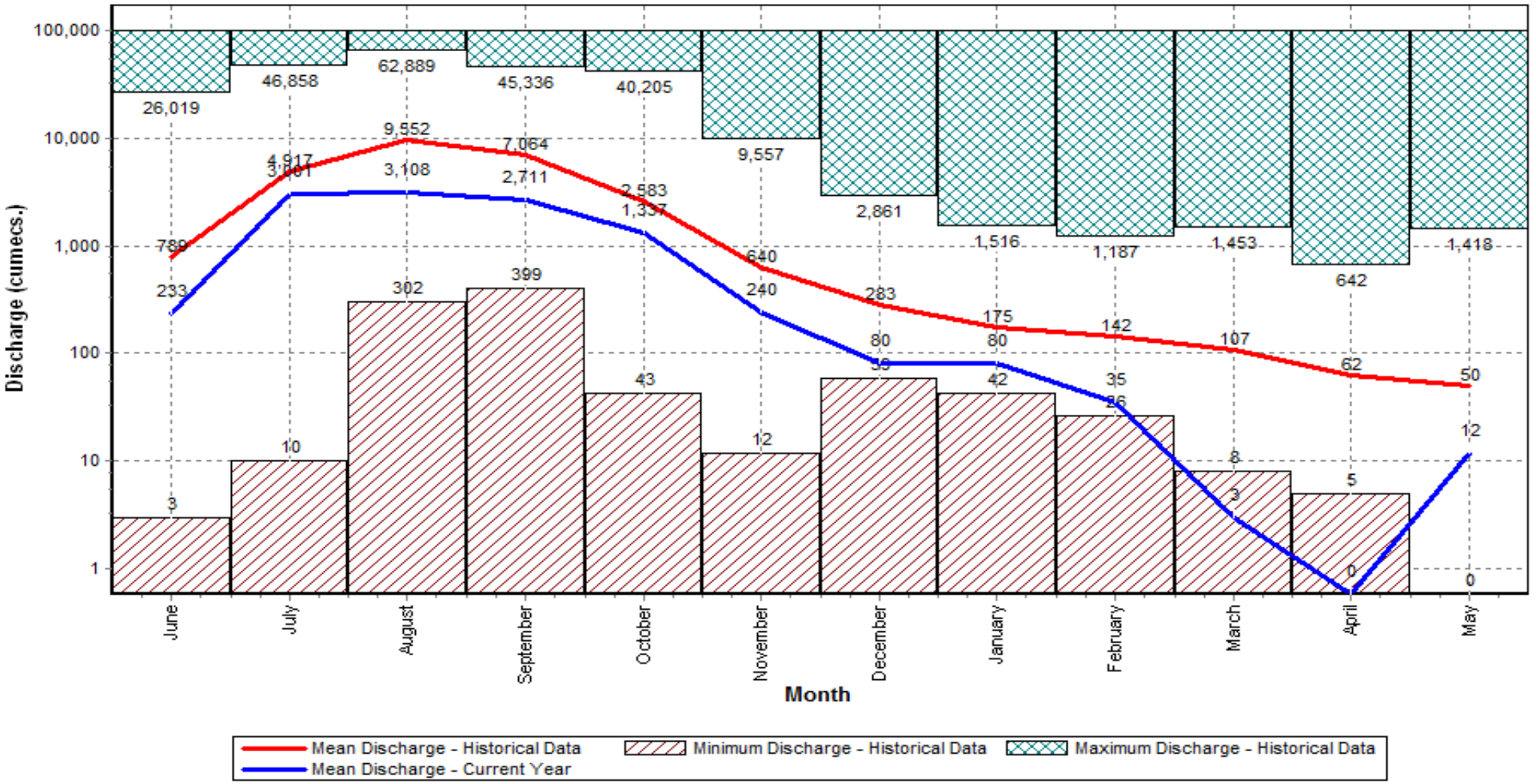
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Perur (AG000G7) **Data considered : 1966-2018** **Division : Lower Godavari Div., Hyderabad**

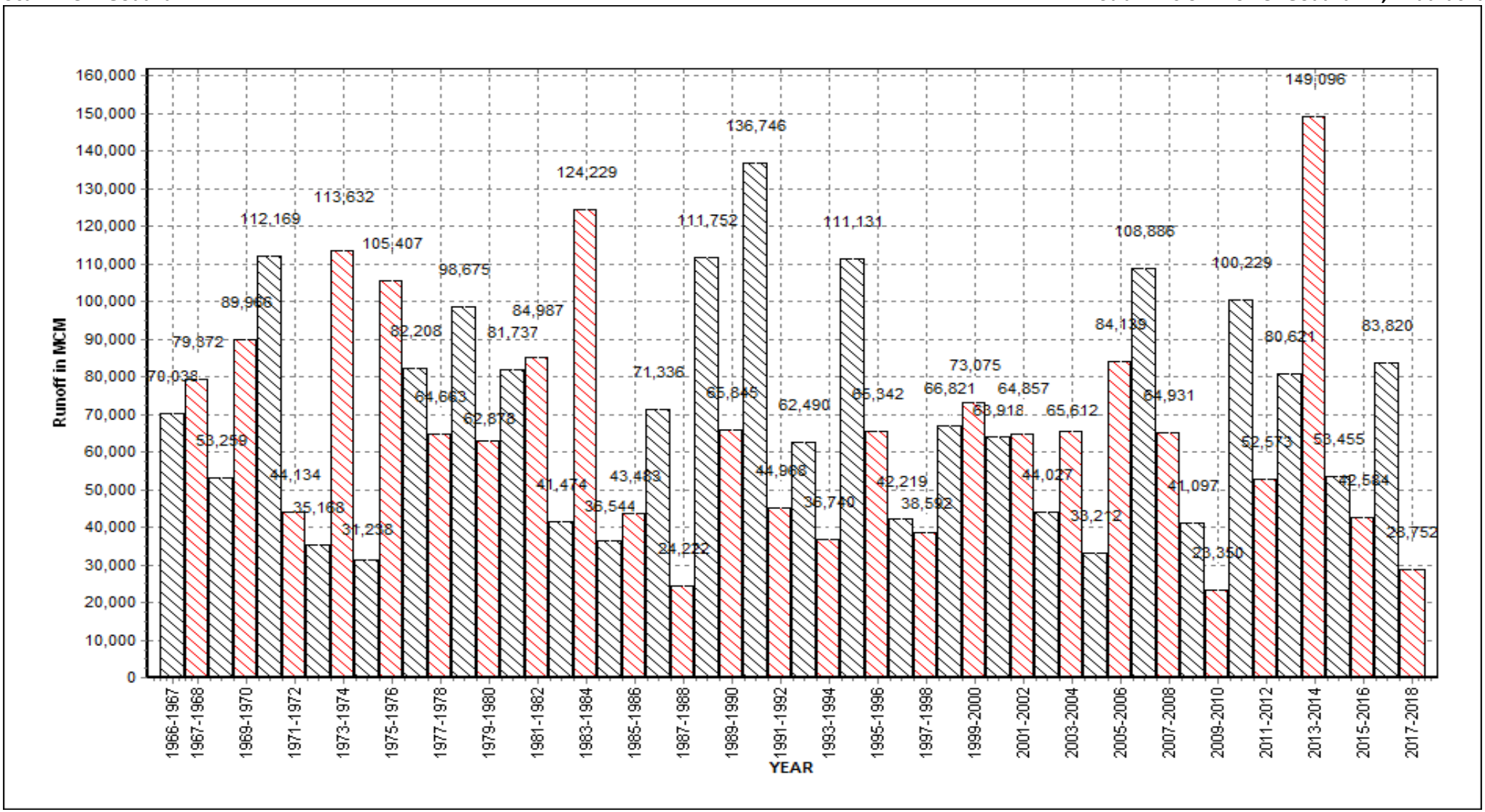
Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Annual Runoff Values for the period: 1966 - 2018

Station Name : Perur (AG000G7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Note: Missing values have not been considered while arriving at Annual Runoff

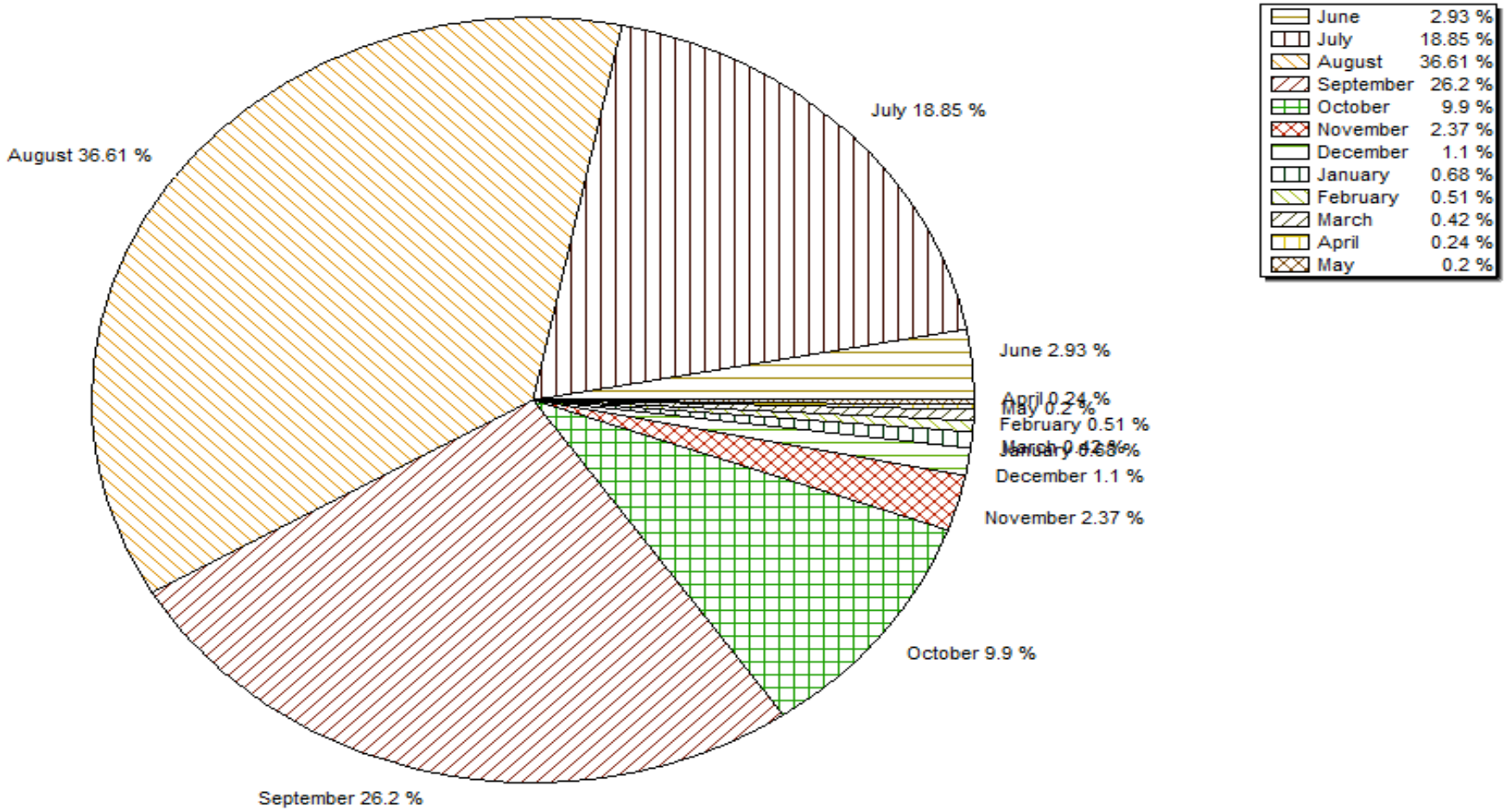
Monthly Average Runoff based on period : 1966-2017

Station Name : Perur (AG000G7)

Local River : Godavari

Division : Lower Godavari Div., Hyderabad

Sub-Division : Lower Godavari 1, Bhadrachalam



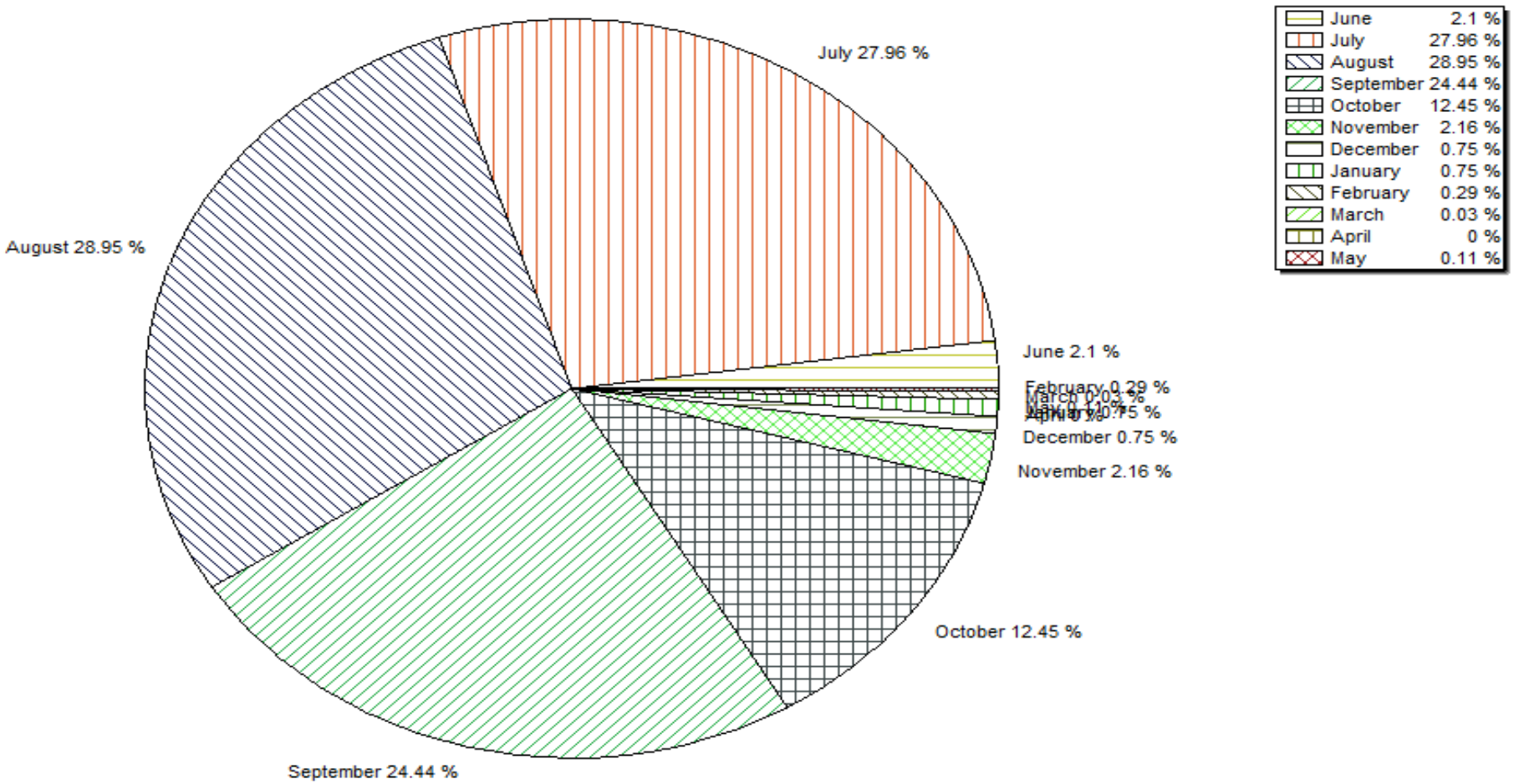
Monthly Runoff for the Year : 2017-2018

Station Name : Perur (AG000G7)

Local River : Godavari

Division : Lower Godavari Div., Hyderabad

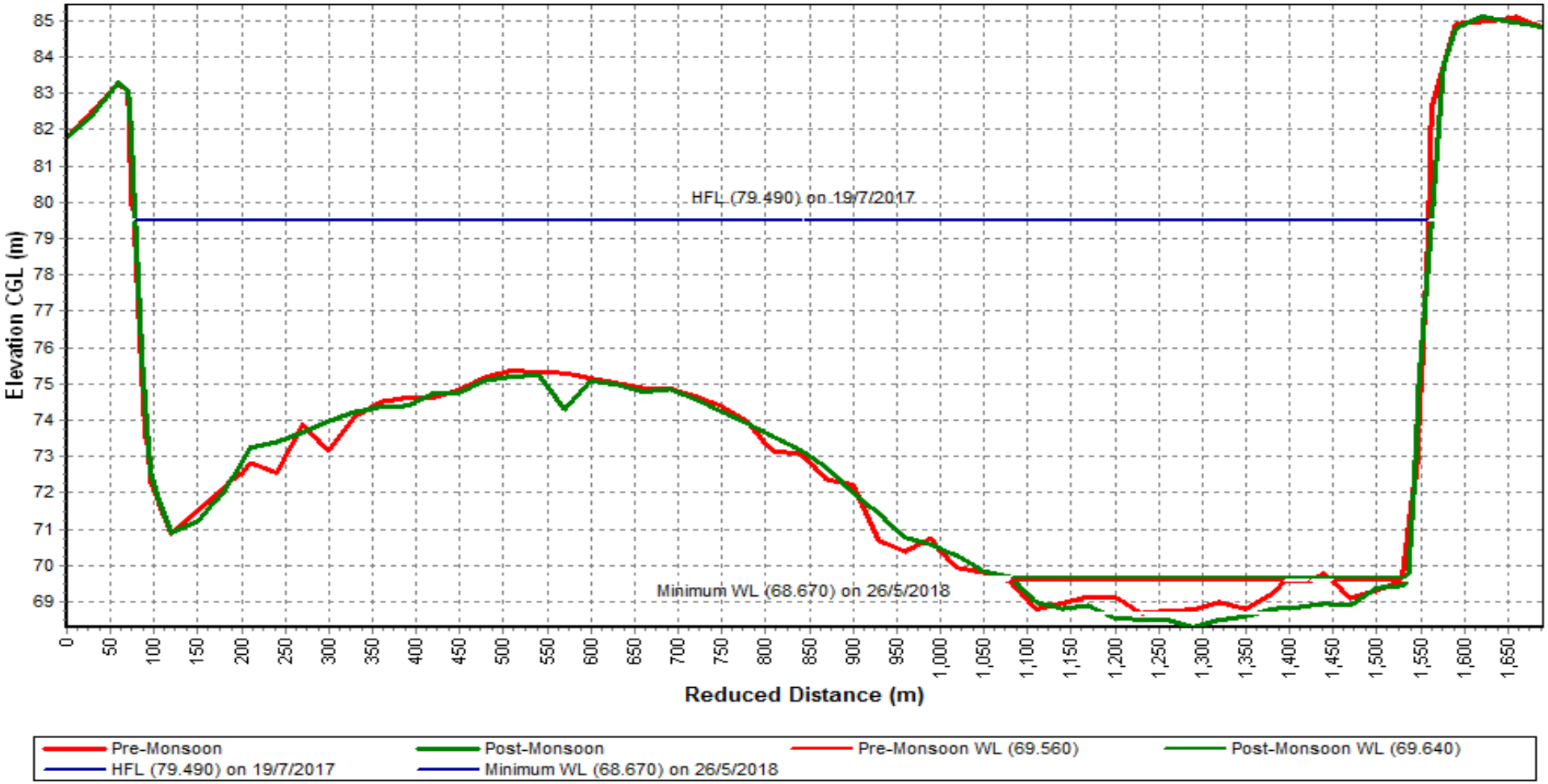
Sub-Division : Lower Godavari 1, Bhadrachalam



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Perur (AG000G7) **Division : Lower Godavari Div., Hyderabad**

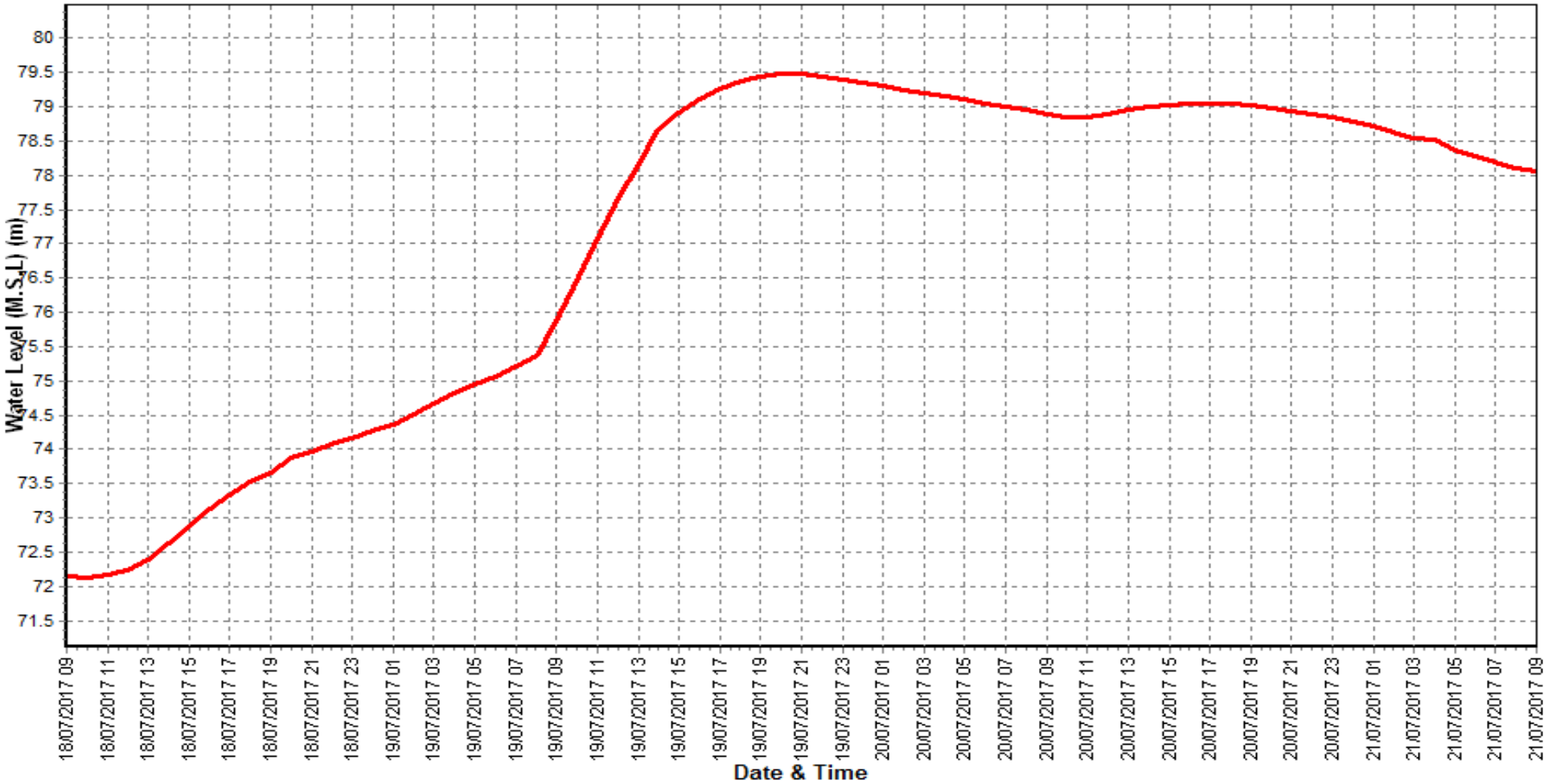
Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Perur (AG000G7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**

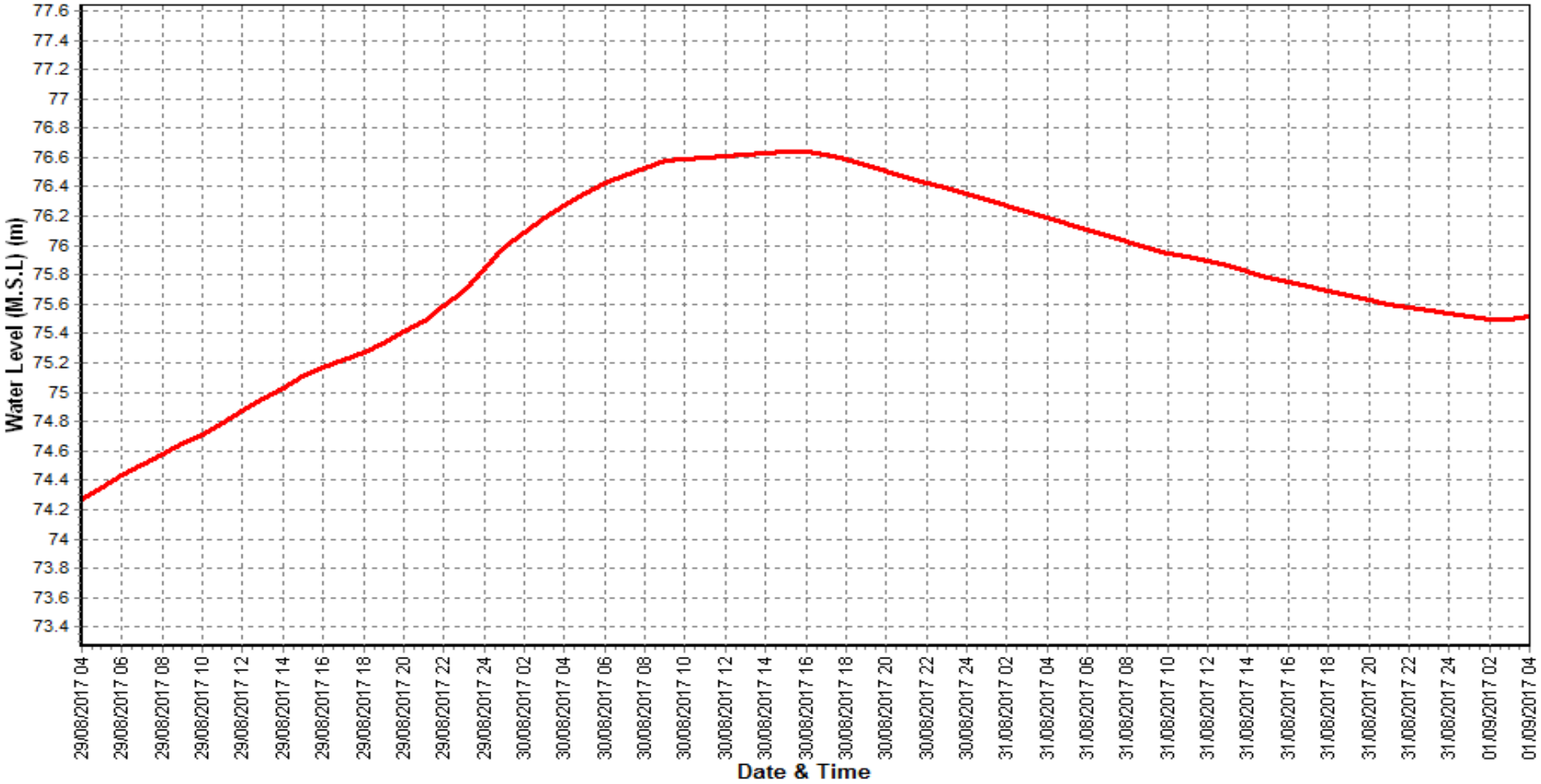


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Perur (AG000G7) **Division : Lower Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Lower Godavari 1, Bhadrachalam**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Pathagudem (Teriminal site of River Indravathi)**	**Code**	:	**AGG00B5**
State	:	Chhattisgarh	District		Dantewara
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Indravathi
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	40000 Sq. Km.	Bank	:	Left
Latitude	:	18°49'00"	Longitude	:	80°21'00"
Zero of Gauge (m)	:	85.750 (m.s.l)	20.07.1964		
		Opening Date	Closing Date		
Gauge	:	01.07.1964	**HFL During 2017-18**	:	**98.450 Meter**
			Corres. Discharge	:	**19729 Cumecs (Estimated)**
Discharge	:	20.07.1964	**Date & Time of**	:	**19.07.2017**
			Occurance	:	**11:00 hrs.**
Sediment	:	21.07.1965			
Water Quality	:	01.01.1972			

HFL Recorded so far in m : 103.61 23/08/1990
Corresponding Discharge (cumecs) : 6747*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1965-1966	7587	94.465	02.09.1965	3.520	86.200	31.05.1966
1966-1967	19718	99.810	05.09.1966	2.059	86.155	10.06.1966
1967-1968	16293	97.620	04.08.1967	5.359	86.355	12.06.1967
1968-1969	9340	95.085	15.09.1968	9.200	86.350	10.05.1969
1969-1970	17960	98.960	01.08.1969	11.79	86.300	25.05.1970
1970-1971	12182	96.400	29.08.1970	16.70	86.375	13.04.1971
1971-1972	6563	93.460	05.09.1971	6.799	86.305	30.05.1972
1972-1973	15155	97.638	05.07.1972	5.627	86.250	08.06.1972
1973-1974	13930	97.275	14.07.1973	6.695	86.330	03.06.1973
1974-1975	10302	95.490	11.08.1974	3.803	86.260	30.05.1975
1975-1976	15036	97.230	10.09.1975	4.095	86.265	02.06.1975
1976-1977	24862	101.958	21.07.1976	12.31	86.485	19.06.1976
1977-1978	14517	97.475	23.08.1977	15.61	86.385	15.06.1977
1978-1979	18461	98.880	16.08.1978	7.530	86.325	06.06.1978
1979-1980	16606	98.698	04.08.1979	6.400	86.335	02.05.1980
1980-1981	11190	95.915	02.08.1980	3.208	86.390	03.06.1980
1981-1982	18015	98.735	10.08.1981	3.899	86.490	07.06.1981
1982-1983	10045	94.940	14.08.1982	2.900	86.355	07.05.1983

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1983-1984	12062	96.850	20.08.1983	0.360	86.530	30.05.1984
1984-1985	12706	96.430	02.08.1984	0.700	86.525	02.06.1984
1985-1986	5880	94.080	08.08.1985	4.906	86.660	27.04.1986
1986-1987	32831	102.900	15.08.1986	4.800	86.660	08.06.1986
1987-1988	7297	94.490	29.08.1987	3.795	86.650	28.04.1988
1988-1989	9227	95.525	30.07.1988	3.757	86.505	31.05.1989
1989-1990	11316	96.775	23.08.1989	2.225	86.500	01.06.1989
1990-1991	31462	103.350	23.08.1990	10.90	86.440	27.05.1991
1991-1992	9081	96.400	31.07.1991	6.076	86.420	01.05.1992
1992-1993	14075	98.010	16.08.1992	4.836	86.195	27.04.1993
1993-1994	5183	93.380	04.08.1993	1.963	86.130	15.05.1994
1994-1995	20800	101.440	12.07.1994	2.566	86.150	03.06.1994
1995-1996	15679	99.175	25.07.1995	6.083	86.260	29.05.1996
1996-1997	4564	92.830	23.07.1996	5.611	86.240	08.06.1996
1997-1998	10803	96.090	23.08.1997	4.947	86.200	18.06.1997
1998-1999	5063	93.265	14.09.1998	2.193	86.160	02.05.1999
1999-2000	7969	94.630	02.09.1999	2.613	86.590	29.05.2000
2000-2001	9842	95.310	30.08.2000	1.045	86.480	28.05.2001
2001-2002	25077	101.150	21.08.2001	0.778	86.450	05.06.2001
2002-2003	11343	96.690	25.08.2002	0.290	86.220	31.05.2003
2003-2004	14072	97.010	24.08.2003	0.000	86.240	17.06.2003
2004-2005	12862	97.830	23.08.2004	1.819	86.470	31.05.2005
2005-2006	13753	97.550	14.09.2005	0.844	86.360	16.06.2005
2006-2007	35392	103.500	05.08.2006	2.850	86.250	31.05.2007
2007-2008	16810	99.010	08.08.2007	0.988	86.260	31.05.2008
2008-2009	12703	96.185	30.07.2008	0.100	86.150	31.05.2009
2009-2010	10446	95.235	28.08.2009	0.000	86.150	02.06.2009
2010-2011	25504	102.450	07.08.2010	3.964	86.420	15.06.2010
2011-2012	10853	96.160	02.09.2011	0.436	86.250	31.05.2012
2012-2013	13358	97.160	20.08.2012	0.231	86.240	08.06.2012
2013-2014	19496	99.770	01.08.2013	1.086	86.150	05.06.2013
2014-2015	23065	100.110	07.09.2014	2.580	86.450	15.06.2014
2015-2016	17670	97.560	22.06.2015	0.172	86.330	16.05.2016
2016-2017	6245	99.280	11.07.2016	1.429	86.520	01.05.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Pathagudem in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**	10584	317	10901
2	**1966-1967**	18993	620	19613
3	**1967-1968**	25823	708	26531
4	**1968-1969**	13441	517	13958
5	**1969-1970**	27409	722	28131
6	**1970-1971**	23209	729	23938
7	**1971-1972**	14746	544	15291
8	**1972-1973**	16681	529	17210
9	**1973-1974**	27607	761	28368
10	**1974-1975**	8571	348	8919
11	**1975-1976**	30500	647	31147
12	**1976-1977**	25804	623	26427
13	**1977-1978**	21605	822	22427
14	**1978-1979**	30359	661	31020
15	**1979-1980**	17092	431	17523
16	**1980-1981**	29964	536	30500
17	**1981-1982**	21916	517	22432
18	**1982-1983**	17089	384	17473
19	**1983-1984**	26754	548	27302
20	**1984-1985**	16234	372	16607
21	**1985-1986**	15606	496	16102
22	**1986-1987**	23816	420	24236
23	**1987-1988**	12202	404	12606
24	**1988-1989**	19685	405	20090
25	**1989-1990**	18810	1193	20003
26	**1990-1991**	46804	1179	47983
27	**1991-1992**	18082	676	18758
28	**1992-1993**	24009	391	24401
29	**1993-1994**	15006	347	15354
30	**1994-1995**	40472	1060	41532
31	**1995-1996**	20841	537	21378
32	**1996-1997**	16231	668	16899
33	**1997-1998**	13642	1479	15121
34	**1998-1999**	16182	453	16635
35	**1999-2000**	26372	402	26774
36	**2000-2001**	18078	196	18274
37	**2001-2002**	34355	299	34654
38	**2002-2003**	11082	103	11185
39	**2003-2004**	30839	654	31493
40	**2004-2005**	18820	446	19266
41	**2005-2006**	21365	354	21719
42	**2006-2007**	36592	480	37072
43	**2007-2008**	24520	428	24948
44	**2008-2009**	18300	172	18472
45	**2009-2010**	11128	140	11268
46	**2010-2011**	30610	562	31172
47	**2011-2012**	13510	148	13658
48	**2012-2013**	26035	294	26329
49	**2013-2014**	39374	620	39994
50	**2014-2015**	23834	497	24331
51	**2015-2016**	18377	205	18582
52	**2016-2017**	10195	334	10529
Average		21907	527	22433

Stage-Discharge Data for the period 2017 - 2018

Station Name : Pathagudem (AGG00B5) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	86.770	5.160	88.800	611.6	88.700	466.9	91.170	2438	89.050	783.7 *	87.810	272.8
2	86.740	5.174	88.540	527.9 *	88.410	514.4	90.180	1491 *	89.330	941.4 *	87.750	264.6
3	86.730	4.119	88.950	669.0	88.420	519.7	89.650	1136 *	89.430	884.8	87.700	245.0
4	86.720	5.272 *	88.970	735.7	88.620	475.6	89.270	851.6	89.090	784.2	87.670	193.2 *
5	86.690	4.078	88.800	654.6	88.470	422.3	89.150	833.0	89.000	738.6	87.630	181.2 *
6	86.670	2.777	88.760	623.6	88.390	460.7 *	88.920	827.0	89.180	840.1	87.590	198.0
7	86.640	2.556	88.430	525.0	88.550	448.5	88.730	810.1	89.330	842.7	87.550	193.3
8	86.685	3.184	88.290	418.0 *	88.650	479.5	88.700	791.4	89.250	895.1 *	87.520	188.8
9	86.760	4.337	88.120	349.4 *	89.580	844.0	89.090	805.5 *	89.040	803.9	87.480	186.7
10	86.820	13.92 *	87.960	242.0	90.060	1444	88.920	714.6 *	89.240	786.9	87.450	177.1
11	86.860	18.28 *	87.840	276.5	89.960	1390	88.750	879.5	89.320	836.3	87.420	123.5 *
12	87.090	24.77	87.820	251.3	89.400	982.7 *	88.590	741.3	89.570	1115	87.270	87.96 *
13	87.500	34.49	87.940	312.3	89.800	1232 *	88.650	749.7	89.700	1201	87.240	112.9
14	87.175	30.53	87.780	248.3	89.030	776.6	88.900	815.2	89.850	1265 *	87.200	92.78
15	87.375	33.99	88.220	432.5	89.120	822.0 *	89.150	821.0	87.870	257.9 *	87.180	103.1
16	87.450	37.17	90.150	1470 *	89.130	821.3	89.350	833.5	89.360	861.9	87.200	97.88
17	87.430	79.36	89.490	820.9	89.440	841.1	89.280	912.4 *	89.170	833.8	87.200	106.9
18	87.410	120.9 *	90.100	1465	89.180	838.7	89.310	830.0	88.820	766.5	87.180	102.6
19	87.275	65.76	97.990	14634 *	91.950	3222	90.050	1456	88.550	532.5 *	87.170	67.11 *
20	87.165	55.22	96.290	15734	91.720	2915 *	89.750	1236	88.360	502.3	87.160	90.89
21	87.165	54.49	93.710	4790	91.690	2942	90.030	1448	88.260	449.2	87.150	90.22
22	87.195	57.91	92.220	3467	90.850	2111	89.860	1308	88.270	409.7 *	87.150	86.80
23	87.435	84.26	90.570	1777 *	90.060	1456	89.770	1240	88.640	650.8	87.140	84.09
24	87.465	90.72	89.610	853.2	89.560	838.1	89.510	1049 *	88.460	557.7	87.140	84.27
25	87.380	113.5 *	89.030	786.6	89.800	1232 *	89.050	768.4	88.500	580.5	87.130	83.74
26	87.540	155.3 *	88.740	816.3	90.290	1607	88.780	732.8	88.450	552.1	87.110	55.73 *
27	87.950	275.6	88.660	707.5	89.950	1332 *	88.740	711.7	88.320	480.8	87.090	79.61
28	89.170	674.6	89.010	766.6	90.290	1620	88.680	675.1	88.180	409.0	87.060	77.74
29	89.070	805.0	88.870	639.2	91.800	3059	88.750	721.1	88.040	318.9 *	87.040	74.68
30	88.940	742.5	88.810	658.1 *	94.040	5172	88.930	719.8 *	87.940	312.0	87.030	71.14
31			88.790	670.7	92.650	3939			87.870	285.1		
Ten-Daily Mean												
I Ten-Daily	86.723	5.057	88.562	535.7	88.785	607.6	89.378	1070	89.194	830.1	87.615	210.1
II Ten-Daily	87.273	50.05	90.362	3564	89.873	1384	89.178	927.5	89.057	817.2	87.222	98.56
III Ten-Daily	87.931	305.4	89.820	1448	90.998	2301	89.210	937.4	88.266	455.1	87.104	78.80
Monthly												
Min.	86.640	2.556	87.780	242.0	88.390	422.3	88.590	675.1	87.870	257.9	87.030	55.73
Max.	89.170	805.0	97.990	15734	94.040	5172	91.170	2438	89.850	1265	87.810	272.8
Mean	87.309	120.2	89.589	1837	89.921	1459	89.255	978.2	88.821	692.9	87.314	129.1

Annual Runoff in MCM = 14103 Annual Runoff in mm = 353

Peak Observed Discharge = 15734 cumecs on 20/07/2017 Corres. Water Level :96.290 m

Lowest Observed Discharge = 1.632 cumecs on 07/04/2018 Corres. Water Level :86.360 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Pathagudem (AGG00B5) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	87.020	69.78	86.990	31.32	86.630	13.47	86.530	7.004	86.390	2.550 *	86.720	9.186
2	87.020	69.78 *	86.950	27.22	86.620	13.20	86.520	6.680 *	86.380	2.601	86.730	9.626
3	87.000	63.22 *	86.910	26.84	86.610	12.89	86.520	6.681	86.370	2.497	86.740	10.04
4	86.990	57.35	86.850	22.05	86.610	12.89 *	86.520	6.670 *	86.370	2.263	86.820	10.77
5	86.970	57.23	86.830	19.70	86.660	12.54	86.520	6.680	86.360	1.938	86.870	12.43
6	86.960	55.01	86.810	16.98	86.650	12.57	86.510	5.975	86.360	1.963	86.810	11.50 *
7	86.930	52.34	86.790	17.10 *	86.640	11.66	86.510	6.342	86.360	1.632	86.780	10.29
8	86.920	50.17	86.800	17.97	86.630	11.22	86.500	6.027	86.360	1.630 *	86.730	9.563
9	86.920	50.20 *	86.820	20.18	86.630	11.26	86.500	6.006	86.370	1.768	86.690	8.707
10	86.920	50.20 *	86.820	20.46	86.630	11.26 *	86.490	5.950 *	86.370	1.889	86.660	7.862
11	86.990	42.70	86.820	20.66	86.620	10.00 *	86.490	5.970 *	86.370	1.976	86.650	7.647
12	87.010	46.18	86.810	18.99	86.620	9.989	86.480	5.943	86.370	1.874	86.650	7.700 *
13	86.960	43.07	86.790	17.90 *	86.610	9.634	86.480	5.624	86.370	1.821	86.650	7.600 *
14	86.950	41.75	86.770	17.50 *	86.610	9.569	86.480	6.125	86.370	1.823 *	86.780	10.78
15	87.090	47.43	86.750	17.25 *	86.610	10.21	86.470	5.341	86.370	1.825 *	86.780	10.75
16	87.100	46.86	86.740	17.17	86.620	10.62	86.470	5.551	86.410	2.621	86.740	9.563
17	87.160	42.50 *	86.730	17.24	86.610	10.22	86.460	5.419	86.540	4.511	86.710	9.445
18	87.130	42.97	86.750	18.43	86.610	10.23 *	86.460	5.420 *	86.590	5.563	86.700	8.923
19	87.140	33.11	86.750	18.98	86.600	9.895	86.460	5.198	86.590	5.464	86.750	10.46
20	87.090	25.70	86.750	19.23	86.640	11.36	86.450	4.861	86.590	5.068	86.760	10.65 *
21	87.030	24.21	86.750	19.25 *	86.650	11.28	86.450	4.592	86.630	5.543	86.950	10.03
22	86.970	30.19	86.740	16.10	86.630	11.17	86.450	4.881	86.750	9.200 *	86.920	9.457
23	86.940	28.78	86.730	16.82	86.610	10.42	86.440	4.039	86.850	11.41	86.890	8.121
24	86.910	28.20 *	86.720	16.46	86.580	9.681	86.440	3.598	86.870	12.12	86.830	8.339
25	86.940	29.10 *	86.710	15.24	86.570	9.000 *	86.430	3.340 *	86.870	12.22	86.780	7.255
26	86.970	27.48	86.700	13.75 *	86.560	8.293	86.430	3.330	86.860	11.89	86.710	6.311
27	86.960	26.63	86.680	12.15	86.540	7.523	86.430	3.898	86.830	11.33	86.730	6.850 *
28	86.970	27.83	86.670	12.50 *	86.540	7.397	86.420	3.751	86.800	10.91	86.680	6.393
29	87.090	29.11	86.660	14.59			86.410	3.200 *	86.770	10.00 *	86.680	6.294
30	87.090	29.15	86.650	14.78			86.410	3.320 *	86.740	9.230 *	86.660	5.153
31	87.040	28.89 *	86.640	13.86			86.390	2.844			86.760	8.558
Ten-Daily Mean												
I Ten-Daily	86.965	57.53	86.857	21.98	86.631	12.29	86.512	6.402	86.369	2.073	86.755	9.998
II Ten-Daily	87.062	41.23	86.766	18.33	86.615	10.17	86.470	5.545	86.457	3.255	86.717	9.352
III Ten-Daily	86.992	28.14	86.695	15.05	86.585	9.345	86.427	3.709	86.797	10.38	86.781	7.524
Monthly												
Min.	86.910	24.21	86.640	12.15	86.540	7.397	86.390	2.844	86.360	1.630	86.650	5.153
Max.	87.160	69.78	86.990	31.32	86.660	13.47	86.530	7.004	86.870	12.22	86.950	12.43
Mean	87.006	41.84	86.770	18.34	86.612	10.69	86.468	5.170	86.541	5.237	86.752	8.912

Peak Computed Discharge = 14634 cumecs on 19/07/2017 **Corres. Water Level :97.990 m**

Lowest Computed Discharge = 1.630 cumecs on 08/04/2018 **Corres. Water Level :86.360 m**

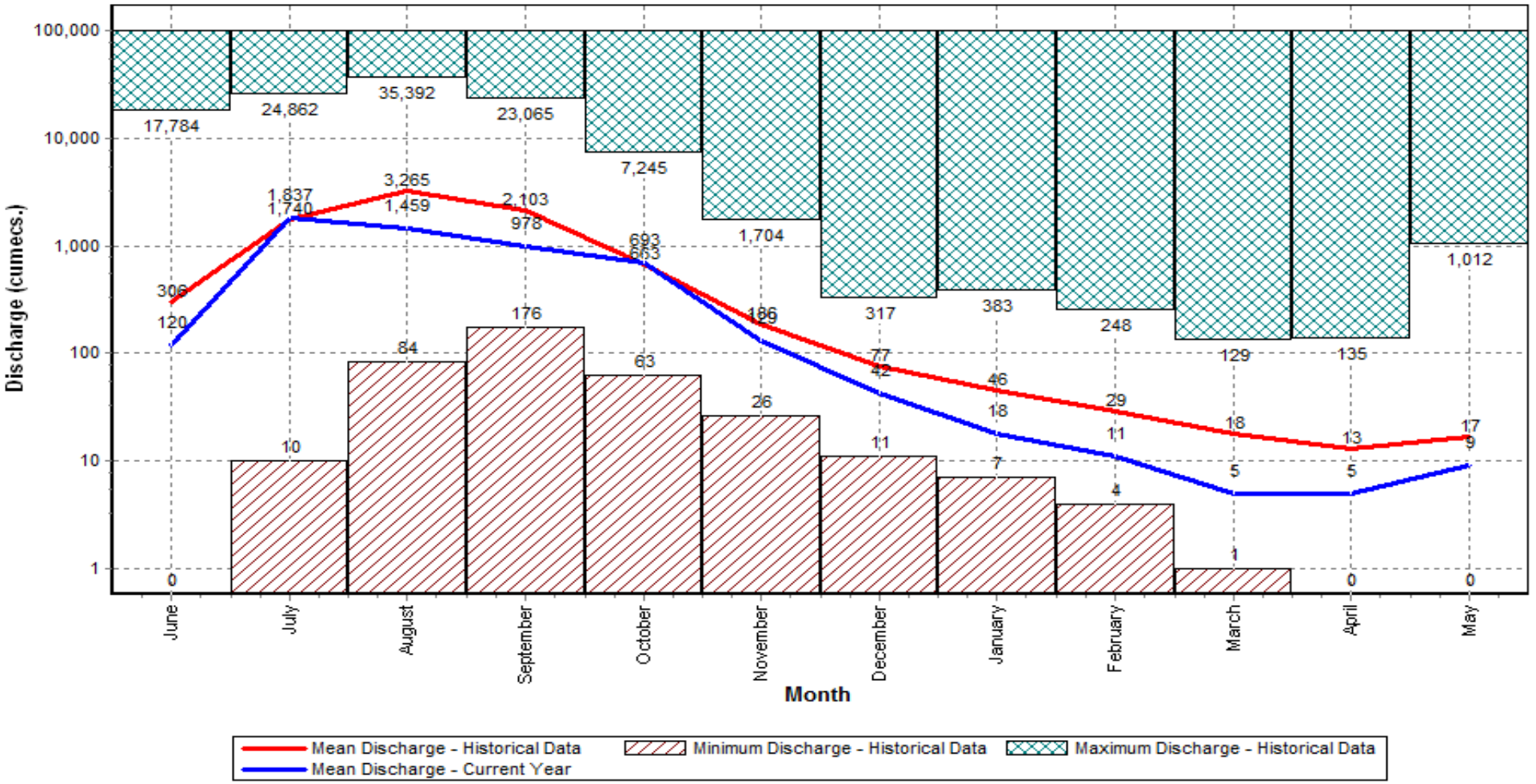
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Pathagudem (AGG00B5) | **Data considered : 1965-2018** | **Division : Lower Godavari Div., Hyderabad**

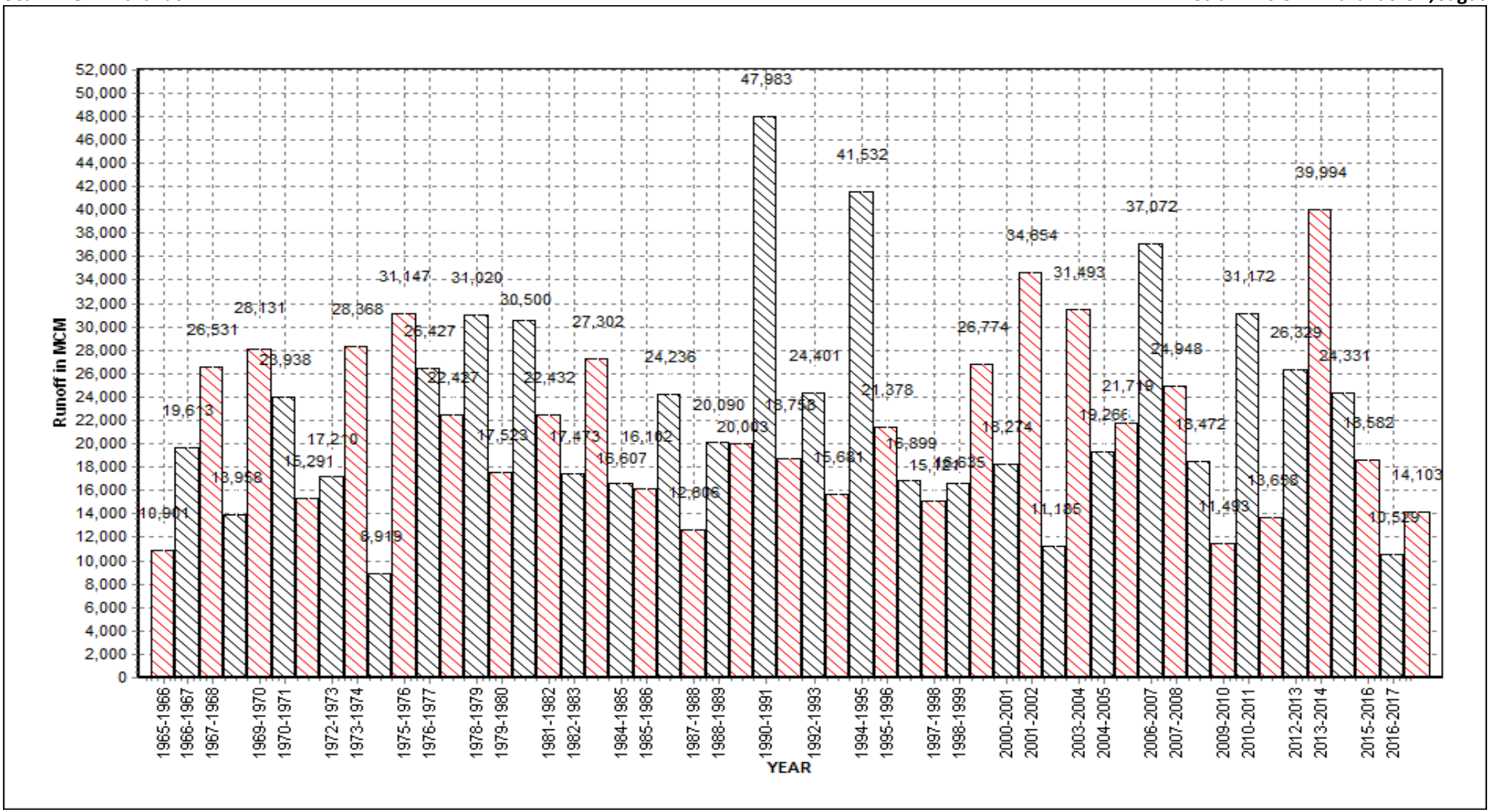
Local River : Indravathi | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1965 - 2018

Station Name : Pathagudem (AGG00B5) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

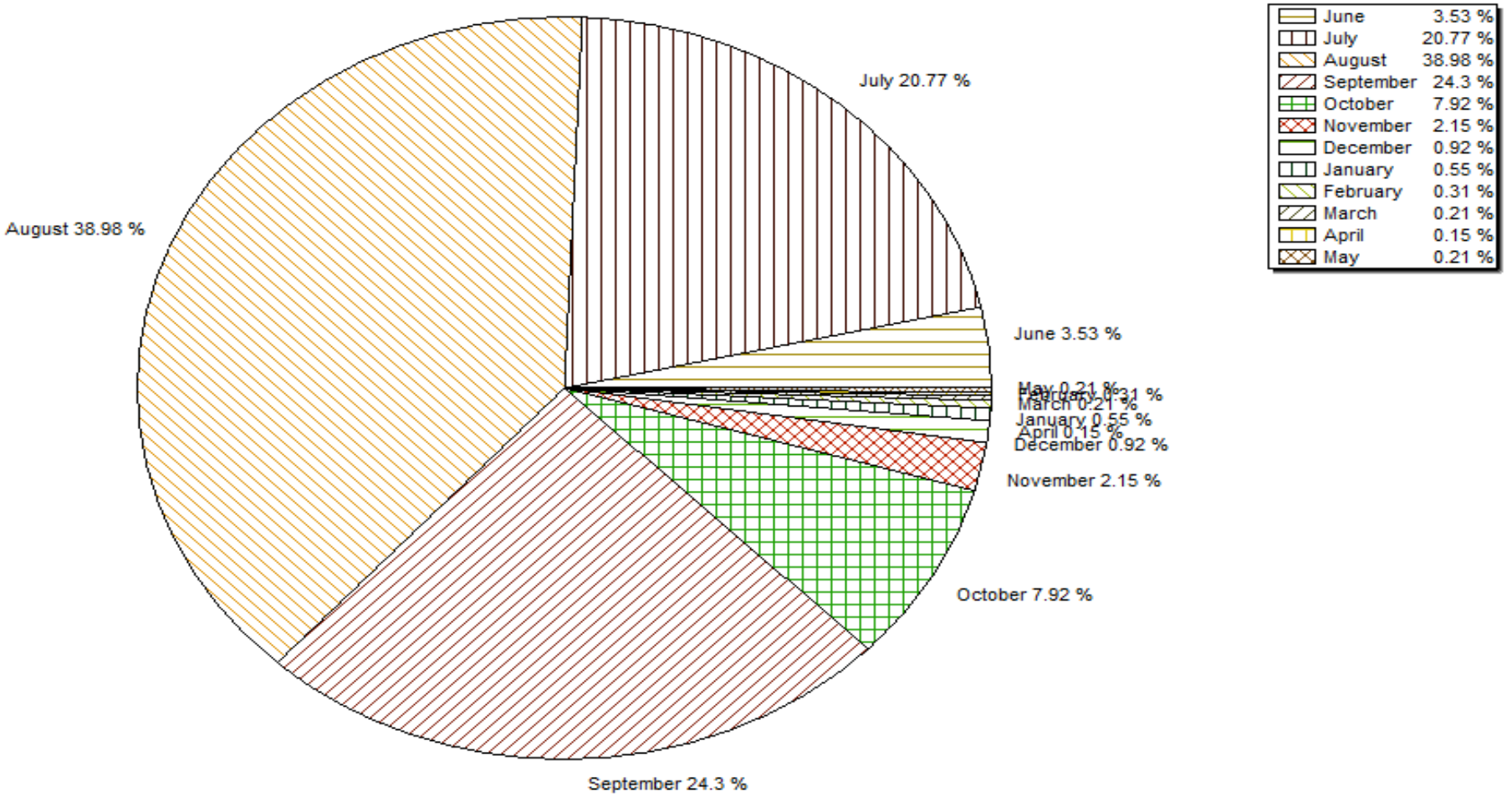
Monthly Average Runoff based on period : 1965-2017

Station Name : Pathagudem (AGG00B5)

Local River : Indravathi

Division : Lower Godavari Div., Hyderabad

Sub-Division : Indravati SD, Jagdalpur



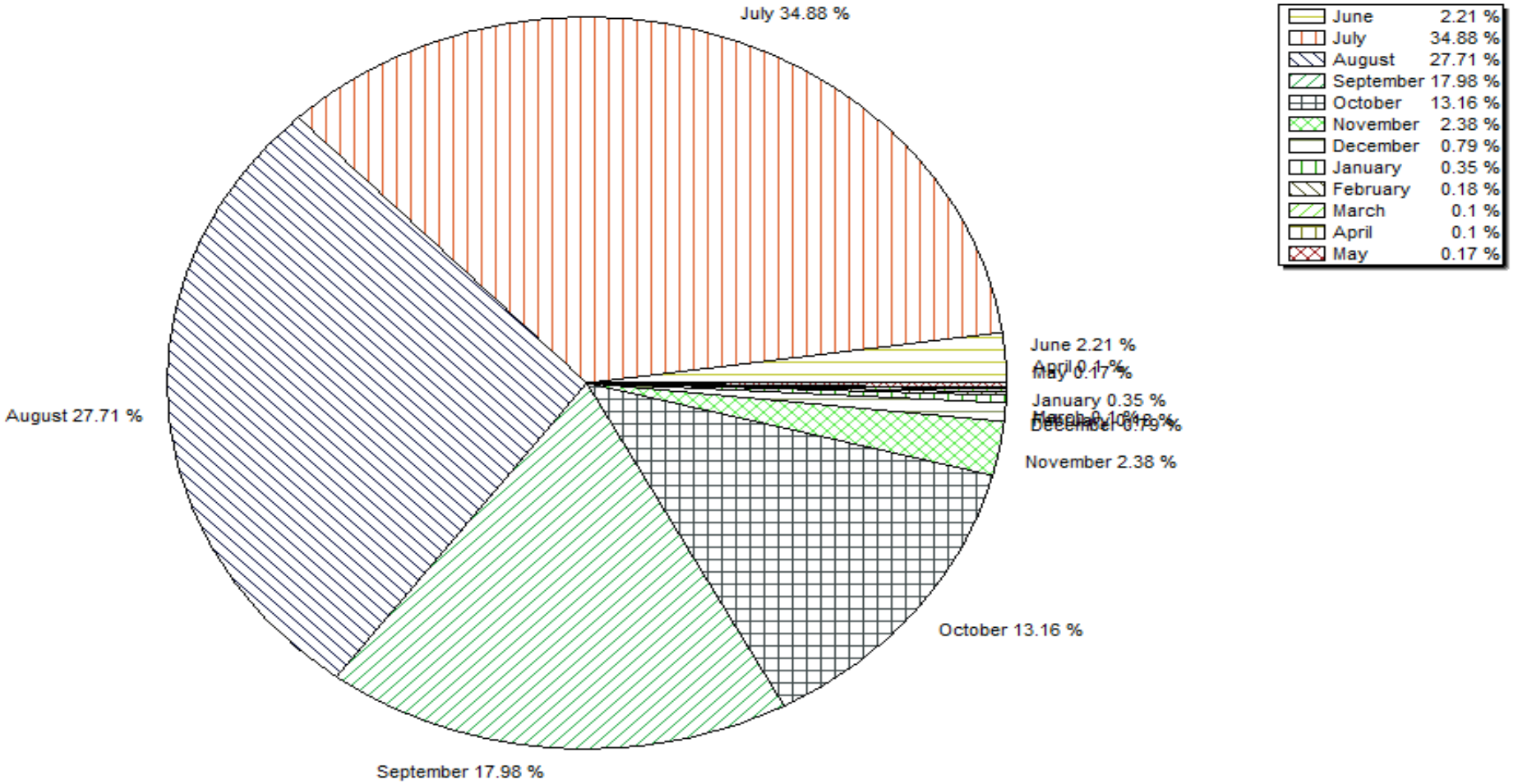
Monthly Runoff for the Year : 2017-2018

Station Name : Pathagudem (AGG00B5)

Local River : Indravathi

Division : Lower Godavari Div., Hyderabad

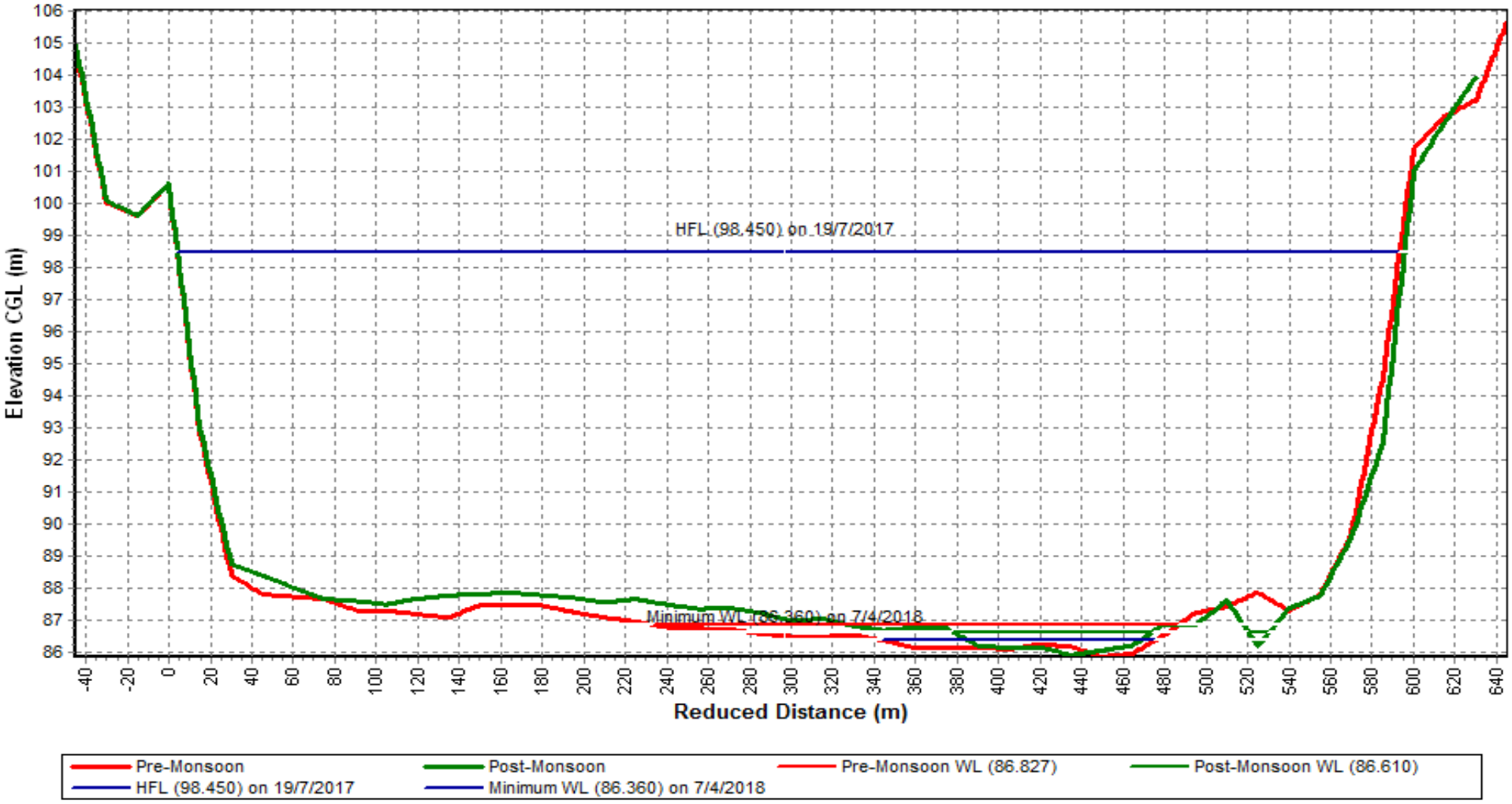
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Pathagudem (AGG00B5) **Division : Lower Godavari Div., Hyderabad**

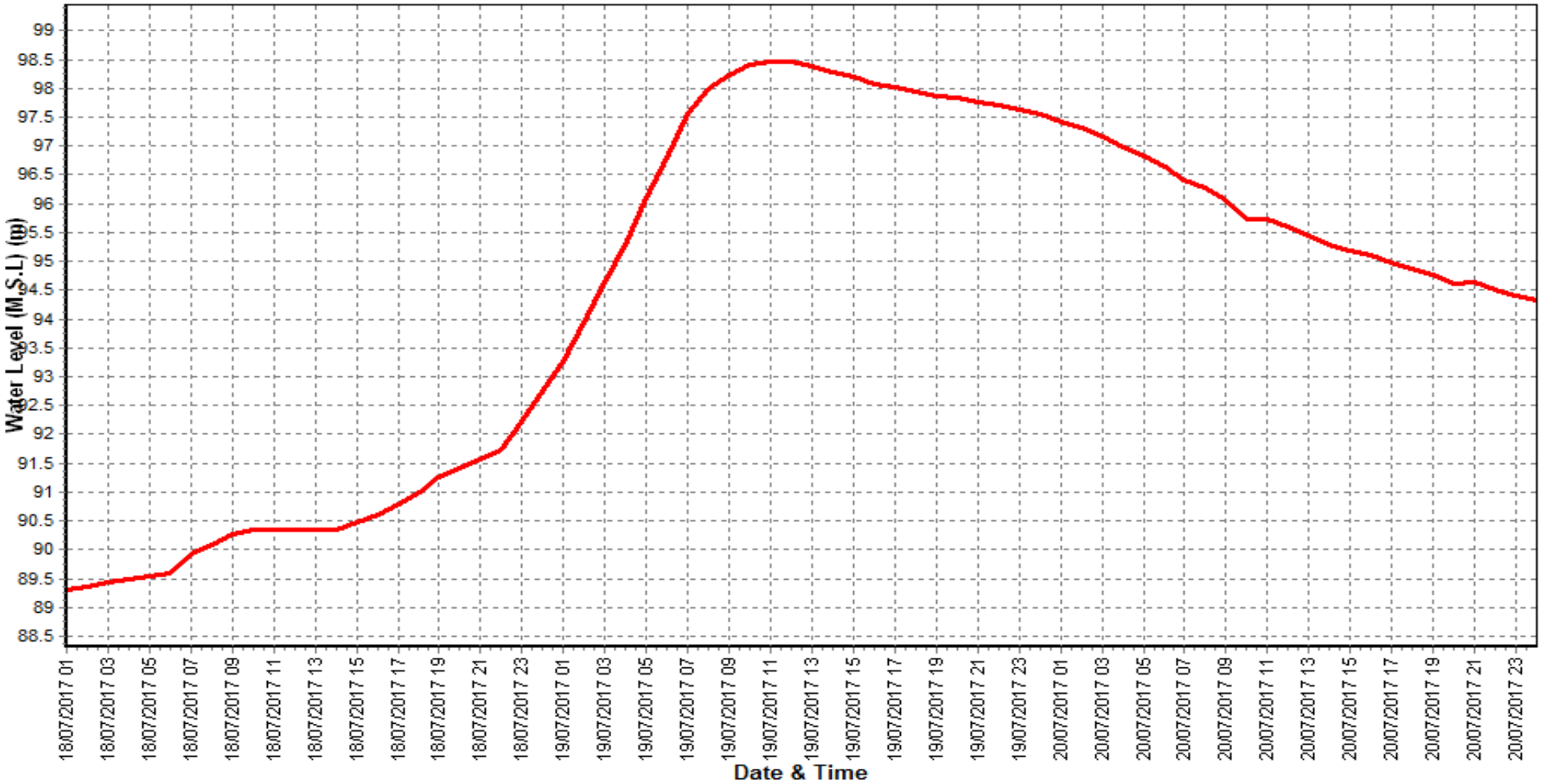
Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Pathagudem (AGG00B5) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

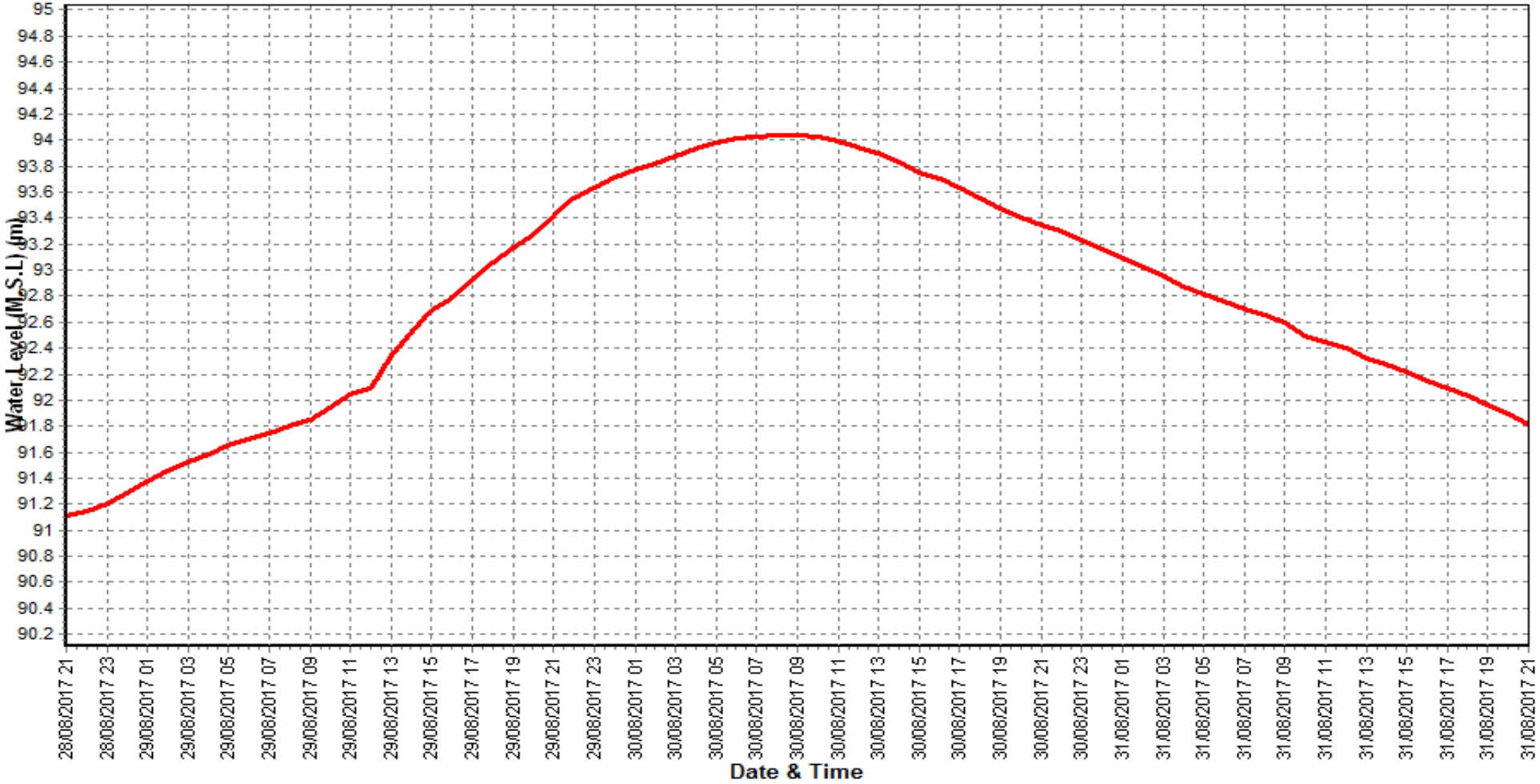


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Pathagudem (AGG00B5) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Tumnar**	**Code**	:	**AGG60B1**
State	:	Chhattisgarh	District		Dantewara
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	Dantewara
Sub-Sub Tributary	:	-	Local River	:	Dantewara
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	1700 Sq. Km.	Bank	:	Right
Latitude	:	19°00'30"	Longitude	:	81°14'20"
Zero of Gauge (m)	:	315.007 (m.s.l)	18.03.1989		
		Opening Date	Closing Date		
Gauge	:	18.03.1989	**HFL During 2017-18**	:	**324.207 Meter**
			Corres. Discharge	:	**2252 Cumecs (Estimated)**
Discharge	:	09.12.1991	**Date & Time of**	:	**18.07.2017**
			Occurance	:	**20:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 326.837 04/09/1994
Corresponding Discharge (cumecs) : 6355*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1992-1993	1677	323.087	31.08.1992	0.194	317.342	15.05.1993
1993-1994	514.9	320.767	08.07.1993	0.000	317.397	27.06.1993
1994-1995	1683	322.967	30.08.1994	1.396	317.347	19.04.1995
1995-1996	1279	322.627	02.09.1995	0.000	317.317	10.06.1995
1996-1997	1329	322.707	12.08.1996	0.837	317.547	26.05.1997
1997-1998	466.6	320.452	29.08.1997	0.109	317.567	29.05.1998
1998-1999	827.7	321.622	11.07.1998	0.000	317.567	09.06.1998
1999-2000	991.1	322.457	24.07.1999	0.063	317.497	10.06.1999
2000-2001	534.3	320.867	30.08.2000	0.188	317.427	21.05.2001
2001-2002	1179	322.617	21.08.2001	0.317	317.302	25.05.2002
2002-2003	658.4	321.682	24.08.2002	0.000	317.217	30.05.2003
2003-2004	1330	322.527	27.08.2003	0.226	317.217	14.06.2003
2004-2005	3584	325.977	14.06.2004	0.523	317.417	19.05.2005
2005-2006	714.0	321.267	14.09.2005	0.000	317.347	12.04.2006
2006-2007	2757	325.207	04.08.2006	0.709	317.427	03.06.2006
2007-2008	3193	325.607	06.10.2007	0.348	316.937	26.05.2008
2008-2009	1564	323.097	29.07.2008	0.650	317.237	30.04.2009
2009-2010	599.5	321.122	31.08.2009	0.275	317.177	21.05.2010

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2010-2011	1924	323.657	25.07.2010	0.463	317.287	11.06.2010
2011-2012	407.0	320.177	03.09.2011	0.443	317.357	30.05.2012
2012-2013	790.7	321.567	30.08.2012	0.417	317.377	09.06.2012
2013-2014	1005	322.227	01.08.2013	0.672	317.367	07.06.2013
2014-2015	510.4	320.447	23.07.2014	0.000	317.237	13.04.2015
2015-2016	1289	322.437	21.06.2015	0.075	317.097	25.04.2016
2016-2017	558.9	320.927	07.08.2016	0.000	321.497	11.09.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Tumnar in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1991-1992**		36	36
2	**1992-1993**	1194	20	1214
3	**1993-1994**	771	22	793
4	**1994-1995**	2075	65	2140
5	**1995-1996**	1546	46	1592
6	**1996-1997**	1238	35	1273
7	**1997-1998**	524	48	571
8	**1998-1999**	1091	35	1126
9	**1999-2000**	1668	37	1705
10	**2000-2001**	841	25	867
11	**2001-2002**	1225	40	1265
12	**2002-2003**	492	15	506
13	**2003-2004**	1712	83	1795
14	**2004-2005**	1285	41	1326
15	**2005-2006**	817	54	871
16	**2006-2007**	1799	38	1837
17	**2007-2008**	1957	57	2014
18	**2008-2009**	1092	39	1131
19	**2009-2010**	577	33	610
20	**2010-2011**	1829	48	1877
21	**2011-2012**	704	31	735
22	**2012-2013**	1543	42	1585
23	**2013-2014**	1651	78	1728
24	**2014-2015**	854	47	901
25	**2015-2016**	1038	19	1058
26	**2016-2017**	1321	26	1347
Average		1234	41	1227

Stage-Discharge Data for the period 2017 - 2018

Station Name : Tumnar (AGG60B1) **Division : Lower Godavari Div., Hyderabad**

Local River : Dantewara **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	317.427	2.827	317.687	19.64	317.577	17.12	318.442	137.4	318.657	136.3 *	317.617	20.12
2	317.387	2.019	318.317	88.25 *	317.527	13.50	318.302	86.36 *	318.957	187.0 *	317.607	18.93
3	317.347	1.797	318.057	93.16	317.627	22.84	318.152	68.53 *	318.202	84.07	317.587	17.20
4	317.317	6.305 *	318.187	143.6	317.597	18.62	318.002	78.09	318.767	141.9	317.577	17.81 *
5	317.297	0.692	318.247	123.7	317.537	14.15	317.972	69.78	319.697	270.7	317.557	15.62 *
6	317.267	0.586	317.997	63.43	317.987	51.22 *	317.982	57.88	318.517	110.0	317.547	14.66
7	317.177	0.648	317.732	25.83	317.902	42.17	318.382	102.8	318.397	106.2	317.537	14.02
8	317.177	0.626	317.647	23.26 *	318.127	64.42	318.472	95.96	318.347	92.09 *	317.527	13.77
9	317.207	0.900	317.557	17.62 *	318.317	83.69	318.267	82.02 *	318.227	81.63	317.517	14.12
10	317.307	2.574	317.602	14.69	317.907	56.02	318.007	53.19 *	318.087	68.17	317.517	13.56
11	317.507	7.510 *	317.497	12.96	317.832	38.67	318.007	45.07	318.527	109.1	317.497	13.50 *
12	317.387	3.159	317.507	13.31	317.737	29.64 *	317.917	41.30	318.607	122.5	317.497	13.50 *
13	317.502	6.530	317.497	9.121	318.207	74.84 *	317.947	41.93	318.637	128.4	317.487	13.64
14	317.447	4.747	317.432	8.240	318.247	118.0	318.177	65.86	318.247	92.09 *	317.487	13.76
15	317.407	4.312	317.527	13.25	318.067	59.31 *	318.307	101.9	318.277	83.25 *	317.487	13.76 *
16	317.367	3.901	318.207	74.84 *	317.847	44.67	318.057	70.41	318.117	62.25	317.487	13.76 *
17	317.512	7.502	317.757	39.89	317.797	43.67	318.077	60.37 *	317.982	55.09	317.487	11.90
18	317.507	7.500 *	317.987	51.22 #	317.822	44.90	318.463	153.0	317.857	45.68	317.477	12.16
19	317.637	7.387	322.802	1491 *	318.007	56.09	318.474	96.45	317.767	31.93 *	317.477	13.24 *
20	317.407	5.604	320.007	250.5	320.057	437.6 *	318.197	76.93	317.837	44.34	317.467	12.38
21	317.407	4.444	319.267	109.4	318.637	126.8	317.962	89.14	318.137	58.89	317.467	12.55
22	317.347	2.628	318.447	62.22	318.052	67.66	317.887	84.49	318.147	67.97 *	317.457	12.25
23	317.672	12.70	318.097	62.50 *	317.967	82.13	317.817	78.91	318.047	63.88	317.447	12.19
24	317.457	7.736	317.882	32.27	319.037	189.3	317.857	39.30 *	317.932	52.45	317.447	11.49
25	317.477	7.800 *	317.797	32.43	319.427	281.8 *	318.507	163.0	317.847	53.08	317.447	10.68
26	317.397	7.200 *	317.652	25.73	318.677	127.5	318.242	79.06	317.822	37.09	317.437	11.28 *
27	317.987	52.15	317.577	26.28	318.417	101.4 *	318.087	68.38	317.747	34.84	317.407	10.28
28	318.497	68.92	317.597	17.19	318.667	153.6	319.077	191.6	317.707	32.56	317.377	10.06
29	318.097	51.96	317.587	14.73	321.047	748.2 *	318.467	100.8	317.677	25.30 *	317.367	9.136
30	317.737	18.31	317.617	21.29 *	319.947	278.4	318.507	113.9 *	317.657	22.63	317.357	8.903
31			317.567	16.55	318.882	167.7			317.637	19.54		
Ten-Daily Mean												
I Ten-Daily	317.291	1.898	317.903	61.33	317.810	38.38	318.198	83.20	318.586	127.8	317.559	15.98
II Ten-Daily	317.468	5.815	318.422	196.5	318.162	94.75	318.162	75.32	318.185	77.46	317.485	13.16
III Ten-Daily	317.708	23.38	317.917	38.23	318.978	211.3	318.241	100.9	317.851	42.57	317.421	10.88
Monthly												
Min.	317.177	0.586	317.432	8.240	317.527	13.50	317.817	39.30	317.637	19.54	317.357	8.903
Max.	318.497	68.92	322.802	1491	321.047	748.2	319.077	191.6	319.697	270.7	317.617	20.12
Mean	317.489	10.37	318.075	96.73	318.338	117.9	318.200	86.46	318.196	81.32	317.488	13.34

Annual Runoff in MCM = 1111 Annual Runoff in mm = 654

Peak Observed Discharge = 278.4 cumecs on 30/08/2017 Corres. Water Level :319.947 m

Lowest Observed Discharge = 0.388 cumecs on 29/05/2018 Corres. Water Level :316.917 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Tumnar (AGG60B1) **Division : Lower Godavari Div., Hyderabad**

Local River : Dantewara **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	317.347	7.884	317.157	2.863	317.107	1.783	317.057	1.215	316.967	0.700 *	317.077	1.709
2	317.337	7.500 *	317.197	3.150	317.107	1.781	317.027	1.100 *	316.987	0.782	317.067	1.543
3	317.317	6.800 *	317.187	3.348	317.097	1.743	317.047	1.148	316.987	0.765	317.037	1.213
4	317.297	5.905	317.197	3.671	317.097	1.740 *	317.047	1.140 *	316.977	0.759	317.027	1.193
5	317.297	5.963	317.187	3.297	317.097	1.626	317.037	0.851	317.037	1.019	317.017	1.060
6	317.297	5.805	317.187	3.211	317.097	1.594	317.037	0.866	317.037	1.065	317.017	1.060 *
7	317.287	5.668	317.177	3.250 *	317.097	1.563	317.037	0.862	316.997	1.047	317.017	1.379
8	317.287	5.507	317.177	3.278	317.097	1.550	317.027	0.907	316.997	1.050 *	317.007	1.318
9	317.277	5.400 *	317.177	2.820	317.097	1.528	317.017	0.742	316.997	0.919	317.007	1.269
10	317.267	5.000 *	317.177	2.714	317.097	1.530 *	317.017	0.740 *	316.987	0.850	316.997	1.181
11	317.257	4.697	317.187	2.982	317.087	1.500 *	317.027	0.910 *	316.987	0.827	316.997	1.181
12	317.247	4.606	317.187	2.921	317.087	1.565	317.027	0.916	317.082	1.830	316.987	1.980 *
13	317.247	5.146	317.177	2.700 *	317.087	1.552	317.027	0.903	317.217	4.722	316.987	1.980 *
14	317.247	5.099	317.167	2.550 *	317.087	1.586	317.027	0.886	317.167	3.500 *	316.987	1.076
15	317.237	4.474	317.167	2.550 *	317.087	1.469	317.017	0.751	317.137	3.200 *	316.962	0.498
16	317.237	4.297	317.157	2.513	317.087	1.426	317.017	0.799	317.097	2.540	316.937	0.491
17	317.237	4.300 *	317.157	2.483	317.087	1.401	317.017	0.803	317.207	4.777	317.007	1.103
18	317.227	4.240	317.157	2.536	317.087	1.400 *	317.017	0.800 *	317.167	4.282	316.997	1.079
19	317.227	4.154	317.147	2.365	317.077	1.264	317.017	0.805	317.147	3.803	316.957	0.535
20	317.217	3.762	317.147	2.368	317.077	1.246	317.007	0.798	317.127	3.711	316.947	0.500 *
21	317.217	3.909	317.147	2.360 *	317.077	1.224	317.007	0.734	317.107	1.204	316.947	0.500
22	317.217	3.842	317.127	2.299	317.067	1.361	317.007	0.757	317.087	1.120 *	316.937	0.530
23	317.207	3.825	317.127	2.251	317.067	1.360	316.997	0.669	317.052	1.047	316.937	0.448
24	317.207	3.800 *	317.127	2.227	317.087	1.571	316.997	0.665	317.027	0.955	316.937	0.522
25	317.207	3.800 *	317.127	2.238	317.077	1.500 *	316.987	0.660 *	317.017	0.855	316.937	0.512
26	317.217	4.130	317.127	2.240 *	317.057	1.196	316.977	0.737	317.057	1.784	316.927	0.506
27	317.217	4.044	317.127	2.192	317.037	0.831	316.977	0.724	317.087	1.779	316.927	0.506 *
28	317.207	3.876	317.117	2.000 *	317.057	1.191	316.977	0.705	317.077	1.714	316.927	0.402
29	317.177	2.961	317.117	1.990			316.967	0.700 *	317.087	1.800 *	316.917	0.388
30	317.167	2.914	317.117	1.949			316.967	0.700 *	317.077	1.715 *	316.967	0.662
31	317.167	2.900 *	317.107	1.785			316.967	0.673			316.967	0.643
Ten-Daily Mean												
I Ten-Daily	317.301	6.143	317.182	3.160	317.099	1.644	317.035	0.957	316.997	0.896	317.027	1.292
II Ten-Daily	317.238	4.478	317.165	2.597	317.085	1.441	317.020	0.837	317.133	3.319	316.977	1.042
III Ten-Daily	317.201	3.636	317.124	2.139	317.066	1.279	316.984	0.702	317.067	1.397	316.939	0.511
Monthly												
Min.	317.167	2.900	317.107	1.785	317.037	0.831	316.967	0.660	316.967	0.700	316.917	0.388
Max.	317.347	7.884	317.197	3.671	317.107	1.783	317.057	1.215	317.217	4.777	317.077	1.980
Mean	317.245	4.716	317.156	2.616	317.084	1.467	317.012	0.828	317.066	1.871	316.979	0.934

Peak Computed Discharge = 1491 cumecs on 19/07/2017 **Corres. Water Level :322.802 m**

Lowest Computed Discharge = 0.500 cumecs on 20/05/2018 **Corres. Water Level :316.947 m**

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

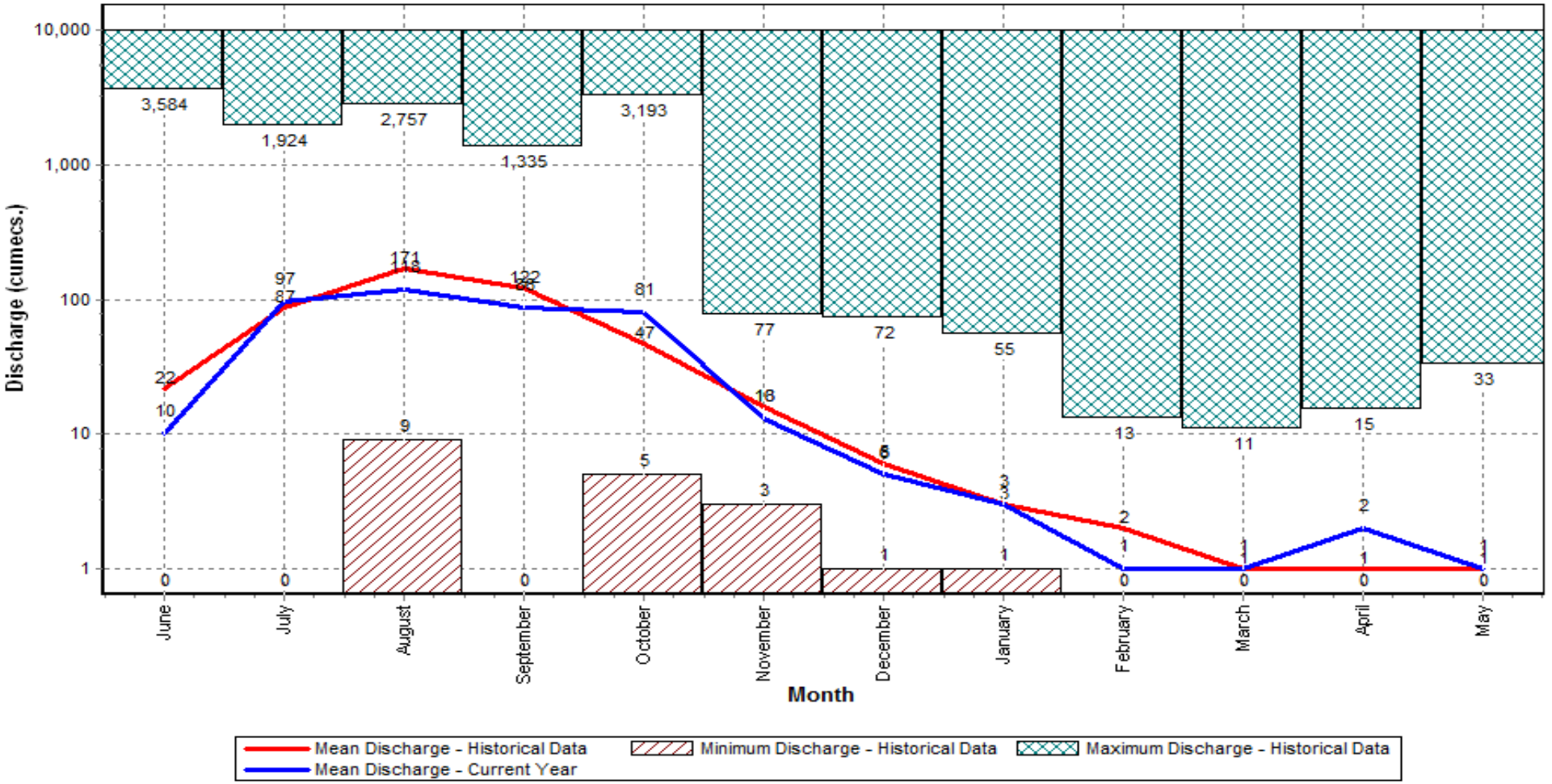
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Tumnar (AGG60B1) | **Data considered : 1992-2018** | **Division : Lower Godavari Div., Hyderabad**

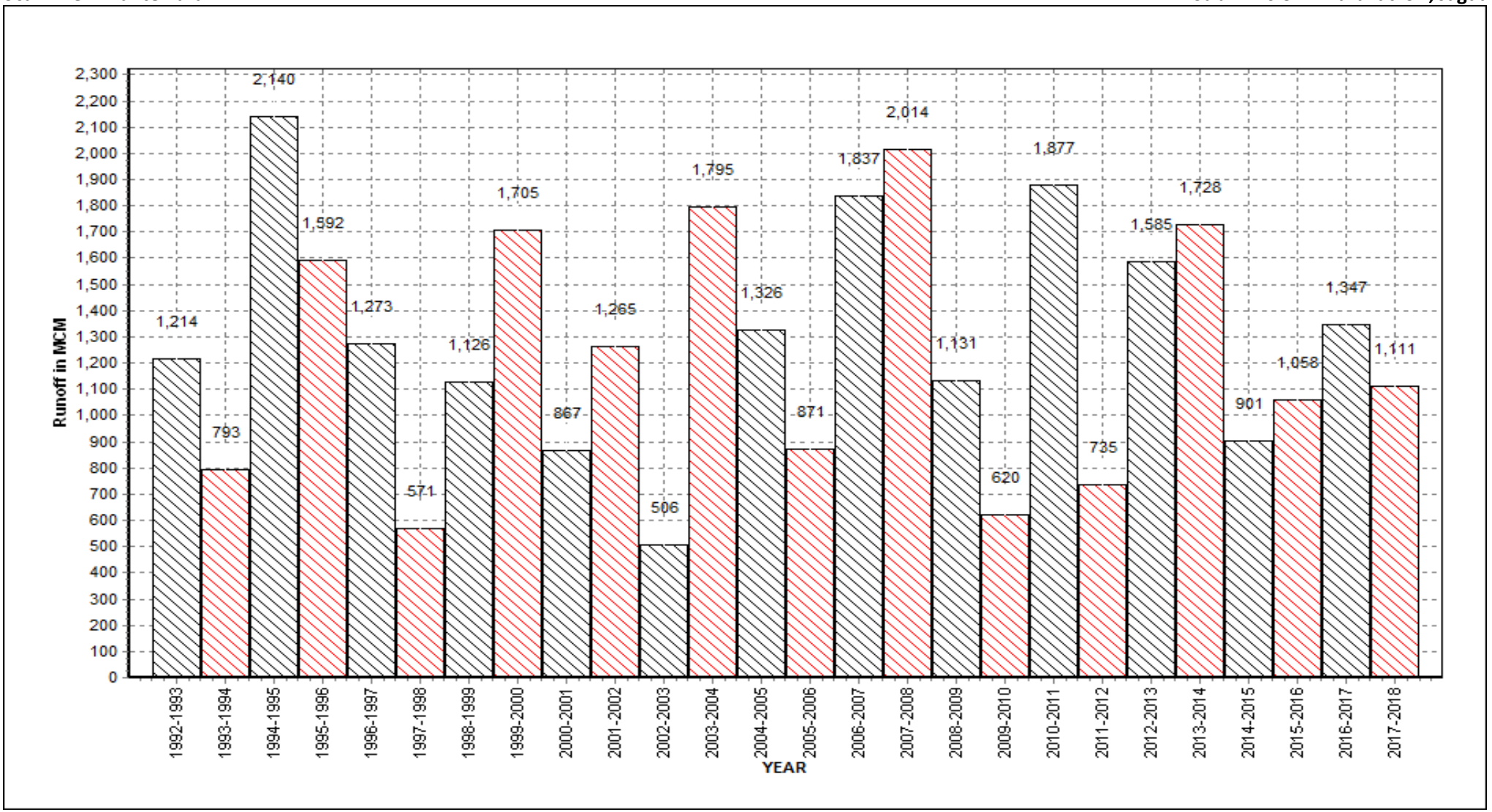
Local River : Dantewara | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1992 - 2018

Station Name : Tumnar (AGG60B1) **Division : Lower Godavari Div., Hyderabad**

Local River : Dantewara **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

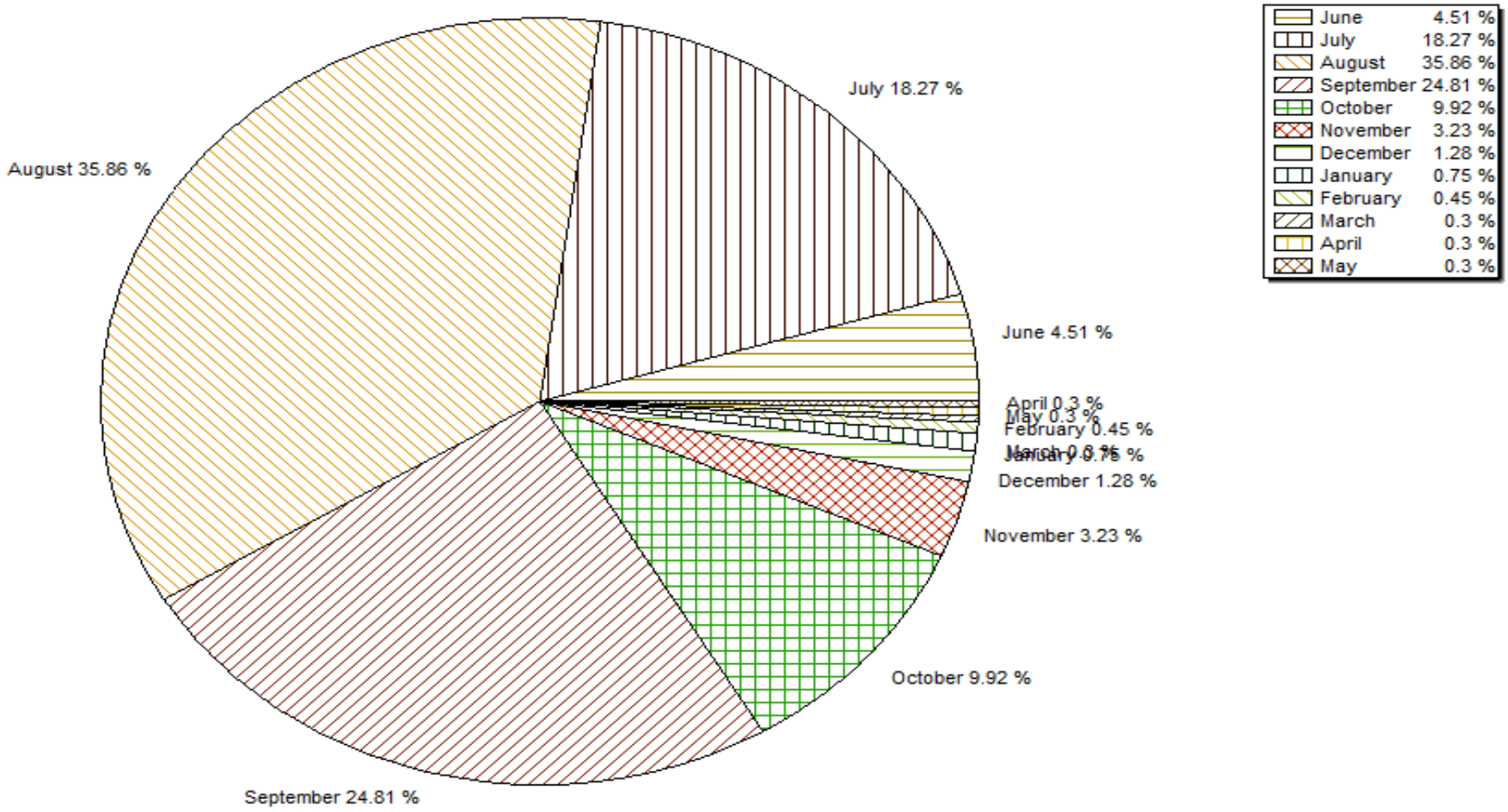
Monthly Average Runoff based on period : 1992-2017

Station Name : Tumnar (AGG60B1)

Local River : Dantewara

Division : Lower Godavari Div., Hyderabad

Sub-Division : Indravati SD, Jagdalpur



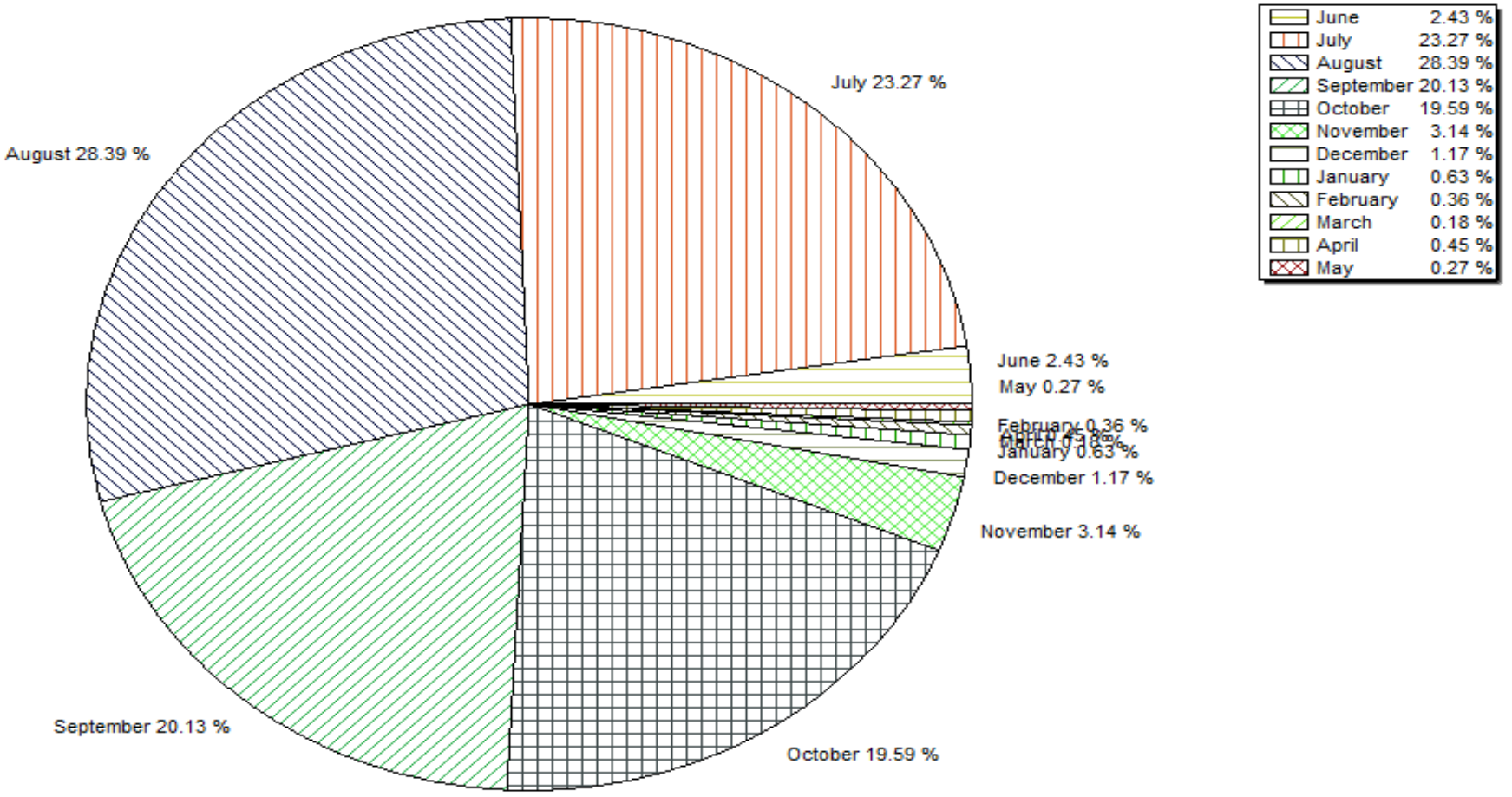
Monthly Runoff for the Year : 2017-2018

Station Name : Tumnar (AGG60B1)

Division : Lower Godavari Div., Hyderabad

Local River : Dantewara

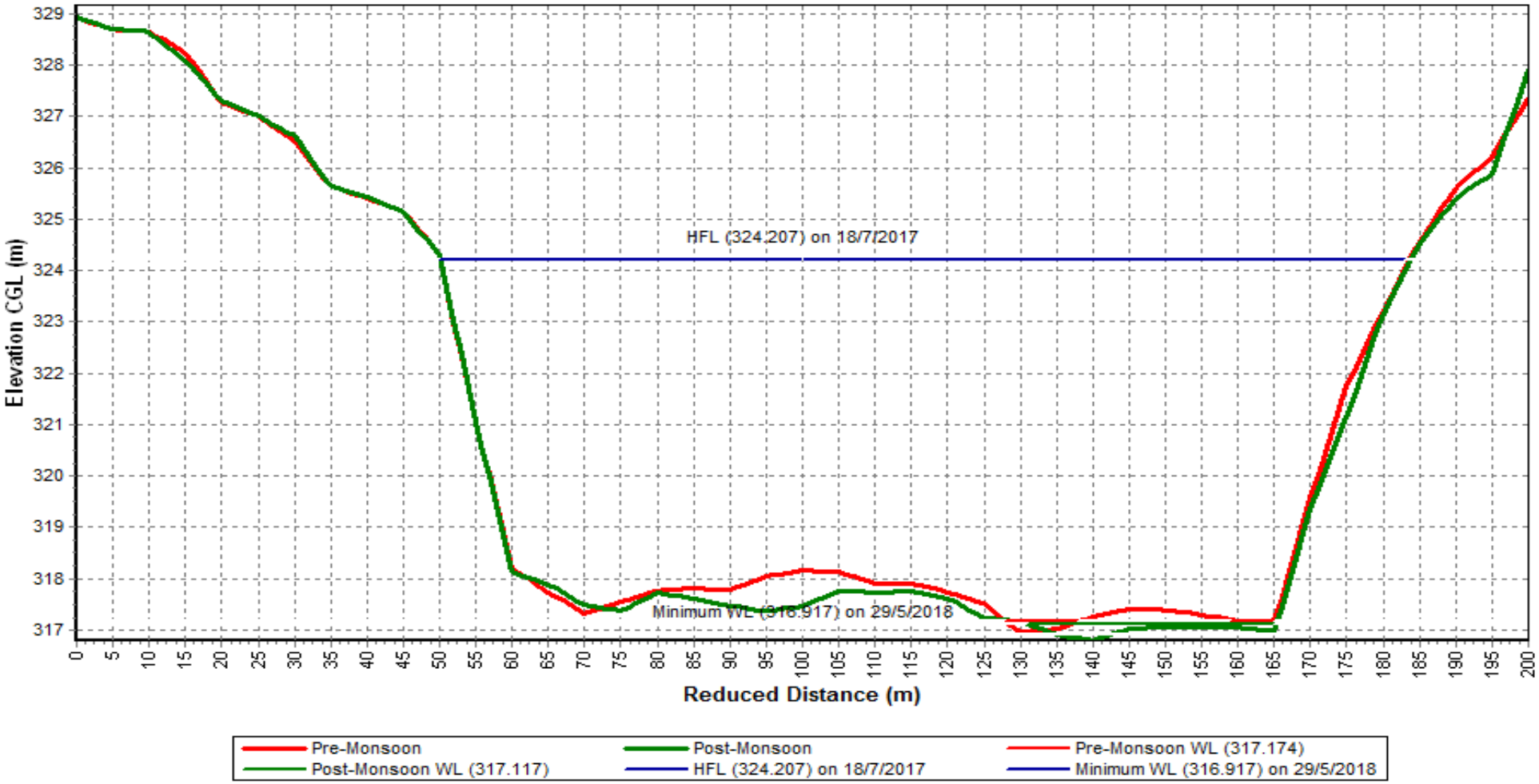
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Tumnar (AGG60B1) **Division : Lower Godavari Div., Hyderabad**

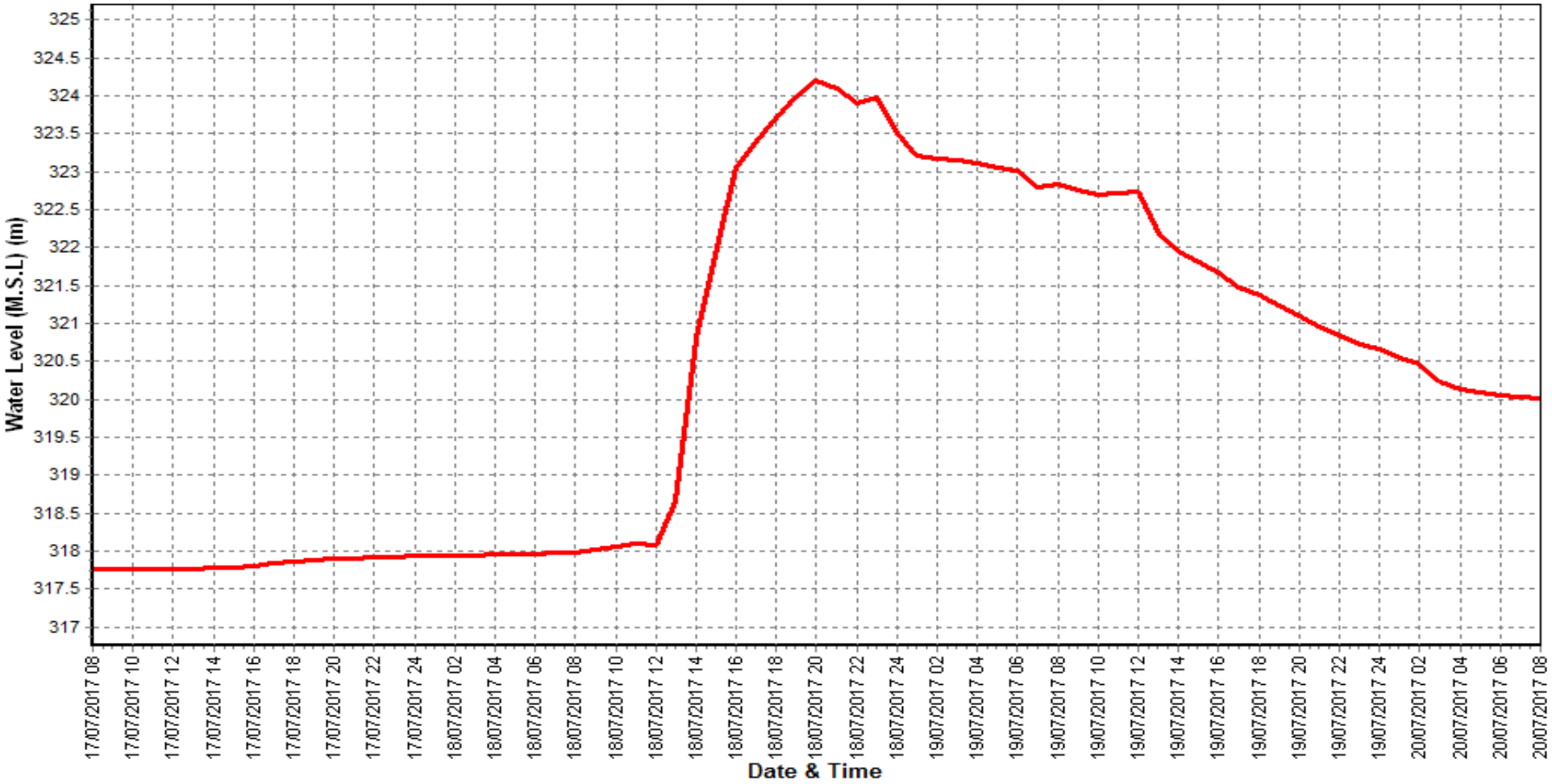
Local River : Dantewara **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Tumnar (AGG60B1) **Division : Lower Godavari Div., Hyderabad**

Local River : Dantewara **Sub-Division : Indravati SD, Jagdalpur**

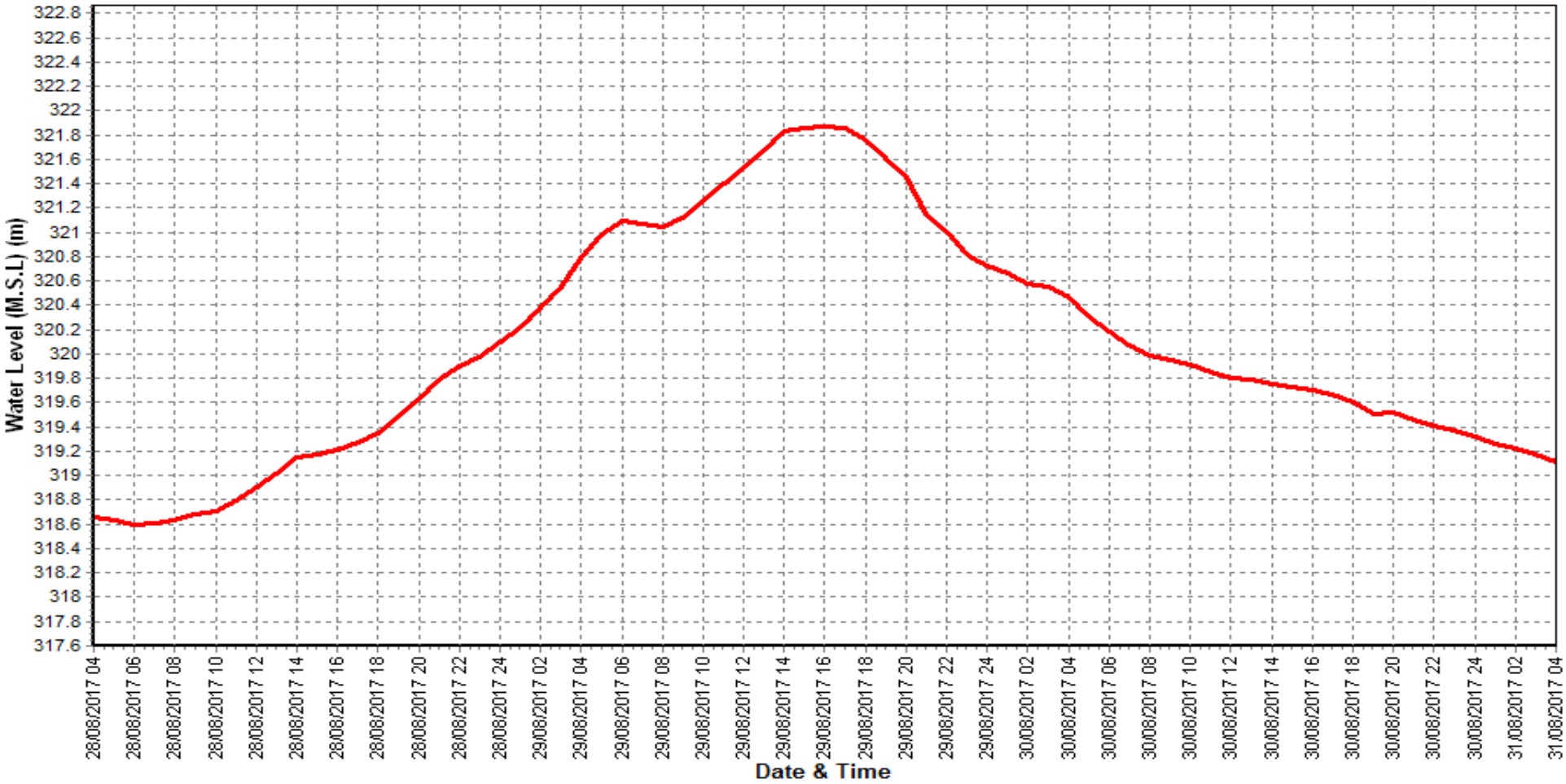


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Tumnar (AGG60B1) **Division : Lower Godavari Div., Hyderabad**

Local River : Dantewara **Sub-Division : Indravati SD, Jagdalpur**

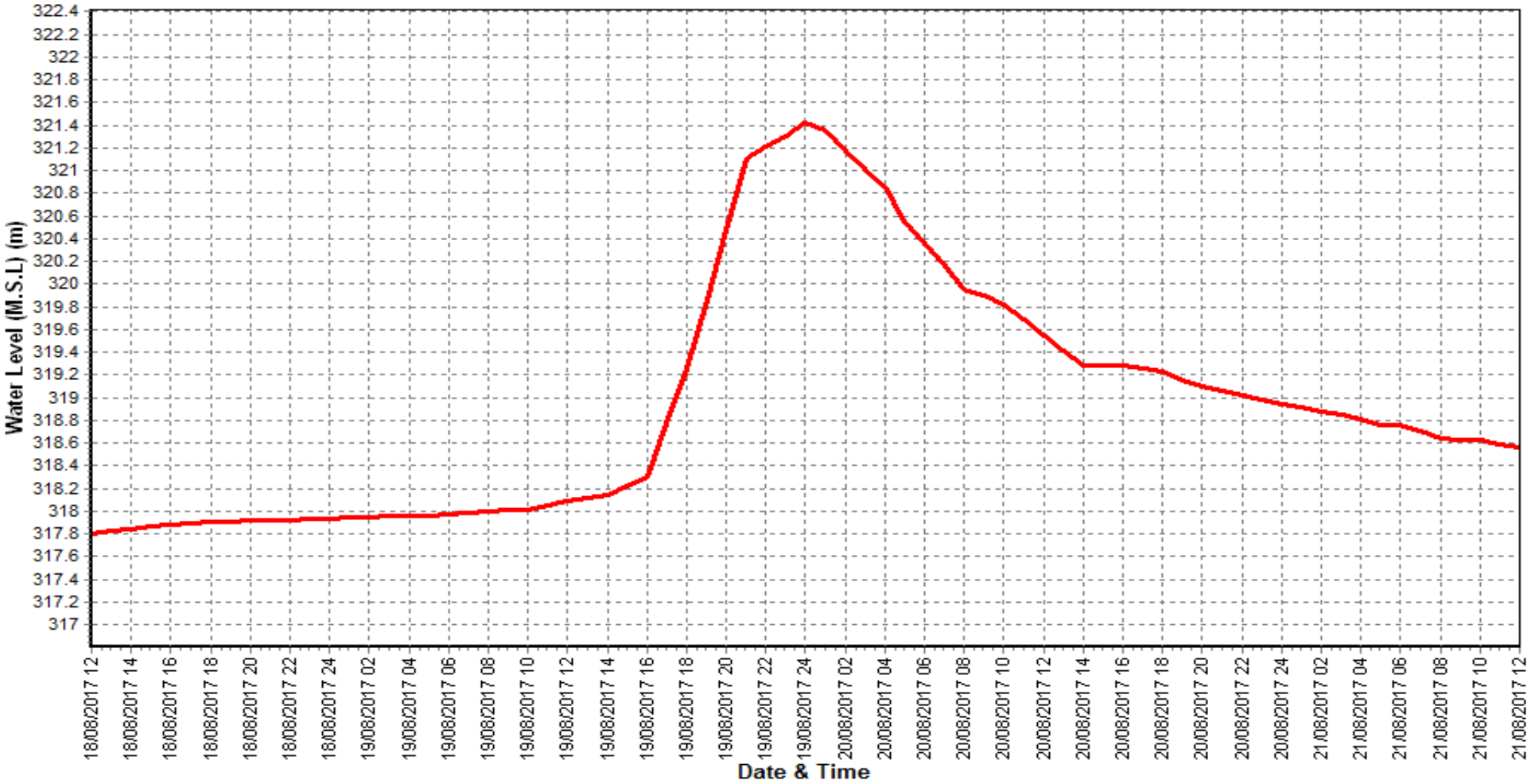


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Tumnar (AGG60B1) **Division : Lower Godavari Div., Hyderabad**

Local River : Dantewara **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Chindnar**	**Code**	:	**AGG00N7**
State	:	Chhattisgarh	District		Dantewara
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Indravathi
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	17270 Sq. Km.	Bank	:	Left
Latitude	:	19°05'00"	Longitude	:	81°18'00"
Zero of Gauge (m)	:	325.002 (m.s.l) 327.150 (m.s.l)	06.06.1971 01.06.1978		
		Opening Date	Closing Date		
Gauge	:	06.06.1971	**HFL During 2017-18**	:	**336.950 Meter**
			Corres. Discharge	:	**6325 Cumecs (Estimated)**
Discharge	:	07.12.1971	**Date & Time of Occurance**	:	**19.07.2017 18:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 339.59 06/08/2010
Corresponding Discharge (cumecs) : 12255*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1972-1973	4621	334.557	06.07.1972	6.700	327.710	24.05.1973
1973-1974	4550	334.652	09.07.1973	9.470	327.717	12.05.1974
1974-1975	1394	331.467	18.06.1974	5.546	327.737	04.06.1974
1975-1976	5346	334.202	14.08.1975	9.758	327.687	13.05.1976
1976-1977	5138	334.792	21.07.1976	10.80	327.727	06.06.1976
1977-1978	4705	334.232	23.08.1977	13.46	327.777	29.05.1978
1978-1979	8167	337.690	17.08.1978	10.00	329.860	30.05.1979
1979-1980	4668	336.450	04.08.1979	7.100	329.795	31.05.1980
1980-1981	4821	336.465	20.09.1980	6.700	329.845	29.05.1981
1981-1982	4556	336.185	10.08.1981	6.800	329.780	13.05.1982
1982-1983	3494	335.625	14.08.1982	5.777	329.755	08.05.1983
1983-1984	3531	335.600	26.06.1983	4.648	329.685	27.05.1984
1984-1985	6330	337.390	02.08.1984	5.695	329.805	03.05.1985
1985-1986	3080	335.235	08.08.1985	7.900	329.775	23.04.1986
1986-1987	6915	337.620	15.08.1986	5.763	329.805	26.04.1987
1987-1988	1923	334.350	06.09.1987	5.000	329.720	11.04.1988
1988-1989	1848	333.720	23.09.1988	4.500	329.610	11.05.1989

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1989-1990	2381	334.840	31.08.1989	4.468	329.710	01.05.1990
1990-1991	7464	337.870	23.08.1990	9.304	329.800	10.05.1991
1991-1992	6147	337.710	31.07.1991	6.810	329.765	28.05.1992
1992-1993	6291	337.390	29.07.1992	7.023	329.730	14.05.1993
1993-1994	2614	335.260	15.07.1993	2.980	329.650	17.05.1994
1994-1995	7418	338.530	06.09.1994	3.972	329.810	28.04.1995
1995-1996	12223	339.160	24.07.1995	4.680	329.820	16.06.1995
1996-1997	2352	334.950	23.07.1996	1.195	329.870	08.06.1996
1997-1998	3070	335.360	23.08.1997	0.268	329.460	13.06.1997
1998-1999	1508	333.780	12.07.1998	1.563	329.460	10.06.1998
1999-2000	3003	335.250	09.08.1999	0.317	329.495	12.05.2000
2000-2001	3247	335.430	31.08.2000	2.102	329.540	12.04.2001
2001-2002	9820	339.050	21.08.2001	1.388	329.500	02.04.2002
2002-2003	5274	337.050	24.08.2002	0.000	329.600	05.02.2003
2003-2004	4311	336.250	26.07.2003	0.000	329.380	10.12.2003
2004-2005	5008	336.500	15.06.2004	0.012	329.480	30.06.2004
2005-2006	7127	337.375	14.09.2005	1.216	329.720	11.06.2005
2006-2007	13351	340.100	05.07.2006	0.711	329.660	29.05.2007
2007-2008	10073	339.050	08.08.2007	0.021	329.640	25.05.2008
2008-2009	4821	336.440	11.08.2008	0.015	329.640	02.06.2008
2009-2010	4059	335.600	27.08.2009	0.239	329.630	25.04.2010
2010-2011	11335	339.250	07.08.2010	3.216	329.790	10.06.2010
2011-2012	2899	335.150	02.09.2011	1.059	329.610	04.04.2012
2012-2013	4847	336.490	20.08.2012	0.643	329.570	19.04.2013
2013-2014	3995	335.790	15.06.2013	2.595	329.750	08.05.2014
2014-2015	9311	337.100	23.07.2014	3.051	329.750	14.06.2014
2015-2016	6630	336.920	18.09.2015	0.784	329.630	13.04.2016
2016-2017	5086	336.340	11.07.2016	1.955	329.750	18.03.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Chindnar in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1971-1972**	5677	357	6034
2	**1972-1973**	6823	424	7247
3	**1973-1974**	8737	474	9211
4	**1974-1975**	2974	269	3243
5	**1975-1976**	10644	443	11087
6	**1976-1977**	8397	486	8882
7	**1977-1978**	9522	569	10090
8	**1978-1979**	11776	469	12245
9	**1979-1980**	7019	326	7345
10	**1980-1981**	10343	336	10679
11	**1981-1982**	5629	274	5903
12	**1982-1983**	5948	263	6212
13	**1983-1984**	8994	351	9345
14	**1984-1985**	8278	312	8590
15	**1985-1986**	7881	375	8255
16	**1986-1987**	7673	324	7997
17	**1987-1988**	4372	307	4680
18	**1988-1989**	5455	205	5660
19	**1989-1990**	6921	663	7584
20	**1990-1991**	16427	595	17022
21	**1991-1992**	8871	408	9280
22	**1992-1993**	10014	295	10309
23	**1993-1994**	6687	201	6888
24	**1994-1995**	13647	547	14194
25	**1995-1996**	8958	253	9211
26	**1996-1997**	5675	487	6162
27	**1997-1998**	4936	1007	5943
28	**1998-1999**	4015	170	4185
29	**1999-2000**	7534	96	7630
30	**2000-2001**	5177	116	5294
31	**2001-2002**	11651	130	11782
32	**2002-2003**	3318	30	3348
33	**2003-2004**	8190	275	8464
34	**2004-2005**	8554	193	8747
35	**2005-2006**	7642	117	7759
36	**2006-2007**	15295	129	15424
37	**2007-2008**	10513	99	10612
38	**2008-2009**	6603	50	6654
39	**2009-2010**	4484	86	4570
40	**2010-2011**	11844	243	12087
41	**2011-2012**	4701	73	4775
42	**2012-2013**	8911	93	9003
43	**2013-2014**	10400	192	10593
44	**2014-2015**	10730	197	10927
45	**2015-2016**	7602	104	7707
46	**2016-2017**	11549	143	11691
Average		8195	295	8490

Stage-Discharge Data for the period 2017 - 2018

Station Name : Chindnar (AGG00N7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	329.860	6.120	331.650	319.6 *	331.260	166.5	332.720	1034	332.240	615.1 *	330.860	87.16
2	329.810	5.063	331.390	231.0 *	331.490	337.4	332.250	621.1 *	332.020	489.8 *	330.800	77.52
3	329.790	4.223	331.530	276.4 *	331.580	279.9	332.180	579.6 *	331.775	366.5	330.780	75.09
4	329.760	4.162 *	331.400	234.0 *	331.625	339.1	331.925	399.3	331.780	372.7	330.740	83.00 *
5	329.750	3.826	331.380	227.9 *	331.695	328.6	331.675	310.4	331.970	473.8	330.670	72.47 *
6	329.740	3.699	331.360	221.9 *	331.740	354.8 *	331.695	356.4	331.960	492.5	330.630	66.86 *
7	329.870	6.767	331.210	180.1 *	332.685	909.1 #	331.625	281.4	331.785	382.1	330.580	60.26 *
8	329.830	5.269	331.080	148.3 *	333.235	1344	331.745	356.7	331.780	371.2 *	330.550	56.51 *
9	329.880	7.255	330.930	116.5 *	332.460	765.0	331.710	342.8 *	331.725	357.6	330.480	48.36 *
10	329.970	10.62	330.790	91.10 *	332.155	736.9	331.540	279.8 *	331.920	417.0	330.390	39.06 *
11	330.280	10.81 *	330.690	75.39 *	331.905	367.8	331.620	288.6	332.215	623.0	330.380	38.11 *
12	330.455	47.61	330.630	66.86 *	331.690	332.9	331.745	339.4	332.345	724.6	330.450	45.12 *
13	330.570	58.99 *	330.970	124.5 *	331.710	342.8 *	331.940	425.4	332.505	752.7	330.440	44.07 *
14	330.355	38.72	330.950	120.4 *	331.920	441.6	332.240	559.6	332.330	670.2 *	330.420	42.02 *
15	330.305	37.01	331.060	143.8 *	332.430	734.0 *	332.260	595.3	332.140	556.5 *	330.410	41.02 *
16	330.280	34.24	330.990	128.6 *	332.360	738.4	332.240	550.9	331.910	424.7	330.420	39.84
17	330.370	41.47	331.080	148.3 *	332.045	491.4	332.150	562.2 *	331.620	302.9	330.420	39.63
18	330.350	35.33 *	332.590	841.8 *	331.990	470.1	332.390	783.4	331.425	345.1	330.410	39.72
19	330.790	91.10 *	336.800	6058 *	332.995	1322	332.195	496.5	331.300	204.5 *	330.410	41.02 *
20	330.670	72.47 *	336.530	5590 *	333.860	1939 *	332.110	530.1	331.195	168.7	330.410	45.93
21	330.480	49.99	335.315	4024	333.365	1370	332.095	530.2	331.210	176.2	330.420	48.06
22	330.535	54.21	333.135	1110	332.595	845.3 #	332.525	778.8	331.400	234.0 *	330.400	41.31
23	330.475	47.14	332.175	576.7 *	332.135	499.8	331.995	503.8	331.605	312.8	330.360	39.26
24	331.050	141.5 *	331.710	353.8	332.275	590.6	331.710	342.8 *	331.660	287.5	330.350	39.68
25	331.340	216.0 *	331.465	334.3	332.260	627.1 *	331.615	329.5	331.480	262.6	330.340	38.84
26	331.820	388.1 *	331.335	203.5	332.200	491.0	331.715	330.5	331.335	206.7	330.330	33.56 *
27	331.580	293.9 *	331.300	198.6	332.760	963.9 *	331.580	291.6	331.195	157.2	330.300	37.89
28	331.920	437.4 *	331.700	322.3	333.100	1380	331.560	297.5	331.090	131.8	330.300	34.46
29	331.690	335.0 *	331.785	373.3 #	335.470	3928 *	331.775	350.8	331.000	130.7 *	330.280	30.69
30	331.390	231.0 *	331.550	283.3 *	335.490	3957 *	331.760	362.9 *	330.940	107.7	330.260	30.20
31			331.360	205.7	333.780	1737			330.890	94.59		
Ten-Daily Mean												
I Ten-Daily	329.826	5.701	331.272	204.7	331.992	556.1	331.906	456.1	331.896	433.8	330.648	66.63
II Ten-Daily	330.443	46.78	332.229	1330	332.290	718.1	332.089	513.1	331.898	477.3	330.417	41.65
III Ten-Daily	331.228	219.4	332.075	726.0	333.221	1490	331.833	411.8	331.255	191.1	330.334	37.39
Monthly												
Min.	329.740	3.699	330.630	66.86	331.260	166.5	331.540	279.8	330.890	94.59	330.260	30.20
Max.	331.920	437.4	336.800	6058	335.490	3957	332.720	1034	332.505	752.7	330.860	87.16
Mean	330.499	90.63	331.866	752.6	332.525	939.7	331.943	460.4	331.669	361.7	330.466	48.56

Annual Runoff in MCM = 7207 Annual Runoff in mm = 417

Peak Observed Discharge = 4024 cumecs on 21/07/2017 Corres. Water Level :335.315 m

Lowest Observed Discharge = 1.293 cumecs on 22/03/2018 Corres. Water Level :329.650 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Chindnar (AGG00N7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	330.240	28.03	329.960	10.67	329.900	6.675	329.870	5.671	329.750	2.992 *	329.880	8.016
2	330.220	26.26 *	329.990	10.63	329.890	7.786	329.860	6.286 *	329.750	2.061	329.870	7.585
3	330.200	24.77 *	329.990	11.30	329.900	6.667	329.850	5.785	329.740	1.858	329.910	9.124
4	330.190	27.41	329.990	11.16	329.900	7.801 *	329.850	5.933 *	329.790	2.899	329.950	12.71
5	330.180	24.80	329.990	10.58	329.900	7.180	329.850	6.257	329.890	7.816	330.060	15.95
6	330.200	25.88	329.970	9.480	329.910	7.700	329.840	5.240	329.830	6.758	330.020	13.39 *
7	330.260	28.64	329.950	9.938 *	329.930	8.098	329.820	4.686	329.810	5.270	329.990	13.47
8	330.180	21.55	329.920	7.951	329.930	7.795	329.840	5.277	329.820	4.941 *	329.970	13.03
9	330.160	21.92 *	329.920	9.102	329.910	7.519	329.830	5.538	329.840	6.735	329.980	12.45
10	330.180	23.32 *	329.920	10.55	329.900	7.801 *	329.820	4.941 *	329.850	8.083	329.990	13.44
11	330.170	21.89	329.970	10.81	330.040	14.47 *	329.820	4.941 *	329.840	6.203	330.010	12.62
12	330.120	17.87	329.970	10.79	329.990	11.19	329.800	5.580	329.855	8.263	330.020	13.39 *
13	330.090	15.75	329.990	11.84 *	329.930	9.405	329.780	4.462	330.010	12.24	330.040	14.47 *
14	330.060	14.37	329.990	11.84 *	329.900	7.334	329.770	4.395	330.010	12.86 *	329.990	13.39
15	329.990	11.60	329.990	11.84 *	329.880	6.841	329.750	2.545	330.010	12.86 *	329.950	11.24
16	329.960	9.611	329.980	10.94	329.870	6.071	329.730	2.086	330.020	12.89	329.930	10.04
17	329.960	10.40 *	329.970	10.52	329.860	5.817	329.730	1.932	329.990	13.11	329.920	9.964
18	329.990	11.76	329.960	9.141	329.860	6.286 *	329.710	2.105 *	330.000	12.17	329.900	8.034
19	330.050	13.99	329.950	9.423	329.860	5.647	329.690	1.748	330.010	12.50	329.930	10.48
20	330.050	14.00	329.950	9.697	329.860	5.634	329.680	1.445	329.980	12.74	329.930	9.050 *
21	330.050	14.01	329.940	9.489 *	329.870	5.882	329.660	1.481	329.960	11.57	329.910	9.309
22	330.070	15.07	329.940	8.486	329.870	6.440	329.650	1.293	330.000	12.35 *	329.910	8.764
23	330.140	20.08	329.930	8.372	329.880	6.497	329.640	1.349	329.980	13.17	329.900	8.387
24	330.120	19.26 *	329.930	7.663	329.870	6.554	329.640	1.454	329.960	11.44	329.890	8.611
25	330.080	16.78 *	329.930	8.746	329.870	6.648 *	329.680	1.547 *	329.960	11.38	329.900	9.233
26	330.040	12.67	329.920	8.623 *	329.870	6.346	329.710	1.603	329.960	11.77	329.910	8.799
27	329.990	10.92	329.910	8.856	329.870	6.979	329.710	1.589	329.990	12.82	329.910	8.207 *
28	329.950	9.493	329.900	7.801 *	329.870	6.128	329.720	1.603	329.970	12.82	329.910	9.209
29	329.950	9.237	329.900	7.474			329.740	2.755 *	329.930	9.050 *	329.900	8.919
30	329.930	8.055	329.900	6.789			329.760	3.239 *	329.910	8.207 *	329.900	9.160
31	329.930	9.050 *	329.890	6.484			329.760	2.092			329.890	8.490
Ten-Daily Mean												
I Ten-Daily	330.201	25.26	329.960	10.14	329.907	7.502	329.843	5.561	329.807	4.941	329.962	11.92
II Ten-Daily	330.044	14.12	329.972	10.68	329.905	7.870	329.746	3.124	329.973	11.58	329.962	11.27
III Ten-Daily	330.023	13.15	329.917	8.071	329.871	6.434	329.697	1.819	329.962	11.46	329.903	8.826
Monthly												
Min.	329.930	8.055	329.890	6.484	329.860	5.634	329.640	1.293	329.740	1.858	329.870	7.585
Max.	330.260	28.64	329.990	11.84	330.040	14.47	329.870	6.286	330.020	13.17	330.060	15.95
Mean	330.087	17.37	329.949	9.581	329.896	7.328	329.760	3.447	329.914	9.327	329.941	10.61

Peak Computed Discharge = 6058 cumecs on 19/07/2017 Corres. Water Level :336.800 m

Lowest Computed Discharge = 1.547 cumecs on 25/03/2018 Corres. Water Level :329.680 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

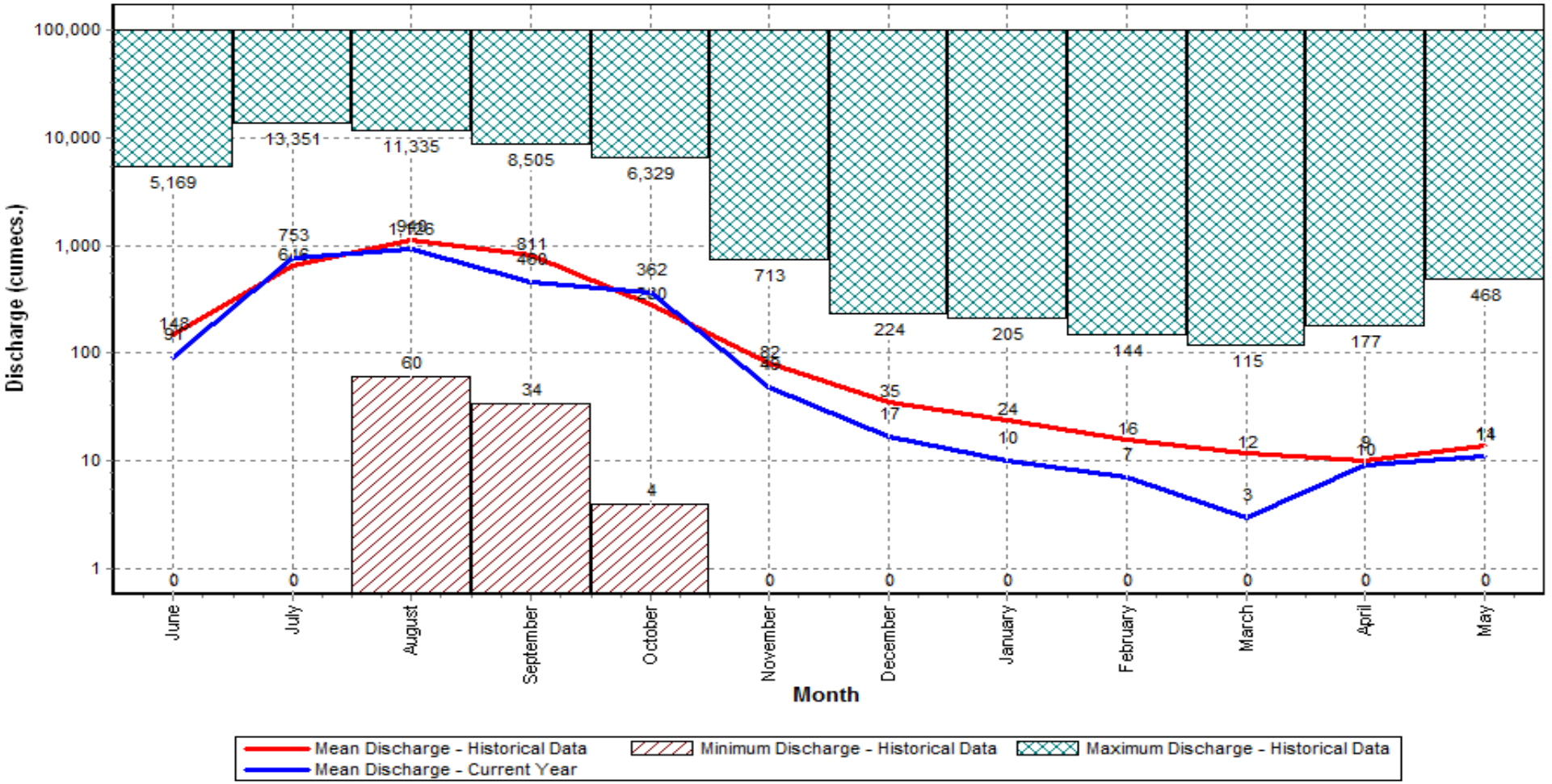
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Chindnar (AGG00N7) | **Data considered : 1972-2018** | **Division : Lower Godavari Div., Hyderabad**

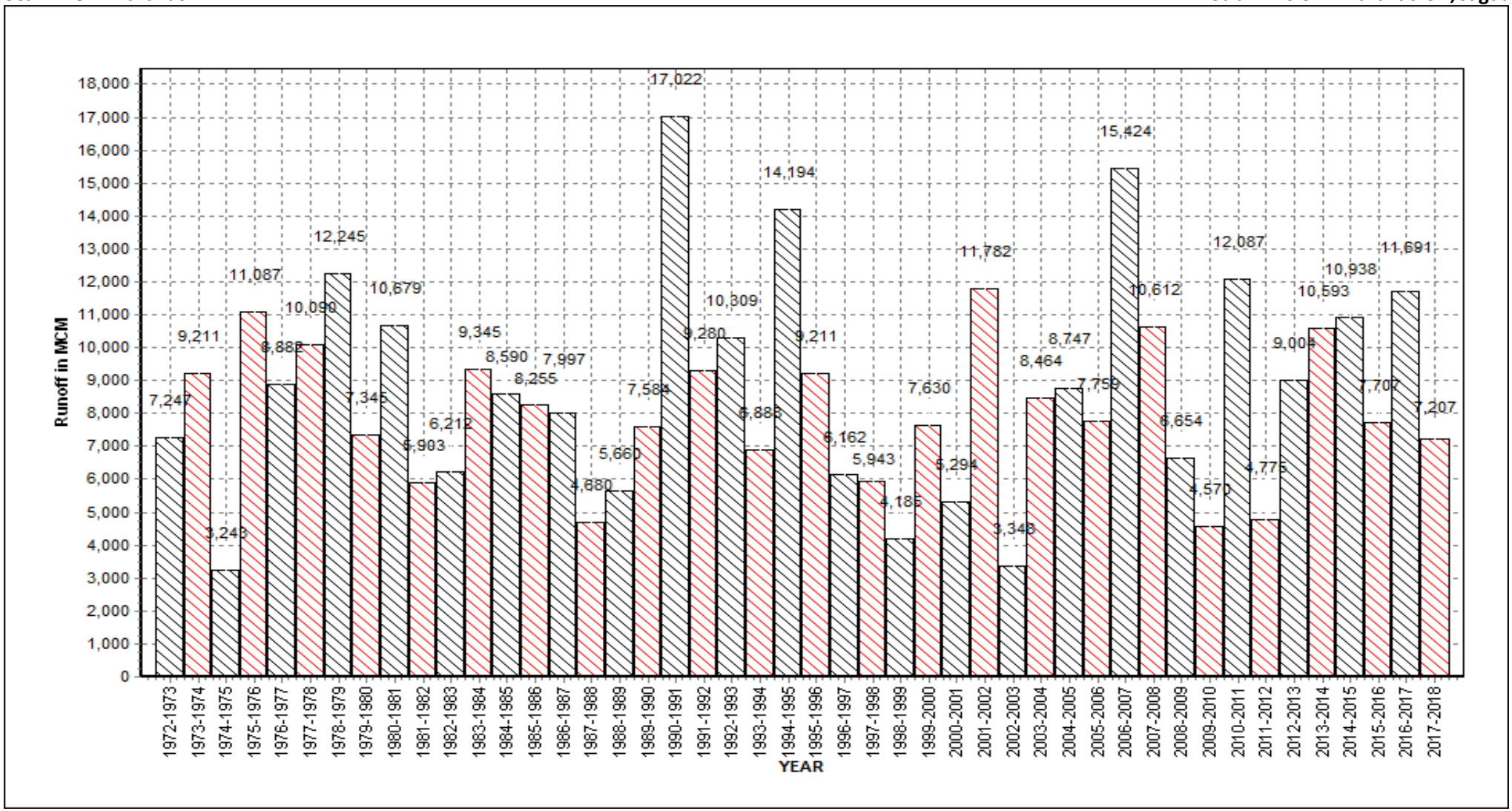
Local River : Indravathi | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1972 - 2018

Station Name : Chindnar (AGG00N7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

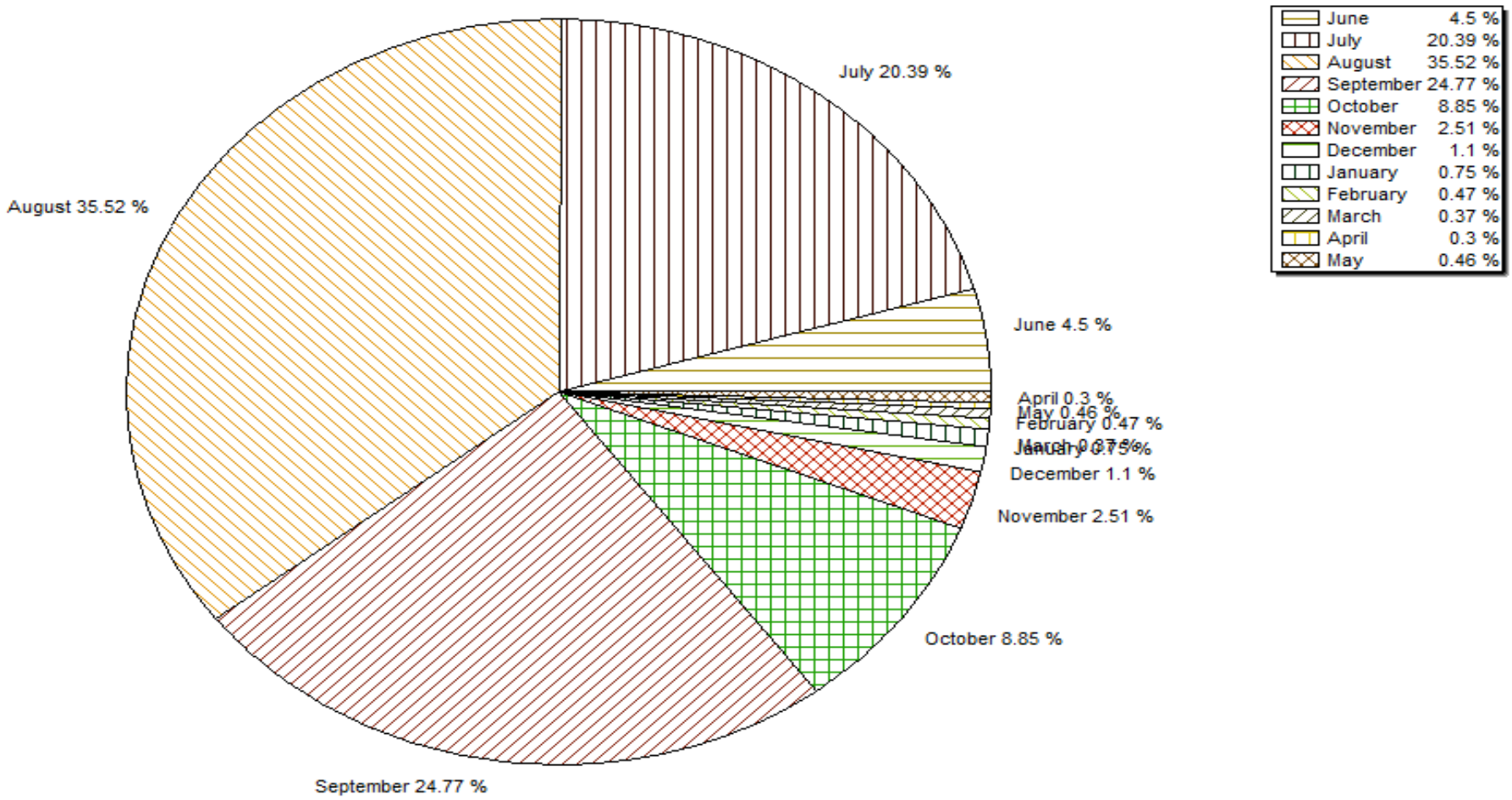
Monthly Average Runoff based on period : 1972-2017

Station Name : Chindnar (AGG00N7)

Local River : Indravathi

Division : Lower Godavari Div., Hyderabad

Sub-Division : Indravati SD, Jagdalpur



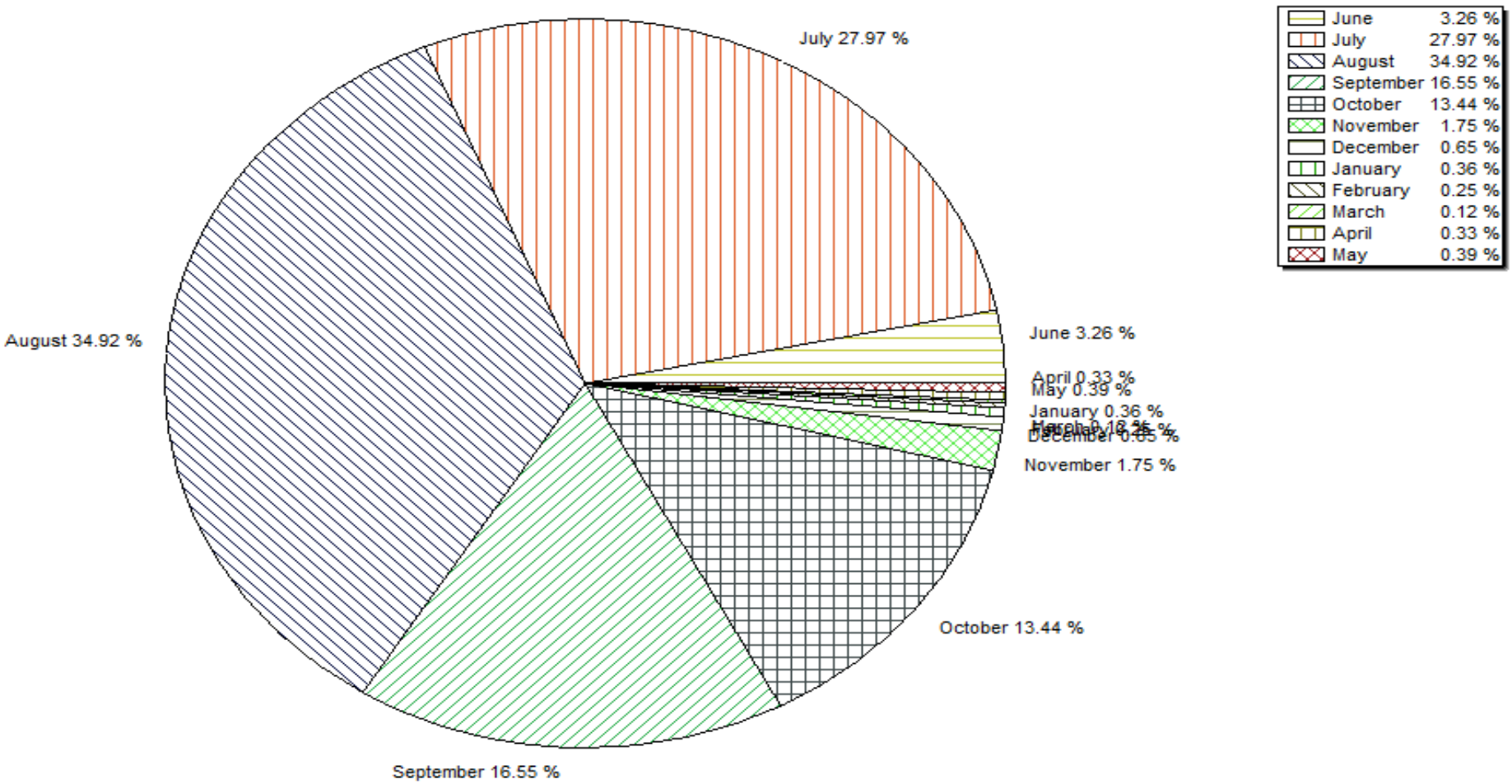
Monthly Runoff for the Year : 2017-2018

Station Name : Chindnar (AGG00N7)

Local River : Indravathi

Division : Lower Godavari Div., Hyderabad

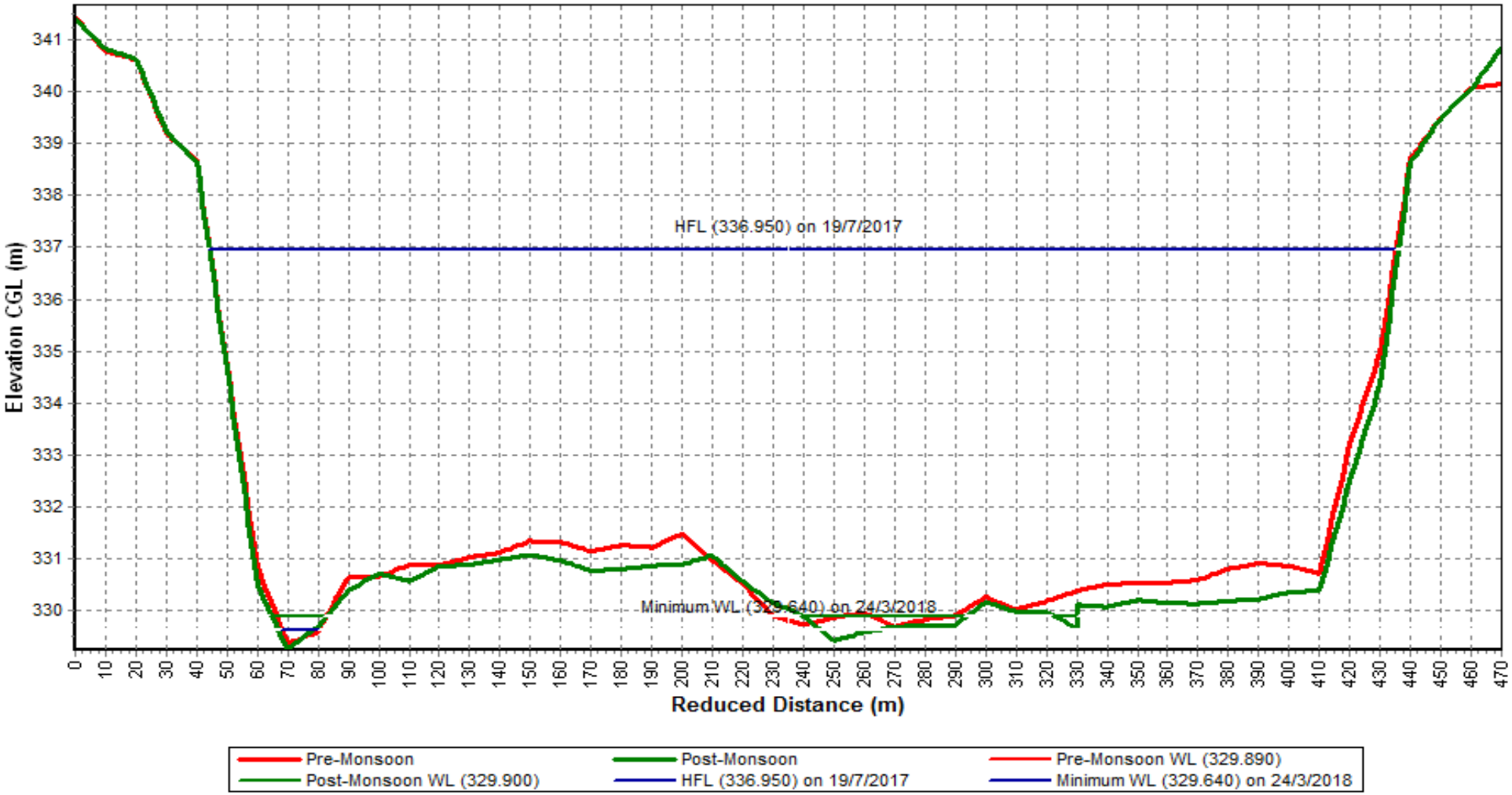
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Chindnar (AGG00N7) **Division : Lower Godavari Div., Hyderabad**

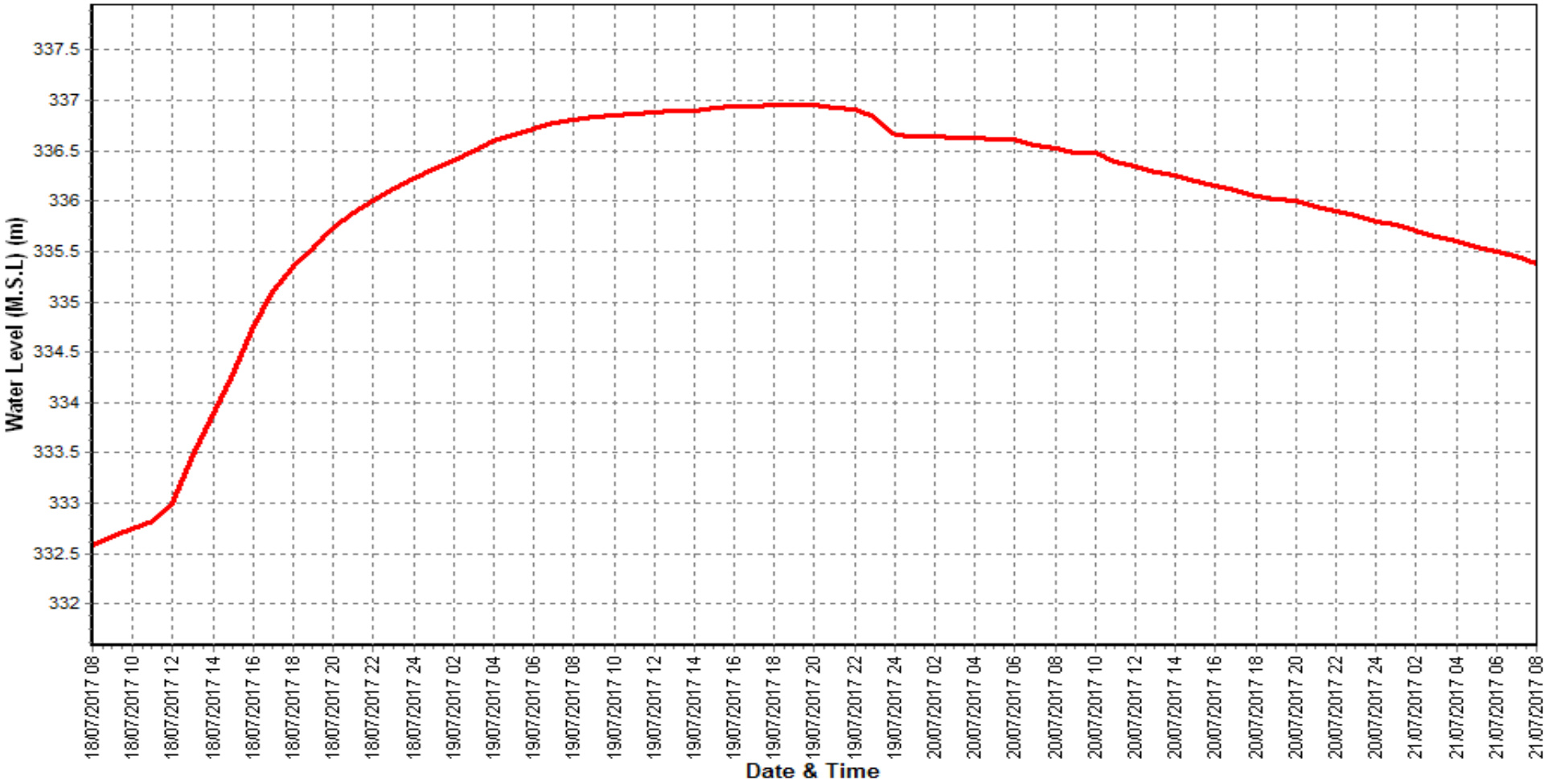
Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Chindnar (AGG00N7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

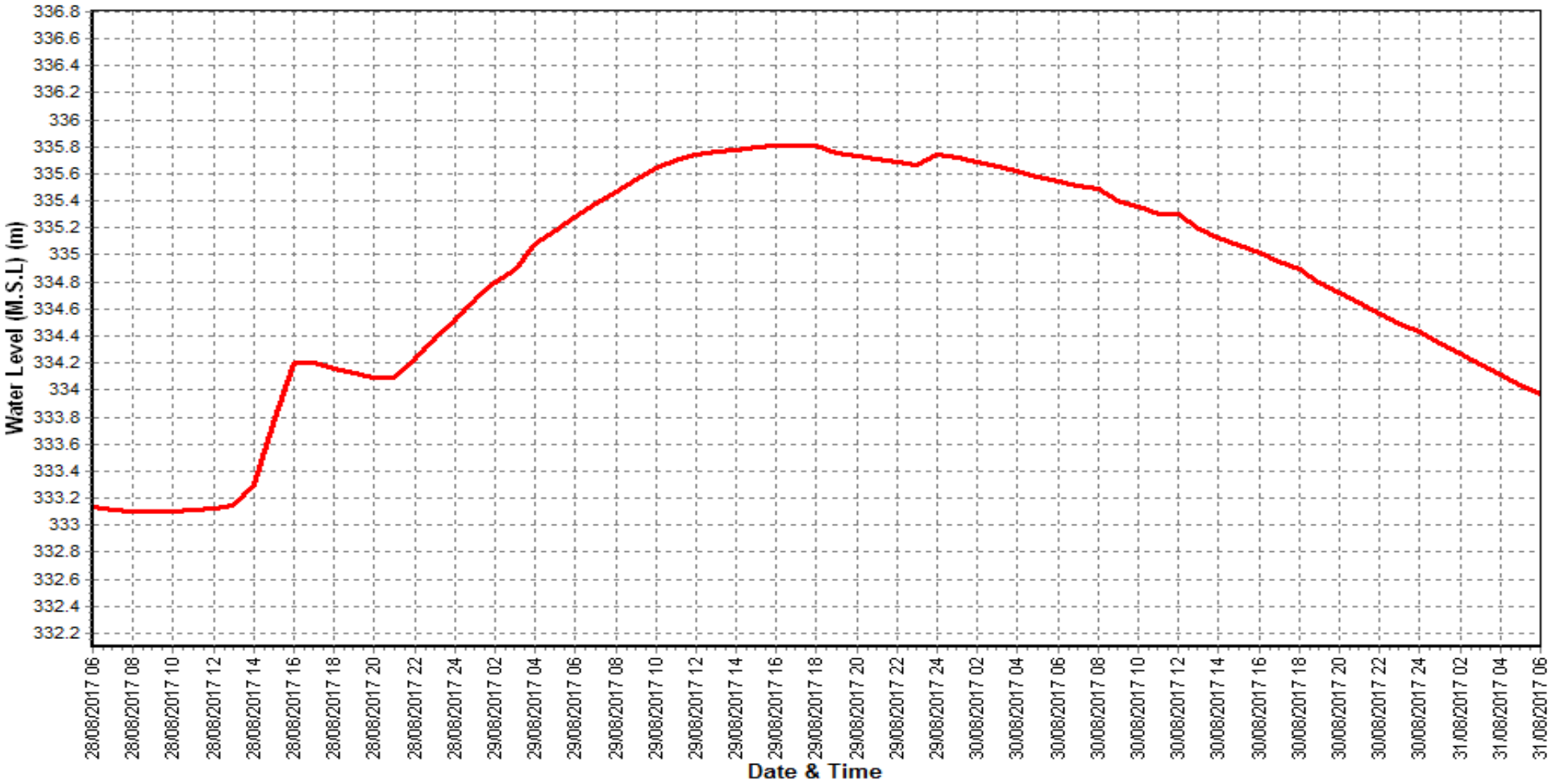


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Chindnar (AGG00N7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Cherribeda**	**Code**	:	**Cherribeda**
State	:	Chhattisgarh	District		Bastar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	Bardha
Sub-Sub Tributary	:	-	Local River	:	Bardha
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	890 Sq. Km.	Bank	:	Left
Latitude	:	19°38'23"	Longitude	:	81°29'07"
Zero of Gauge (m)	:	564.400 (m.s.l)	01.11.1996		
		Opening Date	Closing Date		
Gauge	:	21.03.1996	**HFL During 2017-18**	:	**569.620 Meter**
			Corres. Discharge	:	**635.7 Cumecs (Estimated)**
Discharge	:	13.11.1996	**Date & Time of Occurance**	:	**18.07.2017 19:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 575.63 03/07/2006
Corresponding Discharge (cumecs) : 3793*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1996-1997	185.6	568.800	26.07.1996	0.000	565.070	20.05.1997
1997-1998	432.5	570.150	22.08.1997	0.000	565.370	25.05.1998
1998-1999	76.57	567.550	17.08.1998	0.000	565.300	31.03.1999
1999-2000	252.4	569.050	31.08.1999	0.000		01.06.1999
2000-2001	179.3	568.370	20.07.2000	0.000	565.220	10.04.2001
2001-2002	963.6	572.600	20.08.2001	0.000		01.05.2002
2002-2003	312.4	569.460	08.09.2002	0.000		17.04.2003
2003-2004	1380	571.900	25.07.2003	0.000		15.06.2003
2004-2005	987.4	570.690	15.06.2004	0.082	565.530	24.05.2005
2005-2006	579.8	569.900	13.09.2005	0.000		17.06.2005
2006-2007	2485	573.900	04.07.2006	0.080	565.340	31.05.2007
2007-2008	1816	572.890	07.08.2007	0.000	565.250	15.05.2008
2008-2009	377.6	569.000	11.08.2008	0.000		12.05.2009
2009-2010	434.0	569.000	15.07.2009	0.000		20.04.2010
2010-2011	1662	572.700	06.09.2010	0.000	565.420	19.04.2011
2011-2012	237.7	568.260	01.09.2011	0.000	565.240	23.04.2012
2012-2013	988.2	571.200	19.08.2012	0.000	565.160	29.04.2013
2013-2014	728.6	570.200	07.08.2013	0.000	565.270	01.05.2014

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2014-2015	4384	571.650	22.07.2014	0.000	565.430	31.03.2015
2015-2016	1762	569.910	17.09.2015	0.000	565.720	18.03.2016
2016-2017	1919	570.050	06.08.2016	0.000	564.400	07.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Cherribeda in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1996-1997**	285	6	291
2	**1997-1998**	369	23	392
3	**1998-1999**	242	7	249
4	**1999-2000**	508	15	524
5	**2000-2001**	181	3	184
6	**2001-2002**	962	11	974
7	**2002-2003**	230	4	234
8	**2003-2004**	1162	30	1191
9	**2004-2005**	803	23	826
10	**2005-2006**	595	11	606
11	**2006-2007**	1197	20	1216
12	**2007-2008**	941	11	952
13	**2008-2009**	366	5	371
14	**2009-2010**	372	3	374
15	**2010-2011**	827	15	842
16	**2011-2012**	310	7	317
17	**2012-2013**	630	6	636
18	**2013-2014**	962	11	972
19	**2014-2015**	1478	12	1490
20	**2015-2016**	898	6	903
21	**2016-2017**	1919	12	1931
Average		725	11	737

Stage-Discharge Data for the period 2017 - 2018

Station Name : Cherribeda (Cherribeda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bardha **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	565.020	0.000	566.530	42.26 *	566.110	10.92	566.420	32.86 *	566.300	23.75 *	565.960	7.911
2	565.080	0.000	566.330	25.91 *	566.100	11.02	566.330	25.91 *	566.380	29.69 *	565.950	7.482
3	565.140	0.000	566.150	12.44	566.215	18.17	566.270	21.67 *	566.345	27.03	565.940	7.754
4	565.210	0.000	566.235	15.97	566.185	12.70	566.190	16.34	566.280	20.99	565.930	5.975 *
5	565.260	0.000	566.045	10.48	566.075	9.181	566.150	12.90	566.220	19.37	565.920	5.683 *
6	565.320	0.000	566.170	16.10	566.100	12.33 *	566.150	13.74	566.150	15.00	565.910	6.953
7	565.410	0.000	565.980	8.295	566.150	17.20	566.150	12.94	566.120	12.59	565.910	6.066
8	565.540	0.000	565.890	5.979	566.400	31.25 *	566.150	13.31	566.210	17.96 *	565.900	5.717
9	565.570	0.000	565.840	3.656 *	566.620	50.69 *	566.430	33.67 *	566.320	23.60	565.890	4.901
10	565.490	0.000	565.810	3.437	566.450	35.32 *	566.840	73.91 *	566.330	22.98	565.880	4.313
11	565.820	0.000	565.995	8.702	566.270	21.04	566.450	35.32 *	566.395	28.10	565.880	4.671
12	565.540	0.000	565.890	6.158	566.340	26.65 *	566.500	39.60 *	566.760	65.04 *	565.870	4.354 *
13	565.530	0.000	565.840	5.485	566.170	15.77 *	566.420	31.37	566.710	59.74 *	565.860	4.440
14	565.540	0.000	565.810	3.772	566.180	14.18	566.550	44.08 *	566.480	37.86 *	565.860	4.607
15	565.660	0.665	565.820	4.525	566.200	17.40 *	566.450	35.32 *	566.300	23.75 *	565.850	4.420
16	565.940	4.859	565.880	4.603 *	566.130	13.17	566.330	26.15	566.220	18.30	565.850	4.174
17	565.750	2.057	565.960	8.899	566.100	10.13	566.260	21.00 *	566.140	14.99	565.850	4.254
18	565.770	2.300 *	567.530	169.2 *	566.700	58.71 *	566.570	45.93 *	566.090	12.91	565.850	4.127
19	565.860	3.094	569.000	471.7 *	567.450	156.5 *	566.390	30.39	566.050	10.18 *	565.850	3.881 *
20	565.730	1.058	567.600	180.6 *	567.290	132.4 *	566.340	28.86	566.260	22.03	565.840	4.094
21	565.680	0.929	566.680	56.66 *	566.640	52.64 *	566.730	61.84 *	566.255	22.09	565.840	3.994
22	565.680	0.906	566.490	38.73 *	566.400	31.25 *	566.570	45.93 *	566.440	34.49 *	565.840	3.554
23	565.770	1.826	566.280	22.36 *	566.290	23.15	566.360	29.13	566.345	27.99	565.830	3.624
24	565.700	0.878	566.210	16.85	566.580	46.86 *	566.270	21.67 *	566.200	17.97	565.820	2.896
25	565.920	5.683 *	566.170	14.65	566.910	82.06 *	566.210	20.69	566.130	14.59	565.810	2.829
26	566.140	14.23 *	566.430	33.67 *	566.730	61.84 *	566.150	13.86	566.080	12.54	565.800	2.836 *
27	567.400	148.8 *	566.800	69.42 *	566.750	63.97 *	566.110	10.63	566.040	10.26	565.790	3.207
28	566.470	37.90	566.620	50.69 *	567.220	122.3 *	566.130	11.45	566.020	8.409	565.790	3.350
29	566.170	16.86	566.390	30.47 *	567.790	213.2 *	566.240	20.83	566.000	8.263 *	565.790	2.555
30	565.990	8.760	566.230	19.12 *	566.910	82.06 *	566.400	31.25 *	565.990	8.122	565.780	2.197
31			566.140	13.14	566.600	48.76 *			565.980	8.133		
Ten-Daily Mean												
I Ten-Daily	565.304	0.000	566.098	14.45	566.241	20.88	566.308	25.73	566.266	21.30	565.919	6.276
II Ten-Daily	565.714	1.403	566.533	86.37	566.483	46.59	566.426	33.80	566.340	29.29	565.856	4.302
III Ten-Daily	566.092	23.67	566.404	33.25	566.802	75.29	566.317	26.73	566.135	15.71	565.809	3.104
Monthly												
Min.	565.020	0.000	565.810	3.437	566.075	9.181	566.110	10.63	565.980	8.122	565.780	2.197
Max.	567.400	148.8	569.000	471.7	567.790	213.2	566.840	73.91	566.760	65.04	565.960	7.911
Mean	565.703	8.359	566.347	44.32	566.518	48.48	566.350	28.75	566.243	21.89	565.861	4.561

Annual Runoff in MCM = 422 Annual Runoff in mm = 474

Peak Observed Discharge = 37.90 cumecs on 28/06/2017 Corres. Water Level :566.470 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :565.020 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Cherribeda (Cherribeda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bardha **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	565.770	2.045	565.680	1.010	565.590	0.390	565.540	0.000	565.470	0.000	565.360	0.000
2	565.770	2.045 *	565.680	0.957	565.590	0.299	565.540	0.000	565.470	0.000	565.400	0.000
3	565.760	2.200 *	565.680	0.929	565.590	0.307	565.540	0.000	565.460	0.000	565.380	0.000
4	565.760	2.202	565.680	1.086	565.590	0.300 *	565.540	0.000	565.460	0.000	565.380	0.000
5	565.760	2.056	565.670	0.969	565.580	0.299	565.530	0.000	565.450	0.000	565.370	0.000
6	565.750	1.751	565.670	0.929	565.580	0.301	565.530	0.000	565.450	0.000	565.370	0.000
7	565.740	1.666	565.660	0.800 *	565.580	0.281	565.530	0.000	565.440	0.000	565.360	0.000
8	565.740	1.759	565.660	0.806	565.570	0.268	565.530	0.000	565.440	0.000	565.360	0.000
9	565.740	1.711	565.650	0.782	565.570	0.267	565.530	0.000	565.430	0.000	565.360	0.000
10	565.740	1.710 *	565.650	0.797	565.540	0.170 *	565.520	0.000	565.430	0.000	565.350	0.000
11	565.740	1.741	565.650	0.787	565.570	0.260 *	565.520	0.000	565.420	0.000	565.350	0.000
12	565.730	2.066	565.640	0.753	565.560	0.230	565.520	0.000	565.420	0.000	565.450	0.000
13	565.730	1.714	565.640	0.760 *	565.560	0.171	565.520	0.000	565.420	0.000	565.500	0.000
14	565.730	1.603	565.640	0.760 *	565.570	0.276	565.520	0.000	565.440	0.000	565.410	0.000
15	565.720	1.594	565.630	0.765 *	565.570	0.289	565.510	0.000	565.460	0.000	565.380	0.000
16	565.720	1.649	565.630	0.765	565.570	0.284	565.510	0.000	565.430	0.000	565.370	0.000
17	565.720	1.650 *	565.630	0.685	565.560	0.280	565.510	0.000	565.420	0.000	565.370	0.000
18	565.720	1.629	565.630	0.587	565.560	0.280 *	565.510	0.000	565.410	0.000	565.360	0.000
19	565.710	1.471	565.620	0.551	565.560	0.251	565.510	0.000	565.410	0.000	565.360	0.000
20	565.710	1.462	565.620	0.539	565.560	0.204	565.500	0.000	565.410	0.000	565.350	0.000
21	565.700	1.500	565.620	0.540 *	565.550	0.204	565.500	0.000	565.410	0.000	565.350	0.000
22	565.700	1.563	565.610	0.511	565.550	0.200	565.500	0.000	565.410	0.000	565.340	0.000
23	565.700	1.394	565.600	0.408	565.550	0.200	565.490	0.000	565.400	0.000	565.340	0.000
24	565.700	1.400 *	565.600	0.446	565.550	0.201	565.490	0.000	565.400	0.000	565.330	0.000
25	565.690	1.380 *	565.600	0.441	565.540	0.065 *	565.490	0.000	565.390	0.000	565.330	0.000
26	565.690	1.459	565.600	0.440 *	565.540	0.065	565.490	0.000	565.390	0.000	565.320	0.000
27	565.690	1.316	565.600	0.453	565.540	0.065 *	565.480	0.000	565.380	0.000	565.320	0.000
28	565.690	1.341	565.600	0.450 *	565.540	0.065 *	565.480	0.000	565.380	0.000	565.320	0.000
29	565.680	1.379	565.600	0.453			565.480	0.000	565.370	0.000	565.310	0.000
30	565.680	1.242	565.600	0.445			565.480	0.000	565.370	0.000	565.310	0.000
31	565.670	1.200 *	565.590	0.425			565.470	0.000			565.310	0.000
Ten-Daily Mean												
I Ten-Daily	565.753	1.914	565.668	0.907	565.578	0.288	565.533	0.000	565.450	0.000	565.369	0.000
II Ten-Daily	565.723	1.658	565.633	0.695	565.564	0.253	565.513	0.000	565.424	0.000	565.390	0.000
III Ten-Daily	565.690	1.379	565.602	0.456	565.545	0.133	565.486	0.000	565.390	0.000	565.326	0.000
Monthly												
Min.	565.670	1.200	565.590	0.408	565.540	0.065	565.470	0.000	565.370	0.000	565.310	0.000
Max.	565.770	2.202	565.680	1.086	565.590	0.390	565.540	0.000	565.470	0.000	565.500	0.000
Mean	565.721	1.642	565.633	0.678	565.564	0.231	565.510	0.000	565.421	0.000	565.360	0.000

Peak Computed Discharge = 471.7 cumecs on 19/07/2017 Corres. Water Level :569.000 m

Lowest Computed Discharge = 0.065 cumecs on 25/02/2018 Corres. Water Level :565.540 m

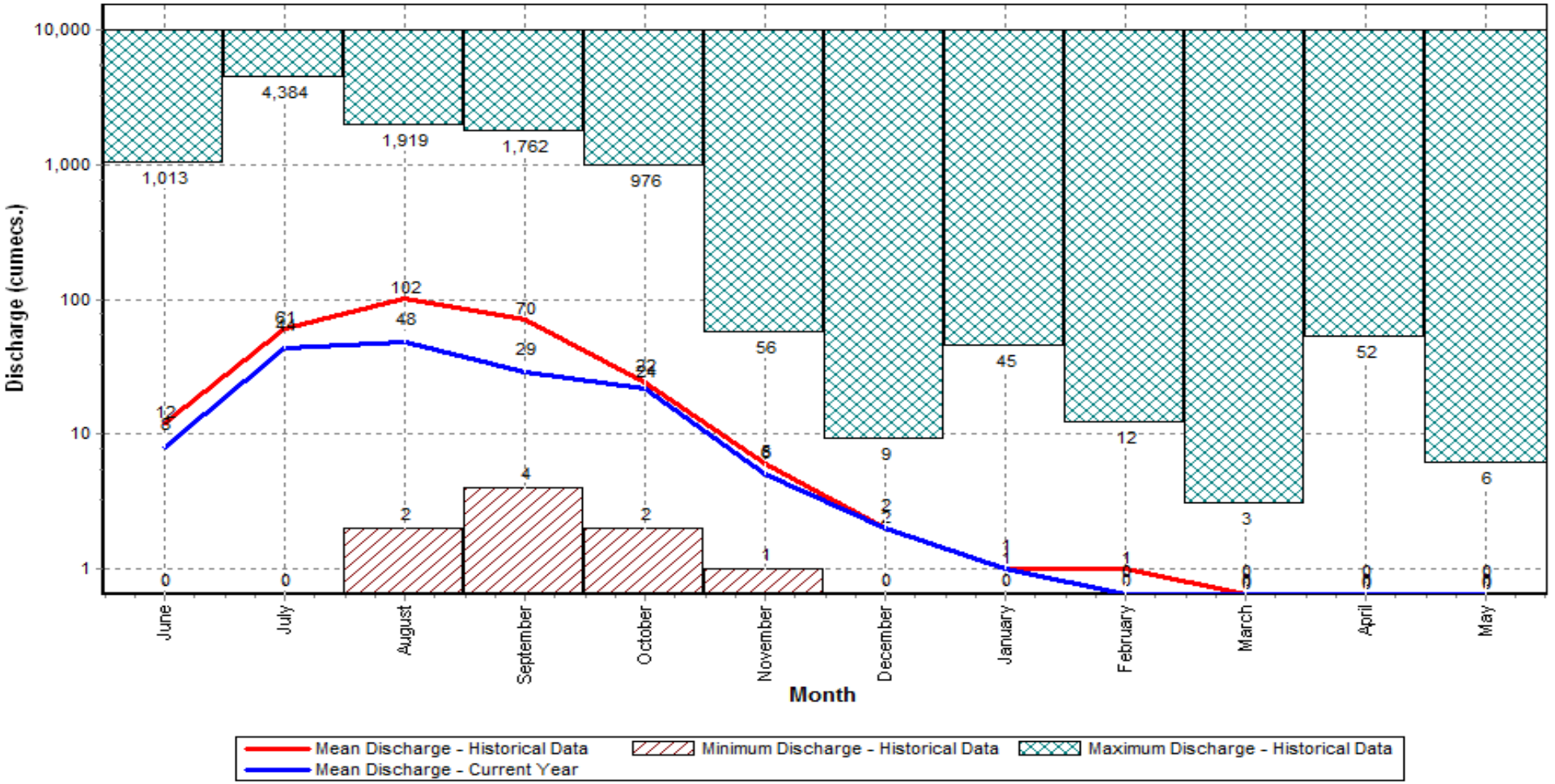
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Cherribeda (Cherribeda) | **Data considered : 1996-2018** | **Division : Lower Godavari Div., Hyderabad**

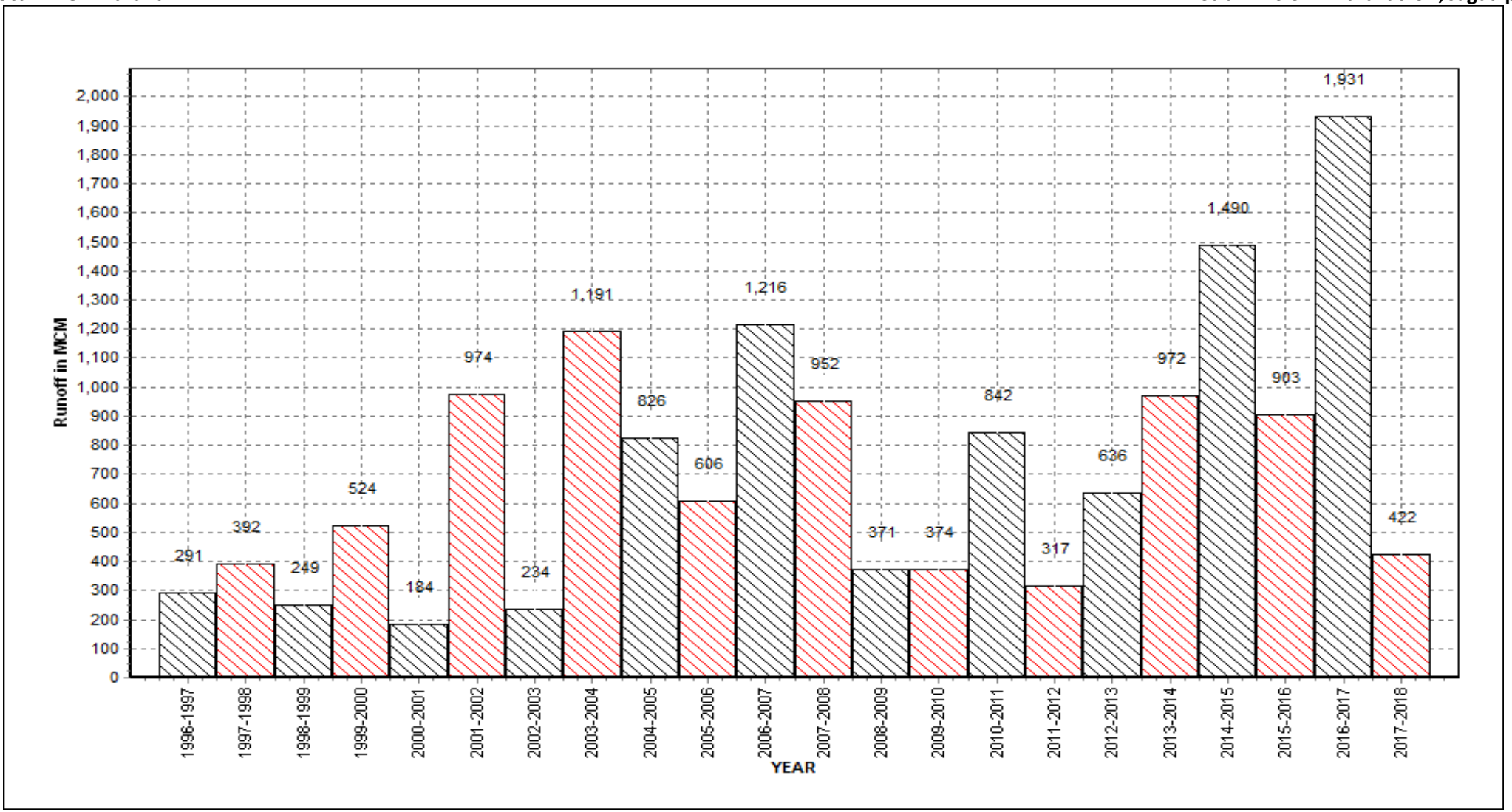
Local River : Bardha | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1996 - 2018

Station Name : Cherribeda (Cherribeda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bardha **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

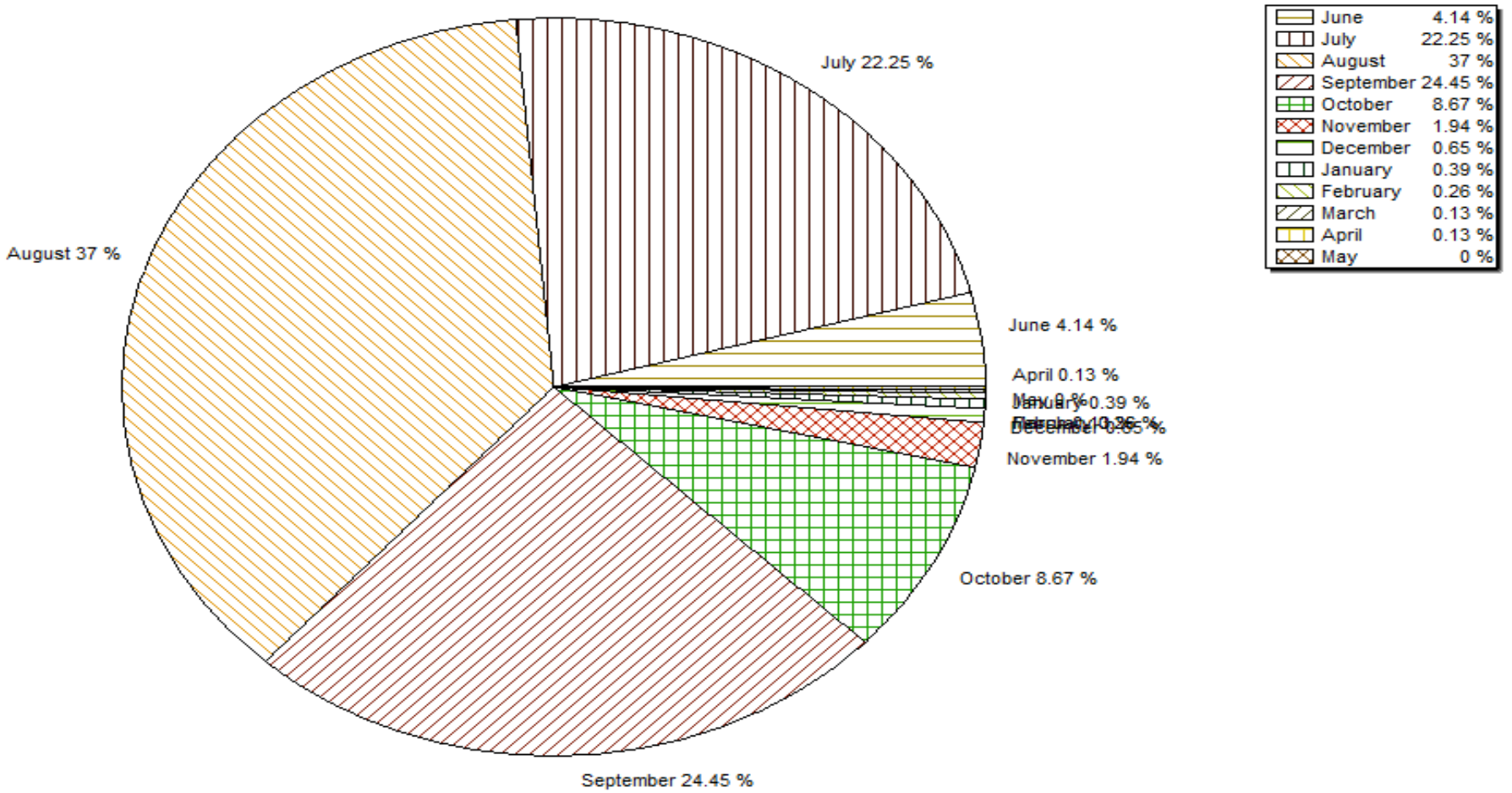
Monthly Average Runoff based on period : 1996-2017

Station Name : Cherribeda (Cherribeda)

Local River : Bardha

Division : Lower Godavari Div., Hyderabad

Sub-Division : Indravati SD, Jagdalpur



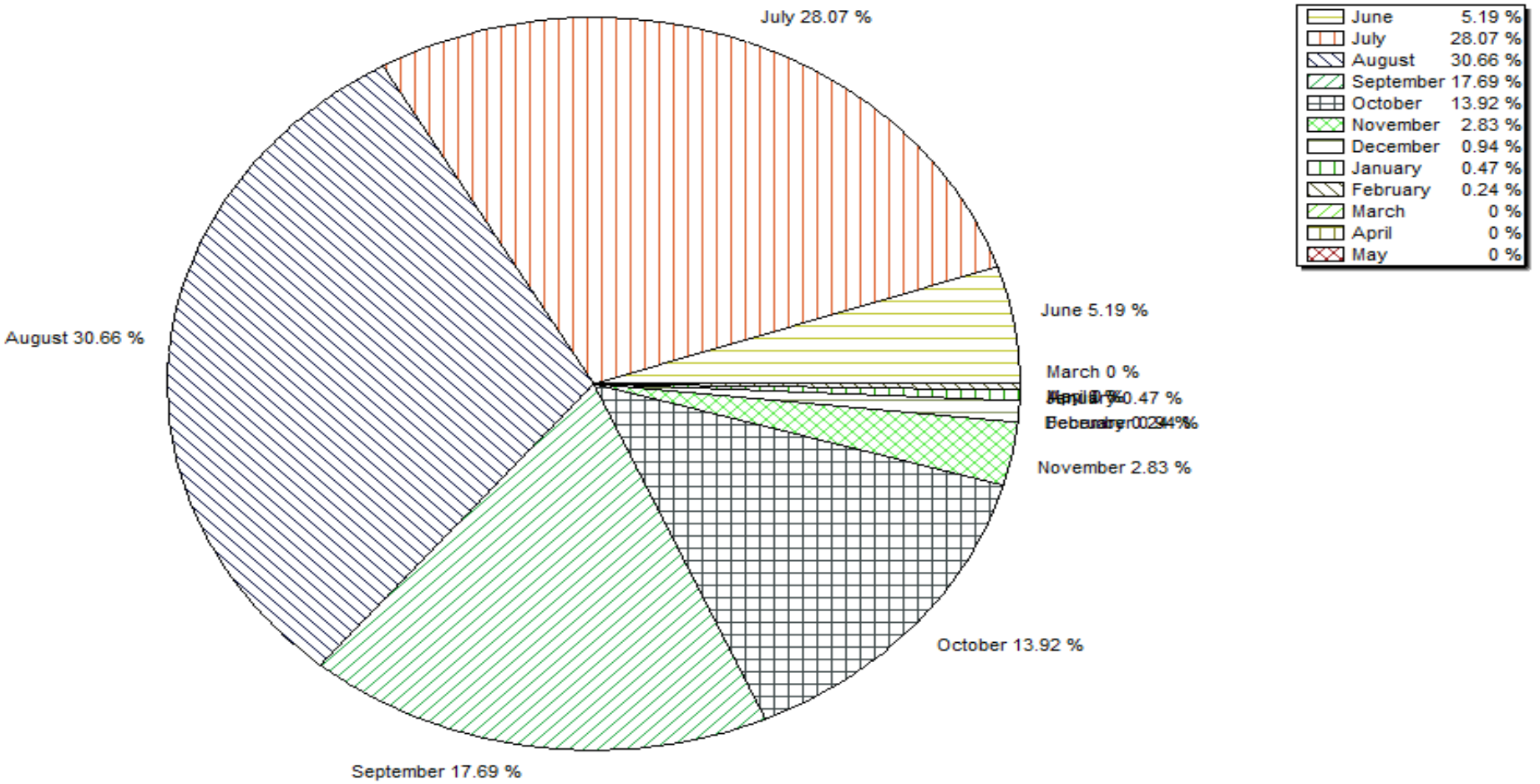
Monthly Runoff for the Year : 2017-2018

Station Name : Cherribeda (Cherribeda)

Local River : Bardha

Division : Lower Godavari Div., Hyderabad

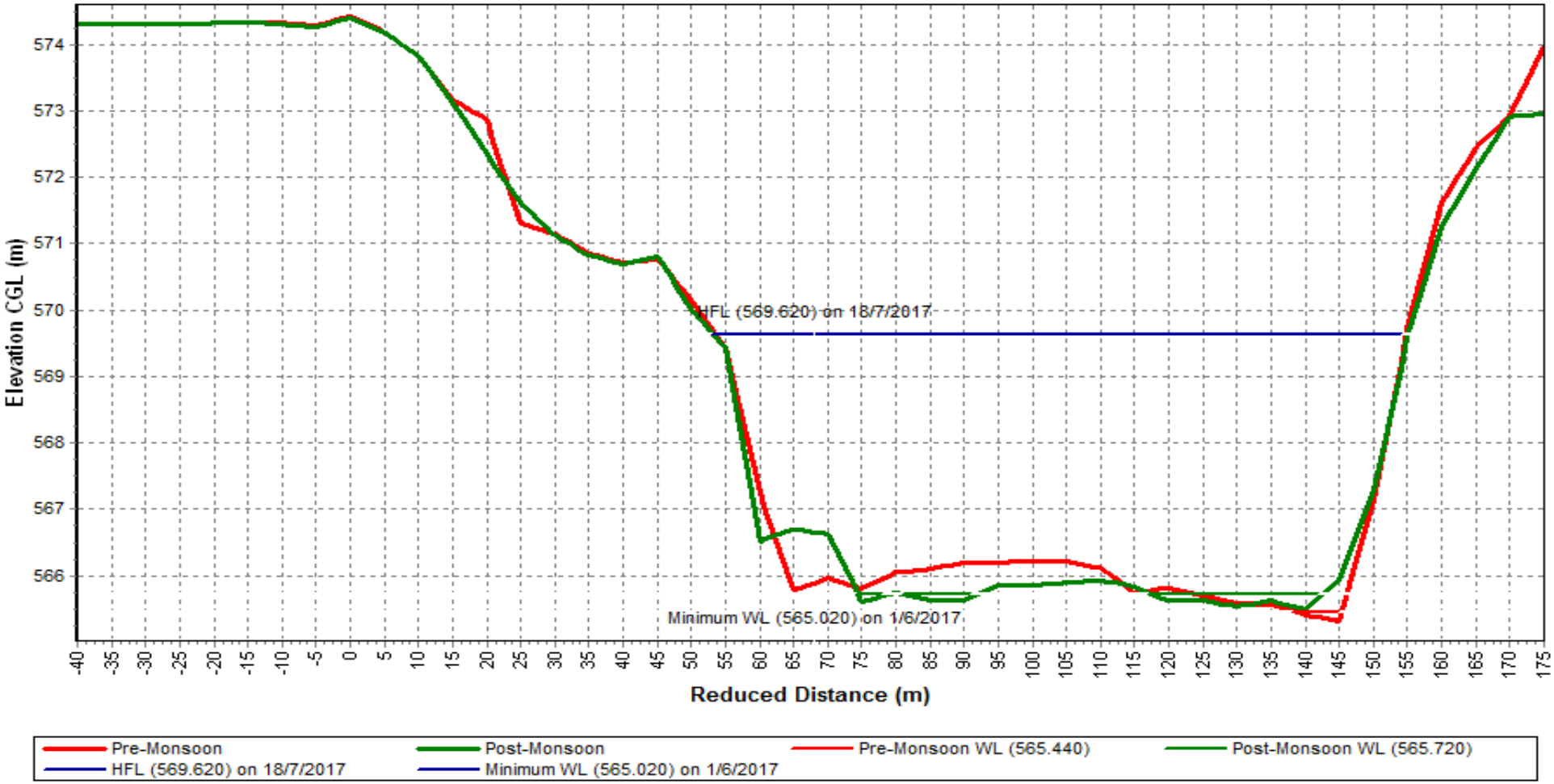
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Cherribeda (Cherribeda) **Division : Lower Godavari Div., Hyderabad**

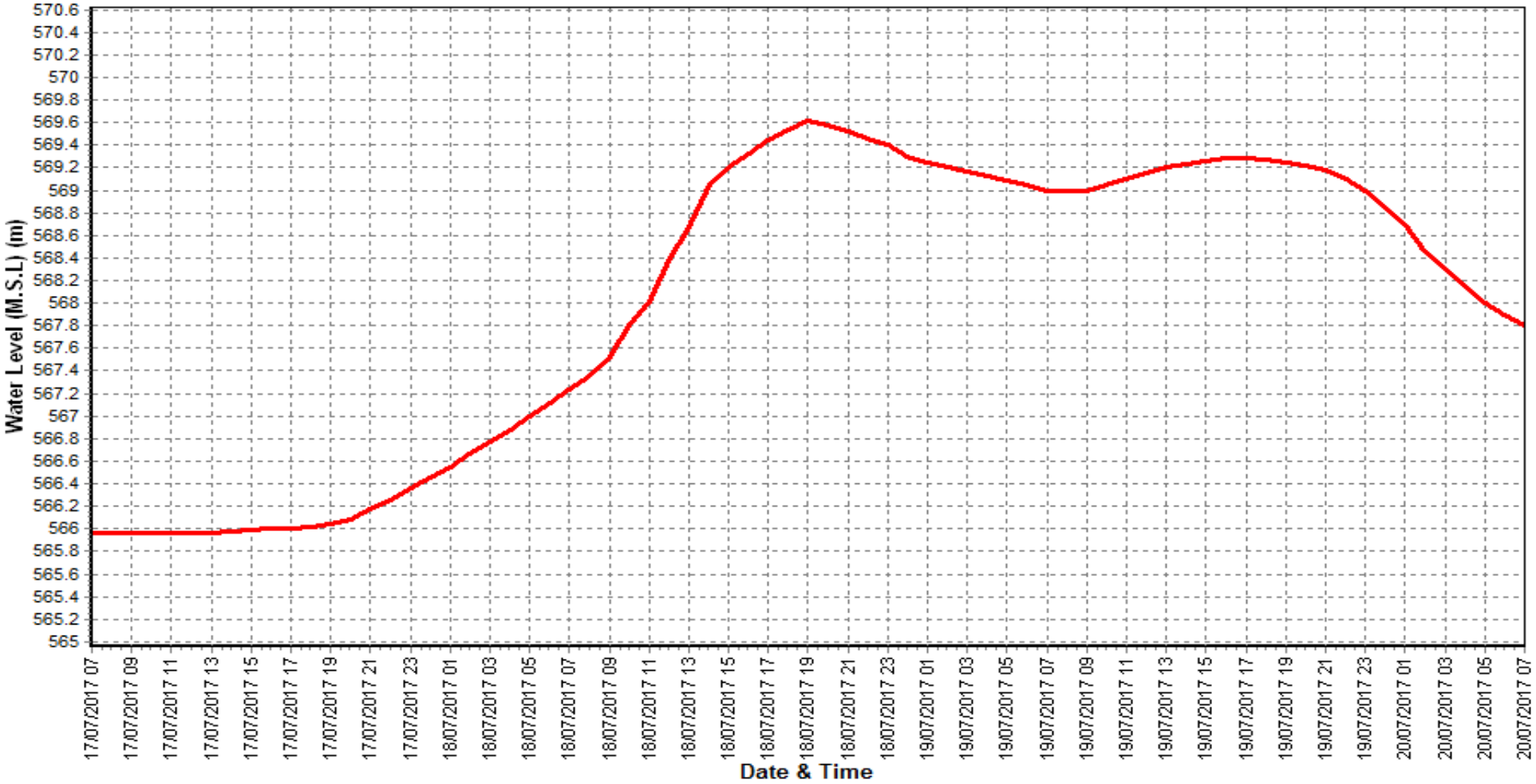
Local River : Bardha **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Cherribeda (Cherribeda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bardha **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Kiwaibalenga**	**Code**	:	**KOKIDI**
State	:	Chhattisgarh	District		Bastar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	Bawardhi
Sub-Sub Tributary	:	-	Local River	:	Bawardhi
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	910 Sq. Km.	Bank	:	Left
Latitude	:	19°38'30"	Longitude	:	81°33'45"
Zero of Gauge (m)	:	562.000 (m.s.l)	01.03.1996		
		Opening Date	Closing Date		
Gauge	:	01.03.1996	**HFL During 2017-18**	:	**568.970 Meter**
			Corres. Discharge	:	**742.5 Cumecs (Estimated)**
Discharge	:	29.08.2005	**Date & Time of**	:	**20.07.2017**
			Occurance	:	**03:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 573.47 31/08/2006 water level only recorded
572.57 22.07.2014
Corresponding Discharge (cumecs) : 1684*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2010-2011	1408	571.790	06.08.2010	0.000		02.06.2010
2011-2012	480.7	567.940	31.08.2011	0.000	563.800	18.02.2012
2012-2013	915.9	569.400	20.08.2012	0.000		23.02.2013
2013-2014	1037	569.900	01.08.2013	0.000	564.040	12.03.2014
2014-2015	213.8	572.000	22.07.2014	0.000	564.010	12.12.2014
2015-2016	230.7	569.440	18.09.2015	0.000	563.890	31.01.2016
2016-2017	258.0	569.900	12.09.2016	0.000	563.910	05.03.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Kiwaibalenga in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**2005-2006**	2	0	2
2	**2006-2007**		0	0
3	**2007-2008**	0	0	1
4	**2008-2009**	3	0	3
5	**2009-2010**	1	0	1
6	**2010-2011**	1312	14	1326
7	**2011-2012**	473	2	474
8	**2012-2013**	806	1	806
9	**2013-2014**	1272	4	1275
10	**2014-2015**	353	0	353
11	**2015-2016**	278	0	279
12	**2016-2017**	552	3	555
Average		459	2	423

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kiwaibalenga (KOKIDI) **Division : Lower Godavari Div., Hyderabad**

Local River : Bawardhi **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	563.780	0.000	564.980	31.66 *	564.760	19.59 *	565.400	62.64 *	565.520	73.40 *	564.380	5.977
2	563.780	0.000	564.780	20.57 *	564.700	16.79 *	565.260	51.16 *	565.300	54.32 *	564.370	5.711
3	563.780	0.000	564.745	17.95	564.665	10.94	565.150	42.94 *	565.045	34.18	564.360	5.406
4	563.770	0.000	564.730	17.57	564.650	10.60	565.000	32.90 *	564.995	31.17	564.360	5.002 *
5	563.770	0.000	564.595	12.39	564.625	9.647	564.750	16.87	564.875	26.29	564.330	4.293 *
6	563.770	0.000	564.570	11.50	564.590	12.23 *	564.700	15.18	564.800	22.88	564.320	4.330
7	563.770	0.000	564.485	8.668	564.730	13.79	564.600	11.46	564.730	19.38	564.320	4.347
8	563.770	0.000	564.395	5.432	564.880	22.62	564.610	12.16	564.870	23.35	564.300	3.919
9	563.840	0.000	564.310	3.850 *	565.480	69.72 *	564.880	25.82 *	565.230	48.85 *	564.290	3.714
10	563.890	0.000	564.340	6.025	565.210	47.33 *	565.000	32.90 *	565.065	35.36	564.280	3.380
11	565.000	32.90 *	564.940	29.25 *	565.050	36.10 *	565.350	58.40 *	565.780	99.61 *	564.285	3.524
12	564.290	3.143	564.645	13.82	564.900	26.94 *	565.680	89.06 *	565.420	64.37 *	564.160	1.293 *
13	564.315	3.307	564.490	9.083	564.820	22.60 *	565.510	72.47 *	565.190	45.85 *	564.280	3.483
14	564.345	3.852	564.390	5.594	564.750	15.62	565.450	67.02 *	565.220	48.09 *	564.250	3.450
15	564.210	1.788	564.360	5.333	565.030	34.80 *	565.380	60.93 *	565.100	39.45 *	564.240	3.289
16	564.295	3.376	564.440	7.157 *	565.050	36.10 *	565.610	82.02 *	564.905	25.99	564.230	3.075
17	564.335	3.594	564.495	9.989	564.960	30.44 *	565.270	51.94 *	564.780	21.07	564.220	2.895
18	564.240	2.489 *	567.230	318.3 *	566.010	126.1 *	565.670	88.04 *	564.685	16.89	564.240	3.129
19	564.170	1.425	568.140	518.2 *	566.170	146.4 *	565.600	81.04 *	564.620	13.40 *	564.220	2.154 *
20	564.140	0.927	568.770	684.7 *	566.880	254.3 *	565.380	0.000	564.640	14.54	564.200	2.454
21	564.110	0.734	566.410	179.6 *	566.110	138.6 *	566.050	131.0 *	564.720	18.77	564.200	2.549
22	565.150	42.94 *	565.600	81.04 *	565.530	74.33 *	565.560	77.17 *	564.850	24.18 *	564.250	2.894
23	564.355	4.908	565.250	50.38 *	565.290	53.52 *	565.240	49.61 *	564.695	18.10	564.240	2.616
24	564.375	5.744	565.040	35.45 *	565.030	34.80 *	565.030	34.80 *	564.610	14.54	564.210	2.220
25	564.580	11.85 *	564.960	30.44 *	565.000	32.90 *	564.860	24.72 *	564.560	12.46	564.190	1.813
26	564.630	13.80 *	565.030	34.80 *	565.010	33.53 *	564.740	19.20	564.520	10.50	564.170	1.421 *
27	565.100	39.45 *	566.070	133.5 *	565.510	72.47 *	564.650	14.94	564.460	8.819	564.130	0.696
28	565.320	55.93 *	565.870	109.6 *	566.020	127.3 *	564.700	17.80	564.470	8.790	564.120	0.536
29	564.685	14.48	565.410	63.50 *	566.900	257.8 *	564.915	29.79	564.340	4.524 *	564.105	0.482
30	564.695	15.28	565.090	38.77 *	566.390	176.7 *	565.660	87.02 *	564.430	7.883	564.110	0.496
31			564.870	25.27 *	565.740	95.32 *			564.335	4.871		
Ten-Daily Mean												
I Ten-Daily	563.792	0.000	564.593	13.56	564.829	23.32	564.935	30.40	565.043	36.92	564.331	4.608
II Ten-Daily	564.334	5.680	565.590	160.1	565.362	72.94	565.490	65.09	565.034	38.92	564.233	2.874
III Ten-Daily	564.700	20.51	565.418	71.12	565.685	99.75	565.141	48.61	564.544	12.13	564.172	1.572
Monthly												
Min.	563.770	0.000	564.310	3.850	564.590	9.647	564.600	0.000	564.335	4.524	564.105	0.482
Max.	565.320	55.93	568.770	684.7	566.900	257.8	566.050	131.0	565.780	99.61	564.380	5.977
Mean	564.275	8.731	565.207	81.27	565.305	66.45	565.188	48.03	564.863	28.77	564.245	3.018

Annual Runoff in MCM = 632 Annual Runoff in mm = 694

Peak Observed Discharge = 35.36 cumecs on 10/10/2017 Corres. Water Level :565.065 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :563.780 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kiwaibalenga (KOKIDI) **Division : Lower Godavari Div., Hyderabad**

Local River : Bawardhi **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	564.140	0.875	564.070	0.261	564.000	0.000	563.980	0.000	563.960	0.000	564.020	0.000
2	564.120	0.670 *	564.070	0.259	564.000	0.000	563.970	0.000	563.960	0.000	564.360	5.337
3	564.120	0.680 *	564.070	0.256	564.000	0.000	563.980	0.000	563.960	0.000	564.150	1.099
4	564.110	0.535	564.060	0.230	563.990	0.000	563.980	0.000	563.980	0.000	564.130	0.813
5	564.130	0.712	564.060	0.225	563.990	0.000	563.980	0.000	563.980	0.000	564.100	0.604
6	564.130	0.720	564.060	0.214	563.990	0.000	563.970	0.000	563.980	0.000	564.080	0.000
7	564.110	0.612	564.060	0.205 *	563.990	0.000	563.970	0.000	563.990	0.000	564.060	0.000
8	564.110	0.522	564.060	0.201	563.990	0.000	563.980	0.000	564.000	0.000	564.040	0.000
9	564.100	0.420 *	564.050	0.202	563.990	0.000	563.970	0.000	563.990	0.000	564.040	0.000
10	564.080	0.370 *	564.050	0.190	563.990	0.000	563.970	0.000	563.990	0.000	564.050	0.000
11	564.070	0.298	564.000	0.000	563.990	0.000	563.970	0.000	563.980	0.000	564.040	0.000
12	564.070	0.278	564.000	0.000	563.990	0.000	563.970	0.000	563.980	0.000	564.050	0.000
13	564.110	0.672	564.000	0.000	563.990	0.000	563.970	0.000	563.990	0.000	564.040	0.000
14	564.110	0.624	564.000	0.000	563.990	0.000	563.960	0.000	563.980	0.000	564.040	0.000
15	564.130	0.826	564.000	0.000	563.990	0.000	563.960	0.000	563.980	0.000 *	564.040	0.000
16	564.140	0.751	564.000	0.000	563.980	0.000	563.970	0.000	564.505	11.19	564.030	0.000
17	564.130	0.630 *	564.000	0.000	563.980	0.000	563.970	0.000	564.280	3.576	564.020	0.000
18	564.120	0.573	564.000	0.000	563.980	0.000	563.970	0.000	564.370	7.126	564.010	0.000
19	564.110	0.470	564.000	0.000	563.990	0.000	563.970	0.000	564.185	1.759	564.000	0.000
20	564.090	0.338	564.000	0.000	563.990	0.000	563.970	0.000	564.110	0.866	564.010	0.000
21	564.080	0.290	564.000	0.000	563.990	0.000	563.960	0.000	564.090	0.788	564.020	0.000
22	564.080	0.252	564.000	0.000	563.990	0.000	563.960	0.000	564.070	0.000	564.020	0.000
23	564.080	0.232	564.000	0.000	563.990	0.000	563.960	0.000	564.060	0.000	564.020	0.000
24	564.080	0.238 *	564.000	0.000	563.980	0.000	563.960	0.000	564.050	0.000	564.020	0.000
25	564.080	0.240 *	564.000	0.000	563.980	0.000	563.950	0.000	564.040	0.000	564.030	0.000
26	564.080	0.167	564.000	0.000	563.980	0.000	563.940	0.000	564.050	0.000	564.020	0.000
27	564.070	0.142	564.000	0.000	563.980	0.000	563.930	0.000	564.040	0.000	564.020	0.000
28	564.070	0.190	564.000	0.000	563.990	0.000	563.930	0.000	564.050	0.000	564.020	0.000
29	564.070	0.268	564.000	0.000			563.930	0.000	564.030	0.000	564.020	0.000
30	564.070	0.278	563.990	0.000			563.930	0.000	564.030	0.000	564.020	0.000
31	564.070	0.280 *	563.990	0.000			563.930	0.000			564.100	0.608
Ten-Daily Mean												
I Ten-Daily	564.115	0.612	564.061	0.224	563.993	0.000	563.975	0.000	563.979	0.000	564.103	0.785
II Ten-Daily	564.108	0.546	564.000	0.000	563.987	0.000	563.968	0.000	564.136	2.452	564.028	0.000
III Ten-Daily	564.075	0.234	563.998	0.000	563.985	0.000	563.944	0.000	564.051	0.079	564.028	0.055
Monthly												
Min.	564.070	0.142	563.990	0.000	563.980	0.000	563.930	0.000	563.960	0.000	564.000	0.000
Max.	564.140	0.875	564.070	0.261	564.000	0.000	563.980	0.000	564.505	11.19	564.360	5.337
Mean	564.099	0.457	564.019	0.072	563.989	0.000	563.962	0.000	564.055	0.844	564.052	0.273

Peak Computed Discharge = 684.7 cumecs on 20/07/2017 Corres. Water Level :568.770 m

Lowest Computed Discharge = 0.000 cumecs on 15/04/2018 Corres. Water Level :563.980 m

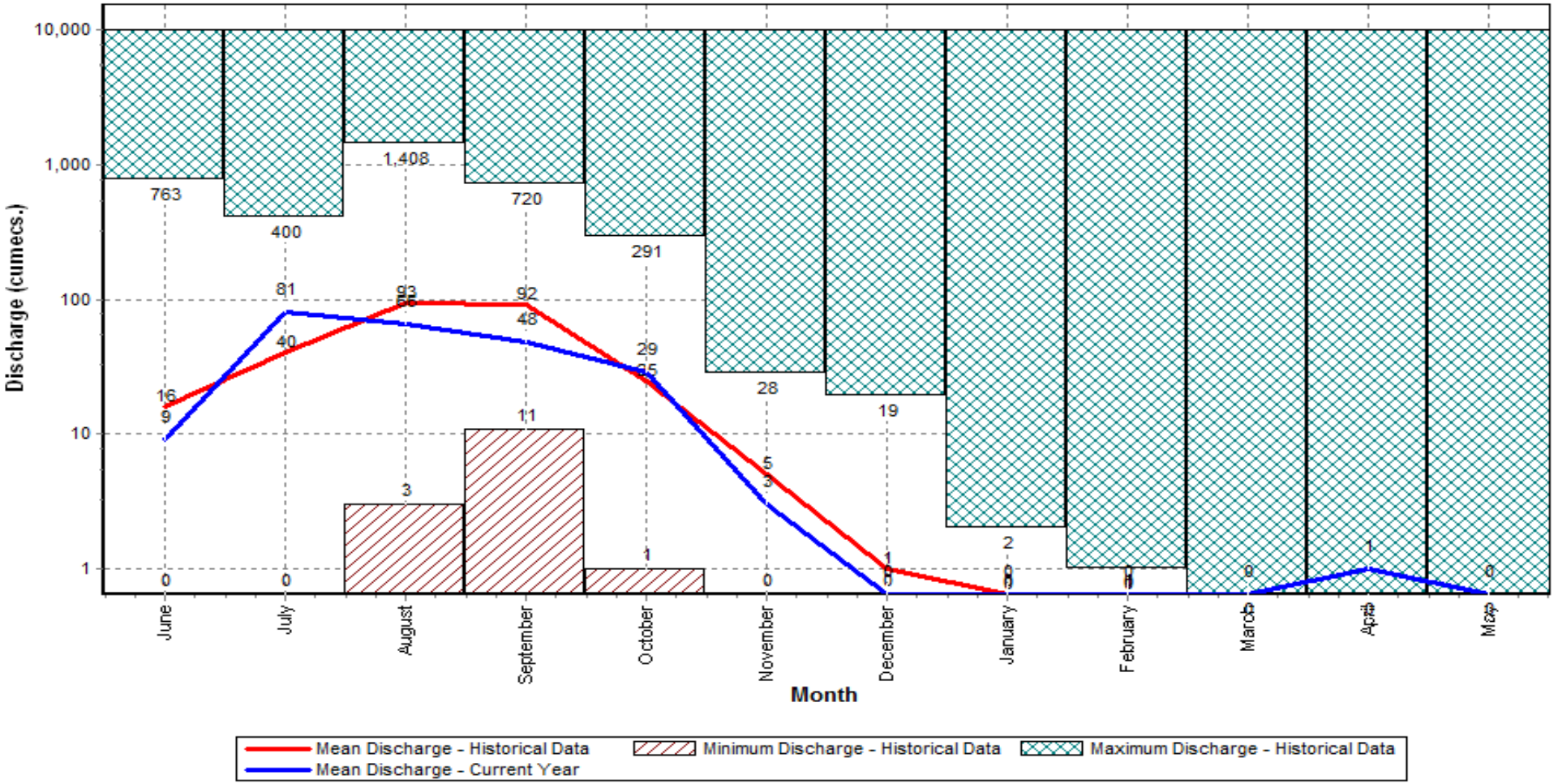
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Kiwaibalenga (KOKIDI) | **Data considered : 2010-2018** | **Division : Lower Godavari Div., Hyderabad**

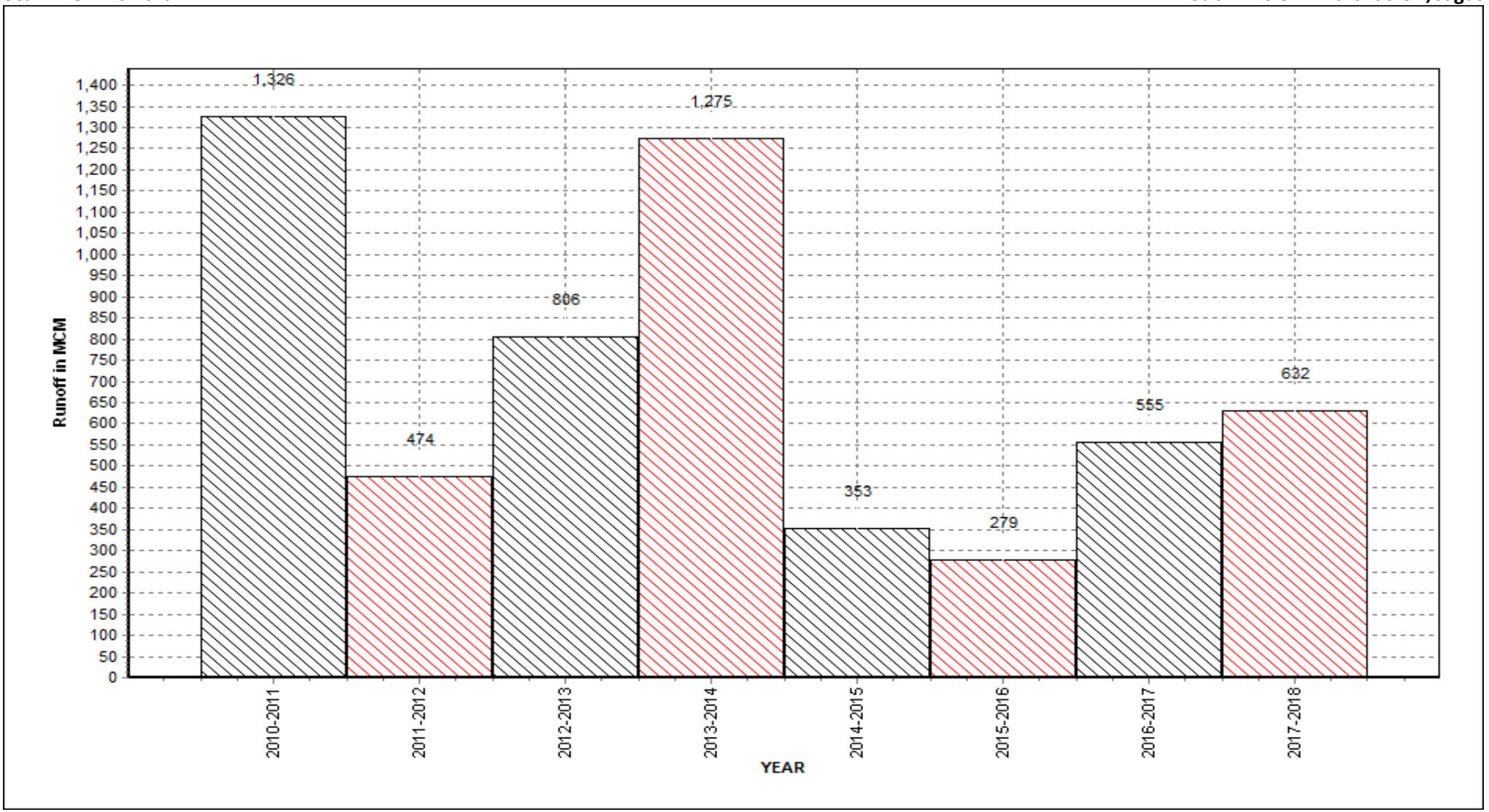
Local River : Bawardhi | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 2010 - 2018

Station Name : Kiwaibalenga (KOKIDI) **Division : Lower Godavari Div., Hyderabad**

Local River : Bawardhi **Sub-Division : Indravati SD, Jagdalpur**

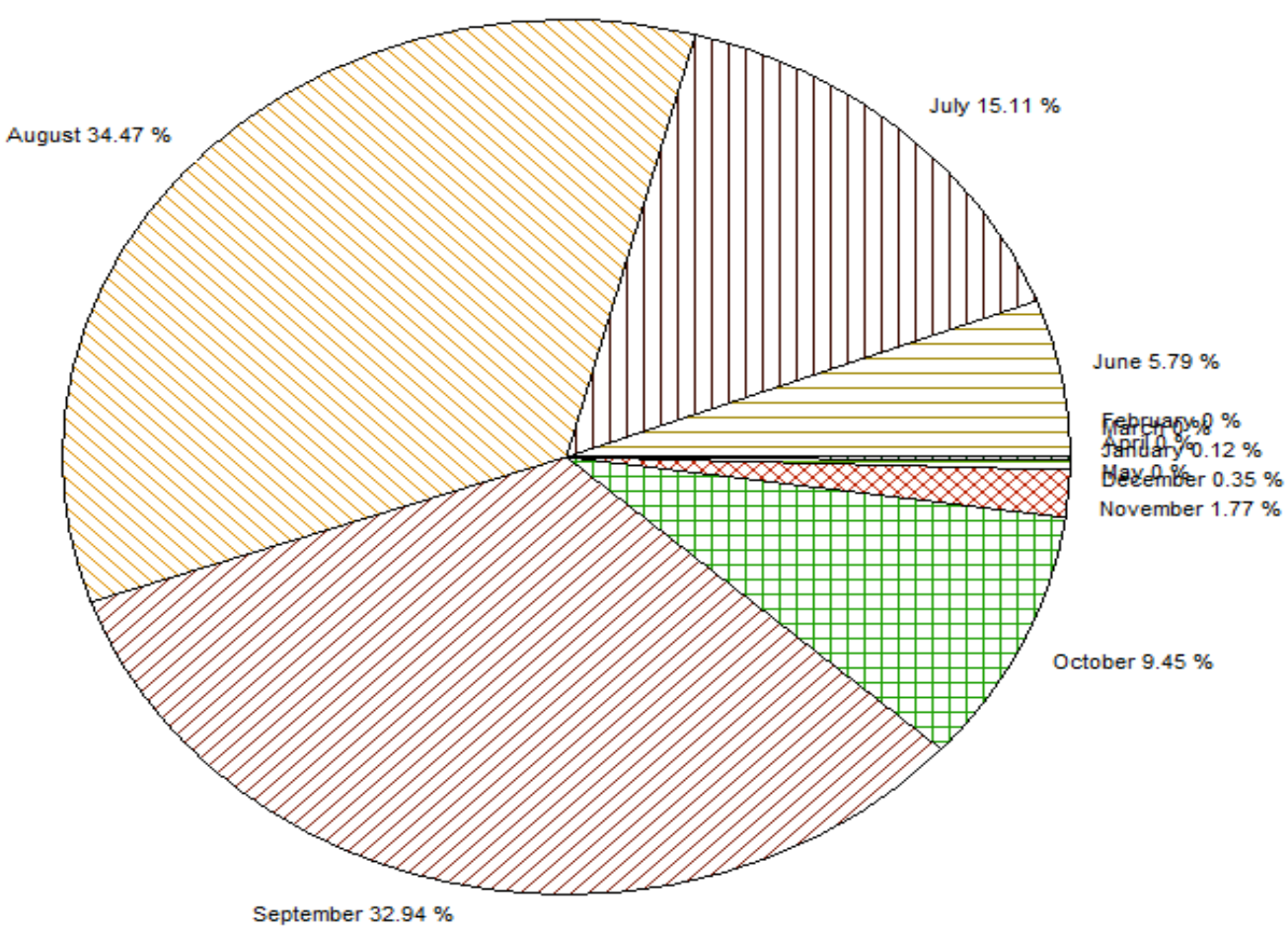


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 2010-2017

Station Name : Kiwaibalenga (KOKIDI) **Division : Lower Godavari Div., Hyderabad**

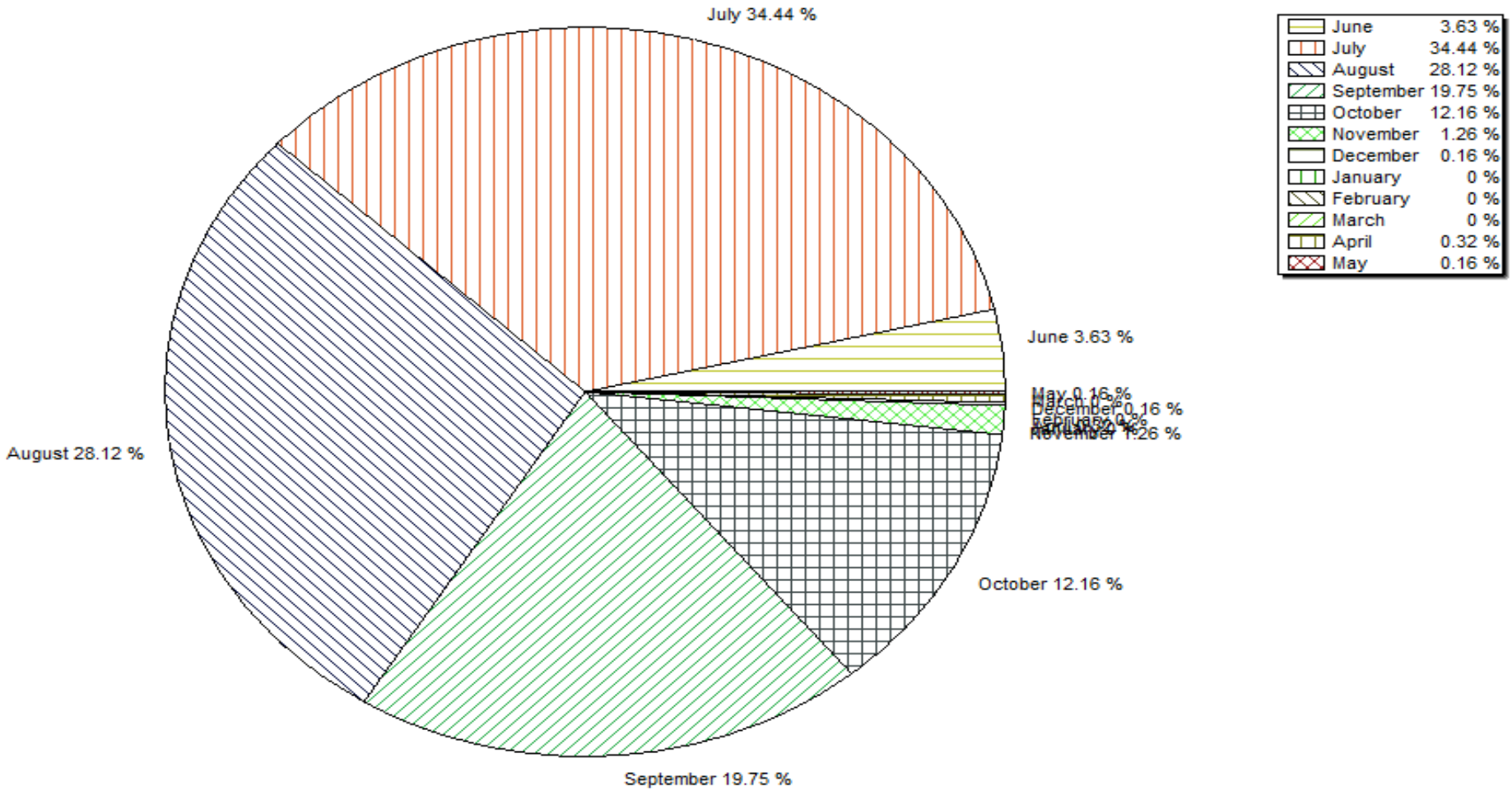
Local River : Bawardhi **Sub-Division : Indravati SD, Jagdalpur**



Monthly Runoff for the Year : 2017-2018

Station Name : Kiwaibalenga (KOKIDI) **Division : Lower Godavari Div., Hyderabad**

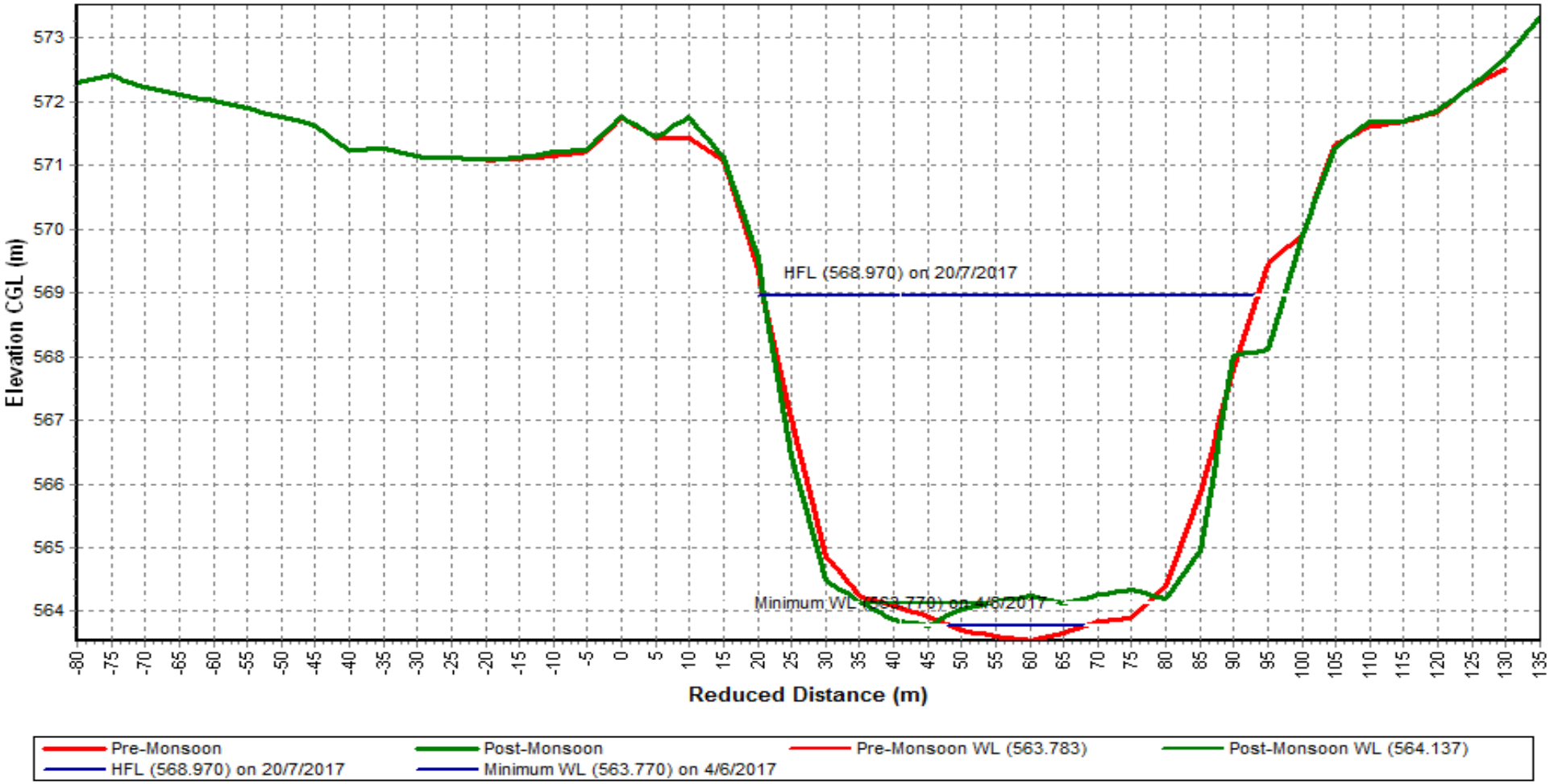
Local River : Bawardhi **Sub-Division : Indravati SD, Jagdalpur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Kiwaibalenga (KOKIDI) **Division : Lower Godavari Div., Hyderabad**

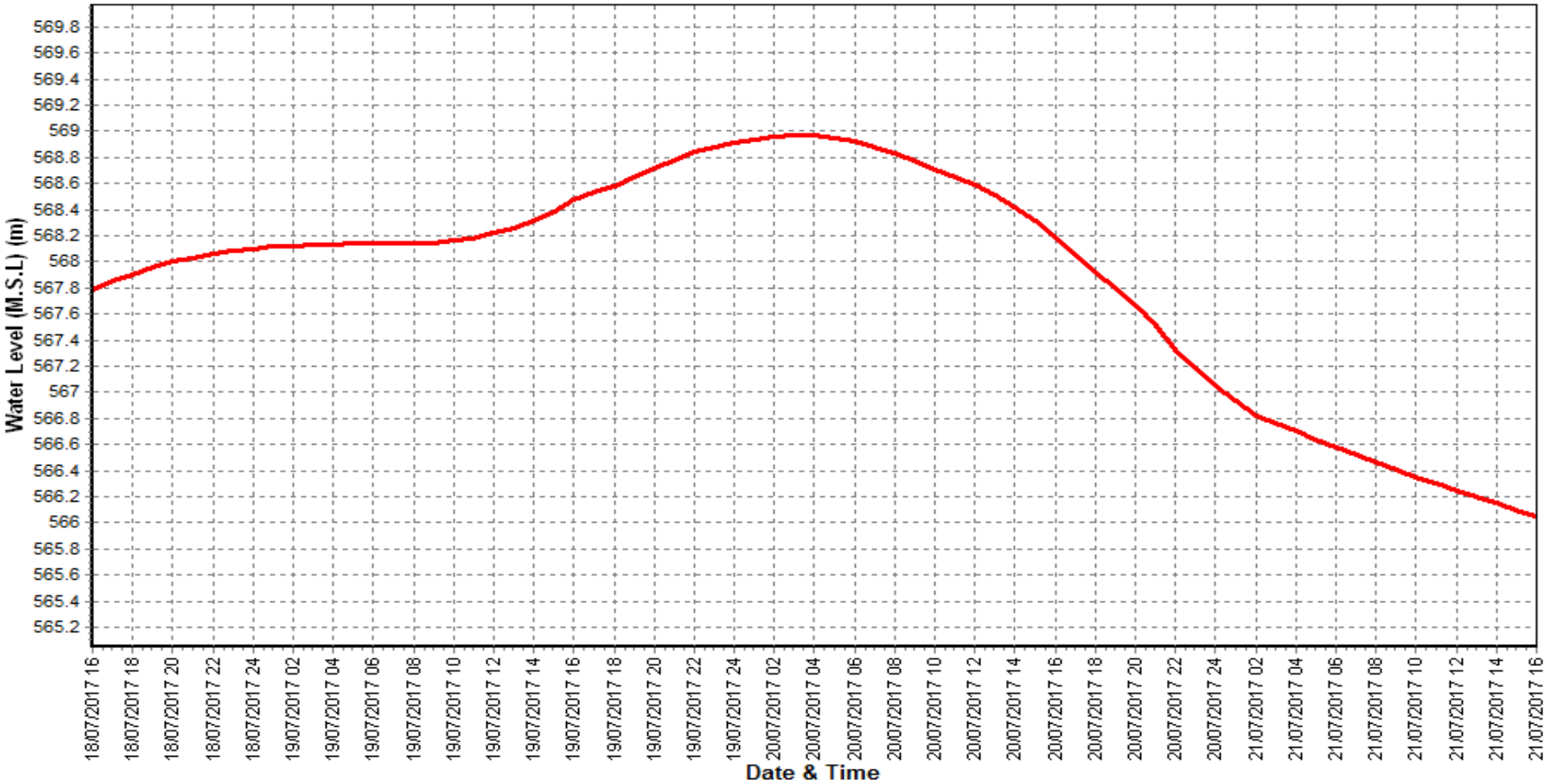
Local River : Bawardhi **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Kiwaibalenga (KOKIDI) **Division : Lower Godavari Div., Hyderabad**

Local River : Bawardhi **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Ambabal**	**Code**	:	**AGC90C8**
State	:	Chhattisgarh	District		Bastar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	Narangi
Sub-Sub Tributary	:	-	Local River	:	Narangi
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	1968 Sq. Km.	Bank	:	Left
Latitude	:	19°17'00"	Longitude	:	81°47'20"
Zero of Gauge (m)	:	533.136 (m.s.l)	01.11.1992	-	30.11.2000
		534 (m.s.l)	01.12.2000		
		84 (m.s.l)	01.06.1989	-	31.10.1992
		Opening Date	Closing Date		
Gauge	:	09.12.1988	**HFL During 2017-18**	:	**538.830 Meter**
			Corres. Discharge	:	**515.5 Cumecs (Estimated)**
Discharge	:	30.10.1993	**Date & Time of**	:	**18.07.2017**
			Occurance	:	**20:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 542.55 05/07/2006
Corresponding Discharge (cumecs) : 2299*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1993-1994	521.5	539.286	15.07.1993	0.000	535.041	19.03.1994
1994-1995	1180	541.756	05.09.1994	3.602	534.996	13.06.1994
1995-1996	774.4	540.476	24.07.1995	0.000	535.431	07.03.1996
1996-1997	511.5	538.796	16.08.1996	0.000	535.266	02.03.1997
1997-1998	360.0	538.131	22.08.1997	0.000	535.286	31.05.1998
1998-1999	145.5	537.226	08.09.1998	0.000		02.05.1999
1999-2000	456.3	538.511	04.08.1999	0.000		30.04.2000
2000-2001	567.9	538.816	30.08.2000	0.000		28.03.2001
2001-2002	1303	540.720	20.08.2001	0.000	534.540	23.05.2002
2002-2003	476.3	538.280	24.08.2002	0.000		07.04.2003
2003-2004	604.0	539.140	25.07.2003	0.000	534.850	09.03.2004
2004-2005	771.3	539.500	15.06.2004	0.000	534.795	02.04.2005
2005-2006	551.4	538.965	14.09.2005	0.000	534.810	17.03.2006
2006-2007	2243	542.450	05.07.2006	0.011	534.580	09.04.2007
2007-2008	1770	541.550	08.08.2007	0.000	534.800	24.04.2008
2008-2009	398.3	537.850	28.07.2008	0.000	534.820	07.02.2009

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2009-2010	525.4	538.240	27.08.2009	0.000	535.050	11.02.2010
2010-2011	1220	541.730	06.08.2010	0.000	536.580	12.02.2011
2011-2012	258.6	538.310	01.09.2011	0.000	536.550	06.12.2011
2012-2013	585.1	538.900	06.08.2012	0.000	536.540	29.01.2013
2013-2014	658.4	539.150	25.06.2013	0.000	536.030	01.03.2014
2014-2015	1862	539.930	22.07.2014	0.000	536.570	06.03.2015
2015-2016	618.3	539.340	17.09.2015	0.000	536.550	25.01.2016
2016-2017	539.8	539.230	07.08.2016	0.000	536.320	21.02.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Ambabal in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1993-1994**	579	3	582
2	**1994-1995**	1374	306	1680
3	**1995-1996**	1008	4	1012
4	**1996-1997**	765	4	769
5	**1997-1998**	474	29	503
6	**1998-1999**	386	7	393
7	**1999-2000**	919	7	926
8	**2000-2001**	503	3	505
9	**2001-2002**	1297	7	1304
10	**2002-2003**	315	85	400
11	**2003-2004**	1129	24	1153
12	**2004-2005**	734	14	748
13	**2005-2006**	545	4	549
14	**2006-2007**	1521	9	1529
15	**2007-2008**	1109	5	1113
16	**2008-2009**	711	1	712
17	**2009-2010**	473	1	474
18	**2010-2011**	1134	8	1142
19	**2011-2012**	642	0	642
20	**2012-2013**	587	0	587
21	**2013-2014**	809	0	809
22	**2014-2015**	940	0	940
23	**2015-2016**	523	0	523
24	**2016-2017**	1055	62	1117
Average		814	24	838

Stage-Discharge Data for the period 2017 - 2018

Station Name : Ambabal (AGC90C8) **Division : Lower Godavari Div., Hyderabad**

Local River : Narangi **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	535.600	0.000	535.600	25.64	535.620	28.86	536.780	64.07	536.840	97.18 *	535.320	7.933
2	535.600	0.000	536.490	63.23 *	535.550	25.64	536.930	107.5 *	536.700	82.46 *	535.280	6.735
3	535.580	0.000	535.580	33.79	535.615	27.89	536.830	96.08 *	536.300	51.63	535.220	4.891
4	535.560	0.000	535.985	42.53	535.520	22.33	536.635	59.39	536.650	66.64	535.220	0.000
5	535.460	0.000	535.695	32.22	535.455	20.79	536.590	61.63	536.600	47.04	535.220	0.000
6	535.420	0.000	535.575	21.56	535.490	21.40 *	536.000	39.63	536.080	38.16	536.660	0.000
7	535.400	0.000	535.465	16.10	535.520	19.82	536.170	42.23	535.740	27.51	536.670	0.000
8	535.430	0.000	535.405	11.48	535.670	29.98	535.670	30.19	536.000	39.83 *	536.680	0.000
9	535.450	0.000	535.360	15.94 *	535.870	36.24	535.600	26.83	536.405	46.94	536.680	0.000
10	535.530	0.000	535.300	6.084	535.975	36.53	535.650	27.59 *	536.820	75.94	536.680	0.000
11	535.840	0.000	535.270	5.874	535.810	32.07	536.660	54.66	536.635	56.36	536.620	0.000
12	536.650	0.000	535.570	17.76	535.790	34.84	535.860	31.23	536.800	68.37	536.570	0.000
13	536.700	0.000	535.590	20.10	536.300	49.44 *	535.665	27.96	536.825	68.34	536.610	0.000
14	536.700	0.000	535.445	13.01	535.920	39.94	535.870	35.10	536.620	48.23	536.620	0.000
15	536.720	0.000	535.445	13.46	535.730	30.51 *	536.070	41.10	536.780	90.68 *	536.620	0.000
16	536.710	0.000	535.450	19.77 *	536.360	48.90	536.805	73.11	536.205	45.32	536.640	0.000
17	536.850	0.000	535.520	15.41	536.385	49.68	536.610	73.81 *	535.700	33.39	536.650	0.000
18	535.630	0.000 *	538.030	294.8 *	536.300	55.12	536.800	60.95	535.580	20.05	536.650	0.000
19	535.250	3.504	538.740	486.7 *	537.250	166.6	536.855	77.42	535.530	23.00 *	536.650	0.000
20	535.340	5.889	538.490	412.0 *	537.340	163.4 *	536.740	70.74	535.495	15.23	536.640	0.000
21	535.215	2.459	537.275	126.1	537.060	110.6	536.980	98.76	535.490	15.72	536.640	0.000
22	535.250	6.108	536.615	66.52	536.640	71.01	536.840	72.60	535.820	33.71 *	536.640	0.000
23	535.330	6.427	536.100	43.11 *	536.340	52.12	536.450	54.03	536.040	40.33	536.630	0.000
24	535.650	26.04	535.625	26.69	535.860	36.56	536.050	41.48 *	535.660	18.25	536.630	0.000
25	535.450	19.77 *	535.505	19.37	535.810	33.36 *	535.760	31.02	535.565	19.65	536.630	0.000
26	535.530	23.00 *	535.510	20.70	536.510	45.41	535.665	28.02	535.485	15.87	536.620	0.000
27	535.445	14.08	535.625	30.61	537.020	118.5 *	535.585	20.35	535.440	11.13	536.620	0.000
28	536.040	36.86	536.855	67.89	537.080	116.1	536.275	50.77	535.400	11.62	536.620	0.000
29	536.070	44.48	536.725	61.40	538.580	438.0 *	535.680	28.65	535.390	17.24 *	536.620	0.000
30	535.550	21.67	536.120	43.75 *	537.680	251.1	536.280	48.82 *	535.360	10.26	536.610	0.000
31			535.645	29.83	537.120	119.1			535.330	8.675		
Ten-Daily Mean												
I Ten-Daily	535.503	0.000	535.645	26.86	535.629	26.95	536.286	55.51	536.414	57.33	535.963	1.956
II Ten-Daily	536.239	0.939	536.355	129.9	536.318	67.05	536.393	54.61	536.217	46.90	536.627	0.000
III Ten-Daily	535.553	20.09	536.146	48.73	536.882	126.5	536.157	47.45	535.544	18.41	536.626	0.000
Monthly												
Min.	535.215	0.000	535.270	5.874	535.455	19.82	535.585	20.35	535.330	8.675	535.220	0.000
Max.	536.850	44.48	538.740	486.7	538.580	438.0	536.980	107.5	536.840	97.18	536.680	7.933
Mean	535.765	7.010	536.052	67.85	536.296	75.22	536.279	52.52	536.041	40.15	536.405	0.652

Annual Runoff in MCM = 647 Annual Runoff in mm = 329

Peak Observed Discharge = 251.1 cumecs on 30/08/2017 Corres. Water Level :537.68 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :535.60 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Ambabal (AGC90C8) **Division : Lower Godavari Div., Hyderabad**

Local River : Narangi **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	536.610	0.000	536.580	0.000	536.560	0.000	536.520	0.000	535.900	0.000	536.450	0.000
2	536.600	0.000	536.590	0.000	536.550	0.000	536.510	0.000	535.870	0.000	536.520	0.000
3	536.600	0.000	536.580	0.000	536.550	0.000	536.500	0.000	535.910	0.000	536.550	0.000
4	536.600	0.000	536.580	0.000	536.550	0.000	536.500	0.000	535.910	0.000	536.560	0.000
5	536.600	0.000	536.580	0.000	536.550	0.000	536.470	0.000	535.940	0.000	536.570	0.000
6	536.600	0.000	536.580	0.000	536.550	0.000	536.450	0.000	536.050	0.000	536.560	0.000
7	536.590	0.000	536.580	0.000	536.550	0.000	536.440	0.000	536.140	0.000	536.540	0.000
8	536.590	0.000	536.580	0.000	536.540	0.000	536.420	0.000	536.170	0.000	536.530	0.000
9	536.600	0.000	536.580	0.000	536.530	0.000	536.400	0.000	536.180	0.000	536.520	0.000
10	536.590	0.000	536.570	0.000	536.520	0.000	536.390	0.000	536.210	0.000	536.510	0.000
11	536.530	0.000	536.570	0.000	536.510	0.000	536.380	0.000	536.260	0.000	536.500	0.000
12	536.510	0.000	536.570	0.000	536.510	0.000	536.370	0.000	536.290	0.000	536.490	0.000
13	536.480	0.000	536.570	0.000	536.510	0.000	536.360	0.000	536.320	0.000	536.470	0.000
14	536.520	0.000	536.570	0.000	536.520	0.000	536.350	0.000	536.330	0.000	536.460	0.000
15	536.580	0.000	536.570	0.000	536.530	0.000	536.340	0.000	536.340	0.000	536.450	0.000
16	536.580	0.000	536.560	0.000	536.530	0.000	536.330	0.000	536.380	0.000	536.440	0.000
17	536.580	0.000	536.560	0.000	536.540	0.000	536.320	0.000	536.400	0.000	536.430	0.000
18	536.580	0.000	536.560	0.000	536.540	0.000	536.310	0.000	536.410	0.000	536.420	0.000
19	536.570	0.000	536.550	0.000	536.540	0.000	536.290	0.000	536.490	0.000	536.410	0.000
20	536.560	0.000	536.550	0.000	536.530	0.000	536.270	0.000	536.510	0.000	536.400	0.000
21	536.550	0.000	536.550	0.000	536.530	0.000	536.260	0.000	536.540	0.000	536.380	0.000
22	536.510	0.000 *	536.550	0.000	536.520	0.000	536.220	0.000	536.570	0.000	536.370	0.000
23	536.490	0.000	536.550	0.000	536.520	0.000	536.190	0.000	536.570	0.000	536.360	0.000
24	536.450	0.000	536.550	0.000	536.530	0.000	536.170	0.000	536.560	0.000	536.350	0.000
25	536.420	0.000	536.560	0.000	536.550	0.000	536.150	0.000	536.560	0.000	536.330	0.000
26	536.410	0.000	536.570	0.000	536.550	0.000	536.120	0.000	536.550	0.000 *	536.310	0.000
27	536.410	0.000	536.580	0.000	536.540	0.000	536.100	0.000	536.530	0.000	536.290	0.000
28	536.410	0.000	536.580	0.000	536.530	0.000	536.040	0.000	536.520	0.000	536.270	0.000
29	536.440	0.000	536.580	0.000			535.980	0.000	536.540	0.000	536.250	0.000
30	536.470	0.000	536.560	0.000			535.930	0.000	536.470	0.000	536.230	0.000
31	536.470	0.000	536.560	0.000			535.910	0.000			536.250	0.000
Ten-Daily Mean												
I Ten-Daily	536.598	0.000	536.580	0.000	536.545	0.000	536.460	0.000	536.028	0.000	536.531	0.000
II Ten-Daily	536.549	0.000	536.563	0.000	536.526	0.000	536.332	0.000	536.373	0.000	536.447	0.000
III Ten-Daily	536.457	0.000	536.563	0.000	536.534	0.000	536.097	0.000	536.541	0.000	536.308	0.000
Monthly												
Min.	536.410	0.000	536.550	0.000	536.510	0.000	535.910	0.000	535.870	0.000	536.230	0.000
Max.	536.610	0.000	536.590	0.000	536.560	0.000	536.520	0.000	536.570	0.000	536.570	0.000
Mean	536.532	0.000	536.568	0.000	536.535	0.000	536.290	0.000	536.314	0.000	536.425	0.000

Peak Computed Discharge = 486.7 cumecs on 19/07/2017 Corres. Water Level :538.74 m

Lowest Computed Discharge = 0.000 cumecs on 18/06/2017 Corres. Water Level :535.63 m

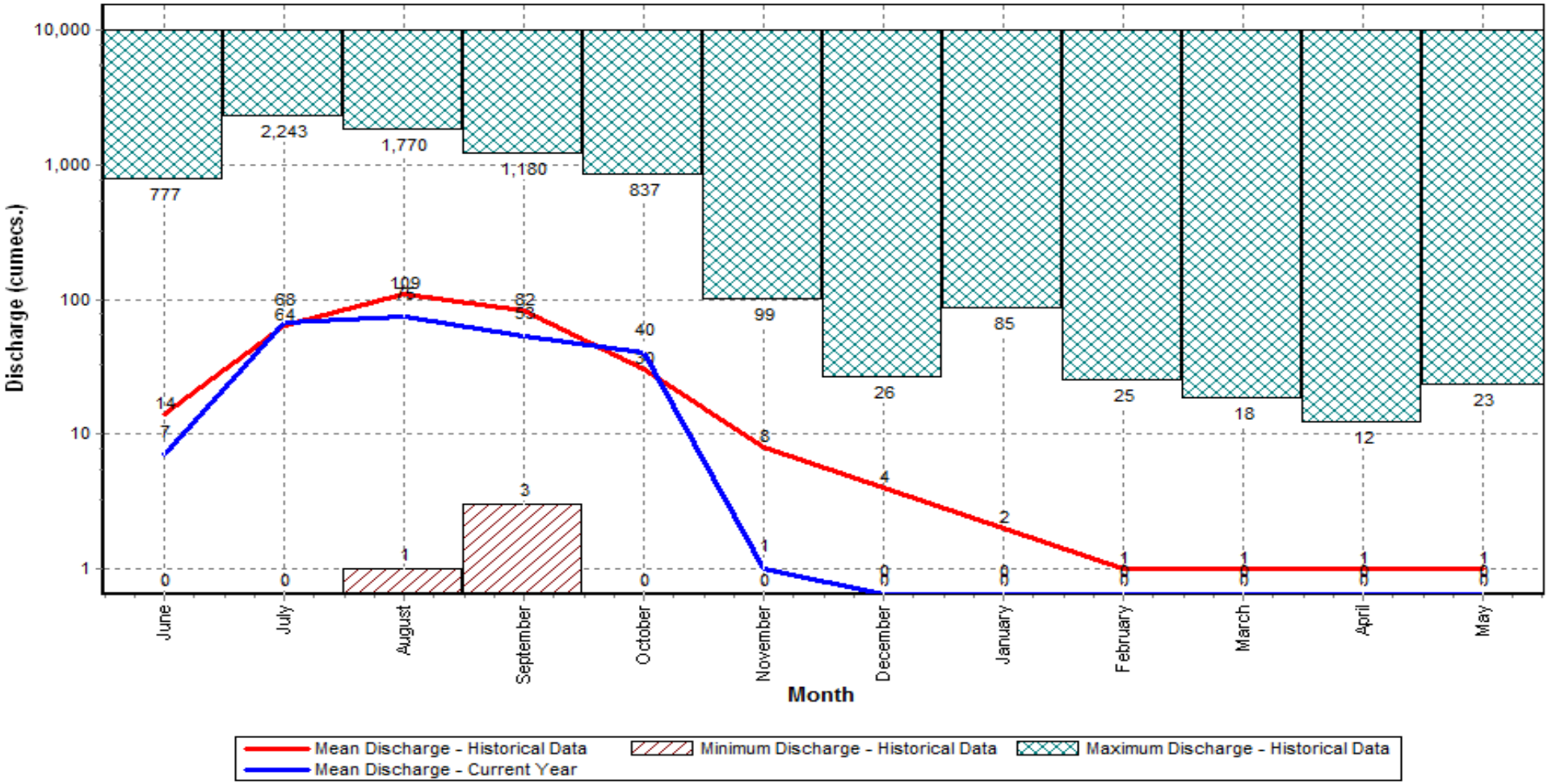
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Ambabal (AGC90C8) | **Data considered : 1993-2018** | **Division : Lower Godavari Div., Hyderabad**

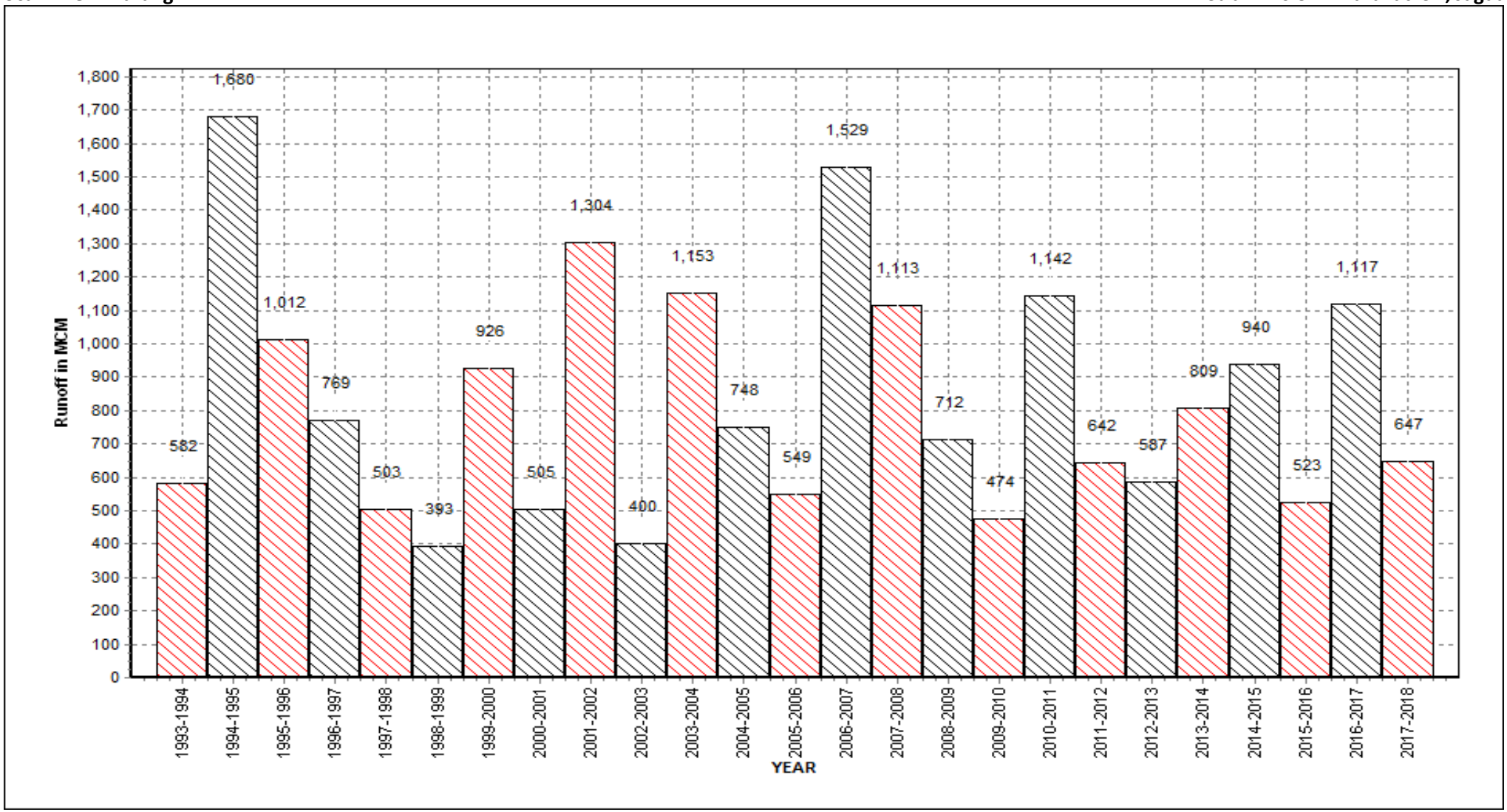
Local River : Narangi | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1993 - 2018

Station Name : Ambabal (AGC90C8) **Division : Lower Godavari Div., Hyderabad**

Local River : Narangi **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

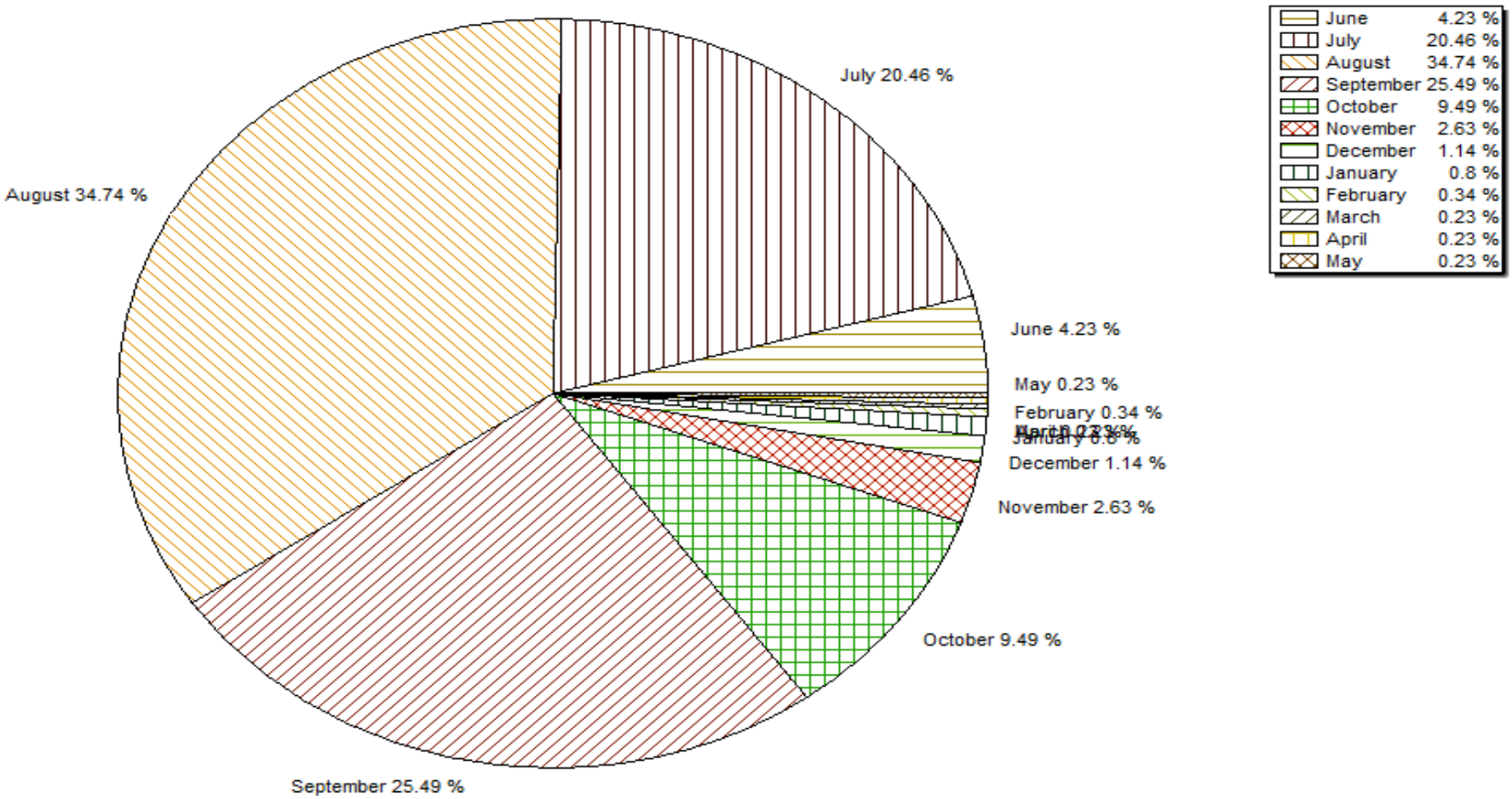
Monthly Average Runoff based on period : 1993-2017

Station Name : Ambabal (AGC90C8)

Division : Lower Godavari Div., Hyderabad

Local River : Narangi

Sub-Division : Indravati SD, Jagdalpur



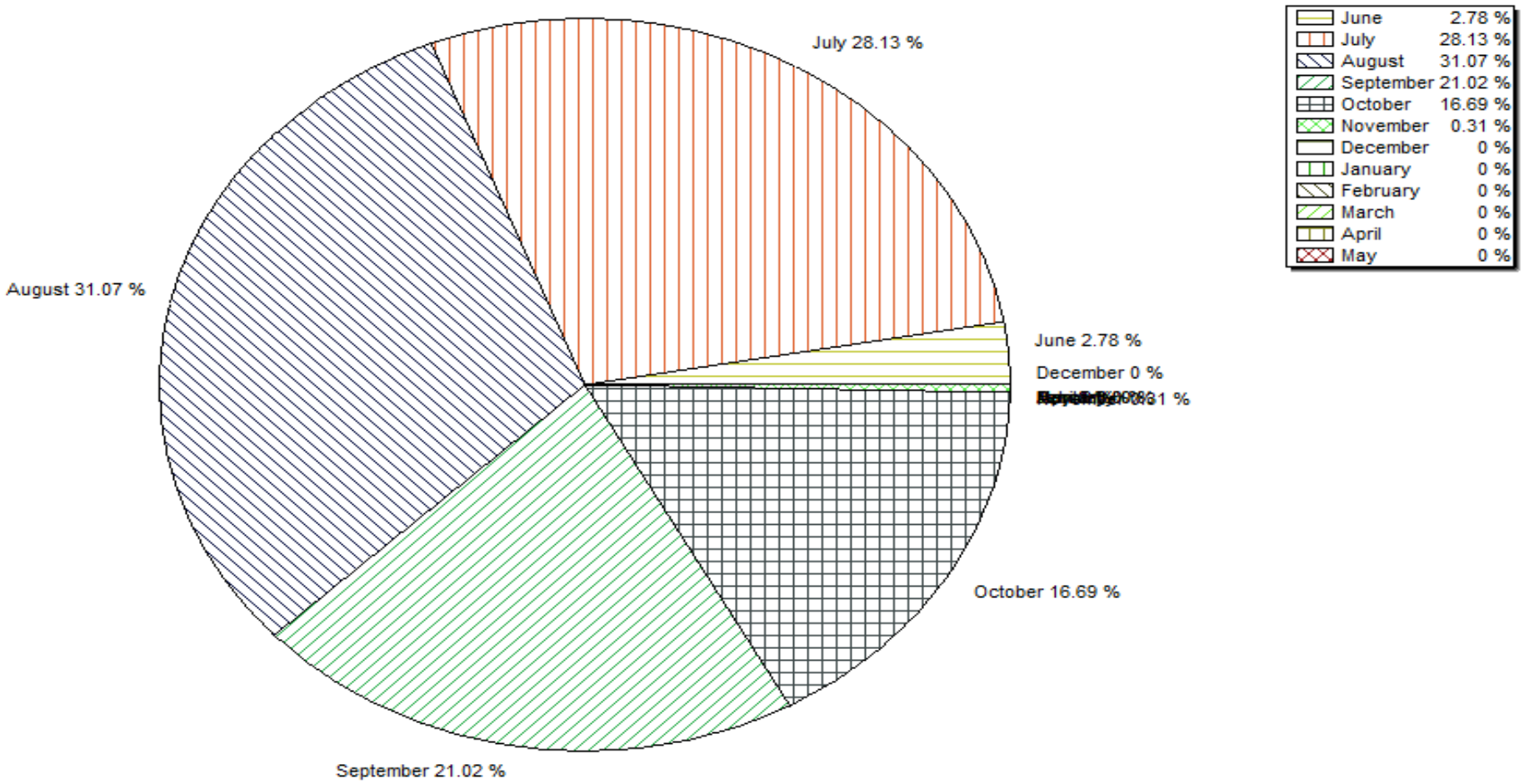
Monthly Runoff for the Year : 2017-2018

Station Name : Ambabal (AGC90C8)

Local River : Narangi

Division : Lower Godavari Div., Hyderabad

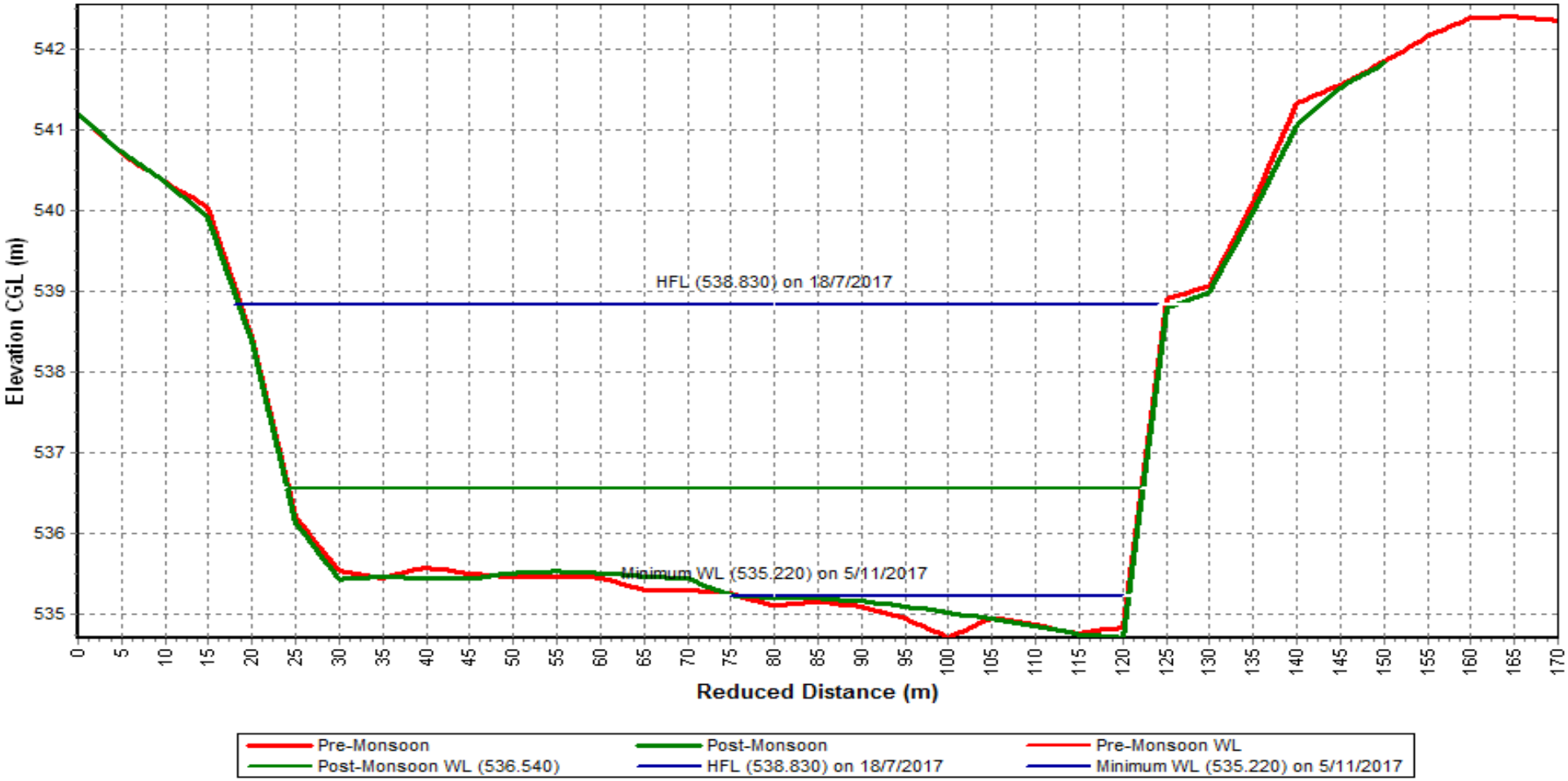
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Ambabal (AGC90C8) **Division : Lower Godavari Div., Hyderabad**

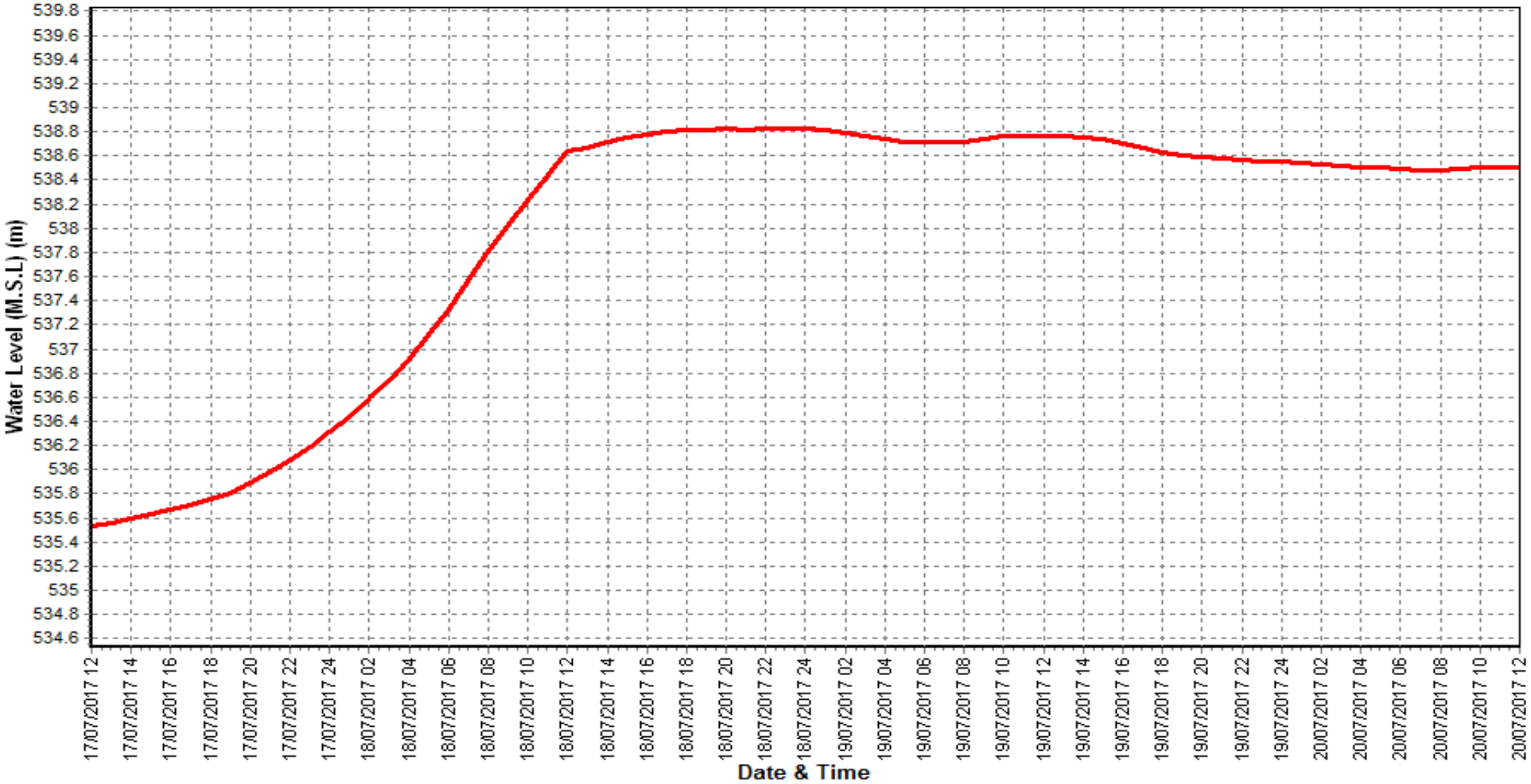
Local River : Narangi **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Ambabal (AGC90C8) **Division : Lower Godavari Div., Hyderabad**

Local River : Narangi **Sub-Division : Indravati SD, Jagdalpur**

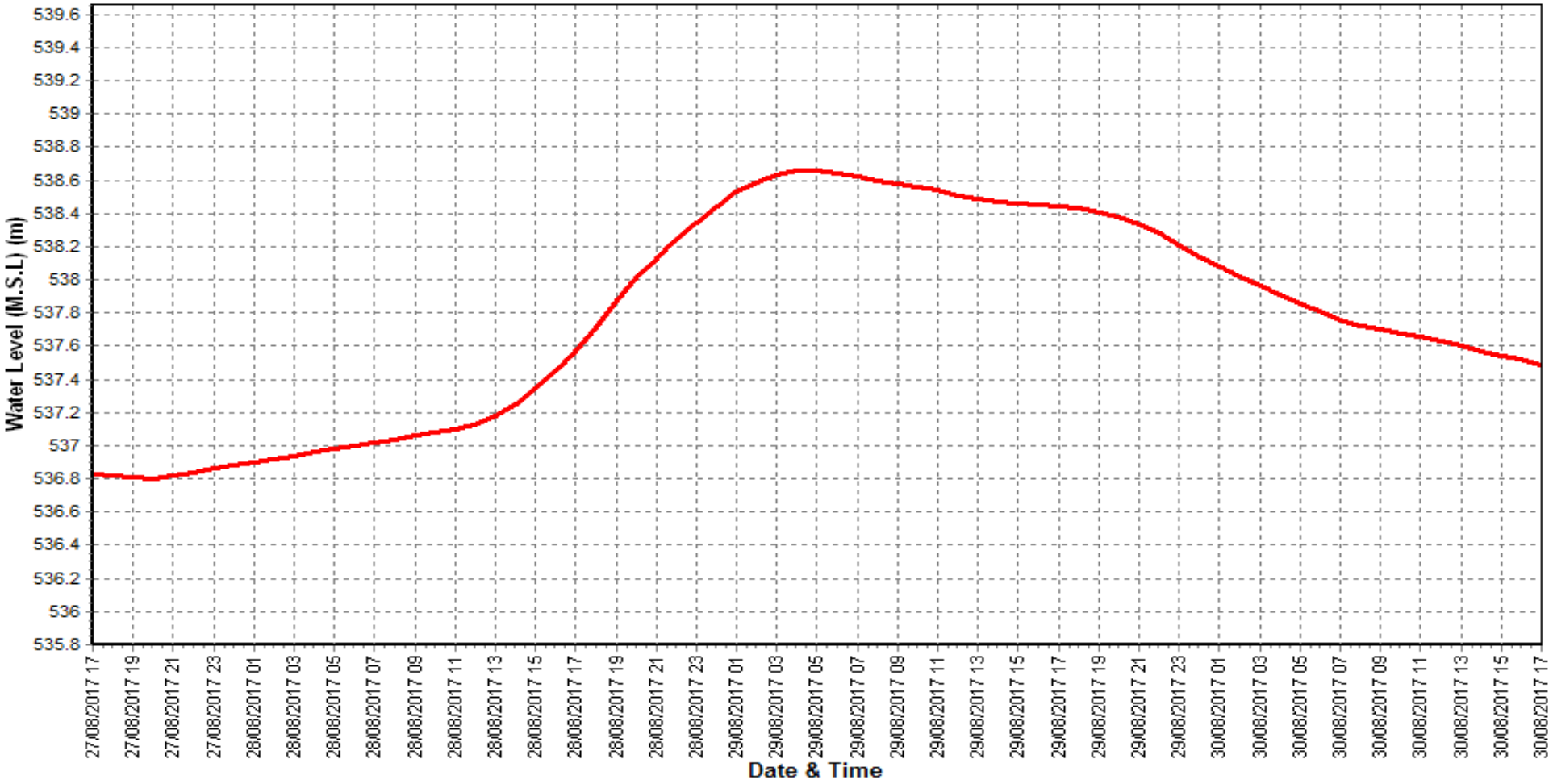


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Ambabal (AGC90C8) **Division : Lower Godavari Div., Hyderabad**

Local River : Narangi **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Sonarpal**	**Code**	:	**AGG91F2**
State	:	Chhattisgarh	District		Bastar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	Markandi
Sub-Sub Tributary	:	-	Local River	:	Markandi
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	1523 Sq. Km.	Bank	:	Right
Latitude	:	19°16'00"	Longitude	:	81°52'00"
Zero of Gauge (m)	:	534.356 (m.s.l) 534.000 (m.s.l)	01.07.1989 01.12.2000		30.11.2000
		Opening Date	Closing Date		
Gauge	:	01.07.1989	**HFL During 2017-18**	:	**540.850 Meter**
			Corres. Discharge	:	**944.2 Cumecs (Estimated)**
Discharge	:	05.12.1991	**Date & Time of Occurance**	:	**19.07.2017 08:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 543.05 06/08/2010
Corresponding Discharge (cumecs) : 1820*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1992-1993	1160	541.886	28.07.1992	0.000	535.146	03.05.1993
1993-1994	519.2	539.756	06.09.1993	0.007	535.186	23.04.1994
1994-1995	1247	542.106	30.08.1994	0.243	535.176	15.04.1995
1995-1996	1373	542.456	24.07.1995	3.822	535.206	01.06.1995
1996-1997	437.8	539.386	21.07.1996	0.004	535.216	03.04.1997
1997-1998	303.1	538.446	20.09.1997	0.000	535.146	23.04.1998
1998-1999	285.7	538.456	16.08.1998	0.000		23.04.1999
1999-2000	540.0	539.456	04.08.1999	0.000		22.04.2000
2000-2001	689.3	540.246	30.08.2000	0.000		05.04.2001
2001-2002	909.3	540.800	20.08.2001	0.000	534.210	16.03.2002
2002-2003	804.6	540.650	24.08.2002	0.139	534.540	02.06.2002
2003-2004	683.3	540.120	25.07.2003	0.000	534.490	28.06.2003
2004-2005	781.2	540.650	15.06.2004	0.000	534.540	23.05.2005
2005-2006	599.2	539.450	14.09.2005	0.002	534.530	13.03.2006
2006-2007	1509	542.570	04.07.2006	0.000	534.635	04.04.2007
2007-2008	1260	541.600	07.08.2007	0.000	534.605	17.03.2008
2008-2009	462.2	539.155	29.07.2008	0.000	534.620	14.03.2009

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2009-2010	408.1	538.585	27.08.2009	0.000	534.440	08.04.2010
2010-2011	1546	542.350	06.08.2010	0.000	534.580	02.05.2011
2011-2012	245.1	537.630	21.09.2011	0.000	534.760	26.01.2012
2012-2013	478.2	539.100	06.08.2012	0.000	534.600	01.02.2013
2013-2014	581.1	539.200	14.06.2013	0.000	534.780	25.02.2014
2014-2015	637.1	539.350	29.07.2014	0.000	534.780	28.03.2015
2015-2016	1093	540.460	17.09.2015	0.000	534.550	21.11.2015
2016-2017	518.3	538.800	11.09.2016	0.000	534.770	25.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Sonarpal in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1991-1992**		7	7
2	**1992-1993**	810	2	812
3	**1993-1994**	571	2	573
4	**1994-1995**	986	28	1014
5	**1995-1996**	635	82	716
6	**1996-1997**	651	9	660
7	**1997-1998**	339	14	353
8	**1998-1999**	390	5	395
9	**1999-2000**	779	6	785
10	**2000-2001**	531	11	543
11	**2001-2002**	938	4	941
12	**2002-2003**	362	10	372
13	**2003-2004**	1188	26	1215
14	**2004-2005**	784	10	794
15	**2005-2006**	632	5	637
16	**2006-2007**	1102	5	1107
17	**2007-2008**	801	1	803
18	**2008-2009**	619	10	629
19	**2009-2010**	487	2	489
20	**2010-2011**	983	15	998
21	**2011-2012**	344	0	344
22	**2012-2013**	636	1	637
23	**2013-2014**	765	5	769
24	**2014-2015**	612	0	612
25	**2015-2016**	574	0	574
26	**2016-2017**	1071	0	1071
Average		704	10	687

Stage-Discharge Data for the period 2017 - 2018

Station Name : Sonarpal (AGG91F2) **Division : Lower Godavari Div., Hyderabad**

Local River : Markandi **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	534.640	0.000	534.725	10.71	534.885	15.91	535.650	61.82	535.200	30.22 *	534.620	8.280
2	534.540	0.000	534.740	11.31 *	534.800	12.30	535.530	51.25 *	535.200	30.22 *	534.480	5.614
3	534.530	0.000	534.785	14.31	535.100	21.03	535.420	43.48 *	535.130	31.37	534.605	9.218
4	534.530	0.000	534.870	17.68	535.265	30.41	535.280	30.73	535.280	40.66	534.400	3.829 *
5	534.550	0.000	534.840	13.36	535.180	27.58	535.200	27.06	535.310	34.01	534.540	6.327 *
6	534.420	0.000	534.895	19.81	535.990	96.32 *	535.135	22.39	535.150	26.53	534.550	7.352
7	534.430	0.000	534.730	10.80	535.805	72.61	535.205	27.25	535.080	25.33	534.850	7.266
8	534.680	0.000	534.615	7.903	535.785	74.69	535.285	31.55	535.070	23.73 *	534.880	4.137
9	534.720	0.000	534.430	4.301 *	535.665	60.73	535.260	29.92	535.060	22.18	534.890	5.092
10	534.970	0.000	534.650	9.402	535.480	45.43	535.120	26.12 *	535.600	67.64	534.900	5.080
11	534.920	0.000	534.840	14.54	535.280	33.70	535.175	25.43	535.660	67.31	534.890	0.000
12	534.900	0.000	534.645	9.533	535.220	30.82	534.950	17.26	536.165	115.5	534.850	0.000
13	534.920	0.000	534.690	11.04	535.220	31.31 *	536.210	119.5	535.875	87.54	534.870	0.000
14	534.970	0.000	534.605	7.609	536.020	101.4	536.215	126.9	535.475	48.36	534.770	0.000
15	534.980	0.000	534.680	10.88	536.040	102.0 *	536.055	112.8	535.360	39.57 *	534.750	0.000
16	534.900	0.000	534.830	14.16 *	535.580	50.40	535.595	59.38	535.200	33.73	534.730	0.000
17	534.930	0.000	535.110	27.11	535.560	50.43	535.500	49.05 *	534.965	25.25	534.720	0.000
18	534.760	0.000	537.700	334.3 *	535.715	62.59	535.790	80.63	534.845	16.01	534.720	0.000
19	534.980	17.29	540.850	944.1 *	536.550	157.1	535.555	55.48	534.790	12.84 *	534.720	0.000
20	534.800	10.79	536.850	192.5	536.540	163.3 *	535.480	48.09	534.740	13.42	534.700	0.000
21	534.680	6.235	535.835	73.05	535.890	77.43	535.570	57.89	535.400	43.53	534.650	0.000
22	534.650	5.807	535.493	42.95	535.560	50.46	535.300	38.92	535.310	36.49 *	534.560	0.000
23	534.680	6.346	535.280	34.71 *	535.970	85.90	535.150	34.31	535.300	37.10	534.470	0.000
24	534.690	8.167	535.145	24.05	535.525	47.72	535.070	23.73 *	535.290	38.47	534.580	0.000
25	534.740	11.31 *	535.000	19.22	536.070	105.4 *	535.000	22.52	535.100	25.39	534.580	0.000
26	534.940	18.17 *	534.945	17.54	536.850	199.1	535.090	24.13	534.980	21.95	534.570	0.000
27	534.830	13.21	535.040	22.75	536.460	153.0 *	534.870	20.02	534.800	19.25	534.500	0.000
28	534.910	17.34	534.998	19.25	536.300	118.3	535.380	45.17	534.740	13.34	534.383	0.000
29	534.880	14.70	534.890	15.41	539.640	688.5 *	535.360	45.36	534.680	9.631 *	534.330	0.000
30	534.725	11.06	534.820	13.82 *	536.990	191.3	535.250	32.98 *	534.700	11.89	534.330	0.000
31			534.780	11.34	536.075	90.08			534.630	7.990		
Ten-Daily Mean												
I Ten-Daily	534.601	0.000	534.728	11.96	535.396	45.70	535.308	35.16	535.208	33.19	534.672	6.219
II Ten-Daily	534.906	2.808	535.880	156.6	535.773	78.31	535.652	69.45	535.307	45.95	534.772	0.000
III Ten-Daily	534.773	11.23	535.111	26.73	536.485	164.3	535.204	34.50	534.994	24.09	534.495	0.000
Monthly												
Min.	534.420	0.000	534.430	4.301	534.800	12.30	534.870	17.26	534.630	7.990	534.330	0.000
Max.	534.980	18.17	540.850	944.1	539.640	688.5	536.215	126.9	536.165	115.5	534.900	9.218
Mean	534.760	4.681	535.236	63.85	535.904	98.3	535.388	46.37	535.164	34.08	534.646	2.073

Annual Runoff in MCM = 663 Annual Runoff in mm = 436

Peak Observed Discharge = 199.1 cumecs on 26/08/2017 Corres. Water Level :536.850 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :534.640 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Sonarpal (AGG91F2) **Division : Lower Godavari Div., Hyderabad**

Local River : Markandi **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	534.330	0.000	534.410	0.000	534.280	0.000	534.320	0.000	534.600	0.000	534.630	0.000
2	534.330	0.000	534.490	0.000	534.240	0.000	534.320	0.000	534.640	0.000	534.660	0.000
3	534.330	0.000	534.700	0.000	534.210	0.000	534.350	0.000	534.650	0.000	534.720	0.000
4	534.430	0.000	534.450	0.000	534.210	0.000	534.280	0.000	534.650	0.000	534.730	0.000
5	534.490	0.000	534.550	0.000	534.210	0.000	534.260	0.000	534.650	0.000	534.690	0.000
6	534.300	0.000	534.530	0.000	534.210	0.000	534.200	0.000	534.650	0.000	534.630	0.000
7	534.290	0.000	534.540	0.000	534.210	0.000	534.150	0.000	534.650	0.000	534.610	0.000
8	534.260	0.000	534.540	0.000	534.180	0.000	534.100	0.000	534.660	0.000	534.600	0.000
9	534.230	0.000	534.440	0.000	534.250	0.000	534.210	0.000	534.660	0.000	534.580	0.000
10	534.240	0.000	534.380	0.000	534.300	0.000	534.250	0.000	534.660	0.000	534.680	0.000
11	534.260	0.000	534.380	0.000	534.380	0.000	534.500	0.000	534.680	0.000	534.620	0.000
12	534.260	0.000	534.390	0.000	534.420	0.000	534.620	0.000	534.640	0.000	534.590	0.000
13	534.250	0.000	534.300	0.000	534.450	0.000	534.670	0.000	534.670	0.000	534.640	0.000
14	534.260	0.000	534.250	0.000	534.520	0.000	534.680	0.000	534.670	0.000	534.680	0.000
15	534.270	0.000	534.240	0.000	534.540	0.000	534.650	0.000	534.660	0.000	534.670	0.000
16	534.380	0.000	534.220	0.000	534.520	0.000	534.650	0.000	534.660	0.000	534.660	0.000
17	534.380	0.000	534.120	0.000	534.520	0.000	534.650	0.000	534.660	0.000	534.650	0.000
18	534.370	0.000	534.120	0.000	534.520	0.000	534.670	0.000	534.660	0.000	534.640	0.000
19	534.370	0.000	534.120	0.000	534.480	0.000	534.680	0.000	534.650	0.000	534.660	0.000
20	534.300	0.000	534.150	0.000	534.490	0.000	534.660	0.000	534.640	0.000	534.680	0.000
21	534.200	0.000	534.250	0.000	534.500	0.000	534.650	0.000	534.620	0.000	534.700	0.000
22	534.250	0.000	534.280	0.000	534.500	0.000	534.650	0.000	534.600	0.000	534.650	0.000
23	534.250	0.000	534.450	0.000	534.500	0.000	534.850	0.000	534.590	0.000	534.600	0.000
24	534.290	0.000	534.600	0.000	534.500	0.000	534.680	0.000	534.570	0.000	534.570	0.000
25	534.340	0.000	534.620	0.000	534.500	0.000	534.660	0.000	534.570	0.000	534.570	0.000
26	534.340	0.000	534.620	0.000	534.470	0.000	534.660	0.000	534.560	0.000	534.590	0.000
27	534.250	0.000	534.630	0.000	534.400	0.000	534.650	0.000	534.530	0.000	534.590	0.000
28	534.260	0.000	534.580	0.000	534.330	0.000	534.610	0.000	534.510	0.000	534.590	0.000
29	534.320	0.000	534.480	0.000			534.580	0.000	534.560	0.000	534.540	0.000
30	534.340	0.000	534.410	0.000			534.550	0.000	534.580	0.000	534.320	0.000
31	534.370	0.000	534.360	0.000			534.520	0.000			534.450	0.000
Ten-Daily Mean												
I Ten-Daily	534.323	0.000	534.503	0.000	534.230	0.000	534.244	0.000	534.647	0.000	534.653	0.000
II Ten-Daily	534.310	0.000	534.229	0.000	534.484	0.000	534.643	0.000	534.659	0.000	534.649	0.000
III Ten-Daily	534.292	0.000	534.480	0.000	534.463	0.000	534.642	0.000	534.569	0.000	534.561	0.000
Monthly												
Min.	534.200	0.000	534.120	0.000	534.180	0.000	534.100	0.000	534.510	0.000	534.320	0.000
Max.	534.490	0.000	534.700	0.000	534.540	0.000	534.850	0.000	534.680	0.000	534.730	0.000
Mean	534.308	0	534.406	0	534.387	0	534.514	0	534.625	0	534.619	0

Peak Computed Discharge = 944.1 cumecs on 19/07/2017 Corres. Water Level :540.850 m

Lowest Computed Discharge = 3.829 cumecs on 04/11/2017 Corres. Water Level :534.400 m

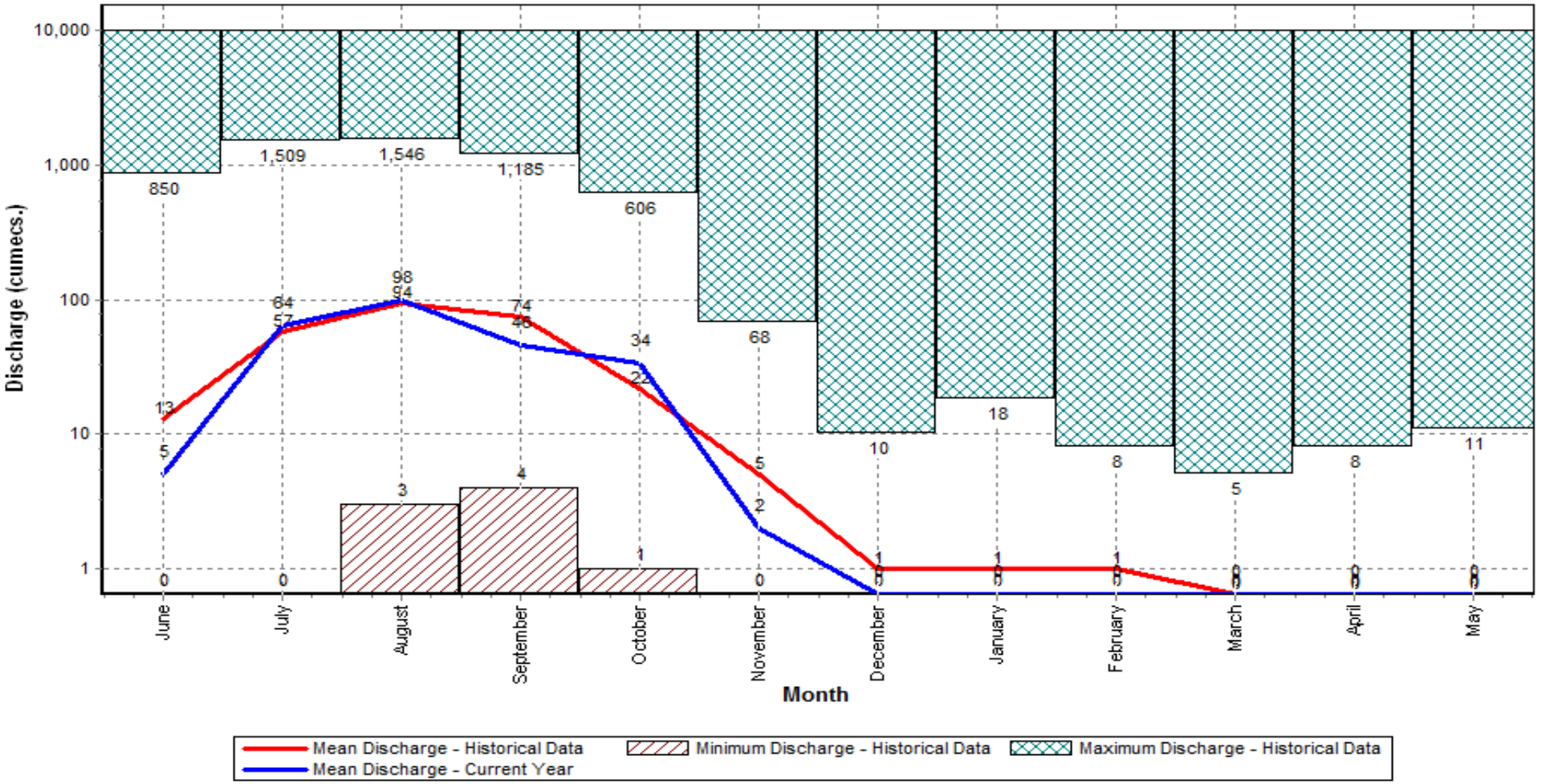
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Sonarpal (AGG91F2) | **Data considered : 1992-2018** | **Division : Lower Godavari Div., Hyderabad**

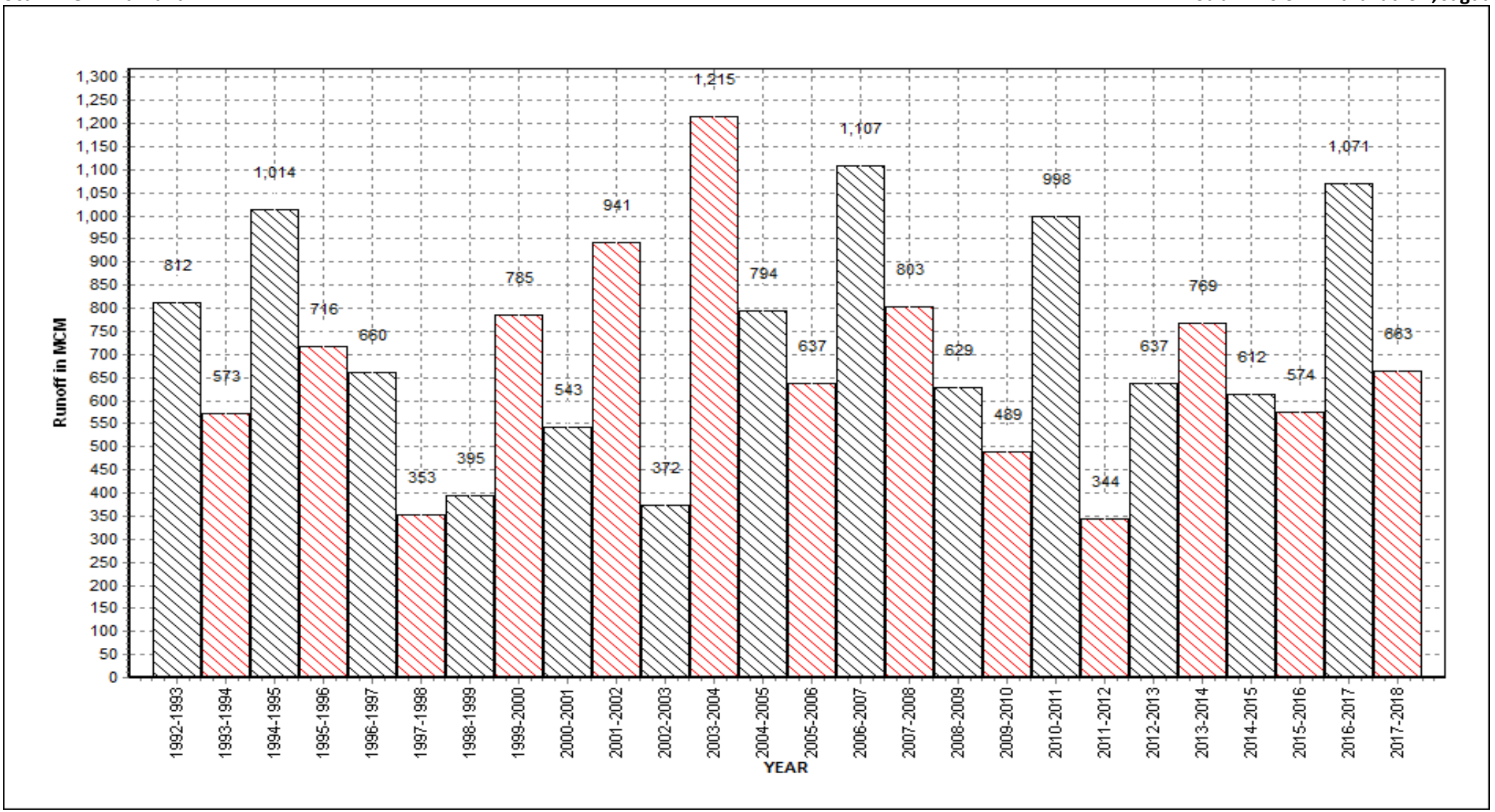
Local River : Markandi | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1992 - 2018

Station Name : Sonarpal (AGG91F2) **Division : Lower Godavari Div., Hyderabad**

Local River : Markandi **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

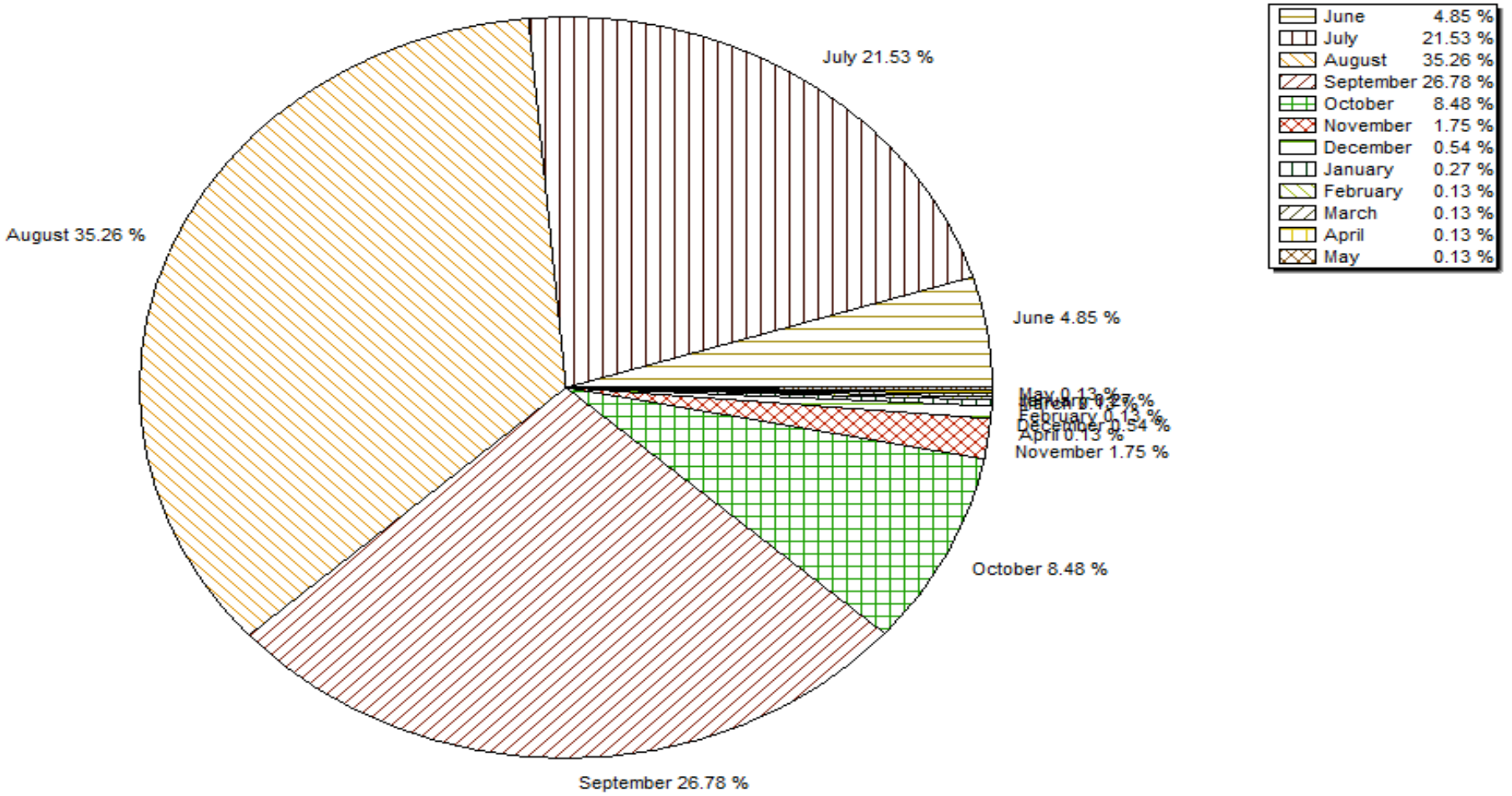
Monthly Average Runoff based on period : 1992-2017

Station Name : Sonarpal (AGG91F2)

Local River : Markandi

Division : Lower Godavari Div., Hyderabad

Sub-Division : Indravati SD, Jagdalpur



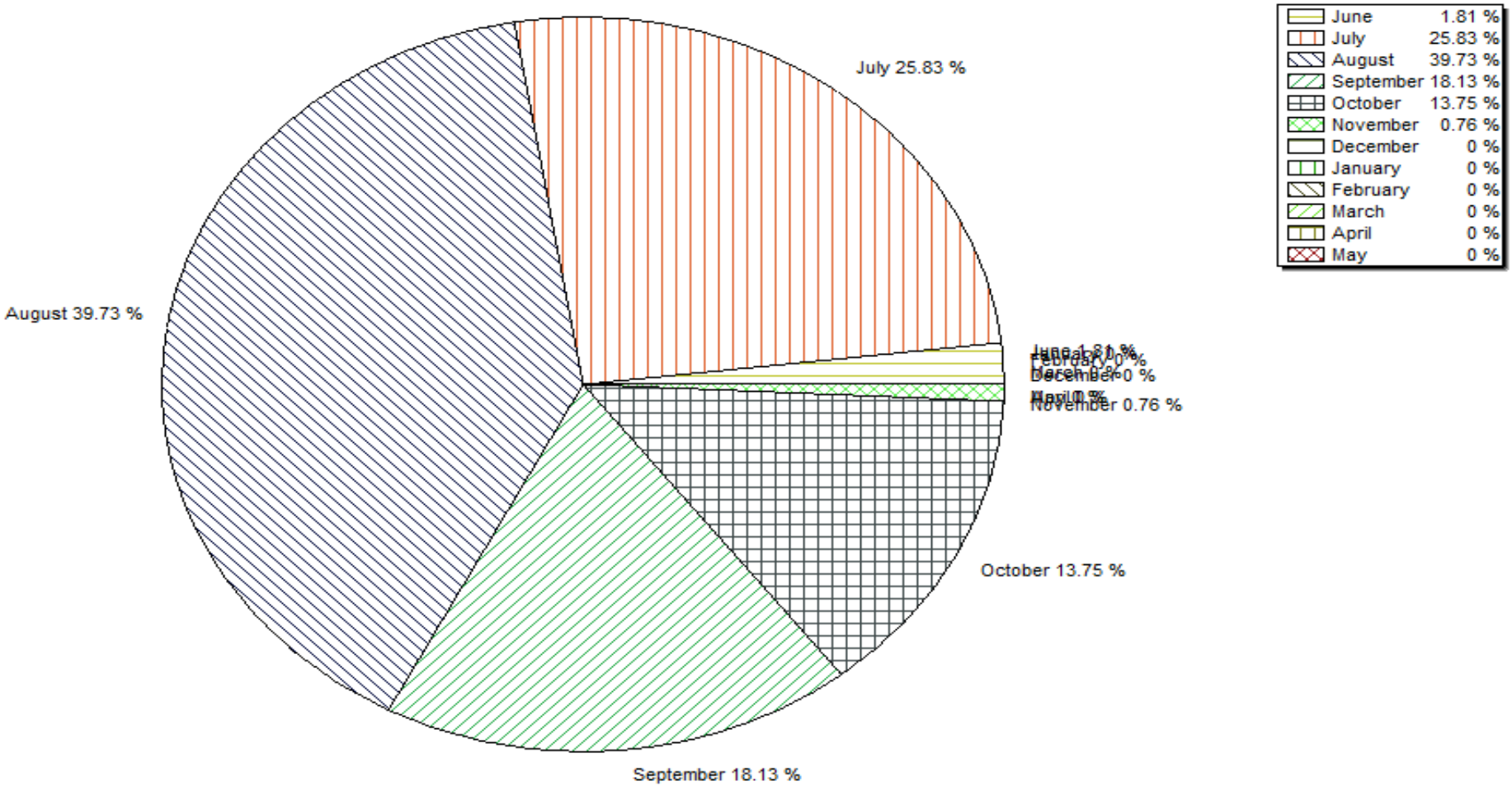
Monthly Runoff for the Year : 2017-2018

Station Name : Sonarpal (AGG91F2)

Local River : Markandi

Division : Lower Godavari Div., Hyderabad

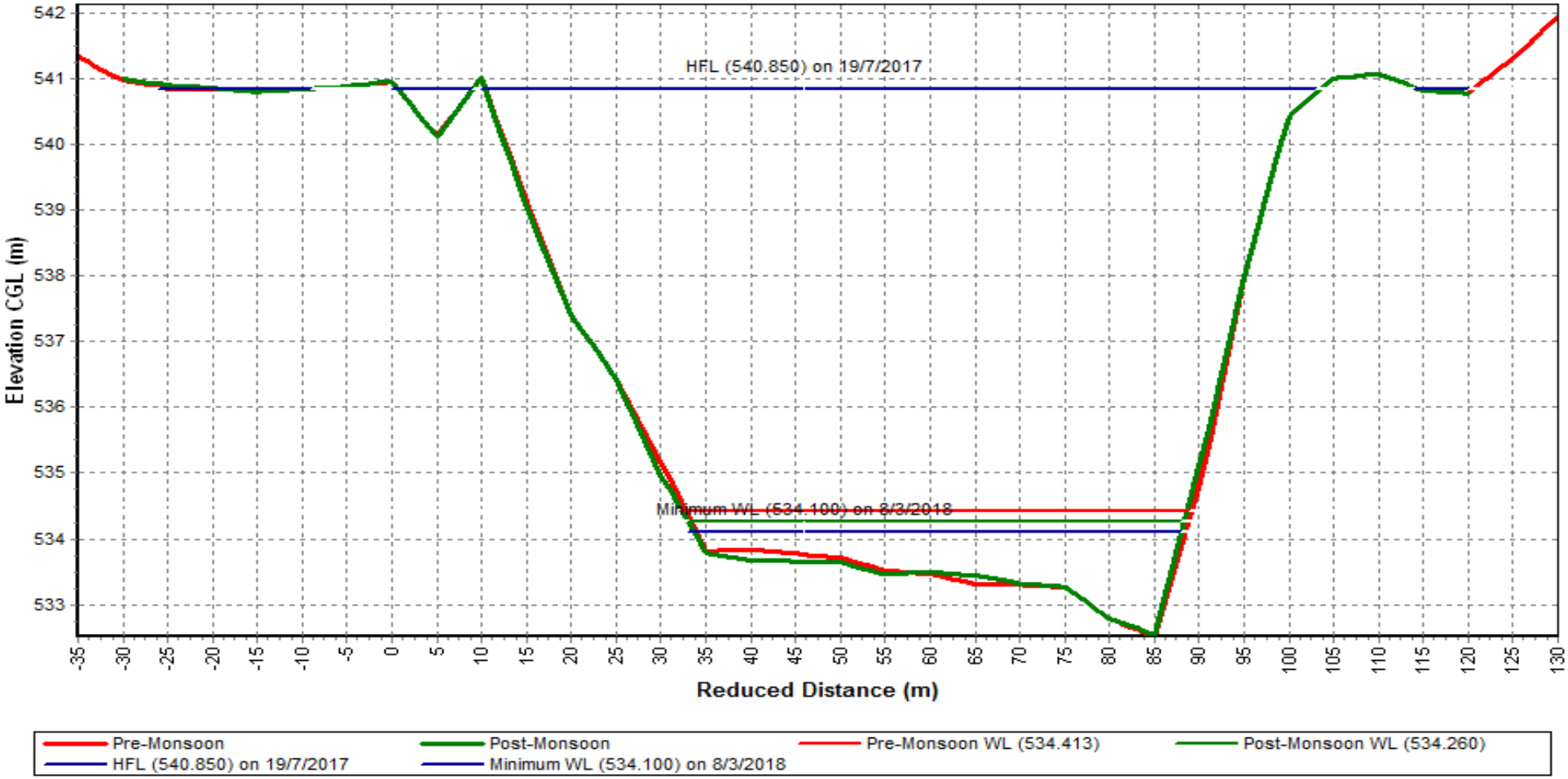
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Sonarpal (AGG91F2) **Division : Lower Godavari Div., Hyderabad**

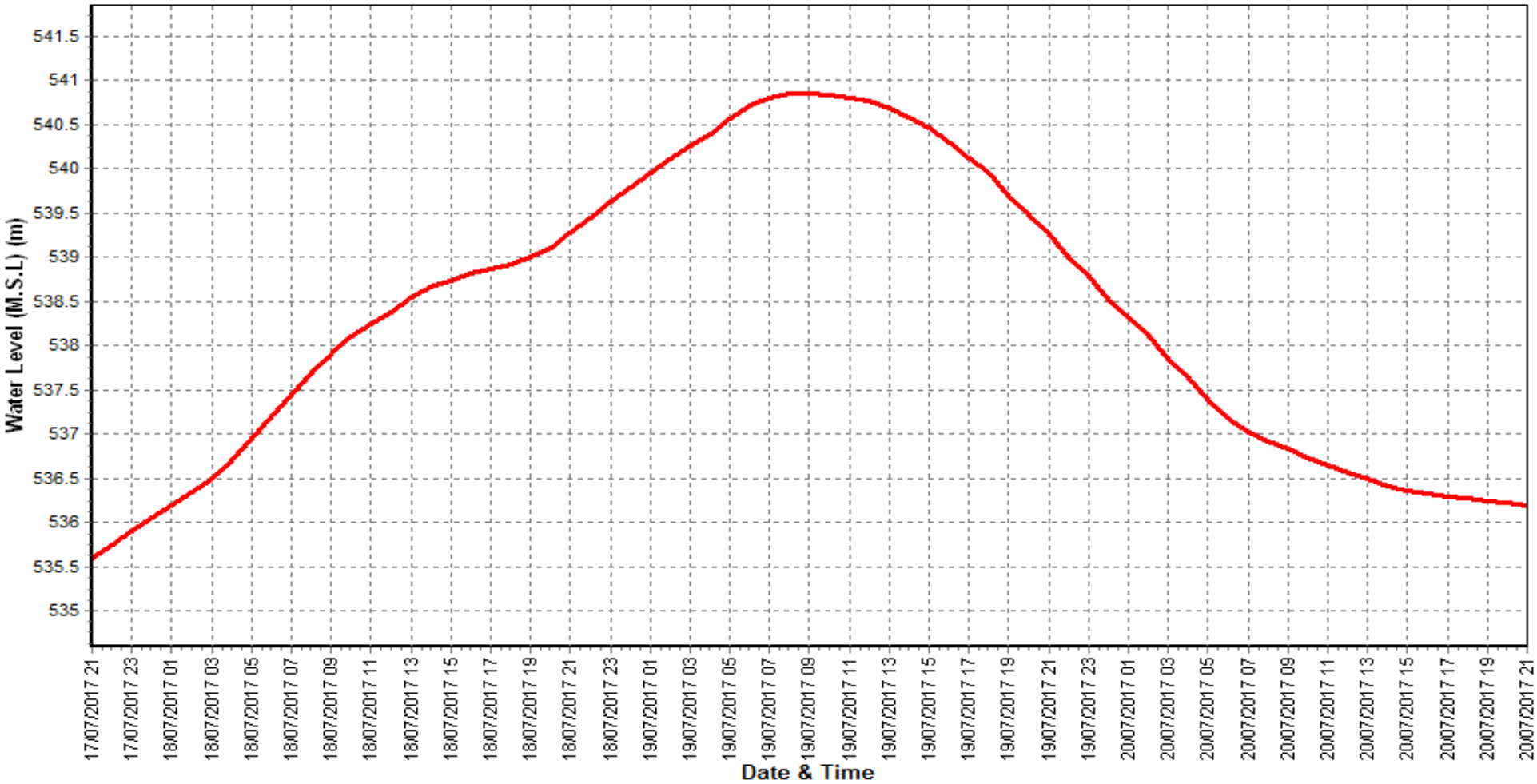
Local River : Markandi **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Sonarpal (AGG91F2) **Division : Lower Godavari Div., Hyderabad**

Local River : Markandi **Sub-Division : Indravati SD, Jagdalpur**

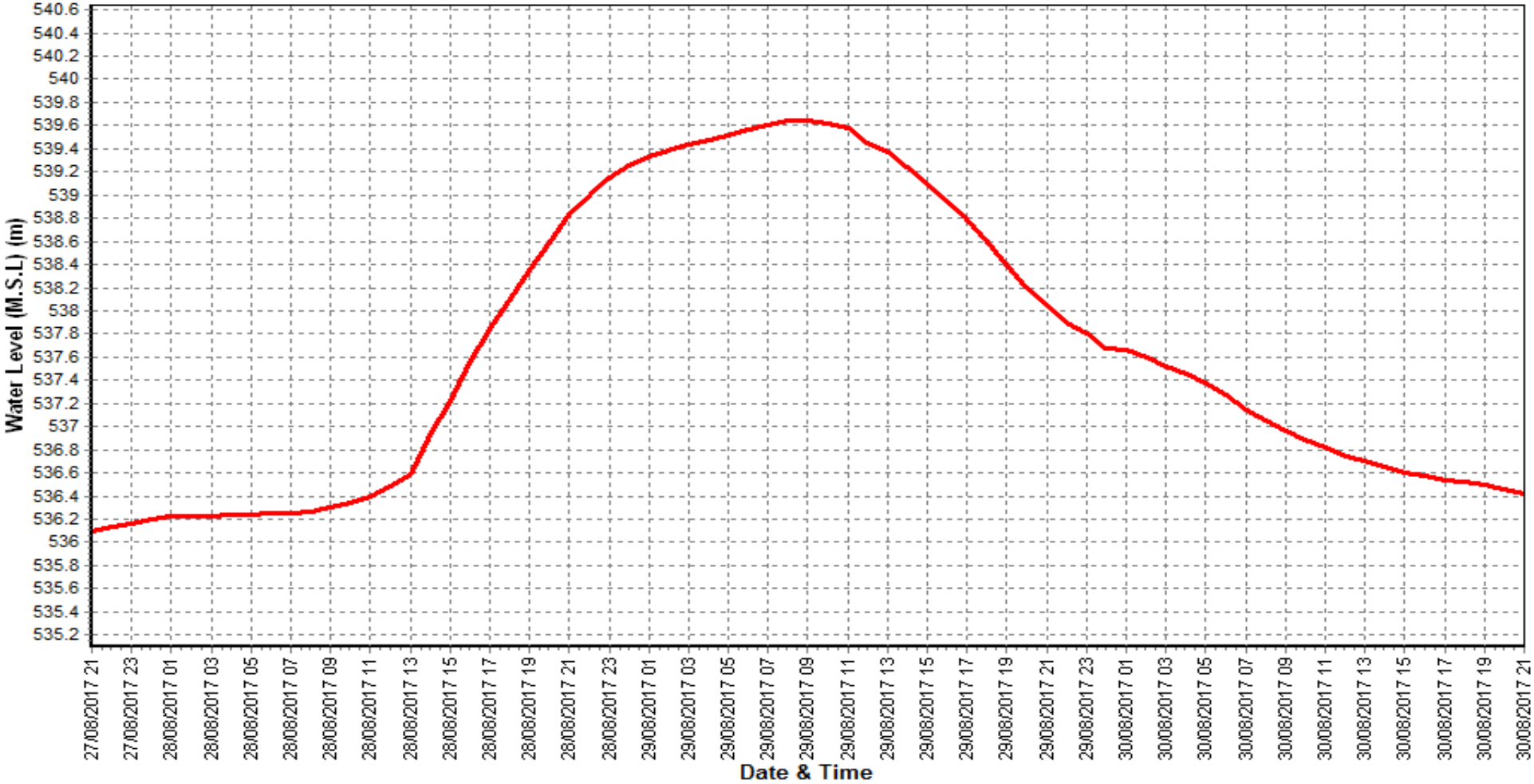


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Sonarpal (AGG91F2) **Division : Lower Godavari Div., Hyderabad**

Local River : Markandi **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Jagdalpur**	**Code**	:	**AGG00R9**
State	:	Chhattisgarh	District		Bastar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Indravathi
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	7380 Sq. Km.	Bank	:	Left
Latitude	:	19°06'30"	Longitude	:	82°01'30"
Zero of Gauge (m)	:	544.595 (m.s.l)	04.08.1964		
		532.507 (m.s.l)	01.01.1965		
		532.5 (m.s.l)	01.06.1968		
		532.501 (m.s.l)	01.06.1970		
		Opening Date	Closing Date		
Gauge	:	04.08.1964	**HFL During 2017-18**	:	**542.471 Meter**
			Corres. Discharge	:	**2321 Cumecs (Estimated)**
Discharge	:	21.09.1965	**Date & Time of Occurance**	:	**20.07.2017 08:00 hrs.**
Sediment	:	21.09.1965			
Water Quality	:	01.12.1979			

HFL Recorded so far in m : 544.686 09/07/1973
Corresponding Discharge (cumecs) : 2532*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1965-1966	935.7	537.937	29.07.1965	4.760	533.622	27.05.1966
1966-1967	2940	544.397	06.09.1966	6.287	533.622	01.06.1966
1967-1968	2313	543.107	04.08.1967	6.150	533.677	09.06.1967
1968-1969	2315	541.530	05.10.1968	10.00	533.885	22.04.1969
1969-1970	2889	544.340	30.07.1969	9.600	533.865	03.06.1969
1970-1971	1985	542.291	29.08.1970	13.85	533.861	10.05.1971
1971-1972	1284	540.976	06.09.1971	8.700	533.834	25.05.1972
1972-1973	1924	542.551	13.09.1972	7.483	533.791	16.06.1972
1973-1974	2462	544.491	09.07.1973	8.587	533.846	02.06.1973
1974-1975	974.8	539.096	18.06.1974	5.800	533.696	21.05.1975
1975-1976	1730	541.176	14.08.1975	8.970	533.921	10.05.1976
1976-1977	2499	543.186	22.07.1976	9.585	533.893	02.06.1976
1977-1978	2337	543.011	14.09.1977	11.40	534.026	07.06.1977
1978-1979	3175	544.331	17.08.1978	8.951	533.901	29.05.1979
1979-1980	2191	542.401	26.06.1979	6.148	533.711	27.05.1980
1980-1981	2032	541.811	19.09.1980	7.500	533.771	26.05.1981

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1981-1982	2366	542.236	10.08.1981	6.859	533.741	07.05.1982
1982-1983	1468	540.649	14.08.1982	5.934	533.711	08.05.1983
1983-1984	1336	540.651	27.06.1983	4.694	533.656	27.05.1984
1984-1985	2262	543.071	03.08.1984	7.100	533.761	01.05.1985
1985-1986	1591	540.336	18.08.1985	8.100	533.831	11.04.1986
1986-1987	3109	544.551	15.08.1986	5.781	533.721	19.05.1987
1987-1988	1186	539.936	05.09.1987	4.800	533.671	15.04.1988
1988-1989	932.1	538.826	19.07.1988	3.632	533.651	31.05.1989
1989-1990	1256	540.261	31.08.1989	3.622	533.646	01.06.1989
1990-1991	2019	542.111	07.10.1990	9.119	533.821	21.05.1991
1991-1992	2407	542.851	31.07.1991	4.904	533.786	27.05.1992
1992-1993	2956	543.801	29.07.1992	3.177	533.781	09.05.1993
1993-1994	1397	540.226	16.07.1993	1.904	533.616	14.05.1994
1994-1995	2675	544.031	06.09.1994	1.880	534.651	01.05.1995
1995-1996	2089	542.791	02.09.1995	0.133	534.601	14.06.1995
1996-1997	1190	540.306	22.07.1996	2.313	533.621	29.05.1997
1997-1998	1084	539.471	22.08.1997	1.377	533.611	10.06.1997
1998-1999	994.5	539.381	12.07.1998	0.265	533.441	26.03.1999
1999-2000	962.8	538.851	09.08.1999	0.583	533.501	17.05.2000
2000-2001	1518	541.096	31.08.2000	1.275	533.531	30.03.2001
2001-2002	2115	542.791	21.08.2001	1.216	534.261	25.05.2002
2002-2003	1511	540.751	24.08.2002	1.288	533.621	26.05.2003
2003-2004	1696	541.471	29.08.2003	0.824	533.651	10.06.2003
2004-2005	1641	541.401	15.06.2004	1.495	533.641	23.05.2005
2005-2006	1470	540.711	14.09.2005	1.701	533.666	20.06.2005
2006-2007	2113	543.371	05.07.2006	1.524	533.731	22.03.2007
2007-2008	1737	541.991	08.08.2007	0.433	533.701	19.05.2008
2008-2009	1152	540.281	11.08.2008	0.817	533.581	24.04.2009
2009-2010	831.6	538.631	27.08.2009	1.427	533.571	21.04.2010
2010-2011	2231	543.701	07.08.2010	0.000	533.601	03.02.2011
2011-2012	916.4	539.201	02.09.2011	0.000	534.981	05.05.2012
2012-2013	1452	540.861	06.08.2012	0.000	534.661	14.02.2013
2013-2014	1688	542.011	15.06.2013	0.000	534.451	08.02.2014
2014-2015	1149	540.601	22.07.2014	0.000	534.521	29.03.2015
2015-2016	2851	542.991	18.09.2015	0.000	534.521	18.01.2016
2016-2017	1475	540.321	11.07.2016	8.214	534.301	02.12.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Jagdalpur in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**	2165	231	2396
2	**1966-1967**	3590	409	3999
3	**1967-1968**	5080	393	5472
4	**1968-1969**	3370	331	3700
5	**1969-1970**	4764	427	5191
6	**1970-1971**	4207	377	4584
7	**1971-1972**	3112	331	3443
8	**1972-1973**	3471	353	3824
9	**1973-1974**	4275	394	4669
10	**1974-1975**	1675	239	1914
11	**1975-1976**	4437	333	4771
12	**1976-1977**	4440	367	4807
13	**1977-1978**	4870	459	5329
14	**1978-1979**	5540	338	5878
15	**1979-1980**	3535	264	3800
16	**1980-1981**	4924	328	5251
17	**1981-1982**	2755	242	2998
18	**1982-1983**	2765	234	2998
19	**1983-1984**	3105	286	3391
20	**1984-1985**	4311	309	4620
21	**1985-1986**	4203	283	4487
22	**1986-1987**	3513	266	3778
23	**1987-1988**	1978	224	2202
24	**1988-1989**	2417	157	2574
25	**1989-1990**	3510	448	3957
26	**1990-1991**	6601	387	6988
27	**1991-1992**	4507	228	4735
28	**1992-1993**	4233	204	4437
29	**1993-1994**	2937	162	3100
30	**1994-1995**	5754	319	6073
31	**1995-1996**	3476	179	3655
32	**1996-1997**	2059	411	2470
33	**1997-1998**	2195	769	2964
34	**1998-1999**	1255	75	1330
35	**1999-2000**	2580	40	2620
36	**2000-2001**	1968	65	2033
37	**2001-2002**	3769	47	3816
38	**2002-2003**	1127	40	1167
39	**2003-2004**	3169	87	3256
40	**2004-2005**	2317	57	2374
41	**2005-2006**	1730	75	1805
42	**2006-2007**	3471	61	3532
43	**2007-2008**	3056	63	3119
44	**2008-2009**	1824	44	1868
45	**2009-2010**	1342	64	1406
46	**2010-2011**	2728	113	2841
47	**2011-2012**	1179	31	1210
48	**2012-2013**	2400	5	2405
49	**2013-2014**	2757	12	2769
50	**2014-2015**	2477	4	2482
51	**2015-2016**	2217	0	2217
52	**2016-2017**	2344	604	2948
Average		3221	234	3455

Stage-Discharge Data for the period 2017 - 2018

Station Name : Jagdalpur (AGG00R9) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	534.981	0.000	535.511	39.68	536.006	129.2	536.371	191.0	535.631	65.91 *	535.261	27.63
2	534.981	0.000	535.671	71.48 *	536.006	127.7	536.421	208.5 *	535.631	65.91 *	535.261	23.66
3	535.041	0.000	535.591	46.74	535.906	115.3	536.166	155.2 *	535.701	84.34	535.236	23.23
4	535.071	0.000	535.641	60.62	536.241	172.3	535.851	97.93	535.681	72.23	535.221	20.40 *
5	535.041	0.000	535.791	69.07	535.941	122.9	535.991	123.5	535.766	97.78	535.211	19.57 *
6	535.011	0.000	535.621	54.91	537.101	383.9 *	535.851	97.29	535.736	94.21	535.201	16.05
7	535.011	0.000	535.531	41.16	537.681	558.9 *	535.816	85.94	535.611	71.72	535.191	15.10
8	535.031	0.000	535.481	46.76 *	536.701	261.7	535.761	82.79	535.601	61.87 *	535.181	17.83
9	535.101	0.000	535.411	38.79 *	536.136	149.4 *	535.701	75.78 *	535.676	76.91	535.171	17.58
10	535.081	0.000	535.356	24.38	535.826	139.8	535.661	70.07 *	535.701	79.13	535.141	16.48
11	535.101	0.000	535.801	70.34	535.691	79.02	535.791	84.45	536.096	150.1	535.141	0.000
12	535.101	0.000	535.571	48.71	535.636	66.60 *	535.641	65.38	535.931	121.9	535.141	0.000
13	535.101	0.000	535.576	52.42	535.711	77.23 *	535.691	81.20	536.091	154.6	535.131	0.000
14	535.091	0.000	535.471	29.15	536.046	166.5	536.426	201.7	536.131	148.5 *	535.131	0.000
15	535.081	0.000	535.411	29.01	537.431	482.0 *	536.531	230.2	535.791	89.29 *	535.131	0.000
16	535.091	0.000	535.516	50.99 *	536.411	189.1	536.521	245.0	535.621	80.74	535.131	0.000
17	535.071	0.000	536.791	291.0	536.191	151.6	536.161	154.3 *	535.521	61.56	535.121	0.000
18	535.081	0.000	538.851	942.5 *	536.701	296.0	536.141	156.7	535.456	54.76	535.121	0.000
19	535.131	0.000	542.011	2118 *	537.461	458.2	536.241	173.4	535.501	49.16 *	535.121	0.000
20	535.111	0.000	542.471	2301 *	538.051	676.2 *	536.221	171.7	535.361	36.55	535.121	0.000
21	535.121	0.000	540.311	1464 *	537.021	337.9	537.141	361.2	535.396	45.85	535.111	0.000
22	535.211	0.000	536.731	219.3	536.321	181.7	536.241	176.0	535.531	52.84 *	535.111	0.000
23	535.956	122.9	536.031	129.8 *	535.951	113.6	535.831	94.19	535.781	103.6	535.101	0.000
24	536.106	103.5	535.771	87.28	535.731	69.32	535.651	68.67 *	535.776	96.28	535.101	0.000
25	535.711	77.23 *	535.641	59.37	535.921	110.4 *	535.831	95.06	535.586	69.64	535.091	0.000
26	535.891	105.4 *	535.561	55.92	536.196	163.8	535.896	111.5	535.471	56.06	535.091	0.000
27	535.686	63.88	535.606	58.71	536.911	329.3 *	535.681	82.82	535.406	42.87	535.081	0.000
28	535.641	59.38	535.776	87.30	536.671	267.4	535.706	89.49	535.361	42.39	535.071	0.000
29	535.611	56.51	535.636	61.15	540.961	1709 *	535.641	75.06	535.341	31.44 *	535.071	0.000
30	535.561	38.50	535.531	52.84 *	540.186	1418 *	535.671	71.48 *	535.316	34.17	535.071	0.000
31			535.561	56.80	537.406	474.4 *			535.296	31.14		
Ten-Daily Mean												
I Ten-Daily	535.035	0.000	535.561	49.36	536.354	216.1	535.959	118.8	535.674	77.00	535.207	19.75
II Ten-Daily	535.096	0.000	537.347	593.3	536.533	264.2	536.137	156.4	535.750	94.72	535.129	0.000
III Ten-Daily	535.650	62.74	536.196	212.1	537.207	470.4	535.929	122.5	535.478	55.12	535.090	0.000
Monthly												
Min.	534.981	0.000	535.356	24.38	535.636	66.60	535.641	65.38	535.296	31.14	535.071	0.000
Max.	536.106	122.9	542.471	2301	540.961	1709	537.141	361.2	536.131	154.6	535.261	27.63
Mean	535.260	20.91	536.362	282.6	536.715	321.9	536.008	132.6	535.629	74.95	535.142	6.584

Annual Runoff in MCM = 2235 Annual Runoff in mm = 303

Peak Observed Discharge = 458.2 cumecs on 19/08/2017 Corres. Water Level :537.461 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :534.981 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Jagdalpur (AGG00R9) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	535.071	0.000	535.051	0.000	535.081	0.000	534.431	0.000	535.031	0.000	535.061	0.000
2	535.071	0.000	535.051	0.000	535.071	0.000	534.451	0.000	535.051	0.000	535.101	0.000
3	535.061	0.000	535.051	0.000	535.091	0.000	534.451	0.000	535.041	0.000	535.121	0.000
4	535.061	0.000	535.051	0.000	535.051	0.000	534.571	0.000	535.041	0.000	535.121	0.000
5	535.051	0.000	535.051	0.000	535.051	0.000	534.611	0.000	535.041	0.000	535.151	0.000
6	535.051	0.000	535.051	0.000	535.051	0.000	534.731	0.000	535.041	0.000	535.151	0.000
7	535.041	0.000	535.051	0.000	535.051	0.000	534.861	0.000	535.051	0.000	535.161	0.000
8	535.041	0.000	535.051	0.000	535.051	0.000	535.001	0.000	535.101	0.000	535.151	0.000
9	535.041	0.000	535.051	0.000	535.051	0.000	535.021	0.000	535.091	0.000	535.141	0.000
10	535.041	0.000	535.071	0.000	535.051	0.000	535.021	0.000	535.071	0.000	535.131	0.000
11	535.041	0.000	535.061	0.000	535.051	0.000	534.991	0.000	535.071	0.000	535.121	0.000
12	535.041	0.000	535.061	0.000	535.041	0.000	534.991	0.000	535.061	0.000	535.111	0.000
13	535.041	0.000	535.061	0.000	535.041	0.000	534.981	0.000	535.061	0.000	535.111	0.000
14	535.031	0.000	535.061	0.000	534.991	0.000	534.901	0.000	535.061	0.000	535.111	0.000
15	535.031	0.000	535.051	0.000	534.861	0.000	534.861	0.000	535.091	0.000	535.101	0.000
16	535.031	0.000	535.051	0.000	534.791	0.000	534.881	0.000	535.071	0.000	535.101	0.000
17	535.021	0.000	535.051	0.000	534.751	0.000	534.891	0.000	535.101	0.000	535.101	0.000
18	535.021	0.000	535.061	0.000	534.711	0.000	534.951	0.000	535.121	0.000	535.101	0.000
19	534.961	0.000	535.061	0.000	534.701	0.000	535.011	0.000	535.101	0.000	535.101	0.000
20	534.641	0.000	535.061	0.000	534.701	0.000	535.011	0.000	535.101	0.000	535.101	0.000
21	534.621	0.000	535.061	0.000	534.571	0.000	535.011	0.000	535.101	0.000	535.101	0.000
22	534.611	0.000	535.021	0.000	534.451	0.000	535.011	0.000	535.101	0.000	535.121	0.000
23	534.611	0.000	534.981	0.000	534.531	0.000	535.001	0.000	535.101	0.000	535.121	0.000
24	534.651	0.000	535.041	0.000	534.521	0.000	535.001	0.000	535.091	0.000	535.101	0.000
25	534.941	0.000	535.051	0.000	534.391	0.000	535.001	0.000	535.091	0.000	535.091	0.000
26	535.071	0.000	535.051	0.000	534.391	0.000	535.001	0.000	535.081	0.000	535.091	0.000
27	535.061	0.000	535.051	0.000	534.431	0.000	534.991	0.000	535.081	0.000	535.081	0.000
28	535.061	0.000	535.051	0.000	534.411	0.000	535.021	0.000	535.071	0.000	535.081	0.000
29	535.061	0.000	535.051	0.000			535.021	0.000	535.071	0.000	535.071	0.000
30	535.061	0.000	535.051	0.000			535.031	0.000	535.071	0.000	535.071	0.000
31	535.061	0.000	535.051	0.000			535.031	0.000			535.071	0.000
Ten-Daily Mean												
I Ten-Daily	535.053	0.000	535.053	0.000	535.060	0.000	534.715	0.000	535.056	0.000	535.129	0.000
II Ten-Daily	534.986	0.000	535.058	0.000	534.864	0.000	534.947	0.000	535.084	0.000	535.106	0.000
III Ten-Daily	534.892	0.000	535.042	0.000	534.462	0.000	535.011	0.000	535.086	0.000	535.091	0.000
Monthly												
Min.	534.611	0.000	534.981	0.000	534.391	0.000	534.431	0.000	535.031	0.000	535.061	0.000
Max.	535.071	0.000	535.071	0.000	535.091	0.000	535.031	0.000	535.121	0.000	535.161	0.000
Mean	534.974	0.000	535.051	0.000	534.819	0.000	534.895	0.000	535.075	0.000	535.108	0.000

Peak Computed Discharge = 2301 cumecs on 20/07/2017 Corres. Water Level :542.471 m

Lowest Computed Discharge = 19.57 cumecs on 05/11/2017 Corres. Water Level :535.211 m

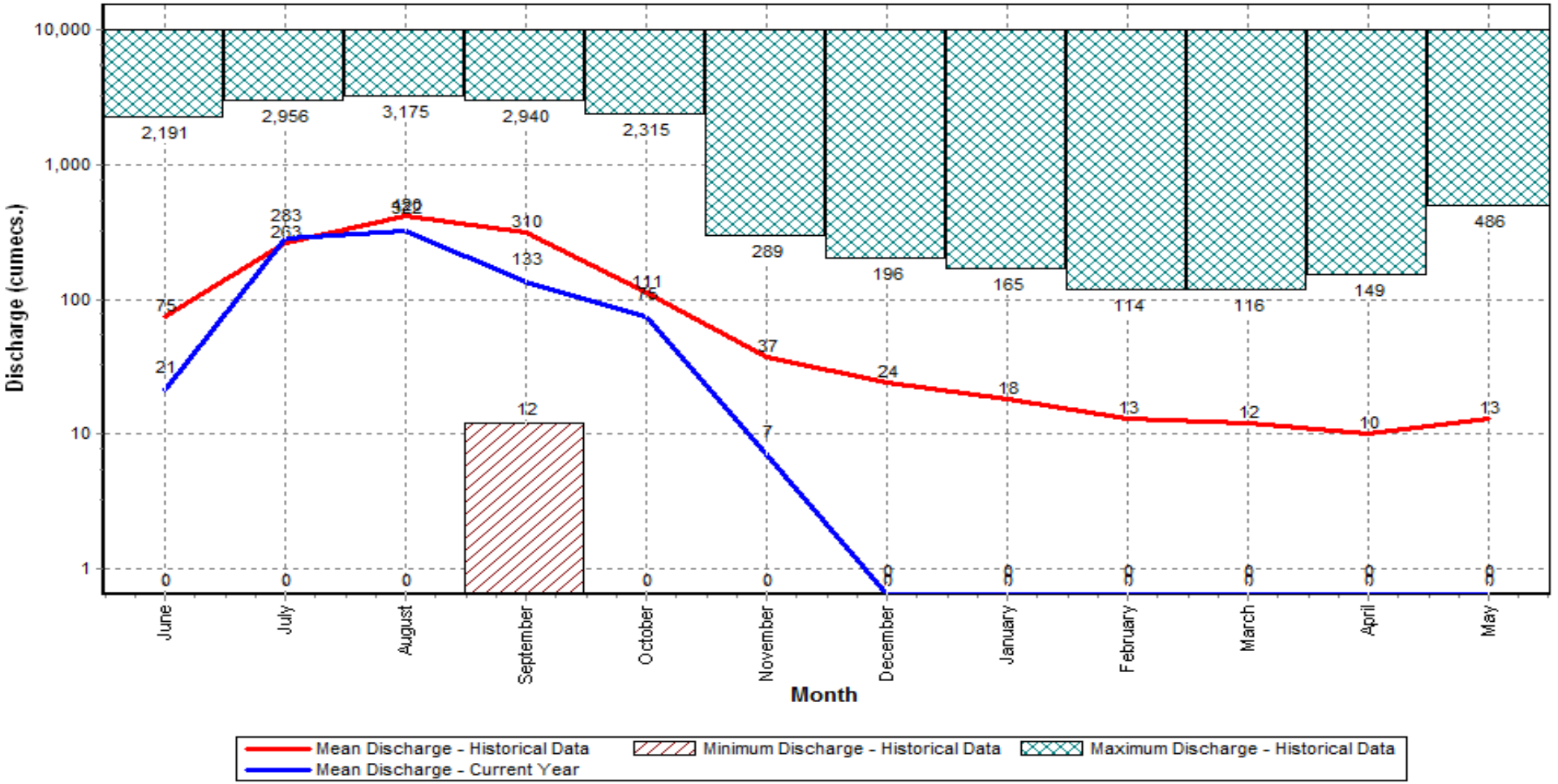
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Jagdalpur (AGG00R9) | **Data considered : 1965-2018** | **Division : Lower Godavari Div., Hyderabad**

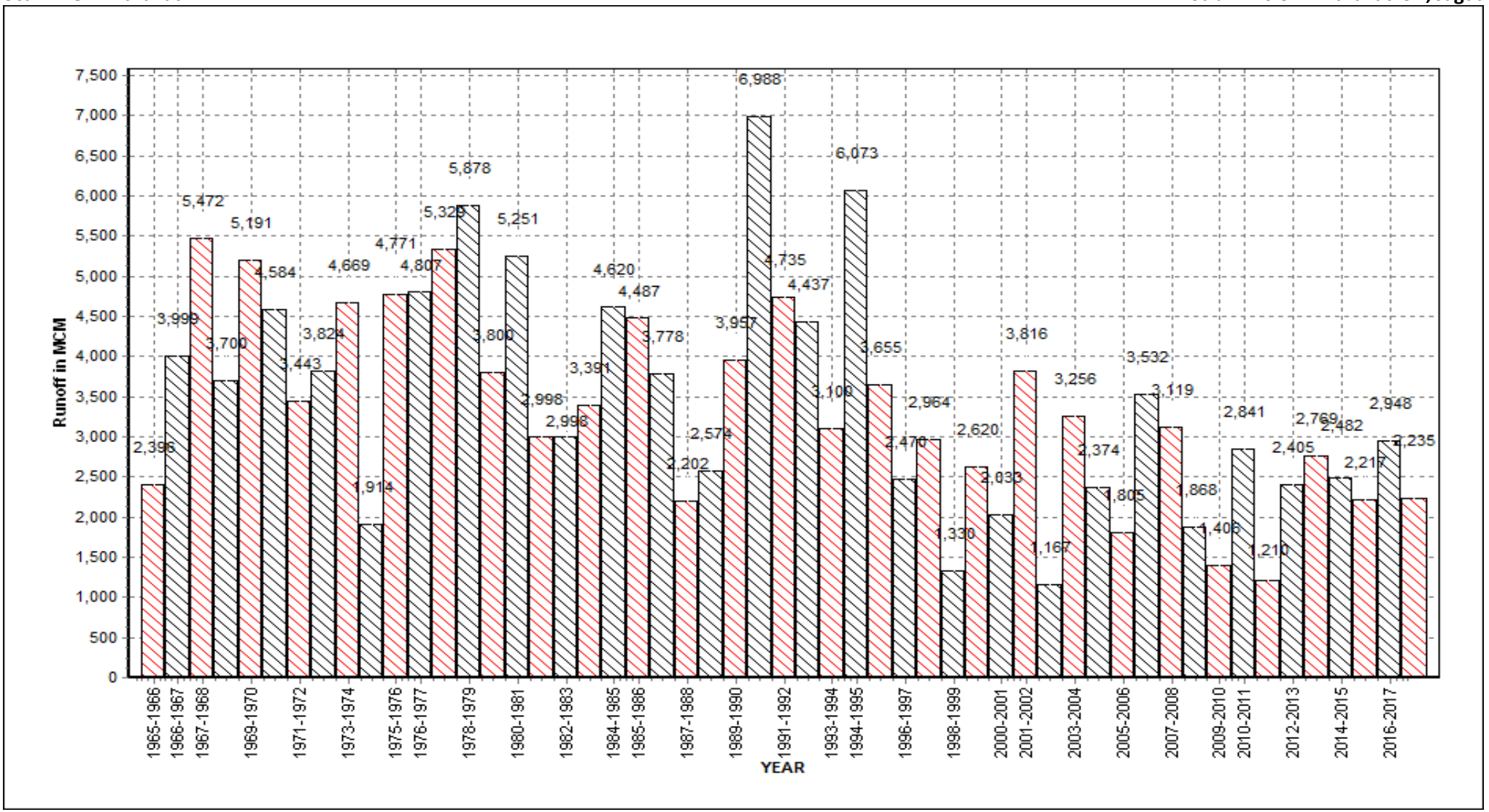
Local River : Indravathi | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1965 - 2018

Station Name : Jagdalpur (AGG00R9) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

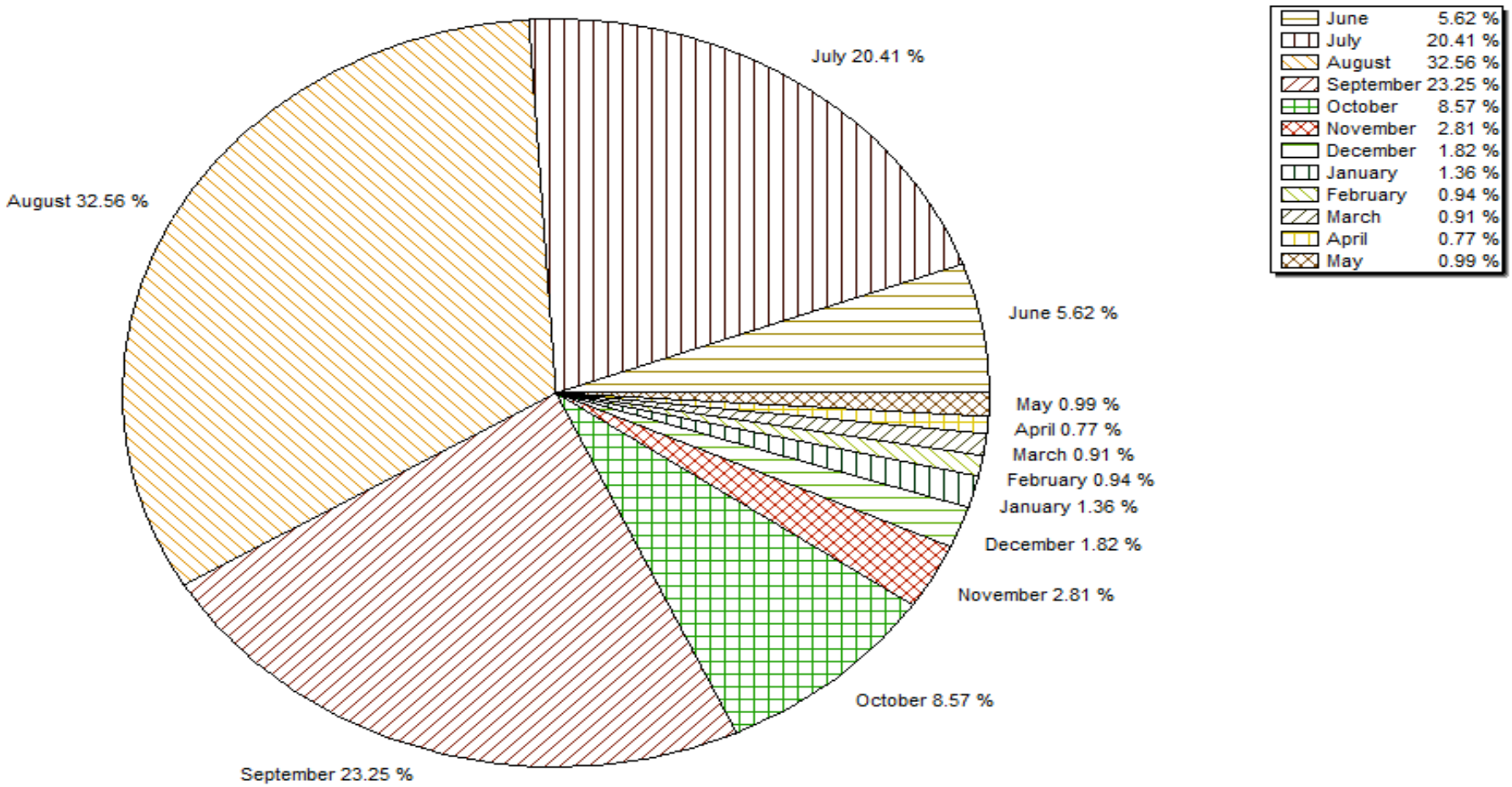
Monthly Average Runoff based on period : 1965-2017

Station Name : Jagdalpur (AGG00R9)

Local River : Indravathi

Division : Lower Godavari Div., Hyderabad

Sub-Division : Indravati SD, Jagdalpur



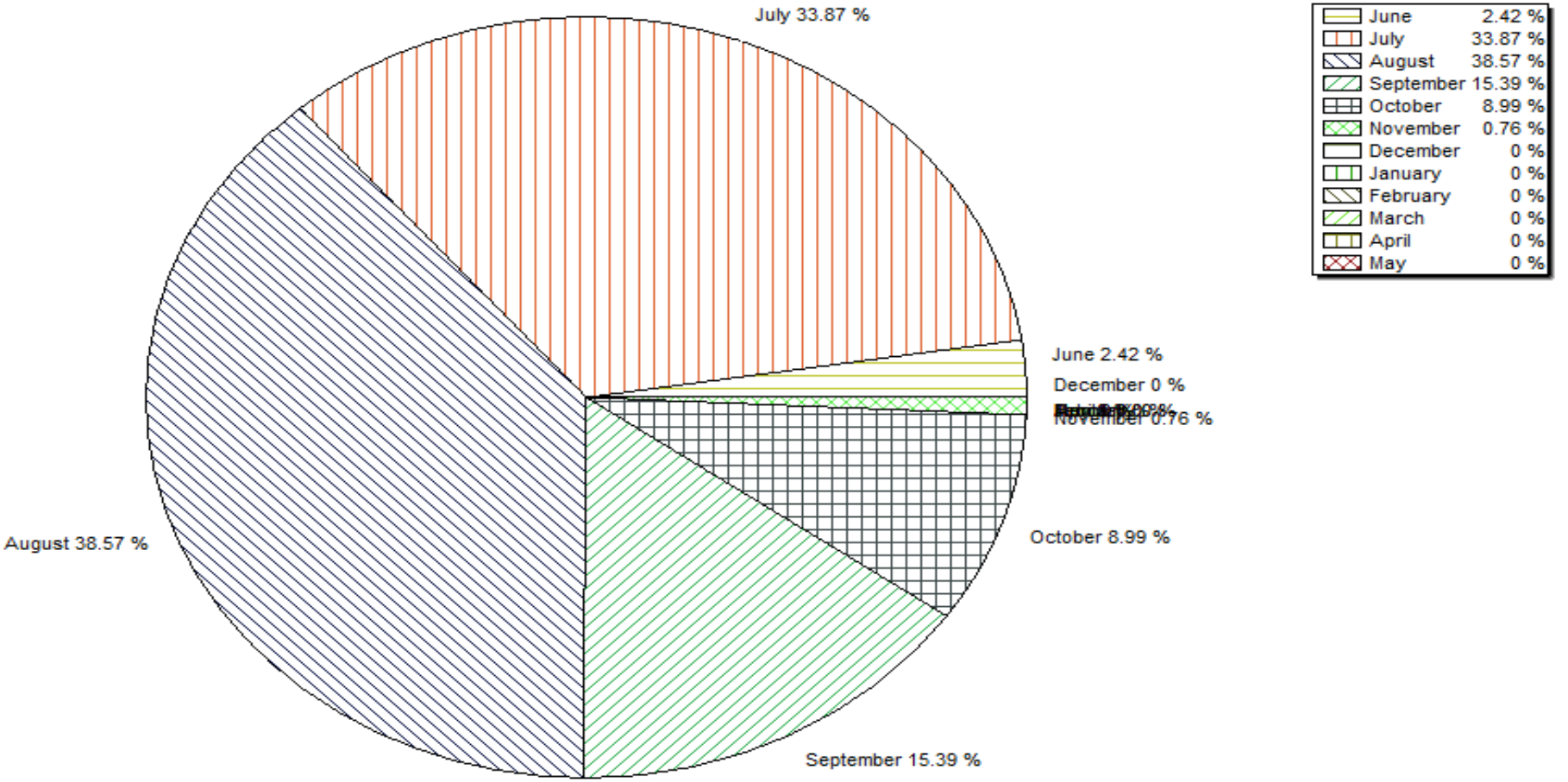
Monthly Runoff for the Year : 2017-2018

Station Name : Jagdalpur (AGG00R9)

Local River : Indravathi

Division : Lower Godavari Div., Hyderabad

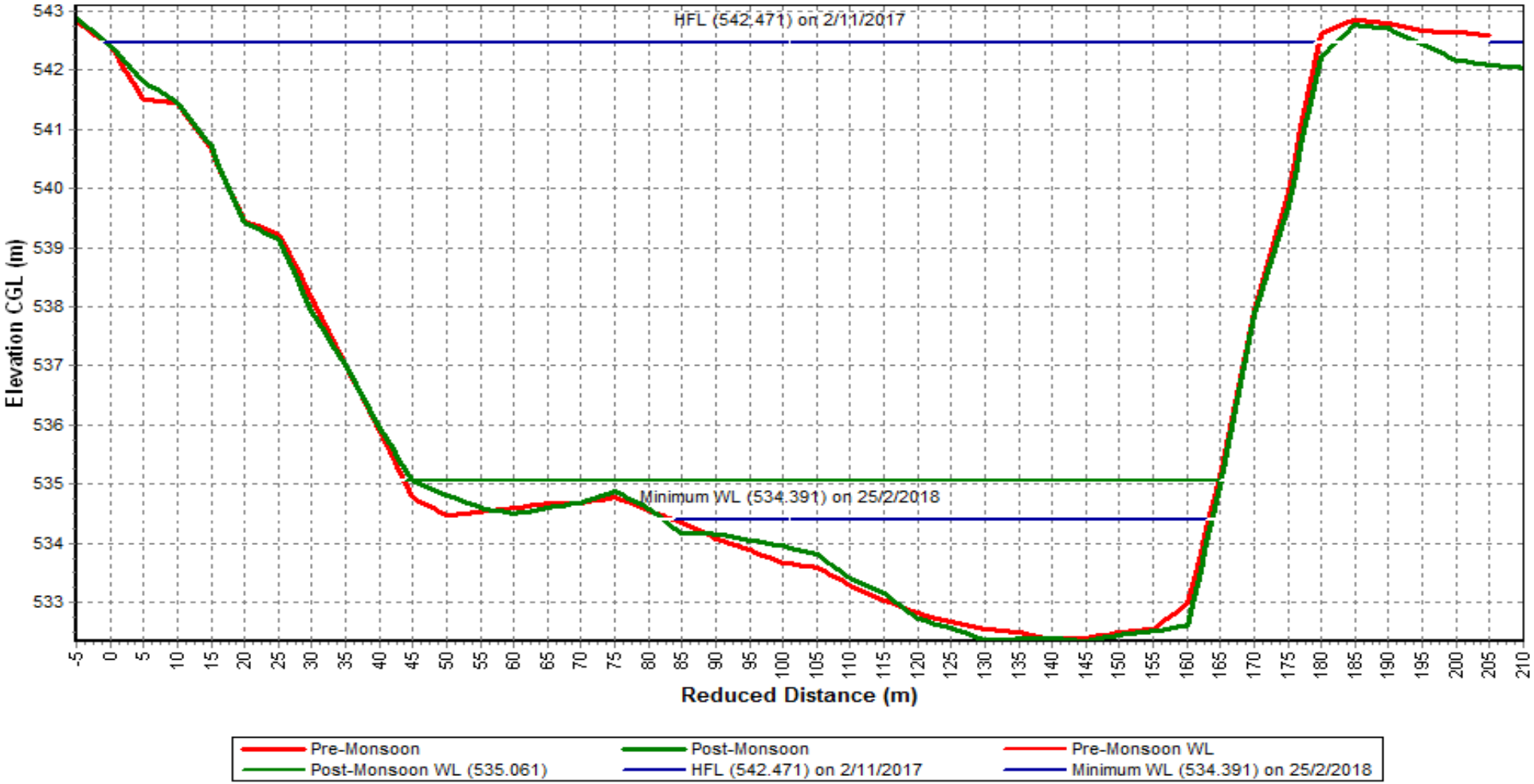
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Jagdalpur (AGG00R9) **Division : Lower Godavari Div., Hyderabad**

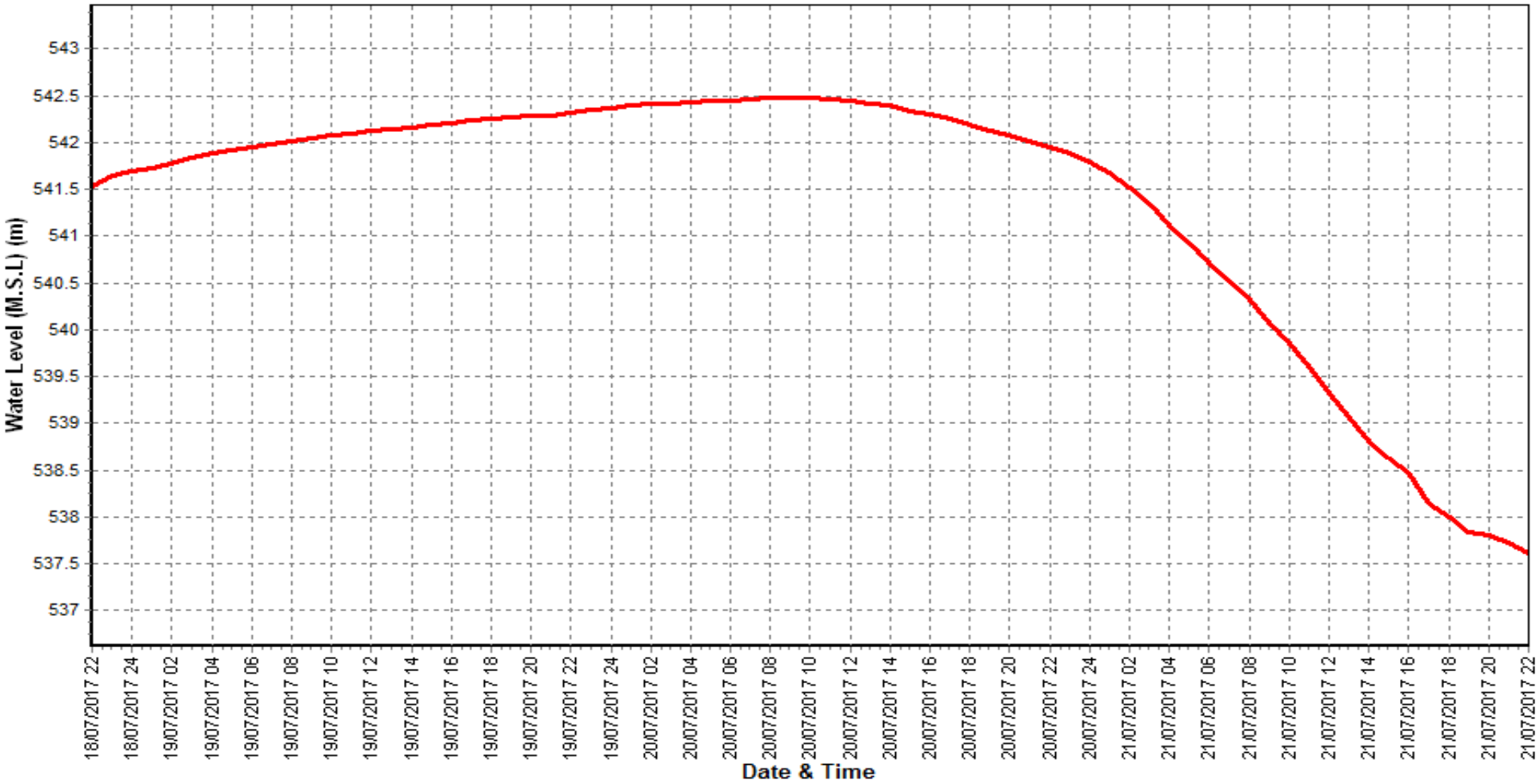
Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Jagdalpur (AGG00R9) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

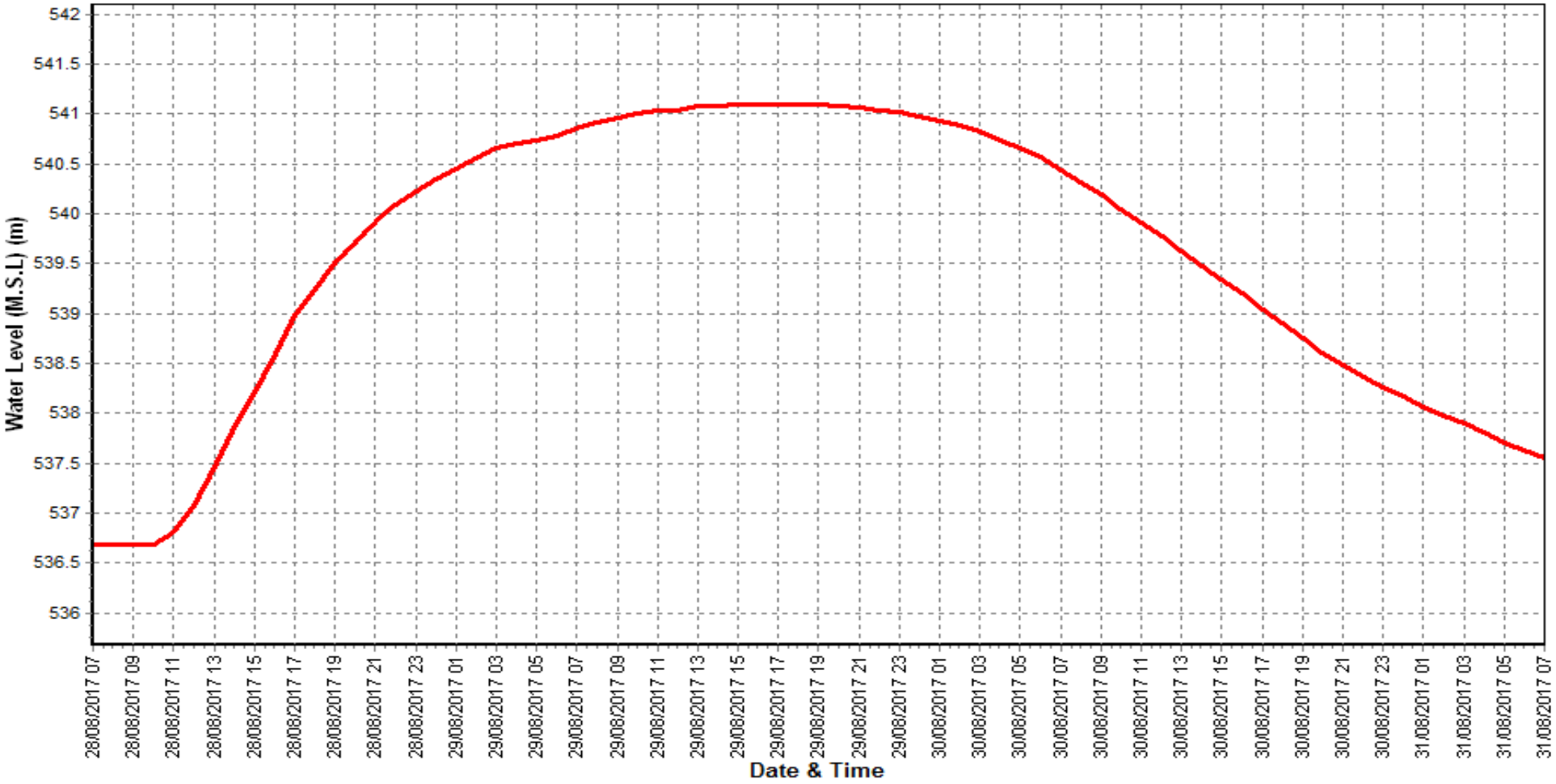


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Jagdalpur (AGG00R9) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Kosagumda**	**Code**	:	**Kosagumda**
State	:	Orissa	District		Nowrangpur
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	Bhaskal
Sub-Sub Tributary	:	-	Local River	:	Bhaskal
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	1635 Sq. Km.	Bank	:	Left
Latitude	:	19°16'37"	Longitude	:	82°14'00"
Zero of Gauge (m)	:	547.000 (m.s.l)	13.11.1996		
		Opening Date	Closing Date		
Gauge	:	13.11.1996	**HFL During 2017-18**	:	**555.660 Meter**
			Corres. Discharge	:	**1419 Cumecs (Estimated)**
Discharge	:	13.11.1996	**Date & Time of Occurance**	:	**19.07.2017 06:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 557.98 05/08/2010
Corresponding Discharge (cumecs) : 2774*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1998-1999	138.8	550.740	16.08.1998	0.081	548.195	23.06.1998
1999-2000	317.1	552.160	08.09.1999	0.000	548.130	29.04.2000
2000-2001	802.7	554.120	30.08.2000	0.000	548.130	21.02.2001
2001-2002	893.5	556.150	20.08.2001	0.000	548.010	24.01.2002
2002-2003	539.0	553.050	24.08.2002	0.000	547.950	19.01.2003
2003-2004	943.8	554.570	28.08.2003	0.000	547.930	10.06.2003
2004-2005	1182	555.560	15.06.2004	0.393	548.110	11.04.2005
2005-2006	666.3	553.000	14.09.2005	0.249	548.080	15.05.2006
2006-2007	1647	556.140	04.07.2006	0.421	547.700	04.04.2007
2007-2008	1516	555.630	07.08.2007	0.081	547.650	09.06.2007
2008-2009	791.0	553.160	10.08.2008	0.020	548.060	07.05.2009
2009-2010	703.1	552.820	26.08.2009	0.039	548.090	24.03.2010
2010-2011	1692	555.870	06.08.2010	0.275	548.030	25.03.2011
2011-2012	381.7	551.520	28.08.2011	0.000	548.050	22.03.2012
2012-2013	689.8	553.150	06.08.2012	0.054	548.090	14.04.2013
2013-2014	1158	555.040	14.06.2013	0.323	548.030	06.04.2014
2014-2015	997.7	554.150	22.07.2014	0.349	548.080	25.03.2015
2015-2016	1021	555.630	17.09.2015	0.000	547.790	23.04.2016
2016-2017	375.1	551.380	11.07.2016	0.000	547.840	01.05.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Kosagumda in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1996-1997**	2	10	12
2	**1997-1998**	653	40	693
3	**1998-1999**	422	25	448
4	**1999-2000**	723	19	742
5	**2000-2001**	712	10	722
6	**2001-2002**	1219	0	1219
7	**2002-2003**	304	1	306
8	**2003-2004**	1146	33	1178
9	**2004-2005**	1029	31	1061
10	**2005-2006**	724	26	750
11	**2006-2007**	1324	21	1345
12	**2007-2008**	1281	16	1297
13	**2008-2009**	970	7	977
14	**2009-2010**	583	9	592
15	**2010-2011**	1287	45	1332
16	**2011-2012**	654	7	662
17	**2012-2013**	915	12	927
18	**2013-2014**	1055	28	1083
19	**2014-2015**	1225	37	1262
20	**2015-2016**	826	17	843
21	**2016-2017**	853	14	867
Average		853	20	872

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kosagumda (Kosagumda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bhaskal **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	547.890	0.691	548.510	19.67	548.770	44.38	548.960	58.90	548.590	31.75 *	548.170	12.42
2	547.870	0.270	548.510	26.34 *	548.630	35.84	549.530	110.4 *	548.670	37.58 *	548.150	9.892
3	547.930	1.060	548.495	19.51	548.760	43.10	549.000	65.93 *	548.755	47.80	548.130	9.717
4	547.920	1.178 *	548.775	38.81	548.505	25.80	549.220	96.24	548.700	43.85	548.130	6.903 *
5	547.900	0.880	548.575	20.11	548.545	27.97	548.945	56.47	548.830	51.95	548.120	6.541 *
6	547.910	1.030	548.400	14.37	551.390	338.1 *	548.765	53.47	548.585	36.01	548.110	9.361
7	548.010	1.459	548.305	14.12	549.870	142.0 *	548.620	34.57	548.480	30.10	548.090	8.503
8	548.010	1.457	548.210	7.315	549.000	65.93 *	548.625	35.17	548.480	24.43 *	548.080	8.710
9	548.030	2.258	548.180	8.833 *	549.070	72.80 *	548.560	34.04	548.750	42.42	548.070	7.404
10	548.010	1.428	548.910	54.22	548.890	55.73 *	548.580	31.05 *	549.020	67.36	548.060	6.203
11	547.990	1.250 *	548.555	23.13	548.620	33.88 *	548.695	49.70	548.860	55.27	548.050	4.249 *
12	547.970	0.885	548.550	22.92	548.660	36.83 *	548.445	36.45	548.920	60.66	548.040	3.956 *
13	547.990	1.489	548.480	18.25	548.660	36.83 *	549.705	148.1	548.900	58.57	548.040	5.660
14	548.000	2.044	548.315	16.15	551.590	358.8	549.345	136.3	548.735	43.01	548.040	5.879
15	547.930	1.060	548.260	10.92	550.150	171.2 *	549.315	94.28	548.590	31.75 *	548.040	5.885
16	548.105	3.889	548.680	38.34 *	549.275	87.07	549.275	90.27	548.480	24.76	548.040	5.296
17	548.105	4.188	549.555	97.23	549.555	106.2	549.020	67.86 *	548.390	20.74	548.030	5.249
18	548.040	3.956 *	553.400	745.5 *	550.000	146.3	549.060	83.16	548.320	18.70	548.040	5.209
19	548.010	1.975	555.640	1413 *	549.995	225.1	549.050	82.87	548.270	12.81 *	548.040	3.956 *
20	548.000	1.494	553.200	697.0 *	550.650	231.1 *	549.020	79.68	548.260	15.47	548.030	5.130
21	548.345	11.71	549.770	117.4	549.560	114.9	550.225	230.1	548.435	19.31	548.030	5.153
22	548.350	11.94	549.050	57.99	548.975	59.79	549.240	88.67	548.820	49.62 *	548.030	5.467
23	549.720	103.2	548.700	39.87 *	548.850	53.83	548.850	53.46	549.025	65.33	548.010	4.101
24	548.690	31.41	548.545	29.53	548.940	60.00	548.570	30.36 *	548.695	38.31	548.000	3.972
25	548.650	36.08 *	548.425	19.18	549.670	122.9 *	549.310	103.6	548.475	25.32	547.990	3.989
26	548.560	29.67 *	548.510	19.71	549.510	106.4	548.685	51.55	548.365	20.30	547.990	2.630 *
27	548.405	17.47	549.110	74.88	549.820	137.1 *	548.755	48.92	548.275	16.42	547.970	3.274
28	548.505	19.26	548.750	43.35	553.000	650.4 *	548.625	36.70	548.260	15.19	547.970	3.243
29	548.405	15.80	548.525	27.63	552.500	541.4 *	548.840	53.76	548.240	11.41 *	547.970	3.297
30	548.335	14.63	548.290	13.78 *	550.560	243.5	548.660	36.83 *	548.200	13.25	547.970	3.329
31			548.725	40.23	549.560	107.9			548.190	12.66		
Ten-Daily Mean												
I Ten-Daily	547.948	1.171	548.487	22.33	549.143	85.16	548.880	57.62	548.686	41.32	548.111	8.565
II Ten-Daily	548.014	2.223	550.264	308.2	549.715	143.3	549.093	86.87	548.572	34.17	548.039	5.047
III Ten-Daily	548.596	29.12	548.764	43.96	550.086	199.8	548.976	73.40	548.453	26.10	547.993	3.846
Monthly												
Min.	547.870	0.270	548.180	7.315	548.505	25.80	548.445	30.36	548.190	11.41	547.970	2.630
Max.	549.720	103.2	555.640	1413	553.000	650.4	550.225	230.1	549.025	67.36	548.170	12.42
Mean	548.186	10.84	549.158	122.2	549.662	144.6	548.983	72.63	548.567	33.62	548.048	5.819

Annual Runoff in MCM = 1049 Annual Runoff in mm = 642

Peak Observed Discharge = 358.8 cumecs on 14/08/2017 Corres. Water Level :551.590 m

Lowest Observed Discharge = 0.000 cumecs on 01/04/2018 Corres. Water Level :547.760 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kosagumda (Kosagumda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bhaskal **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	547.960	3.259	547.820	1.136	547.830	1.090	547.790	0.820	547.760	0.000	547.800	0.949
2	547.960	3.250 *	547.820	0.901	547.840	1.343	547.790	0.820 *	547.790	0.000	547.820	0.936
3	547.940	2.700 *	547.820	0.892	547.840	1.592	547.780	0.792	547.780	0.000	547.820	0.913
4	547.930	2.366	547.820	0.922	547.820	0.980 *	547.780	0.790 *	547.800	0.000	547.830	0.941
5	547.930	2.108	547.810	0.919	547.820	0.984	547.790	0.642	547.790	0.000	547.810	0.887
6	547.920	2.193	547.810	0.912	547.820	0.890	547.790	0.700	547.790	0.000	547.800	0.900 *
7	547.920	1.885	547.800	1.120 *	547.820	1.039	547.780	0.533	547.770	0.000	547.790	0.904
8	547.920	1.853	547.800	1.124	547.830	1.112	547.780	0.540	547.790	0.000	547.780	0.877
9	547.920	1.850 *	547.800	1.115	547.820	1.072	547.780	0.541	547.790	0.000	547.780	0.919
10	547.910	1.750 *	547.800	1.093	547.820	1.087	547.790	0.684	547.780	0.000	547.800	0.936
11	547.900	1.680	547.800	1.110	547.830	0.940 *	547.790	0.680 *	547.800	0.000	547.790	0.942
12	547.900	1.727	547.860	1.527	547.830	0.944	547.810	0.793	547.800	0.000	547.830	0.000
13	547.900	1.791	547.860	1.500 *	547.830	0.948	547.800	0.792	547.870	0.000	547.830	0.000
14	547.900	1.865	547.840	1.350 *	547.830	1.025	547.810	0.769	547.850	0.000	547.840	0.000
15	547.900	1.692	547.840	1.350 *	547.820	0.974	547.790	0.680	547.900	0.000	547.850	0.000
16	547.880	1.670	547.840	1.354	547.810	0.997	547.780	0.682	547.950	0.000	547.840	0.000
17	547.880	1.670 *	547.840	1.334	547.810	0.983	547.780	0.679	547.920	0.000	547.830	0.000
18	547.870	1.708	547.840	1.325	547.810	0.980 *	547.780	0.680 *	547.900	0.000	547.830	0.000
19	547.870	1.504	547.840	1.344	547.810	0.958	547.790	0.708	547.890	0.000	547.820	0.000
20	547.870	1.544	547.840	1.346	547.810	0.835	547.800	0.740	547.880	0.000	547.830	0.000
21	547.870	1.552	547.840	1.350 *	547.810	0.882	547.790	0.694	547.880	0.000	547.830	0.000
22	547.860	1.494	547.840	1.301	547.810	0.895	547.780	0.659	547.870	0.000	547.800	0.000
23	547.860	1.511	547.840	1.267	547.800	0.802	547.780	0.543	547.860	0.000	547.810	0.000
24	547.860	1.510 *	547.830	1.011	547.790	0.839	547.780	0.567	547.860	0.000	547.840	0.000
25	547.860	1.510 *	547.830	1.065	547.790	0.840 *	547.770	0.540 *	547.850	0.000	547.820	0.000
26	547.850	1.467	547.830	1.070 *	547.790	0.820	547.760	0.517	547.840	0.000	547.810	0.000
27	547.850	1.434	547.840	1.281	547.790	0.822	547.780	0.591	547.800	0.000	547.810	0.000
28	547.850	1.459	547.840	1.280 *	547.790	0.828	547.780	0.597	547.790	0.000	547.800	0.000
29	547.850	1.433	547.830	1.020			547.760	0.520 *	547.780	0.000	547.780	0.000
30	547.830	1.136	547.820	1.042			547.750	0.505 *	547.780	0.000	547.780	0.000
31	547.830	1.140 *	547.850	1.521			547.750	0.503			547.770	0.000
Ten-Daily Mean												
I Ten-Daily	547.931	2.322	547.810	1.013	547.826	1.119	547.785	0.686	547.784	0.000	547.803	0.916
II Ten-Daily	547.887	1.685	547.840	1.354	547.819	0.958	547.793	0.720	547.876	0.000	547.829	0.094
III Ten-Daily	547.852	1.422	547.836	1.201	547.796	0.841	547.771	0.567	547.831	0.000	547.805	0.000
Monthly												
Min.	547.830	1.136	547.800	0.892	547.790	0.802	547.750	0.503	547.760	0.000	547.770	0.000
Max.	547.960	3.259	547.860	1.527	547.840	1.592	547.810	0.820	547.950	0.000	547.850	0.949
Mean	547.889	1.797	547.829	1.190	547.815	0.982	547.783	0.655	547.830	0.000	547.812	0.326

Peak Computed Discharge = 1413 cumecs on 19/07/2017 Corres. Water Level :555.640 m

Lowest Computed Discharge = 0.505 cumecs on 30/03/2018 Corres. Water Level :547.750 m

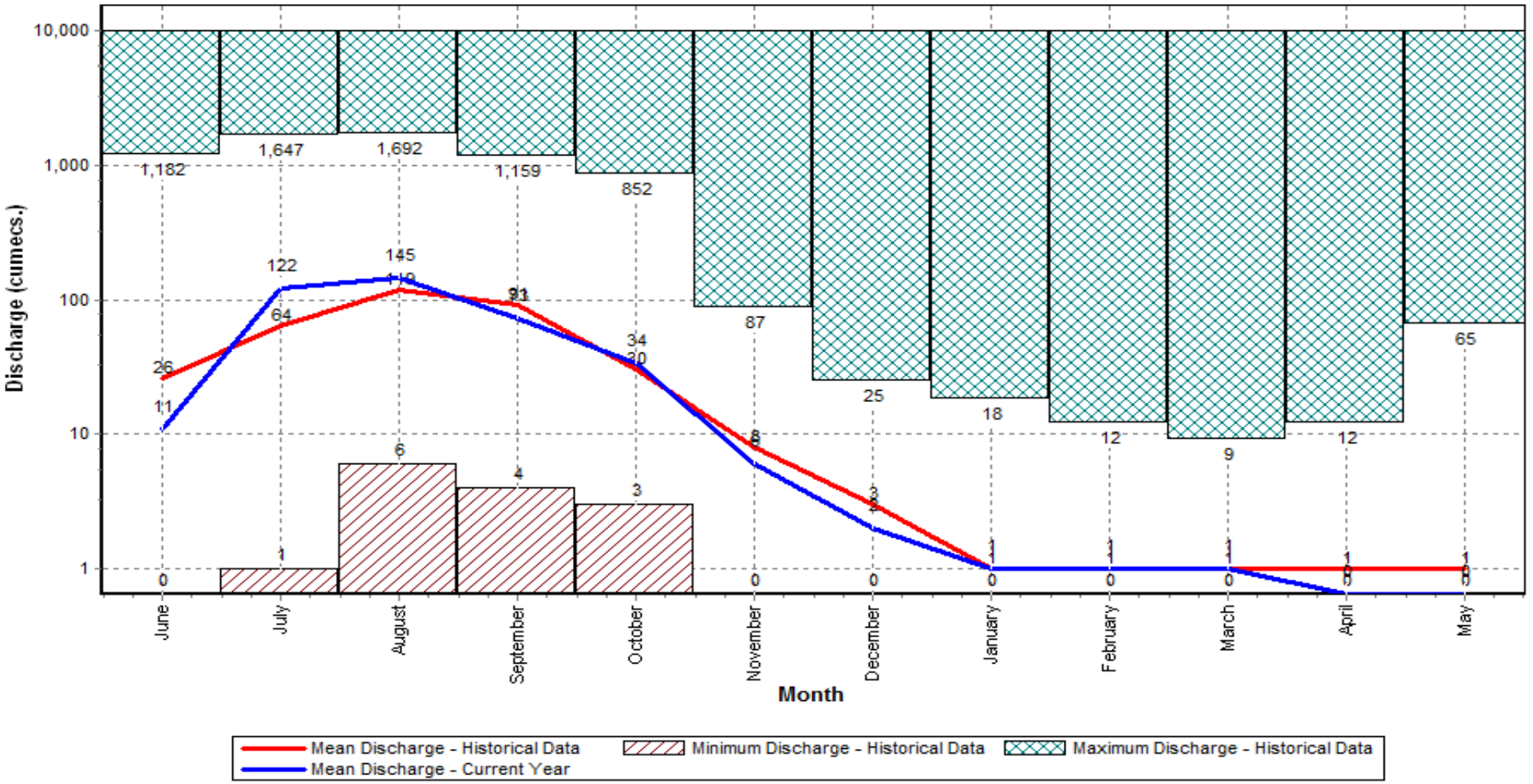
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Kosagumda (Kosagumda) | **Data considered : 1998-2018** | **Division : Lower Godavari Div., Hyderabad**

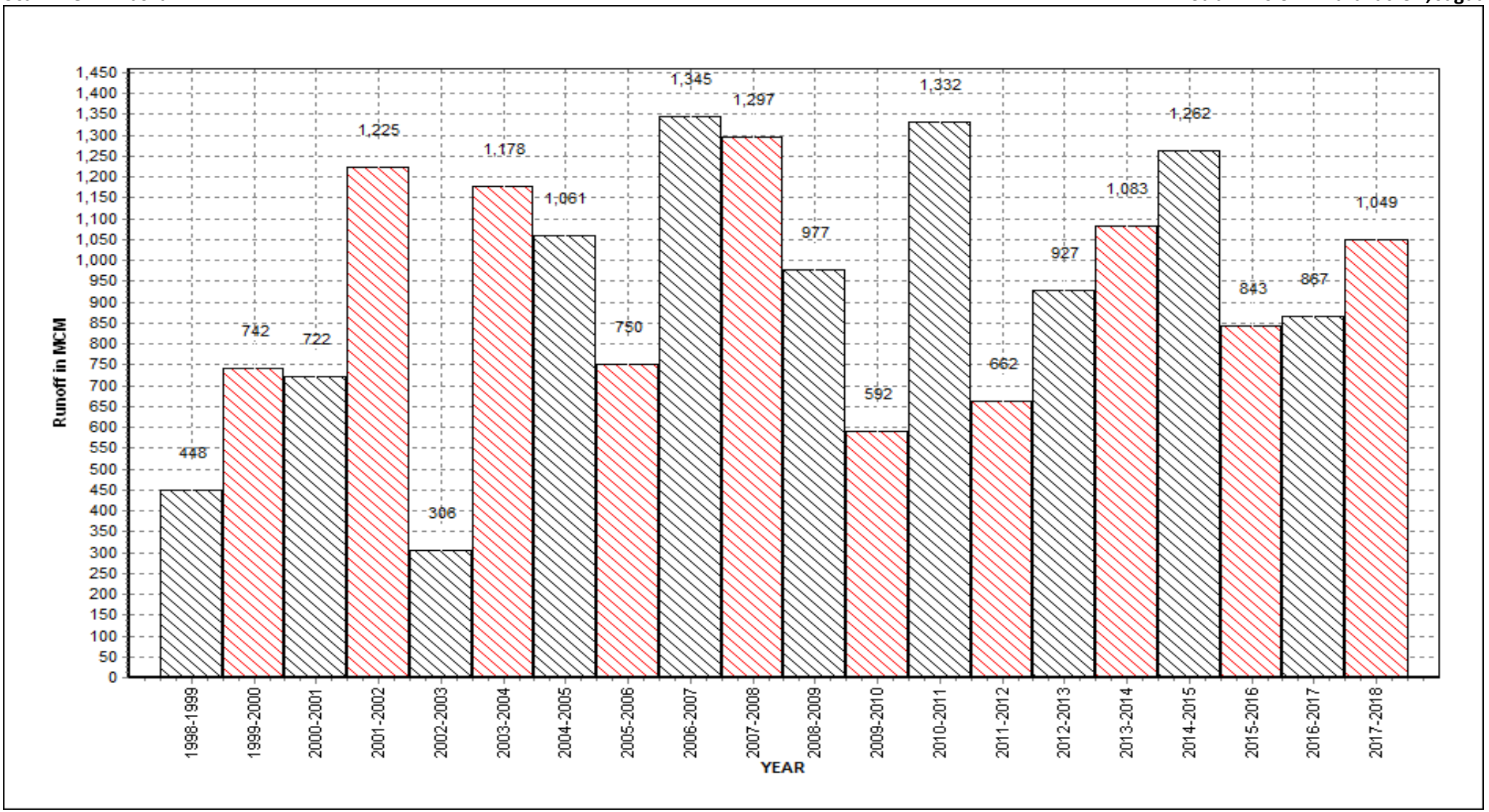
Local River : Bhaskal | **Sub-Division : Indravati SD, Jagdalpur**


Discharge (cumecs.)
10,000
1,000
100
10
1
1,182
1,647
1,692
1,159
852
87
25
18
12
9
12
65
122
145
64
91
34
30
26
11
6
4
3
1
0
0
0

Annual Runoff Values for the period: 1998 - 2018

Station Name : Kosagumda (Kosagumda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bhaskal **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

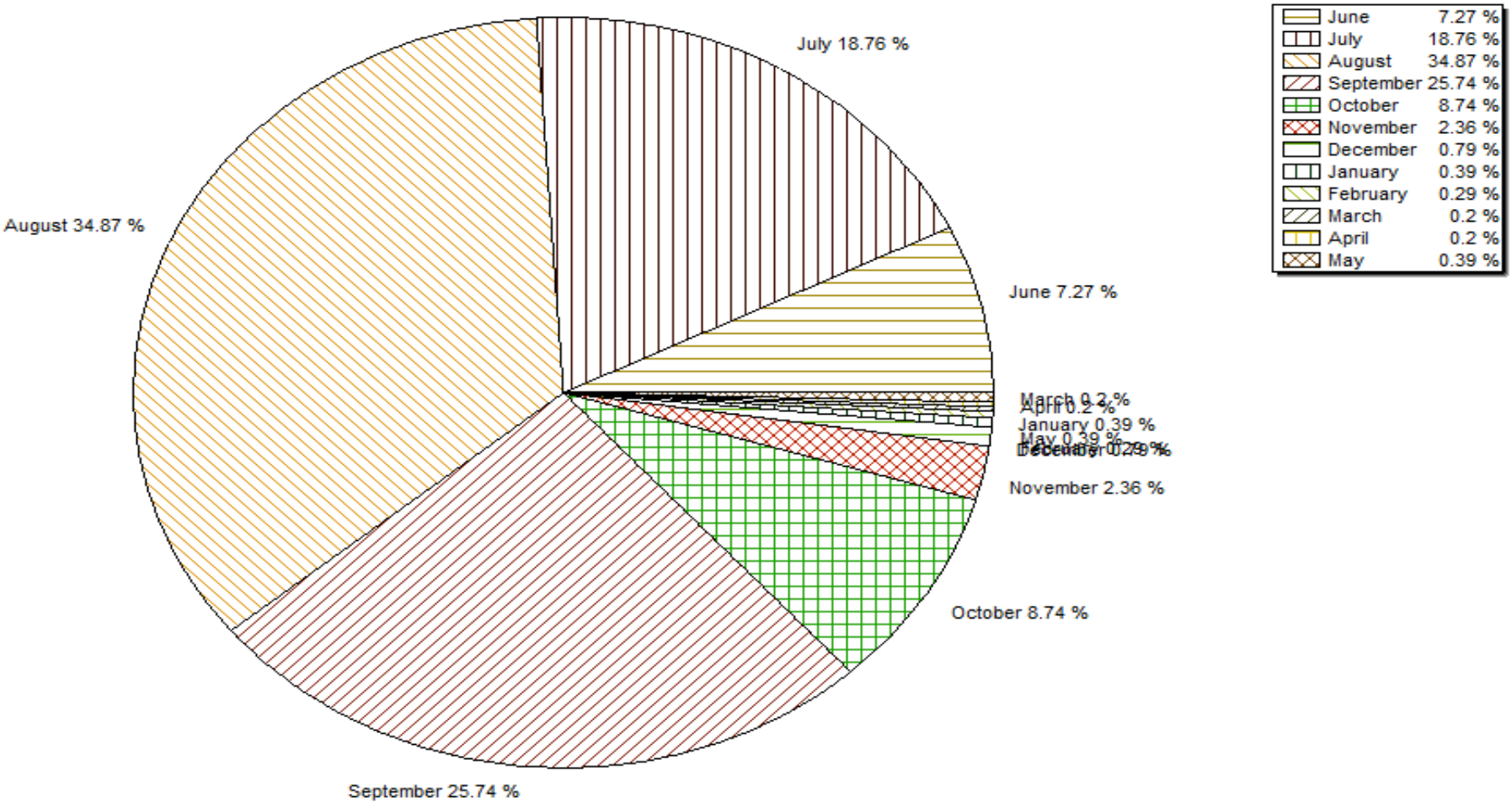
Monthly Average Runoff based on period : 1998-2017

Station Name : Kosagumda (Kosagumda)

Local River : Bhaskal

Division : Lower Godavari Div., Hyderabad

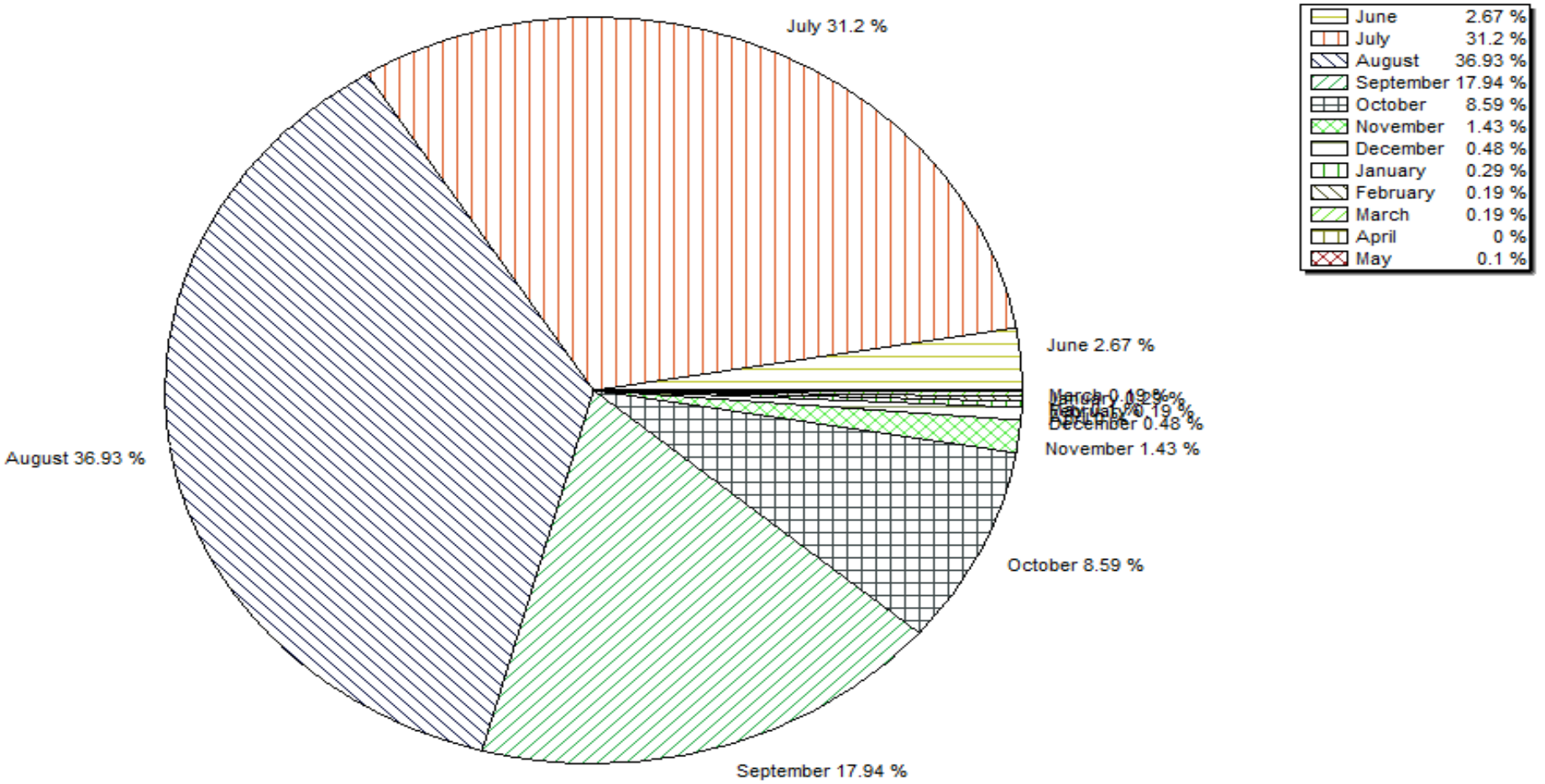
Sub-Division : Indravati SD, Jagdalpur



Monthly Runoff for the Year : 2017-2018

Station Name : Kosagumda (Kosagumda)
Local River : Bhaskal

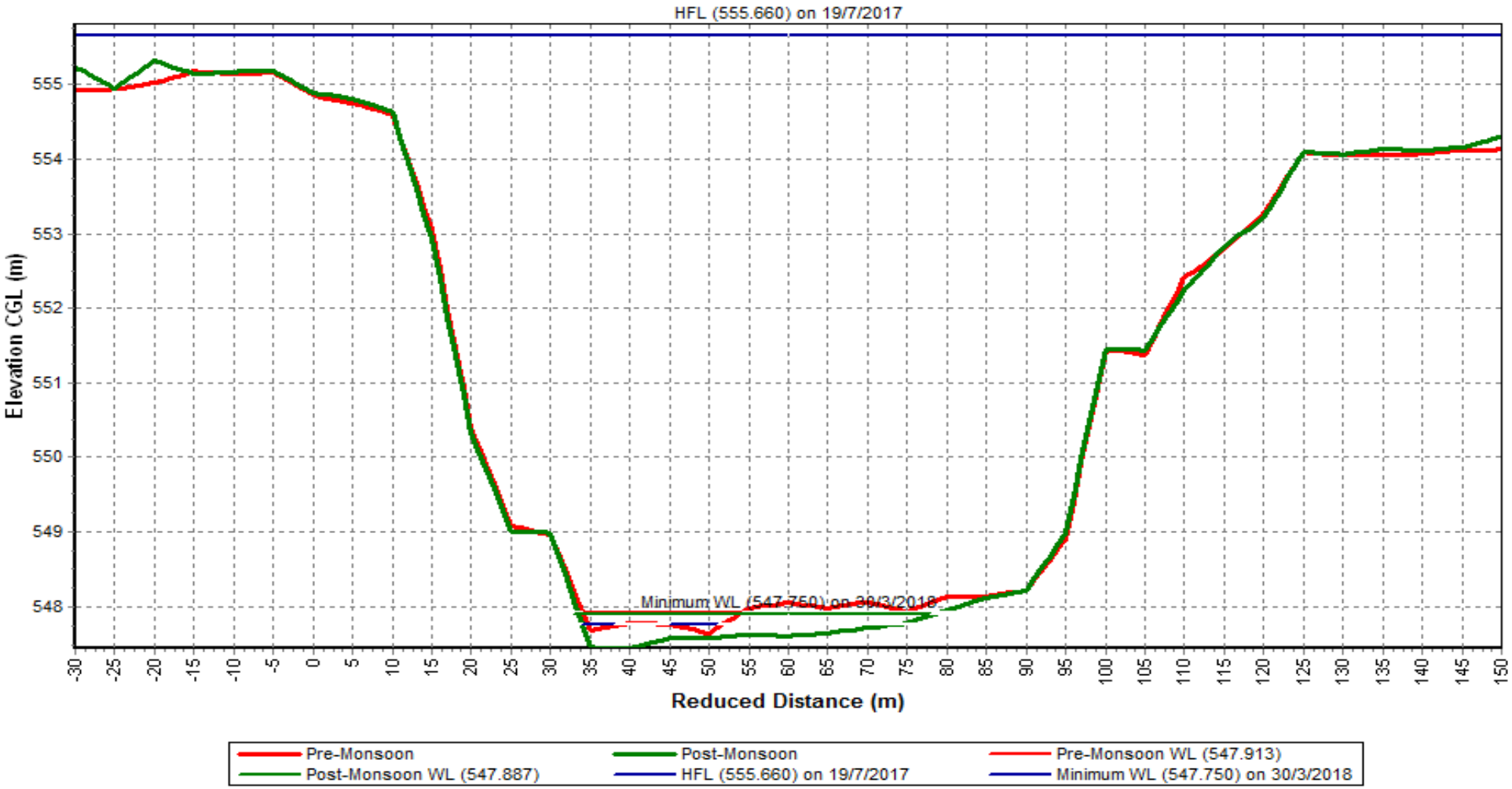
Division : Lower Godavari Div., Hyderabad
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Kosagumda (Kosagumda) **Division : Lower Godavari Div., Hyderabad**

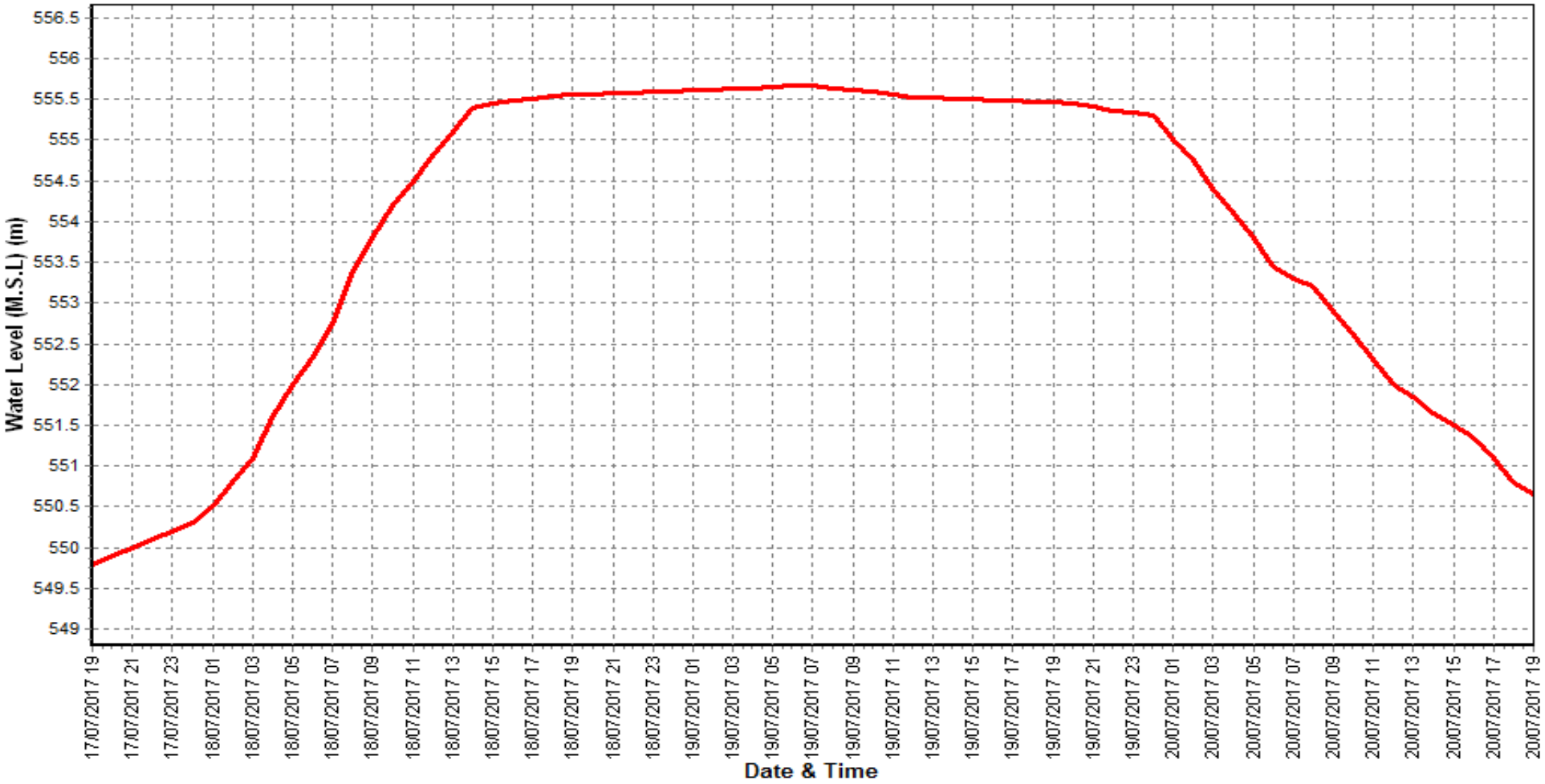
Local River : Bhaskal **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Kosagumda (Kosagumda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bhaskal **Sub-Division : Indravati SD, Jagdalpur**

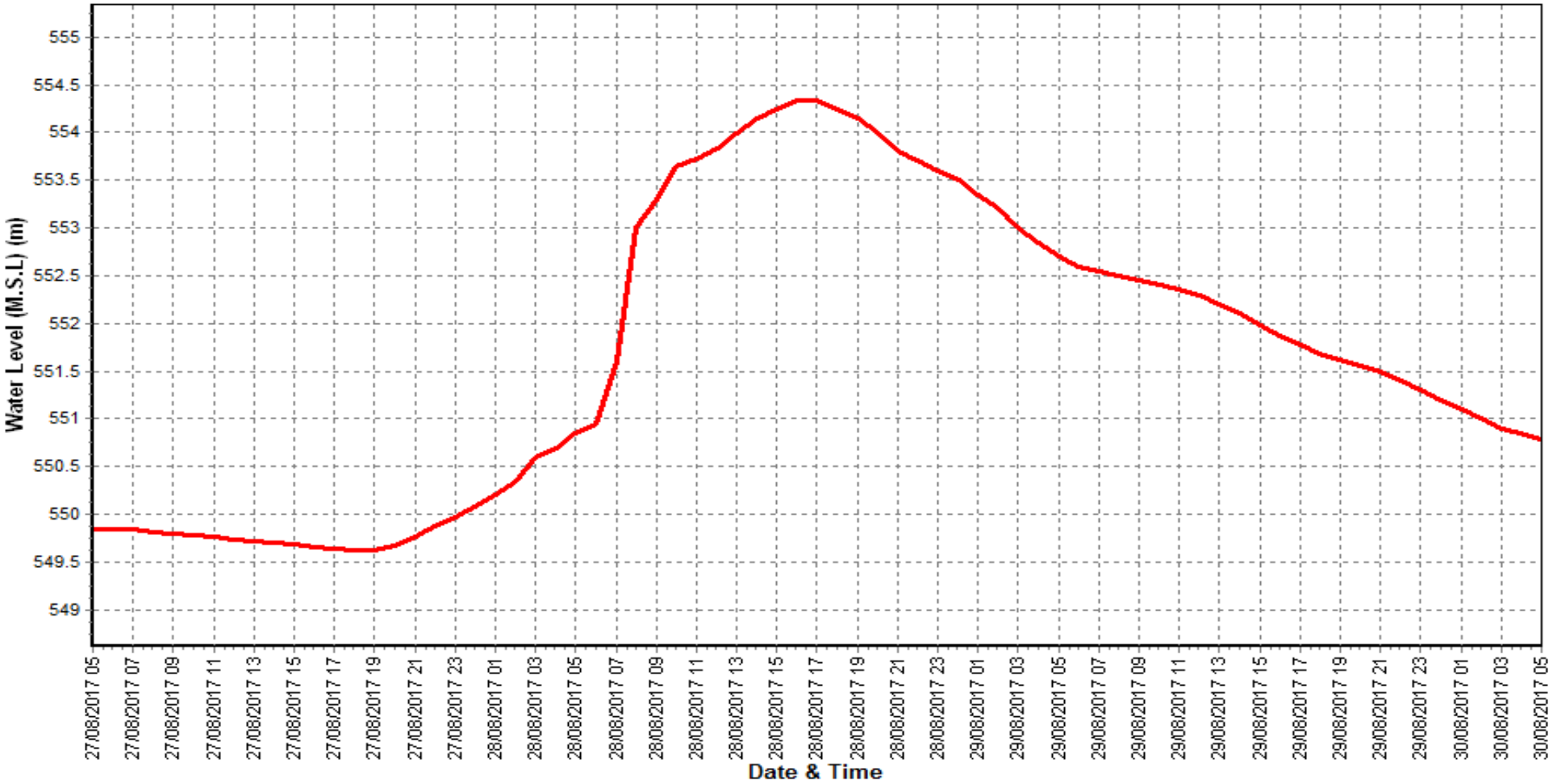


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Kosagumda (Kosagumda) **Division : Lower Godavari Div., Hyderabad**

Local River : Bhaskal **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Murthahandi**	**Code**	:	**AGC40E9**
State	:	Orissa	District		Koraput
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	Journala
Sub-Sub Tributary	:	-	Local River	:	Journala
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	Sq. Km.	Bank	:	Right
Latitude	:	19°03'00"	Longitude	:	82°17'00"
Zero of Gauge (m)	:	533.600 (m.s.l)	01.06.1976		
		Opening Date	Closing Date		
Gauge	:	15.02.1979	**HFL During 2017-18**	:	**541.460 Meter**
			Corres. Discharge	:	**837.1 Cumecs (Estimated)**
Discharge	:	01.12.1988	**Date & Time of**	:	**19.07.2017**
			Occurance	:	**17:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 545.24 06/08/2010
Corresponding Discharge (cumecs) : 1933*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1989-1990	508.2	539.850	28.08.1989	5.968	534.470	01.06.1989
1990-1991	1012	542.320	06.10.1990	10.55	534.770	22.05.1991
1991-1992	956.3	542.190	30.07.1991	6.788	534.680	26.05.1992
1992-1993	1554	543.930	29.07.1992	7.546	534.640	03.05.1993
1993-1994	421.5	540.240	16.07.1993	7.012	534.600	15.05.1994
1994-1995	1538	544.440	06.09.1994	2.371	534.780	04.06.1994
1995-1996	1190	542.890	01.09.1995	12.29	534.620	22.05.1996
1996-1997	324.4	539.080	21.07.1996	13.68	534.780	31.05.1997
1997-1998	373.9	539.410	22.08.1997	7.744	534.560	30.05.1998
1998-1999	389.6	539.350	12.07.1998	3.429	534.360	25.04.1999
1999-2000	347.3	538.160	09.09.1999	4.428	534.430	07.04.2000
2000-2001	683.3	541.420	31.08.2000	3.310	534.370	30.04.2001
2001-2002	824.5	542.200	21.08.2001	3.738	534.360	08.06.2001
2002-2003	560.4	540.330	24.08.2002	1.152	534.110	24.05.2003
2003-2004	705.0	541.030	08.09.2003	1.156	534.160	01.06.2003
2004-2005	666.9	540.780	15.06.2004	3.480	534.310	29.05.2005
2005-2006	539.5	540.290	13.09.2005	3.940	534.340	19.06.2005
2006-2007	967.9	542.200	05.07.2006	5.811	534.440	01.05.2007

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2007-2008	642.6	540.990	30.06.2007	7.400	534.500	14.06.2007
2008-2009	432.3	540.400	11.08.2008	6.605	534.430	20.03.2009
2009-2010	295.9	538.670	20.07.2009	5.521	534.340	14.04.2010
2010-2011	1882	545.090	06.08.2010	7.201	534.390	05.06.2010
2011-2012	423.8	539.470	02.09.2011	2.266	533.970	01.04.2012
2012-2013	685.2	541.240	06.08.2012	2.617	534.020	09.06.2012
2013-2014	821.0	541.700	15.06.2013	5.432	534.150	12.04.2014
2014-2015	541.2	540.550	29.07.2014	0.734	533.770	07.04.2015
2015-2016	613.9	540.560	16.09.2015	0.000	533.780	01.05.2016
2016-2017	465.3	539.440	11.07.2016	0.000	533.750	13.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Murthahandi in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1988-1989**		135	135
2	**1989-1990**	1391	265	1656
3	**1990-1991**	2338	281	2619
4	**1991-1992**	1738	259	1997
5	**1992-1993**	1614	192	1807
6	**1993-1994**	1132	190	1322
7	**1994-1995**	3020	382	3403
8	**1995-1996**	1744	383	2127
9	**1996-1997**	933	499	1432
10	**1997-1998**	1080	742	1823
11	**1998-1999**	713	118	832
12	**1999-2000**	1255	125	1380
13	**2000-2001**	1218	129	1348
14	**2001-2002**	1756	137	1893
15	**2002-2003**	789	50	839
16	**2003-2004**	1360	168	1528
17	**2004-2005**	1076	138	1214
18	**2005-2006**	859	130	989
19	**2006-2007**	1622	149	1771
20	**2007-2008**	1456	220	1676
21	**2008-2009**	947	150	1097
22	**2009-2010**	828	141	969
23	**2010-2011**	1364	281	1645
24	**2011-2012**	826	75	900
25	**2012-2013**	1122	157	1279
26	**2013-2014**	1426	163	1589
27	**2014-2015**	1243	145	1388
28	**2015-2016**	856	99	955
29	**2016-2017**	1048	75	1123
Average		1313	206	1474

Stage-Discharge Data for the period 2017 - 2018

Station Name : Murthahandi (AGC40E9) **Division : Lower Godavari Div., Hyderabad**

Local River : Journala **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	534.010	3.829	534.955	28.17	536.315	113.7	536.255	106.8	535.290	45.05 *	534.670	21.17
2	533.980	3.670	535.220	41.93 *	536.125	94.33	536.170	99.83 *	535.320	46.42 *	534.630	20.97
3	533.960	3.486	535.010	31.17	536.395	117.0	535.990	86.91 *	535.480	55.86	534.600	18.93
4	533.940	3.480 *	535.295	46.52	536.535	119.6	535.635	68.25	535.460	54.32	534.580	17.92 *
5	533.940	3.346	535.535	54.60	536.265	108.0	535.695	66.68	535.400	54.50	534.560	17.30 *
6	533.940	3.261	535.175	37.32	537.340	204.1 *	535.590	62.88	535.595	58.82	534.550	18.94
7	533.970	3.635	534.825	25.80	537.520	212.1	535.585	61.46	535.350	48.30	534.520	16.69
8	534.030	4.452	534.585	20.31	536.740	137.7	535.630	63.83	535.580	60.66 *	534.500	17.43
9	534.100	5.682	534.530	16.40 *	536.215	98.02	535.390	47.51	535.460	54.82	534.490	15.81
10	534.120	6.055	534.510	17.59	536.060	90.61	535.360	48.42 *	535.405	51.88	534.470	14.34
11	534.090	5.630 *	535.410	52.37	535.785	70.10	535.280	46.81	535.915	83.53	534.460	14.18
12	534.060	5.032	535.065	37.89	535.490	52.44	535.160	39.89	535.695	71.58	534.450	14.10 *
13	534.020	4.593	535.095	38.58	535.810	74.84 *	535.430	53.40	536.215	99.50	534.440	13.75
14	534.040	4.763	534.775	26.65	536.055	89.74	536.025	90.93	536.230	101.1	534.430	13.47
15	534.050	4.824	534.965	34.15	537.150	184.8 *	536.440	122.3	535.710	68.50 *	534.420	12.69
16	534.040	4.796	535.320	46.42 *	536.445	117.5	536.415	127.1	535.380	49.29	534.410	12.37
17	534.060	4.798	537.624	244.1	536.350	117.2	536.340	112.8 *	535.170	41.84	534.410	12.32
18	534.070	5.256 *	538.060	285.3 *	536.885	167.0	536.185	103.8	535.025	35.94	534.420	12.29
19	534.040	4.815	541.330	811.2 *	538.035	293.9	536.235	109.7	534.900	28.87 *	534.420	13.28 *
20	534.020	4.585	540.830	676.9	537.730	246.5 *	536.225	105.3	534.840	29.56	534.420	12.78
21	534.140	6.676	537.475	201.5	536.870	171.8	536.145	98.93	534.905	30.48	534.410	12.75
22	534.395	11.74	536.320	93.81	536.495	132.5	535.865	83.93	535.310	45.96 *	534.400	12.46
23	535.835	68.73	535.870	78.77 *	536.050	93.55	535.565	54.87	535.660	67.40	534.390	12.30
24	535.695	59.92	535.520	50.82	535.815	77.14	535.340	47.37 *	535.590	64.80	534.380	11.16
25	535.370	48.95 *	535.340	40.98	535.990	86.91 *	535.325	45.96	535.300	48.39	534.370	10.56
26	535.760	71.64 *	535.175	32.65	536.405	127.8	535.505	59.89	535.035	36.77	534.360	11.69 *
27	535.315	44.57	535.150	32.68	536.880	158.9 *	535.285	44.32	534.890	29.84	534.350	10.77
28	534.995	32.25	535.200	37.89	536.650	137.1	535.085	36.96	534.810	27.91	534.340	11.01
29	535.110	36.84	535.180	35.12	540.830	745.6	535.070	36.39	534.780	24.51 *	534.330	10.46
30	534.855	25.58	535.130	38.05 *	538.495	376.5	535.110	37.21 *	534.730	23.15	534.320	10.14
31			535.315	45.99	536.810	148.2			534.700	22.21		
Ten-Daily Mean												
I Ten-Daily	533.999	4.090	534.964	31.98	536.551	129.5	535.730	71.26	535.434	53.06	534.557	17.95
II Ten-Daily	534.049	4.909	536.847	225.4	536.573	141.4	535.974	91.21	535.508	60.97	534.428	13.12
III Ten-Daily	535.147	40.69	535.607	62.57	537.026	205.1	535.430	54.58	535.065	38.31	534.365	11.33
Monthly												
Min.	533.940	3.261	534.510	16.40	535.490	52.44	535.070	36.39	534.700	22.21	534.320	10.14
Max.	535.835	71.64	541.330	811.2	540.830	745.6	536.440	127.1	536.230	101.1	534.670	21.17
Mean	534.398	16.56	535.800	105.2	536.727	160.2	535.711	72.35	535.327	50.38	534.450	14.13

Annual Runoff in MCM = 1206 Annual Runoff in mm =

Peak Observed Discharge = 745.6 cumecs on 29/08/2017 Corres. Water Level :540.830 m

Lowest Observed Discharge = 2.457 cumecs on 31/03/2018 Corres. Water Level :533.870 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Murthahandi (AGC40E9) **Division : Lower Godavari Div., Hyderabad**

Local River : Journala **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	534.310	9.858	534.140	6.361	534.060	5.441	534.000	4.556	533.950	3.721 *	533.990	4.448
2	534.300	9.498 *	534.140	6.388	534.050	5.194	533.970	4.100 *	534.040	5.491	534.125	6.563
3	534.300	9.498 *	534.140	6.384	534.050	5.203	533.960	4.097	534.120	6.055	534.565	19.43
4	534.290	9.185	534.140	6.396	534.040	4.950 *	533.950	3.765 *	534.090	5.766	534.350	10.80
5	534.280	9.180	534.140	6.404	534.030	4.683	533.960	3.888	534.070	5.639	534.340	9.725
6	534.270	9.164	534.140	6.400	534.050	5.184	533.950	3.780	534.060	5.527	534.250	8.533 *
7	534.260	9.156	534.130	6.400 *	534.050	5.082	533.950	3.765	534.060	5.458	534.180	6.786
8	534.250	9.041	534.130	6.388	534.060	5.588	534.000	4.646	534.100	5.914 *	534.150	6.345
9	534.250	9.025	534.120	6.326	534.070	5.759	533.970	3.976	534.090	6.149	534.130	5.784
10	534.250	8.533 *	534.160	6.734	534.070	5.655	533.970	3.899	534.120	6.581	534.140	6.572 *
11	534.250	8.742	534.170	6.904	534.070	5.660 *	533.960	4.100 *	534.070	5.745	534.140	6.238
12	534.240	8.422	534.170	6.942	534.090	5.761	533.970	4.042	534.060	5.377	534.170	6.597
13	534.230	8.003	534.150	6.603	534.100	5.873	533.990	3.904	534.010	4.772	534.190	7.436 *
14	534.230	8.305	534.140	6.450 *	534.090	5.848	534.000	4.357	534.000	4.357	534.190	7.019
15	534.220	8.015	534.130	6.400 *	534.060	5.238	533.970	3.895	534.060	5.286 *	534.170	6.587
16	534.220	7.964	534.120	6.332	534.050	5.140	533.990	4.234	534.220	7.826	534.150	6.345
17	534.210	7.794 *	534.120	6.316	534.070	5.357	533.990	4.352	534.240	8.687	534.120	5.885
18	534.210	7.939	534.120	6.214	534.060	5.010 *	533.970	3.980 *	534.190	7.650	534.120	5.848
19	534.200	7.800	534.100	5.889	534.060	5.010	533.940	3.650	534.150	7.389	534.160	6.269
20	534.190	7.567	534.080	5.700	534.060	5.357	533.930	3.587	534.140	7.270	534.160	6.912 *
21	534.190	7.654	534.080	5.700 *	534.060	5.351	533.920	3.352	534.110	7.323	534.160	6.411
22	534.190	7.515	534.080	5.551	534.050	5.346	533.910	3.276	534.070	5.440 *	534.110	5.651
23	534.190	7.285	534.160	6.985	534.040	5.140	533.910	2.598	534.060	5.454	534.130	5.856
24	534.190	7.436 *	534.070	5.510	534.030	4.838	533.870	2.583	534.050	5.344	534.110	5.821
25	534.180	7.259 *	534.070	5.407	534.020	4.750 *	533.890	2.930 *	534.030	5.247	534.090	5.429
26	534.180	6.952	534.070	5.400 *	534.000	4.360	533.870	2.616	534.010	4.918	534.080	5.134
27	534.170	6.948	534.060	5.648	533.990	4.373	533.890	2.934	534.000	4.810	534.070	5.440 *
28	534.170	6.821	534.050	5.120 *	533.990	4.305	533.920	3.270	534.010	4.821	534.040	4.819
29	534.160	6.497	534.050	5.197			533.920	3.270 *	534.000	4.403 *	534.030	4.858
30	534.160	6.507	534.070	5.425			533.890	2.930 *	534.010	4.545 *	534.020	4.764
31			534.070	5.425			533.870	2.457			534.020	4.744
Ten-Daily Mean												
I Ten-Daily	534.276	9.214	534.138	6.418	534.053	5.274	533.968	4.047	534.070	5.630	534.222	8.499
II Ten-Daily	534.220	8.055	534.130	6.375	534.071	5.425	533.971	4.010	534.114	6.436	534.157	6.514
III Ten-Daily	534.178	7.087	534.075	5.579	534.022	4.808	533.896	2.929	534.035	5.231	534.078	5.357
Monthly												
Min.	534.160	6.497	534.050	5.120	533.990	4.305	533.870	2.457	533.950	3.721	533.990	4.448
Max.	534.310	9.858	534.170	6.985	534.100	5.873	534.000	4.646	534.240	8.687	534.565	19.43
Mean	534.225	8.119	534.113	6.106	534.051	5.195	533.944	3.638	534.073	5.766	534.150	6.744

Peak Computed Discharge = 811.2 cumecs on 19/07/2017 Corres. Water Level :541.330 m

Lowest Computed Discharge = 2.930 cumecs on 25/03/2018 Corres. Water Level :533.890 m

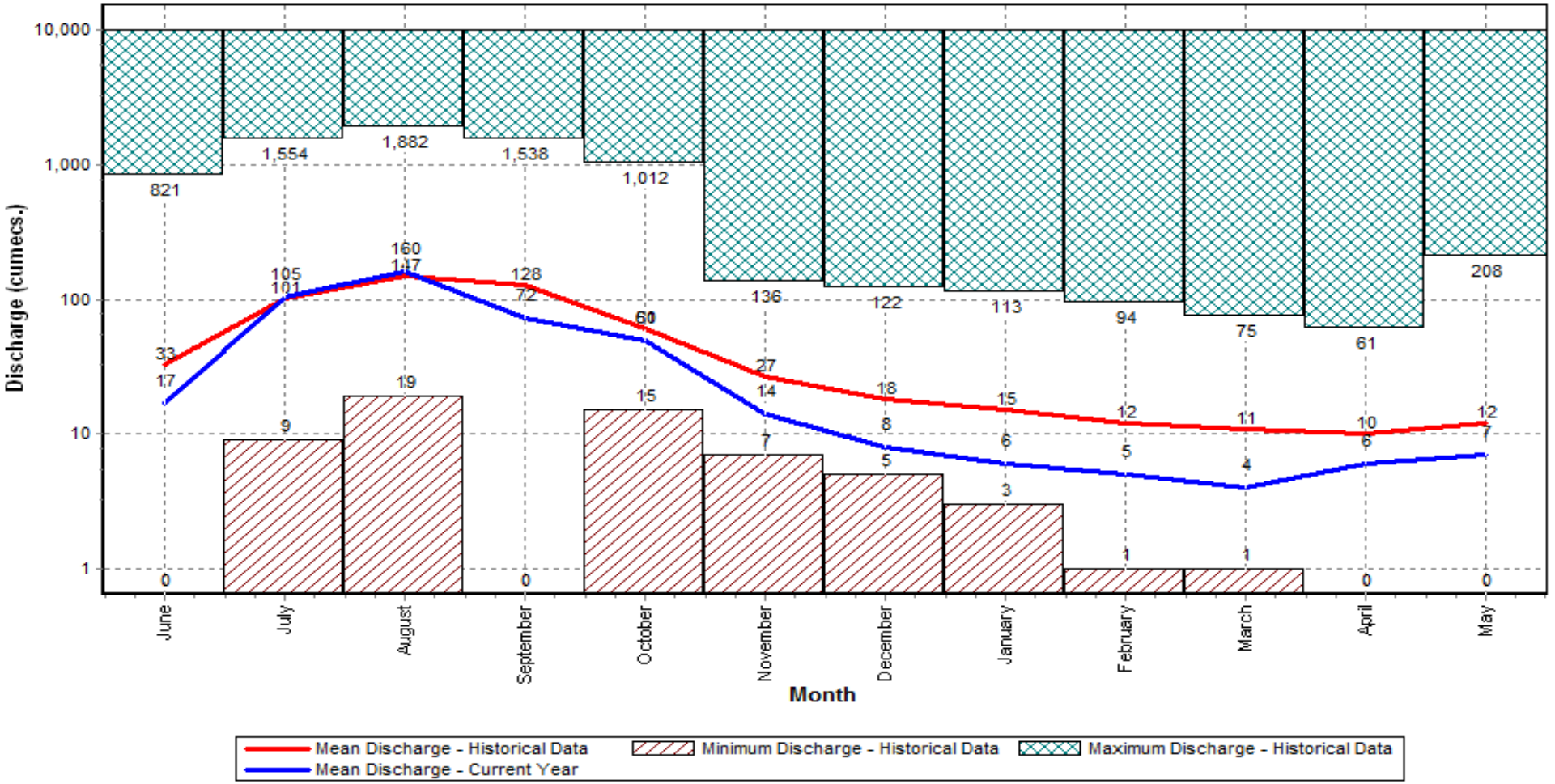
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Murthahandi (AGC40E9) | **Data considered : 1989-2018** | **Division : Lower Godavari Div., Hyderabad**

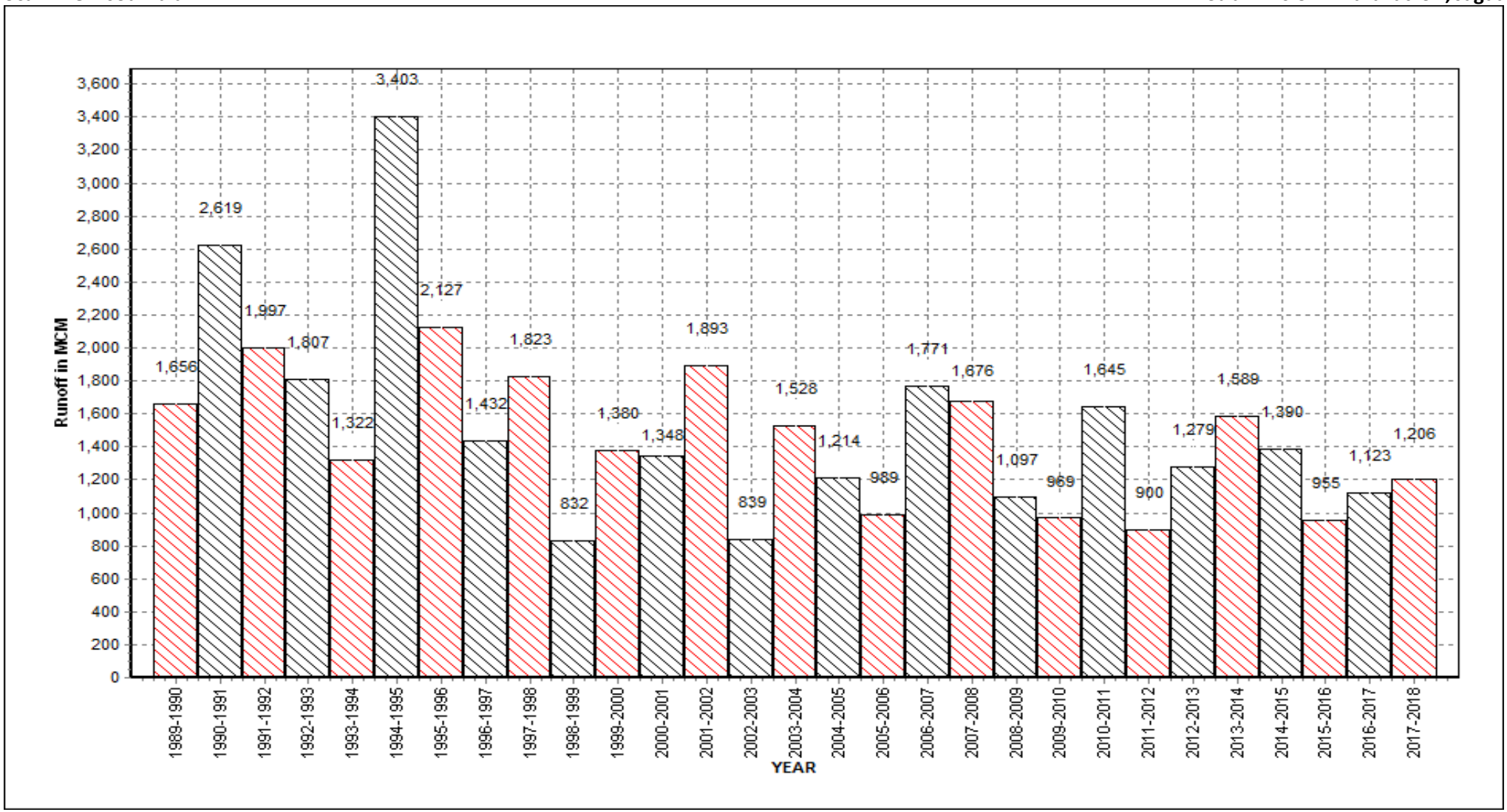
Local River : Journala | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1989 - 2018

Station Name : Murthahandi (AGC40E9) **Division : Lower Godavari Div., Hyderabad**

Local River : Journala **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

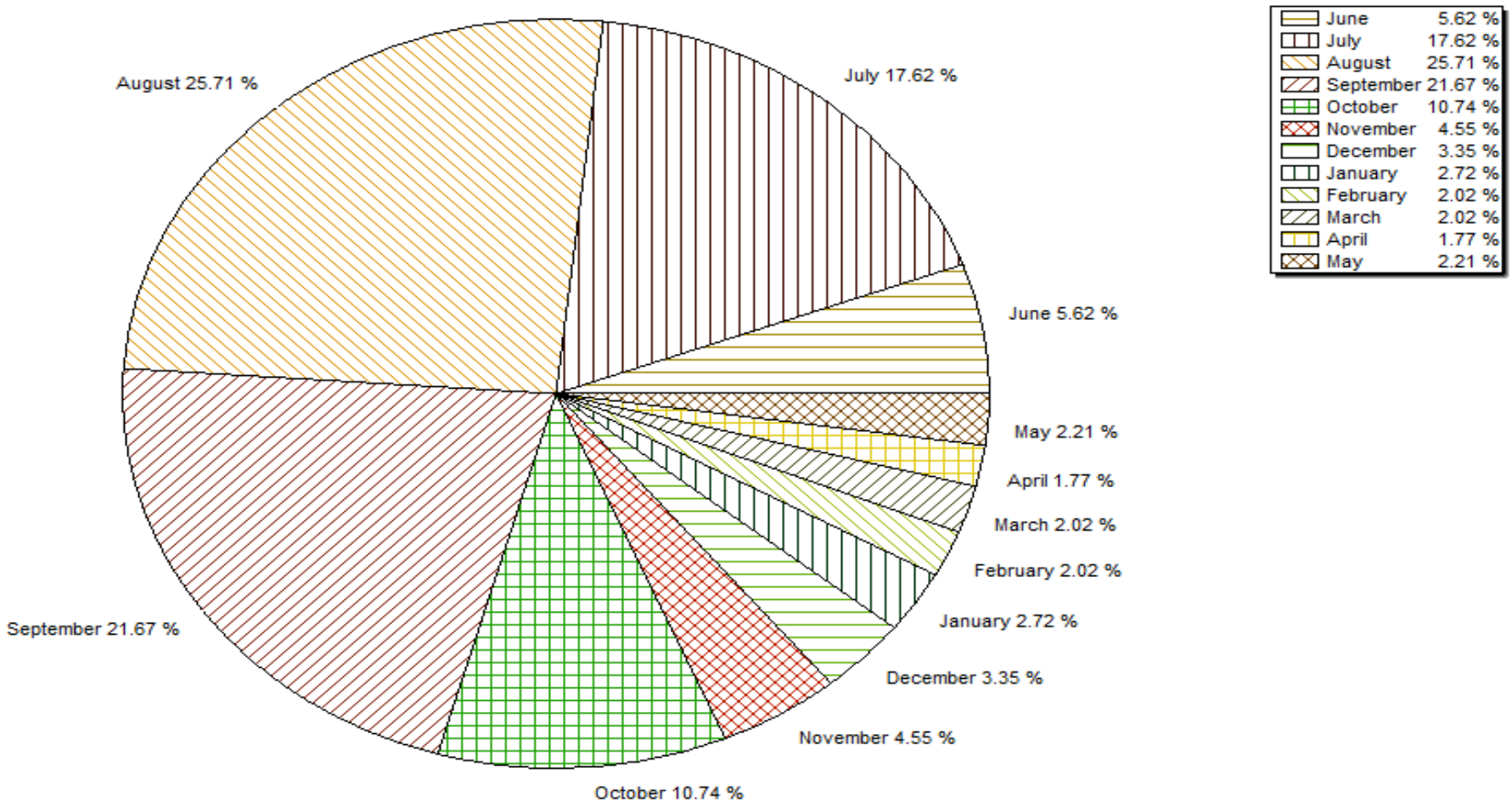
Monthly Average Runoff based on period : 1989-2017

Station Name : Murthahandi (AGC40E9)

Local River : Journala

Division : Lower Godavari Div., Hyderabad

Sub-Division : Indravati SD, Jagdalpur



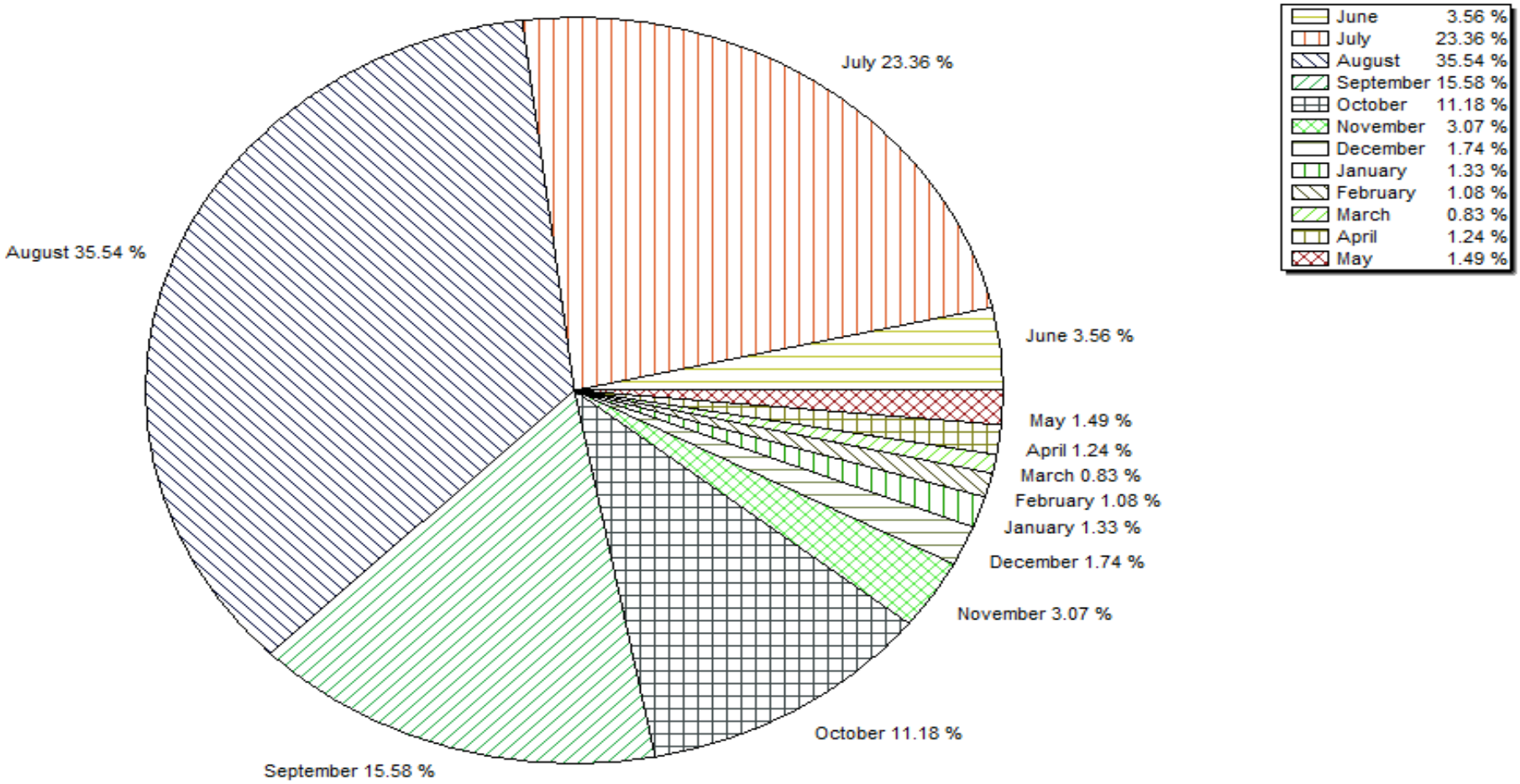
Monthly Runoff for the Year : 2017-2018

Station Name : Murthahandi (AGC40E9)

Local River : Journala

Division : Lower Godavari Div., Hyderabad

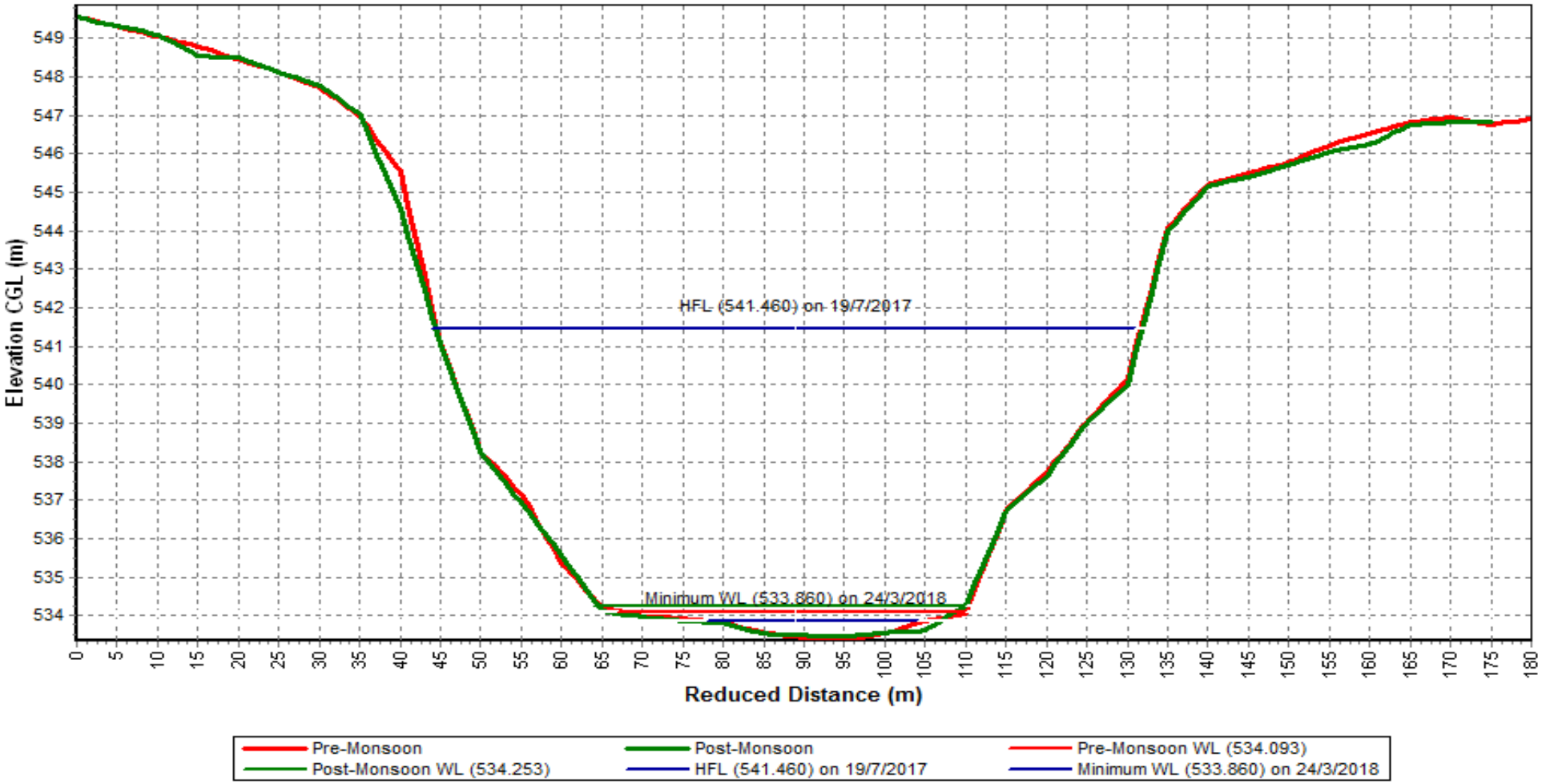
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Murthahandi (AGC40E9) **Division : Lower Godavari Div., Hyderabad**

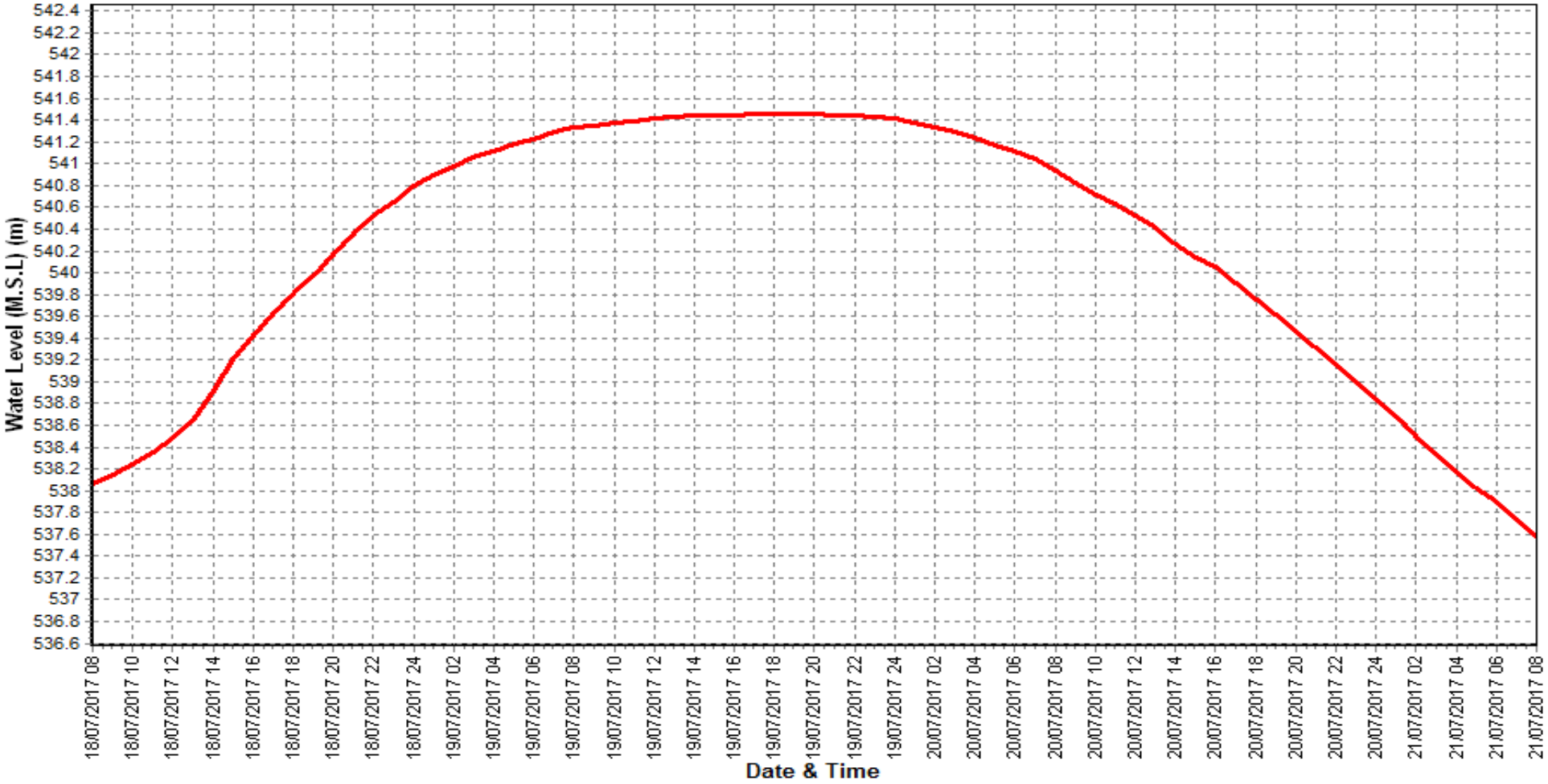
Local River : Journala **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Murthahandi (AGC40E9) **Division : Lower Godavari Div., Hyderabad**

Local River : Journala **Sub-Division : Indravati SD, Jagdalpur**

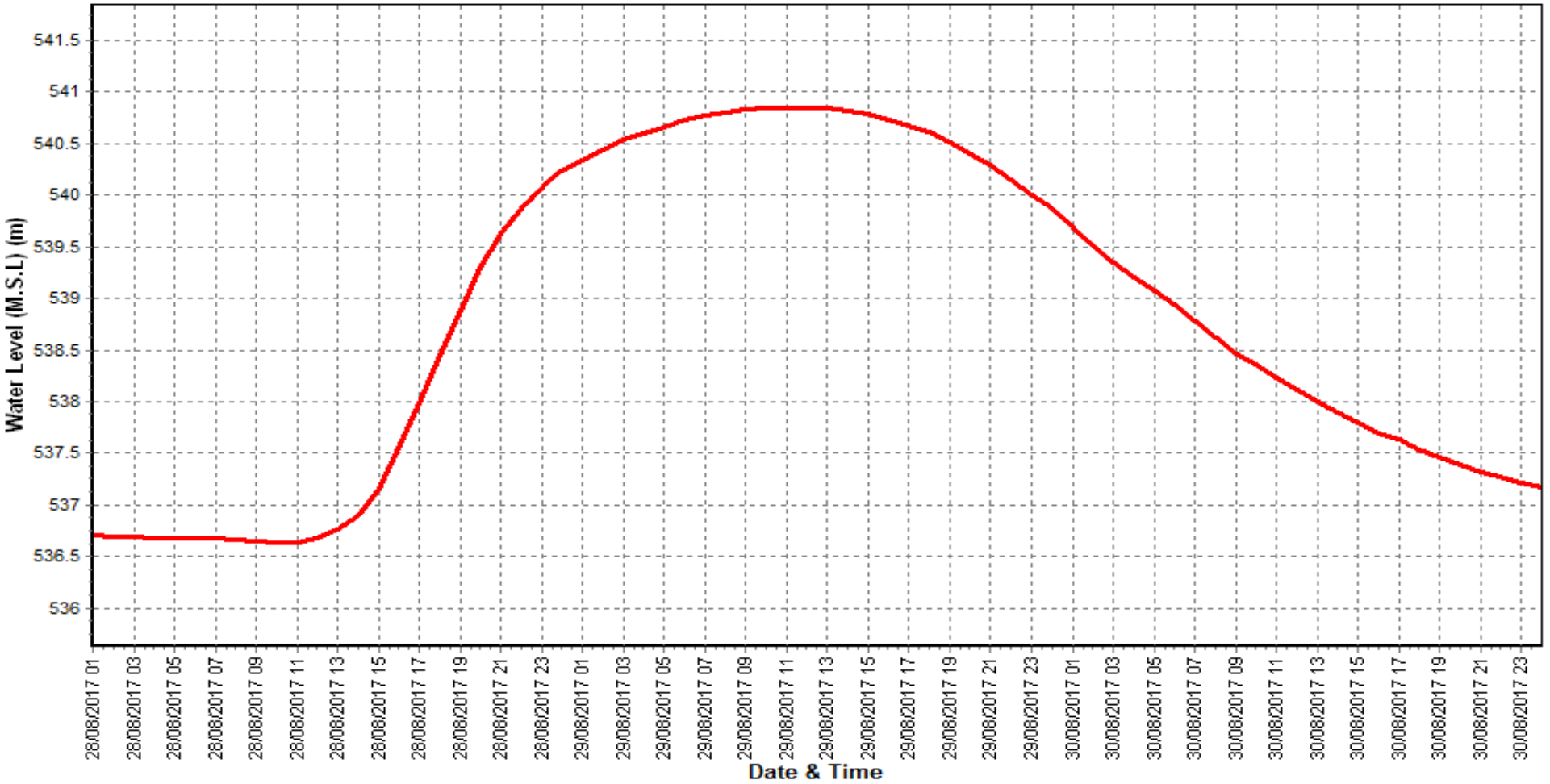


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Murthahandi (AGC40E9) **Division : Lower Godavari Div., Hyderabad**

Local River : Journala **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Nowrangpur**	**Code**	:	**AGG00U7**
State	:	Orissa	District		Nowrangpur
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Indravathi	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Indravathi
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Indravati SD, Jagdalpur
Drainage Area	:	3545 Sq. Km.	Bank	:	
Latitude	:	19°12'00"	Longitude	:	82°31'00"
Zero of Gauge (m)	:	550.716 (m.s.l) 549.745 (m.s.l)	24.06.1965 20.06.1971		
		Opening Date	Closing Date		
Gauge	:	24.06.1965	**HFL During 2017-18**	:	**556.445 Meter**
			Corres. Discharge	:	**1298 Cumecs (Estimated)**
Discharge	:	20.06.1971	**Date & Time of Occurance**	:	**19.07.2017 01:00 hrs.**
Sediment	:	21.06.1971	31.05.2006		
Water Quality	:	01.01.1972	31.05.2006		

HFL Recorded so far in m : 561.456 04/09/1966
Corresponding Discharge (cumecs) : 2329*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1966-1967	1516	559.536	04.09.1966	4.100	551.346	30.05.1967
1967-1968	1617	560.081	02.08.1967	3.700	551.334	06.06.1967
1968-1969	2088	559.526	13.09.1968	6.975	551.211	02.06.1968
1969-1970	2164	560.636	29.07.1969	8.300	551.326	02.06.1969
1970-1971	1615	558.846	27.08.1970	9.200	551.351	08.05.1971
1971-1972	1315	556.985	05.09.1971	6.500	550.365	24.05.1972
1972-1973	1806	557.480	12.09.1972	3.800	550.325	16.06.1972
1973-1974	2610	558.943	07.07.1973	7.200	550.485	01.06.1973
1974-1975	952.0	555.495	17.06.1974	5.100	550.065	15.05.1975
1975-1976	1147	555.965	09.09.1975	8.400	550.240	31.05.1976
1976-1977	2059	557.725	02.08.1976	7.700	550.220	04.06.1976
1977-1978	1958	558.275	13.09.1977	9.400	550.135	10.06.1977
1978-1979	2260	558.505	16.08.1978	7.500	550.330	10.06.1978
1979-1980	1935	557.755	25.06.1979	6.300	550.165	27.05.1980
1980-1981	1628	557.548	18.09.1980	8.339	550.195	24.05.1981
1981-1982	1710	557.615	09.08.1981	8.600	550.275	08.05.1982
1982-1983	1254	556.738	29.08.1982	6.200	550.195	09.06.1982

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1983-1984	1203	556.330	26.06.1983	6.400	550.285	10.06.1983
1984-1985	2230	557.915	02.08.1984	6.925	550.185	05.05.1985
1985-1986	1377	556.825	17.08.1985	5.800	550.230	24.05.1986
1986-1987	1649	557.435	14.08.1986	5.388	550.235	14.06.1986
1987-1988	1085	555.530	04.09.1987	5.630	550.285	14.05.1988
1988-1989	560.8	554.200	01.08.1988	4.839	550.230	02.05.1989
1989-1990	1015	555.745	28.08.1989	8.836	550.350	29.04.1990
1990-1991	1765	557.505	05.10.1990	6.022	550.395	19.05.1991
1991-1992	1832	557.645	30.07.1991	6.870	550.325	26.05.1992
1992-1993	2510	558.310	28.07.1992	8.129	550.245	06.05.1993
1993-1994	1240	556.505	02.08.1993	7.403	550.160	11.05.1994
1994-1995	2351	558.955	05.09.1994	13.45	550.355	08.06.1994
1995-1996	1557	557.685	01.09.1995	7.910	550.165	18.05.1996
1996-1997	614.9	554.995	21.07.1996	5.731	550.135	06.06.1996
1997-1998	742.6	554.985	29.08.1997	5.234	549.945	29.05.1998
1998-1999	686.2	554.990	11.07.1998	0.000	549.875	13.04.1999
1999-2000	634.7	554.945	18.06.1999	0.767	549.955	05.05.2000
2000-2001	1991	557.265	31.08.2000	0.264	550.045	02.04.2001
2001-2002	1507	557.085	08.07.2001	0.005	549.995	14.05.2002
2002-2003	584.1	554.785	23.06.2002	0.007	550.005	16.06.2002
2003-2004	1474	557.525	07.09.2003	0.872	550.135	27.06.2003
2004-2005	851.8	555.385	21.08.2004	2.027	550.085	30.03.2005
2005-2006	810.9	555.900	25.07.2005	1.798	550.035	02.05.2006
2006-2007	1300	556.845	30.09.2006	1.472	550.165	20.06.2006
2007-2008	936.9	555.885	29.06.2007	1.703	550.165	01.06.2007
2008-2009	571.1	555.345	10.08.2008	5.299	550.215	04.05.2009
2009-2010	486.2	554.075	20.07.2009	5.032	550.245	15.04.2010
2010-2011	1147	556.445	05.08.2010	5.766	550.295	04.06.2010
2011-2012	365.8	553.920	02.09.2011	0.701	549.925	07.04.2012
2012-2013	665.4	555.245	05.08.2012	0.000	549.995	08.05.2013
2013-2014	1143	557.085	14.06.2013	1.788	550.035	04.04.2014
2014-2015	908.1	555.505	21.09.2014	1.419	549.955	11.04.2015
2015-2016	1184	556.895	16.09.2015	1.249	550.025	18.04.2016
2016-2017	271.4	552.975	11.07.2016	1.168	549.975	28.04.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Nowrangpur in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**		205	205
2	**1966-1967**	1793	279	2072
3	**1967-1968**	2823	355	3178
4	**1968-1969**	2622	295	2917
5	**1969-1970**	3311	343	3653
6	**1970-1971**	3230	341	3572
7	**1971-1972**	2430	277	2708
8	**1972-1973**	2417	286	2703
9	**1973-1974**	3541	366	3908
10	**1974-1975**	1327	228	1555
11	**1975-1976**	2551	306	2856
12	**1976-1977**	2860	330	3190
13	**1977-1978**	3633	407	4039
14	**1978-1979**	3976	335	4311
15	**1979-1980**	2083	252	2335
16	**1980-1981**	3428	332	3760
17	**1981-1982**	2196	289	2485
18	**1982-1983**	2182	276	2457
19	**1983-1984**	2177	326	2502
20	**1984-1985**	3649	278	3927
21	**1985-1986**	2889	274	3163
22	**1986-1987**	2643	262	2905
23	**1987-1988**	1750	247	1998
24	**1988-1989**	1546	175	1720
25	**1989-1990**	2568	488	3056
26	**1990-1991**	5032	407	5439
27	**1991-1992**	3694	306	4001
28	**1992-1993**	3483	346	3829
29	**1993-1994**	2515	284	2799
30	**1994-1995**	5482	639	6120
31	**1995-1996**	2888	369	3257
32	**1996-1997**	1233	792	2025
33	**1997-1998**	1874	1257	3131
34	**1998-1999**	654	48	702
35	**1999-2000**	1372	43	1415
36	**2000-2001**	1568	35	1604
37	**2001-2002**	1975	22	1997
38	**2002-2003**	440	40	479
39	**2003-2004**	1552	82	1635
40	**2004-2005**	917	53	971
41	**2005-2006**	716	63	779
42	**2006-2007**	2181	61	2242
43	**2007-2008**	1541	140	1682
44	**2008-2009**	660	115	775
45	**2009-2010**	583	105	689
46	**2010-2011**	1070	155	1225
47	**2011-2012**	496	35	531
48	**2012-2013**	880	38	917
49	**2013-2014**	1268	90	1358
50	**2014-2015**	1247	64	1312
51	**2015-2016**	750	49	800
52	**2016-2017**	699	48	746
Average		2165	255	2378

Stage-Discharge Data for the period 2017 - 2018

Station Name : Nowrangpur (AGG00U7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	550.095	1.700	550.885	30.01	551.495	86.78	550.990	36.91	550.525	17.94 *	550.275	11.68
2	550.085	2.077	550.755	30.05 *	551.045	48.03	550.995	46.46 *	550.565	19.80 *	550.265	13.58
3	550.085	1.905	550.750	17.88	552.245	156.6	550.885	38.45 *	550.730	32.65	550.255	13.75
4	550.085	3.884 *	551.115	33.85	551.455	84.03	550.765	30.48	550.675	33.34	550.245	7.687 *
5	550.085	1.633	550.940	31.14	551.315	72.26	550.775	23.21	551.145	60.54	550.245	7.687 *
6	550.095	1.885	550.720	19.57	553.175	306.3 *	550.695	21.98	550.810	37.16	550.235	11.92
7	550.115	2.105	550.565	14.13	552.035	157.4	550.755	32.72	550.820	31.77	550.225	11.90
8	550.165	2.105	550.585	15.55	551.555	91.91	550.695	21.37	550.685	26.00 *	550.215	11.67
9	550.155	2.111	550.515	17.49 *	551.185	59.34	550.675	25.45 *	550.625	26.26	550.215	11.06
10	550.155	1.874	550.715	18.03	551.225	65.84	550.645	23.83 *	550.965	49.82	550.215	12.01
11	550.185	6.093 *	550.650	15.59	550.870	37.52	550.635	27.07	550.845	38.29	550.205	6.601 *
12	550.245	2.814	550.595	16.21	550.990	37.55	550.585	27.50	550.990	46.89	550.205	6.601 *
13	550.205	2.570	550.605	15.96	551.015	48.01 *	550.885	35.74	551.230	70.09	550.205	12.19
14	550.185	2.107	550.605	16.07	552.420	184.5	551.655	64.46	550.960	43.82 *	550.195	11.32
15	550.165	1.820	550.655	16.88	551.645	98.70 *	551.690	90.46	550.705	27.13 *	550.195	10.60
16	550.195	2.722	550.965	44.20 *	551.335	70.81	551.295	54.17	550.605	27.68	550.195	13.09
17	550.185	1.739	553.225	304.4	552.100	130.6	551.445	81.28 *	550.530	20.74	550.205	11.22
18	550.195	6.344 *	553.245	307.6	552.220	184.6	551.515	83.45	550.455	19.53	550.205	11.98
19	550.265	2.980	555.585	955.5	553.335	334.8	551.360	76.48	550.415	13.35 *	550.195	6.344 *
20	550.345	5.266	552.545	198.4	552.505	198.3 *	551.275	56.64	550.405	18.70	550.185	10.72
21	550.435	8.432	551.325	70.70	551.795	113.3	551.110	60.12	550.475	23.33	550.175	10.58
22	550.700	22.21	550.945	30.98	551.525	82.44	550.865	43.66	550.655	24.36 *	550.165	10.01
23	550.810	36.10	550.785	31.89 *	551.085	53.37	550.735	25.84	550.640	34.61	550.165	10.56
24	550.830	32.41	550.685	21.31	551.085	51.50	550.715	27.70 *	550.670	25.85	550.155	10.35
25	550.775	31.27 *	550.605	20.00	551.165	60.52 *	550.675	28.35	550.495	21.28	550.145	5.143 *
26	550.965	44.20 *	550.525	13.09	551.785	121.2	550.700	33.44	550.400	15.38	550.155	5.372 *
27	550.785	22.92	550.595	20.79	551.615	95.96 *	550.595	25.33	550.355	15.11	550.155	10.14
28	550.745	27.59	550.665	19.78	551.895	141.2	550.545	21.37	550.325	15.76	550.145	9.800
29	550.745	20.26	550.565	18.55	553.845	320.5	550.555	24.41	550.315	9.808 *	550.145	9.368
30	550.655	16.57	550.655	24.36 *	551.835	115.5	550.545	18.86 *	550.295	12.78	550.145	10.20
31			550.980	43.20	551.240	65.33			550.285	14.09		
Ten-Daily Mean												
I Ten-Daily	550.112	2.128	550.755	22.77	551.673	112.9	550.787	30.09	550.755	33.53	550.239	11.29
II Ten-Daily	550.217	3.446	551.868	189.1	551.843	132.5	551.234	59.73	550.714	32.62	550.199	10.07
III Ten-Daily	550.745	26.20	550.757	28.61	551.715	111.0	550.704	30.91	550.446	19.31	550.155	9.153
Monthly												
Min.	550.085	1.633	550.515	13.09	550.870	37.52	550.545	18.86	550.285	9.808	550.145	5.143
Max.	550.965	44.20	555.585	955.5	553.845	334.8	551.690	90.46	551.230	70.09	550.275	13.75
Mean	550.358	10.59	551.115	78.49	551.743	118.5	550.909	40.24	550.632	28.19	550.198	10.17

Annual Runoff in MCM = 824 Annual Runoff in mm = 232

Peak Observed Discharge = 955.5 cumecs on 19/07/2017 Corres. Water Level :555.585 m

Lowest Observed Discharge = 1.430 cumecs on 27/03/2018 Corres. Water Level :549.865 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Nowrangpur (AGG00U7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	550.135	9.171	550.085	5.907	549.975	3.670	549.915	2.875	549.925	2.250 *	549.985	2.659
2	550.135	9.170 *	550.085	6.203	549.965	3.741	549.915	2.307	549.935	2.339	550.055	3.516
3	550.125	8.350 *	550.085	5.954	549.965	3.617	549.915	2.929	549.945	2.965	550.105	4.640
4	550.115	7.896	550.085	5.878	549.965	3.600 *	549.915	2.930 *	549.945	2.722	550.055	3.500 *
5	550.115	8.080	550.085	5.860	549.965	3.777	549.915	2.811	549.935	2.726	550.045	3.100 *
6	550.115	8.121	550.075	6.071	549.965	3.675	549.915	2.307	549.935	2.609	550.025	2.950 *
7	550.115	8.148	550.075	6.070 *	549.965	3.424	549.905	2.604	549.945	2.846	549.985	2.780
8	550.115	8.172	550.075	5.524	549.965	3.749	549.905	2.554	549.935	2.700 *	549.975	2.260
9	550.115	8.170 *	550.135	7.906	549.965	3.709	549.925	2.916	549.925	2.556	549.965	2.053
10	550.115	8.170 *	550.135	7.895	549.975	3.870 *	549.925	2.900 *	549.915	2.275	549.995	2.380
11	550.105	8.806	550.135	8.206	549.965	3.670 *	549.915	2.350 *	549.905	2.154	550.015	2.435
12	550.105	6.926	550.115	8.121	549.965	3.489	549.935	2.915	549.895	1.913	550.045	3.100 *
13	550.105	7.795	550.105	7.500 *	549.955	3.333	549.925	2.962	549.915	2.012	550.035	2.850 *
14	550.105	7.444	550.095	6.600 *	549.945	2.947	549.915	2.621	549.905	2.150 *	550.025	2.338
15	550.095	7.918	550.085	6.000 *	549.945	3.167	549.915	2.517	549.975	3.000 *	550.025	2.226
16	550.095	7.243	550.075	5.765	549.955	3.499	549.915	2.619	549.965	2.990	550.015	2.446
17	550.085	6.700 *	550.065	5.599	549.945	3.340	549.905	2.554	549.965	2.907	550.005	2.325
18	550.085	6.774	550.055	5.533	549.945	3.350 *	549.885	2.170 *	549.965	2.957	550.025	2.471
19	550.085	6.539	550.045	5.355	549.945	3.430	549.885	2.175	549.965	2.793	550.005	2.467
20	550.085	6.721	550.035	4.836	549.945	3.201	549.885	1.738	549.965	2.990	550.015	2.500 *
21	550.085	6.964	550.025	4.700 *	549.935	2.989	549.885	1.781	549.955	2.884	550.005	2.297
22	550.085	6.842	550.015	4.944	549.935	3.086	549.885	1.573	549.955	2.800 *	550.005	2.184
23	550.085	6.643	550.005	4.475	549.925	2.954	549.885	1.682	549.945	2.001	550.005	2.135
24	550.085	6.600 *	549.995	4.350	549.925	2.830	549.885	2.034	549.945	2.021	549.995	1.936
25	550.085	6.800 *	550.005	4.660	549.925	2.830 *	549.885	2.040 *	549.945	2.134	549.995	1.933
26	550.085	7.007	549.995	4.450 *	549.925	2.865	549.875	1.614	549.925	1.945	549.965	1.934
27	550.085	6.520	549.995	4.408	549.915	2.856	549.865	1.430	549.935	1.993	550.025	2.470 *
28	550.085	6.668	549.995	4.450 *	549.915	2.836	549.865	1.452	549.935	2.067	550.035	2.183
29	550.085	6.439	549.985	3.920			549.875	1.600 *	549.935	2.060 *	550.045	2.364
30	550.085	6.642	549.975	4.035			549.865	1.400 *	549.935	2.070 *	550.035	2.265
31	550.085	6.650 *	549.975	3.847			549.865	1.443			550.005	1.744
Ten-Daily Mean												
I Ten-Daily	550.120	8.345	550.092	6.327	549.967	3.683	549.915	2.713	549.934	2.599	550.019	2.984
II Ten-Daily	550.095	7.287	550.081	6.352	549.951	3.343	549.908	2.462	549.942	2.587	550.021	2.516
III Ten-Daily	550.085	6.707	549.997	4.385	549.925	2.906	549.876	1.641	549.941	2.197	550.010	2.131
Monthly												
Min.	550.085	6.439	549.975	3.847	549.915	2.830	549.865	1.400	549.895	1.913	549.965	1.744
Max.	550.135	9.171	550.135	8.206	549.975	3.870	549.935	2.962	549.975	3.000	550.105	4.640
Mean	550.099	7.422	550.055	5.646	549.949	3.339	549.899	2.252	549.939	2.461	550.017	2.530

Peak Computed Discharge = 306.3 cumecs on 06/08/2017 Corres. Water Level :553.175 m

Lowest Computed Discharge = 1.400 cumecs on 30/03/2018 Corres. Water Level :549.865 m

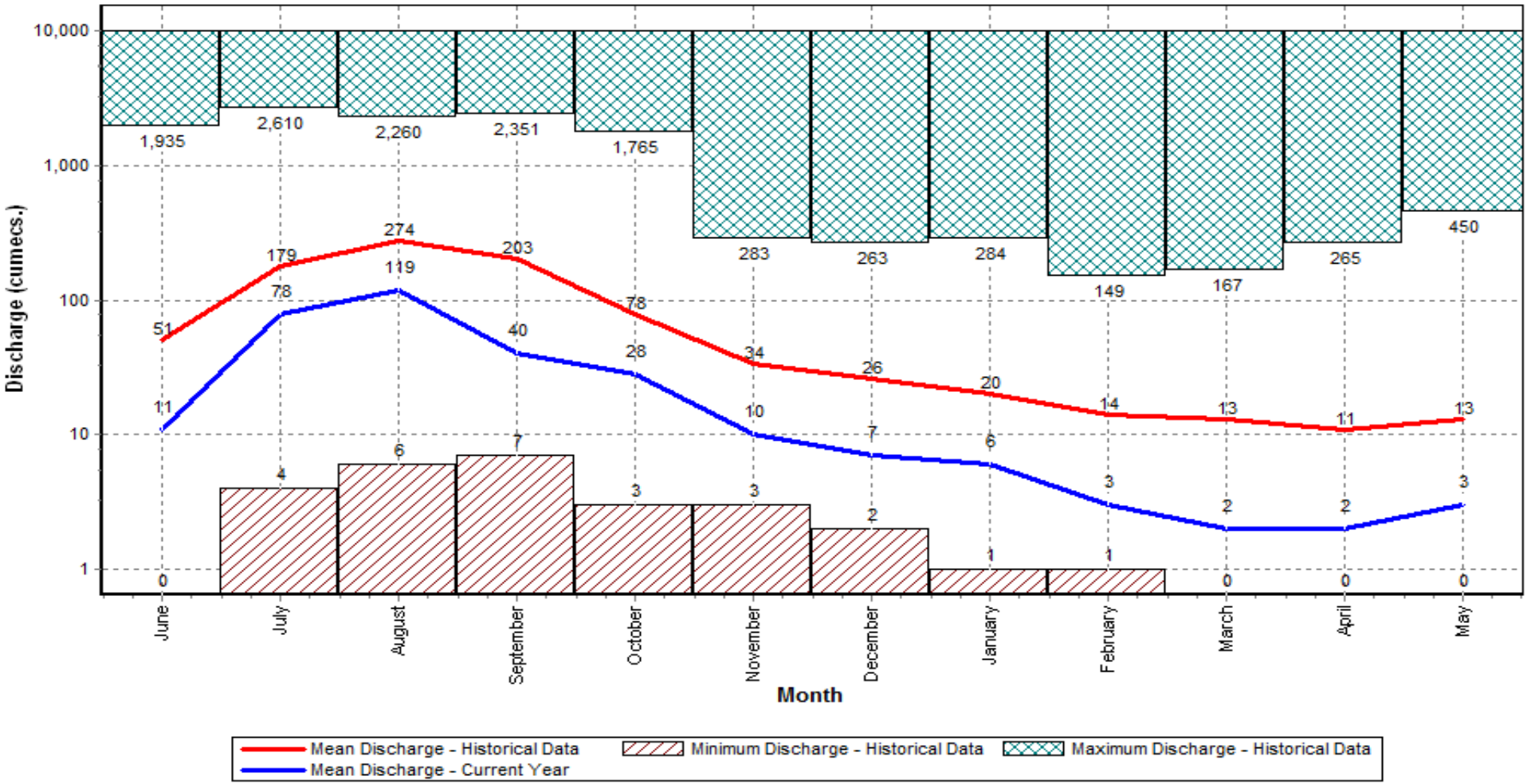
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Nowrangpur (AGG00U7) | **Data considered : 1966-2018** | **Division : Lower Godavari Div., Hyderabad**

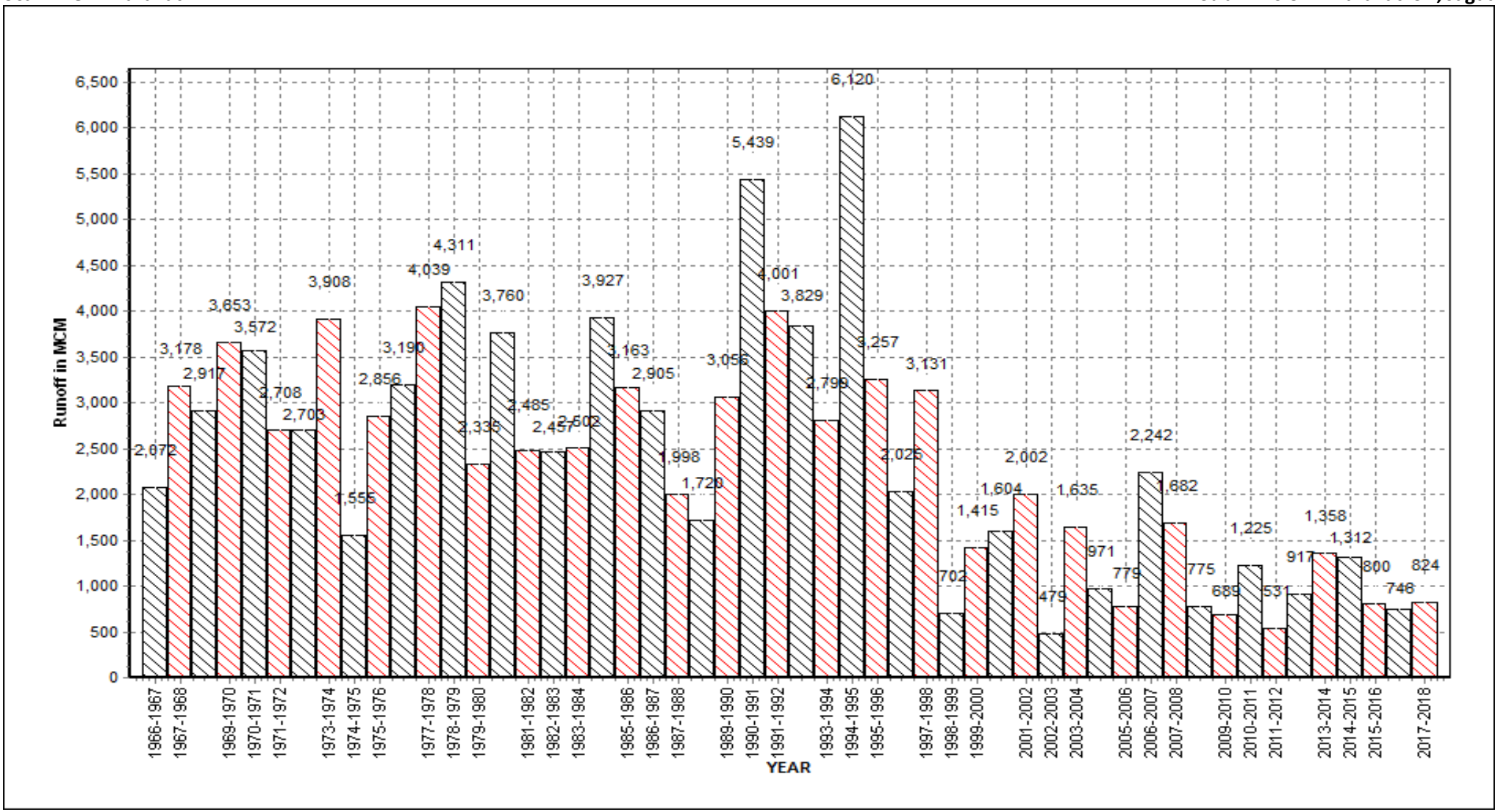
Local River : Indravathi | **Sub-Division : Indravati SD, Jagdalpur**



Annual Runoff Values for the period: 1966 - 2018

Station Name : Nowrangpur (AGG00U7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Note: Missing values have not been considered while arriving at Annual Runoff

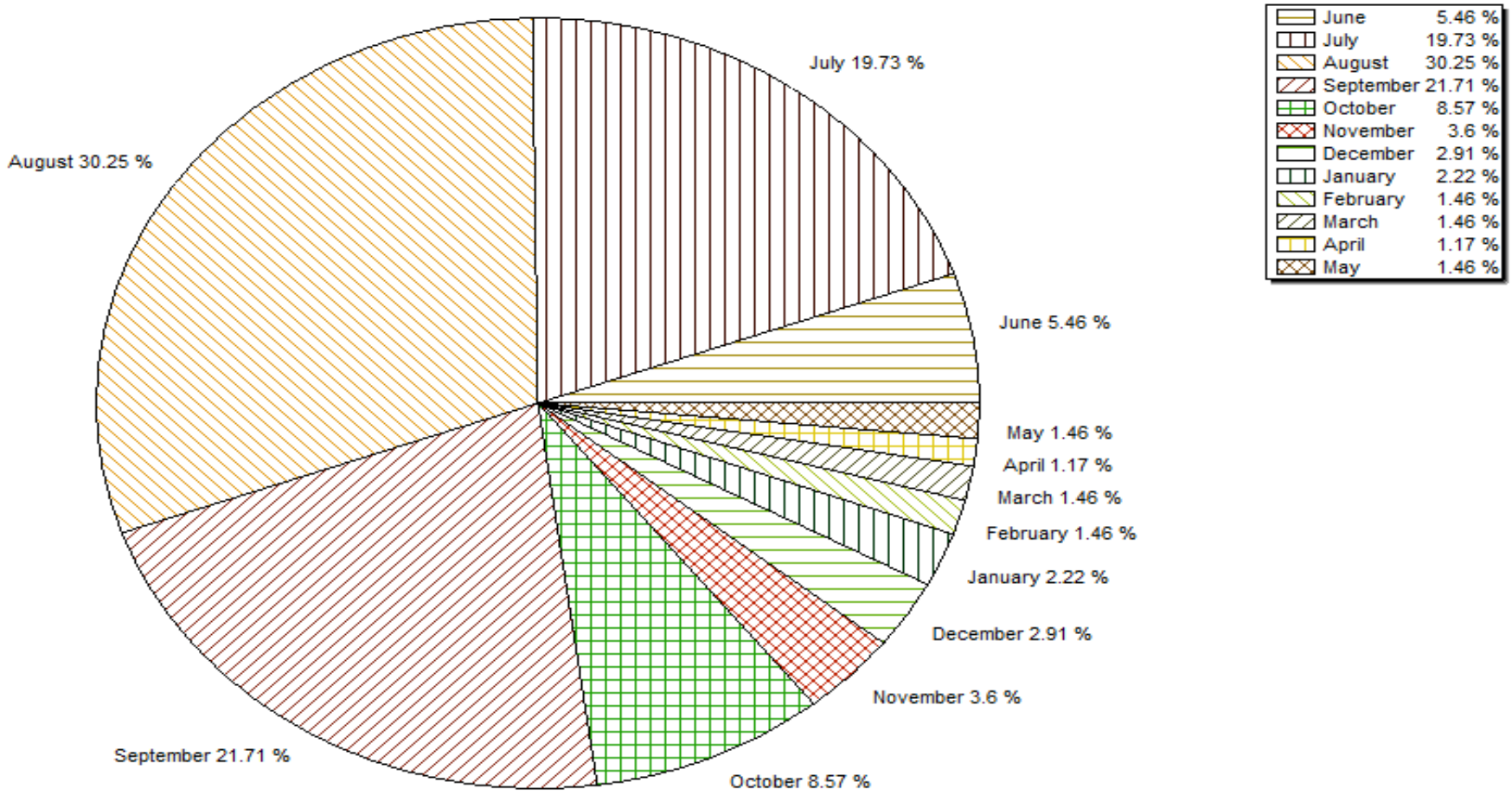
Monthly Average Runoff based on period : 1966-2017

Station Name : Nowrangpur (AGG00U7)

Division : Lower Godavari Div., Hyderabad

Local River : Indravathi

Sub-Division : Indravati SD, Jagdalpur



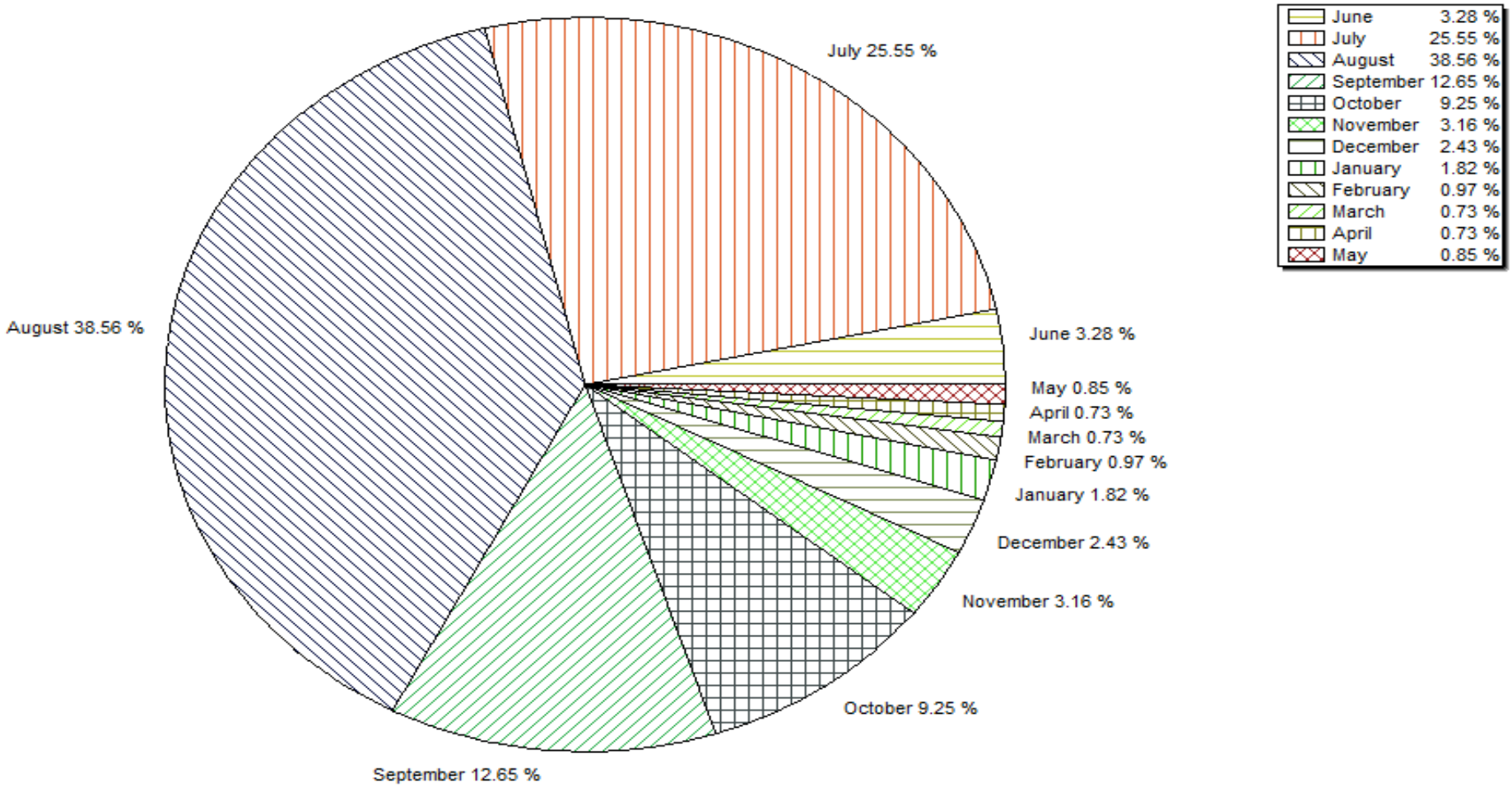
Monthly Runoff for the Year : 2017-2018

Station Name : Nowrangpur (AGG00U7)

Local River : Indravathi

Division : Lower Godavari Div., Hyderabad

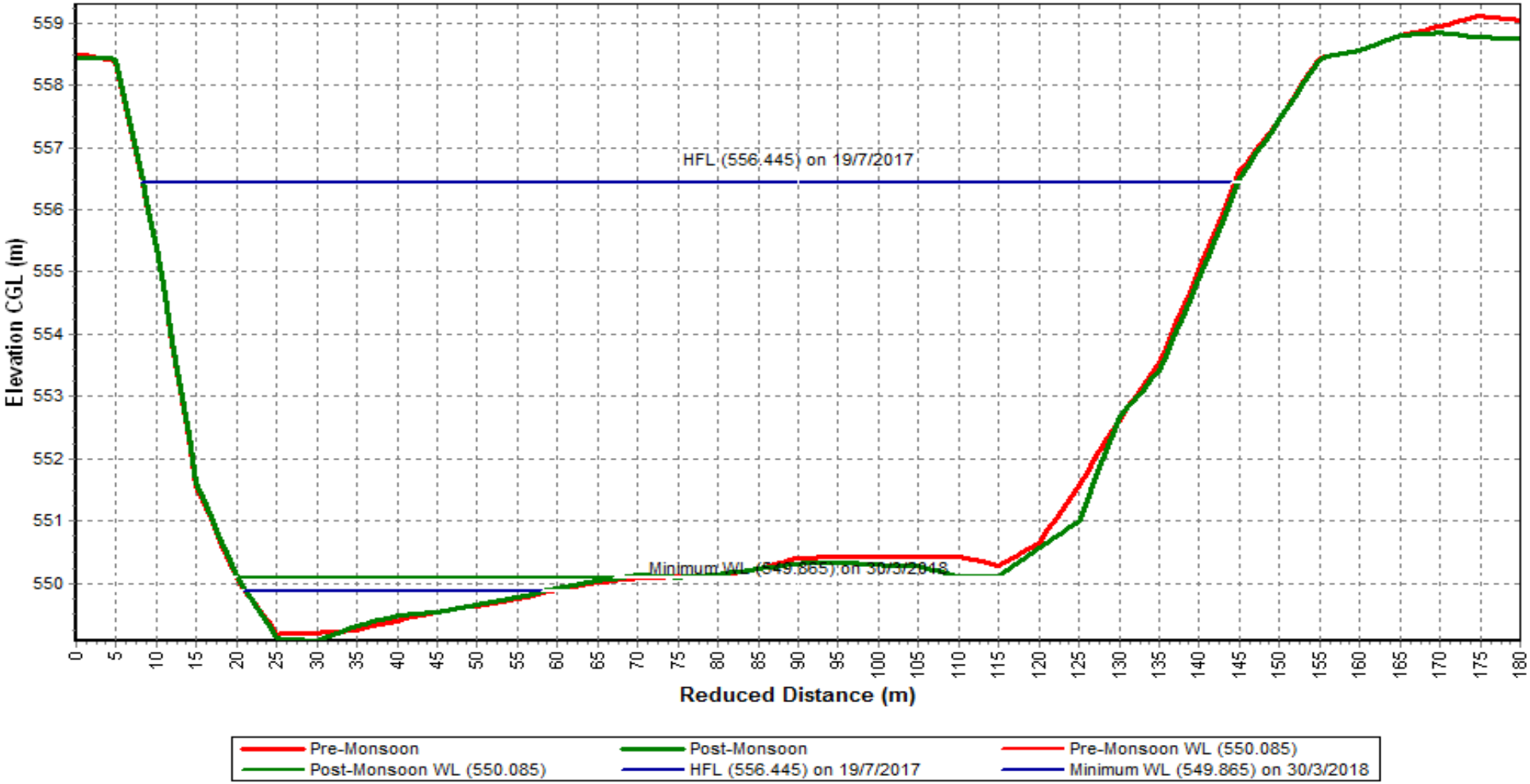
Sub-Division : Indravati SD, Jagdalpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Nowrangpur (AGG00U7) **Division : Lower Godavari Div., Hyderabad**

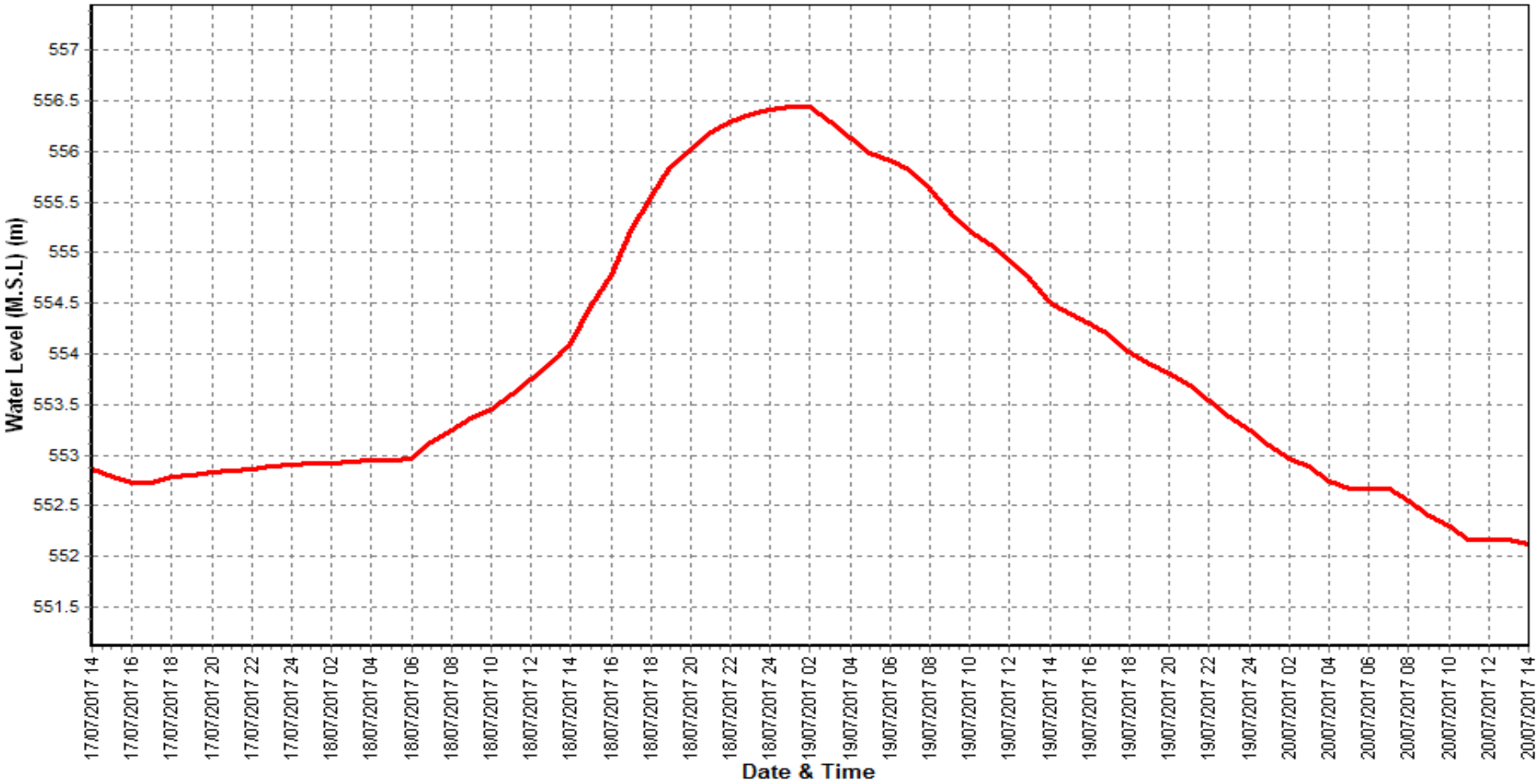
Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Nowrangpur (AGG00U7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**

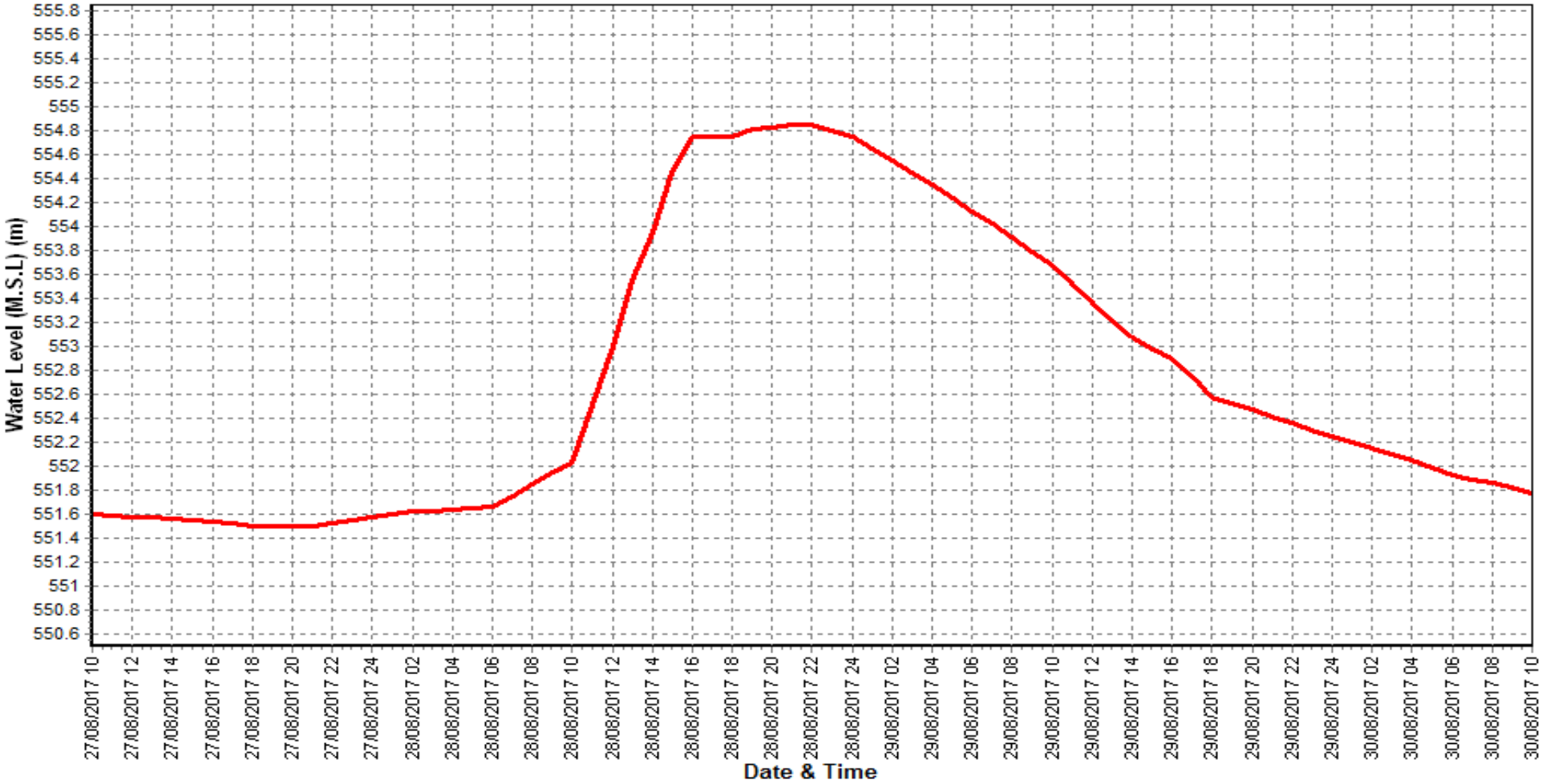


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Nowrangpur (AGG00U7) **Division : Lower Godavari Div., Hyderabad**

Local River : Indravathi **Sub-Division : Indravati SD, Jagdalpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**TEKRA**	**Code**	:	**AGH00C4**
State	:	Maharashtra	District		Gadchiroli
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Pranhita
Division	:	Wainganga Div., Nagpur	Sub-Division	:	L Wainganga SD, Chandrapur
Drainage Area	:	108780 Sq. Km.	Bank	:	Left
Latitude	:	18°58'42"	Longitude	:	79°56'49"
Zero of Gauge (m)	:	95.09 (m.s.l)	01.06.1964		
		Opening Date	Closing Date		
Gauge	:	01.06.1964	**HFL During 2017-18**	:	**104.140 Meter**
			Corres.Discharge	:	**8743 Cumecs (Estimated)**
Discharge	:	15.07.1964	**Date & Time of**	:	**20.07.2017**
			Occurance	:	**09.00 Hrs.**
Sediment	:	01.07.1965			
Water Quality	:	15.06.1966			

HFL Recorded so far in m : 114.67 15/08/1986
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1964-1965	25.67	97.340	01.06.1964	25.60	97.330	02.06.1964
1965-1966	8204	104.065	03.09.1965	2.900	96.210	11.05.1966
1966-1967	26000	110.920	06.09.1966	1.800	96.175	09.06.1966
1967-1968	15839	107.578	04.08.1967	3.100	96.200	12.06.1967
1968-1969	21480	108.670	18.08.1968	3.643	96.075	31.05.1969
1969-1970	15065	107.495	22.09.1969	3.165	96.065	04.06.1969
1970-1971	26646	110.560	06.09.1970	20.09	96.375	28.05.1971
1971-1972	13400	107.190	02.09.1971	1.990	96.300	31.05.1972
1972-1973	8571	104.795	25.08.1972	1.364	96.250	16.06.1972
1973-1974	27589	109.105	10.07.1973	2.160	96.350	01.06.1973
1974-1975	21127	108.350	22.08.1974	1.650	96.455	29.05.1975
1975-1976	24919	109.850	15.08.1975	3.590	96.535	15.06.1975
1976-1977	24085	109.460	03.09.1976	6.930	96.780	05.06.1976
1977-1978	14150	107.520	24.08.1977	5.900	96.650	12.06.1977
1978-1979	33617	111.648	01.09.1978	13.10	96.570	07.06.1978
1979-1980	28714	111.175	13.08.1979	3.100	97.015	31.05.1980
1980-1981	19000	108.630	03.08.1980	3.200	97.020	02.06.1980
1981-1982	33732	112.140	11.08.1981	5.800	97.190	10.06.1981

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1982-1983	6158	103.975	18.08.1982	6.700	97.255	07.05.1983
1983-1984	20910	109.600	14.08.1983	4.400	97.170	13.06.1983
1984-1985	18683	108.140	21.08.1984	2.600	97.580	31.05.1985
1985-1986	9855	105.350	18.07.1985	2.200	97.600	02.06.1985
1986-1987	46600	114.600	15.08.1986	3.700	97.825	14.06.1986
1987-1988	6492	104.220	29.08.1987	2.800	97.600	31.05.1988
1988-1989	14908	107.773	02.10.1988	1.900	97.570	08.06.1988
1989-1990	12408	106.425	02.09.1989	4.600	98.015	06.05.1990
1990-1991	26200	112.260	23.08.1990	27.00	98.105	21.05.1991
1991-1992	19826	108.740	17.08.1991	5.191	97.410	27.05.1992
1992-1993	24823	110.360	23.08.1992	6.650	97.330	27.05.1993
1993-1994	9800	105.390	01.08.1993	4.500	97.170	25.05.1994
1994-1995	35750	112.400	09.09.1994	4.709	97.120	08.06.1994
1995-1996	19972	108.990	04.09.1995	11.97	97.120	31.05.1996
1996-1997	4887	103.045	20.08.1996	8.624	97.150	31.05.1997
1997-1998	7877	104.550	01.08.1997	6.200	97.120	08.06.1997
1998-1999	14796	106.785	16.09.1998	25.22	97.050	24.05.1999
1999-2000	17623	108.250	21.09.1999	21.21	97.050	06.05.2000
2000-2001	38915	112.800	21.07.2000	5.591	96.940	31.05.2001
2001-2002	15497	108.540	16.08.2001	6.697	96.510	12.05.2002
2002-2003	16446	108.030	27.06.2002	5.702	96.490	03.06.2002
2003-2004	14828	107.285	30.07.2003	4.270	96.030	10.06.2003
2004-2005	6180	103.305	07.08.2004	1.506	96.040	28.05.2005
2005-2006	16243	109.240	18.09.2005	1.095	96.000	21.06.2005
2006-2007	20397	109.920	06.08.2006	13.26	96.350	31.05.2007
2007-2008	25540	110.410	09.08.2007	6.827	96.810	31.05.2008
2008-2009	14223	106.790	05.08.2008	1.287	96.530	17.05.2009
2009-2010	8737	104.480	25.07.2009	1.730	96.530	02.06.2009
2010-2011	20695	109.590	09.09.2010	5.310	96.840	25.05.2011
2011-2012	14976	107.590	09.09.2011	0.000	96.720	07.05.2012
2012-2013	16927	109.060	08.09.2012	0.000	96.660	05.06.2012
2013-2014	32665	112.090	02.08.2013	5.233	96.530	09.06.2013
2014-2015	12273	108.970	08.09.2014	9.435	97.080	15.06.2014
2015-2016	17398	106.890	15.08.2015	11.86	96.760	04.05.2016
2016-2017	11999	108.290	13.07.2016	10.51	96.740	05.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at TEKRA in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1964-1965**	4		4
2	**1965-1966**	15511	469	15980
3	**1966-1967**	32967	1388	34354
4	**1967-1968**	35205	2697	37901
5	**1968-1969**	29616	1022	30637
6	**1969-1970**	35107	1113	36220
7	**1970-1971**	54838	1558	56396
8	**1971-1972**	22326	1145	23471
9	**1972-1973**	16949	745	17693
10	**1973-1974**	56566	3623	60190
11	**1974-1975**	21020	1716	22736
12	**1975-1976**	53483	2379	55862
13	**1976-1977**	41080	1159	42239
14	**1977-1978**	35431	3312	38744
15	**1978-1979**	49958	2806	52764
16	**1979-1980**	35969	968	36937
17	**1980-1981**	43416	996	44412
18	**1981-1982**	49122	2183	51305
19	**1982-1983**	19589	1147	20735
20	**1983-1984**	59316	2269	61585
21	**1984-1985**	22945	836	23781
22	**1985-1986**	23291	1477	24768
23	**1986-1987**	46551	1547	48098
24	**1987-1988**	9891	1072	10962
25	**1988-1989**	51894	1519	53413
26	**1989-1990**	26677	911	27588
27	**1990-1991**	59982	2745	62727
28	**1991-1992**	19640	586	20226
29	**1992-1993**	37415	1042	38457
30	**1993-1994**	21264	1555	22819
31	**1994-1995**	75840	2974	78814
32	**1995-1996**	29831	1561	31392
33	**1996-1997**	14197	964	15161
34	**1997-1998**	16952	5821	22774
35	**1998-1999**	28773	3303	32076
36	**1999-2000**	40026	2252	42278
37	**2000-2001**	31143	744	31887
38	**2001-2002**	25779	1070	26849
39	**2002-2003**	24257	981	25238
40	**2003-2004**	29680	1810	31490
41	**2004-2005**	11014	1093	12107
42	**2005-2006**	37668	2225	39893
43	**2006-2007**	44546	1923	46469
44	**2007-2008**	36096	1871	37967
45	**2008-2009**	18617	613	19230
46	**2009-2010**	11693	1152	12845
47	**2010-2011**	43397	2163	45560
48	**2011-2012**	27509	1223	28731
49	**2012-2013**	35665	1824	37489
50	**2013-2014**	81501	3684	85185
51	**2014-2015**	19424	1408	20833
52	**2015-2016**	19929	975	20904
53	**2016-2017**			
54	**2017-2018**	11994	1230	13224
Average		32878	1709	34555

Stage-Discharge Data for the period 2017 - 2018

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	96.970	53.20	98.125	232.4	98.730	792.1	102.500	4884 *	99.190	972.2 *	98.310	278.9
2	96.980	54.24	98.530	399.4 *	98.545	696.5	101.700	3599 *	98.950	820.1 *	98.220	255.6
3	96.980	54.89	98.250	282.4	98.490	628.1	100.790	2414 *	98.790	727.1 *	98.130	233.3
4	96.990	48.25 *	98.140	265.4	98.190	521.5	100.120	1683	98.710	594.8	98.080	217.2 *
5	96.990	55.82	98.130	253.1	98.090	421.6	99.770	1348	98.690	634.5	98.060	212.9 *
6	97.040	59.38	97.990	230.5	97.980	354.6 *	99.430	1224	98.640	562.8	98.040	217.3
7	97.310	79.14	97.850	208.0	97.930	342.9	99.190	972.2 *	98.500	497.4	98.010	199.9
8	97.460	92.91	97.780	195.3	97.890	343.8	99.160	952.4 *	98.490	570.5 *	98.000	193.7
9	97.590	102.2	97.800	182.0 *	97.810	297.1	98.910	796.2 *	98.650	598.2	97.970	186.1
10	97.540	93.84	97.750	190.4	97.730	282.7	98.590	620.2 *	98.590	525.1	97.930	181.9
11	97.460	113.3 *	97.780	197.4	101.990	4038 *	98.420	463.2	98.760	595.0	97.910	177.1
12	97.380	86.18	97.900	219.0	101.450	3275	98.250	404.3	99.020	690.2	97.840	168.3 *
13	97.330	84.17	98.150	267.1	100.570	2169 *	98.170	389.6	99.310	911.1	97.770	154.4
14	97.290	83.80	97.700	193.5	99.870	1356	99.120	1032	99.600	651.4 *	97.740	144.0
15	97.270	81.47	97.870	222.9	99.620	1285 *	99.270	1230	99.480	609.6 *	97.710	141.9
16	97.340	86.34	98.910	554.4 *	99.320	1106	99.780	1414 *	99.390	579.1 *	97.690	137.7
17	98.120	242.3	98.440	431.9	98.940	865.5	99.900	1517 *	99.350	565.8 *	97.650	134.6
18	98.040	242.4 *	98.100	308.4	98.640	698.7	100.030	1690	99.130	495.0 *	97.590	129.5
19	97.860	191.9	99.970	1157 *	98.590	679.6	100.040	1676	99.100	485.6 *	97.560	118.4 *
20	97.790	175.5	104.140	8743 *	99.180	965.6 *	99.960	1578	98.960	443.2 *	97.540	112.7
21	97.740	167.1	102.740	4125 *	99.490	1243	99.800	1461	98.850	411.1 *	97.510	112.4
22	97.920	197.6	101.340	2664	101.090	2641	100.030	1678	98.860	413.9 *	97.480	108.3
23	97.890	189.0	100.590	2190 *	100.190	1491	101.270	3085	98.860	395.8	97.460	99.93
24	97.700	158.3	100.260	1904	99.440	1116	101.620	3484 *	98.820	389.6	97.440	98.18
25	97.570	133.4 *	100.110	1694	99.040	875.3 *	101.270	3133	98.820	385.5	97.430	98.16
26	97.700	159.7 *	99.570	1298	98.875	812.3	100.490	2053	98.660	365.0	97.410	94.90 *
27	97.840	180.0	99.310	1146	98.870	772.7 *	99.950	1447	98.550	342.7	97.390	95.52
28	98.030	234.6	99.370	1097 *	99.100	1052	99.580	1181	98.510	329.5	97.370	89.16
29	97.920	216.9	98.990	844.3 *	100.790	2535	99.420	1125	98.460	306.0 *	97.360	86.94
30	97.790	186.3	98.810	738.4 *	100.310	2013	99.340	1075 *	98.390	290.0	97.350	84.90
31			98.930	932.8	100.420	2044			98.360	295.5		
Ten-Daily Mean												
I Ten-Daily	97.185	69.39	98.034	243.9	98.138	468.1	100.016	1849	98.720	650.3	98.075	217.7
II Ten-Daily	97.588	138.7	98.896	1007	99.817	1644	99.294	1139	99.210	602.6	97.700	141.8
III Ten-Daily	97.810	182.3	100.002	1694	99.783	1509	100.277	1972	98.649	356.8	97.420	96.84
Monthly												
Min.	96.970	48.25	97.700	182.0	97.730	282.7	98.170	389.6	98.360	290.0	97.350	84.90
Max.	98.120	242.4	104.140	6517	101.990	4038	102.500	4884	99.600	972.2	98.310	278.9
Mean	97.528	130.1	99.010	1005	99.264	1217	99.862	1654	98.853	530.7	97.732	152.1

Annual Runoff in MCM = 13224 Annual Runoff in mm = 122

Peak Observed Discharge = 3275 cumecs on 12/08/2017 Corres. Water Level :101.450 m

Lowest Observed Discharge = 9.230 cumecs on 26/05/2018 Corres. Water Level : 96.670 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	97.340	89.62 *	97.140	83.38	97.120	73.29	97.090	45.58	96.840	27.07 *	96.710	11.98
2	97.320	82.26	97.170	86.11	97.110	70.77	97.080	55.08 *	96.830	26.93	96.710	11.76
3	97.310	87.74 *	97.170	86.64	97.110	70.59	97.060	46.01	96.830	25.90	96.700	12.52
4	97.290	80.32	97.220	95.11	97.090	56.41 *	97.040	49.89 *	96.820	25.26	96.740	13.80
5	97.290	80.31	97.220	93.59	97.060	52.46 #	97.010	45.70	96.820	25.37	96.740	13.68
6	97.280	79.79	97.210	91.96	97.060	52.46 #	96.990	44.02	96.810	25.28	96.730	15.78 *
7	97.260	78.42	97.290	85.46 *	97.060	52.46 #	96.990	43.47	96.810	25.54	96.730	13.87
8	97.260	77.27	97.490	121.2	97.240	83.74	96.990	43.42	96.800	26.99 *	96.730	13.76
9	97.190	74.10	97.590	132.7	97.330	91.95	96.960	39.93	96.790	27.74	96.720	14.60
10	97.090	74.48 *	97.590	129.6	97.340	92.34	96.940	39.62	96.790	26.87	96.710	14.32
11	97.020	72.58	97.560	123.9	97.330	91.81 *	96.940	37.81 *	96.790	26.23	96.710	13.99
12	97.010	70.89	97.540	121.4	97.320	90.78	96.940	37.81 *	96.780	25.79	96.700	13.76
13	97.000	67.28	97.540	120.4	97.320	88.70	96.940	39.19	96.780	25.19	96.690	10.73 *
14	97.000	66.77	97.520	124.4 *	97.310	85.22	96.940	38.25	96.780	23.48 *	96.690	13.57
15	97.000	64.66	97.510	119.4	97.300	85.60	96.920	34.81	96.780	23.48 *	96.690	12.23
16	96.990	62.15	97.510	118.3	97.300	84.65	96.920	34.20	96.780	25.36	96.690	11.39
17	97.010	69.90 *	97.440	107.8	97.300	83.27	96.920	34.14	96.780	25.19	96.690	10.44
18	97.040	71.66	97.370	103.3	97.300	87.03 *	96.920	35.55 *	96.770	24.82	96.690	10.44
19	97.040	71.08	97.340	101.1	97.310	84.32	96.920	33.24	96.770	24.29	96.690	9.734
20	97.090	75.46	97.310	95.31	97.320	89.06	96.910	33.21	96.760	23.40	96.690	10.73 *
21	97.090	72.20	97.270	82.34 *	97.320	85.90	96.910	33.69	96.760	22.88	96.680	9.674
22	97.040	70.06	97.240	83.89	97.340	93.43 #	96.900	32.64	96.760	20.22 *	96.680	9.630
23	97.010	70.17	97.220	80.26	97.350	95.06 #	96.900	31.96	96.750	22.63	96.680	9.585
24	97.020	70.47 *	97.190	80.32	97.290	85.46 #	96.900	31.28	96.750	22.52	96.680	9.448
25	97.020	70.47 *	97.170	78.32	97.240	77.76 *	96.890	32.27 *	96.730	12.87	96.670	9.419
26	97.020	70.18	97.150	64.63 *	97.170	50.37	96.880	30.09	96.730	13.18	96.670	9.230
27	97.020	70.11	97.130	76.16	97.150	49.92	96.880	29.76	96.730	13.20	96.690	10.73 *
28	97.090	77.03	97.130	61.84 *	97.130	48.10	96.870	29.53	96.720	12.49	96.730	11.77
29	97.120	77.71	97.130	77.34			96.860	29.10 *	96.720	14.43 *	96.730	15.78 #
30	97.140	84.96	97.120	74.48			96.860	29.10 *	96.710	13.14 *	96.730	15.78 #
31	97.140	77.41 *	97.120	72.77			96.850	27.92			96.890	45.85 #
Ten-Daily Mean												
I Ten-Daily	97.263	80.43	97.309	100.6	97.152	69.65	97.015	45.27	96.814	26.30	96.722	13.61
II Ten-Daily	97.020	69.24	97.464	113.5	97.311	87.04	96.927	35.82	96.777	24.72	96.693	11.70
III Ten-Daily	97.065	73.71	97.170	75.67	97.249	73.25	96.882	30.67	96.736	16.75	96.712	14.26
Monthly												
Min.	96.990	62.15	97.120	61.84	97.060	48.10	96.850	27.92	96.710	12.49	96.670	9.230
Max.	97.340	89.62	97.590	132.7	97.350	95.06	97.090	55.08	96.840	27.74	96.890	45.85
Mean	97.114	74.43	97.310	95.92	97.236	76.89	96.939	37.04	96.776	22.59	96.709	13.23

Peak Computed Discharge = 8743 cumecs on 20/07/2017 **Corres. Water Level :104.140 m**

Lowest Computed Discharge = 10.73 cumecs on 13/05/2018 **Corres. Water Level : 96.690 m**

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

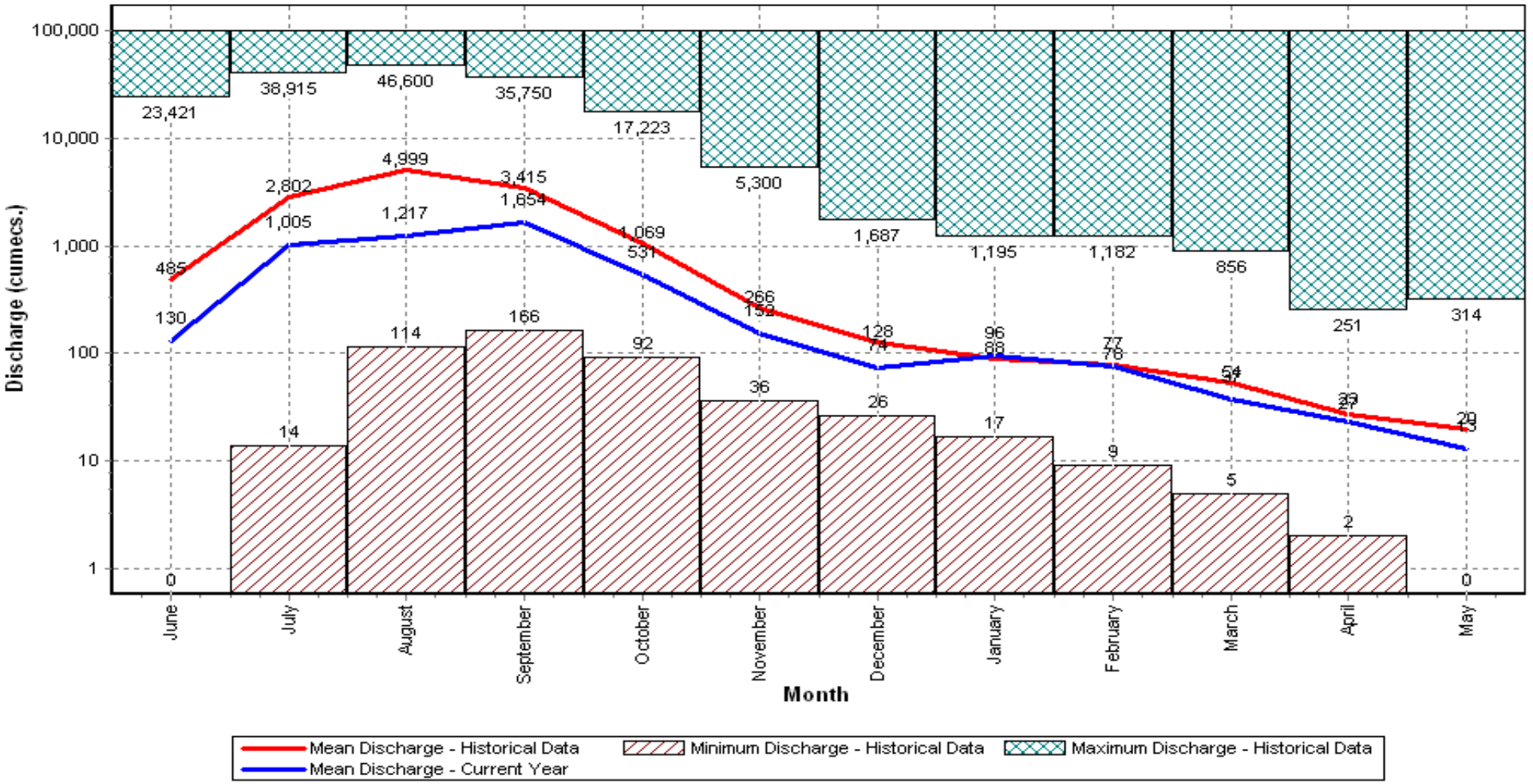
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : TEKRA (AGH00C4) **Data considered : 1964-2018** **Division : Wainganga Div., Nagpur**

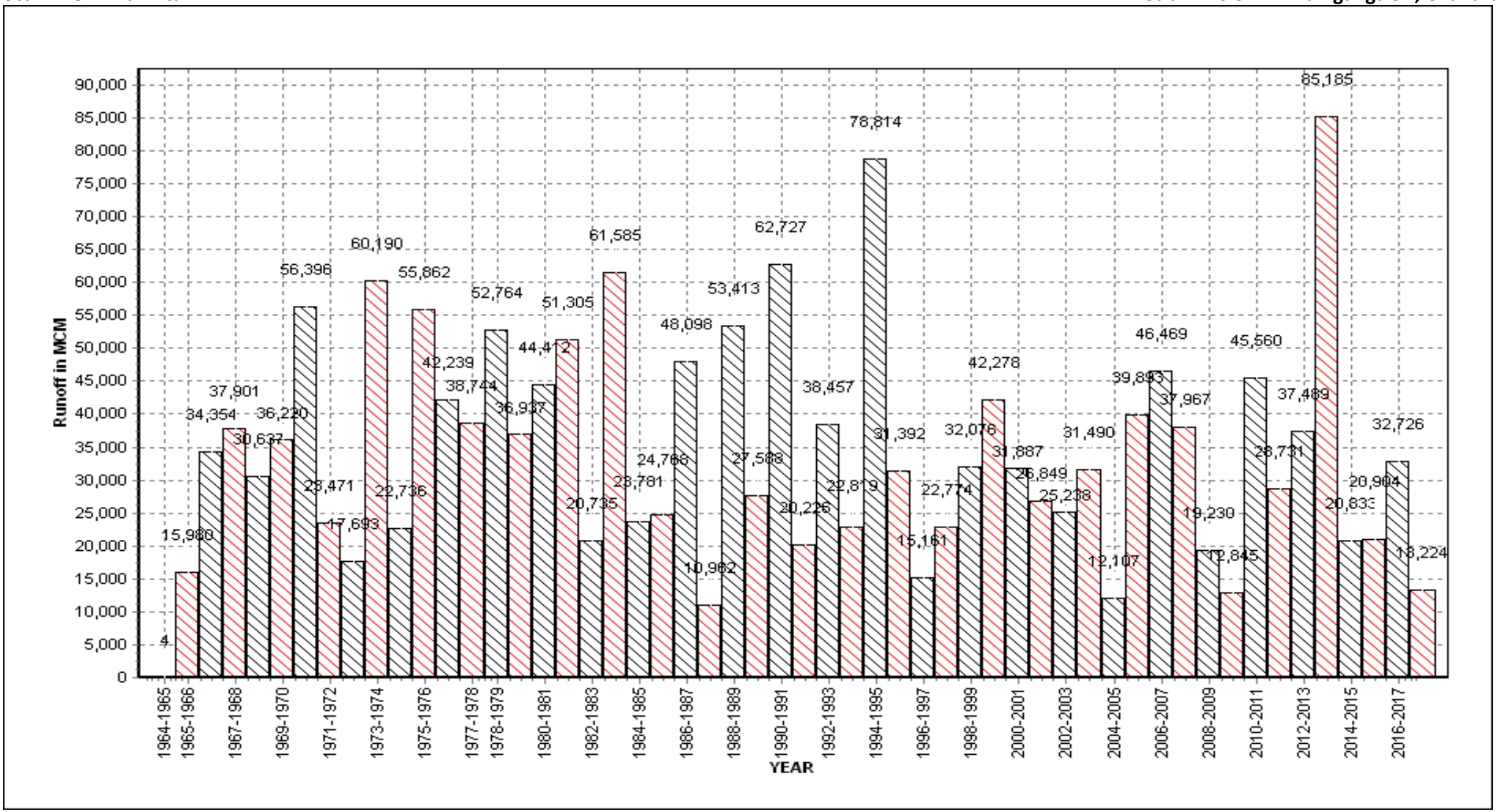
Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**



Annual Runoff Values for the period: 1964 - 2018

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**

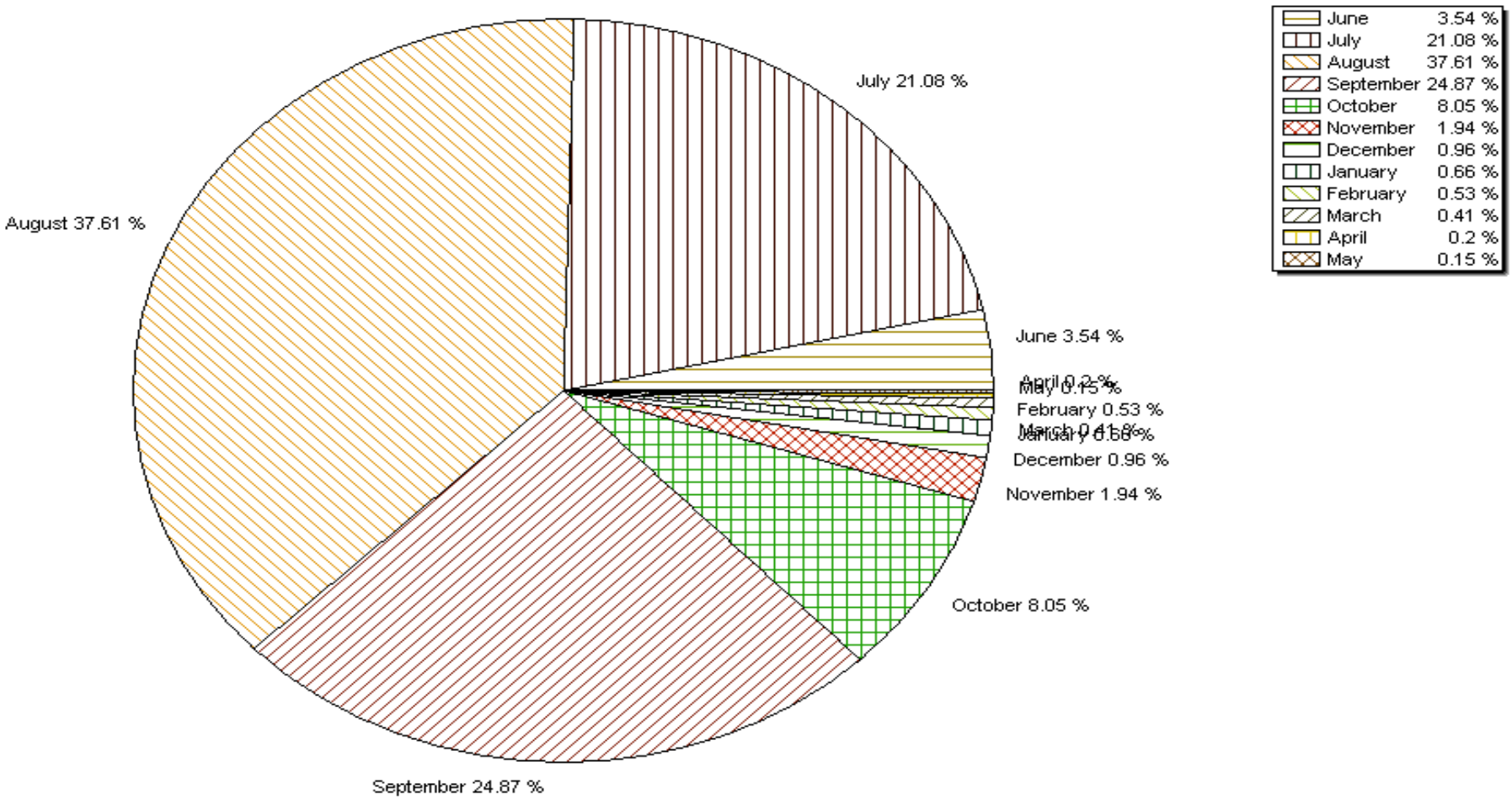


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1964-2017

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

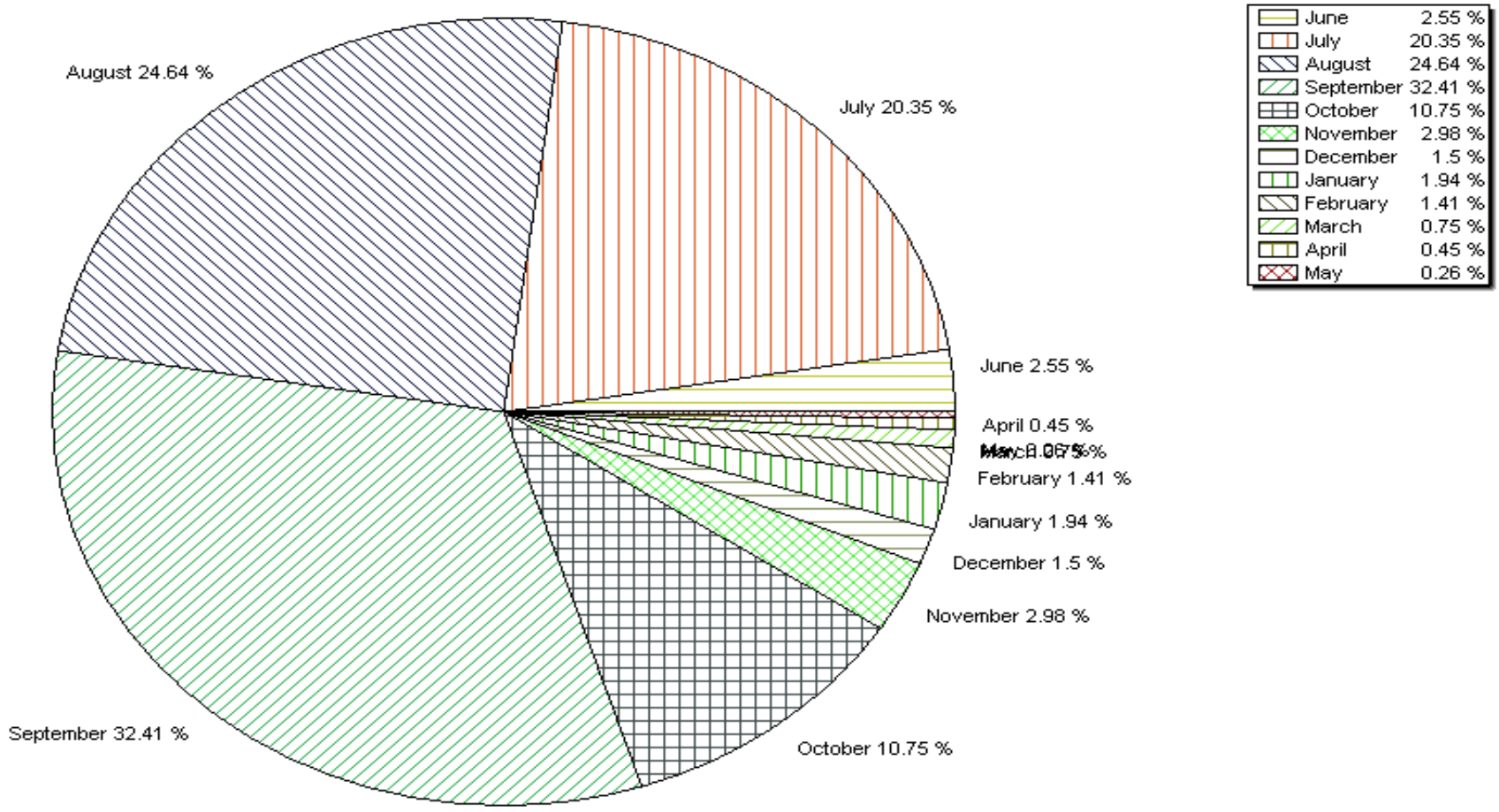
Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**



Monthly Runoff for the Year : 2017-2018

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

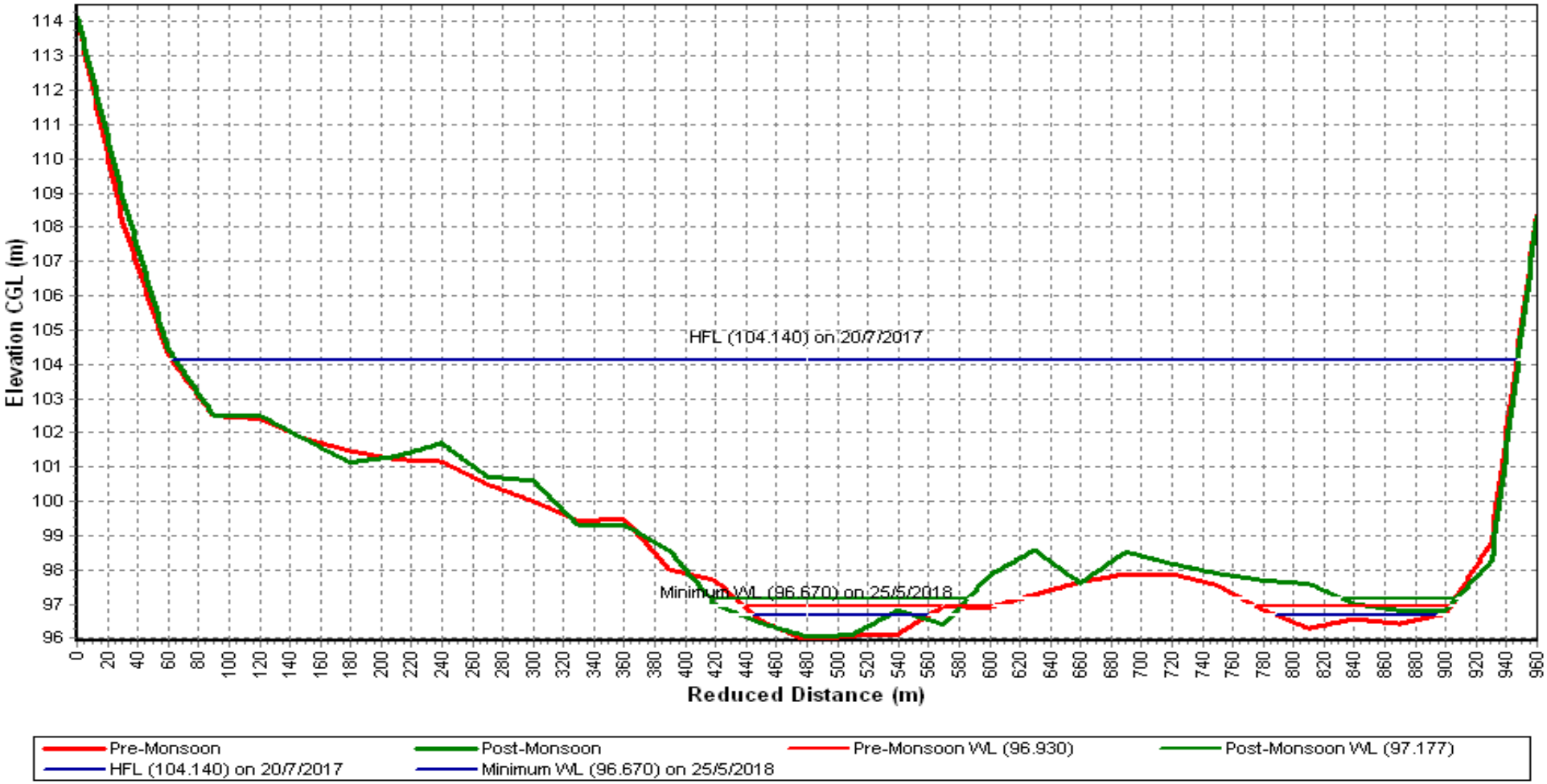
Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

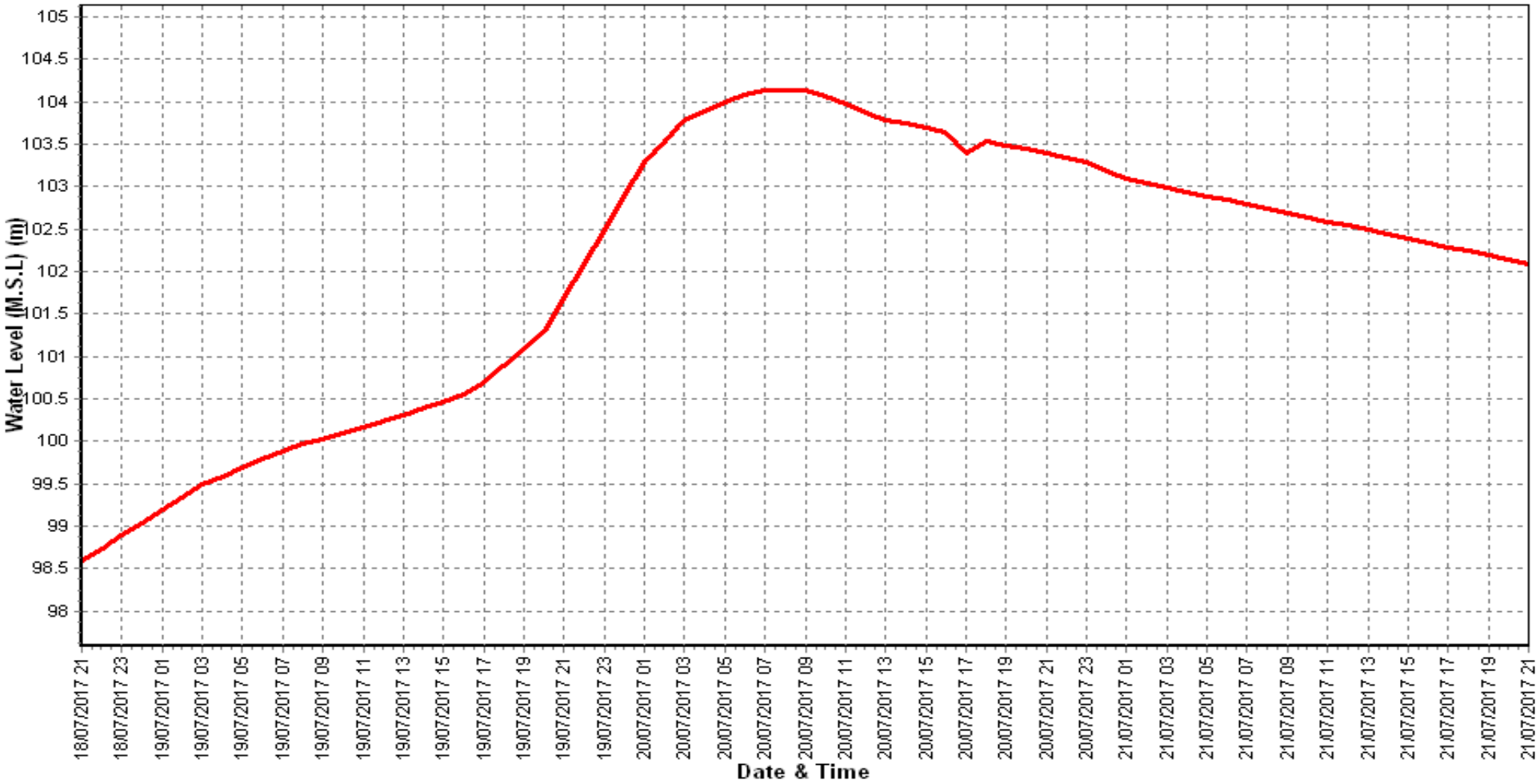
Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**

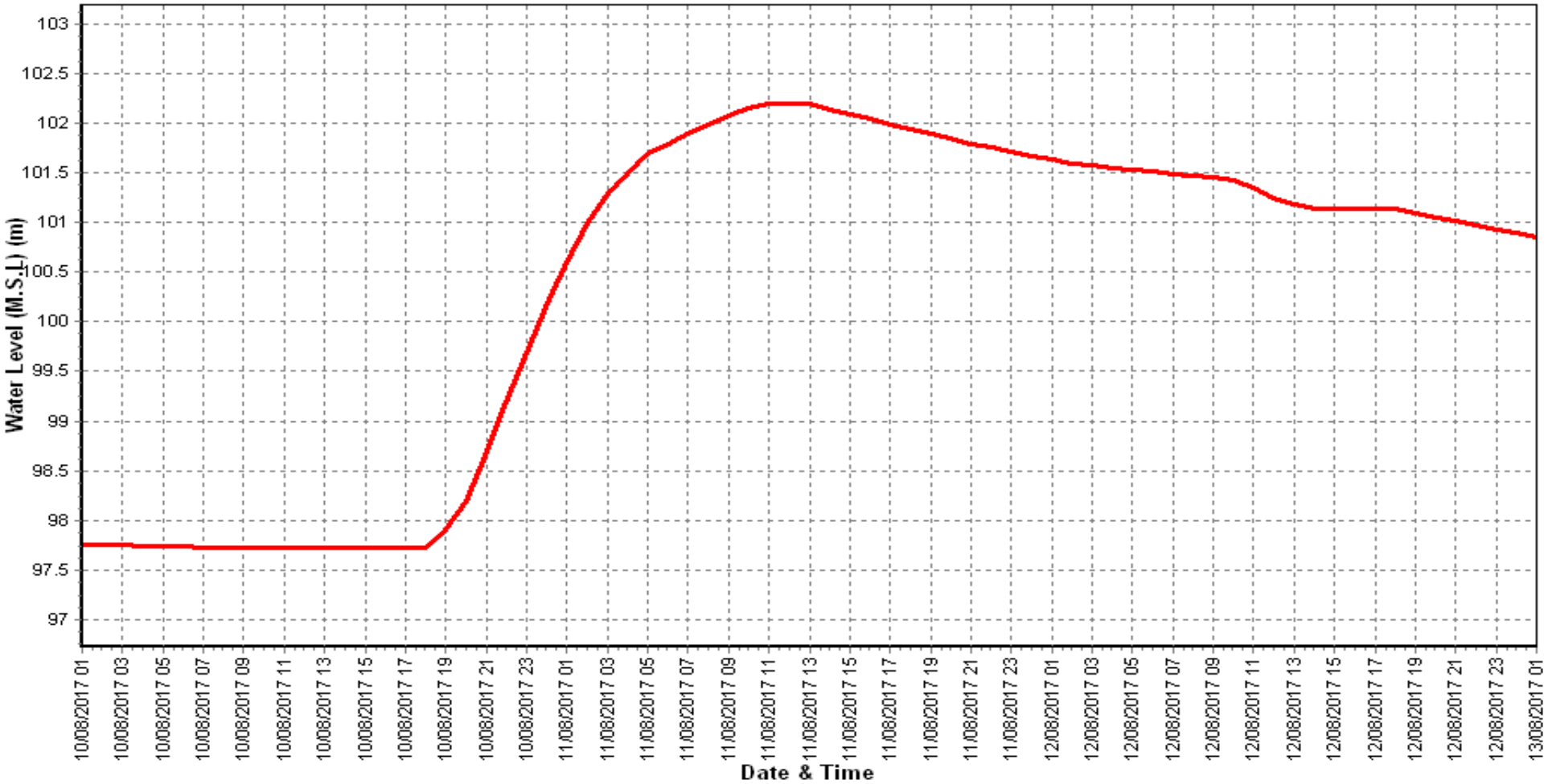


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : TEKRA (AGH00C4) **Division : Wainganga Div., Nagpur**

Local River : Pranhita **Sub-Division : L Wainganga SD, Chandrapur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**BHATPALLI**	**Code**	:	**AGH10L0**
State	:	Andhra Pradesh	District		Adilabad
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:	-	Local River	:	Peddavagu
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Wardha SD, Chandrapur
Drainage Area	:	3100 Sq. Km.	Bank	:	Left
Latitude	:	19°19'50"	Longitude	:	79°30'14"
Zero of Gauge (m)	:	156 (m.s.l)	12.08.1986		
		Opening Date	Closing Date		
Gauge	:	12.08.1986	**HFL During 2017-18**	:	**160.000 Meter**
			Corres.Discharge	:	**166.7 Cumecs (Estimated)**
Discharge	:	01.10.1986	**Date & Time of**	:	**20.08.2017**
			Occurance	:	**10.00 Hrs.**
Sediment	:	07.10.1988			
Water Quality	:	04.01.1988			

HFL Recorded so far in m : 172.11 13/08/1986
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1987-1988	139.2	161.390	20.08.1987	0.000	159.855	30.05.1988
1988-1989	3750	168.500	02.10.1988	0.000		03.06.1988
1989-1990	1730	165.510	23.07.1989	0.850	159.610	02.06.1989
1990-1991	3810	168.430	29.08.1990	2.368	159.900	04.05.1991
1991-1992	1196	161.700	12.07.1991	0.680	158.695	29.05.1992
1992-1993	3058	164.528	19.06.1992	0.000	158.685	10.05.1993
1993-1994	373.2	161.530	01.08.1993	0.184	158.840	31.05.1994
1994-1995	2247	163.100	12.08.1994	0.000	158.800	02.06.1994
1995-1996	7862	167.330	20.10.1995	0.750	158.450	29.05.1996
1996-1997	1567	163.175	07.09.1996	0.626	158.920	31.05.1997
1997-1998	253.2	160.650	22.08.1997	0.220	159.150	27.05.1998
1998-1999	1360	162.705	11.08.1998	0.000	159.100	02.06.1998
1999-2000	581.2	161.520	18.06.1999	0.890	159.090	30.04.2000
2000-2001	6653	166.120	28.08.2000	0.550	158.750	27.05.2001
2001-2002	1151	162.310	14.06.2001	1.391	158.860	13.05.2002
2002-2003	402.4	161.420	25.08.2002	0.349	158.645	31.05.2003
2003-2004	687.5	161.820	08.08.2003	0.348	158.640	01.06.2003
2004-2005	218.7	160.585	11.09.2004	0.030	158.890	20.05.2005

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2005-2006	1645	162.900	05.08.2005	0.000		14.06.2005
2006-2007	4008	165.750	05.08.2006	0.289	158.920	19.06.2006
2007-2008	1422	162.680	18.09.2007	0.517	158.580	26.05.2008
2008-2009	925.5	162.400	04.08.2008	0.475	158.580	01.06.2008
2009-2010	201.5	160.200	01.09.2009	0.010	158.370	27.04.2010
2010-2011	1246	162.950	30.07.2010	0.000	158.380	12.06.2010
2011-2012	333.4	161.000	28.08.2011	0.311	158.500	28.05.2012
2012-2013	1087	162.020	23.07.2012	0.396	158.500	06.06.2012
2013-2014	2308	164.000	23.07.2013	1.346	158.510	03.06.2013
2014-2015	1536	162.300	08.09.2014	2.318	158.790	31.05.2015
2015-2016	951.7	161.950	17.09.2015	1.673	158.910	18.05.2016
2016-2017	2164	161.900	12.07.2016	0.933	158.900	01.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at BHATPALLI in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**	29	55	84
2	**1987-1988**	211	28	239
3	**1988-1989**	2213	94	2307
4	**1989-1990**	1243	139	1382
5	**1990-1991**	2697	151	2848
6	**1991-1992**	900	50	949
7	**1992-1993**	1393	62	1456
8	**1993-1994**	515	56	571
9	**1994-1995**	2343	131	2473
10	**1995-1996**	2373	149	2522
11	**1996-1997**	999	84	1083
12	**1997-1998**	286	97	383
13	**1998-1999**	1632	121	1754
14	**1999-2000**	687	81	768
15	**2000-2001**	1964	74	2038
16	**2001-2002**	828	133	962
17	**2002-2003**	496	53	549
18	**2003-2004**	885	94	979
19	**2004-2005**	275	33	308
20	**2005-2006**	967	99	1066
21	**2006-2007**	1258	80	1339
22	**2007-2008**	666	58	725
23	**2008-2009**	480	58	538
24	**2009-2010**	146	21	166
25	**2010-2011**	1308	151	1459
26	**2011-2012**	483	66	549
27	**2012-2013**	966	143	1109
28	**2013-2014**	2503	188	2692
29	**2014-2015**	360	120	481
30	**2015-2016**	506	79	585
31	**2016-2017**			
32	**2017-2018**	146	51	198
Average		1024	90	1115

Stage-Discharge Data for the period 2017 - 2018

Station Name : BHATPALLI (AGH10L0) **Division : Wainganga Div., Nagpur**

Local River : Peddavagu **Sub-Division : Wardha SD, Chandrapur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	158.720	2.042 #	158.750	2.720	158.810	4.517	158.980	16.50	158.860	7.847 *	158.810	5.637
2	158.720	1.540	158.750	3.161 *	158.800	3.713	158.960	14.42 *	158.840	6.740 *	158.800	5.258
3	158.740	2.756 #	158.770	3.920	158.810	4.327	158.900	10.27 *	158.820	6.227	158.810	5.436
4	158.740	2.756 *	158.760	3.703	158.830	5.614	158.920	13.34	158.820	6.122	158.820	5.706 *
5	158.730	2.383 #	158.850	8.108	158.800	4.746 #	158.980	15.02	158.830	6.993	158.820	5.706 *
6	158.770	4.099	158.760	3.824	158.830	6.214 *	159.450	73.96	158.820	6.028	158.820	6.094
7	158.750	2.759	158.745	2.882	158.820	5.706 #	159.040	19.54	158.830	7.146	158.810	4.596
8	158.740	2.641	158.740	2.853	158.830	5.000	158.940	13.22	158.860	7.847 *	158.810	4.556
9	158.730	2.383 #	158.750	3.161 *	158.860	5.903	158.950	13.91	158.875	8.811	158.800	4.141
10	158.790	5.114 #	158.740	2.845	158.910	9.857	158.900	10.27 *	158.890	9.100	158.790	3.871
11	158.800	5.690 *	158.915	16.03	158.910	9.553	158.890	9.992	158.980	17.96	158.790	3.910
12	158.790	6.085	158.810	7.527	158.920	10.24	158.870	8.882	158.920	11.61	158.820	5.706 *
13	159.040	26.27	158.770	4.070 #	158.980	15.94 *	158.910	10.23	158.910	11.84	158.820	6.097
14	158.915	12.67	158.760	3.598 #	158.975	16.34	159.200	31.68	158.920	12.56	158.820	6.101
15	158.810	5.965	158.810	7.440	159.000	17.52 *	159.020	17.91	158.920	11.59 *	158.810	4.511
16	159.200	35.13 #	158.790	4.295 *	158.960	14.14	159.130	26.98	158.900	11.00	158.810	4.446
17	158.870	11.99	158.790	3.973	158.900	7.997	159.000	17.52 *	158.900	11.18	158.790	4.331
18	158.850	9.119 *	158.790	3.989	158.890	9.485	158.925	10.68	158.880	8.554	158.780	4.116
19	158.800	6.375	158.820	6.053	158.960	14.31	159.030	18.28	158.860	7.847 *	158.800	4.746 *
20	158.870	11.93	158.930	14.52	160.000	166.7 *	158.940	13.49	158.850	7.899	158.810	5.235
21	158.800	5.547	158.920	14.35	159.185	31.01	158.910	10.92 #	158.850	6.978	158.810	5.347
22	158.770	3.991	158.860	8.014	158.980	17.78	158.900	11.71	158.870	8.427 *	158.810	5.463
23	158.760	3.785	158.820	5.706 *	158.930	13.16	158.980	16.10	158.860	8.002	158.830	6.246
24	158.770	4.010	158.810	4.802	158.900	10.79	158.920	11.59 *	158.850	7.632	158.830	6.189
25	158.750	3.161 *	158.810	4.764	158.900	10.27 *	158.890	11.48	158.830	6.894	158.790	4.785
26	158.760	3.598 *	158.800	4.574	158.920	11.80	158.870	10.31	158.820	6.560	158.780	4.295 *
27	158.770	4.058	158.795	3.434	159.140	30.30 *	158.870	10.46	158.830	7.041	158.770	3.993
28	158.800	5.669	158.780	3.189	159.130	29.67	158.860	9.591	158.830	7.004	158.780	4.093
29	158.770	4.092	158.820	4.954	159.270	38.20	158.880	11.12	158.830	6.214 *	158.770	3.941
30	158.750	3.644	158.830	6.214 *	159.100	25.73	158.880	9.025 *	158.810	5.694	158.740	2.336 #
31			158.825	4.720	159.080	24.86			158.810	5.694		
Ten-Daily Mean												
I Ten-Daily	158.743	2.847	158.762	3.718	158.830	5.560	159.002	20.05	158.845	7.286	158.809	5.100
II Ten-Daily	158.895	13.12	158.819	7.149	159.049	28.22	158.992	16.56	158.904	11.20	158.805	4.920
III Ten-Daily	158.770	4.156	158.825	5.884	159.049	22.14	158.896	11.23	158.835	6.922	158.791	4.669
Monthly												
Min.	158.720	1.540	158.740	2.720	158.800	3.713	158.860	8.882	158.810	5.694	158.740	2.336
Max.	159.200	35.13	158.930	16.03	160.000	166.7	159.450	73.96	158.980	17.96	158.830	6.246
Mean	158.803	6.708	158.802	5.593	158.978	18.75	158.963	15.95	158.860	8.420	158.802	4.896

Annual Runoff in MCM = 198 Annual Runoff in mm = 64

Peak Observed Discharge = 73.96 cumecs on 06/09/2017 Corres. Water Level :159.450 m

Lowest Observed Discharge = 0.648 cumecs on 22/05/2018 Corres. Water Level :158.530 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : BHATPALLI (AGH10L0) **Division : Wainganga Div., Nagpur**

Local River : Peddavagu **Sub-Division : Wardha SD, Chandrapur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	158.750	3.334 *	158.750	3.683	158.760	3.670	158.720	2.684	158.670	2.208 *	158.540	0.853
2	158.740	3.247	158.740	3.572	158.760	3.602	158.720	2.883 *	158.660	2.210	158.540	0.851
3	158.740	3.180 *	158.740	3.582	158.740	3.549	158.720	2.663	158.660	2.225	158.540	0.867
4	158.740	3.201	158.740	3.597	158.750	3.334 *	158.710	2.741 *	158.660	2.197	158.540	0.868
5	158.730	2.721	158.740	3.513	158.760	3.871	158.700	2.542	158.660	2.178	158.540	0.852
6	158.720	2.750	158.740	3.643	158.760	3.852	158.700	2.502	158.640	2.158	158.530	0.811 *
7	158.710	2.503	158.750	3.334 *	158.740	2.683	158.700	2.473	158.640	2.131	158.530	0.778
8	158.710	2.220	158.710	2.682	158.740	2.699	158.700	2.406	158.620	1.626 *	158.530	0.780
9	158.710	2.456	158.710	2.888	158.740	2.727	158.700	2.402	158.610	1.808	158.530	0.761
10	158.710	2.741 *	158.740	3.523	158.740	2.470	158.700	2.345	158.610	1.801	158.530	0.760
11	158.700	2.021	158.740	3.224	158.730	3.030 *	158.700	2.602 *	158.610	1.791	158.530	0.761
12	158.700	2.056	158.740	2.760	158.740	2.647	158.700	2.320	158.600	1.419 #	158.530	0.751
13	158.730	3.254	158.740	3.328	158.750	2.820	158.700	2.324	158.600	1.419 #	158.540	0.887 *
14	158.730	3.249	158.740	3.373	158.750	2.871	158.700	2.289	158.600	1.785	158.530	0.809
15	158.730	3.146	158.740	3.372	158.750	3.003	158.700	2.270	158.600	1.419 *	158.530	0.792
16	158.750	3.574	158.740	3.405	158.740	2.474	158.710	2.607	158.590	1.559	158.530	0.787
17	158.760	3.492 *	158.740	3.491	158.740	2.501	158.710	2.586	158.590	1.577	158.540	0.844
18	158.760	3.944	158.740	3.466	158.730	3.030 *	158.710	2.741 *	158.590	1.539	158.540	0.833
19	158.750	3.889	158.750	3.682	158.730	2.469	158.700	2.595	158.590	1.537	158.540	0.828
20	158.750	3.792	158.750	3.643	158.730	2.377	158.700	2.524	158.590	1.540	158.540	0.887 *
21	158.740	3.716	158.750	3.334 *	158.730	2.354	158.700	2.502	158.580	1.495	158.530	0.650
22	158.740	3.762	158.740	2.939	158.730	2.352	158.700	2.469	158.580	1.227 *	158.530	0.648
23	158.740	3.617	158.750	3.551	158.740	2.812	158.700	2.449	158.570	1.279	158.780	3.820 #
24	158.740	3.616	158.780	4.217	158.730	2.766	158.700	2.432	158.560	1.217	158.690	2.467 #
25	158.750	3.334 *	158.780	4.377	158.720	2.883 *	158.700	2.602 *	158.560	1.129	158.660	2.084 #
26	158.740	3.658	158.780	3.820 *	158.720	2.691	158.700	2.462	158.550	0.886	158.640	1.847 #
27	158.740	3.723	158.780	4.298	158.720	2.731	158.700	2.360	158.550	0.882	158.620	1.626 *
28	158.740	3.647	158.770	3.654 *	158.720	2.714	158.680	2.384	158.550	0.877	158.560	1.290
29	158.750	3.830	158.760	3.844			158.680	2.335 *	158.550	0.967 *	158.540	0.887 #
30	158.750	3.750	158.760	3.701			158.680	2.335 *	158.540	0.887 *	158.540	0.887 #
31	158.750	3.334 *	158.760	3.762			158.680	2.335			158.540	1.110
Ten-Daily Mean												
I Ten-Daily	158.726	2.835	158.736	3.402	158.749	3.246	158.707	2.564	158.643	2.054	158.535	0.818
II Ten-Daily	158.736	3.242	158.742	3.374	158.739	2.722	158.703	2.486	158.596	1.559	158.535	0.818
III Ten-Daily	158.744	3.635	158.765	3.772	158.726	2.663	158.693	2.424	158.559	1.085	158.603	1.574
Monthly												
Min.	158.700	2.021	158.710	2.682	158.720	2.352	158.680	2.270	158.540	0.877	158.530	0.648
Max.	158.760	3.944	158.780	4.377	158.760	3.871	158.720	2.883	158.670	2.225	158.780	3.820
Mean	158.735	3.250	158.748	3.524	158.739	2.892	158.701	2.489	158.599	1.566	158.559	1.086

Peak Computed Discharge = 166.7 cumecs on 20/08/2017 Corres. Water Level :160.000 m

Lowest Computed Discharge = 0.811 cumecs on 06/05/2018 Corres. Water Level :158.530 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

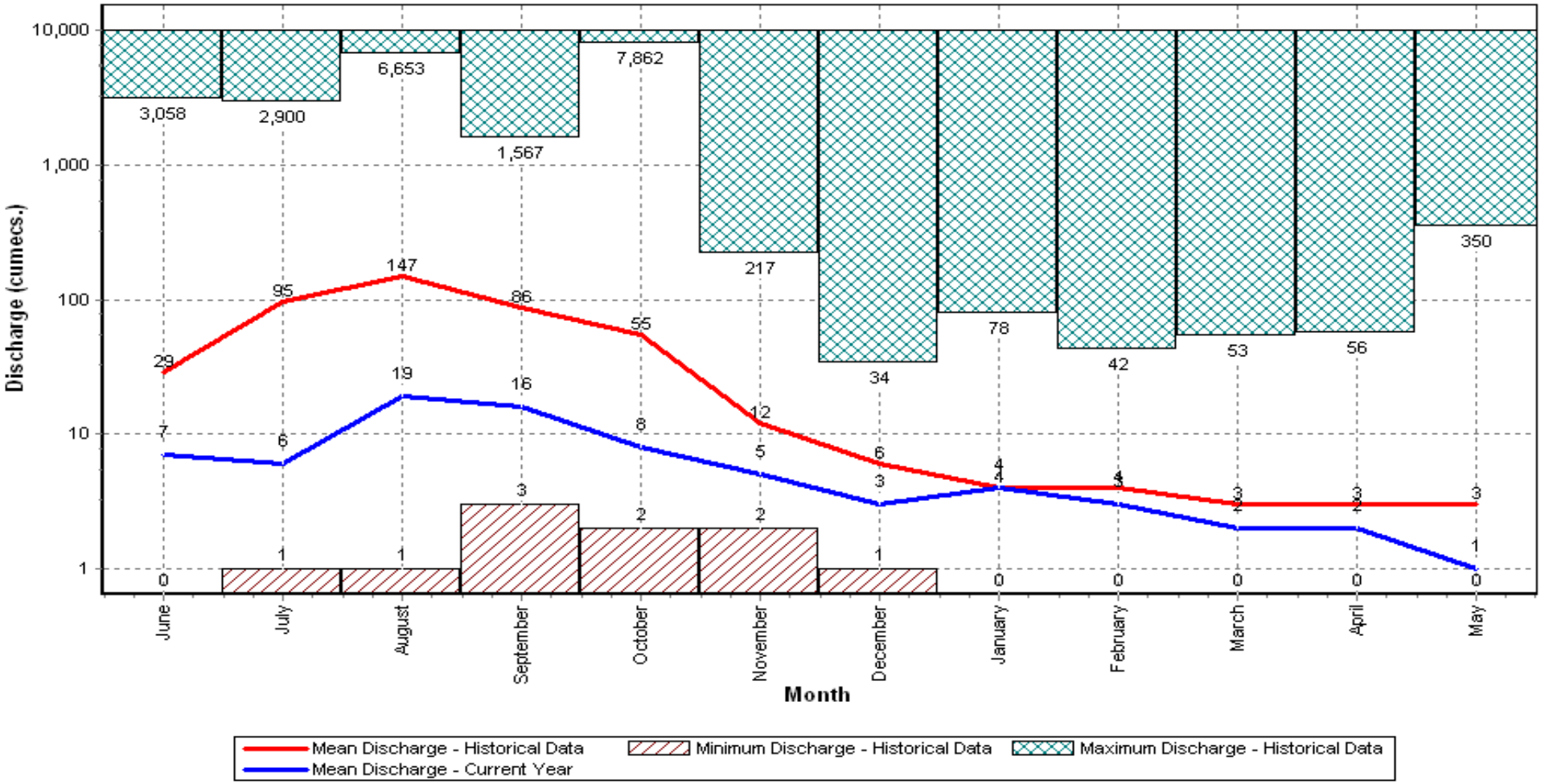
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : BHATPALLI (AGH10L0) | **Data considered : 1987-2018** | **Division : Wainganga Div., Nagpur**

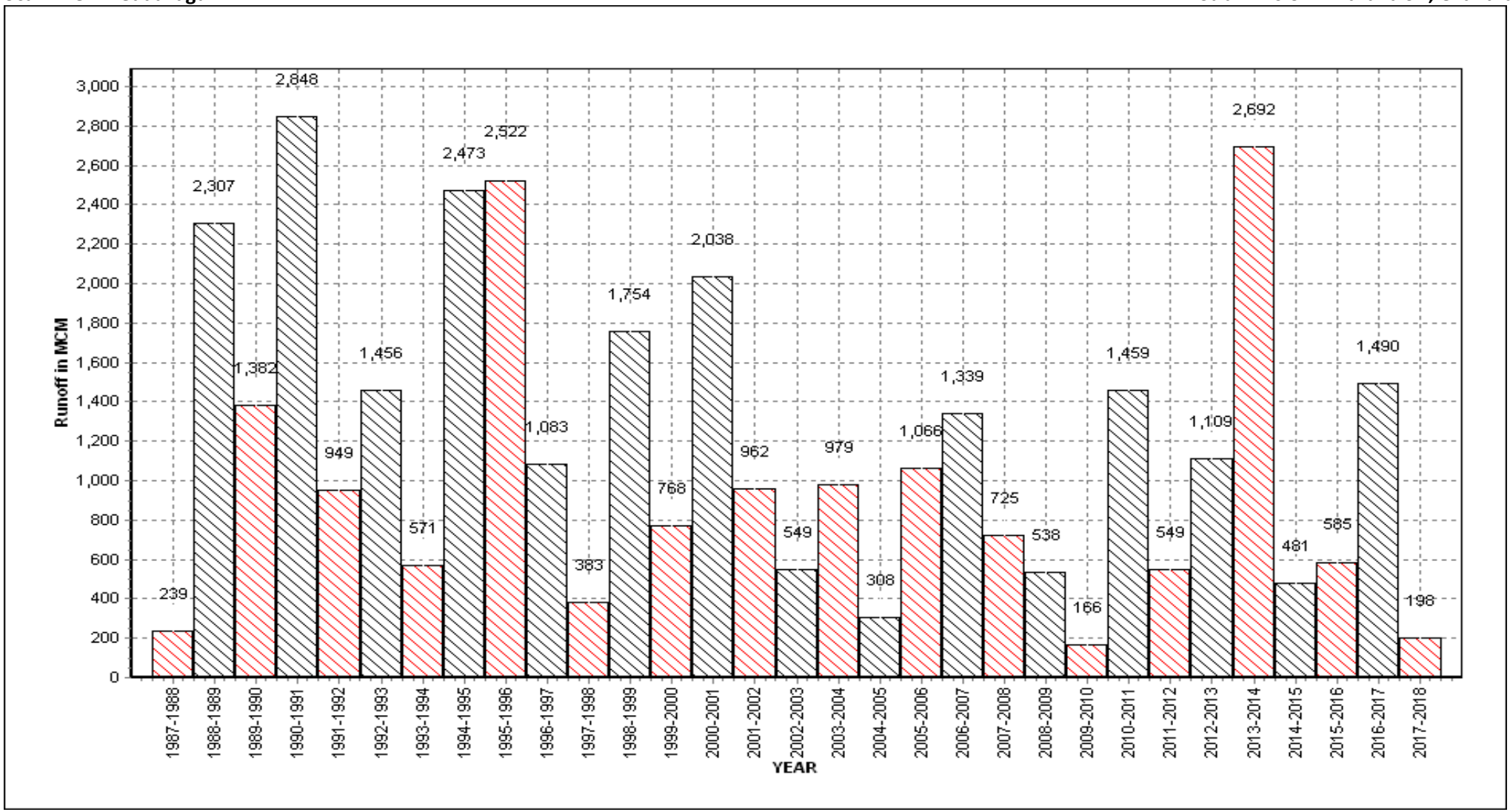
Local River : Peddavagu | **Sub-Division : Wardha SD, Chandrapur**



Annual Runoff Values for the period: 1987 - 2018

Station Name : BHATPALLI (AGH10L0) **Division : Wainganga Div., Nagpur**

Local River : Peddavagu **Sub-Division : Wardha SD, Chandrapur**

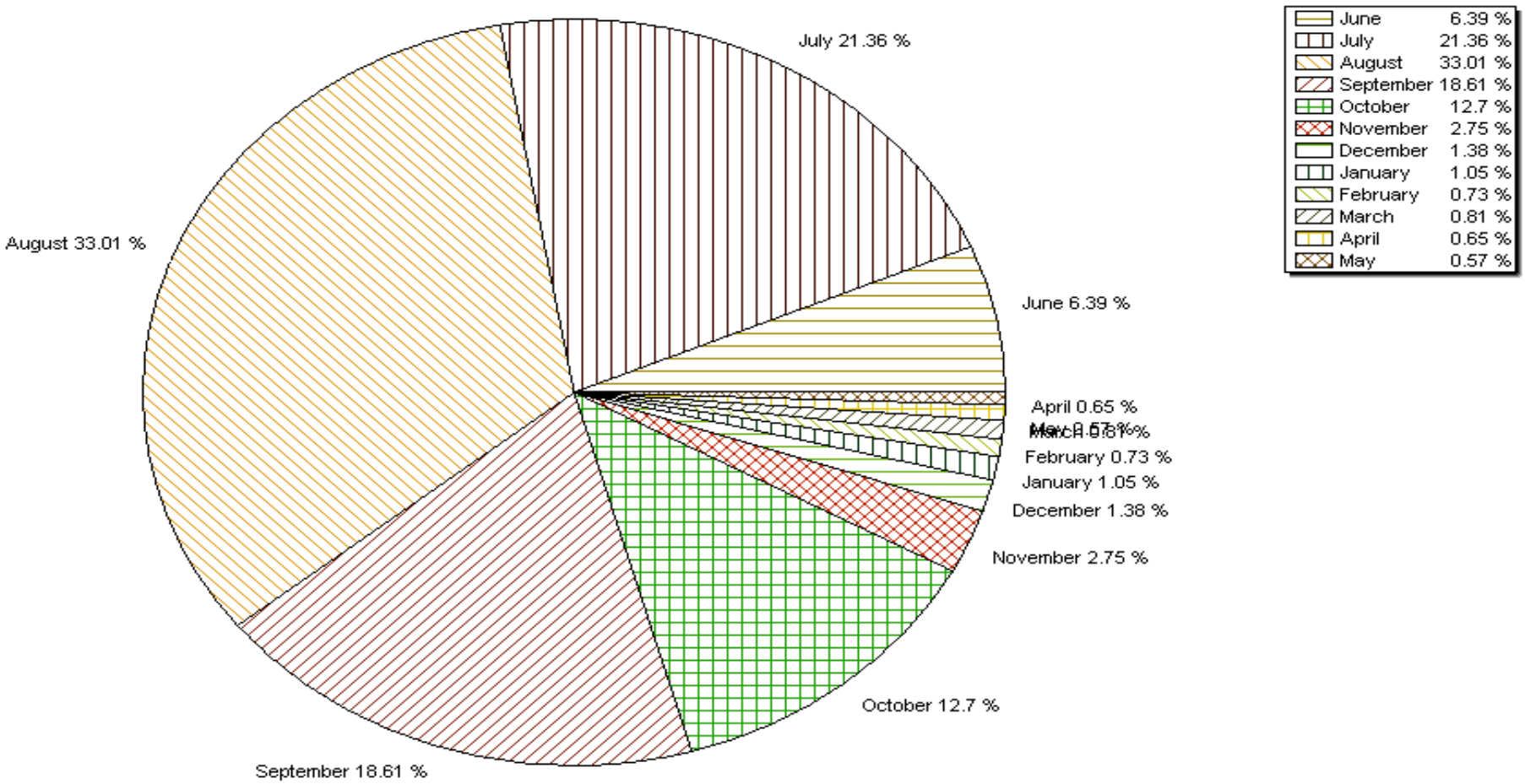


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1987-2017

Station Name : BHATPALLI (AGH10L0) **Division : Wainganga Div., Nagpur**

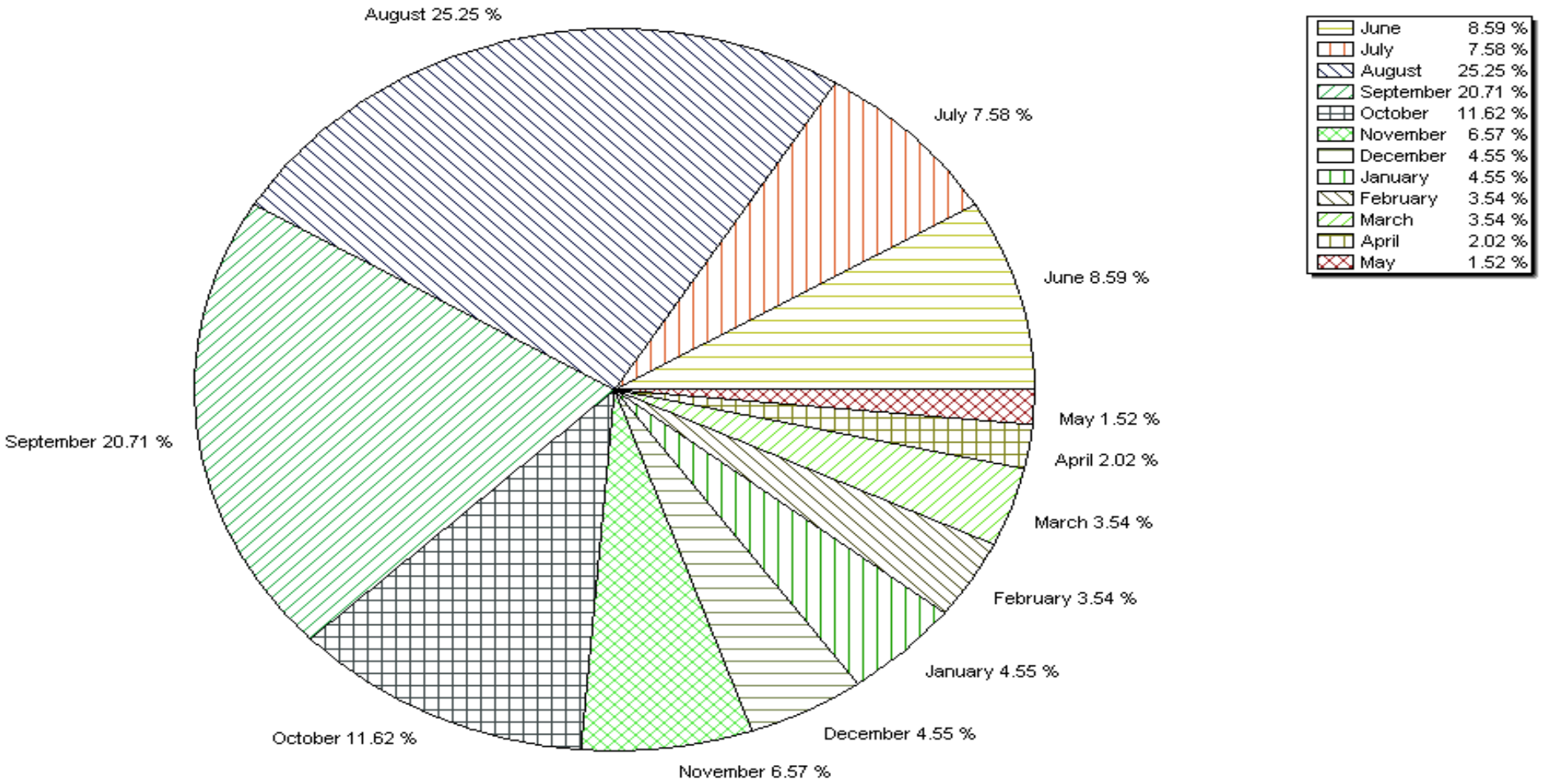
Local River : Peddavagu **Sub-Division : Wardha SD, Chandrapur**



Monthly Runoff for the Year : 2017-2018

Station Name : BHATPALLI (AGH10L0) **Division : Wainganga Div., Nagpur**

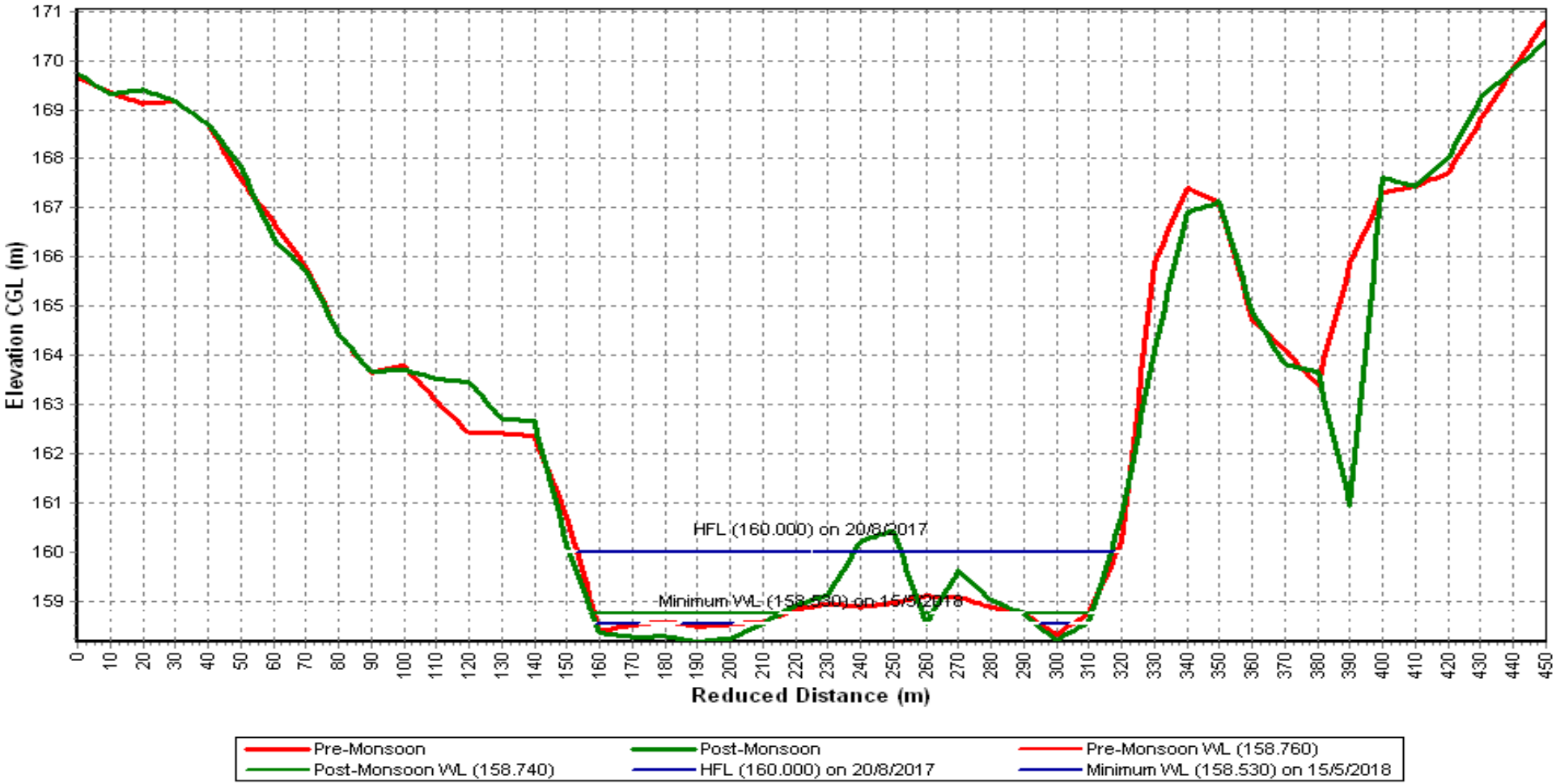
Local River : Peddavagu **Sub-Division : Wardha SD, Chandrapur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : BHATPALLI (AGH10L0) **Division : Wainganga Div., Nagpur**

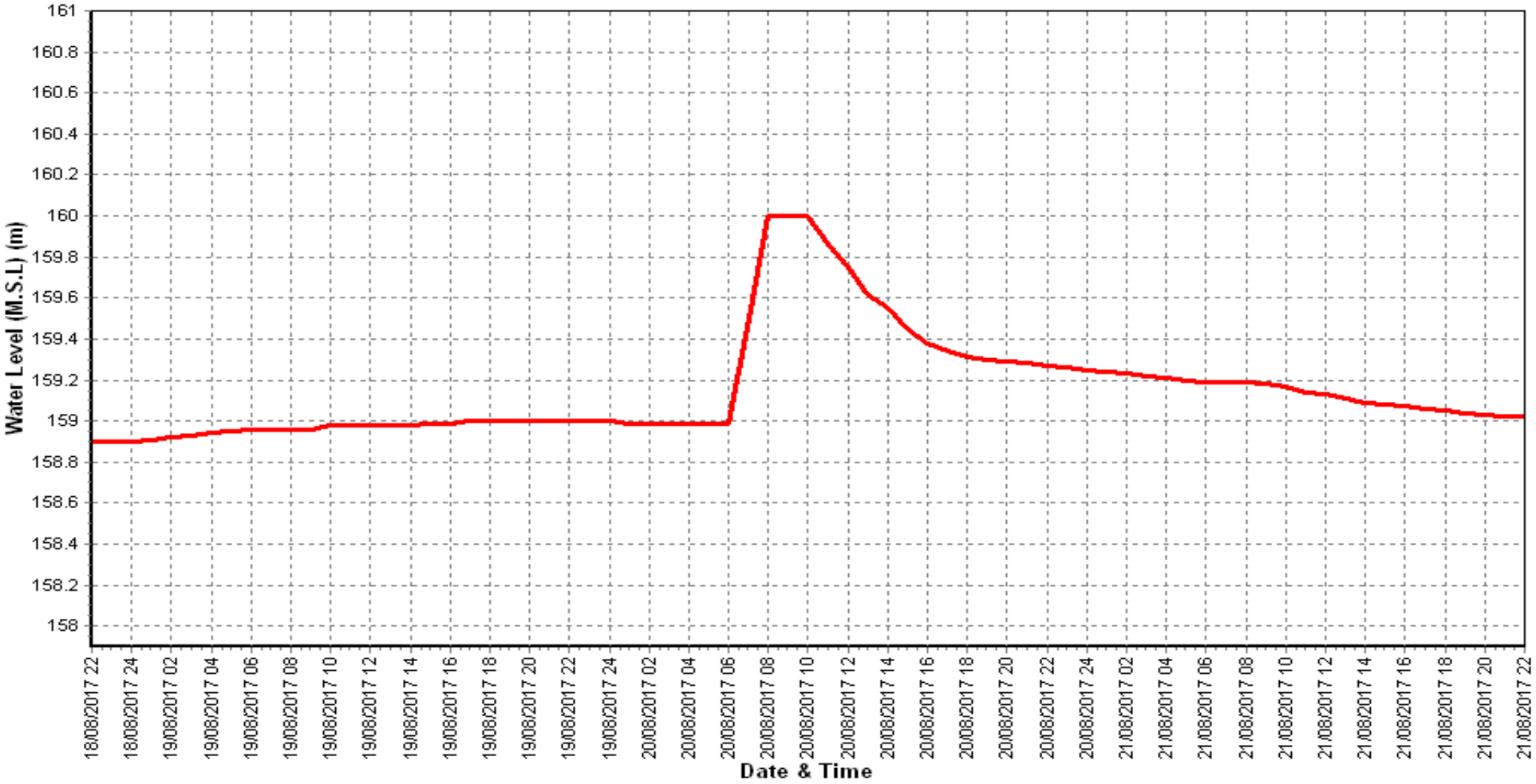
Local River : Peddavagu **Sub-Division : Wardha SD, Chandrapur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : BHATPALLI (AGH10L0) **Division : Wainganga Div., Nagpur**

Local River : Peddavagu **Sub-Division : Wardha SD, Chandrapur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**SAKMUR**	**Code**	:	**AGH30B6**
State	:	Maharashtra	District		Chandrapur
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:	-	Local River	:	Wardha
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Wardha SD, Chandrapur
Drainage Area	:	47500 Sq. Km.	Bank	:	Left
Latitude	:	19°33'41"	Longitude	:	79°36'48"
Zero of Gauge (m)	:	145.71 (m.s.l) 143 (m.s.l) 148.5 (m.s.l)	23.06.1964 16.06.2003 21.01.2006	-	15.06.2003 20.01.2006
		Opening Date	Closing Date		
Gauge	:	23.06.1964	**HFL During 2017-18**	:	**153.400 Meter**
			Corres.Discharge	:	**1043 Cumecs (Estimated)**
Discharge	:	01.02.1968	**Date & Time of**	:	**20.07.2017**
			Occurance	:	**19.00 Hrs.**
Sediment	:	01.06.2014			
Water Quality	:	01.06.2014			

HFL Recorded so far in m : 161.42 03/08/2013
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1968-1969	4385	152.810	05.08.1968	0.000	146.120	04.05.1969
1969-1970	7213	154.405	08.09.1969	0.000	146.090	01.06.1969
1970-1971	15204	158.020	21.08.1970	1.396	146.215	03.06.1970
1971-1972	4950	152.933	25.06.1971	0.100	145.960	31.05.1972
1972-1973	5225	152.645	29.06.1972	0.000	145.905	19.06.1972
1973-1974	8941	155.390	11.07.1973	0.015	145.765	02.06.1973
1974-1975	4900	153.380	13.08.1974	0.200	145.760	17.05.1975
1975-1976	10691	156.170	06.09.1975	1.300	145.845	06.06.1975
1976-1977	13514	157.380	23.07.1976	1.400	145.995	08.06.1976
1977-1978	10000	155.990	04.09.1977	1.500	146.035	29.05.1978
1978-1979	13380	156.490	14.07.1978	3.820	146.100	14.05.1979
1979-1980	13170	157.540	07.08.1979	1.000	146.270	29.05.1980
1980-1981	9285	156.138	22.08.1980	1.000	146.265	03.06.1980
1981-1982	11254	157.295	11.08.1981	1.500	146.060	06.06.1981
1982-1983	2650	151.870	25.07.1982	1.800	145.970	31.05.1983
1983-1984	17350	158.310	14.08.1983	0.500	146.210	31.05.1984

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1984-1985	2355	150.455	20.08.1984	0.200	146.100	20.05.1985
1985-1986	5260	153.060	28.06.1985	0.200	146.090	02.06.1985
1986-1987	21040	159.960	14.08.1986	1.000	146.160	01.06.1986
1987-1988	1094	149.535	22.08.1987	0.500	146.180	31.05.1988
1988-1989	8904	156.205	04.10.1988	0.500	146.180	01.06.1988
1989-1990	7528	155.930	02.09.1989	2.828	146.475	05.06.1989
1990-1991	16000	158.330	18.08.1990	5.700	146.420	31.05.1991
1991-1992	7597	155.290	17.08.1991	1.170	146.130	26.05.1992
1992-1993	11761	156.560	23.08.1992	3.800	146.300	27.05.1993
1993-1994	5882	152.690	31.07.1993	0.221	146.130	31.05.1994
1994-1995	15027	157.920	14.07.1994	0.385	146.130	02.06.1994
1995-1996	13226	157.330	03.09.1995	3.500	146.260	14.05.1996
1996-1997	2931	151.670	29.08.1996	1.950	146.280	31.05.1997
1997-1998	5033	153.005	29.08.1997	1.240	146.220	06.06.1997
1998-1999	4072	152.230	04.07.1998	3.840	146.240	17.05.1999
1999-2000	11004	154.810	12.08.1999	2.550	146.310	05.05.2000
2000-2001	21518	157.860	21.07.2000	5.025	146.355	30.05.2001
2001-2002	16006	156.320	16.06.2001	0.000		27.01.2002
2002-2003	8123	157.160	26.08.2002	0.000		02.06.2002
2003-2004	8711	152.550	24.08.2003	1.303	146.250	12.06.2003
2004-2005	2510	150.410	07.08.2004	0.000	145.490	30.05.2005
2005-2006	9375	154.850	30.07.2005	3.278	145.410	20.06.2005
2006-2007	14335	161.950	08.08.2006	1.989	150.150	28.05.2007
2007-2008	6720	157.920	08.09.2007	1.251	150.060	30.05.2008
2008-2009	4662	157.470	06.08.2008	0.540	149.830	31.05.2009
2009-2010	754.8	152.865	04.09.2009	0.015	149.900	21.04.2010
2010-2011	10662	158.600	08.08.2010	0.000	149.740	20.06.2010
2011-2012	5500	156.190	03.09.2011	0.233	149.700	31.05.2012
2012-2013	16621	158.340	07.09.2012	0.000	150.070	31.05.2013
2013-2014	22144	161.300	03.08.2013	0.000	150.080	07.06.2013
2014-2015	7780	156.950	08.09.2014	1.151	150.000	15.05.2015
2015-2016	12288	158.160	18.09.2015	0.000	149.840	17.04.2016
2016-2017	8080	158.290	13.07.2016	0.000	149.810	04.05.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at SAKMUR in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1967-1968**		335	335
2	**1968-1969**	6494	280	6774
3	**1969-1970**	10148	324	10472
4	**1970-1971**	22181	513	22694
5	**1971-1972**	3730	164	3893
6	**1972-1973**	4537	107	4644
7	**1973-1974**	18227	1037	19264
8	**1974-1975**	4705	509	5214
9	**1975-1976**	15708	755	16463
10	**1976-1977**	15816	462	16278
11	**1977-1978**	11592	725	12317
12	**1978-1979**	16346	1034	17380
13	**1979-1980**	16170	517	16687
14	**1980-1981**	14063	451	14514
15	**1981-1982**	17798	938	18737
16	**1982-1983**	4647	317	4964
17	**1983-1984**	23584	903	24487
18	**1984-1985**	3421	161	3583
19	**1985-1986**	6507	368	6876
20	**1986-1987**	18547	424	18971
21	**1987-1988**	2823	328	3151
22	**1988-1989**	24265	646	24912
23	**1989-1990**	11385	367	11752
24	**1990-1991**	29157	1043	30200
25	**1991-1992**	6057	197	6254
26	**1992-1993**	14046	566	14612
27	**1993-1994**	4837	383	5221
28	**1994-1995**	21501	786	22288
29	**1995-1996**	11789	762	12552
30	**1996-1997**	5034	359	5393
31	**1997-1998**	3023	1141	4164
32	**1998-1999**	9805	897	10702
33	**1999-2000**	14384	451	14835
34	**2000-2001**	13159	288	13447
35	**2001-2002**	14525	116	14641
36	**2002-2003**	10162	320	10482
37	**2003-2004**	9743	325	10068
38	**2004-2005**	1217	322	1538
39	**2005-2006**	12641	510	13150
40	**2006-2007**	14427	775	15202
41	**2007-2008**	9516	591	10107
42	**2008-2009**	3536	115	3651
43	**2009-2010**	1032	78	1109
44	**2010-2011**	18633	667	19300
45	**2011-2012**	8209	278	8487
46	**2012-2013**	13363	435	13798
47	**2013-2014**	36182	929	37111
48	**2014-2015**	6074	413	6486
49	**2015-2016**	6930	255	7184
50	**2016-2017**			
51	**2017-2018**	2650	178	2828
Average		11721	497	11983

Stage-Discharge Data for the period 2017 - 2018

Station Name : SAKMUR (AGH30B6) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha SD, Chandrapur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	150.160	3.985	151.705	337.9	151.120	167.5	152.348	646.8	151.160	188.7 *	150.490	85.51
2	150.140	3.838	151.480	231.9 *	151.050	164.3	152.230	492.6 *	151.100	176.5 *	150.450	82.97
3	150.120	3.682	151.655	336.8	151.000	156.1	151.820	356.4 *	151.010	123.9	150.440	82.46
4	150.140	4.271 *	151.440	208.5	150.920	156.3	151.600	293.7 #	150.930	137.3	150.430	70.60 *
5	150.150	4.129	151.330	180.8	150.848	140.4	151.510	296.8	150.850	123.6	150.410	68.26 *
6	150.130	3.798	151.208	165.8	150.810	123.8 *	151.430	202.1	150.780	116.8	150.390	79.84
7	150.110	3.485	151.170	157.4	150.760	126.9	151.368	195.6	150.730	104.8	150.340	21.47
8	150.110	3.484	151.090	148.8	150.720	121.0	151.290	176.9	150.680	103.7 *	150.310	19.93
9	150.120	3.365 *	151.020	120.6 *	150.710	119.3	151.153	168.6	150.650	102.2	150.300	19.41
10	150.150	4.366	150.990	119.6	150.860	145.6	151.070	170.5 *	151.270	174.4	150.280	17.16
11	150.150	4.759 *	151.138	152.3	151.018	161.9	151.100	159.9	151.348	191.5	150.250	15.56
12	150.130	3.886	151.120	143.9	151.238	196.5	151.258	175.0	151.310	188.1	150.240	15.03 *
13	150.220	8.809 #	151.000	120.1	150.780	119.0 *	151.220	170.2	151.480	228.8	150.230	15.29
14	151.720	332.4	150.820	99.74	150.668	105.9	151.220	167.4	151.285	182.7	150.220	14.56
15	151.853	359.7	151.140	158.9	150.600	92.28 *	151.960	400.1 #	151.110	178.5 *	150.210	13.75
16	151.590	225.3	151.130	144.4 *	150.628	97.30	151.723	393.9	151.040	162.7	150.190	12.35
17	151.450	188.3	151.030	122.8	150.550	92.30	151.840	362.5 *	151.228	178.0	150.180	12.14
18	151.350	197.3 *	151.040	142.9	150.480	80.31	151.828	439.6	151.230	174.5	150.170	11.54
19	151.605	224.8	151.150	168.8	150.570	95.91	151.760	402.3	151.190	195.0 *	150.160	8.276 *
20	151.593	225.4	152.713	745.0	150.770	117.4 *	151.815	402.3	151.090	170.4	150.150	7.591 #
21	151.353	173.5	152.713	605.7	151.360	233.1 #	151.980	406.5 #	151.020	153.2	150.130	6.324 #
22	151.135	159.7	152.040	408.5 #	151.280	162.2	151.773	414.1	151.140	184.6 *	150.120	5.740 #
23	151.148	159.8	151.630	274.9 *	151.340	228.4 #	151.730	395.2	151.090	175.2	150.100	4.669 #
24	151.388	174.1	151.500	237.5 #	151.328	180.3	151.930	390.5 *	150.883	130.4	150.090	4.181 #
25	151.420	215.6 *	151.345	165.0	151.450	254.9 *	151.773	411.3	150.790	122.4	150.030	1.881 #
26	151.820	333.9 *	151.210	156.1	151.675	361.7	151.563	301.1	150.710	109.7	150.070	3.297 *
27	151.463	188.0	151.195	158.3	151.700	321.3 *	151.375	199.9	150.688	107.3	150.060	2.900 #
28	151.340	171.8	151.160	151.4	151.993	498.7	151.298	182.2	150.650	105.5	150.050	2.243
29	151.650	327.9	151.130	145.8	151.780	396.8	151.258	172.4	150.600	92.28 *	150.040	1.991
30	152.080	449.2	151.130	144.4 *	151.808	407.0	151.220	201.5 *	150.570	97.47	150.040	1.994
31			151.200	160.4 #	152.078	552.2			150.530	91.16		
Ten-Daily Mean												
I Ten-Daily	150.133	3.840	151.309	200.8	150.880	142.1	151.582	300.0	150.916	135.2	150.384	54.76
II Ten-Daily	151.166	177.1	151.228	199.9	150.730	115.9	151.572	307.3	151.231	185.0	150.200	12.61
III Ten-Daily	151.479	235.4	151.478	237.1	151.617	327.0	151.590	307.5	150.788	124.5	150.073	3.522
Monthly												
Min.	150.110	3.365	150.820	99.74	150.480	80.31	151.070	159.9	150.530	91.16	150.030	1.881
Max.	152.080	449.2	152.712	745.0	152.077	552.2	152.348	646.8	151.480	228.8	150.490	85.51
Mean	150.926	138.8	151.343	213.4	151.093	199.2	151.581	304.9	150.972	147.5	150.219	23.63

Annual Runoff in MCM = 2828 Annual Runoff in mm = 60

Peak Observed Discharge = 745.0 cumecs on 20/07/2017 Corres. Water Level :152.7125 m

Lowest Observed Discharge = 0.000 cumecs on 21/04/2018 Corres. Water Level :149.690 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : SAKMUR (AGH30B6) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha SD, Chandrapur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	150.030	2.392 *	150.630	36.53	150.160	7.082	150.060	4.071	149.900	0.975 *		0.000
2	150.030	2.392 #	150.660	40.44	150.150	6.881	150.040	3.341 *	149.880	0.873		0.000
3	150.020	2.092 *	150.620	34.66	150.150	6.874	150.040	4.008	149.870	0.857		0.000
4	150.020	1.890	150.600	31.65	150.140	6.078 *	150.030	3.117 *	149.860	0.581 #		0.000
5	150.010	1.749	150.500	25.63	150.140	6.045	150.020	2.814	149.840	0.426 #		0.000
6	150.010	1.731	150.480	24.09	150.100	3.947	150.000	2.494	149.830	0.359 #		0.000
7	150.000	1.559 #	150.470	23.86 *	150.080	3.679	149.980	2.009	149.810	0.243 #		0.000
8	149.980	1.115 #	150.460	22.49	150.130	4.847	149.970	1.752	149.790	0.153 *		0.000
9	149.980	1.115 #	150.400	19.79	150.140	5.264	149.950	1.576	149.770	0.085 #		0.000
10	149.980	1.115 *	150.380	18.17	150.120	4.565	149.940	1.464	149.750	0.039 #		0.000
11	149.960	0.753 #	150.380	18.23	150.110	5.160 *	149.940	1.489 *	149.740	0.023 #		0.000
12	149.950	0.652	150.370	17.46	150.100	3.967	149.930	1.458	149.740	0.023 #		0.000
13	150.300	20.26	150.390	18.85	150.080	3.549	149.940	1.423	149.730	0.012 #		0.000
14	150.380	25.86	150.410	19.87 *	150.070	3.319	149.900	0.947	149.730	0.012 *		0.000
15	150.430	29.11	150.400	19.55	150.060	2.978	149.890	0.848	149.720	0.005 *		0.000
16	150.350	24.95	150.410	19.08	150.100	4.035	150.100	5.351	149.720	0.005 #		0.000
17	150.320	22.72 *	150.420	21.18	150.140	5.252	150.130	6.707	149.710	0.001 #		0.000
18	150.300	19.93	150.400	19.55	150.170	7.084 *	150.150	6.404 *	149.700	0.001 #		0.000
19	150.330	23.93	150.380	17.83	150.180	8.725	150.130	6.410	149.690	0.001 #		0.000
20	150.310	22.23	150.300	12.77	150.300	15.42	150.080	4.943	149.690	0.001 #		0.000
21	150.280	20.41	150.280	12.64 *	150.280	14.29	150.070	4.592	149.690	0.000		0.000
22	150.250	18.70	150.250	11.79	150.260	11.52	150.060	4.155	149.680	0.000		0.000
23	150.220	16.20	150.230	11.11	150.200	8.842	150.030	2.970	149.670	0.000		0.000
24	150.200	11.38 *	150.220	11.05	150.180	8.115	150.000	2.817	149.660	0.000		0.000
25	150.220	12.96 *	150.210	10.17	150.170	7.084 *	149.990	2.310 *	149.650	0.000	150.000	2.704
26	150.230	15.84	150.200	9.090 *	150.150	6.692	149.970	1.957 #	149.640	0.000	150.060	3.066
27	150.600	34.16	150.190	9.074	150.100	5.195	149.950	1.801	149.600	0.000	150.000	2.499 *
28	150.640	38.45	150.190	8.693 *	150.080	4.834	149.940	1.657	149.590	0.000	149.930	1.348 #
29	150.600	33.30	150.180	8.544			149.940	1.489 *	149.590	0.000	150.080	3.448
30	150.580	33.07	150.180	8.539			149.930	1.348 *	149.580	0.000	150.250	10.75
31	150.630	36.57 *	150.170	6.868			149.910	0.991			150.180	8.230
Ten-Daily Mean												
I Ten-Daily	150.006	1.715	150.520	27.73	150.131	5.526	150.003	2.665	149.830	0.459		0.000
II Ten-Daily	150.263	19.04	150.386	18.44	150.131	5.949	150.019	3.598	149.717	0.008		0.000
III Ten-Daily	150.405	24.64	150.209	9.779	150.177	8.322	149.981	2.371	149.635	0.000	150.071	2.913
Monthly												
Min.	149.950	0.652	150.170	6.868	150.060	2.978	149.890	0.848	149.580	0.000	149.930	0.000
Max.	150.640	38.45	150.660	40.44	150.300	15.42	150.150	6.707	149.900	0.975	150.250	10.75
Mean	150.230	15.44	150.366	18.36	150.144	6.476	150.000	2.862	149.727	0.156	150.071	1.034

Peak Computed Discharge = 492.6 cumecs on 02/09/2017 Corres. Water Level :152.230 m

Lowest Computed Discharge = 0.005 cumecs on 15/04/2018 Corres. Water Level :149.720 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

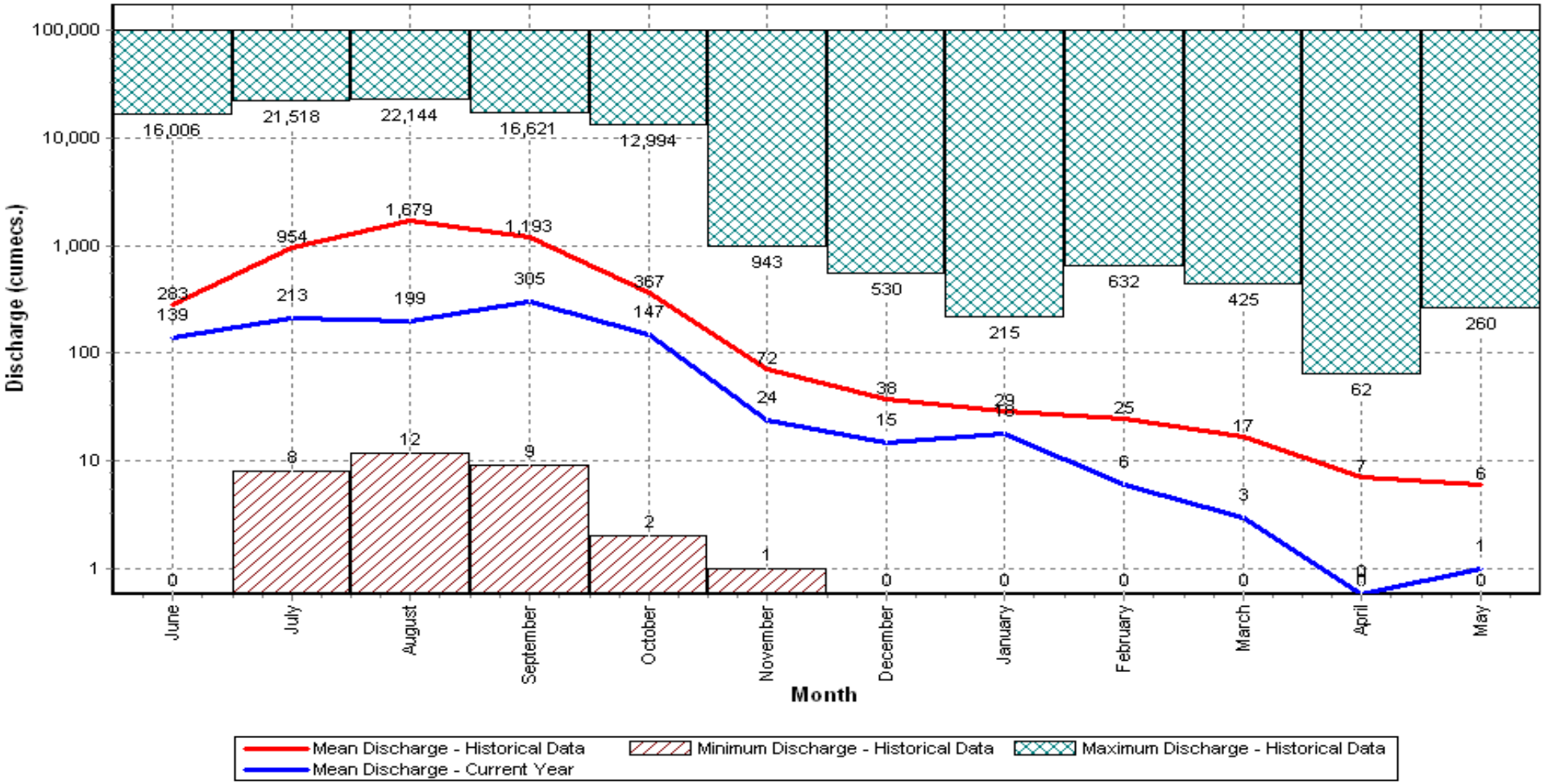
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : SAKMUR (AGH30B6) | **Data considered : 1968-2018** | **Division : Wainganga Div., Nagpur**

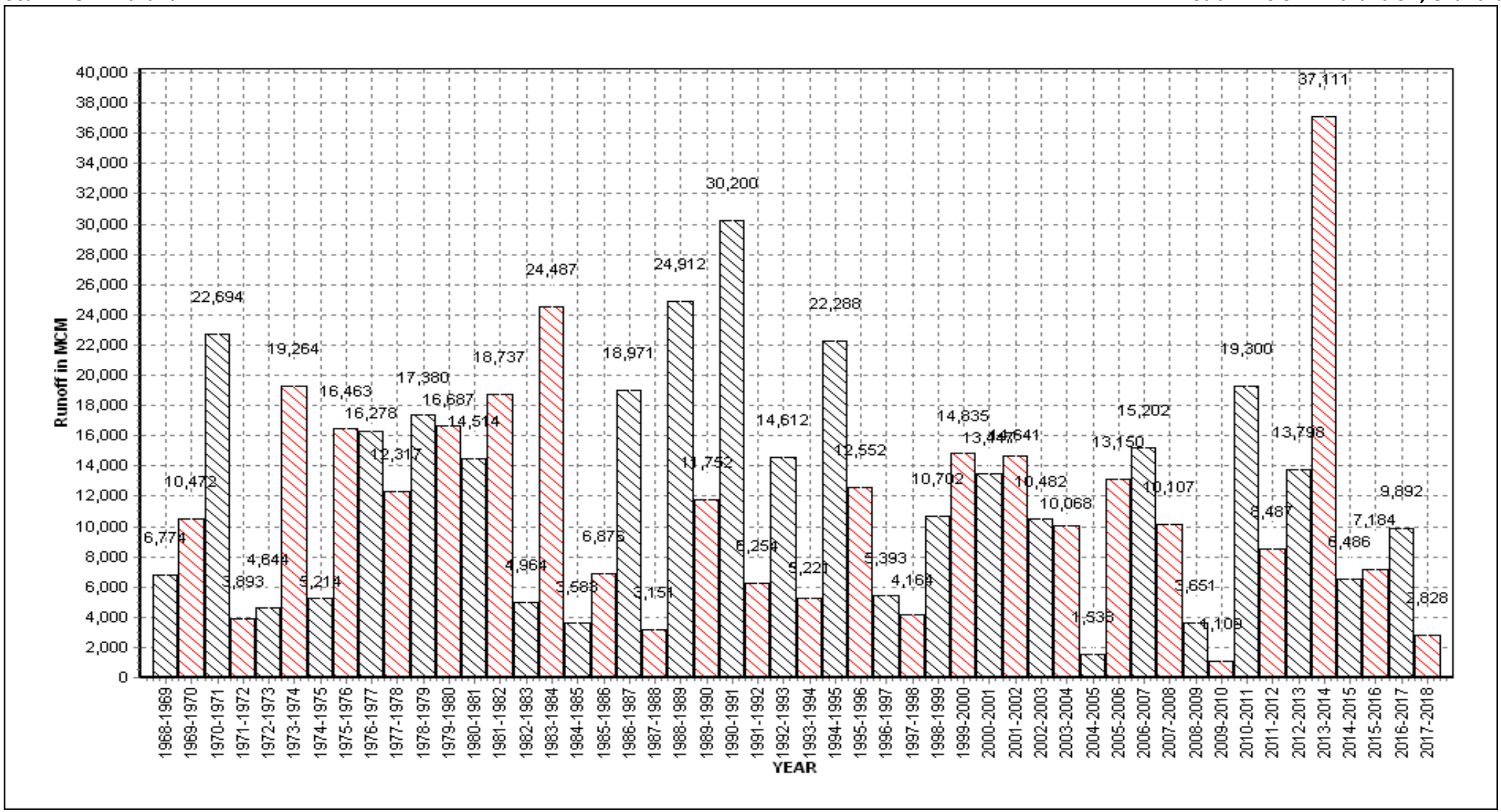
Local River : Wardha | **Sub-Division : Wardha SD, Chandrapur**



Annual Runoff Values for the period: 1968 - 2018

Station Name : SAKMUR (AGH30B6) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha SD, Chandrapur**

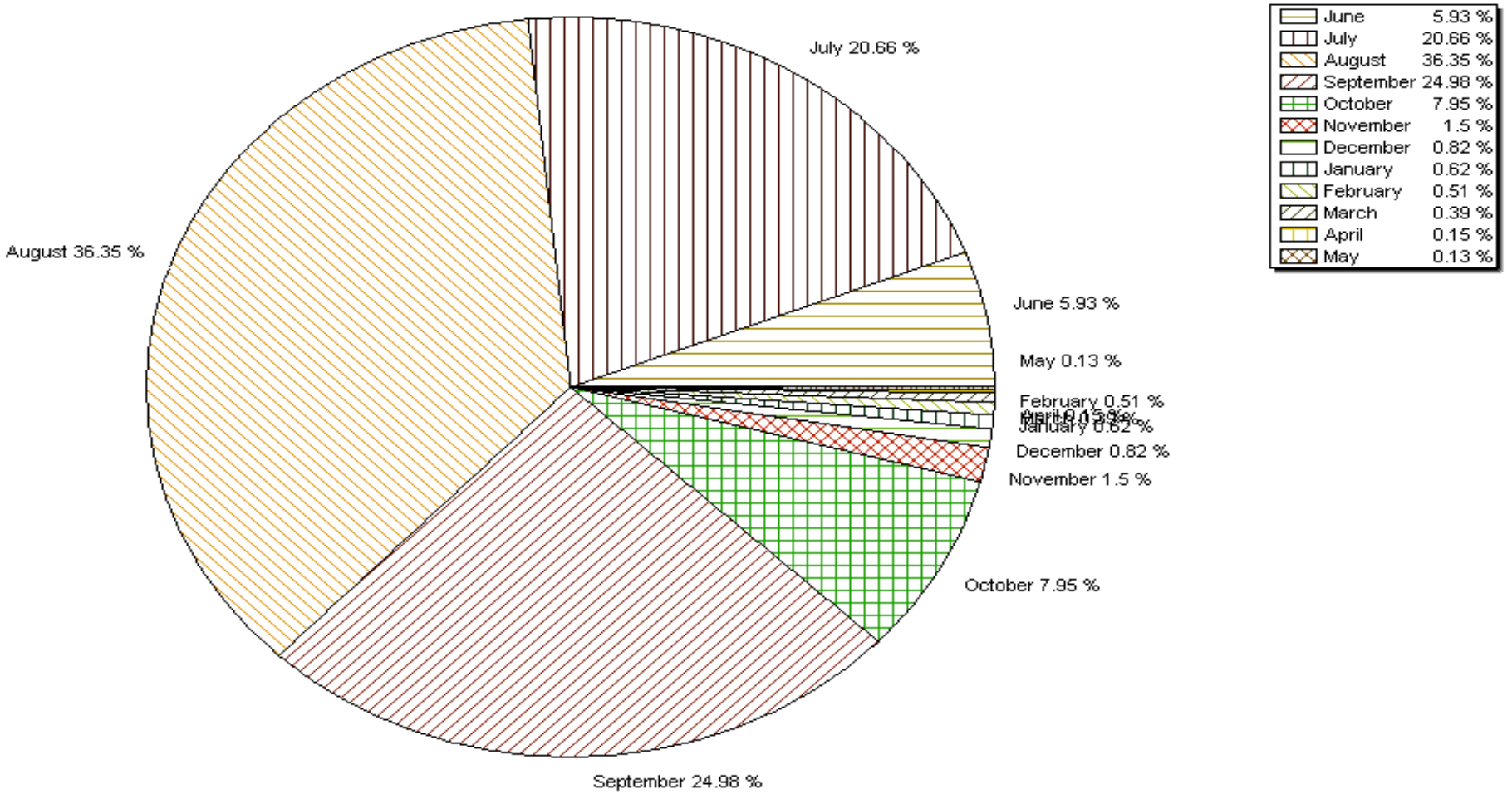


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1968-2017

Station Name : SAKMUR (AGH30B6) **Division : Wainganga Div., Nagpur**

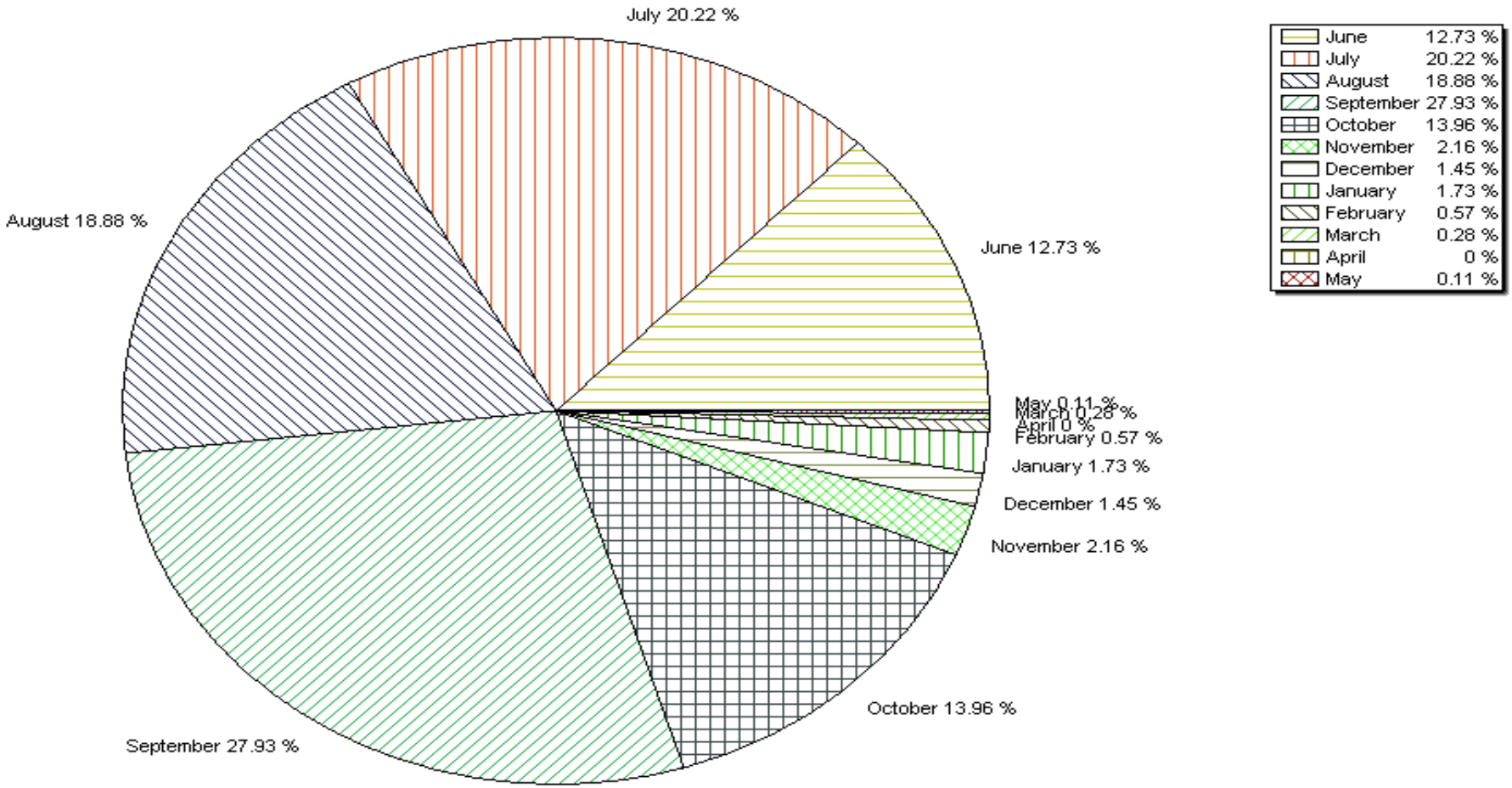
Local River : Wardha **Sub-Division : Wardha SD, Chandrapur**



Monthly Runoff for the Year : 2017-2018

Station Name : SAKMUR (AGH30B6) **Division : Wainganga Div., Nagpur**

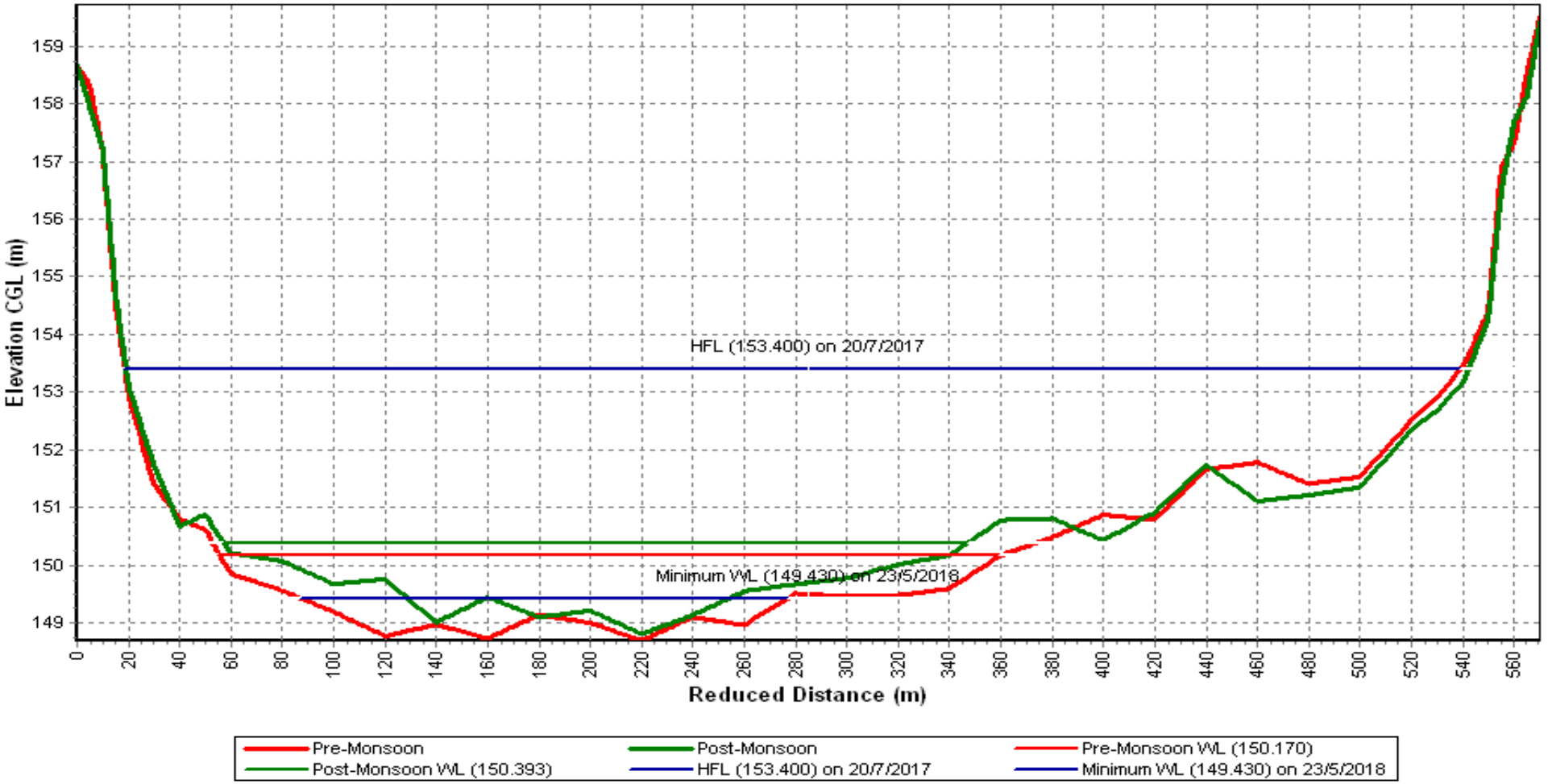
Local River : Wardha **Sub-Division : Wardha SD, Chandrapur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : SAKMUR (AGH30B6) **Division : Wainganga Div., Nagpur**

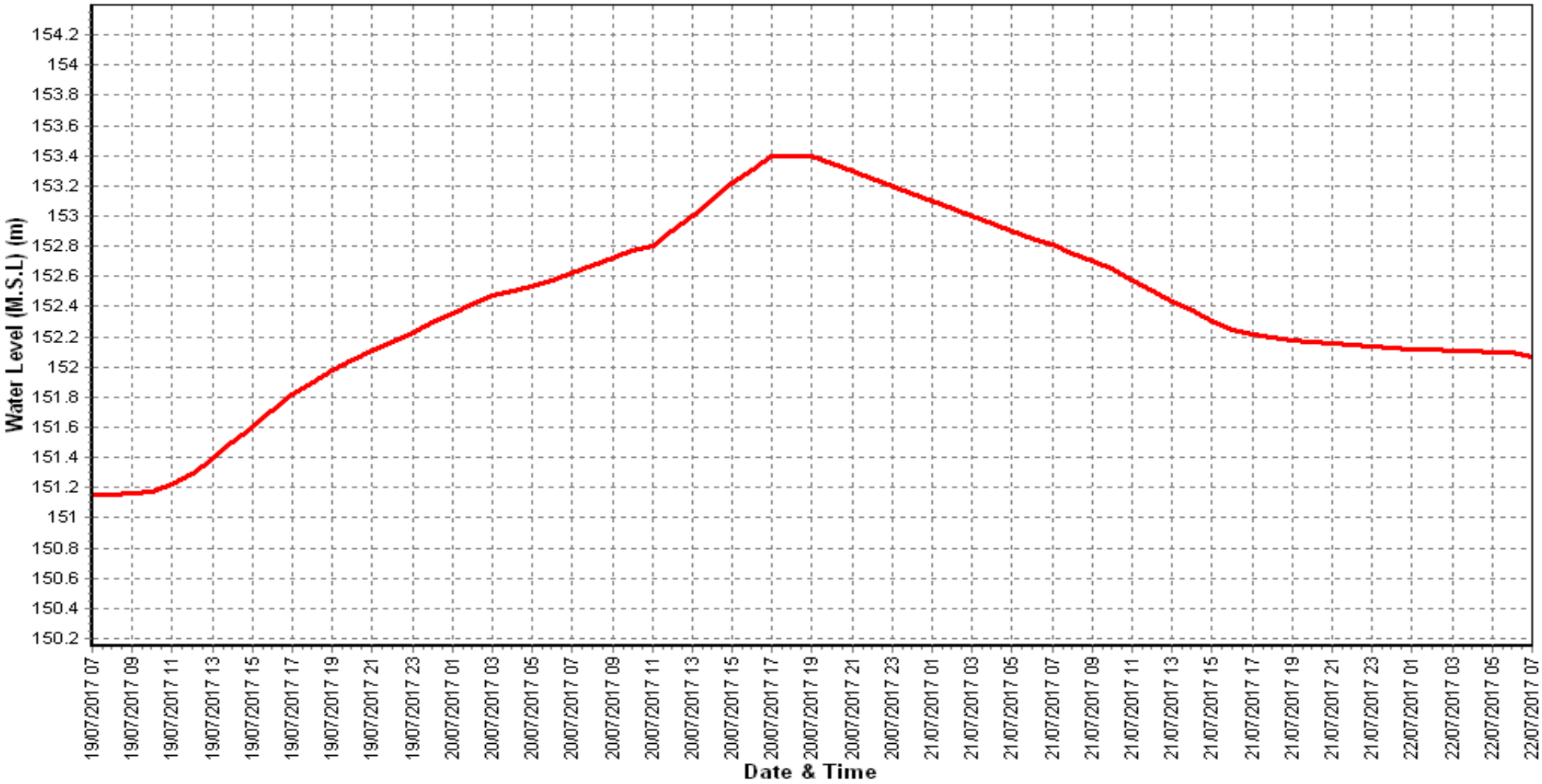
Local River : Wardha **Sub-Division : Wardha SD, Chandrapur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : SAKMUR (AGH30B6) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha SD, Chandrapur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**BAMNI**	**Code**	:	**AGH30E2**
State	:	Maharashtra	District		Chandrapur
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:		Local River	:	Wardha
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Wardha Sub-division,Chandrapur
Drainage Area	:	46020 Sq. Km.	Bank	:	Left
Latitude	:	19°48'53"	Longitude	:	79°22'46"
Zero of Gauge (m)	:	157.38 (m.s.l) 157.97 (m.s.l)	12.01.1964 01.06.1991	-	31.05.1991
		Opening Date	Closing Date		
Gauge	:	12.01.1964	**HFL During 2017-18**	:	**162.740 Meter**
			Corres.Discharge	:	**1098 Cumecs (Estimated)**
Discharge	:	16.10.1965	**Date & Time of**	:	**20.07.2017**
			Occurance	:	**07.00 Hrs.**
Sediment	:	13.12.1965			
Water Quality	:	03.06.1966			

HFL Recorded so far in m : 176.45 14/08/1986
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1966-1967	10900	172.000	06.09.1966	0.800	157.640	13.06.1966
1967-1968	11070	170.130	26.07.1967	0.600	157.525	12.06.1967
1968-1969	4746	167.630	05.08.1968	0.900	157.650	11.06.1968
1969-1970	8485	169.750	21.09.1969	0.536	157.965	21.05.1970
1970-1971	12120	173.680	21.08.1970	0.776	157.765	02.06.1970
1971-1972	3940	166.630	24.06.1971	0.000	157.560	31.05.1972
1972-1973	5141	167.010	29.06.1972	0.003	157.535	17.06.1972
1973-1974	9610	170.290	27.08.1973	0.180	157.660	08.06.1973
1974-1975	5141	167.725	13.08.1974	0.540	157.990	27.05.1975
1975-1976	8800	171.220	06.09.1975	0.800	157.995	01.06.1975
1976-1977	13600	172.610	04.09.1976	1.160	158.220	03.06.1976
1977-1978	9841	170.588	03.09.1977	1.500	158.085	28.05.1978
1978-1979	15000	171.510	31.08.1978	3.200	158.210	13.05.1979
1979-1980	15000	172.580	07.08.1979	0.700	158.040	29.05.1980
1980-1981	10143	170.510	23.08.1980	1.000	158.055	02.06.1980
1981-1982	14600	172.805	10.08.1981	2.300	158.120	16.06.1981
1982-1983	3641	166.185	21.07.1982	1.070	158.625	13.05.1983

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1983-1984	15600	173.570	14.08.1983	0.700	158.565	13.06.1983
1984-1985	2350	164.000	20.08.1984	0.300	158.170	19.05.1985
1985-1986	4986	167.400	14.08.1985	0.700	158.505	26.04.1986
1986-1987	21400	176.320	15.08.1986	1.600	158.440	10.06.1986
1987-1988	990.0	161.775	26.08.1987	1.600	158.590	27.05.1988
1988-1989	11160	171.340	04.10.1988	1.900	158.005	17.05.1989
1989-1990	6078	170.900	20.08.1989	4.200	158.055	01.06.1989
1990-1991	10400	173.780	18.08.1990	5.580	158.140	26.05.1991
1991-1992	8205	171.140	17.08.1991	0.880	158.410	17.05.1992
1992-1993	11000	172.290	22.08.1992	0.850	158.400	08.06.1992
1993-1994	6602	168.920	31.07.1993	0.800	158.555	26.05.1994
1994-1995	14074	174.110	14.07.1994	1.019	158.570	06.06.1994
1995-1996	14096	173.270	21.10.1995	3.091	158.765	21.05.1996
1996-1997	3200	164.860	28.08.1996	0.930	158.770	02.06.1996
1997-1998	3772	167.000	29.08.1997	0.980	158.710	10.06.1997
1998-1999	3438	165.585	11.08.1998	2.741	158.840	13.05.1999
1999-2000	8175	170.392	11.08.1999	3.788	158.740	05.05.2000
2000-2001	12740	173.960	20.07.2000	1.498	158.675	28.05.2001
2001-2002	10035	171.920	16.06.2001	0.830	158.550	24.05.2002
2002-2003	11879	174.050	27.06.2002	0.687	158.820	30.05.2003
2003-2004	7539	169.700	24.08.2003	0.959	158.850	11.06.2003
2004-2005	2512	164.155	06.08.2004	0.242	158.770	29.05.2005
2005-2006	8604	173.120	29.07.2005	0.289	158.770	08.06.2005
2006-2007	13876	175.890	08.08.2006	2.005	158.860	30.05.2007
2007-2008	7867	171.110	10.08.2007	1.732	158.490	30.05.2008
2008-2009	4688	168.100	06.08.2008	0.264	158.210	30.05.2009
2009-2010	783.7	161.380	04.09.2009	0.078	158.170	18.04.2010
2010-2011	8747	172.250	08.08.2010	0.000	158.160	21.06.2010
2011-2012	5891	168.440	02.09.2011	0.000	158.770	22.05.2012
2012-2013	7650	170.995	06.09.2012	0.000	158.860	06.05.2013
2013-2014	12641	175.680	03.08.2013	0.000	158.750	02.06.2013
2014-2015	8758	169.130	08.09.2014	1.091	158.510	13.05.2015
2015-2016	10220	170.970	18.09.2015	0.906	158.470	16.05.2016
2016-2017	9727	170.820	13.07.2016	0.665	158.400	27.04.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at BAMNI in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**		159	159
2	**1966-1967**	11337	535	11872
3	**1967-1968**	7474	642	8116
4	**1968-1969**	6504	274	6778
5	**1969-1970**	9919	350	10269
6	**1970-1971**	22212	554	22766
7	**1971-1972**	3536	195	3731
8	**1972-1973**	4519	111	4631
9	**1973-1974**	17020	1046	18066
10	**1974-1975**	4757	523	5279
11	**1975-1976**	14805	857	15662
12	**1976-1977**	14663	463	15126
13	**1977-1978**	10630	705	11334
14	**1978-1979**	15043	970	16013
15	**1979-1980**	16554	434	16988
16	**1980-1981**	14081	408	14489
17	**1981-1982**	19519	1032	20551
18	**1982-1983**	4749	254	5002
19	**1983-1984**	22192	756	22948
20	**1984-1985**	3192	176	3369
21	**1985-1986**	5785	265	6050
22	**1986-1987**	16783	367	17150
23	**1987-1988**	2400	276	2676
24	**1988-1989**	27867	593	28460
25	**1989-1990**	9779	387	10167
26	**1990-1991**	23992	868	24860
27	**1991-1992**	6005	139	6144
28	**1992-1993**	13648	372	14021
29	**1993-1994**	5215	482	5697
30	**1994-1995**	22309	821	23130
31	**1995-1996**	12031	775	12806
32	**1996-1997**	4815	321	5137
33	**1997-1998**	2195	1053	3249
34	**1998-1999**	7787	867	8654
35	**1999-2000**	12306	649	12955
36	**2000-2001**	9624	255	9879
37	**2001-2002**	9621	304	9925
38	**2002-2003**	12730	305	13036
39	**2003-2004**	8646	266	8912
40	**2004-2005**	1062	215	1278
41	**2005-2006**	11407	517	11924
42	**2006-2007**	15522	621	16143
43	**2007-2008**	10844	594	11438
44	**2008-2009**	3019	148	3167
45	**2009-2010**	905	120	1025
46	**2010-2011**	16284	897	17181
47	**2011-2012**	7565	314	7879
48	**2012-2013**	10186	520	10706
49	**2013-2014**	28133	806	28938
50	**2014-2015**	5688	378	6066
51	**2015-2016**	5306	257	5563
52	**2016-2017**			
53	**2017-2018**	1158	141	1299
Average		10850	487	11128

Stage-Discharge Data for the period 2017 - 2018

Station Name : BAMNI (AGH30E2) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	158.660	9.472	159.310	82.01	159.060	39.49	160.570	349.4 #	159.150	65.30 *	158.780	23.12
2	158.650	9.101	159.520	115.0 *	159.000	36.88	160.030	216.3 *	159.090	56.64 *	158.780	22.42
3	158.650	8.583 #	159.290	82.08	158.950	36.24	159.590	127.4 *	159.050	45.84	158.780	22.85
4	158.640	7.973 *	159.220	60.28	158.900	31.92	159.470	111.9	158.980	47.09	158.730	16.79 *
5	158.580	4.531	159.215	59.58	158.860	24.99	159.365	93.21	158.950	40.12	158.720	16.00 *
6	158.600	5.172	159.120	53.14	158.830	22.39 *	159.360	91.43	158.930	37.61	158.700	14.13
7	158.600	5.300	159.080	45.72	158.800	22.81	159.225	59.41	158.900	34.89	158.700	13.96
8	158.620	6.368	159.010	37.15	158.830	24.65	159.190	54.05	158.870	29.76 *	158.710	14.65
9	158.590	5.061	158.940	33.20 *	158.870	28.21	159.120	50.72	159.110	55.57	158.710	14.29
10	158.590	5.073	158.870	31.39	158.970	41.34	159.180	62.29 *	159.400	115.4	158.710	14.44
11	158.620	6.807 *	158.850	24.23 #	159.190	54.80	159.320	86.50	159.245	62.88	158.700	13.61
12	159.345	90.74	158.840	27.13	159.050	41.38	159.190	54.06	159.470	114.7	158.690	13.71 *
13	159.455	99.45	158.810	20.87	158.940	33.20 *	159.120	50.66	159.280	84.39	158.670	10.19
14	159.935	192.0	158.840	25.09	158.850	24.23 #	159.640	166.6	159.110	56.70	158.660	9.765
15	159.415	92.61	158.850	25.97	158.890	28.08 *	159.655	170.4	159.130	62.35 *	158.610	8.112
16	159.440	111.4	158.820	21.49 *	158.840	23.30 #	159.935	205.5	159.300	88.26	158.560	5.234
17	159.220	54.26	159.070	45.17	158.820	26.90	159.910	220.7 *	159.280	83.25	158.550	5.148
18	159.450	103.1 *	158.920	34.55	158.830	28.03	159.655	172.1	159.260	83.91	158.540	5.012
19	159.490	109.9 #	159.095	52.82	158.900	36.43	159.515	119.9	159.170	68.31 *	158.520	3.871 *
20	159.290	83.47	162.630	1053	159.240	70.66 *	160.535	444.2	159.150	70.68	158.500	3.265
21	159.150	53.13	160.530	338.7 #	159.210	56.53	159.625	164.3	159.210	78.14	158.470	1.541
22	159.245	63.50	159.550	124.9	159.290	80.33	159.470	112.5	159.140	63.82 *	158.440	1.190
23	159.240	64.50	159.400	94.96 *	159.200	53.49	160.190	262.1	158.980	45.02	158.440	1.207
24	159.210	58.83	159.290	79.50	159.370	94.43	159.870	210.5 *	158.990	48.89	158.500	3.314
25	159.610	131.0 *	159.180	57.76	159.600	129.2 *	159.555	129.4	158.970	45.76	158.500	3.275
26	159.190	63.66 *	159.130	51.22	159.455	107.5	159.365	94.46	158.960	43.96	158.500	3.081 *
27	159.330	92.97	159.150	54.20	160.220	260.3 *	159.340	94.98	158.910	35.29	158.490	3.040
28	159.540	118.5 #	159.140	52.38	159.640	167.3	159.290	85.98	158.890	33.38	158.490	3.014
29	160.320	334.7	159.160	56.24	159.655	168.8	159.280	84.01	158.850	27.71 *	158.480	2.373 #
30	159.550	145.2	159.120	54.35 *	160.180	260.9	159.220	76.09 *	158.820	27.70	158.480	2.373 #
31			159.150	54.20	160.210	263.1			158.790	24.26		
Ten-Daily Mean												
I Ten-Daily	158.618	6.663	159.157	59.96	158.907	30.89	159.510	121.6	159.043	52.82	158.732	17.26
II Ten-Daily	159.366	94.38	159.272	133.0	158.955	36.70	159.648	169.1	159.240	77.54	158.600	7.792
III Ten-Daily	159.439	112.6	159.345	92.59	159.639	149.3	159.521	131.4	158.955	43.09	158.479	2.441
Monthly												
Min.	158.580	4.531	158.810	20.87	158.800	22.39	159.120	50.66	158.790	24.26	158.440	1.190
Max.	160.320	334.7	162.630	1053	160.220	263.1	160.570	444.2	159.470	115.4	158.780	23.12
Mean	159.141	71.21	159.261	95.11	159.182	74.77	159.559	140.7	159.075	57.34	158.604	9.166

Annual Runoff in MCM = 1299 Annual Runoff in mm = 28

Peak Observed Discharge = 1053 cumecs on 20/07/2017 Corres. Water Level :162.630 m

Lowest Observed Discharge = 0.000 cumecs on 22/04/2018 Corres. Water Level :158.560 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : BAMNI (AGH30E2) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	158.480	2.641 *	158.940	29.97	158.670	2.029	158.670	1.234	158.610	0.536 *	158.520	0.000
2	158.490	2.903 #	158.920	26.10	158.710	2.855	158.650	1.154 *	158.610	0.604	158.520	0.000
3	158.490	2.903 *	158.870	19.58	158.830	6.460	158.630	0.721	158.610	0.615	158.520	0.000
4	158.500	3.272	158.860	18.38	158.820	7.529 *	158.620	0.664 *	158.590	0.560	158.520	0.000
5	158.500	3.268	158.860	18.11	158.800	4.747	158.620	0.676	158.590	0.599	158.520	0.000
6	158.500	3.149	158.840	17.54	158.780	4.422	158.620	0.720	158.580	0.568	158.520	0.000
7	158.510	3.622	158.840	18.03 *	158.680	1.815	158.620	0.728	158.570	0.415	158.520	0.000
8	158.510	3.309	158.840	17.33	158.670	1.725	158.610	0.693	158.570	0.436 *	158.520	0.000
9	158.500	3.449	158.840	16.81	158.630	0.810 #	158.610	0.536 #	158.570	0.401	158.520	0.000
10	158.800	15.76 *	158.840	17.08	158.630	0.810 #	158.620	0.747	158.570	0.417	158.520	0.000
11	158.800	18.32	158.850	17.75	158.620	0.664 *	158.670	1.573 *	158.570	0.401	158.510	0.000
12	158.780	15.91	158.870	18.27	158.600	0.423 #	158.970	20.50	158.590	0.628	158.510	0.000
13	158.740	13.14	158.870	18.16	158.950	19.38	158.970	21.01	158.590	0.589	158.510	0.000
14	158.720	12.41	158.870	19.82 *	158.970	20.41	158.960	19.96	158.590	0.581 *	158.510	0.000
15	158.720	12.26	158.860	16.39	159.040	29.49	158.920	16.75	158.590	0.581 *	158.510	0.000
16	158.710	11.48	158.860	16.93	159.020	27.48	158.840	8.747 #	158.590	0.563	158.510	0.000
17	158.710	11.14 *	158.860	15.51	158.960	20.18	158.840	8.747 #	158.580	0.531	158.500	0.000
18	158.710	11.70	158.840	13.67	158.950	17.51 *	158.800	6.418 *	158.580	0.558	158.500	0.000
19	158.680	8.418	158.860	16.16	158.940	15.29	158.760	4.503 #	158.580	0.525	158.500	0.000
20	158.670	7.886	158.860	15.74	158.940	15.75	158.760	4.503 #	158.580	0.534	158.510	0.000
21	158.660	8.873 #	158.860	10.08 *	158.920	14.19	158.660	1.184	158.580	0.520	158.510	0.000
22	158.660	8.873 #	158.880	12.77	158.830	5.849	158.640	0.890	158.560	0.000	159.040	30.13 #
23	158.890	25.69	158.880	13.00	158.830	6.007	158.640	0.915	158.550	0.000	159.020	26.13 #
24	158.890	21.05 *	158.890	13.76	158.790	5.901 #	158.620	0.643	158.550	0.000	158.950	18.15 #
25	158.900	21.67 #	158.880	13.50	158.760	4.503 *	158.620	0.664 *	158.550	0.000	158.850	5.034
26	158.900	26.65	158.880	11.52 *	158.730	3.325 #	158.620	0.646	158.540	0.000	158.770	2.336
27	158.890	25.74	158.880	13.43	158.720	2.174	158.620	0.635	158.540	0.000	158.810	3.584 *
28	158.890	25.60	158.840	8.747 *	158.670	1.195	158.620	0.653	158.540	0.000	158.840	5.115
29	158.890	23.34	158.780	6.492			158.620	0.664 *	158.530	0.000	158.750	2.121
30	158.890	23.91	158.750	3.716			158.620	0.664 *	158.530	0.000	158.670	1.193
31	158.930	23.61 *	158.710	2.863			158.610	0.597			158.570	0.436 *
Ten-Daily Mean												
I Ten-Daily	158.528	4.428	158.865	19.89	158.722	3.320	158.627	0.787	158.587	0.515	158.520	0.000
II Ten-Daily	158.724	12.27	158.860	16.84	158.899	16.66	158.849	11.27	158.584	0.549	158.507	0.000
III Ten-Daily	158.854	21.36	158.839	9.990	158.781	5.393	158.626	0.741	158.547	0.052	158.798	8.565
Monthly												
Min.	158.480	2.641	158.710	2.863	158.600	0.423	158.610	0.536	158.530	0.000	158.500	0.000
Max.	158.930	26.65	158.940	29.97	159.040	29.49	158.970	21.01	158.610	0.628	159.040	30.13
Mean	158.707	12.97	158.854	15.39	158.802	8.676	158.698	4.153	158.573	0.372	158.615	3.039

Peak Computed Discharge = 260.3 cumecs on 27/08/2017 Corres. Water Level :160.220 m

Lowest Computed Discharge = 0.436 cumecs on 08/04/2018 Corres. Water Level :158.570 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

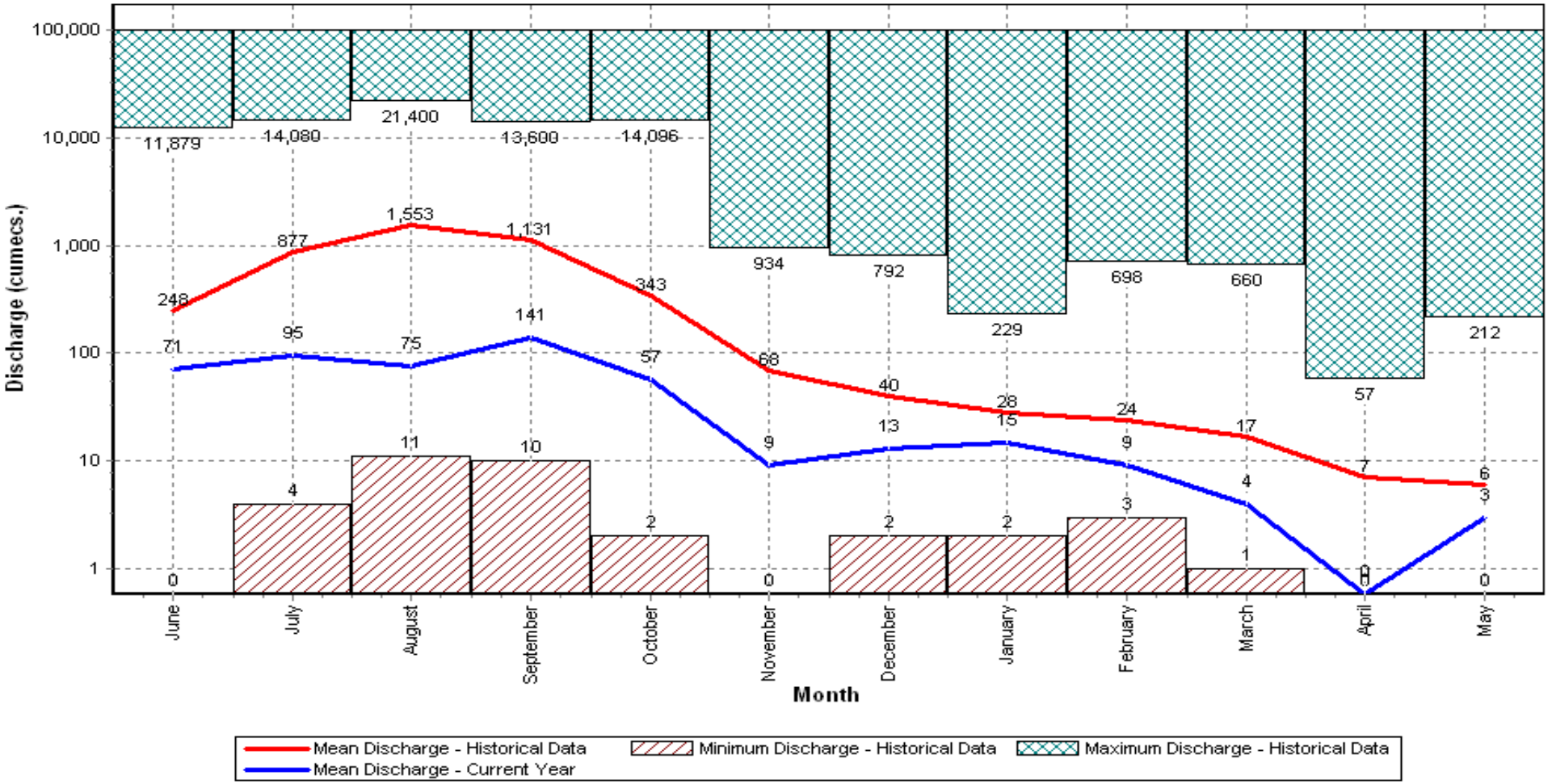
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : BAMNI (AGH30E2) **Data considered : 1966-2018** **Division : Wainganga Div., Nagpur**

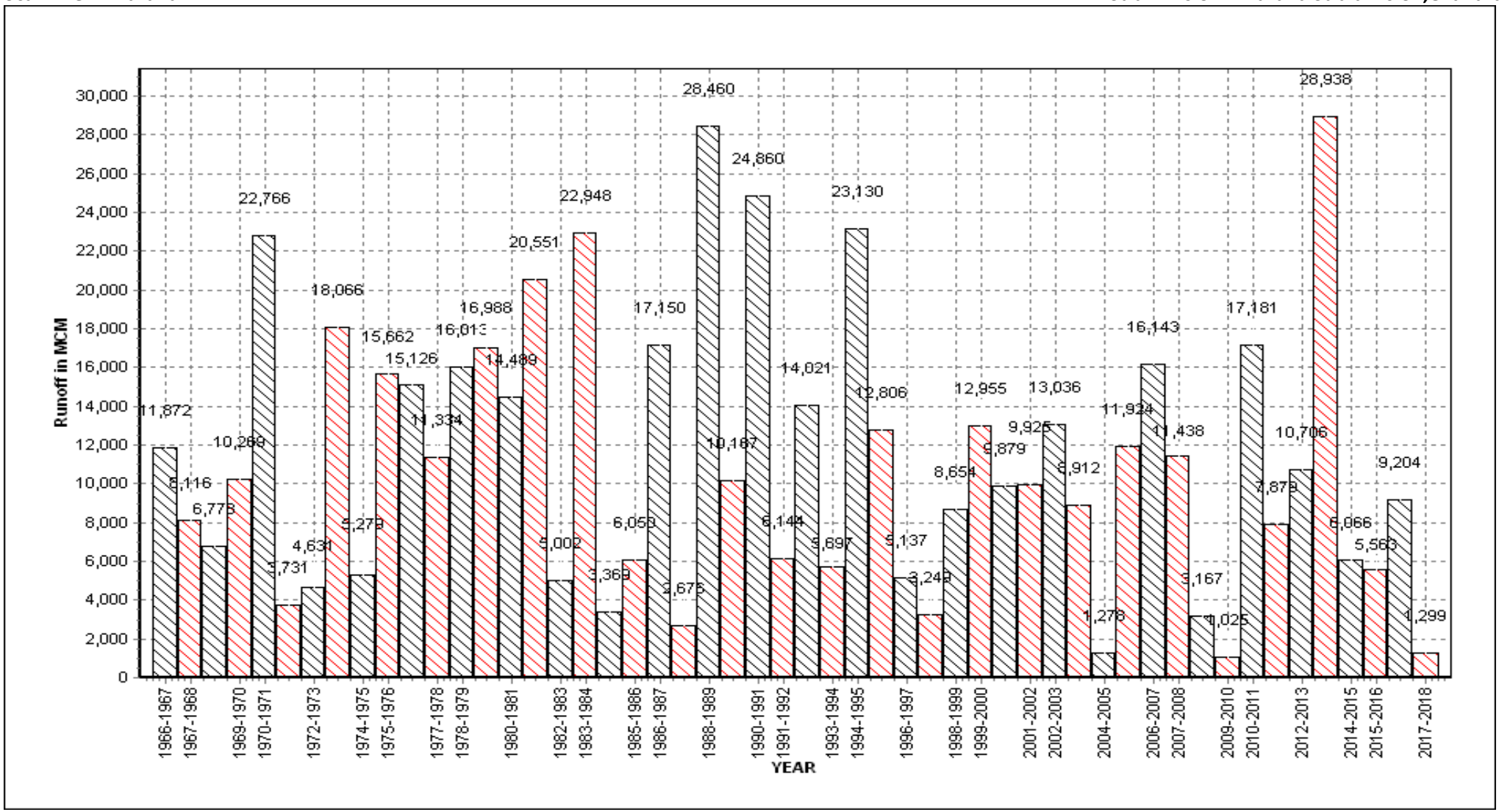
Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**



Annual Runoff Values for the period: 1966 - 2018

Station Name : BAMNI (AGH30E2) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**

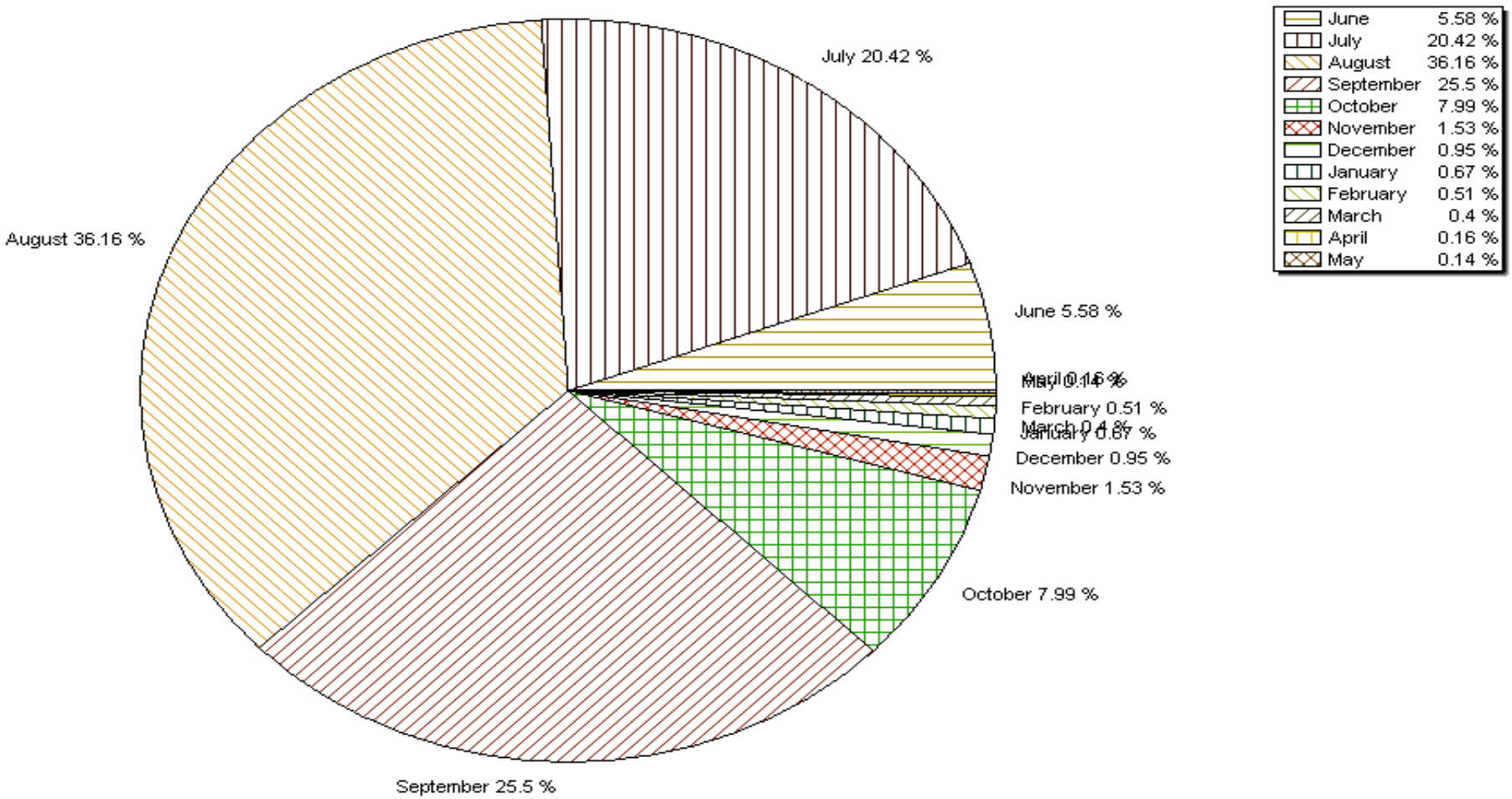


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1966-2017

Station Name : BAMNI (AGH30E2) **Division : Wainganga Div., Nagpur**

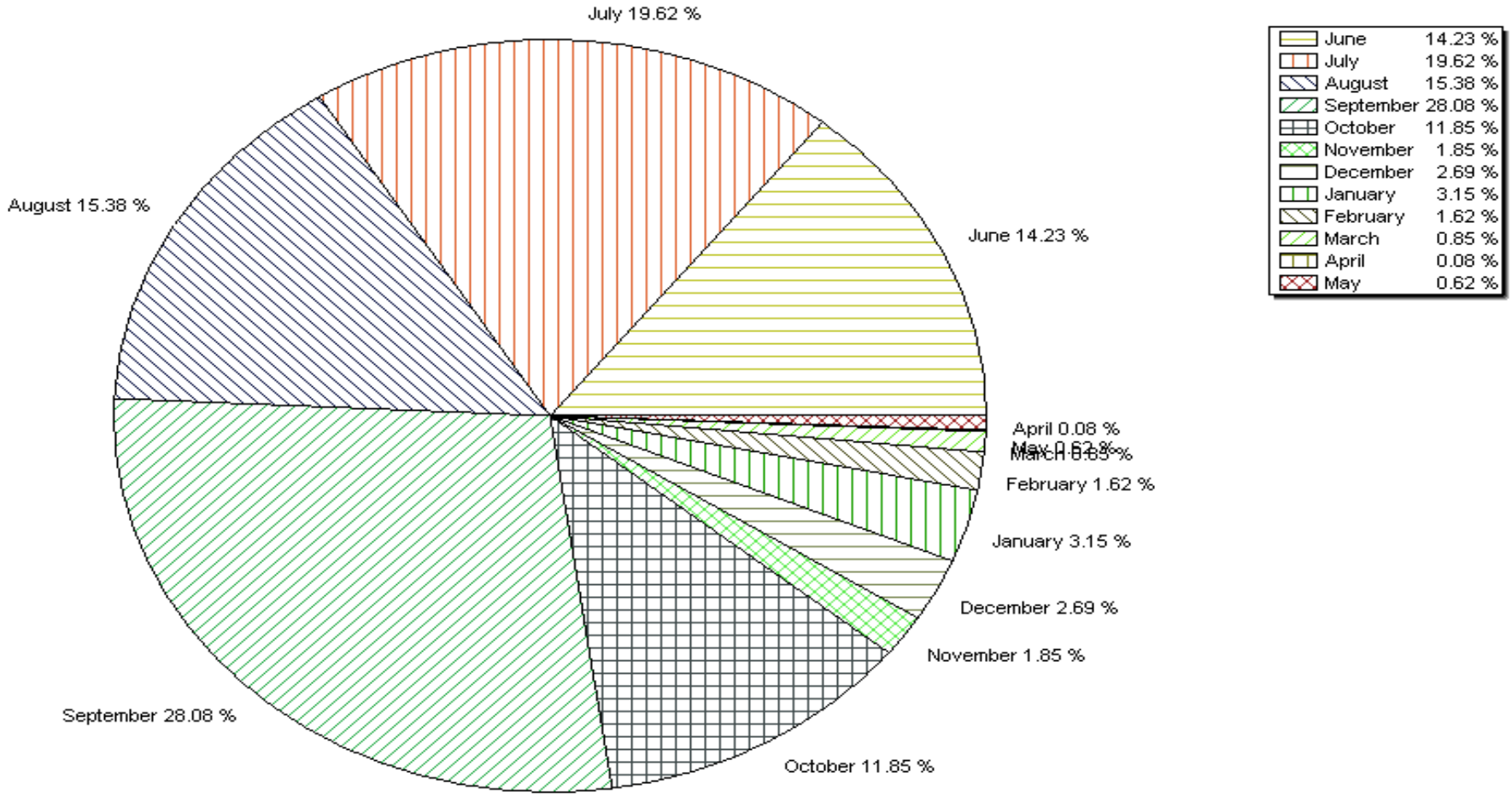
Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**



Monthly Runoff for the Year : 2017-2018

Station Name : BAMNI (AGH30E2) **Division : Wainganga Div., Nagpur**

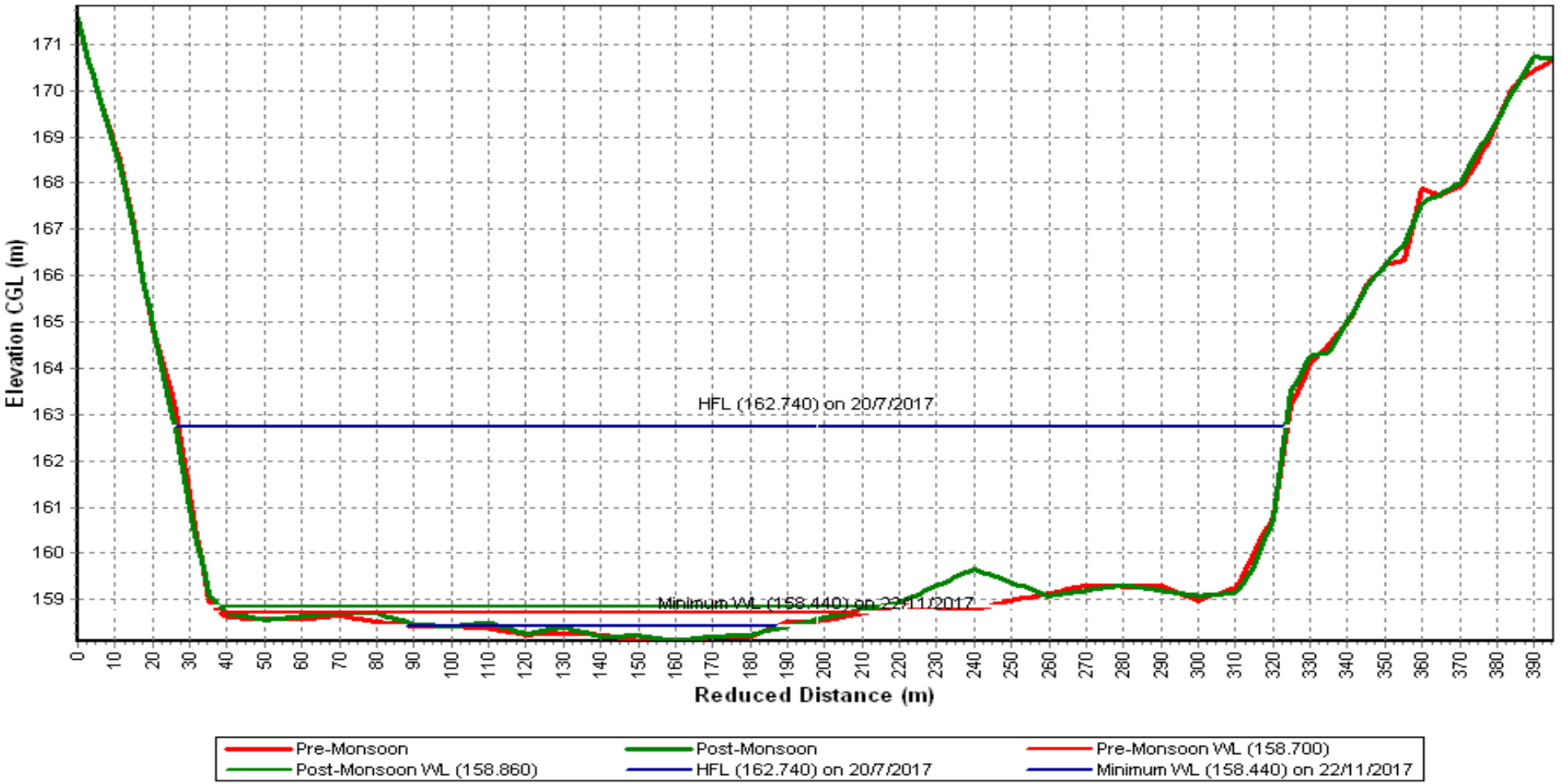
Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : BAMNI (AGH30E2) **Division : Wainganga Div., Nagpur**

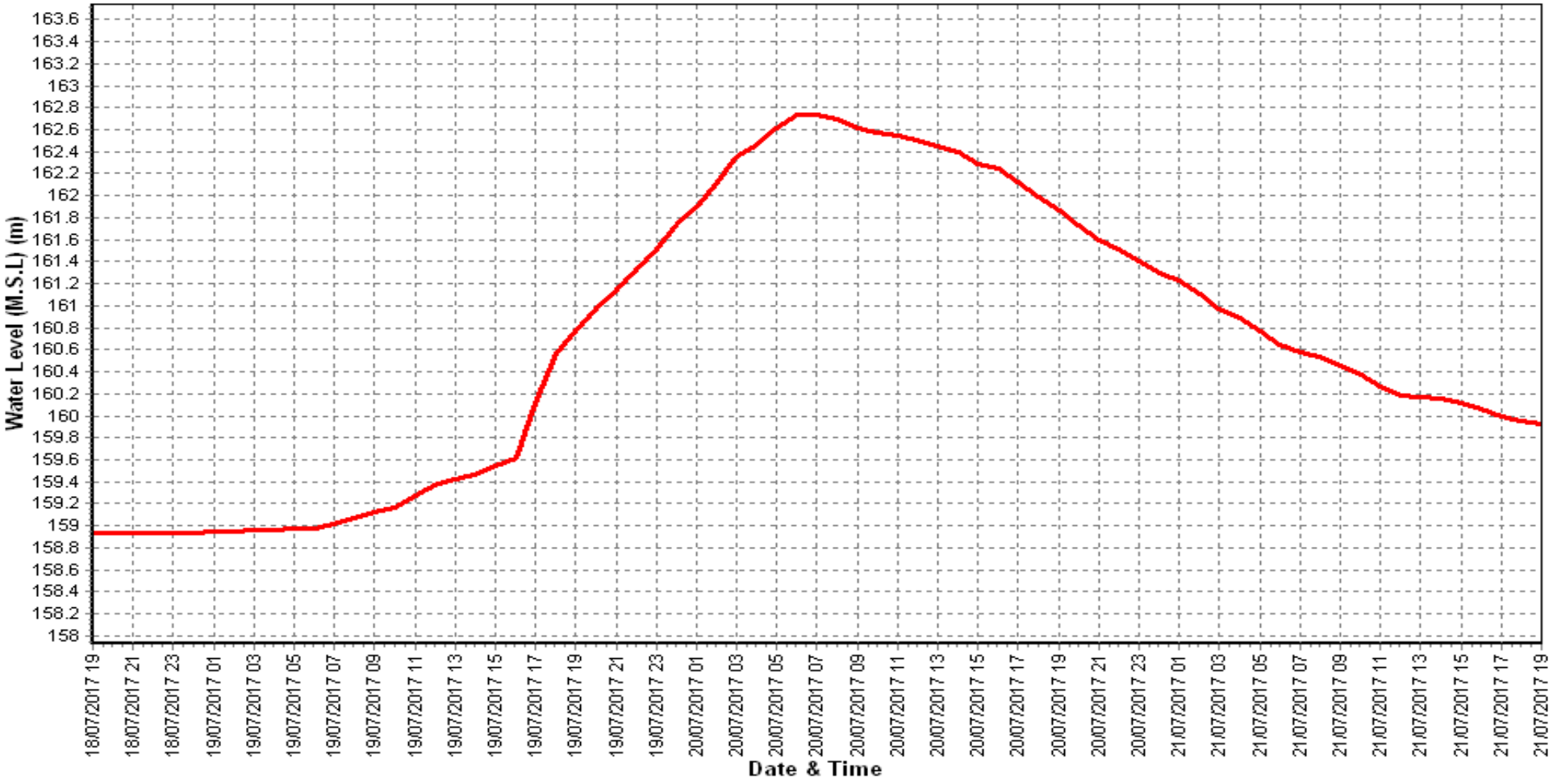
Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : BAMNI (AGH30E2) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Wardha Sub-division,Chandrapur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**P.G.BRIDGE**	**Code**	:	**AGH32D5**
State	:	Maharashtra	District		Yeotmal
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:	Penganga	Local River	:	Penganga
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Penganga Sd, Yeotmal
Drainage Area	:	18441 Sq. Km.	Bank	:	Left
Latitude	:	19°49'03"	Longitude	:	78°34'40"
Zero of Gauge (m)	:	196.828 (m.s.l) 198.63 (m.s.l)	25.12.1964 01.12.1992	-	30.11.1992
		Opening Date	Closing Date		
Gauge	:	25.12.1964	**HFL During 2017-18**	:	**201.840 Meter**
			Corres.Discharge	:	**360.0 Cumecs (Estimated)**
Discharge	:	21.07.1965	**Date & Time of**	:	**30.08.2017**
			Occurance	:	**18.00 Hrs.**
Sediment	:	19.10.1965			
Water Quality	:	31.05.1966			

HFL Recorded so far in m : 217.98 07/08/2006
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1965-1966	1670	203.912	16.07.1965	0.000	197.217	10.06.1965
1966-1967	4309	208.821	06.09.1966	0.000	197.528	12.06.1966
1967-1968	2064	202.768	23.06.1967	0.000	197.548	20.05.1968
1968-1969	1746	203.400	05.08.1968	0.000	197.508	05.05.1969
1969-1970	3188	207.073	07.09.1969	0.000	197.572	17.04.1970
1970-1971	5734	211.152	20.08.1970	0.020	197.482	01.06.1970
1971-1972	1046	201.953	28.08.1971	0.000	197.462	19.04.1972
1972-1973	3633	205.352	28.06.1972	0.000	197.448	13.05.1973
1973-1974	3552	207.850	26.08.1973	0.000	197.417	02.06.1973
1974-1975	1142	202.470	10.10.1974	0.000	197.548	16.05.1975
1975-1976	5278	209.515	05.09.1975	0.000	197.633	31.05.1976
1976-1977	6137	210.077	22.07.1976	0.000	197.798	26.05.1977
1977-1978	3642	206.202	04.09.1977	0.000	197.798	08.06.1977
1978-1979	5410	209.038	13.07.1978	1.300	197.758	08.05.1979
1979-1980	4130	207.428	26.06.1979	0.060	197.603	31.05.1980
1980-1981	4873	207.348	23.08.1980	0.100	197.593	01.06.1980
1981-1982	4513	207.828	27.09.1981	0.700	197.698	01.06.1981

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1982-1983	1948	203.668	24.07.1982	0.300	197.698	07.05.1983
1983-1984	16000	214.178	11.08.1983	0.200	197.693	13.06.1983
1984-1985	353.4	200.313	19.07.1984	0.000	197.658	06.04.1985
1985-1986	2141	203.623	27.06.1985	0.000	197.688	29.05.1986
1986-1987	6561	211.608	23.07.1986	0.000	197.663	02.06.1986
1987-1988	741.2	201.321	25.08.1987	0.000	197.563	09.05.1988
1988-1989	5970	209.628	22.07.1988	0.000	197.583	16.06.1988
1989-1990	5591	211.613	19.08.1989	0.800	197.958	02.06.1989
1990-1991	5520	211.848	30.08.1990	1.800	197.928	04.06.1990
1991-1992	1125	203.063	12.07.1991	0.000	197.683	23.04.1992
1992-1993	4533	207.428	02.09.1992	0.000	197.668	13.06.1992
1993-1994	3676	208.340	31.07.1993	0.000	199.410	11.05.1994
1994-1995	5334	209.950	12.07.1994	0.000	199.375	12.06.1994
1995-1996	6591	213.320	20.10.1995	0.184	199.300	10.05.1996
1996-1997	2082	205.765	17.09.1996	0.067	199.400	28.05.1997
1997-1998	528.1	202.670	23.08.1997	0.000	199.415	15.05.1998
1998-1999	2192	205.645	25.09.1998	0.040	199.540	06.06.1998
1999-2000	4109	207.890	03.08.1999	0.870	199.660	12.06.1999
2000-2001	4658	209.080	19.07.2000	0.000	199.400	16.05.2001
2001-2002	4530	208.565	23.08.2001	0.000	199.450	01.05.2002
2002-2003	8702	213.890	25.08.2002	0.000	199.460	07.06.2002
2003-2004	4118	208.205	09.08.2003	0.000	199.470	24.04.2004
2004-2005	721.3	203.265	06.08.2004	0.000	199.480	16.01.2005
2005-2006	7140	213.355	28.07.2005	0.000	199.505	23.06.2005
2006-2007	13881	217.920	07.08.2006	0.378	199.960	23.05.2007
2007-2008	2877	206.780	07.09.2007	0.001	199.560	12.05.2008
2008-2009	1411	204.330	04.08.2008	0.028	199.725	27.12.2008
2009-2010	833.0	203.530	29.06.2009	0.105	199.680	16.12.2009
2010-2011	6749	211.455	07.08.2010	0.000	199.210	25.06.2010
2011-2012	2405	206.330	26.08.2011	0.000	199.600	14.05.2012
2012-2013	7265	213.465	23.07.2012	0.000	199.490	10.05.2013
2013-2014	9061	214.610	02.08.2013	0.431	199.730	24.02.2014
2014-2015	2607	206.305	08.09.2014	0.000	199.620	28.12.2014
2015-2016	1698	205.400	18.09.2015	0.000	199.520	29.03.2016
2016-2017	6125	211.370	12.07.2016	0.000	199.690	11.04.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at P.G.BRIDGE in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**	2314	60	2374
2	**1966-1967**	3417	279	3697
3	**1967-1968**	2223	344	2567
4	**1968-1969**	2691	132	2824
5	**1969-1970**	3418	163	3581
6	**1970-1971**	6877	214	7091
7	**1971-1972**	897	45	942
8	**1972-1973**	1695	54	1749
9	**1973-1974**	5462	368	5830
10	**1974-1975**	1403	164	1567
11	**1975-1976**	5390	352	5742
12	**1976-1977**	5397	151	5549
13	**1977-1978**	3558	211	3769
14	**1978-1979**	5136	279	5415
15	**1979-1980**	4032	172	4204
16	**1980-1981**	5594	148	5742
17	**1981-1982**	5213	332	5545
18	**1982-1983**	1830	128	1959
19	**1983-1984**	13242	387	13629
20	**1984-1985**	569	36	605
21	**1985-1986**	1886	60	1946
22	**1986-1987**	3913	102	4015
23	**1987-1988**	1291	136	1428
24	**1988-1989**	13005	392	13397
25	**1989-1990**	6042	169	6211
26	**1990-1991**	10694	469	11163
27	**1991-1992**	939	13	952
28	**1992-1993**	5113	95	5208
29	**1993-1994**	2199	88	2287
30	**1994-1995**	5006	195	5201
31	**1995-1996**	3814	240	4054
32	**1996-1997**	2528	133	2661
33	**1997-1998**	720	276	997
34	**1998-1999**	3965	383	4349
35	**1999-2000**	5635	230	5865
36	**2000-2001**	3039	51	3090
37	**2001-2002**	4058	77	4135
38	**2002-2003**	7978	144	8122
39	**2003-2004**	3533	50	3583
40	**2004-2005**	260	6	266
41	**2005-2006**	5067	112	5179
42	**2006-2007**	8232	142	8374
43	**2007-2008**	1667	63	1729
44	**2008-2009**	1088	5	1093
45	**2009-2010**	442	3	445
46	**2010-2011**	7126	225	7351
47	**2011-2012**	2533	58	2592
48	**2012-2013**	3606	106	3712
49	**2013-2014**	12435	250	12686
50	**2014-2015**	1199	11	1210
51	**2015-2016**	1385	5	1390
52	**2016-2017**			
53	**2017-2018**	467	1	468
Average		4062	160	4222

Stage-Discharge Data for the period 2017 - 2018

Station Name : P.G.BRIDGE (AGH32D5) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	199.790	0.216	200.610	47.73	200.210	7.155	201.300	177.8	200.090	5.944 *	199.890	2.449
2	199.780	0.170	200.490	32.43 *	200.190	8.552 #	200.980	88.76 *	200.040	4.446 *	199.850	1.571 #
3	199.780	0.167	200.470	36.89	200.170	8.208	200.800	62.02 *	200.010	3.670 #	199.830	1.609
4	199.760	0.097 *	200.505	40.94	200.130	6.319	200.665	55.76	199.990	3.753	199.810	0.960 *
5	200.010	3.389	200.550	45.27	200.175	6.925	200.680	54.15	199.960	2.910	199.800	0.830 *
6	199.950	2.399	200.435	32.09	200.170	7.860 *	200.635	44.45	199.930	2.202	199.800	0.809
7	200.000	3.360	200.340	22.34	200.120	5.208	200.515	29.39	199.910	1.942	199.780	0.599
8	200.050	3.669	200.280	15.68 #	200.070	3.697	200.450	24.07	199.910	1.693 *	199.760	0.408
9	200.060	3.948	200.230	12.69 *	200.030	3.648	201.065	135.4	199.900	1.758	199.750	0.297
10	200.140	8.215 #	200.185	11.78	200.000	3.217	200.720	51.94 *	199.880	1.349	199.740	0.229
11	200.960	97.73 *	200.220	12.69	199.970	2.878	200.510	28.90	199.870	1.115	199.720	0.138
12	200.620	46.46 #	200.130	7.786 #	199.940	2.512	200.415	20.45	199.860	1.031	199.710	0.083 *
13	201.475	221.8	200.100	8.313	199.930	2.084 *	200.450	21.58	200.395	16.73	199.700	0.045
14	200.720	47.40	200.080	7.121	199.950	2.766	200.440	20.65	200.460	17.98	199.690	0.000
15	200.990	103.3 #	200.060	5.975	200.000	3.319 *	200.595	36.16	200.520	31.25 *	199.680	0.000
16	200.545	30.21	200.060	5.149 *	199.950	2.890	201.480	202.3	200.525	24.43	199.670	0.000
17	201.350	185.1	200.125	7.498	199.920	2.374	200.780	59.40 *	200.515	21.70	199.670	0.000
18	201.050	115.1 *	200.245	11.07	200.580	29.94	200.475	26.53	200.295	12.19	199.660	0.000
19	200.660	43.12	200.430	20.27	200.480	24.43	200.430	18.27	200.470	27.03 *	199.660	0.000
20	200.725	49.57	200.825	58.77	200.410	18.59 *	200.620	38.34	200.275	11.89	199.660	0.000
21	200.785	54.25	200.720	44.11	200.480	22.81	200.750	51.69	200.160	9.732	199.660	0.000
22	200.690	45.33	200.620	35.04	201.035	125.0	200.565	32.88	200.060	5.014 *	199.650	0.000
23	200.915	109.9	200.500	24.08 *	200.780	53.06	200.660	48.73	200.260	10.52	199.650	0.000
24	200.820	62.43	200.440	23.68	201.070	130.3	200.440	24.67 *	200.150	9.011	199.650	0.000
25	200.730	60.66 *	200.400	19.58	200.850	68.88 *	200.320	12.28	200.080	6.892	199.640	0.000
26	200.490	32.43 *	200.380	16.61	201.150	156.1	200.445	23.82	200.070	6.476	199.640	0.000
27	200.420	24.06	200.390	17.69	200.860	70.30 *	200.295	15.49	200.020	3.919 #	199.630	0.000
28	201.180	141.1	200.340	15.06	200.600	34.34	200.210	13.45	200.040	4.446 #	199.630	0.000
29	200.675	63.54	200.320	12.23	201.055	113.6	200.170	8.903 #	200.000	3.430 *	199.600	0.000
30	200.515	41.95	200.310	13.45 *	201.655	267.3	200.120	6.971 *	199.980	4.005	199.560	0.000
31			200.250	8.660	201.555	243.8			199.930	3.086		
Ten-Daily Mean												
I Ten-Daily	199.932	2.563	200.410	29.79	200.127	6.079	200.781	72.37	199.962	2.967	199.801	0.976
II Ten-Daily	200.910	93.98	200.227	14.46	200.113	9.178	200.619	47.26	200.319	16.53	199.682	0.027
III Ten-Daily	200.722	63.57	200.425	20.93	201.008	116.9	200.397	23.89	200.068	6.049	199.631	0.000
Monthly												
Min.	199.760	0.097	200.060	5.149	199.920	2.084	200.120	6.971	199.860	1.031	199.560	0.000
Max.	201.475	221.8	200.825	58.77	201.655	267.3	201.480	202.3	200.525	31.25	199.890	2.449
Mean	200.521	53.37	200.356	21.7	200.435	46.39	200.599	47.84	200.115	8.437	199.705	0.334

Annual Runoff in MCM = 468 Annual Runoff in mm = 25

Peak Observed Discharge = 267.3 cumecs on 30/08/2017 Corres. Water Level :201.655 m

Lowest Observed Discharge = 0.000 cumecs on 14/11/2017 Corres. Water Level :199.690 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : P.G.BRIDGE (AGH32D5) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	199.520	0.000	199.540	0.000	199.500	0.000	199.490	0.000	199.460	0.000	199.380	0.000
2	199.520	0.000	199.540	0.000	199.500	0.000	199.490	0.000	199.460	0.000	199.380	0.000
3	199.530	0.000	199.540	0.000	199.500	0.000	199.490	0.000	199.460	0.000	199.380	0.000
4	199.550	0.000	199.540	0.000	199.490	0.000	199.490	0.000	199.460	0.000	199.380	0.000
5	199.690	0.000	199.530	0.000	199.490	0.000	199.480	0.000	199.450	0.000	199.370	0.000
6	199.690	0.000	199.530	0.000	199.490	0.000	199.480	0.000	199.450	0.000	199.370	0.000
7	199.670	0.000	199.530	0.000	199.490	0.000	199.480	0.000	199.440	0.000	199.370	0.000
8	199.660	0.000	199.530	0.000	199.490	0.000	199.480	0.000	199.440	0.000	199.370	0.000
9	199.650	0.000	199.530	0.000	199.490	0.000	199.480	0.000	199.430	0.000	199.370	0.000
10	199.640	0.000	199.530	0.000	199.490	0.000	199.480	0.000	199.430	0.000	199.370	0.000
11	199.630	0.000	199.520	0.000	199.490	0.000	199.480	0.000	199.430	0.000	199.360	0.000
12	199.620	0.000	199.520	0.000	199.490	0.000	199.480	0.000	199.430	0.000	199.360	0.000
13	199.620	0.000	199.520	0.000	199.530	0.000	199.480	0.000	199.440	0.000	199.360	0.000
14	199.610	0.000	199.520	0.000	199.530	0.000	199.480	0.000	199.440	0.000	199.360	0.000
15	199.610	0.000	199.520	0.000	199.510	0.000	199.480	0.000	199.440	0.000	199.360	0.000
16	199.590	0.000	199.520	0.000	199.510	0.000	199.480	0.000	199.440	0.000	199.360	0.000
17	199.570	0.000	199.520	0.000	199.510	0.000	199.480	0.000	199.440	0.000	199.350	0.000
18	199.560	0.000	199.520	0.000	199.510	0.000	199.480	0.000	199.440	0.000	199.350	0.000
19	199.560	0.000	199.510	0.000	199.510	0.000	199.490	0.000	199.440	0.000	199.350	0.000
20	199.550	0.000	199.510	0.000	199.510	0.000	199.490	0.000	199.440	0.000	199.350	0.000
21	199.550	0.000	199.510	0.000	199.510	0.000	199.480	0.000	199.440	0.000	199.350	0.000
22	199.540	0.000	199.510	0.000	199.510	0.000	199.480	0.000	199.440	0.000	199.350	0.000
23	199.540	0.000	199.510	0.000	199.500	0.000	199.480	0.000	199.440	0.000	199.350	0.000
24	199.540	0.000	199.510	0.000	199.500	0.000	199.480	0.000	199.440	0.000	199.330	0.000
25	199.570	0.000	199.500	0.000	199.500	0.000	199.480	0.000	199.420	0.000	199.320	0.000
26	199.560	0.000	199.500	0.000	199.500	0.000	199.480	0.000	199.410	0.000	199.320	0.000
27	199.560	0.000	199.500	0.000	199.500	0.000	199.470	0.000	199.400	0.000	199.320	0.000
28	199.550	0.000	199.500	0.000	199.490	0.000	199.470	0.000	199.390	0.000	199.310	0.000
29	199.540	0.000	199.500	0.000			199.460	0.000	199.390	0.000	199.310	0.000
30	199.540	0.000	199.500	0.000			199.460	0.000	199.390	0.000	199.310	0.000
31	199.540	0.000	199.500	0.000			199.460	0.000			199.310	0.000
Ten-Daily Mean												
I Ten-Daily	199.612	0.000	199.534	0.000	199.493	0.000	199.484	0.000	199.448	0.000	199.374	0.000
II Ten-Daily	199.592	0.000	199.518	0.000	199.510	0.000	199.482	0.000	199.438	0.000	199.356	0.000
III Ten-Daily	199.548	0.000	199.504	0.000	199.501	0.000	199.473	0.000	199.416	0.000	199.325	0.000
Monthly												
Min.	199.520	0.000	199.500	0.000	199.490	0.000	199.460	0.000	199.390	0.000	199.310	0.000
Max.	199.690	0.000	199.540	0.000	199.530	0.000	199.490	0.000	199.460	0.000	199.380	0.000
Mean	199.583	0.000	199.518	0.000	199.501	0.000	199.479	0.000	199.434	0.000	199.351	0.000

Peak Computed Discharge = 115.1 cumecs on 18/06/2017 Corres. Water Level :201.050 m

Lowest Computed Discharge = 0.083 cumecs on 12/11/2017 Corres. Water Level :199.710 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

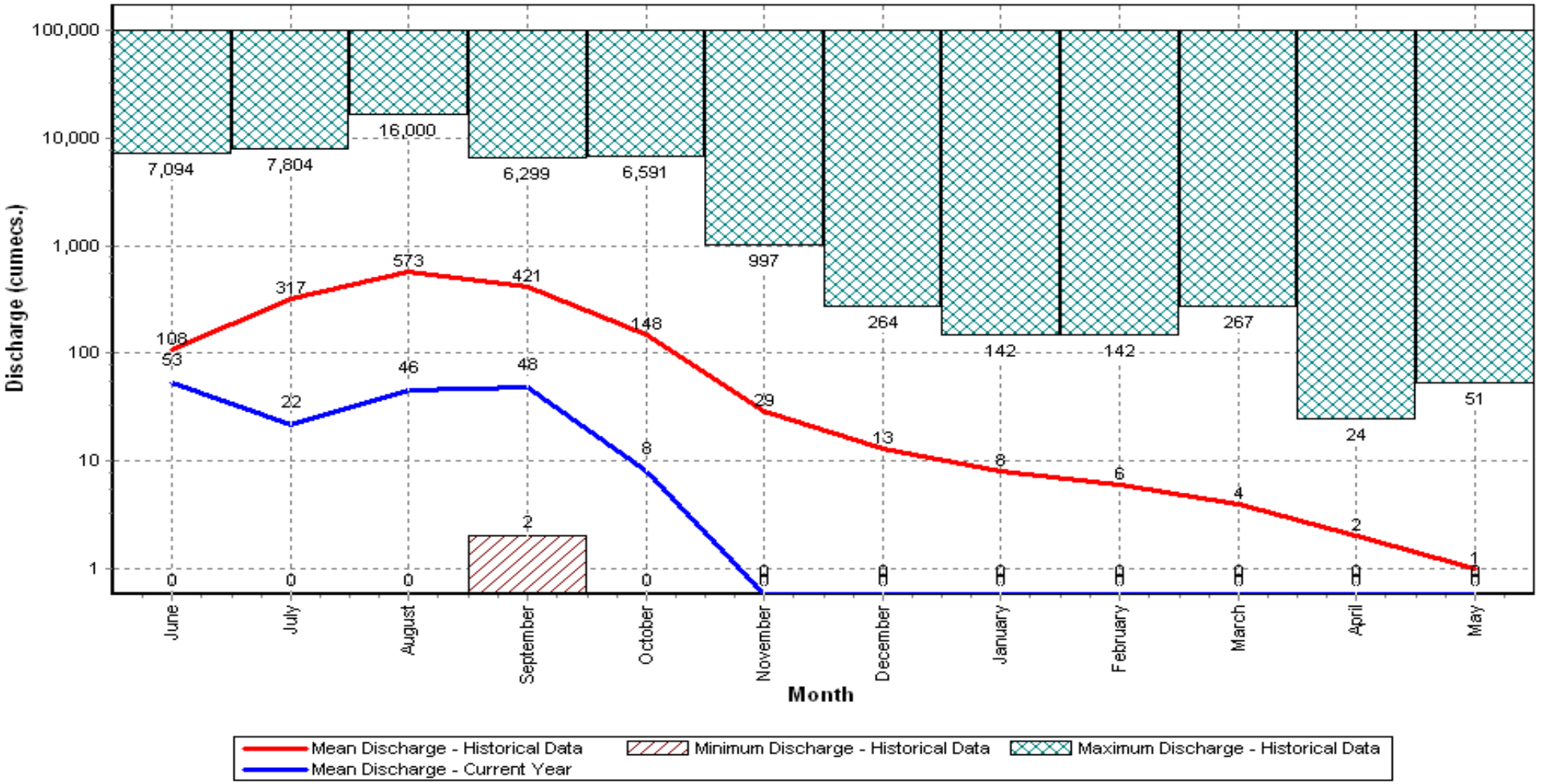
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : P.G.BRIDGE (AGH32D5) **Data considered : 1965-2018** **Division : Wainganga Div., Nagpur**

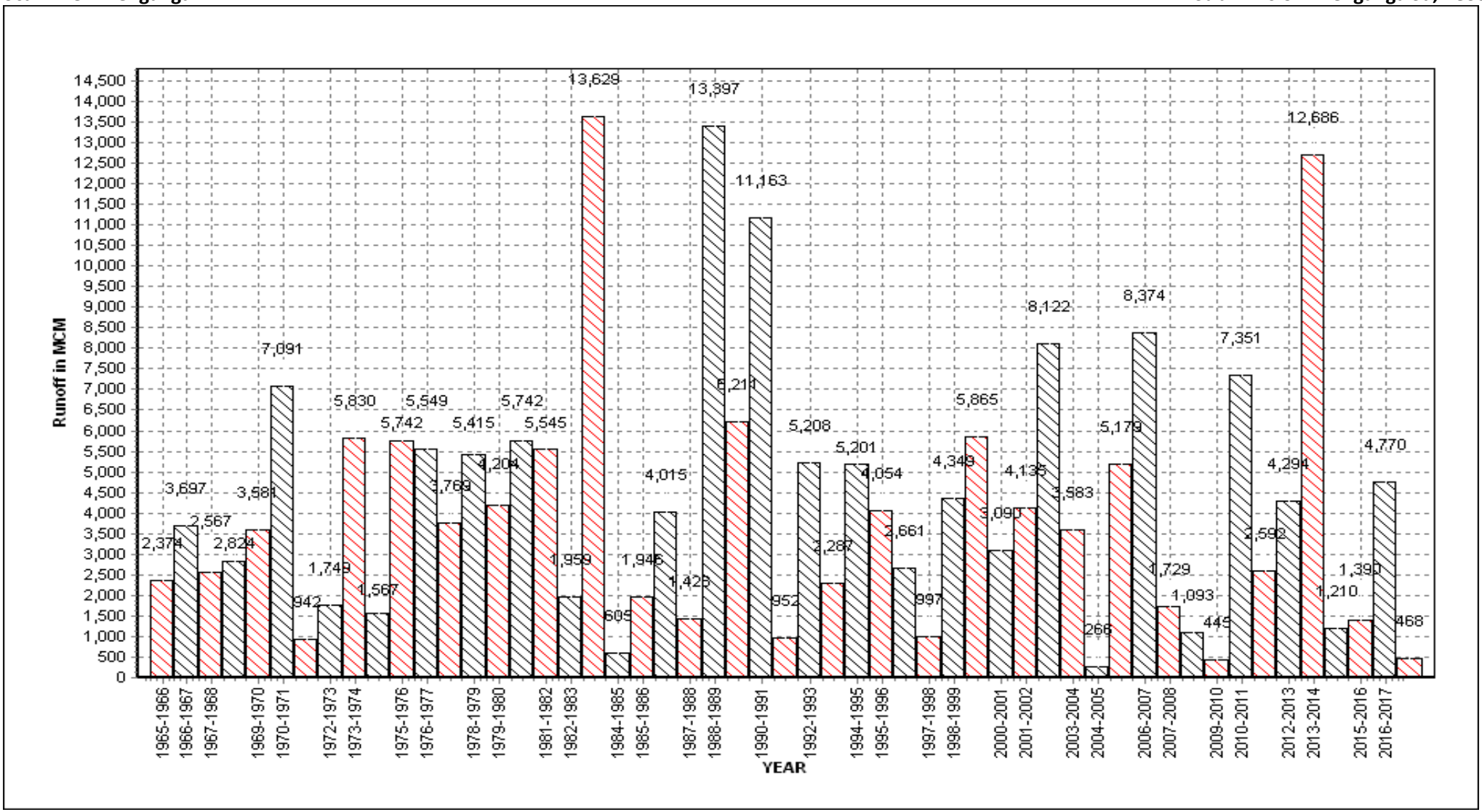
Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Annual Runoff Values for the period: 1965 - 2018

Station Name : P.G.BRIDGE (AGH32D5) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**

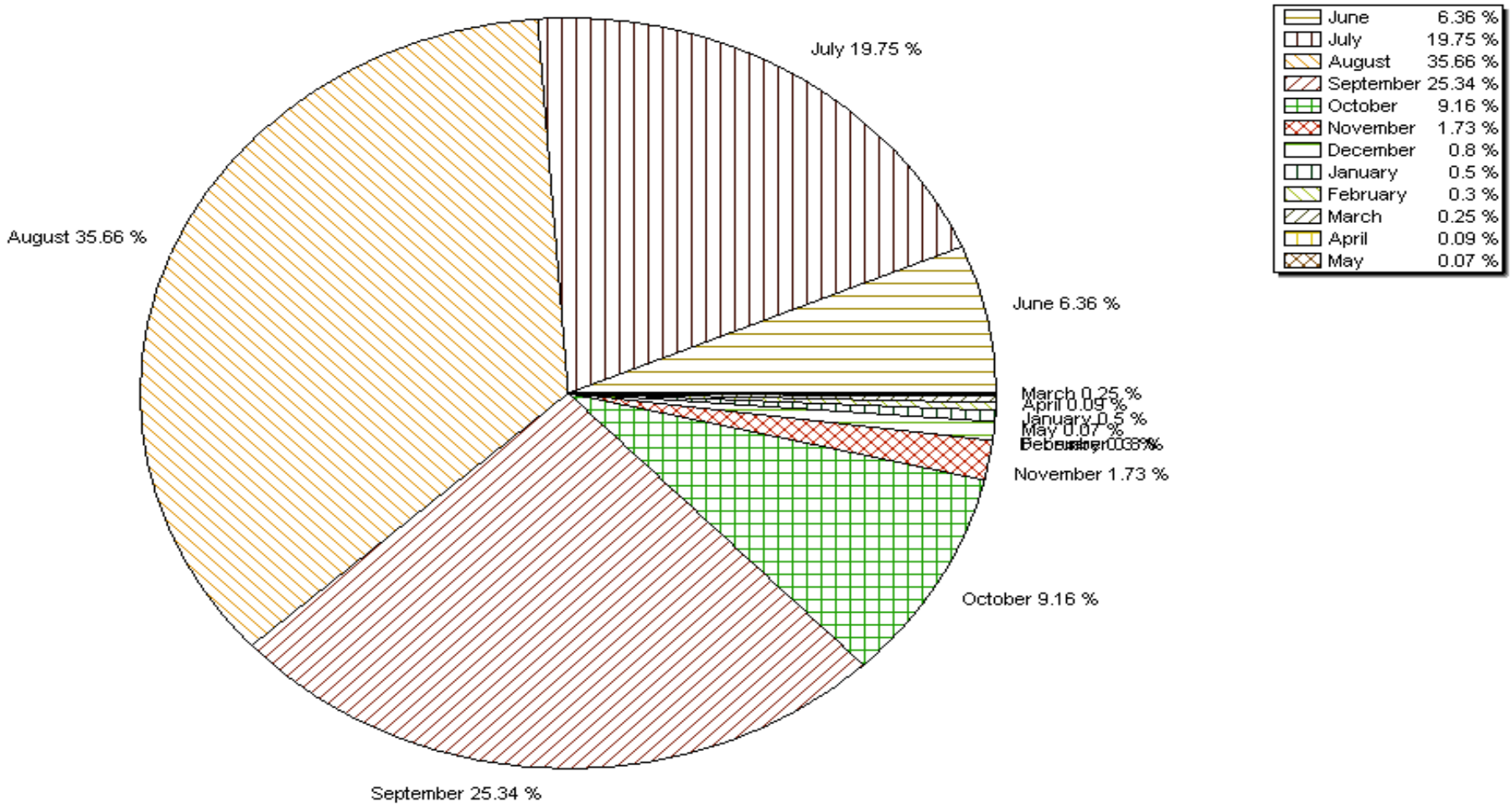


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1965-2017

Station Name : P.G.BRIDGE (AGH32D5) **Division : Wainganga Div., Nagpur**

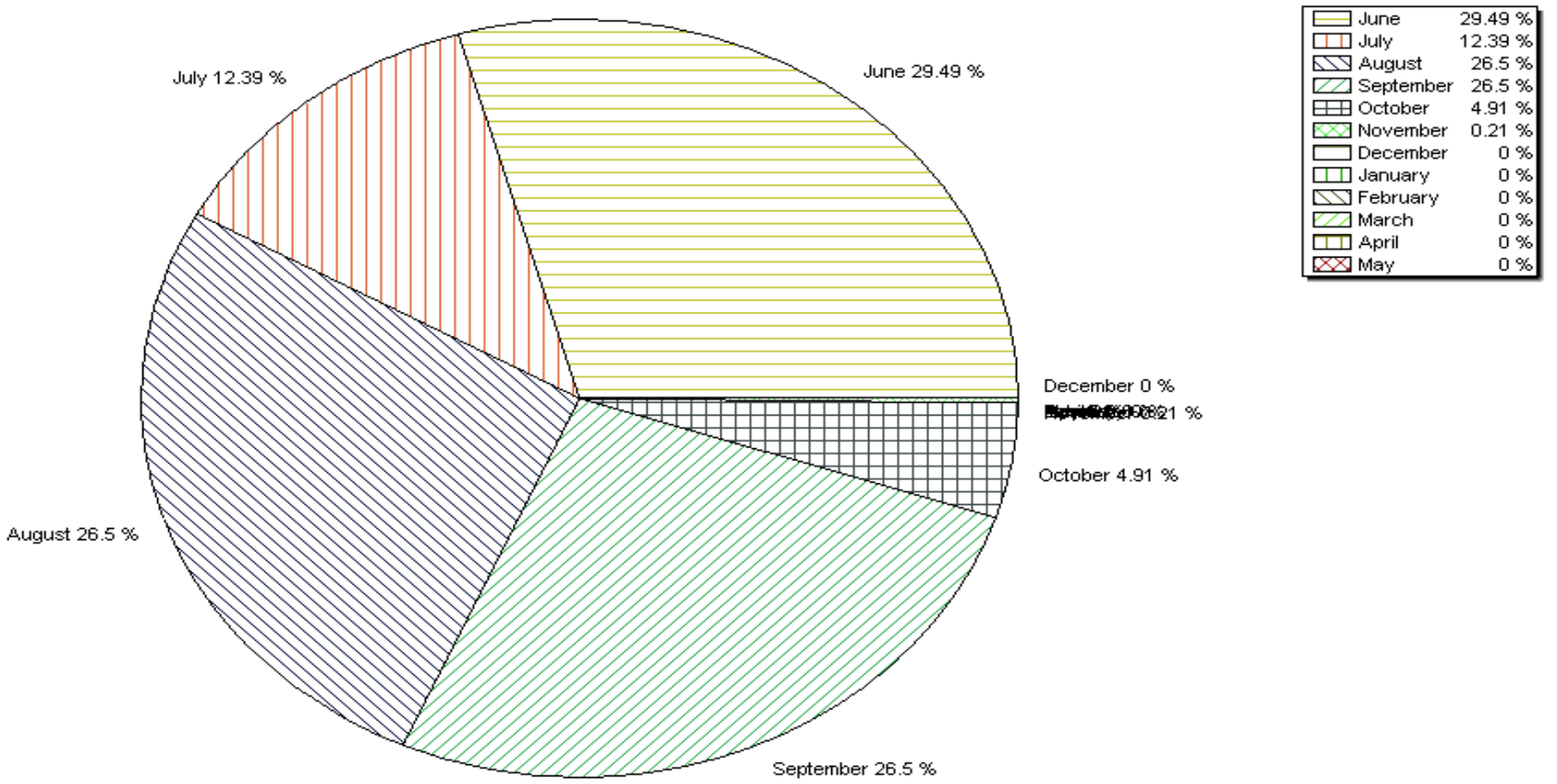
Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Monthly Runoff for the Year : 2017-2018

Station Name : P.G.BRIDGE (AGH32D5) **Division : Wainganga Div., Nagpur**

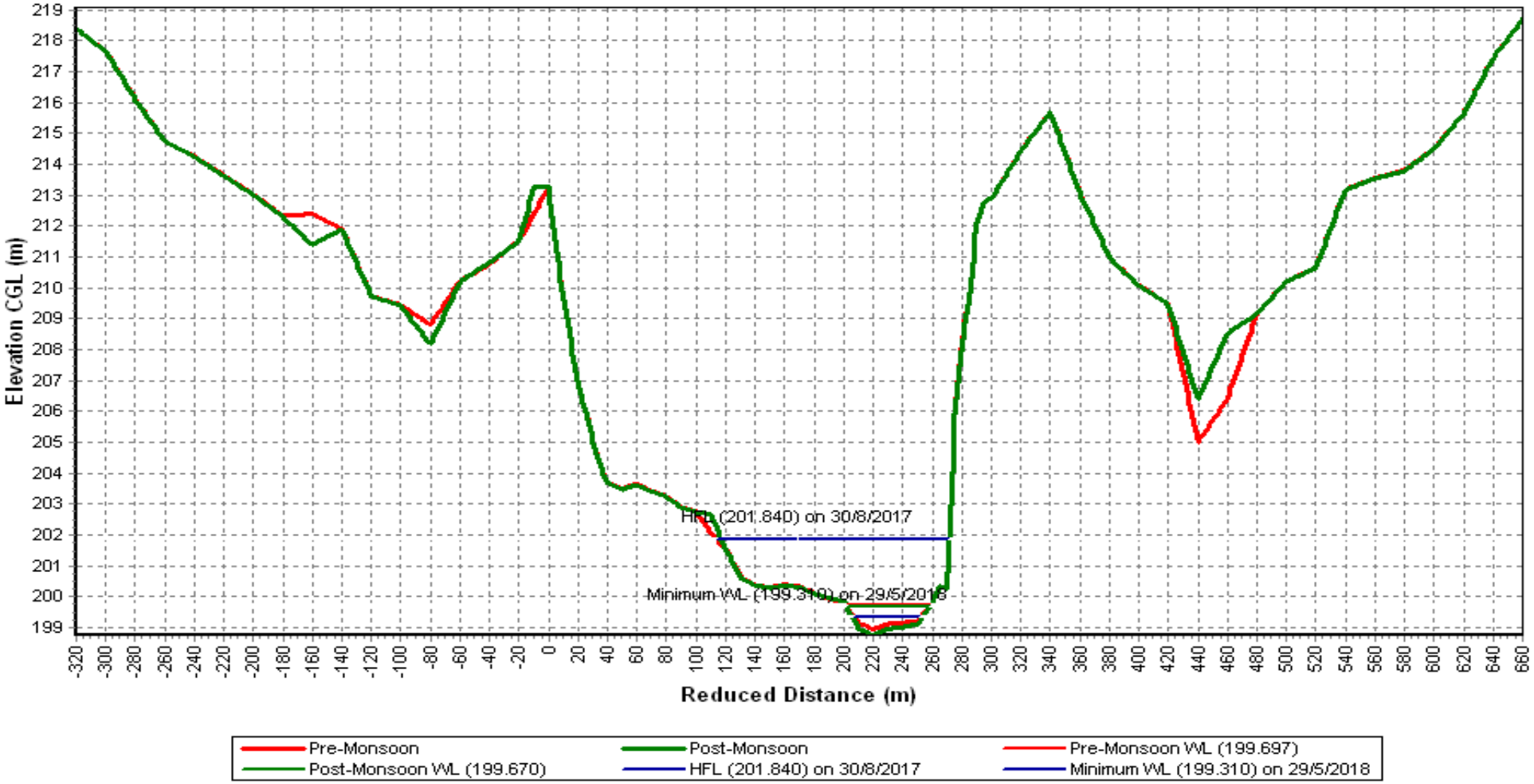
Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : P.G.BRIDGE (AGH32D5) **Division : Wainganga Div., Nagpur**

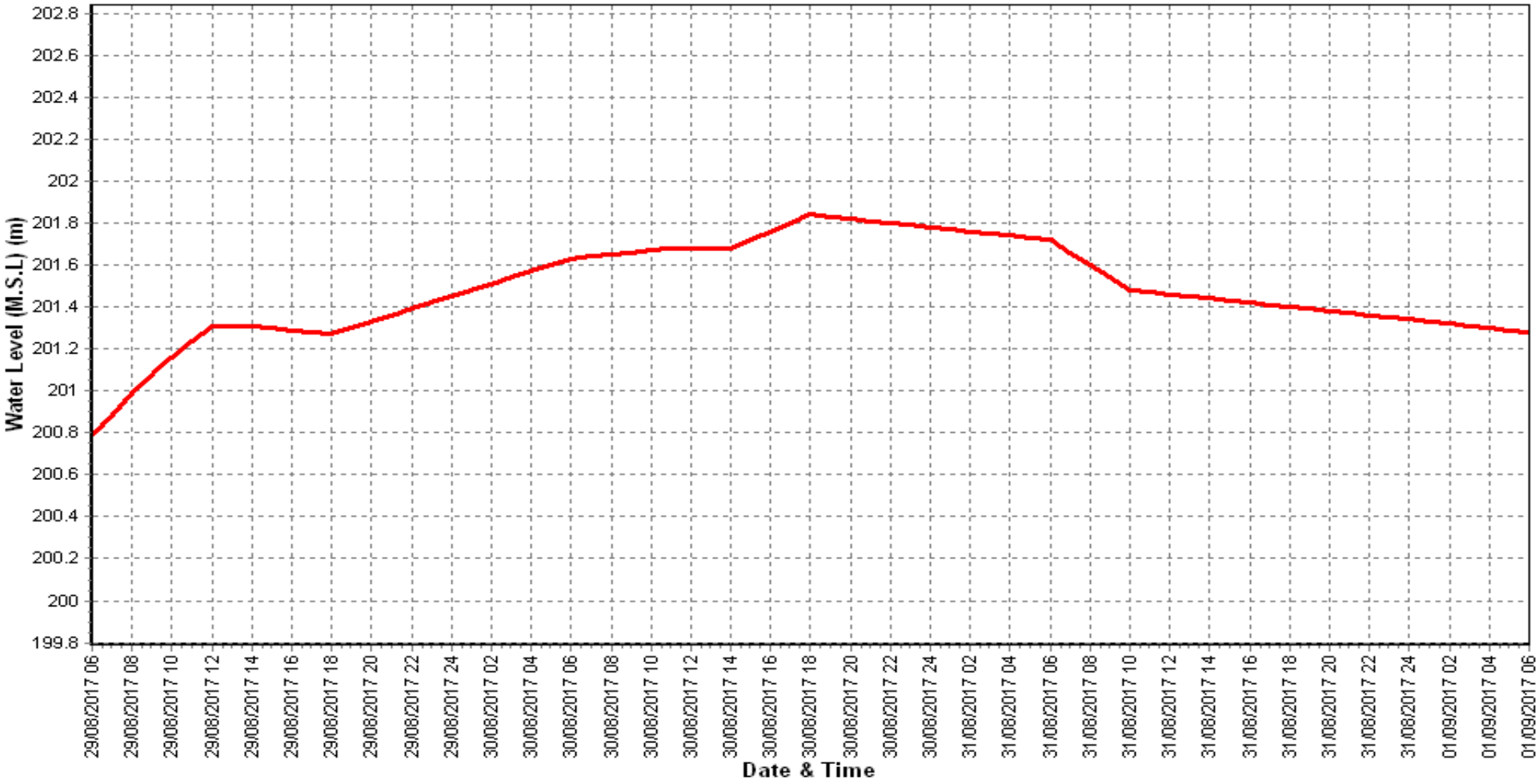
Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : P.G.BRIDGE (AGH32D5) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**MANGRUL**	**Code**	:	**AGH35G0**
State	:	Maharashtra	District		Yeotmal
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:	Penganga	Local River	:	Aran
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Penganga Sd, Yeotmal
Drainage Area	:	2500 Sq. Km.	Bank	:	Right
Latitude	:	20°11'19"	Longitude	:	77°59'12"
Zero of Gauge (m)	:	180 (m.s.l) 279.375 (m.s.l)	09.11.1992 01.06.1996	-	31.05.1996
		Opening Date	Closing Date		
Gauge	:	09.11.1992	**HFL During 2017-18**	:	**285.135 Meter**
			Corres.Discharge	:	**430.5 Cumecs (Estimated)**
Discharge	:	09.11.1992	**Date & Time of Occurance**	:	**15.09.2017 13.00 Hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 290.385 26/08/2002
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1993-1994	323.9	185.390	19.06.1993	0.010	181.480	03.02.1994
1994-1995	602.8	188.255	31.08.1994	0.035	181.510	03.06.1994
1995-1996	698.4	188.110	02.09.1995	0.075	181.400	31.05.1996
1996-1997	152.9	283.135	08.09.1996	0.000	280.745	05.07.1996
1997-1998	84.33	282.750	08.07.1997	0.000	280.975	12.02.1998
1998-1999	299.2	284.730	11.08.1998	0.000	280.705	20.04.1999
1999-2000	478.6	285.740	10.08.1999	0.000	280.735	09.06.1999
2000-2001	1039	289.885	19.07.2000	0.000	280.835	02.04.2001
2001-2002	732.7	286.875	15.06.2001	0.000	280.785	09.04.2002
2002-2003	1151	290.375	26.08.2002	0.000	280.525	10.04.2003
2003-2004	58.03	282.515	22.08.2003	0.000	280.635	04.04.2004
2004-2005	12.79	281.605	05.08.2004	0.000	280.505	25.01.2005
2005-2006	732.5	288.095	28.07.2005	0.000	280.575	05.12.2005
2006-2007	1211	290.125	07.08.2006	0.000	280.625	07.11.2006
2007-2008	251.3	284.275	02.09.2007	0.000	280.485	10.06.2007
2008-2009	27.55	282.125	27.07.2008	0.007	280.615	15.06.2008
2009-2010	154.0	283.475	28.06.2009	0.184	280.715	27.08.2009

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2010-2011	306.4	283.575	10.09.2010	0.000	280.815	12.02.2011
2011-2012	173.8	283.025	11.09.2011	0.000	280.985	11.03.2012
2012-2013	454.9	285.675	05.09.2012	0.000	281.525	17.01.2013
2013-2014	997.0	288.895	16.06.2013	0.000	281.315	31.01.2014
2014-2015	262.5	283.895	31.08.2014	0.000	280.725	10.02.2015
2015-2016	953.5	285.115	18.09.2015	0.000	280.245	12.06.2015
2016-2017	508.7	284.375	12.07.2016	0.000	281.205	27.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at MANGRUL in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1992-1993**		19	19
2	**1993-1994**	108	15	123
3	**1994-1995**	508	34	542
4	**1995-1996**	347	26	374
5	**1996-1997**	112	21	132
6	**1997-1998**	50	8	59
7	**1998-1999**	222	18	241
8	**1999-2000**	593	28	622
9	**2000-2001**	421	9	430
10	**2001-2002**	325	15	340
11	**2002-2003**	849	27	877
12	**2003-2004**	43	9	52
13	**2004-2005**	8	0	8
14	**2005-2006**	347	79	426
15	**2006-2007**	607	39	646
16	**2007-2008**	155	40	194
17	**2008-2009**	22		22
18	**2009-2010**	29	0	29
19	**2010-2011**	410	15	425
20	**2011-2012**	216	1	218
21	**2012-2013**	318	3	321
22	**2013-2014**	997	14	1011
23	**2014-2015**	150	0	150
24	**2015-2016**	170	0	170
25	**2016-2017**			
26	**2017-2018**			
Average		305	18	310

Stage-Discharge Data for the period 2017 - 2018

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	280.525	0.000	280.845	6.011	280.575	1.255	280.325	0.000	280.435	0.000	280.315	0.000
2	280.525	0.000	280.685	3.688 *	280.415	0.000	280.315	0.000	280.425	0.000	280.305	0.000
3	280.495	0.000	280.665	4.354	280.315	0.000	280.305	0.000	280.405	0.000	280.295	0.000
4	280.475	0.000	280.475	0.000	280.295	0.000	280.295	0.000	280.395	0.000	280.285	0.000
5	280.455	0.000	280.590	2.583	280.275	0.000	280.285	0.000	280.385	0.000	280.275	0.000
6	280.475	0.000	280.395	0.000	280.255	0.000	280.275	0.000	280.375	0.000	280.265	0.000
7	280.495	0.000	280.625	3.504	280.235	0.000	280.265	0.000	280.395	0.000	280.255	0.000
8	280.475	0.000	280.445	0.000	280.225	0.000	281.165	16.72	280.405	0.000	280.245	0.000
9	282.925	127.1	280.365	0.000	280.215	0.000	280.825	6.184	280.425	0.000	280.235	0.000
10	281.110	10.69	280.345	0.000	280.205	0.000	280.465	0.000	280.485	0.000	280.225	0.000
11	281.185	16.09 *	280.325	0.000	280.225	0.000	280.445	0.000	280.815	4.832		0.000
12	280.975	7.856	280.305	0.000	280.235	0.000	280.425	0.000	280.880	6.235		0.000
13	280.740	3.911	280.295	0.000	280.225	0.000	280.545	0.933 #	280.630	1.360		0.000
14	280.615	3.223	280.285	0.000	280.215	0.000	280.495	0.598 #	280.530	0.645		0.000
15	280.625	3.588	280.315	0.000	280.225	0.000	281.120	12.05	280.505	0.000		0.000
16	282.335	92.50	280.475	0.000	280.275	0.000	280.995	8.436	280.485	0.000		0.000
17	281.590	40.41	280.365	0.000	280.255	0.000	280.695	2.491 *	280.465	0.000		0.000
18	280.815	6.054 *	280.415	0.000	280.245	0.000	280.635	1.227	280.455	0.000		0.000
19	280.735	4.233	280.785	4.889	280.275	0.000	280.595	1.148	280.445	0.000		0.000
20	280.595	2.608	281.245	18.05	280.335	0.000	280.575	1.645	280.435	0.000		0.000
21	280.495	0.991	280.870	4.467	280.335	0.000	280.660	1.858	280.425	0.000		0.000
22	280.635	4.243	280.835	4.944	280.315	0.000	280.635	1.402	280.415	0.000		0.000
23	280.675	4.890	280.735	3.059 *	280.305	0.000	280.595	1.191	280.405	0.000		0.000
24	280.705	5.270	280.645	1.873 #	280.295	0.000	280.565	1.091 *	280.395	0.000		0.000
25	280.665	3.377 *	280.615	1.913	280.285	0.000	280.545	1.092	280.385	0.000		0.000
26	280.645	3.079 *	280.485	0.000	280.275	0.000	280.525	0.990	280.375	0.000		0.000
27	281.000	10.18	280.655	1.989 #	280.265	0.000	280.505	0.908	280.365	0.000		0.000
28	280.755	4.277	280.630	2.059	280.255	0.000	280.485	0.000	280.355	0.000		0.000
29	280.415	0.000	280.605	1.636	280.635	1.762 #	280.465	0.000	280.345	0.000		0.000
30	280.375	0.000	280.635	1.762 *	280.565	1.193	280.445	0.000	280.335	0.000		0.000
31			280.595	1.418	280.335	0.000			280.325	0.000		
Ten-Daily Mean												
I Ten-Daily	280.796	13.78	280.544	2.014	280.301	0.125	280.452	2.290	280.413	0.000	280.270	0.000
II Ten-Daily	281.021	18.05	280.481	2.294	280.251	0.000	280.652	2.853	280.565	1.307		0.000
III Ten-Daily	280.637	3.631	280.664	2.284	280.351	0.269	280.543	0.853	280.375	0.000		0.000
Monthly												
Min.	280.375	0.000	280.285	0.000	280.205	0.000	280.265	0.000	280.325	0.000	280.225	0.000
Max.	282.925	127.1	281.245	18.05	280.635	1.762	281.165	16.72	280.880	6.235	280.315	0.000
Mean	280.818	11.82	280.566	2.200	280.303	0.136	280.549	1.999	280.448	0.422	280.270	0.000

Annual Runoff in MCM = 43 Annual Runoff in mm = 17

Peak Observed Discharge = 127.1 cumecs on 09/06/2017 Corres. Water Level :282.925 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :280.525 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1		0.000		0.000		0.000 *		0.000		0.000		0.000
2		0.000		0.000		0.000 *		0.000		0.000		0.000
3		0.000		0.000		0.000 *		0.000		0.000		0.000
4		0.000		0.000		0.000 *		0.000		0.000		0.000
5		0.000		0.000		0.000 *		0.000		0.000		0.000
6		0.000		0.000	280.275	0.000		0.000		0.000		0.000
7		0.000		0.000	280.265	0.000		0.000		0.000		0.000
8		0.000		0.000	280.285	0.000		0.000		0.000		0.000
9		0.000		0.000	280.295	0.000		0.000		0.000		0.000
10		0.000		0.000	280.285	0.000		0.000		0.000		0.000
11		0.000		0.000	280.295	0.000		0.000		0.000		0.000
12		0.000		0.000	280.355	0.000		0.000		0.000		0.000
13		0.000		0.000	280.365	0.000		0.000		0.000		0.000
14		0.000		0.000	280.345	0.000		0.000		0.000		0.000
15		0.000		0.000	280.355	0.000		0.000		0.000		0.000
16		0.000		0.000	280.335	0.000		0.000		0.000		0.000
17		0.000		0.000	280.325	0.000		0.000		0.000		0.000
18		0.000		0.000	280.315	0.000		0.000		0.000		0.000
19		0.000		0.000	280.305	0.000		0.000		0.000		0.000
20		0.000		0.000	280.295	0.000		0.000		0.000		0.000
21		0.000		0.000	280.285	0.000		0.000		0.000		0.000
22		0.000		0.000	280.275	0.000		0.000		0.000		0.000
23		0.000		0.000	280.265	0.000		0.000		0.000		0.000
24		0.000		0.000	280.255	0.000		0.000		0.000		0.000
25		0.000		0.000	280.245	0.000		0.000		0.000		0.000
26		0.000		0.000	280.255	0.000		0.000		0.000		0.000
27		0.000		0.000	280.245	0.000		0.000		0.000		0.000
28		0.000		0.000	280.205	0.000		0.000		0.000		0.000
29		0.000		0.000				0.000		0.000		0.000
30		0.000		0.000				0.000		0.000		0.000
31		0.000		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily		0.000		0.000	280.281	0.000		0.000		0.000		0.000
II Ten-Daily		0.000		0.000	280.329	0.000		0.000		0.000		0.000
III Ten-Daily		0.000		0.000	280.254	0.000		0.000		0.000		0.000
Monthly												
Min.		0.000		0.000	280.205	0.000		0.000		0.000		0.000
Max.		0.000		0.000	280.365	0.000		0.000		0.000		0.000
Mean		0.000		0.000	280.292	0.000		0.000		0.000		0.000

Peak Computed Discharge = 16.09 cumecs on 11/06/2017 **Corres. Water Level :281.185 m**

Lowest Computed Discharge = 0.000 cumecs on 01/02/2018

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

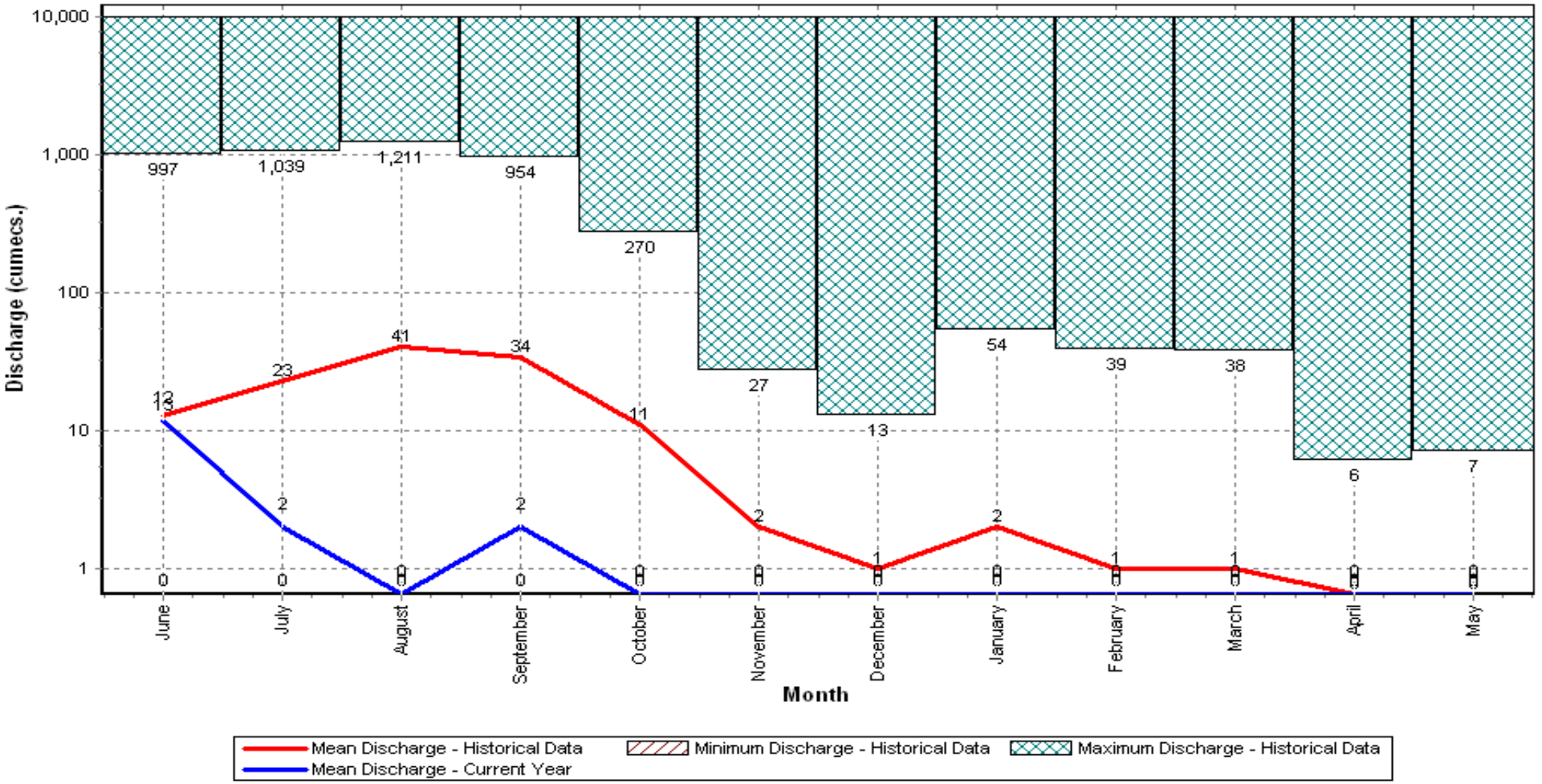
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : MANGRUL (AGH35G0) **Data considered : 1993-2018** **Division : Wainganga Div., Nagpur**

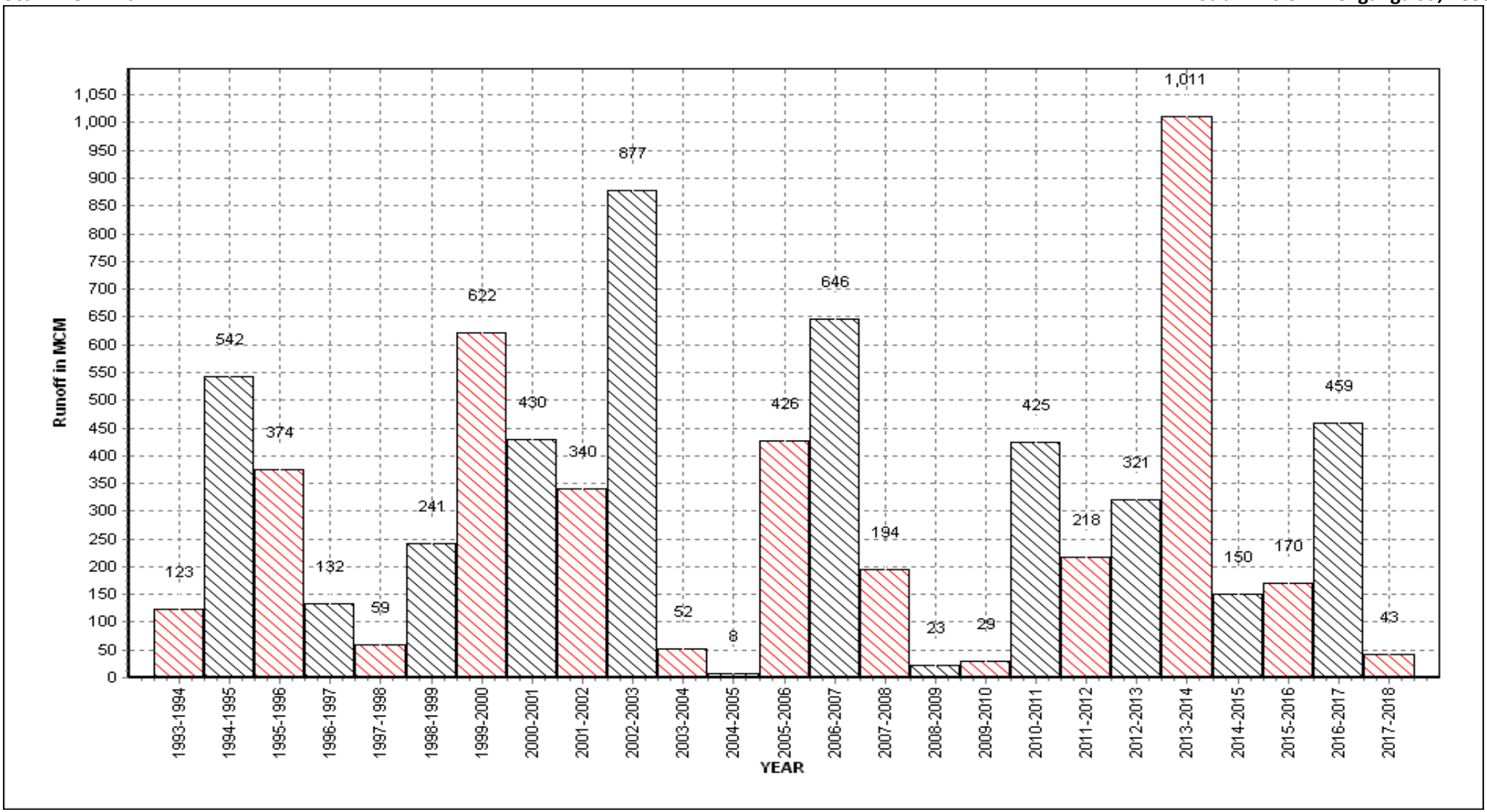
Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**



Annual Runoff Values for the period: 1993 - 2018

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**

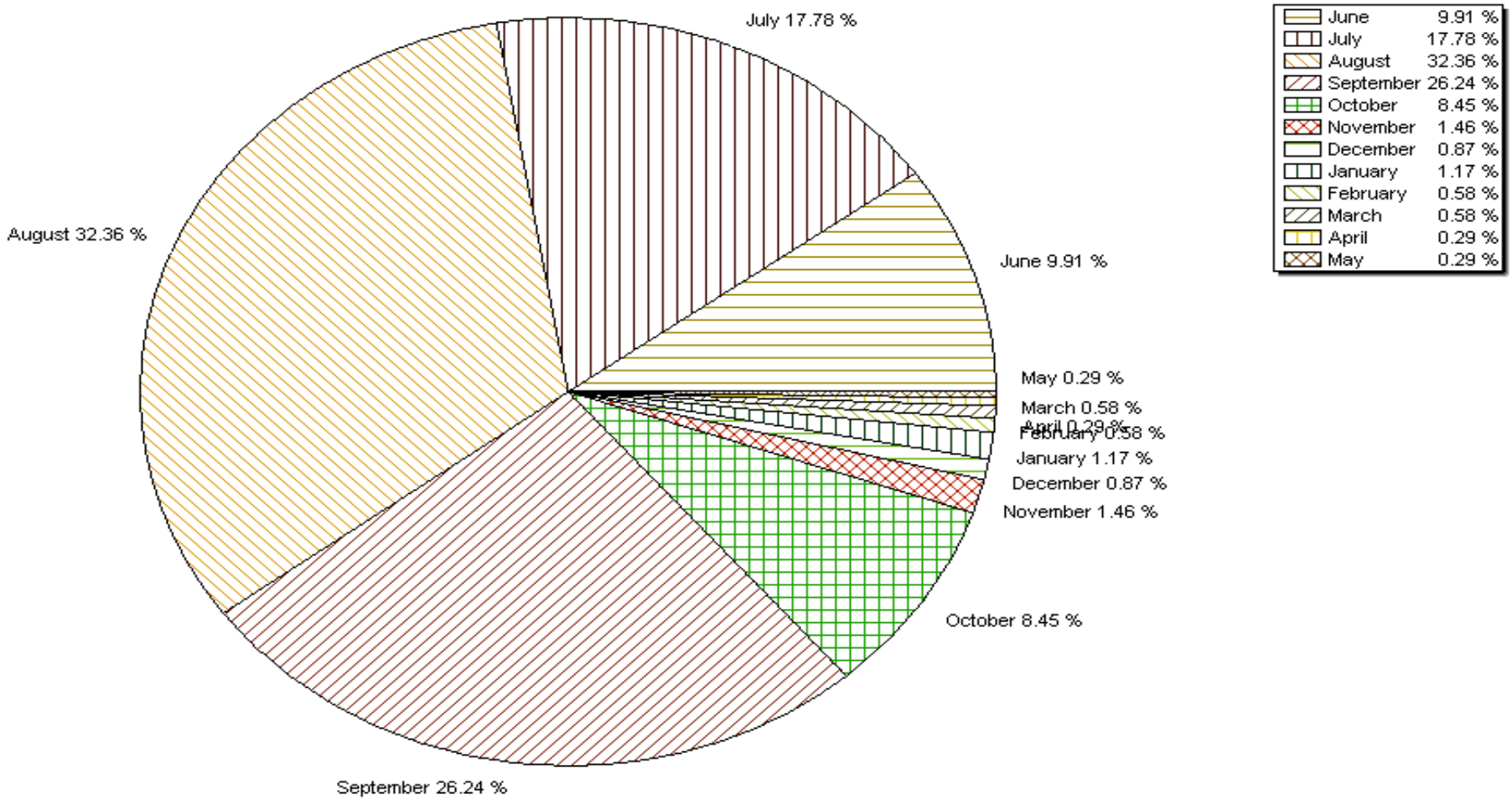


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1993-2017

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

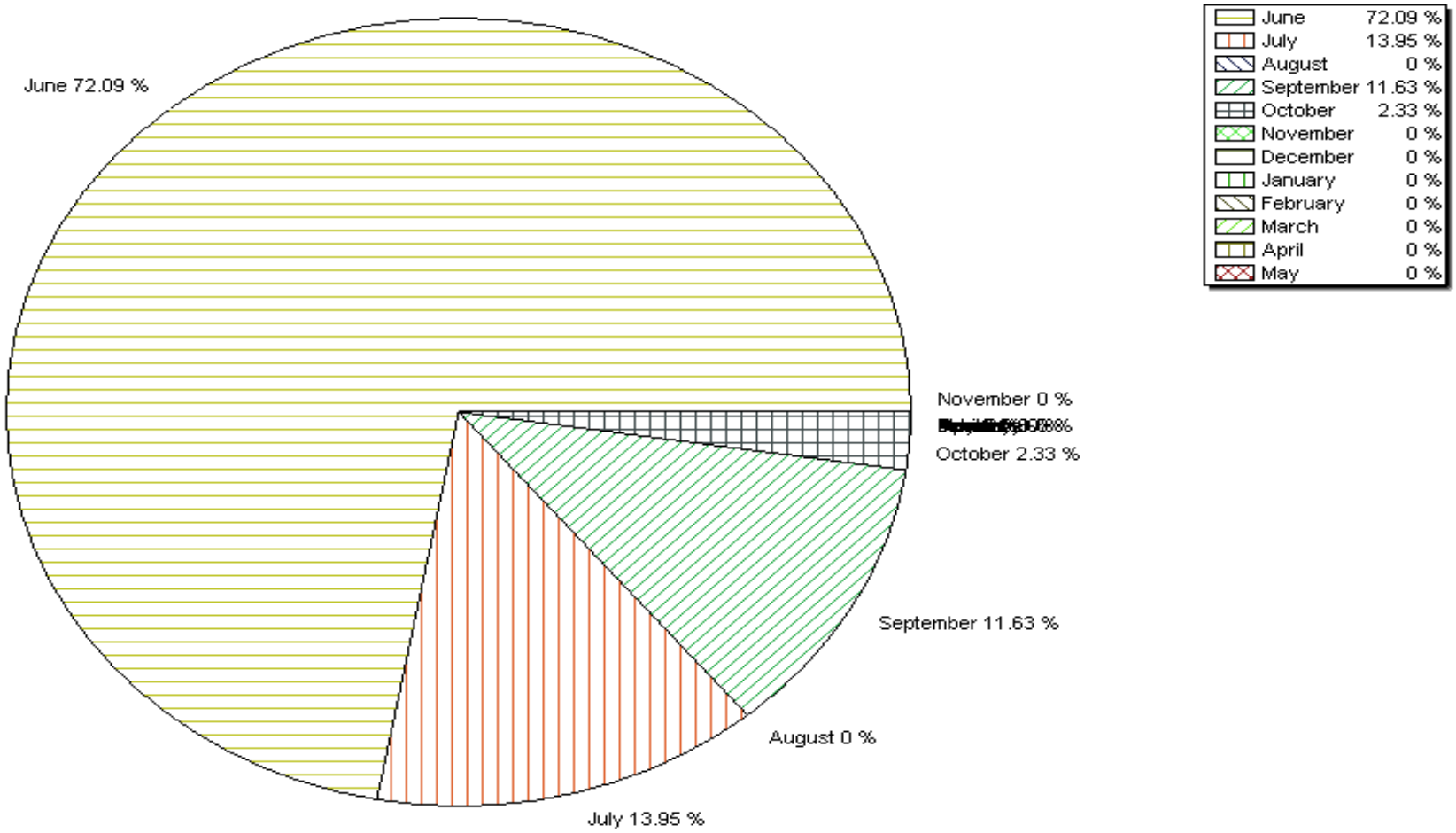
Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**



Monthly Runoff for the Year : 2017-2018

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

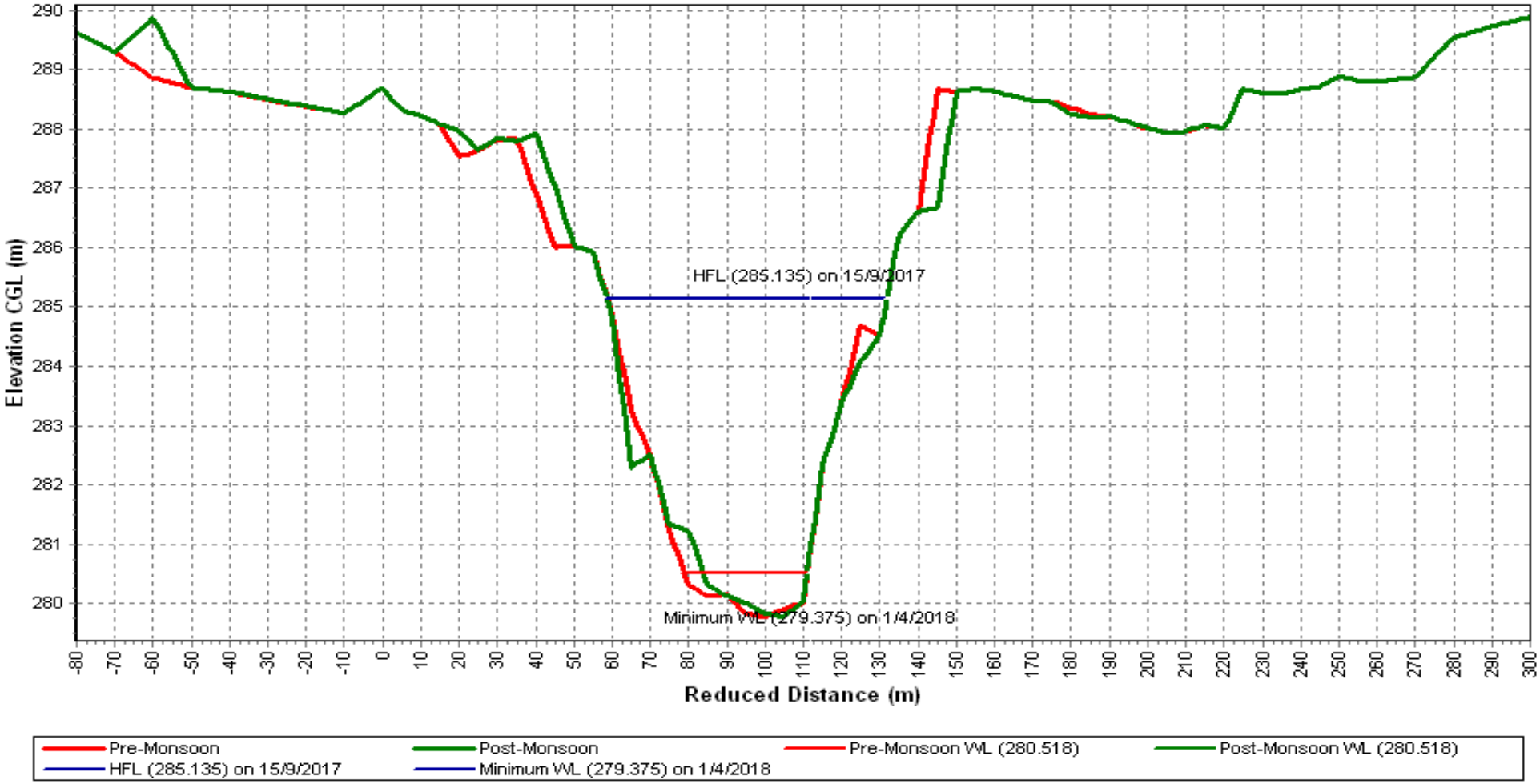
Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

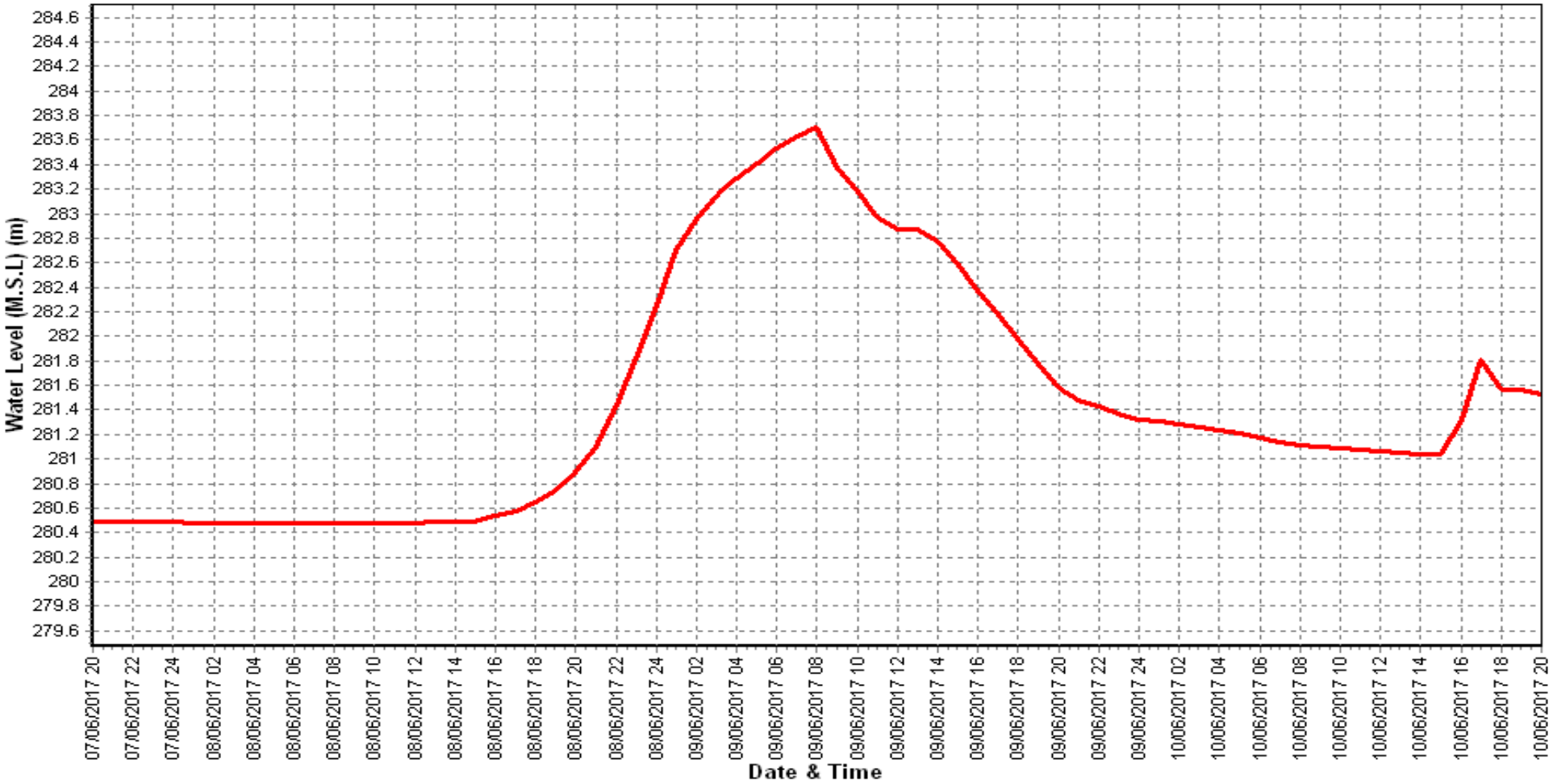
Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**

Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : MANGRUL (AGH35G0) **Division : Wainganga Div., Nagpur**

Local River : Aran **Sub-Division : Penganga Sd, Yeotmal**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**KANERGAON**	**Code**	:	**AGH32R8**
State	:	Maharashtra	District		Hingoli
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:	Penganga	Local River	:	Penganga
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Penganga Sd, Yeotmal
Drainage Area	:	3515 Sq. Km.	Bank	:	Right
Latitude	:	19°57'40"	Longitude	:	77°08'53"
Zero of Gauge (m)	:	465 (m.s.l) 465.015 (m.s.l)	01.01.1991 01.06.1996	-	31.05.1996
		Opening Date	Closing Date		
Gauge	:	10.02.1991	**HFL During 2017-18**	:	**470.465 Meter**
			Corres.Discharge	:	**361.0 Cumecs (Estimated)**
Discharge	:	20.07.1992	**Date & Time of**	:	**15.09.2017**
			Occurance	:	**17.00 Hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 478.035 07/08/2006
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1992-1993	377.3	470.670	02.09.1992	0.000		10.02.1993
1993-1994	480.2	472.130	19.06.1993	0.000		28.04.1994
1994-1995	619.3	469.508	31.08.1994	0.000		11.02.1995
1995-1996	550.4	471.100	02.09.1995	0.000		27.03.1996
1996-1997	263.9	468.765	08.09.1996	0.000		06.04.1997
1997-1998	292.3	468.215	24.08.1997	0.000		02.05.1998
1998-1999	1885	473.820	11.08.1998	0.000	465.765	23.02.1999
1999-2000	1798	474.615	02.08.1999	0.000	465.675	26.01.2000
2000-2001	961.9	471.095	03.07.2000	0.000		25.01.2001
2001-2002	965.0	472.095	02.10.2001	0.000	465.575	28.01.2002
2002-2003	2316	474.965	02.09.2002	0.000		25.01.2003
2003-2004	160.4	467.310	08.08.2003	0.000		26.01.2004
2004-2005	67.02	466.995	14.06.2004	0.000		25.01.2005
2005-2006	255.9	467.720	04.09.2005	0.000	465.465	23.01.2006
2006-2007	3009	477.345	07.08.2006	0.000		09.02.2007
2007-2008	237.4	467.975	29.09.2007	0.018	465.575	19.12.2007
2008-2009	229.4	467.585	21.09.2008	0.006	465.520	12.11.2008

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2009-2010	141.1	467.435	04.09.2009	0.005	465.575	14.10.2009
2010-2011	1215	471.040	31.08.2010	0.000		25.02.2011
2011-2012	377.8	468.725	16.09.2011	0.000	465.195	13.11.2011
2012-2013	168.5	467.125	04.10.2012	0.000		07.04.2013
2013-2014	1398	473.215	24.07.2013	0.000		27.12.2013
2014-2015	547.5	469.100	08.09.2014	0.000	465.115	11.11.2014
2015-2016	511.8	468.235	18.09.2015	0.000	465.115	30.07.2015
2016-2017	159.3	468.935	27.07.2016	0.000	468.175	26.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at KANERGAON in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1992-1993**	297	2	299
2	**1993-1994**	193	10	203
3	**1994-1995**	326	5	331
4	**1995-1996**	291	5	296
5	**1996-1997**	241	6	247
6	**1997-1998**	107	60	167
7	**1998-1999**	1035	159	1194
8	**1999-2000**	1212	5	1218
9	**2000-2001**	361	0	361
10	**2001-2002**	764	3	767
11	**2002-2003**	1229	3	1232
12	**2003-2004**	116	0	116
13	**2004-2005**	32	0	32
14	**2005-2006**	227	4	231
15	**2006-2007**	1087	13	1099
16	**2007-2008**	292	3	294
17	**2008-2009**	99	0	99
18	**2009-2010**	94		94
19	**2010-2011**	1307	27	1333
20	**2011-2012**	204	0	204
21	**2012-2013**	161	4	165
22	**2013-2014**	1264	6	1271
23	**2014-2015**	203	0	203
24	**2015-2016**	128	0	128
25	**2016-2017**			
26	**2017-2018**			
Average		470	14	483

Stage-Discharge Data for the period 2017 - 2018

Station Name : KANERGAON (AGH32R8) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000	465.195	0.000	465.145	0.000	466.755	0.000	469.055	0.000	468.965	0.000
2		0.000	465.165	0.000	465.135	0.000	466.805	0.000	469.055	0.000	468.965	0.000
3		0.000	465.145	0.000	465.125	0.000	466.835	0.000	469.035	0.000	468.945	0.000
4		0.000	465.125	0.000	465.105	0.000	466.885	0.000	469.025	0.000	468.935	0.000
5		0.000	465.115	0.000	465.095	0.000	466.915	0.000	469.015	0.000	468.925	0.000
6		0.000	465.105	0.000	465.065	0.000	466.925	0.000	469.015	0.000	468.915	0.000
7		0.000	465.085	0.000	465.065	0.000	466.935	0.000	469.015	0.000	468.895	0.000
8		0.000	465.085	0.000	465.045	0.000	466.935	0.000	469.025	0.000	468.895	0.000
9		0.000	465.075	0.000	465.035	0.000	466.925	0.000	469.015	0.000	468.885	0.000
10		0.000	465.065	0.000	465.035	0.000	466.915	0.000	469.095	0.000	468.885	0.000
11		0.000	465.045	0.000	465.035	0.000	466.905	0.000	469.065	0.000	468.875	0.000
12		0.000	465.035	0.000	465.035	0.000	467.095	0.000	469.065	0.000	468.875	0.000
13	465.675	22.97	465.035	0.000	465.035	0.000	467.435	0.000	469.155	0.000	468.865	0.000
14	466.138	31.64	465.035	0.000	465.025	0.000	467.775	0.000	469.185	0.000	468.855	0.000
15	465.575	16.76	465.035	0.000	465.025	0.000	469.295	0.000	469.095	0.000	468.845	0.000
16	465.695	21.49	465.035	0.000	465.035	0.000	468.875	0.000	469.075	0.000	468.835	0.000
17	465.685	19.98	465.055	0.000	465.035	0.000	469.205	0.000	469.065	0.000	468.825	0.000
18	465.465	10.45 *	465.295	0.000	465.035	0.000	468.985	0.000	469.065	0.000	468.815	0.000
19	465.415	7.023	465.225	0.000	465.025	0.000	469.415	0.000	469.055	0.000	468.795	0.000
20	465.335	6.550 #	465.245	0.000	465.195	0.000	469.425	0.000	469.045	0.000	468.775	0.000
21	465.275	0.000	465.360	8.564	468.055	0.000	468.615	0.000	469.035	0.000	468.755	0.000
22	465.165	0.000	465.305	0.000	465.255	4.493	469.225	0.000	469.025	0.000	468.755	0.000
23	465.125	0.000	465.255	0.000	465.095	0.000	469.325	0.000	469.025	0.000	468.755	0.000
24	465.105	0.000	465.245	0.000	465.085	0.000	469.165	0.000	469.015	0.000	468.745	0.000
25	465.255	0.000	465.245	0.000	465.085	0.000	469.115	0.000	469.015	0.000	468.735	0.000
26	465.235	0.000	465.235	0.000	465.155	0.000	469.115	0.000	469.015	0.000	468.725	0.000
27	465.245	0.000	465.205	0.000	465.225	0.000	469.095	0.000	469.015	0.000	468.705	0.000
28	465.255	0.000	465.195	0.000	465.265	0.000	469.085	0.000	469.015	0.000	468.685	0.000
29	465.225	0.000	465.185	0.000	466.355	0.000	469.075	0.000	469.005	0.000	468.665	0.000
30	465.235	0.000	465.165	0.000	466.595	0.000	469.055	0.000	468.995	0.000	468.645	0.000
31			465.155	0.000	466.685	0.000			468.975	0.000		
Ten-Daily Mean												
I Ten-Daily		0.000	465.116	0.000	465.085	0.000	466.883	0.000	469.035	0.000	468.921	0.000
II Ten-Daily	465.623	13.69	465.104	0.000	465.048	0.000	468.441	0.000	469.087	0.000	468.836	0.000
III Ten-Daily	465.212	0.000	465.232	0.779	465.805	0.408	469.087	0.000	469.012	0.000	468.717	0.000
Monthly												
Min.	465.105	0.000	465.035	0.000	465.025	0.000	466.755	0.000	468.975	0.000	468.645	0.000
Max.	466.138	31.64	465.360	8.564	468.055	4.493	469.425	0.000	469.185	0.000	468.965	0.000
Mean	465.395	4.562	465.153	0.276	465.329	0.145	468.137	0.000	469.044	0.000	468.825	0.000

Annual Runoff in MCM = 13 Annual Runoff in mm = 4

Peak Observed Discharge = 31.64 cumecs on 14/06/2017 Corres. Water Level :466.1375 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : KANERGAON (AGH32R8) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	468.625	0.000	468.075	0.000	467.425	0.000	467.175	0.000	466.775	0.000	466.365	0.000
2	468.615	0.000	468.055	0.000	467.415	0.000	467.165	0.000	466.765	0.000	466.355	0.000
3	468.605	0.000	468.045	0.000	467.385	0.000	467.155	0.000	466.755	0.000	466.335	0.000
4	468.565	0.000	468.015	0.000	467.365	0.000	467.145	0.000	466.745	0.000	466.325	0.000
5	468.535	0.000	467.985	0.000	467.365	0.000	467.125	0.000	466.735	0.000	466.315	0.000
6	468.515	0.000	467.955	0.000	467.355	0.000	467.115	0.000	466.725	0.000	466.305	0.000
7	468.495	0.000	467.935	0.000	467.345	0.000	467.115	0.000	466.715	0.000	466.295	0.000
8	468.485	0.000	467.915	0.000	467.335	0.000	467.105	0.000	466.705	0.000	466.275	0.000
9	468.465	0.000	467.895	0.000	467.325	0.000	467.095	0.000	466.695	0.000	466.265	0.000
10	468.455	0.000	467.885	0.000	467.315	0.000	467.065	0.000	466.685	0.000	466.245	0.000
11	468.435	0.000	467.855	0.000	467.305	0.000	467.055	0.000	466.675	0.000	466.215	0.000
12	468.415	0.000	467.855	0.000	467.305	0.000	467.035	0.000	466.665	0.000	466.205	0.000
13	468.405	0.000	467.835	0.000	467.295	0.000	467.015	0.000	466.645	0.000	466.175	0.000
14	468.385	0.000	467.805	0.000	467.315	0.000	466.995	0.000	466.635	0.000	466.165	0.000
15	468.365	0.000	467.775	0.000	467.315	0.000	466.975	0.000	466.635	0.000	466.145	0.000
16	468.355	0.000	467.715	0.000	467.305	0.000	466.965	0.000	466.605	0.000	466.125	0.000
17	468.335	0.000	467.715	0.000	467.295	0.000	466.985	0.000	466.595	0.000	466.115	0.000
18	468.325	0.000	467.705	0.000	467.295	0.000	466.985	0.000	466.585	0.000	466.105	0.000
19	468.315	0.000	467.695	0.000	467.285	0.000	466.965	0.000	466.575	0.000	466.075	0.000
20	468.305	0.000	467.665	0.000	467.275	0.000	466.955	0.000	466.565	0.000	466.055	0.000
21	468.265	0.000	467.635	0.000	467.265	0.000	466.945	0.000	466.545	0.000	466.035	0.000
22	468.255	0.000	467.615	0.000	467.255	0.000	466.935	0.000	466.515	0.000	466.015	0.000
23	468.235	0.000	467.605	0.000	467.245	0.000	466.915	0.000	466.505	0.000	466.015	0.000
24	468.225	0.000	467.585	0.000	467.235	0.000	466.905	0.000	466.495	0.000	465.985	0.000
25	468.215	0.000	467.575	0.000	467.225	0.000	466.885	0.000	466.485	0.000	465.965	0.000
26	468.195	0.000	467.565	0.000	467.215	0.000	466.875	0.000	466.455	0.000	465.945	0.000
27	468.175	0.000	467.535	0.000	467.205	0.000	466.865	0.000	466.445	0.000	465.945	0.000
28	468.165	0.000	467.515	0.000	467.195	0.000	466.855	0.000	466.415	0.000	465.925	0.000
29	468.145	0.000	467.485	0.000			466.845	0.000	466.405	0.000	465.915	0.000
30	468.125	0.000	467.465	0.000			466.835	0.000	466.375	0.000	465.905	0.000
31	468.095	0.000	467.445	0.000			466.795	0.000			465.885	0.000
Ten-Daily Mean												
I Ten-Daily	468.536	0.000	467.976	0.000	467.363	0.000	467.126	0.000	466.730	0.000	466.308	0.000
II Ten-Daily	468.364	0.000	467.762	0.000	467.299	0.000	466.993	0.000	466.618	0.000	466.138	0.000
III Ten-Daily	468.190	0.000	467.548	0.000	467.230	0.000	466.878	0.000	466.464	0.000	465.958	0.000
Monthly												
Min.	468.095	0.000	467.445	0.000	467.195	0.000	466.795	0.000	466.375	0.000	465.885	0.000
Max.	468.625	0.000	468.075	0.000	467.425	0.000	467.175	0.000	466.775	0.000	466.365	0.000
Mean	468.358	0.000	467.755	0.000	467.302	0.000	466.995	0.000	466.604	0.000	466.129	0.000

Peak Computed Discharge = 10.45 cumecs on 18/06/2017 Corres. Water Level :465.465 m

Lowest Computed Discharge = 10.45 cumecs on 18/06/2017 Corres. Water Level :465.465 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

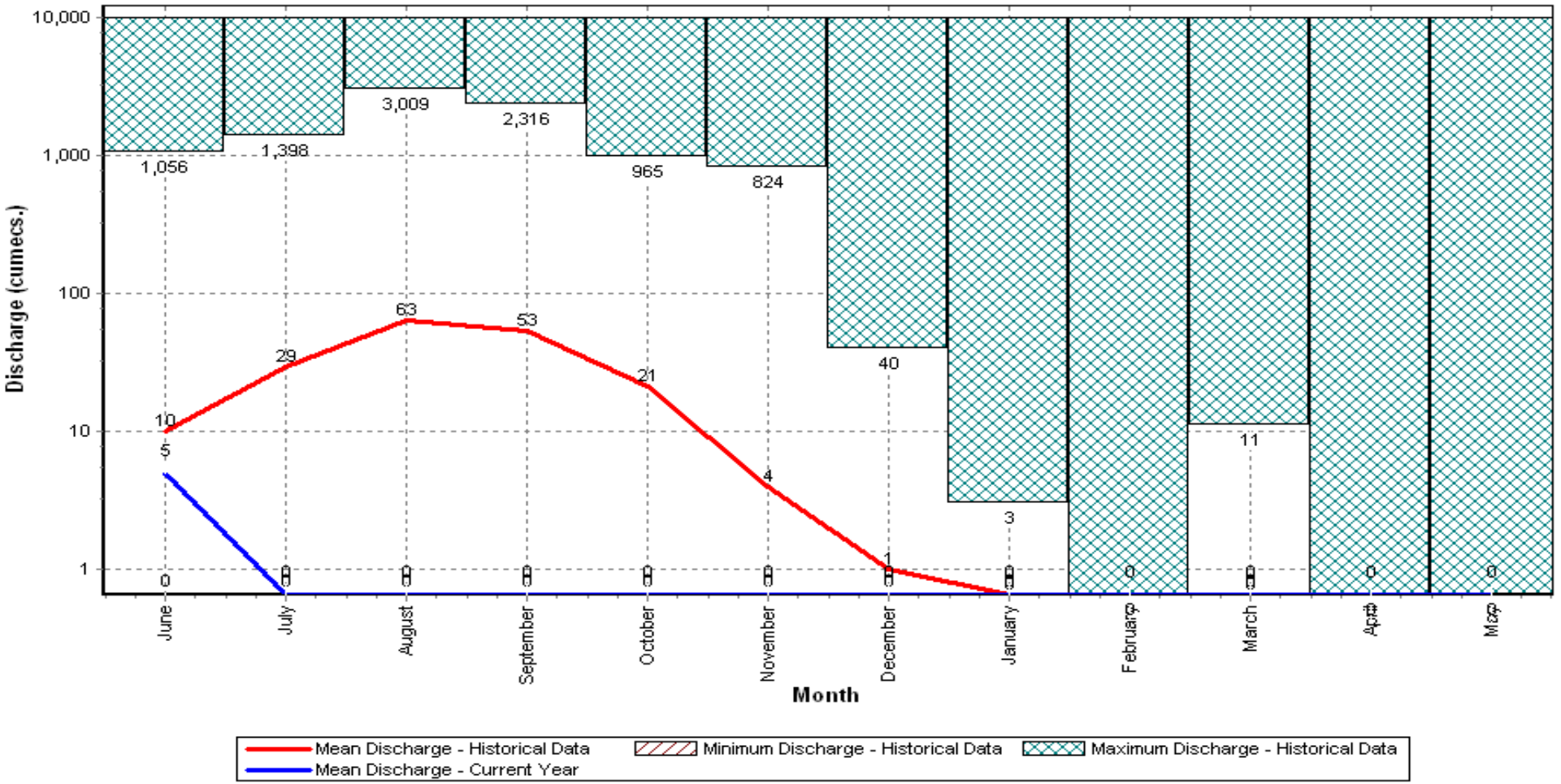
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : KANERGAON (AGH32R8) | **Data considered : 1992-2018** | **Division : Wainganga Div., Nagpur**

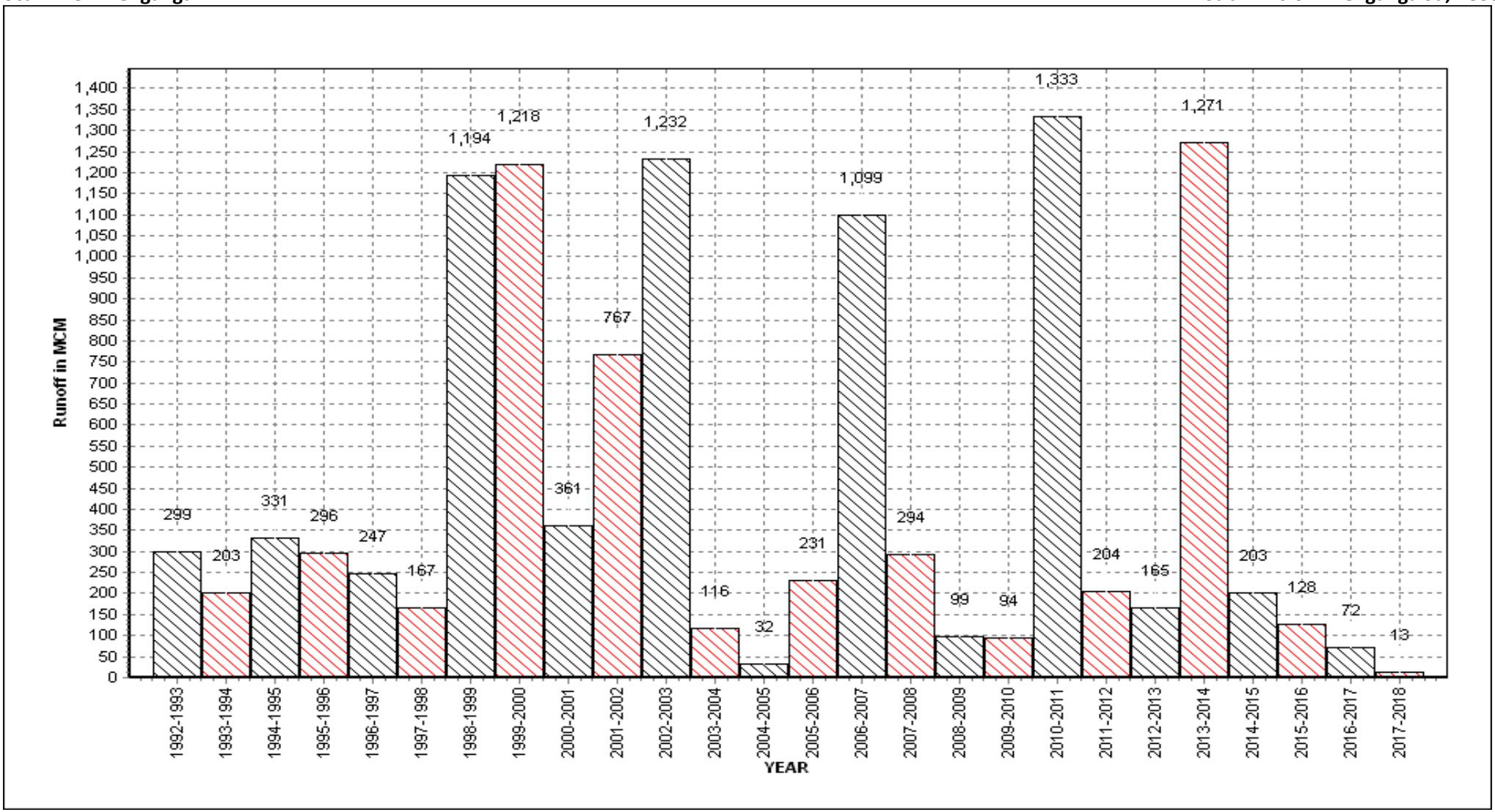
Local River : Penganga | **Sub-Division : Penganga Sd, Yeotmal**



Annual Runoff Values for the period: 1992 - 2018

Station Name : KANERGAON (AGH32R8) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**

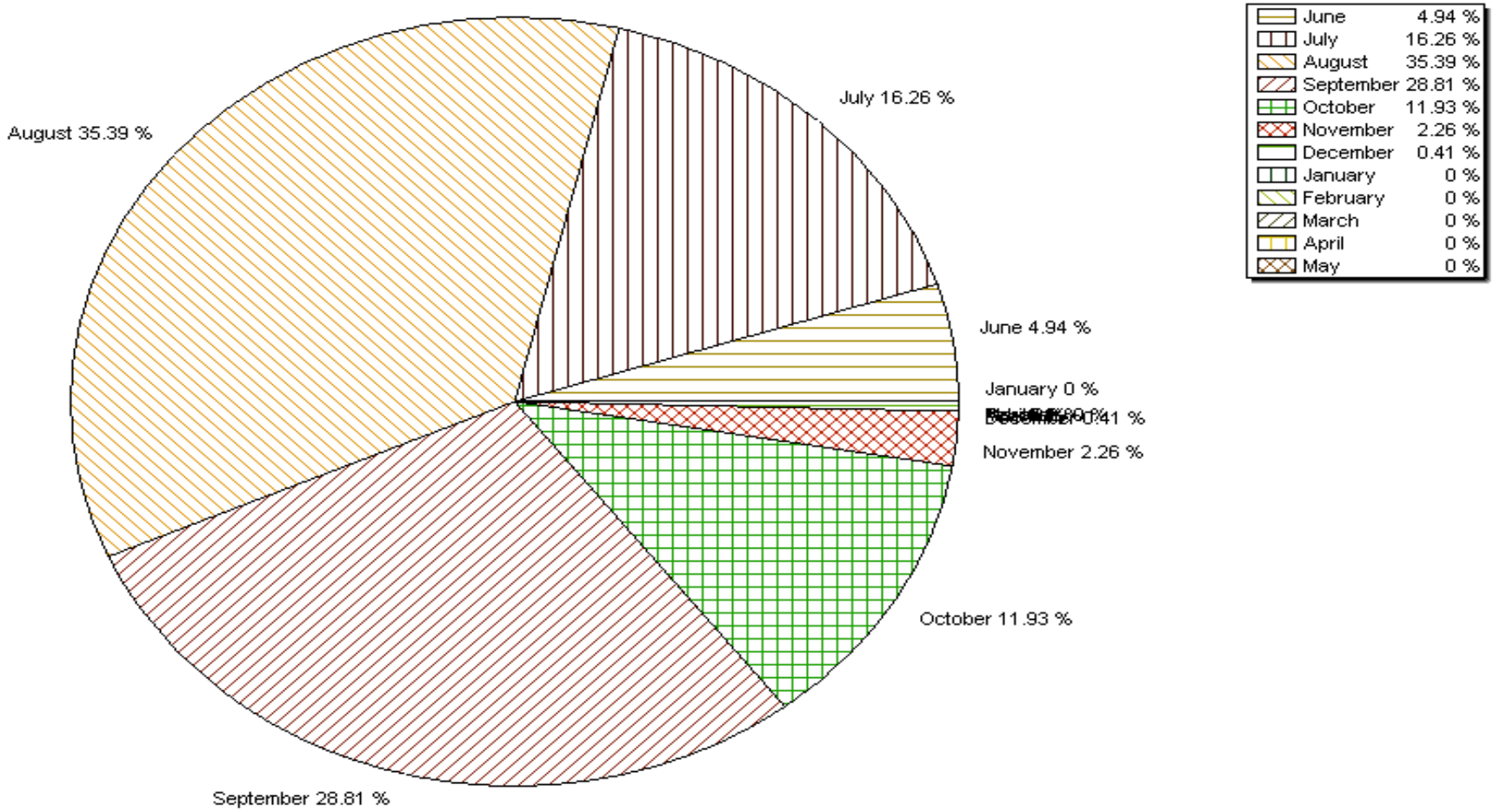


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1992-2017

Station Name : KANERGAON (AGH32R8) **Division : Wainganga Div., Nagpur**

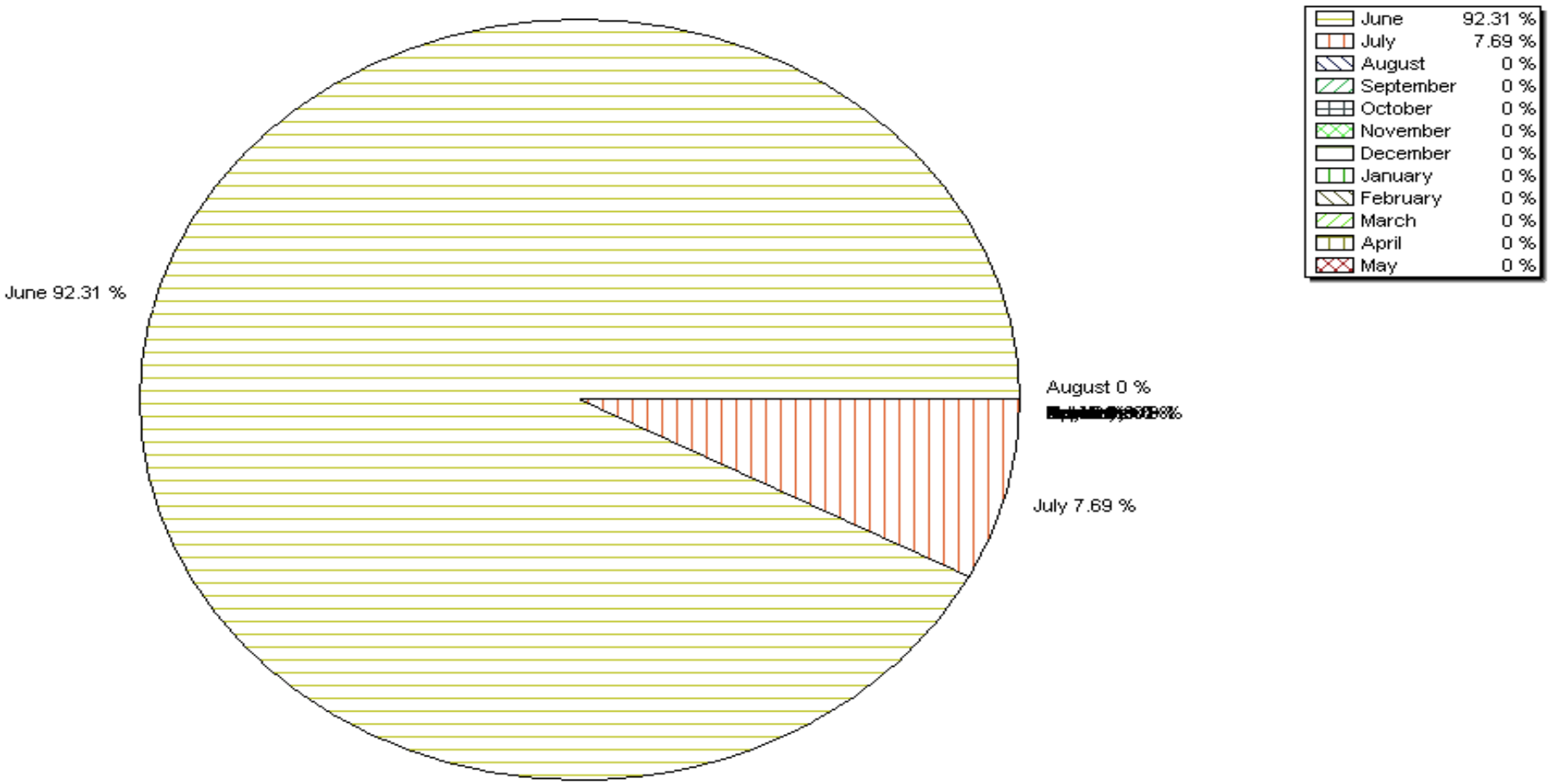
Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Monthly Runoff for the Year : 2017-2018

Station Name : KANERGAON (AGH32R8) **Division : Wainganga Div., Nagpur**

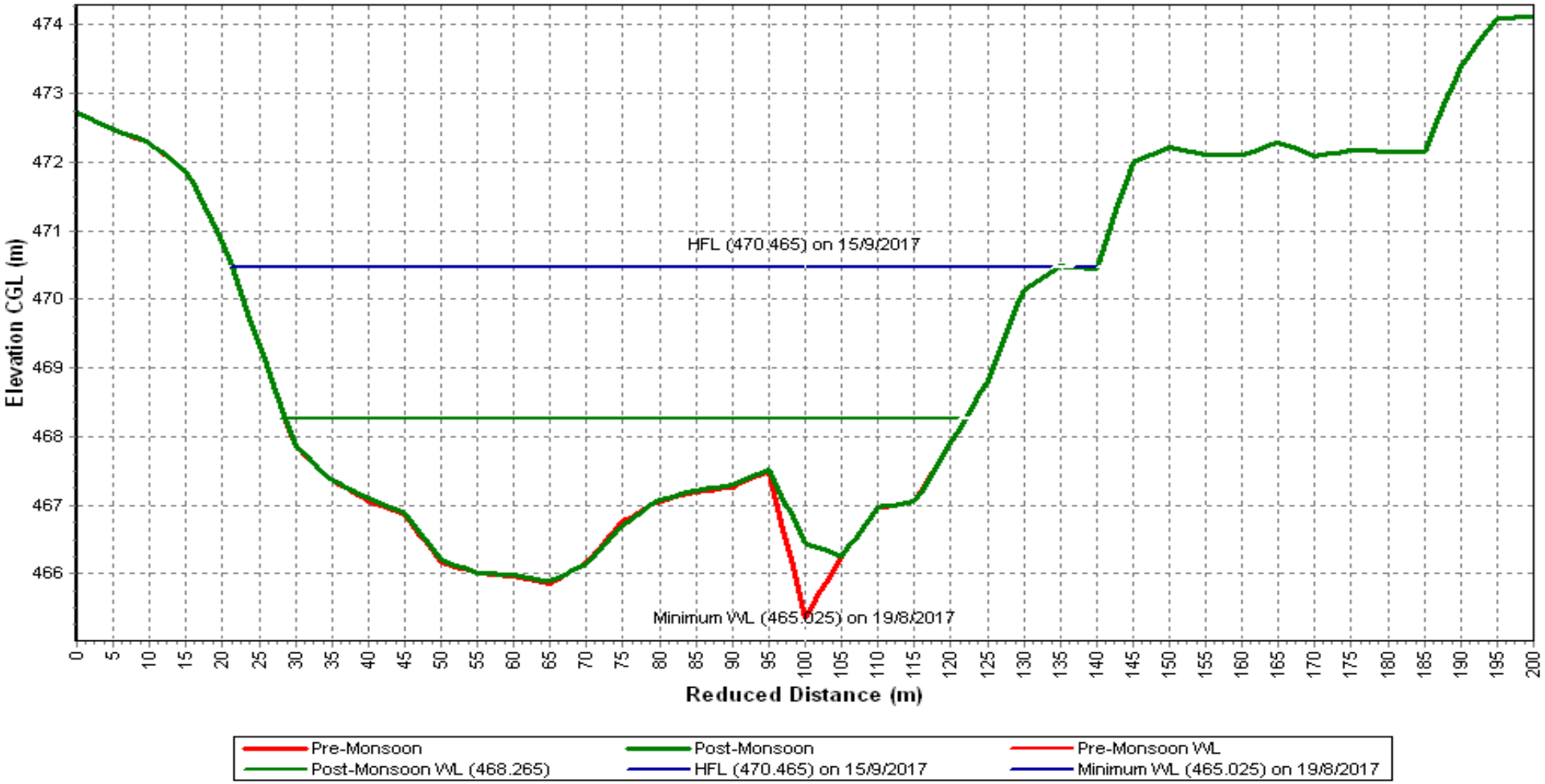
Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : KANERGAON (AGH32R8) **Division : Wainganga Div., Nagpur**

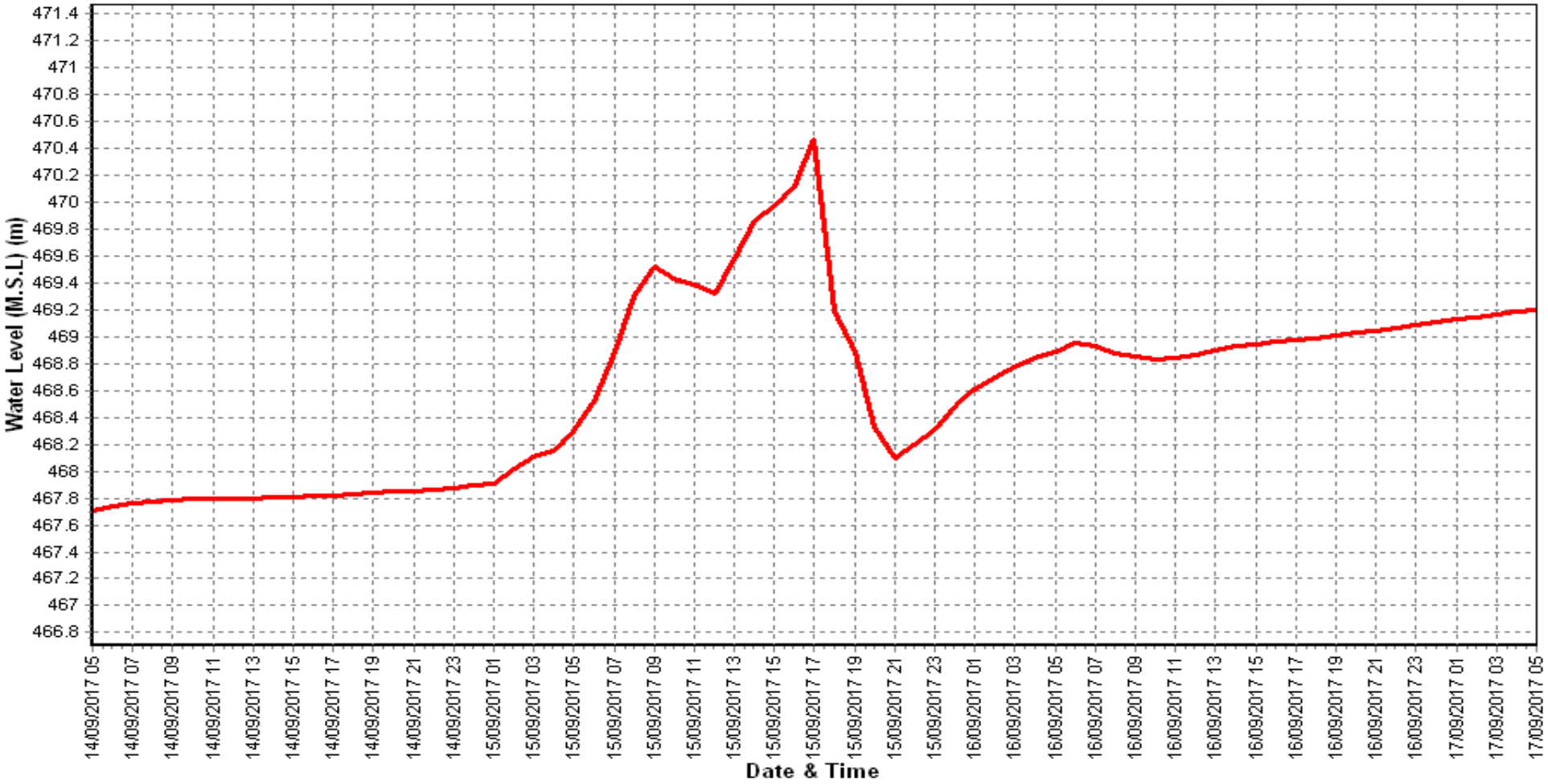
Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : KANERGAON (AGH32R8) **Division : Wainganga Div., Nagpur**

Local River : Penganga **Sub-Division : Penganga Sd, Yeotmal**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**NANDGAON**	**Code**	:	**AGH3AF4**
State	:	Maharashtra	District		Wardha
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:	Wunna	Local River	:	Wunna
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Penganga Sd, Yeotmal
Drainage Area	:	4580 Sq. Km.	Bank	:	Left
Latitude	:	20°32'00"	Longitude	:	78°49'33"
Zero of Gauge (m)	:	198 (m.s.l)	28.10.1985		
		Opening Date	Closing Date		
Gauge	:	28.10.1985	**HFL During 2017-18**	:	**205.180 Meter**
			Corres.Discharge	:	**723.5 Cumecs (Estimated)**
Discharge	:	21.07.1986	**Date & Time of**	:	**18.09.2017**
			Occurance	:	**21.00Hrs.**
Sediment	:	13.07.1988			
Water Quality	:	01.01.1988			

HFL Recorded so far in m : 213.630 13/07/1994
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1986-1987	2505	211.100	14.08.1986	0.000		05.06.1986
1987-1988	68.30	202.270	29.08.1987	0.000		14.04.1988
1988-1989	624.0	208.375	07.09.1988	0.000	0.000	09.05.1989
1989-1990	478.1	205.425	01.09.1989	0.000		26.04.1990
1990-1991	3035	211.590	23.08.1990	0.000	0.000	04.05.1991
1991-1992	1883	209.175	16.08.1991	0.000	200.450	15.04.1992
1992-1993	2153	209.345	21.08.1992	0.000	200.455	13.05.1993
1993-1994	342.3	204.255	29.07.1993	0.000		06.05.1994
1994-1995	3205	212.550	13.07.1994	0.000	200.560	11.05.1995
1995-1996	1208	208.700	02.09.1995	0.000	200.580	13.06.1995
1996-1997	157.7	202.985	17.08.1996	0.000	200.390	30.05.1997
1997-1998	164.8	203.115	23.08.1997	0.000	200.380	14.06.1997
1998-1999	349.0	204.250	08.09.1998	0.140	200.785	06.06.1998
1999-2000	2522	211.270	10.08.1999	0.179	200.470	10.05.2000
2000-2001	2509	210.610	19.07.2000	0.318	200.560	05.05.2001
2001-2002	1094	206.850	14.06.2001	0.000	200.600	26.05.2002
2002-2003	2346	209.750	25.06.2002	0.000	200.610	23.04.2003
2003-2004	621.1	204.385	23.08.2003	0.000	200.520	14.06.2003

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2004-2005	456.9	203.665	05.08.2004	0.000	200.560	10.06.2004
2005-2006	1287	207.650	15.09.2005	0.000	200.610	09.06.2005
2006-2007	788.6	205.215	07.09.2006	0.406	200.640	26.04.2007
2007-2008	3567	210.720	08.08.2007	0.186	200.490	18.05.2008
2008-2009	597.4	204.615	29.07.2008	0.048	200.370	27.05.2009
2009-2010	404.3	203.735	01.09.2009	0.000	200.410	27.06.2009
2010-2011	3634	209.110	31.08.2010	0.000	200.590	18.05.2011
2011-2012	1454	207.660	02.09.2011	0.000	200.470	27.04.2012
2012-2013	1728	207.880	20.08.2012	0.000		19.05.2013
2013-2014	1949	211.270	20.07.2013	0.000	200.320	24.04.2014
2014-2015	1137	208.300	23.07.2014	0.000	200.380	20.03.2015
2015-2016	1662	208.440	14.08.2015	0.000	199.910	20.04.2016
2016-2017	550.9	204.450	09.07.2016	0.000		18.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at NANDGAON in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**	1033	65	1098
2	**1987-1988**	95	11	105
3	**1988-1989**	653	27	679
4	**1989-1990**	427	16	443
5	**1990-1991**	1720	45	1765
6	**1991-1992**	853	14	867
7	**1992-1993**	1000	10	1010
8	**1993-1994**	375	14	389
9	**1994-1995**	2247	70	2317
10	**1995-1996**	837	51	889
11	**1996-1997**	246	25	270
12	**1997-1998**	174	192	367
13	**1998-1999**	393	133	526
14	**1999-2000**	1036	125	1161
15	**2000-2001**	1074	83	1157
16	**2001-2002**	484	68	551
17	**2002-2003**	511	65	577
18	**2003-2004**	554	84	638
19	**2004-2005**	167	64	230
20	**2005-2006**	926	141	1067
21	**2006-2007**	827	118	945
22	**2007-2008**	1442	108	1551
23	**2008-2009**	296	42	339
24	**2009-2010**	148	72	220
25	**2010-2011**	2420	145	2565
26	**2011-2012**	958	120	1077
27	**2012-2013**	893	114	1007
28	**2013-2014**	2050	118	2168
29	**2014-2015**	488	93	581
30	**2015-2016**	587	96	683
31	**2016-2017**			
32	**2017-2018**	343	76	419
Average		815	78	892

Stage-Discharge Data for the period 2017 - 2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000	201.090	37.23	200.500	8.856	201.280	52.61	200.750	18.79 *	200.350	4.117
2		0.000	200.870	24.33 *	200.450	7.001	200.820	22.41 *	200.670	15.00 *	200.330	3.876
3		0.000	200.930	26.17	200.400	5.887	200.700	16.37 *	200.600	12.11	200.360	4.084
4		0.000	200.670	11.54	200.380	5.212	200.635	12.01	200.600	11.78	200.440	5.875 *
5		0.000	200.530	8.545	200.380	5.172	200.600	11.25	200.560	10.09	200.460	6.295 *
6		0.000	200.505	7.955	200.360	4.054 *	200.600	11.53	200.550	10.09	200.470	6.693
7	200.370	0.000	200.400	5.642	200.320	3.104 #	200.580	10.98	200.540	8.093	200.440	5.507
8	200.260	0.000	200.330	4.242	201.190	46.10 #	200.530	10.38	200.820	22.41 *	200.450	6.195
9	200.270	0.000	200.290	3.560 *	201.145	48.77	200.510	8.877	201.070	42.20	200.440	6.195
10	200.520	0.000	200.270	3.238	200.875	25.52	200.490	7.894 *	201.820	110.7	200.440	6.124
11	200.560	0.000	200.260	2.935	200.675	14.97	200.620	10.91	201.050	39.86	200.440	5.952
12	200.550	0.000	200.210	2.583	200.560	9.250	200.575	10.27	200.860	24.84	200.430	5.672 *
13	200.600	0.000	200.200	2.446	200.510	8.583 *	200.770	21.36	200.865	26.29	200.420	5.472
14	200.500	0.000	200.220	2.353	200.460	6.956	200.855	23.56	201.160	55.96	200.440	5.900
15	200.240	0.000	200.220	2.334	200.370	4.309 *	201.030	33.05	201.080	38.28 *	200.480	6.826
16	200.240	2.702 #	200.210	2.251 *	200.395	5.673	200.965	28.95	201.020	38.28	200.470	7.075
17	200.420	6.434 #	200.200	2.313	200.360	4.636	200.890	26.31 *	200.805	22.26	200.470	6.915
18	200.340	4.553 *	200.215	2.403	200.340	4.021	200.905	26.52	200.710	15.87	200.470	6.657
19	200.320	4.140 #	204.200	505.5	200.445	6.204	202.510	159.8	200.640	10.86 *	200.540	8.146 *
20	200.290	3.560 #	201.515	76.09	201.130	41.75 *	201.100	37.51	200.590	10.90	200.540	7.879
21	200.260	3.030 #	200.915	24.23	200.795	23.29	202.100	172.1	200.570	10.55	200.530	7.791
22	200.290	3.560 #	200.740	14.23	200.700	14.64	202.660	211.0	200.540	8.146 *	200.550	8.430
23	200.390	0.000	200.630	13.25 *	200.950	28.77	201.500	85.68	200.550	9.332	200.570	7.621
24	200.300	0.000	200.600	11.94	200.925	28.24	201.150	43.18 *	200.550	9.026	200.580	9.274
25	200.280	0.000	200.680	11.69	201.400	62.81 *	201.070	35.59	200.510	7.378	200.590	9.161
26	200.240	0.000	200.640	10.87	200.845	21.73	201.025	36.90	200.480	6.900	200.590	9.447 *
27	200.340	0.000	200.675	14.62	200.630	13.25 *	201.125	47.54	200.450	5.484	200.600	8.646
28	201.800	123.6	200.680	14.28	200.720	15.97	201.070	48.23	200.430	5.106	200.620	9.123
29	200.860	23.79 #	200.650	12.78	200.970	29.83	201.030	34.90	200.400	5.086 *	200.640	9.733
30	201.800	122.4	200.620	12.82 *	202.460	180.3 #	200.870	25.17 *	200.370	4.587	200.650	9.408
31			200.550	9.612	202.960	197.6			200.360	4.544		
en-Daily Mean												
I Ten-Daily	200.355	0.000	200.589	13.24	200.600	15.97	######	16.43	200.798	26.13	200.418	5.496
II Ten-Daily	200.406	2.139	200.745	60.12	200.525	10.64	######	37.82	200.878	28.34	200.470	6.650
III Ten-Daily	200.656	27.64	200.671	13.67	201.214	56.04	######	74.03	200.474	6.922	200.592	8.863
Monthly												
Min.	200.240	0.000	200.200	2.251	200.320	3.104	######	7.894	200.360	4.544	200.330	3.876
Max.	201.800	123.6	204.200	505.5	202.960	197.6	######	211.0	201.820	110.7	200.650	9.733
Mean	200.502	9.925	200.668	28.52	200.794	28.47	######	42.76	200.709	20.03	200.493	7.003

Annual Runoff in MCM = 419 Annual Runoff in mm = 91

Peak Observed Discharge = 505.5 cumecs on 19/07/2017 Corres. Water Level :204.200 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	200.640	9.719 *	200.650	8.888	200.400	5.561	200.500	7.390	199.860	0.000	199.920	0.000
2	200.640	9.366	200.650	9.934	200.390	5.402	200.510	7.851 *	199.860	0.000	199.920	0.000
3	200.620	9.049 *	200.650	10.20	200.400	5.596	200.520	8.594	199.900	0.000	199.910	0.000
4	200.610	8.995	200.660	10.10	200.420	5.667 *	200.560	9.172 *	199.960	0.000	199.910	0.000
5	200.620	9.092	200.680	10.49	200.520	9.076	200.570	8.825	199.980	0.000	199.900	0.000
6	200.620	9.143	200.660	10.76	200.570	10.78	200.570	9.640	199.970	0.000		0.000
7	200.620	8.458	200.670	10.77 *	200.570	10.73	200.550	9.451	199.970	0.000		0.000
8	200.600	8.440	200.670	11.34	200.590	11.26	200.550	9.462	199.960	0.000		0.000
9	200.570	7.973	200.660	12.04	200.580	10.10	200.510	8.379	199.960	0.000		0.000
10	200.550	6.911 *	200.660	11.27	200.530	9.138	200.420	5.339	199.960	0.000		0.000
11	200.540	6.565	200.640	11.36	200.530	8.370 *	200.370	4.569 *	199.960	0.000		0.000
12	200.540	5.401	200.610	9.267	200.530	8.562	200.300	3.086	199.960	0.000		0.000
13	200.540	6.535	200.570	8.529	200.560	8.929	200.270	2.318	199.960	0.000		0.000
14	200.460	4.865	200.550	8.902 *	200.560	8.428	200.230	1.901	199.980	0.000		0.000
15	200.300	1.884	200.540	8.660	200.500	7.486	200.210	1.896	199.950	0.000		0.000
16	200.360	2.468	200.530	7.674	200.440	6.226	200.190	1.664	199.950	0.000		0.000
17	200.340	2.342 *	200.520	7.582	200.390	5.261	200.170	1.009	199.950	0.000		0.000
18	200.290	1.787	200.520	7.234	200.340	3.952 *	200.150	0.890 *	199.940	0.000		0.000
19	200.280	1.569	200.520	7.234	200.300	2.866	200.140	0.601	199.940	0.000		0.000
20	200.280	1.511	200.510	7.273	200.260	2.817	200.110	0.511	199.950	0.000		0.000
21	200.280	1.454	200.440	6.130 *	200.240	2.409	200.110	0.471 #	199.950	0.000		0.000
22	200.290	1.641	200.370	3.707	200.230	2.265	200.110	0.436	199.960	0.000		0.000
23	200.300	1.679	200.310	3.369 *	200.210	1.526	200.100	0.431	199.960	0.000		0.000
24	200.310	1.903 *	200.240	1.606	200.200	1.899	200.120	0.567 #	199.960	0.000		0.000
25	200.320	2.044 *	200.240	2.054	200.210	1.683 *	200.110	0.471 *	199.960	0.000		0.000
26	200.320	2.156	200.250	2.307 *	200.210	1.785	200.100	0.382 #	199.930	0.000		0.000
27	200.410	3.251	200.280	3.000	200.400	4.552	200.060	0.101 #	199.930	0.000		0.000
28	200.480	5.112	200.350	4.154 *	200.490	7.340	200.020	0.103	199.930	0.000		0.000
29	200.520	5.947	200.390	4.996			199.980	0.000	199.920	0.000		0.000
30	200.560	6.930	200.380	4.775			199.920	0.000	199.920	0.000		0.000
31	200.610	8.724 *	200.390	5.838			199.860	0.000				0.000
en-Daily Mea												
I Ten-Daily	200.609	8.715	200.661	10.58	200.497	8.331	200.526	8.410	199.938	0.000	199.912	0.000
II Ten-Daily	200.393	3.493	200.551	8.372	200.441	6.290	200.214	1.845	199.954	0.000		0.000
III Ten-Daily	200.400	3.713	200.331	3.812	200.274	2.932	200.045	0.269	199.942	0.000		0.000
Monthly												
Min.	200.280	1.454	200.240	1.606	200.200	1.526	199.860	0.000	199.860	0.000	199.900	0.000
Max.	200.640	9.719	200.680	12.04	200.590	11.26	200.570	9.640	199.980	0.000	199.920	0.000
Mean	200.465	5.255	200.508	7.466	200.413	6.059	200.255	3.404	199.945	0.000	199.912	0.000

Peak Computed Discharge = 62.81 cumecs on 25/08/2017 Corres. Water Level :201.400 m

Lowest Computed Discharge = 0.471 cumecs on 25/03/2018 Corres. Water Level :200.110 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

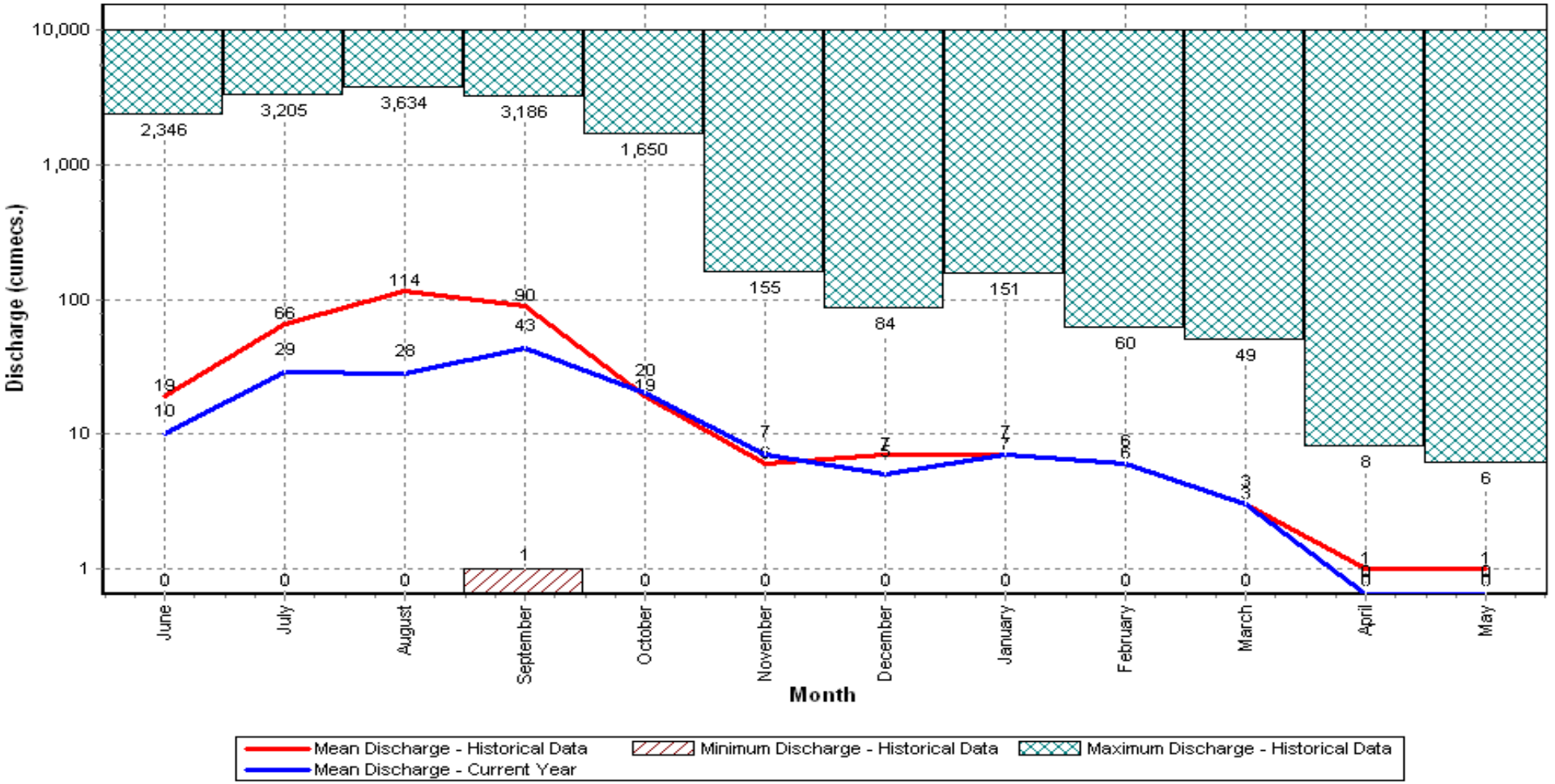
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : NANDGAON (AGH3AF4) **Data considered : 1986-2018** **Division : Wainganga Div., Nagpur**

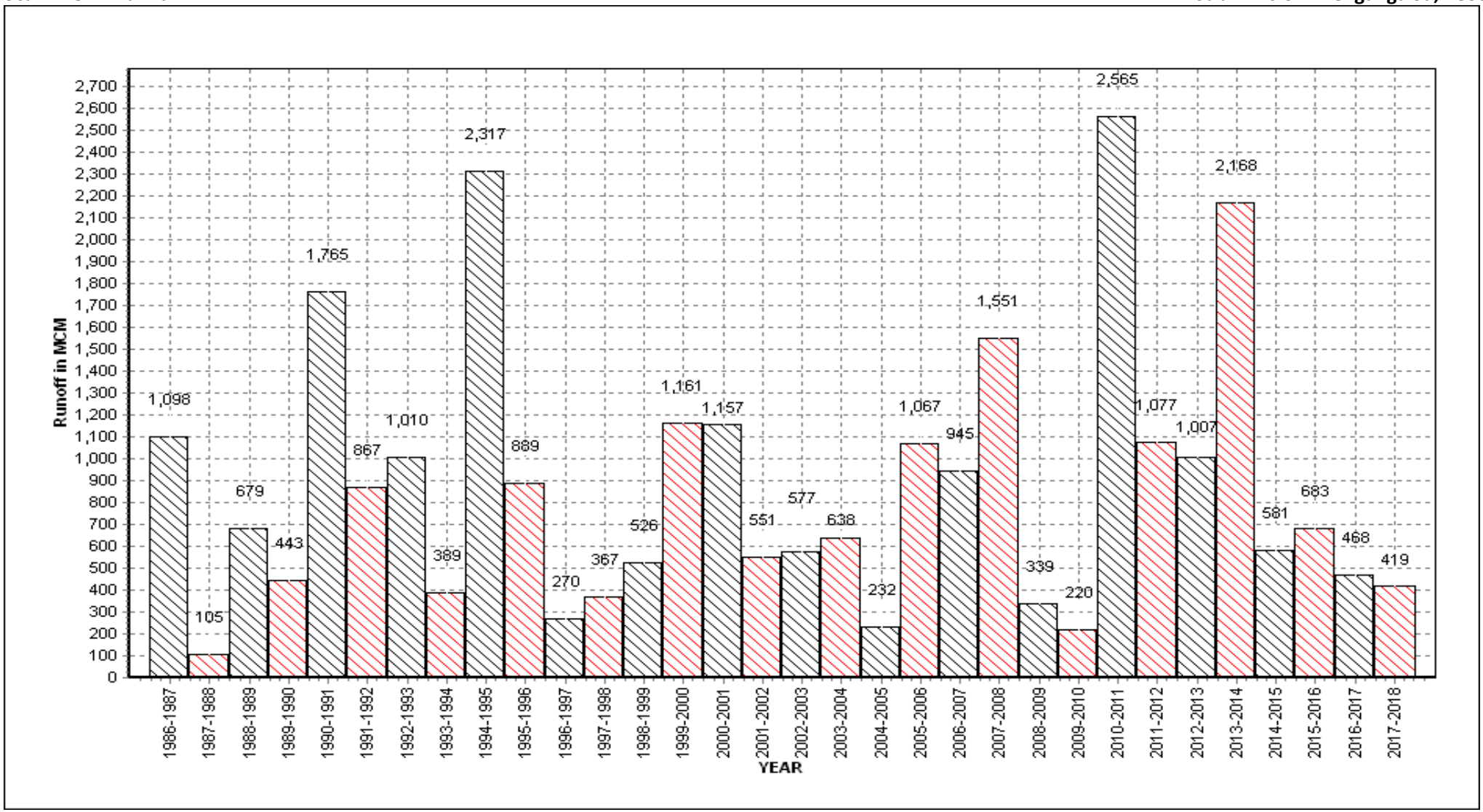
Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**



Annual Runoff Values for the period: 1986 - 2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**

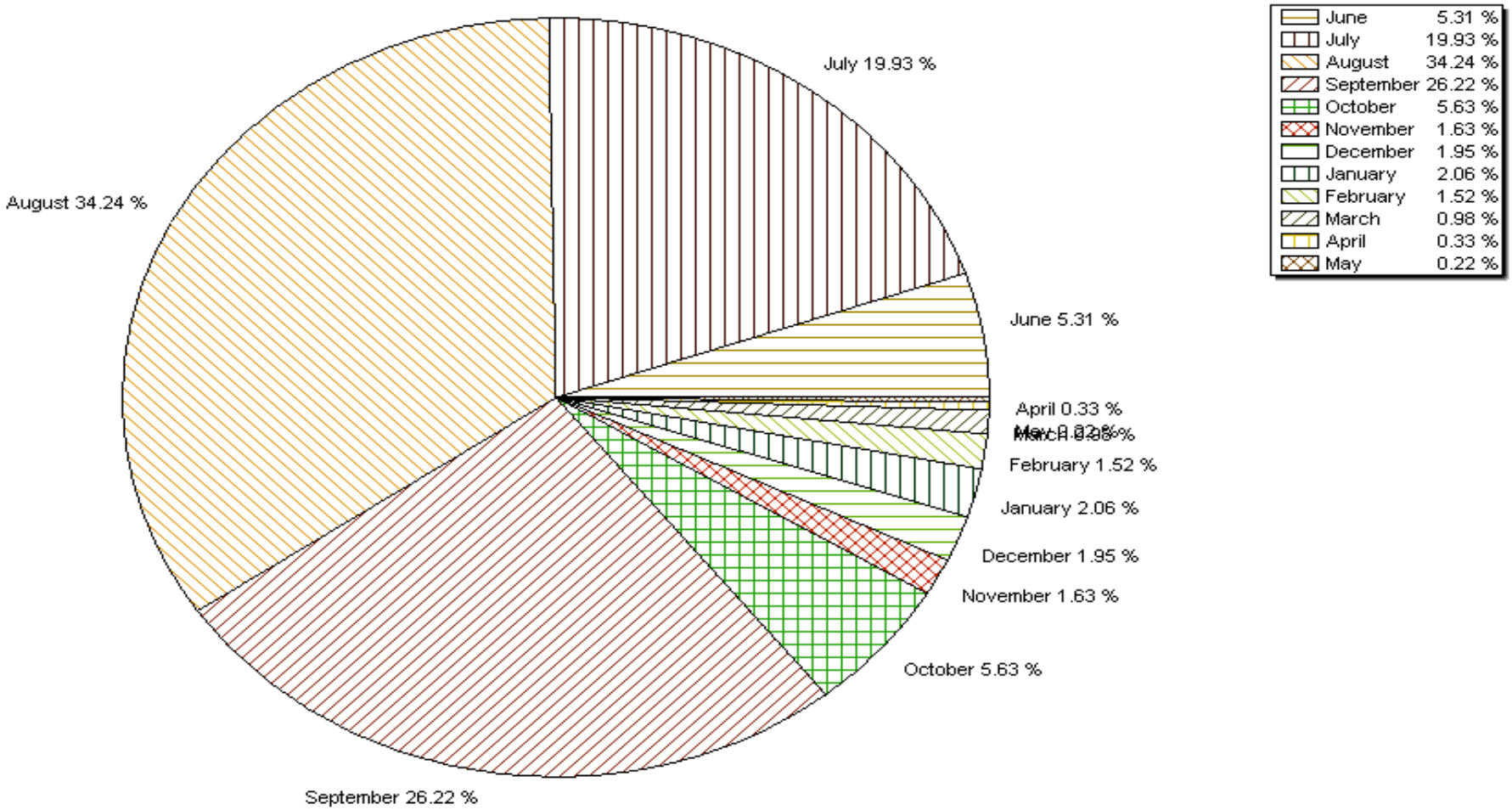


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1986-2017

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

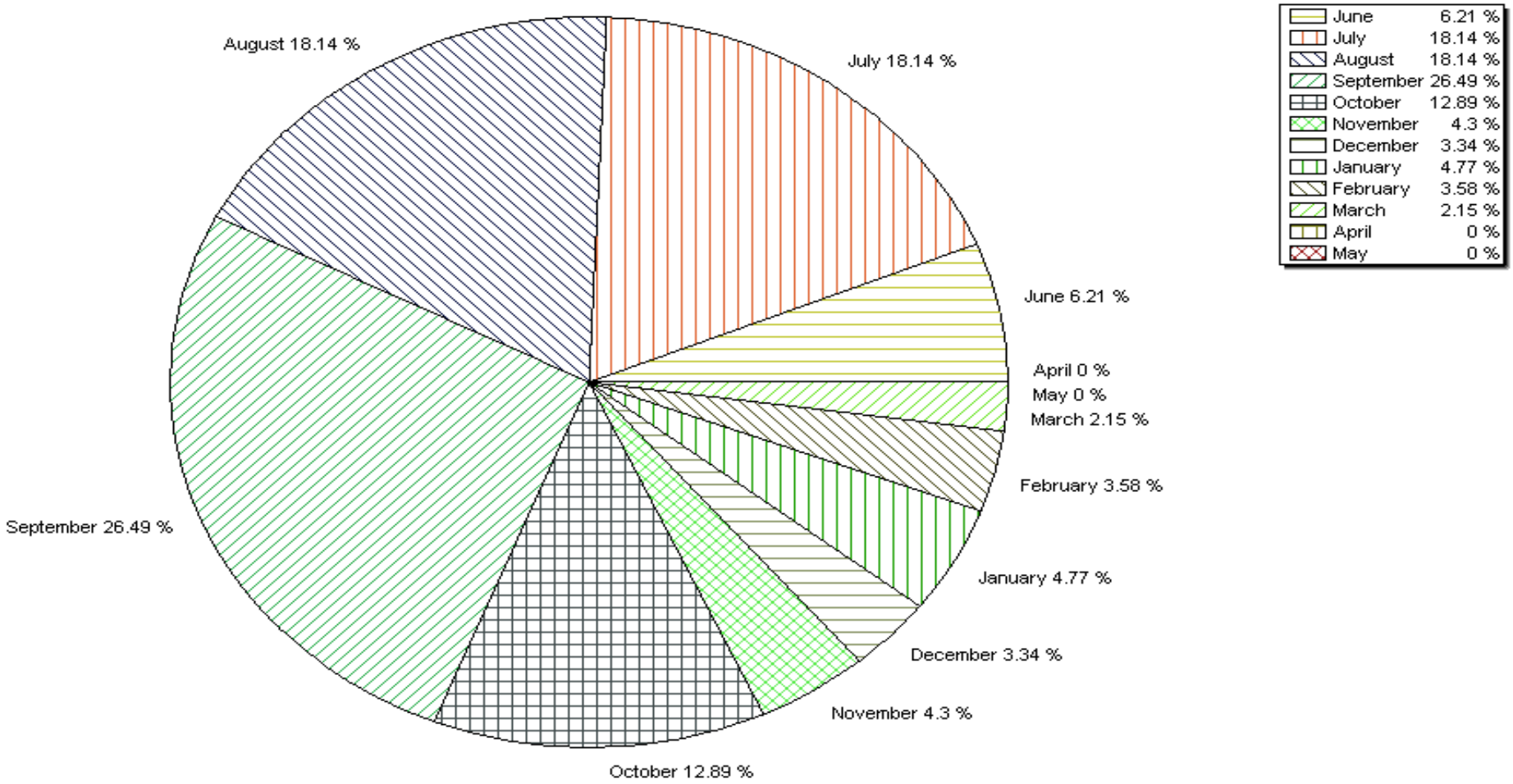
Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**



Monthly Runoff for the Year : 2017-2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

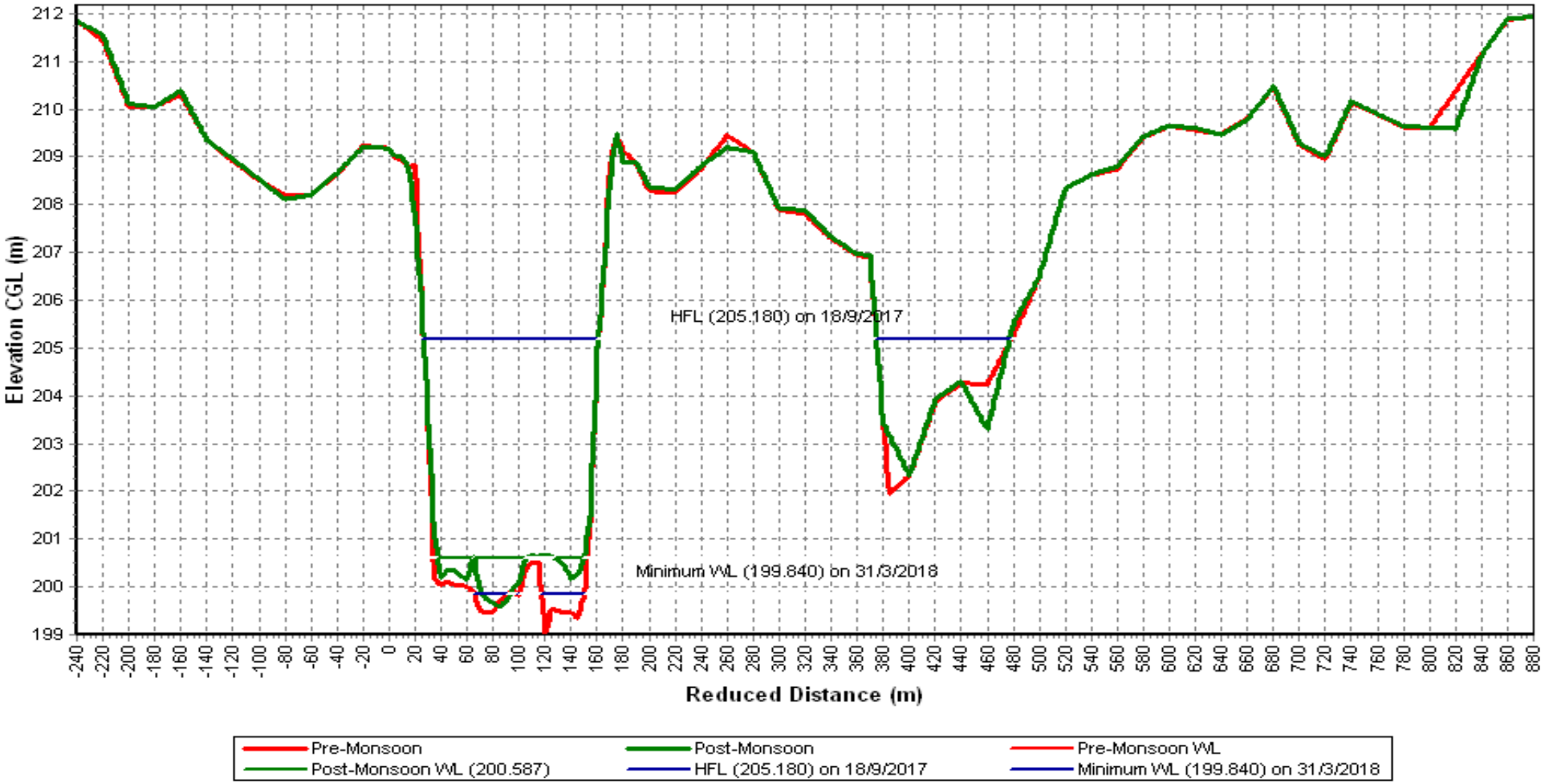
Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

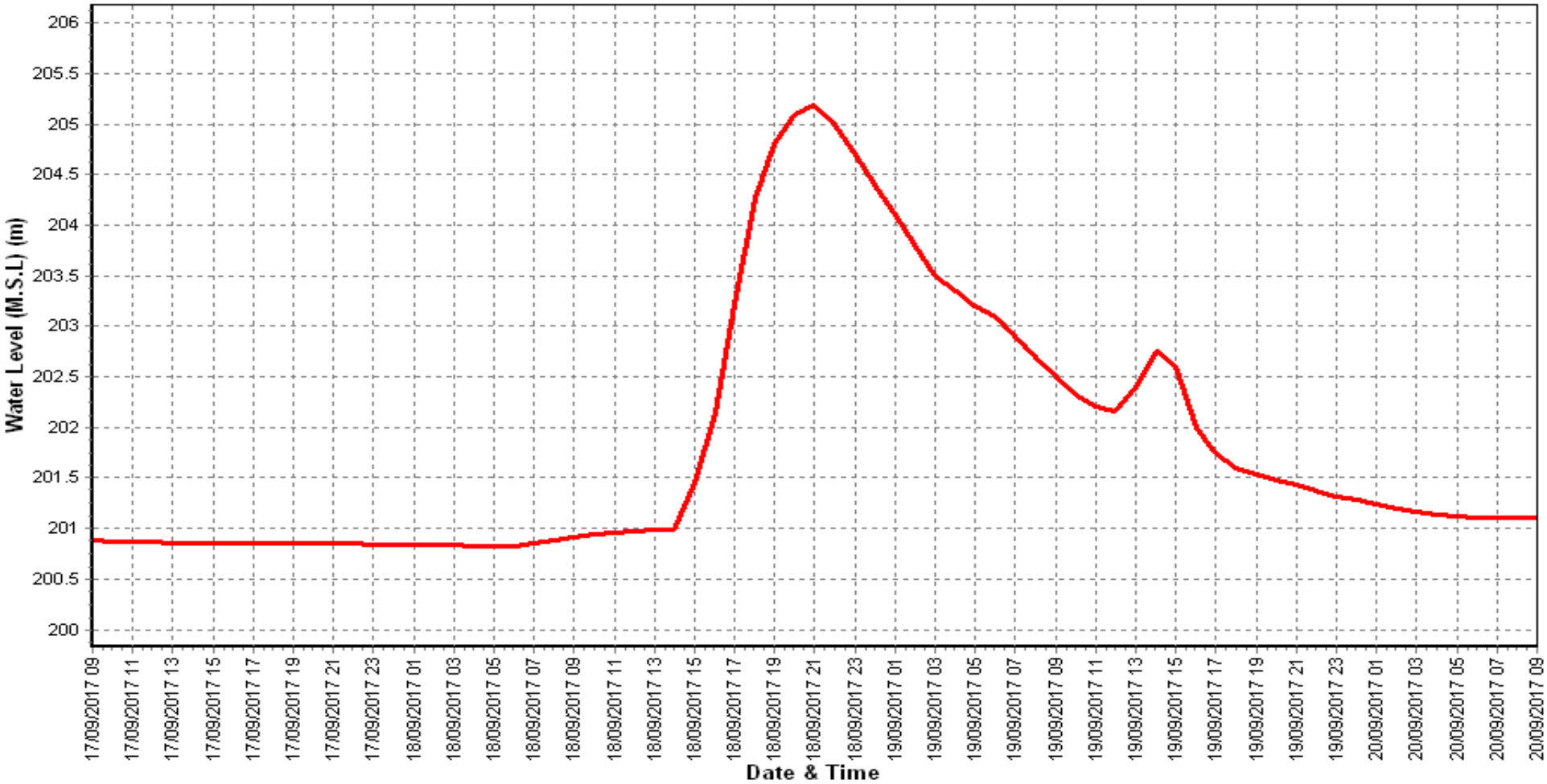
Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**

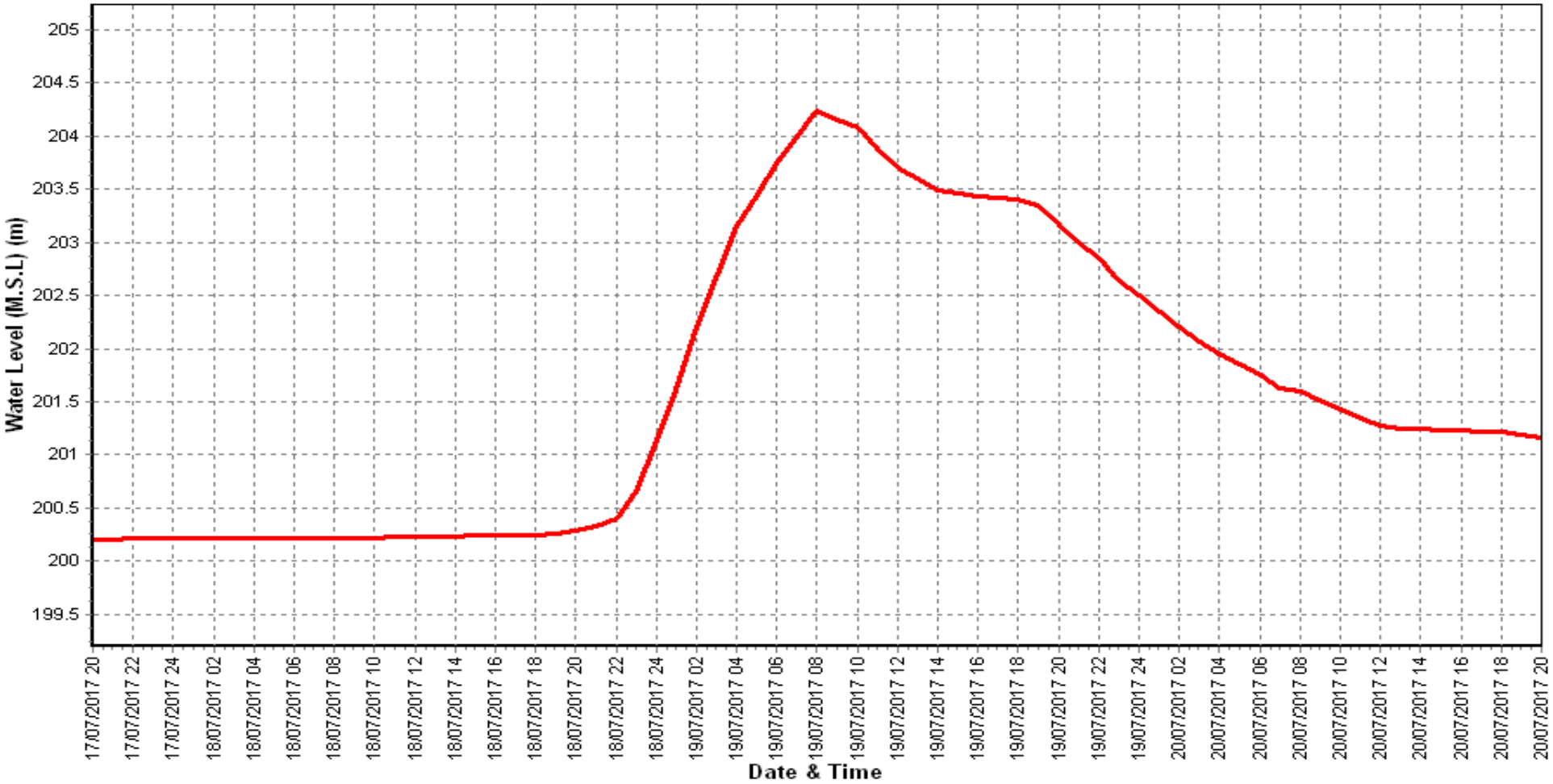


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**

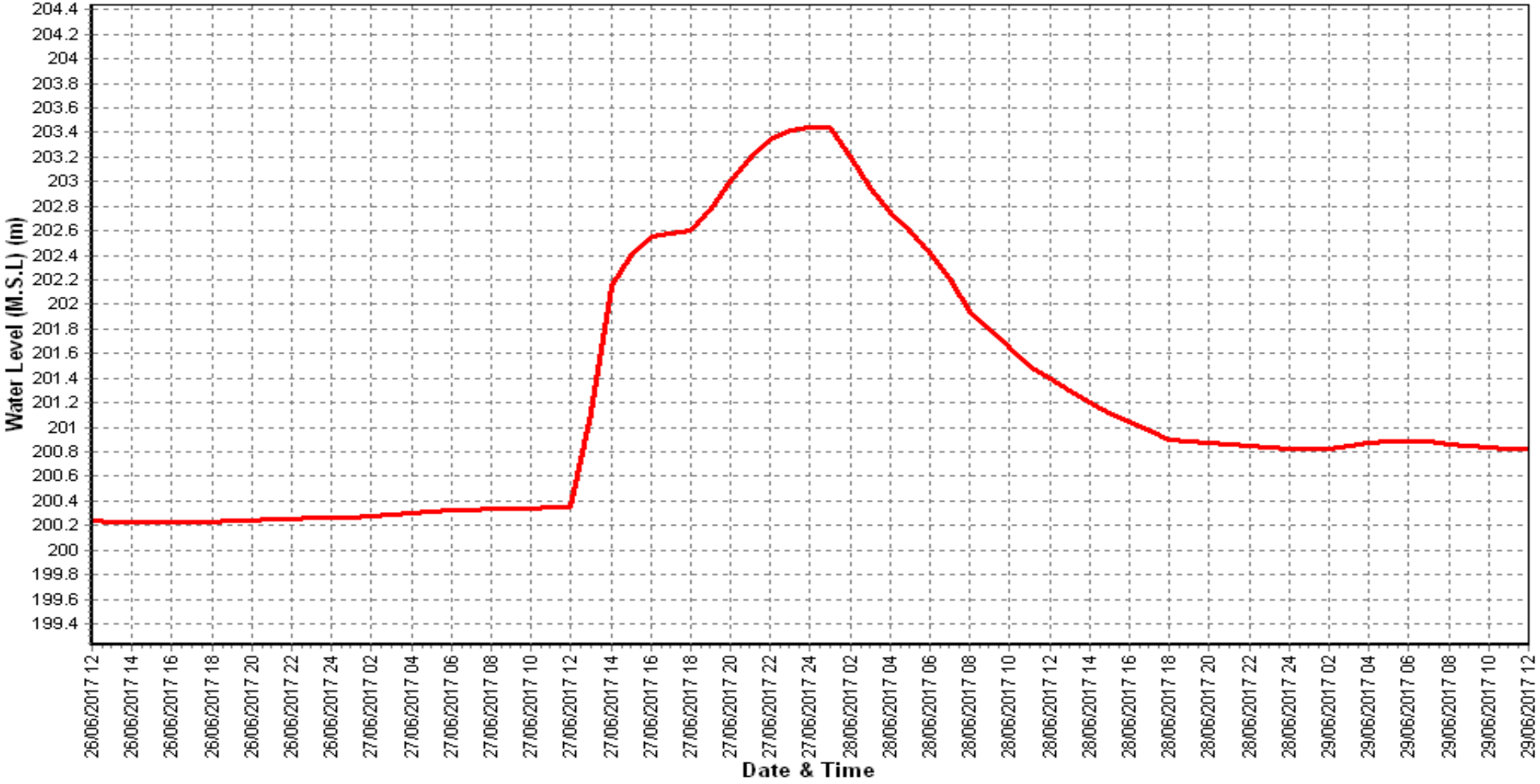


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : NANDGAON (AGH3AF4) **Division : Wainganga Div., Nagpur**

Local River : Wunna **Sub-Division : Penganga Sd, Yeotmal**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**HIVRA**	**Code**	:	**AGH30Q1**
State	:	Maharashtra	District		Wardha
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wardha
Sub-Sub Tributary	:	-	Local River	:	Wardha
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Penganga Sd, Yeotmal
Drainage Area	:	10240 Sq. Km.	Bank	:	Left
Latitude	:	20°32'52"	Longitude	:	78°19'30"
Zero of Gauge (m)	:	230 (m.s.l)	20.11.1986		
		Opening Date	Closing Date		
Gauge	:	20.11.1986	**HFL During 2017-18**	:	**233.200 Meter**
			Corres.Discharge	:	**127.0 Cumecs (Estimated)**
Discharge	:	11.08.1987	**Date & Time of**	:	**23.06.2017**
			Occurance	:	**12.00 Hrs.**
Sediment	:	26.06.1990			
Water Quality	:	16.12.1987			

HFL Recorded so far in m : 248.410 12/07/1994
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1987-1988	2238	235.300	20.08.1987	0.000	231.980	06.02.1988
1988-1989	2150	243.800	03.10.1988	0.000	232.050	02.05.1989
1989-1990	911.0	238.070	19.08.1989	0.003	231.565	18.05.1990
1990-1991	1940	240.555	31.08.1990	0.000	232.075	16.05.1991
1991-1992	5377	244.000	01.08.1991	0.000	232.035	25.03.1992
1992-1993	3050	241.980	22.08.1992	0.000	231.300	19.06.1992
1993-1994	263.2	234.670	01.09.1993	0.000	232.120	06.05.1994
1994-1995	6862	246.310	07.09.1994	0.000		02.06.1994
1995-1996	883.0	237.900	02.09.1995	0.000	231.945	07.05.1996
1996-1997	459.7	235.250	17.09.1996	0.000	231.180	30.05.1997
1997-1998	475.3	236.020	01.12.1997	0.000	231.990	12.06.1997
1998-1999	1889	239.250	16.09.1998	0.523	232.215	13.05.1999
1999-2000	3946	242.500	10.08.1999	0.512	232.125	17.05.2000
2000-2001	2425	240.360	19.07.2000	0.000	232.040	21.05.2001
2001-2002	4151	242.380	14.06.2001	0.000		11.05.2002
2002-2003	2415	240.400	25.06.2002	0.000	231.760	01.05.2003
2003-2004	322.4	234.490	10.08.2003	0.000	0.000	21.04.2004
2004-2005	675.6	236.190	05.08.2004	0.000	0.000	28.04.2005

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2005-2006	2445	240.350	28.07.2005	0.000		21.06.2005
2006-2007	3039	241.025	05.08.2006	0.004	231.930	24.06.2006
2007-2008	4261	242.710	09.08.2007	2.313	232.070	07.06.2007
2008-2009	160.1	233.890	30.06.2008	0.000	232.180	25.01.2009
2009-2010	54.56	233.440	04.09.2009	0.000	232.440	16.08.2009
2010-2011	2936	239.470	31.08.2010	0.000	232.360	25.01.2011
2011-2012	2761	240.110	05.09.2011	0.000	232.280	25.01.2012
2012-2013	4698	242.950	06.09.2012	0.000	232.280	02.11.2012
2013-2014	2699	241.130	24.08.2013	0.000	231.800	04.06.2013
2014-2015	2740	241.100	24.07.2014	0.000	232.100	25.02.2015
2015-2016	3128	241.300	06.08.2015	0.000	231.660	04.05.2016
2016-2017	777.0	236.250	02.09.2016	0.000	231.630	28.04.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at HIVRA in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1987-1988**	567	24	591
2	**1988-1989**	2596	87	2684
3	**1989-1990**	971	6	978
4	**1990-1991**	2557	133	2690
5	**1991-1992**	1298	20	1318
6	**1992-1993**	1685	152	1837
7	**1993-1994**	277	194	471
8	**1994-1995**	3711	330	4042
9	**1995-1996**	1061	148	1209
10	**1996-1997**	498	47	545
11	**1997-1998**	320	529	849
12	**1998-1999**	1388	161	1549
13	**1999-2000**	2836	205	3041
14	**2000-2001**	841	51	891
15	**2001-2002**	1066	34	1100
16	**2002-2003**	860	40	901
17	**2003-2004**	407	46	453
18	**2004-2005**	260	58	318
19	**2005-2006**	1530	131	1661
20	**2006-2007**	2293	152	2445
21	**2007-2008**	3270	222	3492
22	**2008-2009**	211		211
23	**2009-2010**	72		72
24	**2010-2011**	1875	0	1875
25	**2011-2012**	1691	0	1691
26	**2012-2013**	1816	63	1879
27	**2013-2014**	2794	85	2879
28	**2014-2015**	1527	69	1596
29	**2015-2016**	986	114	1100
30	**2016-2017**			
31	**2017-2018**	87	66	153
Average		1378	113	1484

Stage-Discharge Data for the period 2017 - 2018

Station Name : HIVRA (AGH30Q1) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	231.780	0.526	232.000	3.866	232.230	6.230	231.970	2.423	232.000	2.846 *	232.110	4.787
2	231.760	0.513	231.970	2.836 *	232.190	5.100	231.960	2.183 *	232.000	2.846 *	232.090	4.633
3	231.760	0.511	231.960	3.233	232.140	4.618	231.940	1.890 *	232.000	2.802	232.080	4.440
4	231.750	0.417 *	231.980	3.340	232.110	3.806	231.930	2.196	231.970	2.128	232.060	4.041 *
5	231.750	0.505	232.010	3.378	232.070	3.514	231.930	2.198	231.960	2.089	232.020	3.217 *
6	231.740	0.365 #	232.020	3.515	232.040	3.058 *	231.920	1.621 #	231.960	2.105	231.990	2.273
7	231.740	0.365 #	232.010	3.418	232.020	2.522	231.920	2.083	232.020	3.044	231.980	2.252
8	231.740	0.443	231.980	2.750	232.000	2.446	231.900	1.538	232.070	4.265 *	231.970	1.883
9	231.730	0.266	231.940	2.347 *	231.990	2.357	231.890	1.498	232.060	4.718	231.960	1.855
10	231.730	0.263	231.900	1.491	231.980	2.286	231.890	1.263 *	232.080	4.832	231.980	2.277
11	231.760	0.474 *	231.870	1.395	231.950	2.256	231.880	1.470	232.140	6.451	232.000	2.428
12	231.780	0.551	231.850	1.129	231.940	2.182	231.870	1.054 #	232.110	3.988	232.000	2.846 *
13	231.770	0.527	231.840	0.947	231.910	1.488 *	231.920	1.855	232.090	3.757	232.010	2.532
14	231.820	0.981	231.830	0.830	231.880	1.399	232.020	2.530	232.080	3.613	232.040	4.398
15	231.810	1.043	231.830	0.807	231.870	1.127 *	232.110	3.920	232.040	3.615 *	232.040	4.375
16	232.000	2.650	231.830	0.821 *	231.870	1.341	232.000	2.628	232.965	74.18	232.040	4.335
17	231.910	1.926	231.840	0.846	231.860	1.292	231.950	2.033 *	232.760	40.27 #	232.030	4.295
18	231.870	1.413 *	231.840	0.843	231.820	0.579	231.940	2.133	232.930	70.80	232.030	4.234
19	231.840	1.149	232.450	12.43 #	231.830	0.710	231.940	2.194	232.770	41.14 *	232.030	3.412 *
20	231.820	1.099	232.910	65.13 #	231.960	2.018 *	231.930	2.119	232.530	22.37	232.000	2.737
21	231.790	0.647	232.530	17.96	231.940	2.134	232.840	59.40	232.450	21.00	232.000	2.760
22	231.790	0.645	232.360	9.730	231.940	2.101	232.220	7.906	232.360	14.13 *	231.990	2.588
23	232.870	57.68	232.280	7.688 *	231.930	2.037	232.060	4.758	232.330	11.59	231.970	2.245
24	232.610	27.83	232.290	7.262	231.920	1.955	232.040	3.615 *	232.310	11.03	231.960	2.167
25	232.240	10.01 *	232.280	7.447	231.920	1.621 *	232.040	4.396	232.280	9.083	231.930	1.316
26	232.130	6.448 *	232.280	7.502	231.940	2.151	232.040	4.320	232.260	8.625	231.920	1.621 *
27	232.520	23.97	232.320	9.989	231.940	1.890 *	232.040	4.248	232.260	8.517	231.920	1.263
28	232.200	8.455	232.400	10.71	231.970	2.344	232.020	3.054	232.250	8.317	231.900	1.030
29	232.070	4.592	232.360	9.890	231.980	2.497	232.010	2.954	232.220	8.516 *	231.930	1.321
30	232.030	4.274	232.290	7.237	231.980	2.541	232.010	3.028 *	232.180	6.258	231.970	2.219
31			232.250	6.607	231.980	2.477			232.130	4.989		
Ten-Daily Mean												
I Ten-Daily	231.748	0.417	231.977	3.018	232.077	3.594	231.925	1.889	232.012	3.167	232.024	3.166
II Ten-Daily	231.838	1.181	232.009	8.518	231.889	1.439	231.956	2.194	232.441	27.02	232.022	3.559
III Ten-Daily	232.225	14.45	232.331	9.274	231.949	2.159	232.132	9.768	232.275	10.19	231.949	1.853
Monthly												
Min.	231.730	0.263	231.830	0.807	231.820	0.579	231.870	1.054	231.960	2.089	231.900	1.030
Max.	232.870	57.68	232.910	65.13	232.230	6.230	232.840	59.40	232.965	74.18	232.110	4.787
Mean	231.937	5.351	232.113	7.012	231.971	2.390	232.004	4.617	232.244	13.35	231.998	2.859

Annual Runoff in MCM = 153 Annual Runoff in mm = 15

Peak Observed Discharge = 74.18 cumecs on 16/10/2017 Corres. Water Level :232.965 m

Lowest Observed Discharge = 0.000 cumecs on 16/04/2018 Corres. Water Level :231.760 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : HIVRA (AGH30Q1) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	231.960	1.869 *	232.140	4.925	231.990	1.710	232.140	4.378	231.910	0.907 *	231.670	0.000
2	232.000	2.611	232.150	5.417	231.970	1.666	232.140	4.550 *	231.900	0.922	231.670	0.000
3	232.000	2.679 *	232.140	4.781	231.950	1.340	232.130	3.791	231.900	0.925	231.660	0.000
4	232.000	2.734	232.140	4.678	231.940	1.222 *	232.120	4.121 *	231.890	0.881	231.660	0.000
5	231.990	2.592	232.130	4.606	231.940	1.340	232.110	3.607	231.890	0.865	231.660	0.000
6	231.990	2.564	232.120	4.422	231.960	1.724	232.090	3.414	231.890	0.851	231.660	0.000
7	232.000	2.164	232.100	3.713 *	231.950	1.620	232.050	3.171	231.880	0.810	231.660	0.000
8	232.020	3.605	232.020	2.333	231.940	1.315	232.030	2.998	231.880	0.766 *	231.650	0.000
9	232.040	3.974	232.010	2.263	231.950	1.372	232.020	2.796	231.870	0.713	231.650	0.000
10	232.040	3.639 *	232.000	2.189	231.960	1.423	232.010	2.689	231.870	0.689	232.000	2.557
11	232.050	4.265	232.000	2.207	231.960	1.459 *	232.000	1.996 *	231.860	0.643	231.980	1.935
12	232.060	4.448	232.020	2.403	232.000	1.875	232.000	2.077	231.850	0.592	231.970	1.349
13	232.080	4.848	232.030	2.477	232.070	3.209	231.990	2.026	231.840	0.558	232.200	6.661 *
14	232.090	4.912	232.030	2.454 *	232.060	3.020	231.960	1.296	231.800	0.125	233.000	62.47
15	232.110	5.548	232.000	2.237	232.040	2.340	231.950	1.237	231.770	0.090	233.030	62.24
16	232.130	5.640	231.950	1.351	232.010	2.091	231.960	1.293	231.760	0.000	233.000	59.19
17	232.140	6.709 *	231.970	1.429	232.000	1.750	231.960	1.312	231.760	0.000	232.930	48.52 #
18	232.110	5.295	232.000	1.791	231.990	1.854 *	231.960	1.459 *	231.750	0.000	232.690	29.94 #
19	232.100	5.109	232.020	2.290	231.980	1.491	231.950	1.215	231.750	0.000	232.520	26.01
20	232.080	4.830	232.070	3.146	231.970	1.460	231.970	1.375	231.750	0.000	232.410	14.36 *
21	232.060	4.367	232.080	3.326 *	231.960	1.352	231.970	1.397	231.740	0.000	232.300	7.718
22	232.050	4.188	232.100	3.559	231.950	1.304	231.960	1.357	231.740	0.000	232.200	5.282
23	232.040	4.051	232.120	3.788	232.000	1.650	231.950	1.283	231.740	0.000	232.140	5.047 #
24	232.020	3.140 *	232.140	5.149	232.050	3.010	231.940	1.157	231.740	0.000	232.050	2.629
25	232.000	2.679 *	232.120	4.164	232.050	2.787 *	231.940	1.222 *	231.730	0.000	232.020	2.454
26	231.980	2.023	232.110	3.914 *	232.070	3.254	231.930	1.110	231.730	0.000	232.010	2.196
27	231.970	1.830	232.070	3.274	232.100	3.396	231.920	1.042	231.680	0.000	232.000	2.219 *
28	231.960	1.702	232.070	3.141 *	232.120	3.682	231.920	1.051	231.680	0.000	231.960	1.568
29	231.950	1.721	232.020	1.983			231.920	1.007 *	231.680	0.000	231.950	1.518
30	231.940	1.659	232.010	1.931			231.920	1.007 *	231.670	0.000	231.900	0.950 #
31	232.000	1.996 *	232.000	1.801			231.910	0.992			231.870	0.682 #
Ten-Daily Mean												
I Ten-Daily	232.004	2.843	232.095	3.933	231.955	1.473	232.084	3.552	231.888	0.833	231.694	0.256
II Ten-Daily	232.095	5.160	232.009	2.178	232.008	2.055	231.970	1.529	231.789	0.201	232.573	31.27
III Ten-Daily	231.997	2.669	232.076	3.275	232.038	2.554	231.935	1.148	231.713	0.000	232.036	2.933
Monthly												
Min.	231.940	1.659	231.950	1.351	231.940	1.222	231.910	0.992	231.670	0.000	231.650	0.000
Max.	232.140	6.709	232.150	5.417	232.120	3.682	232.140	4.550	231.910	0.925	233.030	62.47
Mean	232.031	3.529	232.061	3.134	231.997	1.990	231.994	2.046	231.797	0.345	232.099	11.21

Peak Computed Discharge = 41.14 cumecs on 19/10/2017 Corres. Water Level :232.770 m

Lowest Computed Discharge = 0.417 cumecs on 04/06/2017 Corres. Water Level :231.750 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

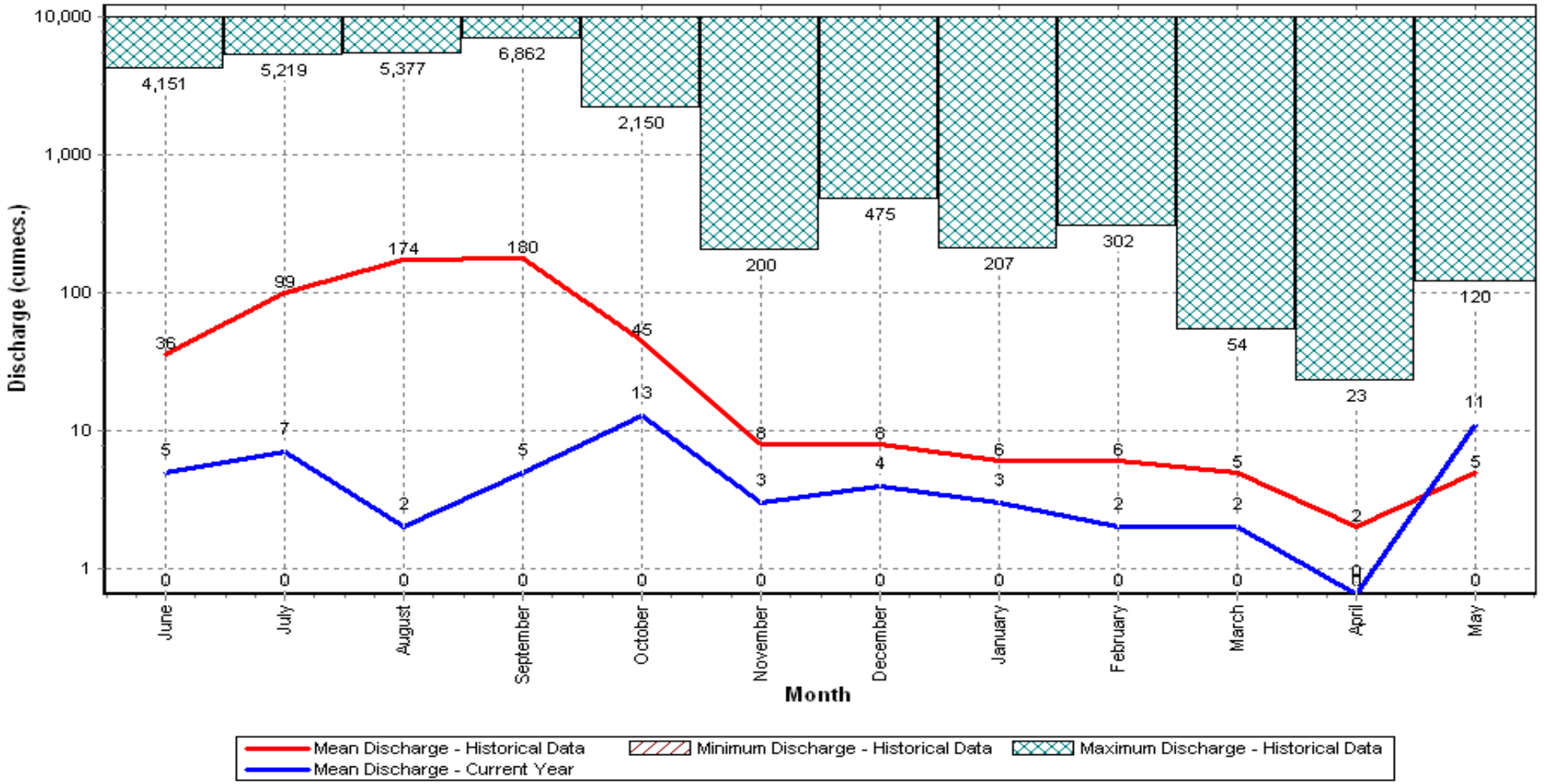
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : HIVRA (AGH30Q1) **Data considered : 1987-2018** **Division : Wainganga Div., Nagpur**

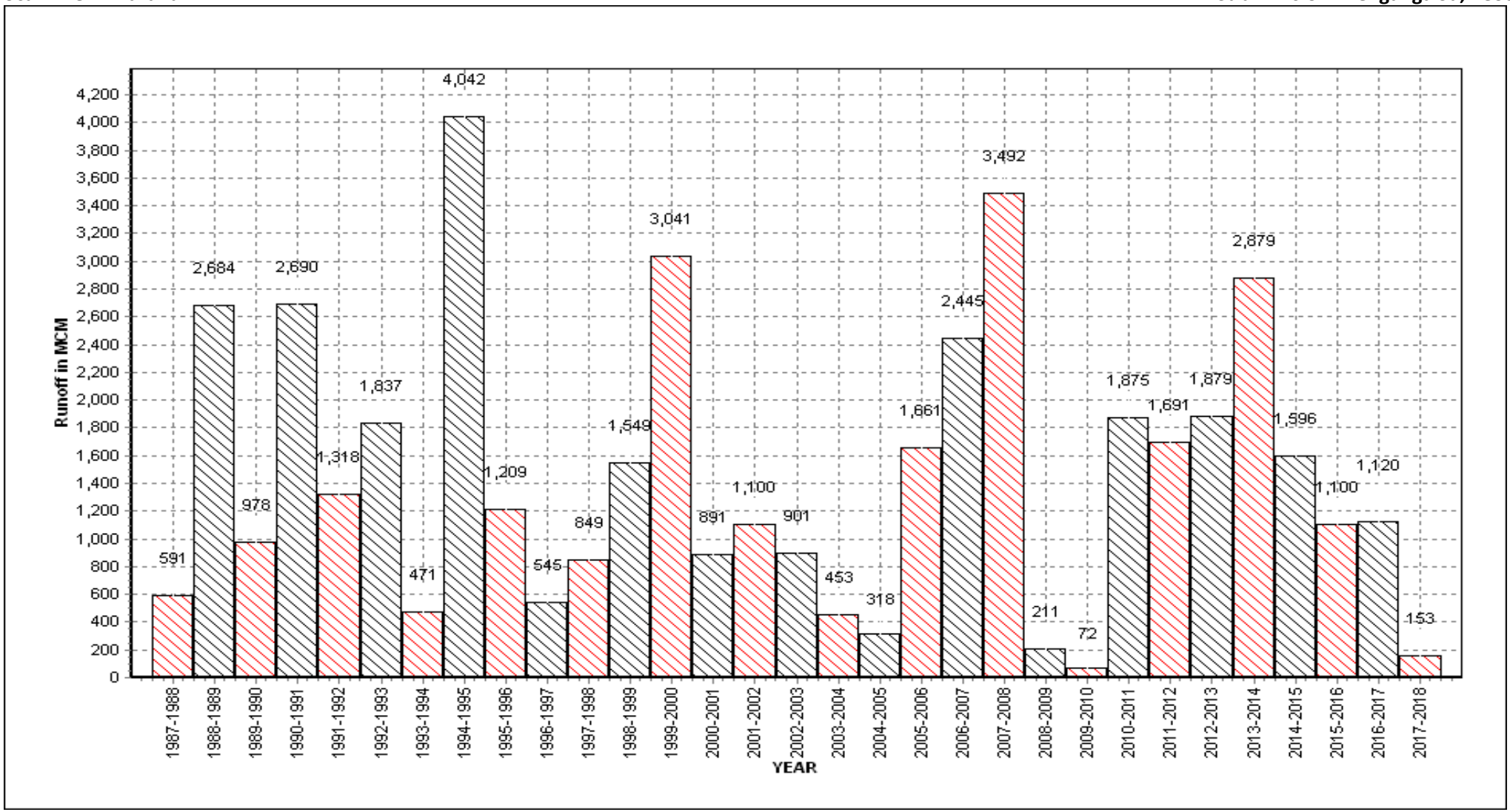
Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**



Annual Runoff Values for the period: 1987 - 2018

Station Name : HIVRA (AGH30Q1) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**

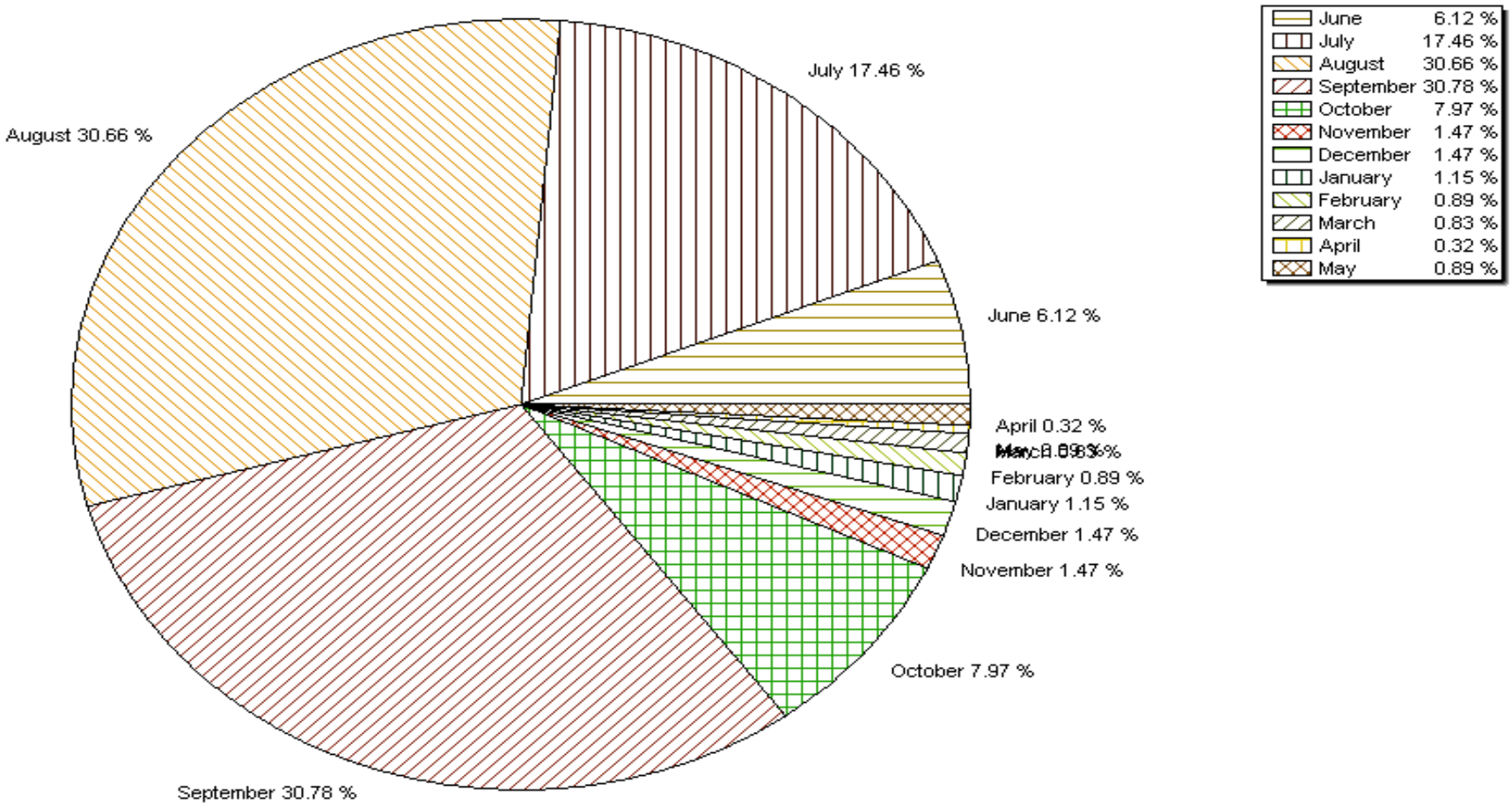


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1987-2017

Station Name : HIVRA (AGH30Q1) **Division : Wainganga Div., Nagpur**

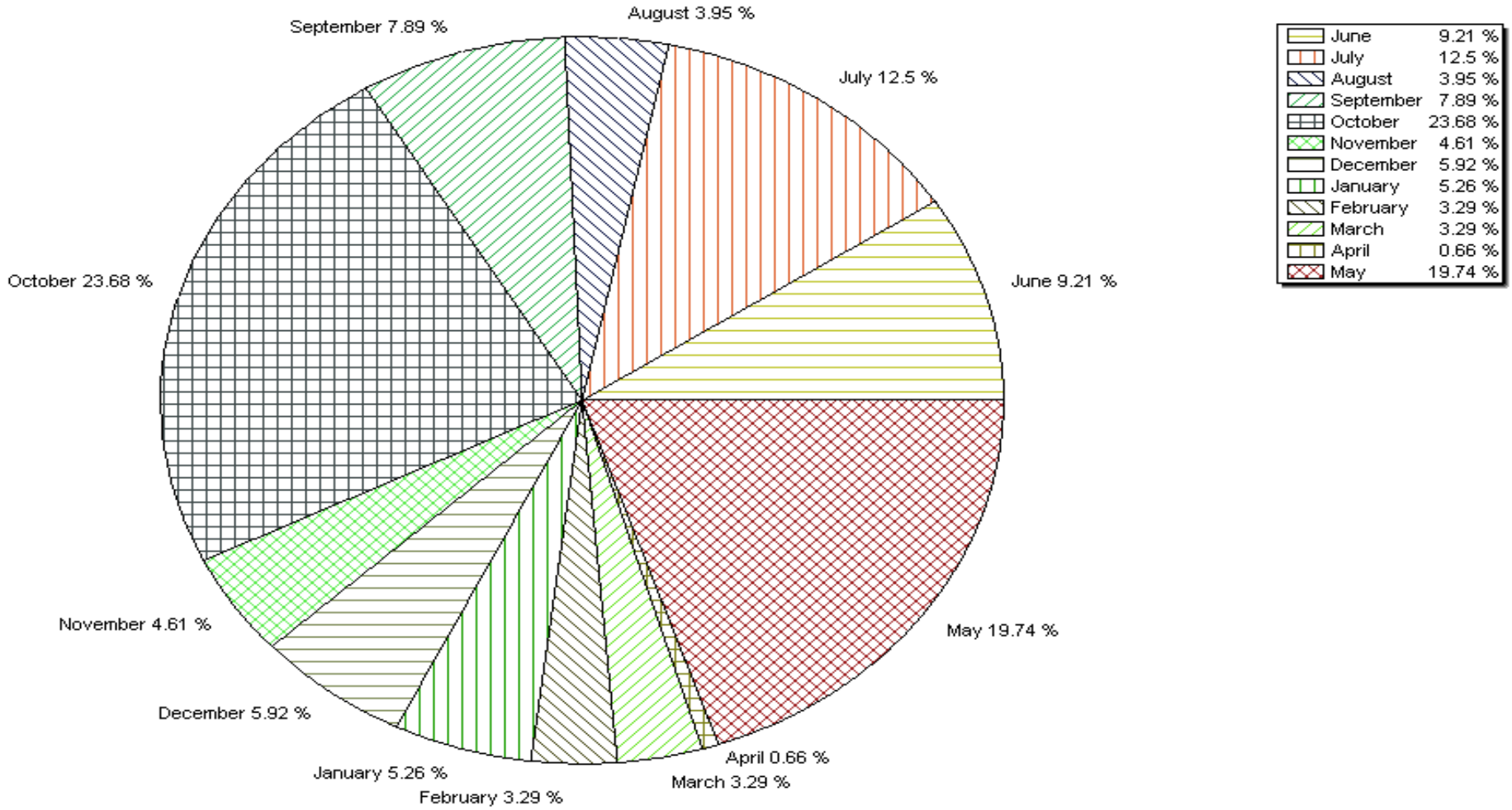
Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**



Monthly Runoff for the Year : 2017-2018

Station Name : HIVRA (AGH30Q1) **Division : Wainganga Div., Nagpur**

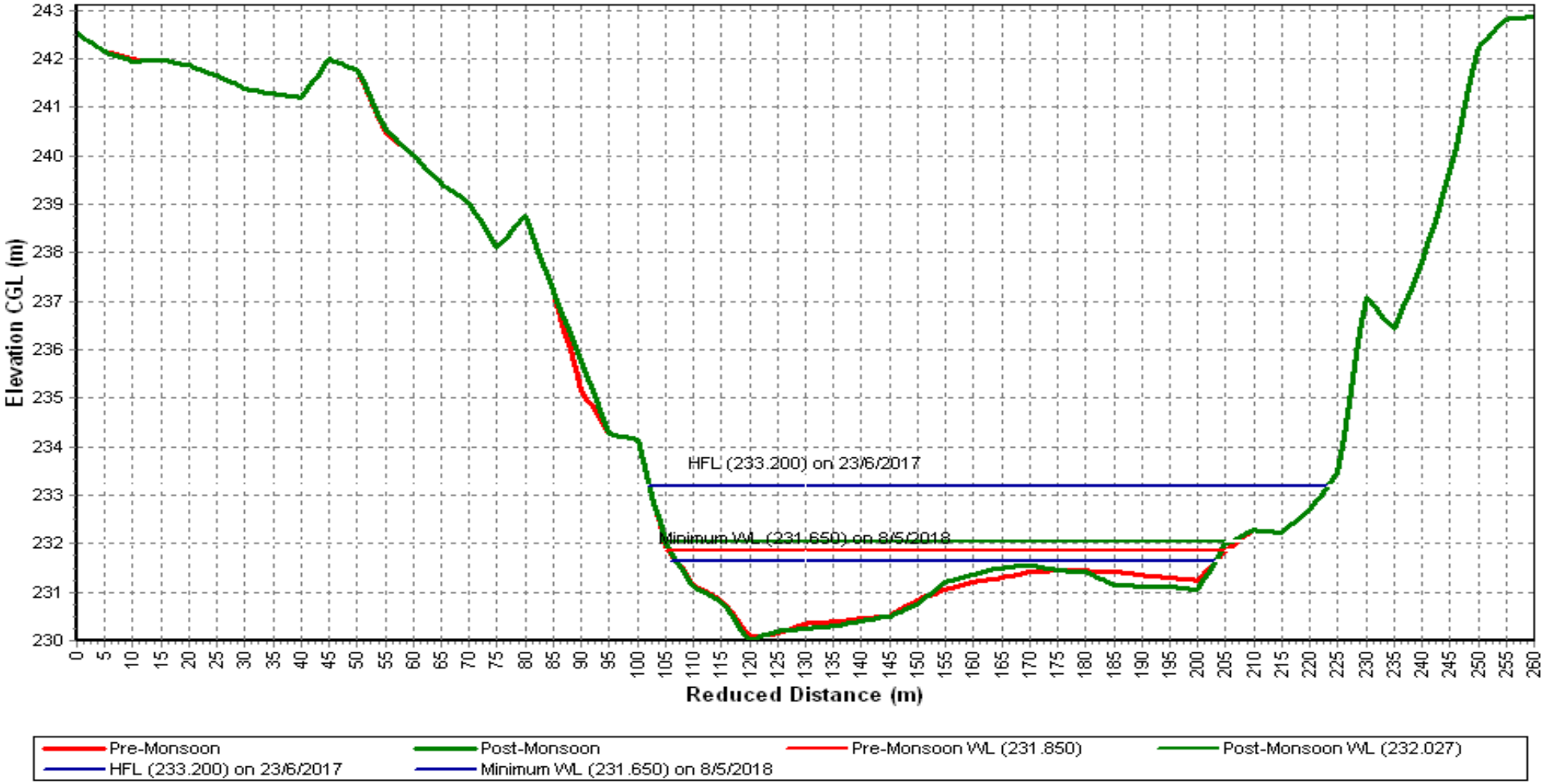
Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : HIVRA (AGH30Q1) **Division : Wainganga Div., Nagpur**

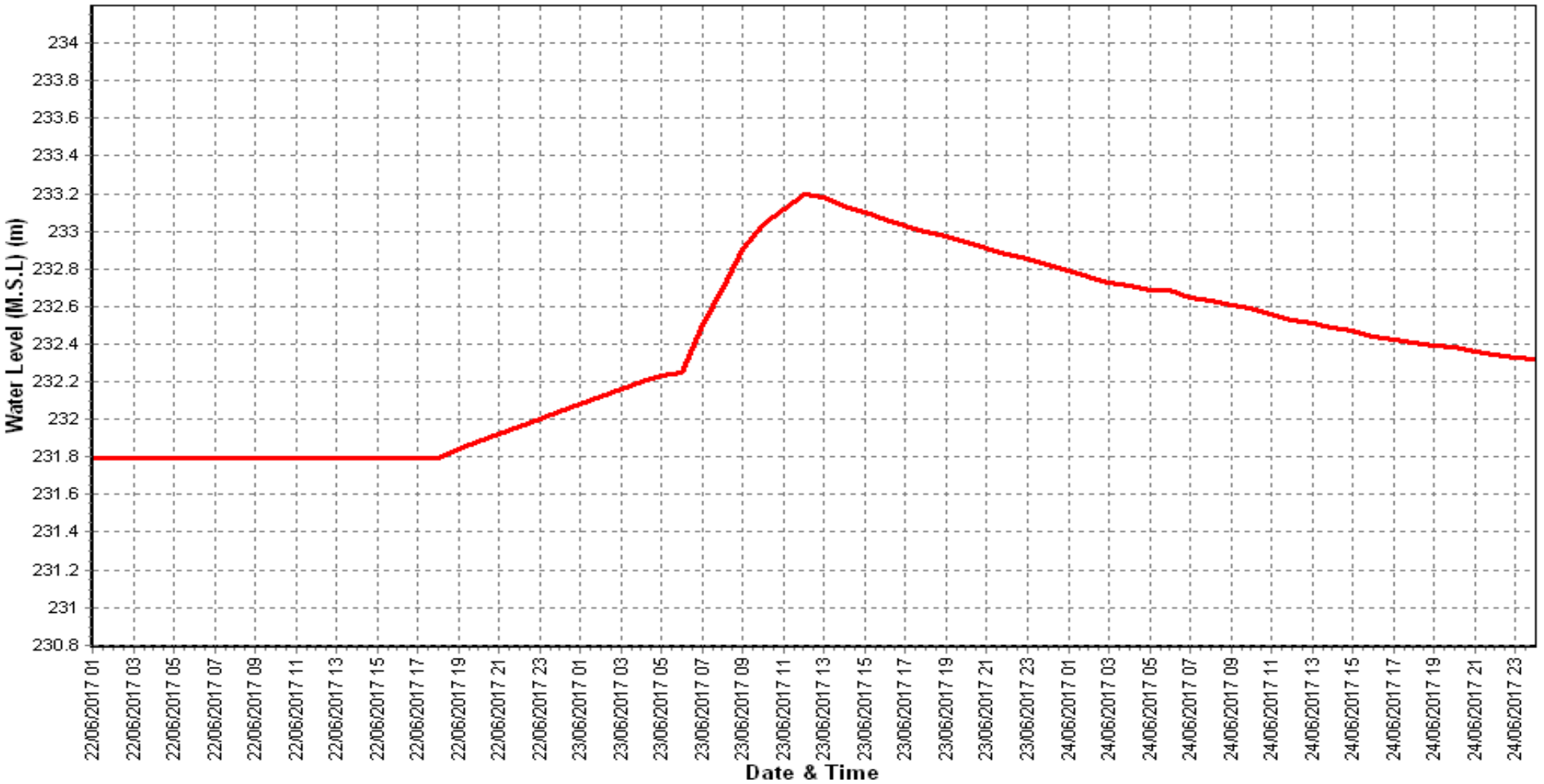
Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : HIVRA (AGH30Q1) **Division : Wainganga Div., Nagpur**

Local River : Wardha **Sub-Division : Penganga Sd, Yeotmal**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**ASHTI**	**Code**	:	**AGH40A4**
State	:	Maharashtra	District		Gadchiroli
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	-	Local River	:	Wainganga
Division	:	Wainganga Div., Nagpur	Sub-Division	:	L Wainganga SD, Chandrapur
Drainage Area	:	50990 Sq. Km.	Bank	:	Left
Latitude	:	19°41'12"	Longitude	:	79°47'13"
Zero of Gauge (m)	:	137.276 (m.s.l) 141.420 (m.s.l)	01.08.1965 01.06.1993	-	31.05.1993
		Opening Date	Closing Date		
Gauge	:	01.08.1965	**HFL During 2017-18**	:	**150.030 Meter**
			Corres.Discharge	:	**11300 Cumecs (Estimated)**
Discharge	:	14.07.1965	**Date & Time of**	:	**19.07.2017**
			Occurance	:	**16.00 Hrs.**
Sediment	:	14.03.1966			
Water Quality	:	01.06.1966			

HFL Recorded so far in m : 155.350 08/09/1994
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1965-1966	3780	143.546	03.09.1965	0.000		14.06.1965
1966-1967	6840	145.781	08.08.1966	0.800		10.06.1966
1967-1968	15300	148.026	03.08.1967	0.400	138.131	12.06.1967
1968-1969	16469	149.151	17.08.1968	1.800	138.121	24.05.1969
1969-1970	11500	148.076	03.08.1969	1.000	138.101	04.06.1969
1970-1971	20520	149.586	05.09.1970	2.700	138.276	05.06.1970
1971-1972	13470	148.141	01.09.1971	1.700	138.121	31.05.1972
1972-1973	9250	146.321	01.09.1972	0.900	138.071	18.06.1972
1973-1974	13945	148.556	10.07.1973	0.600	138.131	09.06.1973
1974-1975	21554	149.256	21.08.1974	1.300	138.066	28.05.1975
1975-1976	20416	149.256	29.06.1975	0.205	138.151	23.06.1975
1976-1977	9846	146.894	05.09.1976	3.800	138.376	26.05.1977
1977-1978	13452	148.016	15.09.1977	2.300	138.396	14.06.1977
1978-1979	28200	150.731	31.08.1978	8.200	138.631	14.06.1978
1979-1980	22700	150.076	12.08.1979	1.000	138.301	30.05.1980
1980-1981	13500	147.246	05.08.1980	1.300	138.356	05.06.1980
1981-1982	16500	150.326	10.08.1981	2.200	138.511	17.06.1981

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1982-1983	5391	145.096	19.08.1982	2.300	138.216	30.05.1983
1983-1984	12729	147.951	22.08.1983	1.080	138.156	14.06.1983
1984-1985	16457	148.491	21.08.1984	1.700	138.281	28.05.1985
1985-1986	7421	145.696	17.07.1985	2.000	138.336	02.06.1985
1986-1987	21000	150.596	15.08.1986	3.500	138.256	31.05.1987
1987-1988	5277	144.956	29.08.1987	0.800	137.986	30.05.1988
1988-1989	5390	145.246	31.07.1988	0.700	137.996	15.06.1988
1989-1990	6000	144.416	23.08.1989	0.900	138.256	11.05.1990
1990-1991	22320	150.226	23.08.1990	6.900	138.516	02.06.1990
1991-1992	17807	148.166	17.08.1991	2.500	138.336	23.05.1992
1992-1993	20000	147.996	23.08.1992	1.100	138.276	06.06.1992
1993-1994	8252	149.670	04.08.1993	2.980	142.430	31.05.1994
1994-1995	27874	155.100	13.07.1994	1.500	142.430	02.06.1994
1995-1996	13649	151.150	03.09.1995	1.000	142.600	26.05.1996
1996-1997	2660	146.760	22.08.1996	2.122	142.570	10.06.1996
1997-1998	10264	150.240	27.07.1997	0.392	142.330	17.06.1997
1998-1999	15084	151.870	16.09.1998	13.73	142.990	06.05.1999
1999-2000	20718	153.120	21.09.1999	11.25	142.960	12.06.1999
2000-2001	24276	154.750	20.07.2000	0.594	142.260	31.05.2001
2001-2002	15890	152.375	16.08.2001	0.412	142.250	02.06.2001
2002-2003	14178	151.740	21.08.2002	0.011	142.160	18.06.2002
2003-2004	15191	151.845	29.07.2003	4.500	142.590	04.06.2003
2004-2005	4609	148.440	23.08.2004	0.070	142.030	30.05.2005
2005-2006	24481	154.020	17.09.2005	0.177	141.990	15.06.2005
2006-2007	15551	152.670	17.08.2006	2.803	142.300	30.05.2007
2007-2008	20614	153.930	08.08.2007	2.417	142.280	07.06.2007
2008-2009	10718	150.270	01.08.2008	0.046	142.080	13.05.2009
2009-2010	8058	149.655	24.07.2009	1.721	142.230	27.06.2009
2010-2011	17500	152.570	09.09.2010	1.404	142.340	23.05.2011
2011-2012	16347	151.730	09.09.2011	1.337	142.300	28.05.2012
2012-2013	15830	151.700	07.09.2012	1.310	142.270	18.06.2012
2013-2014	18596	153.710	01.08.2013	1.229	142.240	10.06.2013
2014-2015	16908	152.435	25.07.2014	1.846	142.370	09.06.2014
2015-2016	12392	151.080	15.08.2015	0.811	142.190	21.04.2016
2016-2017	12476	151.295	11.07.2016	0.276	142.170	08.05.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at ASHTI in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**	6504	153	6656
2	**1966-1967**	12922	395	13317
3	**1967-1968**	22459	1256	23715
4	**1968-1969**	20251	444	20695
5	**1969-1970**	19735	544	20278
6	**1970-1971**	31433	792	32224
7	**1971-1972**	17921	751	18672
8	**1972-1973**	11108	403	11511
9	**1973-1974**	30108	1491	31600
10	**1974-1975**	11116	762	11879
11	**1975-1976**	32684	1206	33890
12	**1976-1977**	20220	559	20779
13	**1977-1978**	23990	2538	26528
14	**1978-1979**	29758	1327	31085
15	**1979-1980**	18588	353	18940
16	**1980-1981**	24173	551	24724
17	**1981-1982**	23649	996	24645
18	**1982-1983**	11562	596	12157
19	**1983-1984**	26652	1056	27708
20	**1984-1985**	16591	475	17066
21	**1985-1986**	14056	1023	15080
22	**1986-1987**	23488	871	24359
23	**1987-1988**	5194	584	5778
24	**1988-1989**	19253	753	20006
25	**1989-1990**	8910	348	9258
26	**1990-1991**	27992	1450	29442
27	**1991-1992**	15769	324	16093
28	**1992-1993**	22349	494	22843
29	**1993-1994**	19254	752	20006
30	**1994-1995**	58749	1688	60437
31	**1995-1996**	18255	834	19090
32	**1996-1997**	8212	555	8766
33	**1997-1998**	14676	3972	18648
34	**1998-1999**	16281	2196	18476
35	**1999-2000**	28657	1455	30112
36	**2000-2001**	16606	288	16894
37	**2001-2002**	18958	386	19344
38	**2002-2003**	14687	547	15235
39	**2003-2004**	20196	1068	21264
40	**2004-2005**	7436	528	7963
41	**2005-2006**	28181	1309	29490
42	**2006-2007**	22952	927	23879
43	**2007-2008**	22628	1081	23709
44	**2008-2009**	11267	286	11553
45	**2009-2010**	9648	1031	10680
46	**2010-2011**	26180	859	27039
47	**2011-2012**	20710	652	21362
48	**2012-2013**	26045	913	26957
49	**2013-2014**	48199	1288	49487
50	**2014-2015**	15738	808	16546
51	**2015-2016**	11189	415	11604
52	**2016-2017**			
53	**2017-2018**	10007	413	10420
Average		20060	899	20959

Stage-Discharge Data for the period 2017 - 2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	142.260	1.350	142.730	22.16	144.190	405.3	147.200	3591	144.270	444.6 *	143.680	198.4
2	142.520	8.933 #	142.820	31.06 *	143.975	337.1	146.200	2134 *	144.150	386.7 *	143.720	205.0
3	142.940	42.21	142.855	34.21	143.830	314.7	145.540	1382 *	144.255	384.2	143.720	208.3
4	142.950	46.01 *	142.780	24.93	143.750	176.7	145.290	1179	143.990	379.2	143.670	201.6 *
5	143.200	85.24 #	142.670	17.88	143.720	168.5	144.950	963.5	143.870	270.0 #	143.600	180.4 *
6	143.430	137.9	142.965	43.65	143.720	217.6 *	144.675	808.0	143.640	150.0	143.560	169.0 #
7	143.520	158.0 #	143.150	76.22 #	143.600	143.9	144.570	759.3	143.710	195.2	143.490	150.0 #
8	143.215	73.72	143.060	50.60	143.400	127.5 #	144.410	607.5	143.780	237.8 *	143.430	134.8 #
9	142.945	41.50	142.920	42.24 *	143.200	67.74	144.050	399.8	144.060	417.5	143.380	96.55
10	142.840	32.31	142.850	33.04	147.560	4342 *	143.790	241.2 *	144.270	455.6	143.310	88.48
11	142.750	24.43 *	142.780	26.38	147.270	3627	143.550	136.1	144.450	592.4	143.210	80.46
12	142.660	16.94	142.720	22.81	145.790	1548	144.280	447.6	144.670	834.9	143.140	74.49 *
13	142.620	15.10	142.630	17.62	145.390	1238 *	144.575	639.3	144.910	984.1	143.100	52.29
14	142.570	13.31	142.580	14.83	145.160	962.9	144.850	792.6	144.735	869.5	143.070	50.12
15	142.560	12.82	143.520	158.0 #	144.940	861.5 *	145.240	1171	144.720	706.3 *	143.010	47.76
16	142.610	14.77	143.030	57.00 *	144.530	624.0	145.320	1250	144.460	593.3	142.930	37.90
17	142.600	14.07	142.890	40.57	144.375	413.4	145.400	1248 *	144.535	645.4	142.850	34.25
18	142.560	10.98 *	144.790	728.3	144.285	378.6	145.400	1360	144.400	558.3	142.800	27.80
19	142.490	7.560 #	148.540	6543 *	144.300	385.7	145.270	1242	144.240	429.7 *	142.760	25.32 *
20	142.460	6.321 #	148.470	6368 *	144.900	831.9 *	145.290	1236	144.190	406.9	142.720	19.76
21	142.430	5.336	146.810	3140	146.880	3376	145.260	1242	144.170	396.2	142.700	19.05
22	142.410	5.057	146.195	2443	145.820	1667	146.735	2961	144.170	396.0 *	142.680	17.50
23	142.410	4.985	146.120	1780 *	144.970	928.3	147.210	3719	144.280	441.4	142.660	16.80
24	142.450	5.938 #	145.890	1639	144.470	596.5	146.730	2884 *	144.110	377.5	142.620	13.97
25	142.430	5.214 *	145.385	1098	144.140	382.1 *	145.875	1667	143.900	281.4 #	142.620	14.16
26	142.410	4.546 *	145.180	956.2	144.430	574.6	145.350	1300	143.860	245.2	142.620	14.55 *
27	142.460	7.584	145.150	932.9	144.480	557.7 *	144.960	974.6	143.810	228.8	142.600	13.34
28	142.510	10.11	144.730	721.1	145.140	1057	144.840	819.4	143.690	196.4	142.580	13.03
29	142.480	8.439	144.640	664.2	145.340	1222	144.590	664.4	143.650	195.4 *	142.580	12.95
30	142.690	18.47	144.600	629.4 *	145.750	1614	144.520	581.0 *	143.760	214.9	142.560	11.68
31			144.470	511.5	148.080	5442 *			143.720	205.8		
Ten-Daily Mean												
I Ten-Daily	142.982	62.72	142.880	37.60	144.094	630.1	145.068	1207	144.000	332.1	143.556	163.3
II Ten-Daily	142.588	13.63	144.195	1398	145.094	1087	144.918	952.2	144.531	662.1	142.959	45.01
III Ten-Daily	142.468	7.568	145.379	1320	145.409	1583	145.607	1681	143.920	289.0	142.622	14.70
Monthly												
Min.	142.260	1.350	142.580	14.83	143.200	67.74	143.550	136.1	143.640	150.0	142.560	11.68
Max.	143.520	158.0	148.540	6543	148.080	5442	147.210	3719	144.910	984.1	143.720	208.3
Mean	142.679	27.97	144.191	931.2	144.883	1116	145.197	1280	144.143	423.2	143.046	74.33

Annual Runoff in MCM = 10420 Annual Runoff in mm = 204

Peak Observed Discharge = 3719 cumecs on 23/09/2017 Corres. Water Level :147.210 m

Lowest Observed Discharge = 0.005 cumecs on 09/05/2018 Corres. Water Level :141.950 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	142.550	11.82 *	142.380	4.801	142.320	3.812	142.320	5.347	142.130	0.777 *	142.020	0.068
2	142.540	11.17	142.390	4.971	142.300	2.831	142.290	3.511 *	142.130	0.886	142.010	0.030 #
3	142.530	10.85 *	142.740	24.39	142.290	2.712	142.280	2.919	142.110	0.501	142.000	0.008 #
4	142.510	9.799	143.270	84.36	142.320	3.467 *	142.260	2.814 *	142.110	0.557	141.990	0.007 #
5	142.500	9.568	143.330	93.91	143.000	45.11	142.250	2.763	142.100	0.390	141.980	0.006 #
6	142.490	9.589	143.360	105.8	143.070	54.98	142.240	2.638	142.090	0.371	141.970	0.006 *
7	142.500	9.653	143.360	100.9 *	143.070	55.39	142.230	2.131	142.090	0.369	141.960	0.006 #
8	142.500	9.838	143.360	105.0	143.030	52.37	142.220	2.163	142.090	0.433 *	141.960	0.006 #
9	142.490	9.433	143.290	85.89	142.980	45.66	142.210	1.712	142.090	0.343	141.950	0.005 #
10	142.480	8.636 *	143.300	88.52	142.980	45.59	142.200	1.638	142.070	0.353	142.350	6.224
11	142.470	7.180	143.300	88.22	142.980	45.97 *	142.200	1.685 *	142.060	0.263	142.560	13.27
12	142.460	6.926	143.270	85.75	142.980	45.62	142.200	1.652	142.060	0.271	142.480	12.06
13	142.430	6.387	143.260	84.08	143.000	48.40	142.200	1.601	142.060	0.269	142.420	8.589 *
14	142.430	6.357	143.120	63.26 *	143.020	50.56	142.290	3.294	142.060	0.271	142.340	5.921
15	142.420	6.067	142.950	40.46	143.030	52.30	142.310	3.832	142.060	0.250 *	142.280	3.851
16	142.410	5.859	142.830	33.49	143.030	51.91	142.300	3.530	142.050	0.249	142.240	3.571
17	142.400	5.705 *	142.730	26.76	143.040	54.83	142.300	3.510	142.050	0.246	142.200	2.423
18	142.390	5.591	142.650	15.64	143.070	56.71 *	142.290	3.511 *	142.020	0.069	142.170	2.143
19	142.410	5.935	142.590	12.95	142.990	45.90	142.260	3.037	142.020	0.068	142.140	1.238 #
20	142.440	6.893	142.540	11.69	142.840	33.81	142.240	2.670	142.020	0.067	142.120	0.951 *
21	142.460	7.277	142.510	9.926 *	142.700	22.83	142.230	2.538	142.010	0.030 #	142.100	0.640
22	142.450	7.075	142.480	9.049	142.620	16.82	142.220	1.770	142.030	0.109 *	142.200	2.427
23	142.430	6.393	142.460	8.522	142.530	13.41	142.210	1.681	142.050	0.230	142.360	6.451
24	142.430	6.720 *	142.460	8.030	142.480	10.63	142.200	1.574	142.070	0.365	142.450	9.077
25	142.410	6.033 *	142.450	7.842	142.460	9.332 *	142.190	1.530 *	142.070	0.352	142.400	8.139
26	142.400	5.385	142.430	6.720 *	142.420	7.650	142.180	1.218	142.060	0.253	142.390	7.902
27	142.390	5.270	142.390	5.941	142.380	6.610	142.170	1.159	142.090	0.587 #	142.360	6.515 *
28	142.380	4.893	142.370	4.788 *	142.350	6.008	142.160	1.093	142.060	0.304	142.340	5.938
29	142.380	4.864	142.350	4.710			142.150	0.995 *	142.050	0.229 *	142.320	5.268
30	142.370	4.590	142.340	4.608			142.150	0.995 *	142.030	0.109 *	142.290	4.172
31	142.370	4.788 *	142.320	3.847			142.140	0.957			142.260	3.508
Ten-Daily Mean												
I Ten-Daily	142.509	10.04	143.078	69.85	142.736	31.19	142.250	2.764	142.101	0.498	142.019	0.637
II Ten-Daily	142.426	6.290	142.924	46.23	142.998	48.60	142.259	2.832	142.046	0.202	142.295	5.402
III Ten-Daily	142.406	5.754	142.415	6.726	142.493	11.66	142.182	1.410	142.052	0.257	142.315	5.458
Monthly												
Min.	142.370	4.590	142.320	3.847	142.290	2.712	142.140	0.957	142.010	0.030	141.950	0.005
Max.	142.550	11.82	143.360	105.8	143.070	56.71	142.320	5.347	142.130	0.886	142.560	13.27
Mean	142.446	7.308	142.793	39.83	142.760	31.83	142.229	2.305	142.066	0.319	142.213	3.885

Peak Computed Discharge = 6543 cumecs on 19/07/2017 Corres. Water Level :148.540 m

Lowest Computed Discharge = 0.006 cumecs on 06/05/2018 Corres. Water Level :141.970 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

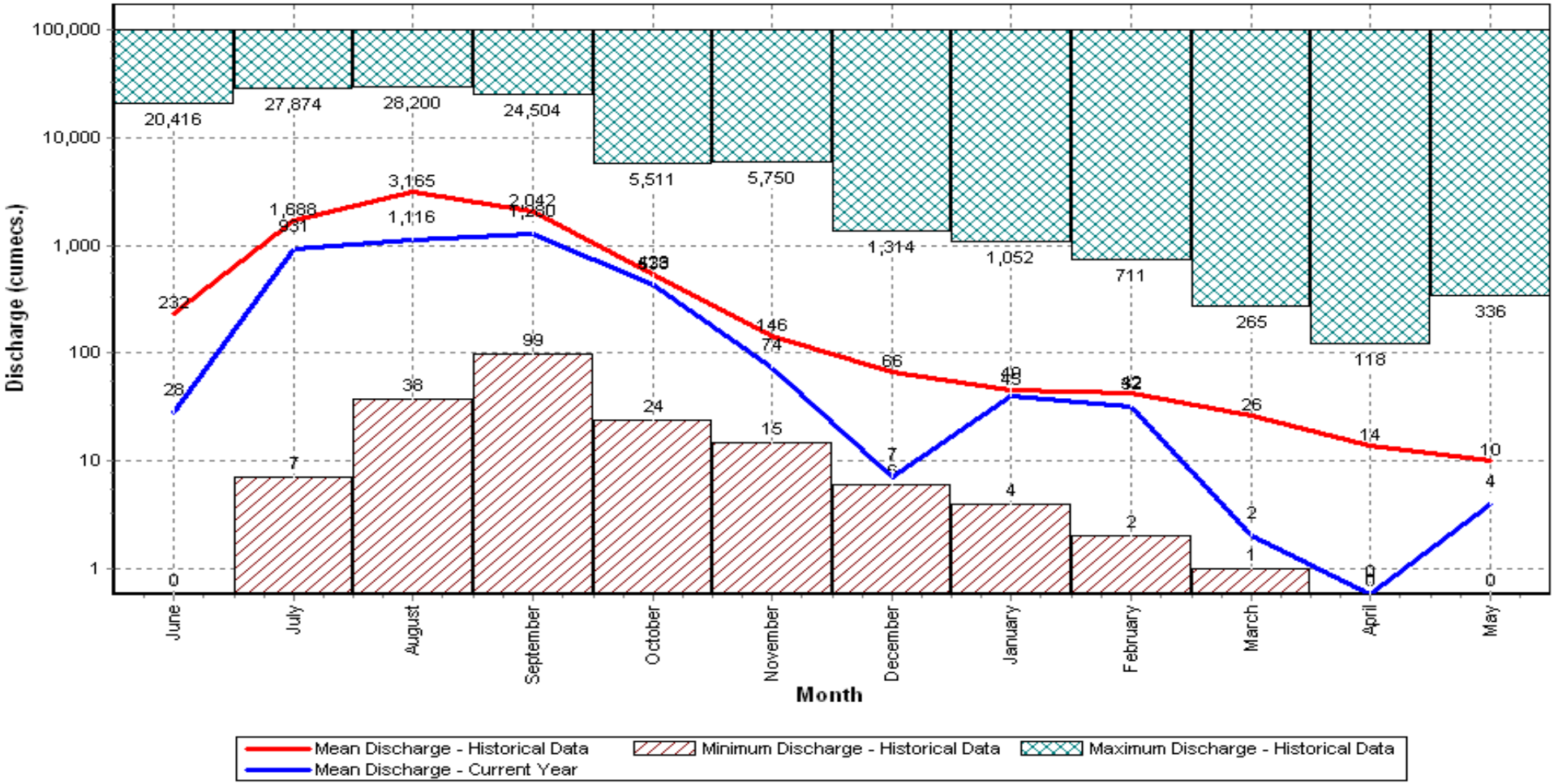
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : ASHTI (AGH40A4) **Data considered : 1965-2018** **Division : Wainganga Div., Nagpur**

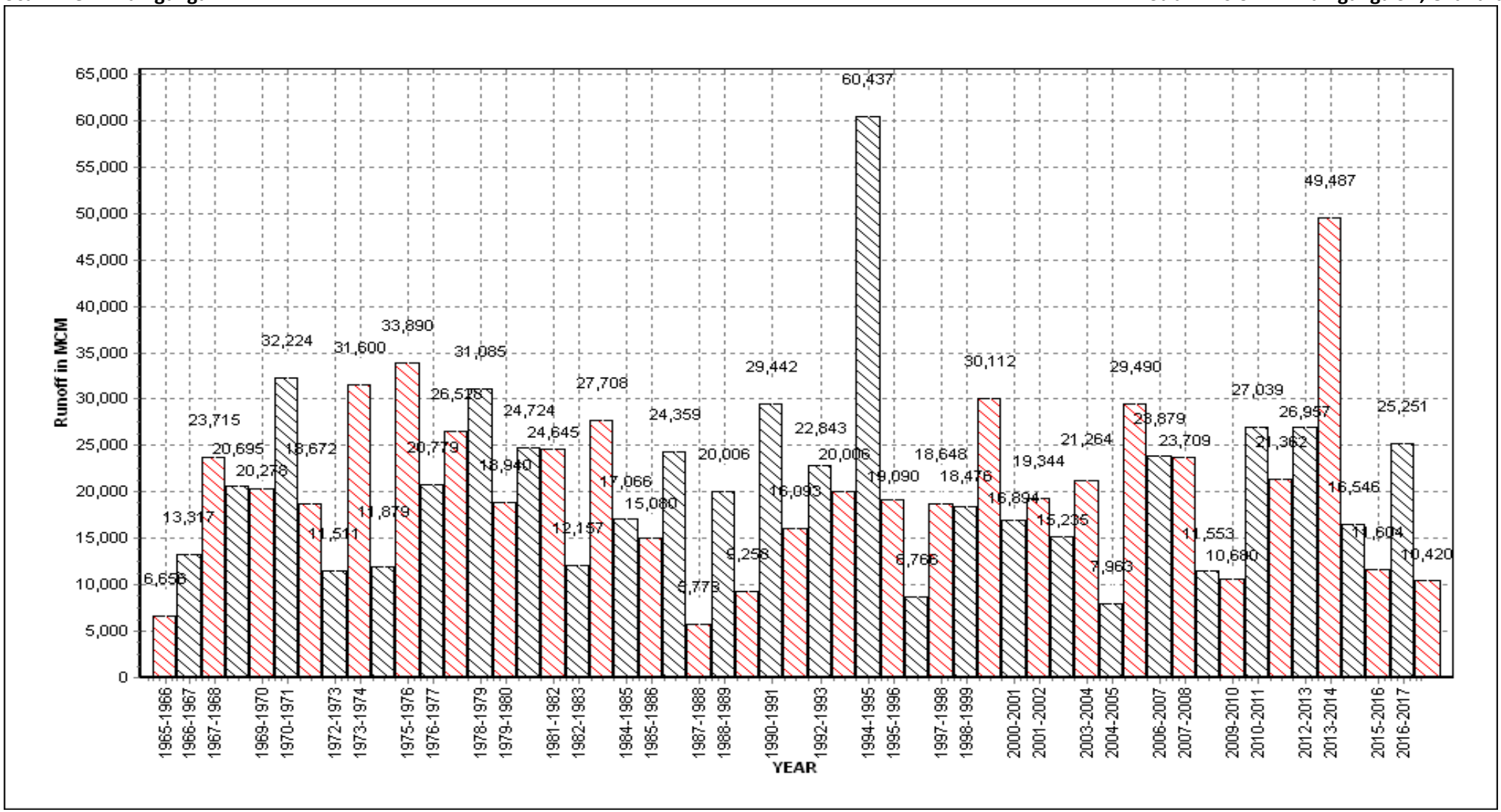
Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**



Annual Runoff Values for the period: 1965 - 2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**

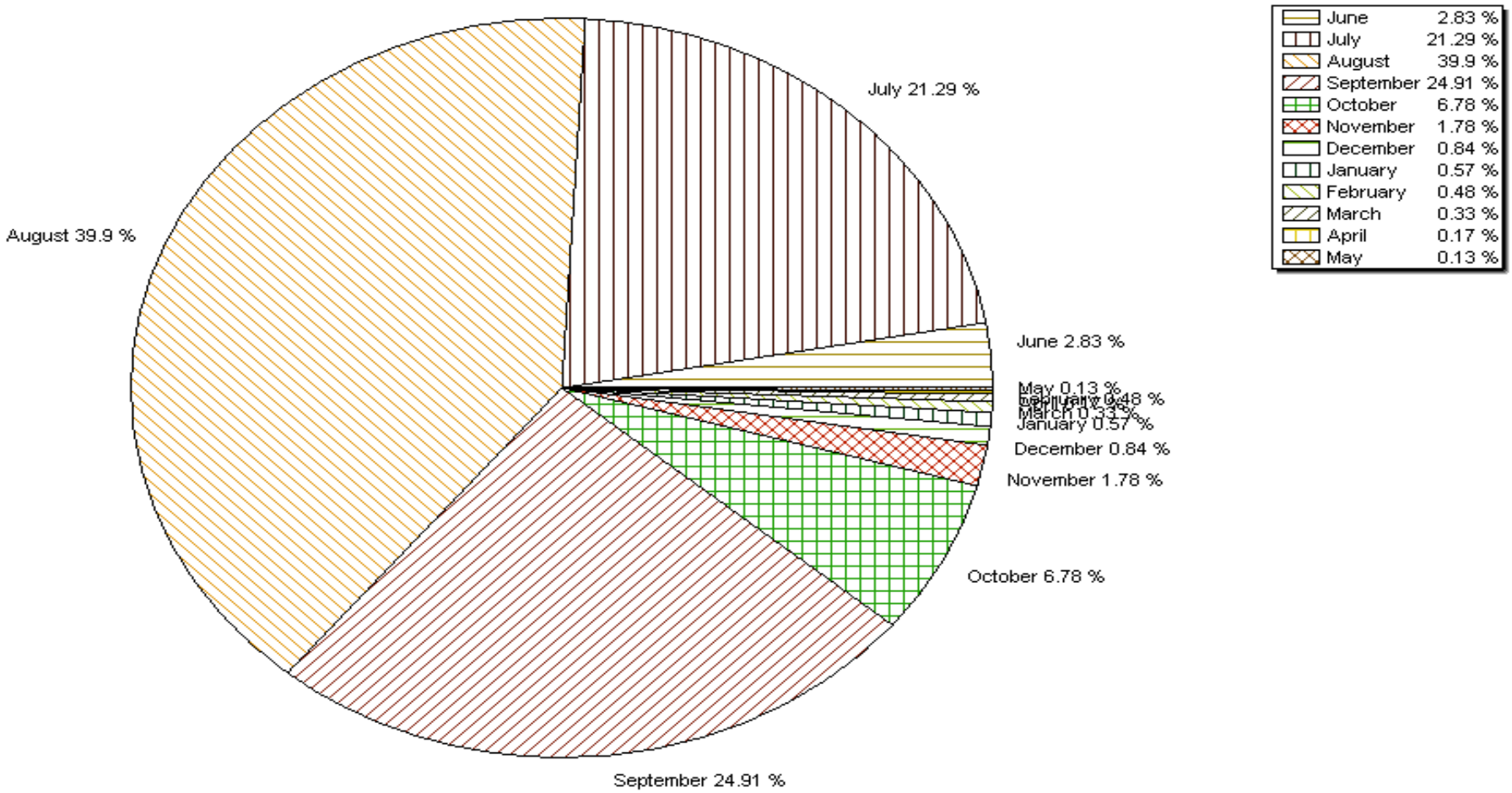


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1965-2017

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

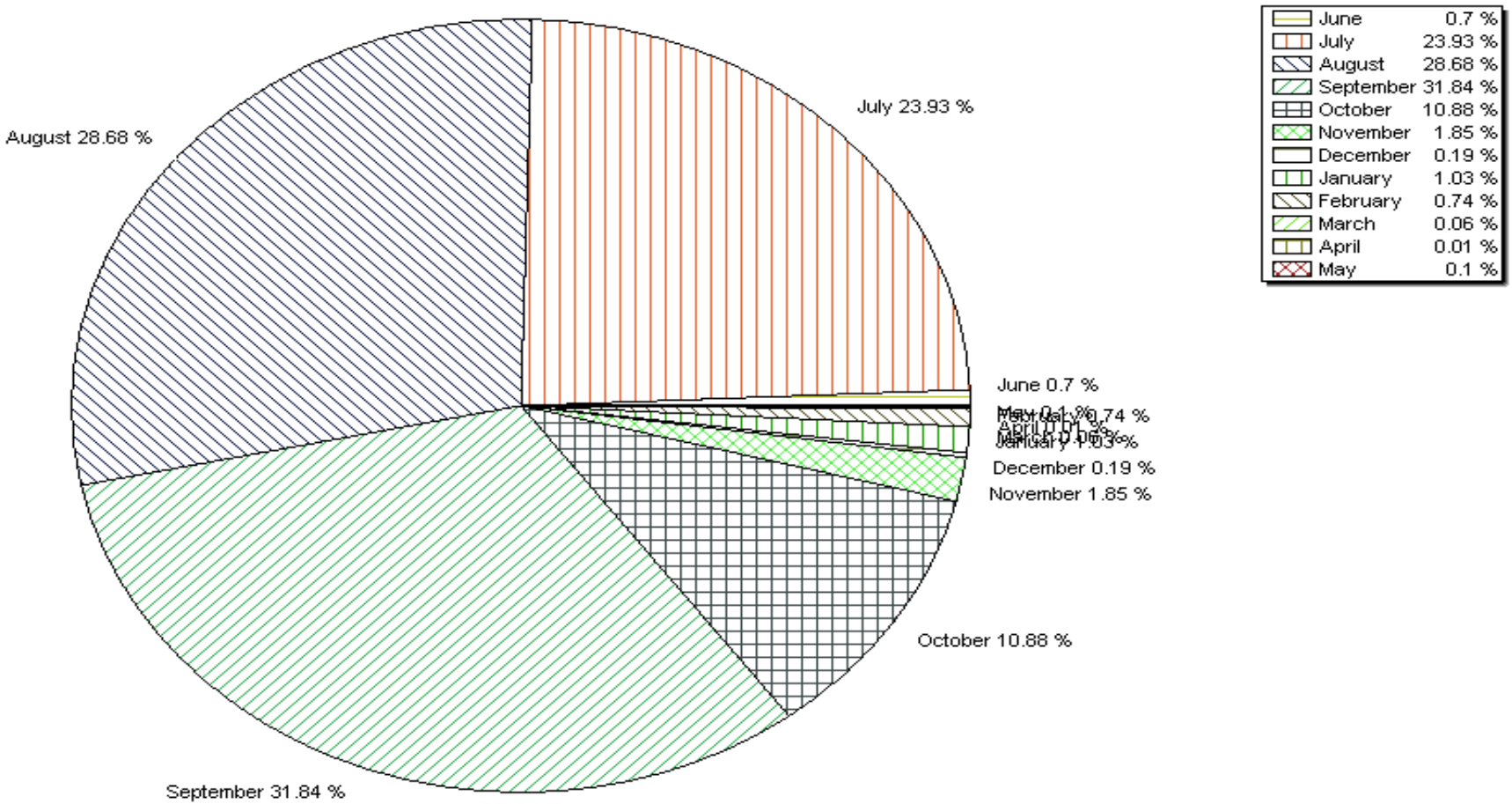
Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**



Monthly Runoff for the Year : 2017-2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

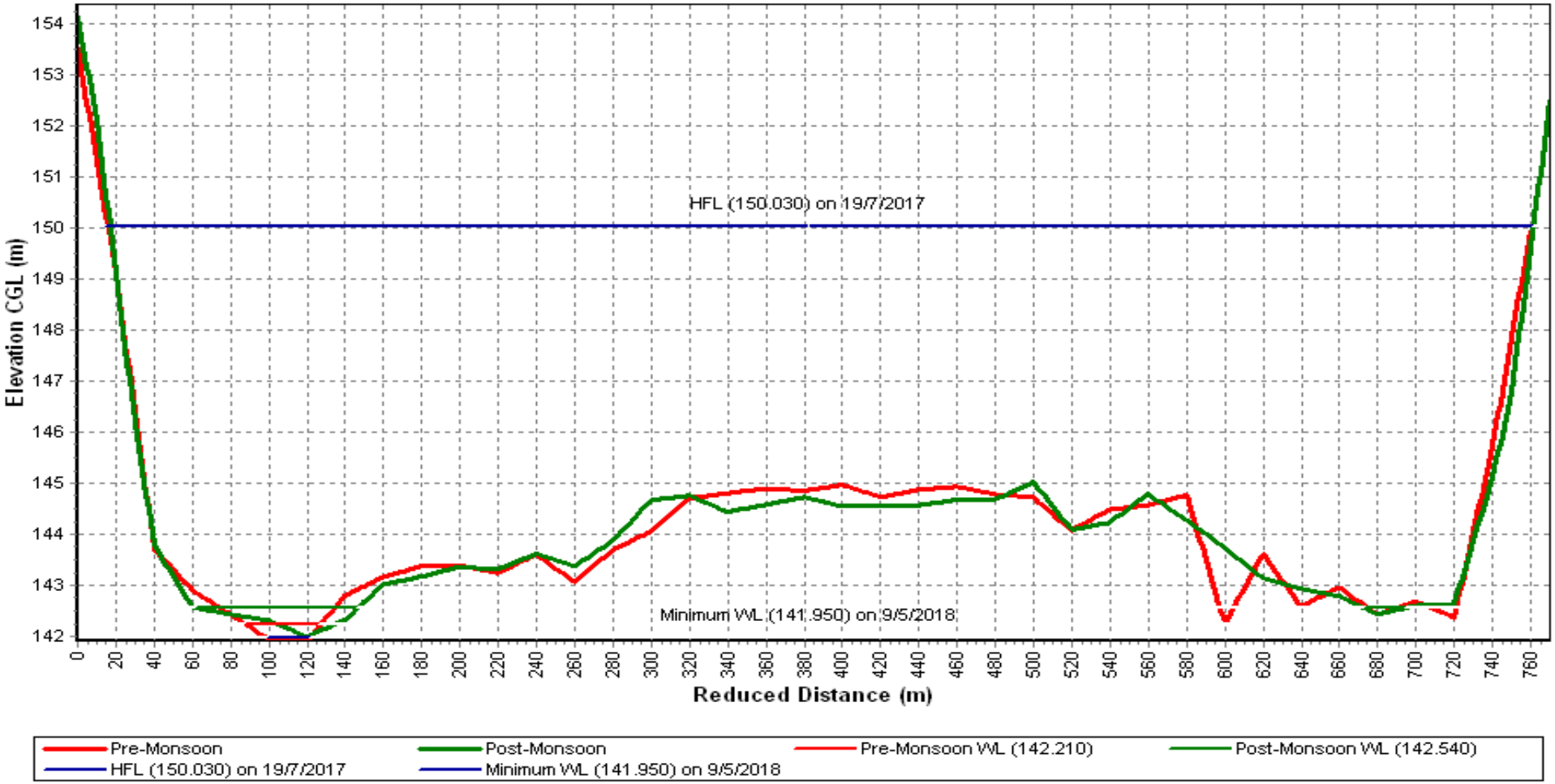
Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

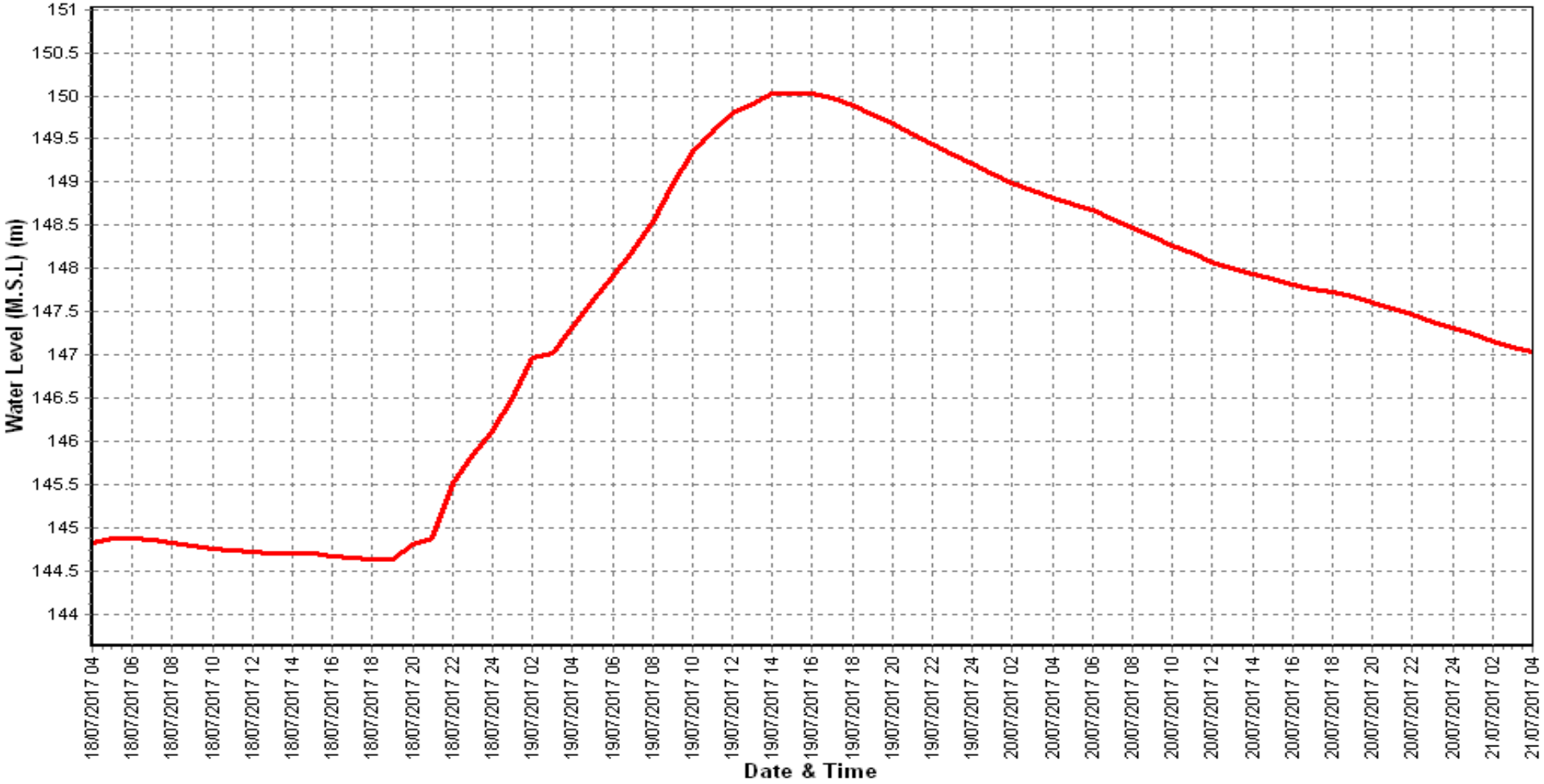
Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**

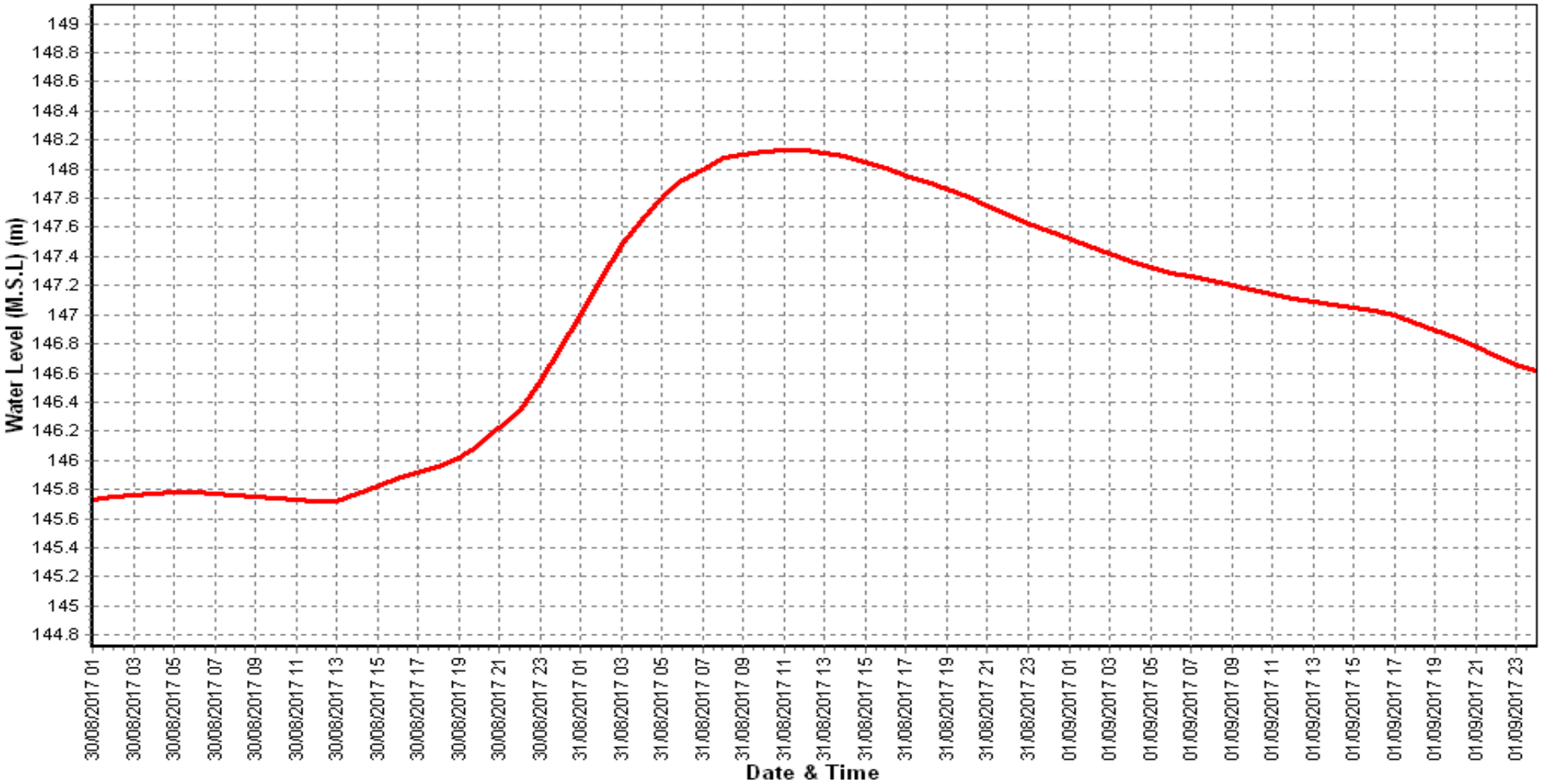


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**

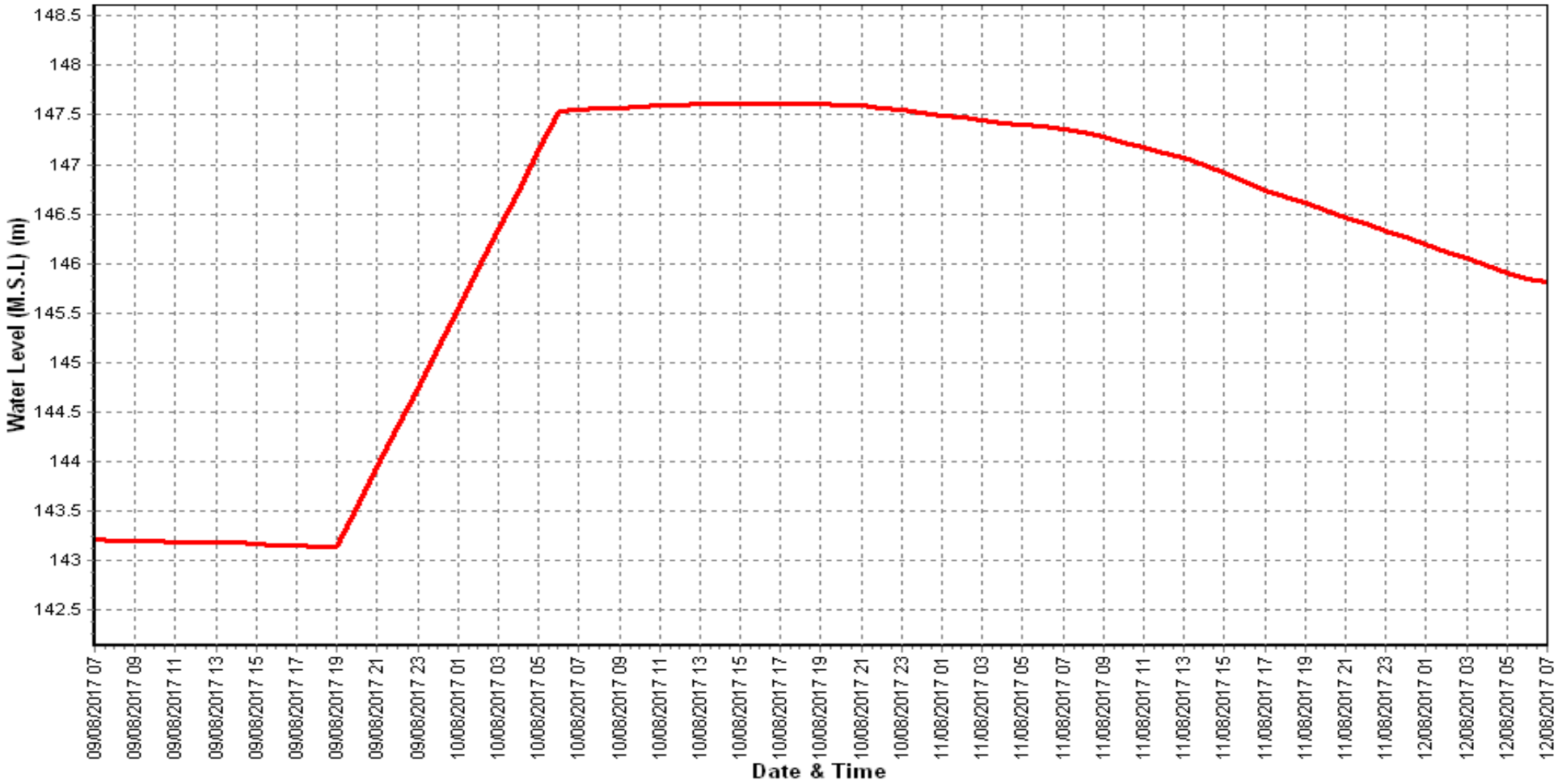


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : ASHTI (AGH40A4) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : L Wainganga SD, Chandrapur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**RAJOLI**	**Code**	:	**AGH41Q4**
State	:	Maharashtra	District		Chandrapur
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	Andhari	Local River	:	Mul
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Wardha SD, Chandrapur
Drainage Area	:	1900 Sq. Km.	Bank	:	Left
Latitude	:	20°11'37"	Longitude	:	79°39'59"
Zero of Gauge (m)	:	229 (m.s.l) 180.62 (m.s.l)	30.01.1985 01.06.1993	-	31.05.1993
		Opening Date	Closing Date		
Gauge	:	30.01.1985	**HFL During 2017-18**	:	**185.880 Meter**
			Corres.Discharge	:	**357.0 Cumecs (Estimated)**
Discharge	:	25.06.1986	**Date & Time of Occurance**	:	**19.07.2017 06.00Hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 239.39 23/08/1990
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1986-1987	1830	239.615	14.08.1986	0.000		19.06.1986
1987-1988	252.6	235.110	29.08.1987	0.000	231.805	04.02.1988
1988-1989	617.4	236.140	27.07.1988	0.000		22.03.1989
1989-1990	393.3	235.300	01.09.1989	0.000		30.03.1990
1990-1991	1226	238.840	23.08.1990	0.000		17.03.1991
1991-1992	963.0	237.638	17.08.1991	0.000		03.03.1992
1992-1993	1354	238.920	22.08.1992	0.000		07.03.1993
1993-1994	583.6	187.285	02.08.1993	0.000		01.04.1994
1994-1995	1538	191.195	31.08.1994	0.000	183.195	17.04.1995
1995-1996	696.7	187.390	02.09.1995	0.000		20.02.1996
1996-1997	292.3	186.003	21.08.1996	0.000		05.02.1997
1997-1998	644.2	187.610	23.08.1997	0.000		25.03.1998
1998-1999	200.8	185.655	14.09.1998	0.000		01.03.1999
1999-2000	1227	189.385	03.08.1999	0.000		12.02.2000
2000-2001	1570	191.400	19.07.2000	0.000		19.02.2001
2001-2002	1076	189.520	15.08.2001	0.000		22.02.2002
2002-2003	902.7	188.660	24.08.2002	0.000		10.03.2003

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2003-2004	734.8	187.275	24.08.2003	0.000	0.000	08.03.2004
2004-2005	491.4	186.260	06.08.2004	0.000		25.12.2004
2005-2006	1100	189.200	06.08.2005	0.000		19.03.2006
2006-2007	704.6	187.300	06.08.2006	0.000		04.04.2007
2007-2008	2394	190.800	01.07.2007	0.176	182.700	20.01.2008
2008-2009	515.1	186.995	30.07.2008	0.059	182.890	18.01.2009
2009-2010	116.9	184.495	23.07.2009	0.001	182.650	24.01.2010
2010-2011	1381	189.030	07.08.2010	0.000		19.04.2011
2011-2012	734.0	187.480	08.09.2011	0.000		06.04.2012
2012-2013	1598	189.910	20.08.2012	0.000		01.03.2013
2013-2014	1562	189.960	01.08.2013	0.000		27.02.2014
2014-2015	652.5	187.275	23.07.2014	0.000		10.04.2015
2015-2016	1400	188.920	14.08.2015	0.000	182.920	20.12.2015
2016-2017	958.8	188.160	10.07.2016	0.000		03.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at RAJOLI in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**	1072	12	1085
2	**1987-1988**	172	11	183
3	**1988-1989**	768	7	775
4	**1989-1990**	284	27	311
5	**1990-1991**	1426	15	1441
6	**1991-1992**	363	3	366
7	**1992-1993**	1053	32	1085
8	**1993-1994**	586	19	605
9	**1994-1995**	1282	17	1299
10	**1995-1996**	448	10	458
11	**1996-1997**	220	4	225
12	**1997-1998**	465	27	492
13	**1998-1999**	232	33	265
14	**1999-2000**	735	12	747
15	**2000-2001**	1065	6	1071
16	**2001-2002**	591	6	596
17	**2002-2003**	493	4	497
18	**2003-2004**	581	8	588
19	**2004-2005**	265	22	287
20	**2005-2006**	1016	13	1029
21	**2006-2007**	484	14	498
22	**2007-2008**	1214	18	1232
23	**2008-2009**	320	2	322
24	**2009-2010**	121	5	126
25	**2010-2011**	1100	15	1115
26	**2011-2012**	576	7	582
27	**2012-2013**	977	24	1001
28	**2013-2014**	1486	12	1498
29	**2014-2015**	306	4	310
30	**2015-2016**	356	8	364
31	**2016-2017**			
32	**2017-2018**			
Average		669	13	682

Stage-Discharge Data for the period 2017 - 2018

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

Local River : Mul **Sub-Division : Wardha SD, Chandrapur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000	183.130	4.411	182.770	0.025 #	183.525	35.32	183.010	2.512 *	183.100	3.708
2		0.000	182.980	2.139 *	182.610	0.000	183.300	16.65 *	182.990	2.252 *	183.070	3.238
3		0.000	182.920	0.951		0.000	183.140	8.460 *	183.040	3.217	183.080	3.232
4		0.000	182.880	0.582		0.000	183.200	13.48	182.970	1.662	183.120	4.518 *
5		0.000	182.880	0.586		0.000	183.240	13.34	182.970	1.723	183.090	3.859 *
6		0.000	182.820	0.042 #		0.000	183.110	7.476	183.070	3.110	183.090	4.192
7		0.000	182.760	0.020 #		0.000	183.170	9.405	183.070	3.134	183.090	4.145
8		0.000		0.000		0.000	183.120	7.941	183.000	2.379 *	183.080	3.607
9		0.000		0.000	183.440	19.19	183.050	5.376	183.390	17.78	183.070	3.588
10		0.000		0.000	183.425	22.49	183.100	6.780 *	183.330	15.05	183.050	2.842
11		0.000		0.000	183.170	9.481	183.590	36.89 #	183.560	39.84	183.030	2.833
12		0.000		0.000	183.020	3.901 #	183.400	22.88 #	183.480	23.46	183.010	2.512 *
13		0.000		0.000	182.910	1.094 *	184.085	79.66	183.370	16.41	182.990	2.540
14		0.000		0.000	182.710	0.010 #	183.870	60.14	183.320	13.41	182.980	2.426
15		0.000		0.000		0.000	183.765	51.29	183.250	9.453	182.920	1.816
16		0.000		0.000		0.000	183.983	71.43	183.190	6.489 #	182.900	1.046
17		0.000		0.000		0.000	183.640	41.04 *	183.100	4.279	182.880	0.927
18		0.000		0.000		0.000	183.540	39.58	183.120	4.361	182.880	1.251
19		0.000	185.725	310.8	183.260	12.75	184.560	151.6	183.080	3.660 *	182.860	1.085 *
20		0.000	184.420	116.3	184.030	79.35 *	183.805	61.78	183.080	4.060	182.850	1.209
21		0.000	183.575	28.88	183.555	29.53	183.660	50.03	183.180	6.165 #	182.830	1.169
22		0.000	183.305	13.68	183.330	18.34	183.975	74.64	183.150	5.282 *	182.820	0.987
23		0.000	183.160	7.390 *	183.200	11.14	183.720	52.69	183.180	6.917	182.820	1.005
24		0.000	183.080	4.630	183.070	5.624 #	183.460	27.00 *	183.150	5.901	182.810	0.850
25		0.000	183.040	3.657	183.040	4.559 *	183.330	15.62	183.150	5.541	182.830	1.089
26		0.000	183.050	3.442	183.030	4.133	183.240	9.955	183.100	3.513	182.820	0.860 *
27		0.000	183.055	3.761	183.050	4.903 *	183.170	8.419	183.070	2.542	182.810	0.769
28	184.085	79.44	183.070	4.180	183.200	12.90	183.100	4.747	183.030	2.253	182.800	0.748
29	183.260	14.25	183.020	3.358	183.440	28.33	183.070	3.485	183.070	3.470 *	182.800	0.735
30	183.150	4.897	182.990	2.356 *	184.075	76.94	183.000	2.379 *	183.060	3.158	182.790	0.641
31			182.850	0.216 #	183.945	65.42			183.070	3.398		
Ten-Daily Mean												
I Ten-Daily		0.000	182.910	0.873	183.061	4.170	183.196	12.42	183.084	5.282	183.084	3.693
II Ten-Daily		0.000	185.073	42.71	183.183	10.66	183.824	61.63	183.255	12.54	182.930	1.765
III Ten-Daily	183.498	9.859	183.109	6.868	183.358	23.80	183.373	24.90	183.110	4.376	182.813	0.885
Monthly												
Min.	183.150	0.000	182.760	0.000	182.610	0.000	183.000	2.379	182.970	1.662	182.790	0.641
Max.	184.085	79.44	185.725	310.8	184.075	79.35	184.560	151.6	183.560	39.84	183.120	4.518
Mean	183.498	3.286	183.236	16.5	183.251	13.23	183.464	32.98	183.148	7.303	182.942	2.114

Annual Runoff in MCM = 199 Annual Runoff in mm = 105

Peak Observed Discharge = 310.8 cumecs on 19/07/2017 Corres. Water Level :185.725 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

Local River : Mul **Sub-Division : Wardha SD, Chandrapur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	182.790	0.550 *	182.680	0.103	182.840	0.000		0.000		0.000		0.000
2	182.780	0.485	182.680	0.105	182.820	0.000		0.000		0.000		0.000
3	182.760	0.363 *	182.680	0.098	182.800	0.000		0.000		0.000		0.000
4	182.750	0.390	182.680	0.086	182.770	0.000		0.000		0.000		0.000
5	182.760	0.346	182.970	0.000	182.770	0.000		0.000		0.000		0.000
6	182.750	0.287	183.100	0.000	182.760	0.000		0.000		0.000		0.000
7	182.740	0.235	183.150	0.000	182.760	0.000		0.000		0.000		0.000
8	182.740	0.269	183.030	0.000	182.760	0.000		0.000		0.000		0.000
9	182.730	0.237	183.040	0.000	182.750	0.000		0.000		0.000		0.000
10	182.720	0.207 *	183.040	0.000	182.720	0.000		0.000		0.000		0.000
11	182.710	0.208	183.030	0.000	182.700	0.000		0.000		0.000		0.000
12	182.720	0.227	183.020	0.000	182.690	0.000		0.000		0.000		0.000
13	182.720	0.220	183.020	0.000	182.840	0.000		0.000		0.000		0.000
14	182.720	0.202	183.010	0.000	182.890	0.000		0.000		0.000		0.000
15	182.720	0.194	183.010	0.000	182.890	0.000		0.000		0.000		0.000
16	182.720	0.186	183.010	0.000	182.880	0.000		0.000		0.000		0.000
17	182.710	0.179 *	183.030	0.000	182.820	0.000		0.000		0.000		0.000
18	182.710	0.165	183.020	0.000	182.740	0.000		0.000		0.000		0.000
19	182.710	0.170	183.010	0.000	182.690	0.000		0.000		0.000		0.000
20	182.710	0.177	183.000	0.000	182.670	0.000		0.000		0.000		0.000
21	182.690	0.169	183.000	0.000	182.630	0.000		0.000		0.000		0.000
22	182.690	0.146	182.980	0.000	182.630	0.000		0.000		0.000		0.000
23	182.680	0.128	182.930	0.000	182.630	0.000		0.000		0.000		0.000
24	182.690	0.135 *	182.900	0.000	182.630	0.000		0.000		0.000		0.000
25	182.690	0.135 *	182.880	0.000	182.630	0.000		0.000		0.000		0.000
26	182.690	0.143	182.870	0.000	182.630	0.000		0.000		0.000		0.000
27	182.690	0.138	182.840	0.000	182.620	0.000		0.000		0.000		0.000
28	182.690	0.155	182.820	0.000	182.620	0.000		0.000		0.000		0.000
29	182.690	0.148	182.820	0.000				0.000		0.000		0.000
30	182.680	0.131	182.800	0.000				0.000		0.000		0.000
31	182.680	0.117 *	182.810	0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	182.752	0.337	182.905	0.039	182.775	0.000		0.000		0.000		0.000
II Ten-Daily	182.715	0.193	183.016	0.000	182.781	0.000		0.000		0.000		0.000
III Ten-Daily	182.687	0.140	182.877	0.000	182.628	0.000		0.000		0.000		0.000
Monthly												
Min.	182.680	0.117	182.680	0.000	182.620	0.000		0.000		0.000		0.000
Max.	182.790	0.550	183.150	0.105	182.890	0.000		0.000		0.000		0.000
Mean	182.717	0.221	182.931	0.013	182.735	0.000		0.000		0.000		0.000

Peak Computed Discharge = 79.35 cumecs on 20/08/2017 **Corres. Water Level :184.030 m**

Lowest Computed Discharge = 0.117 cumecs on 31/12/2017 **Corres. Water Level :182.680 m**

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

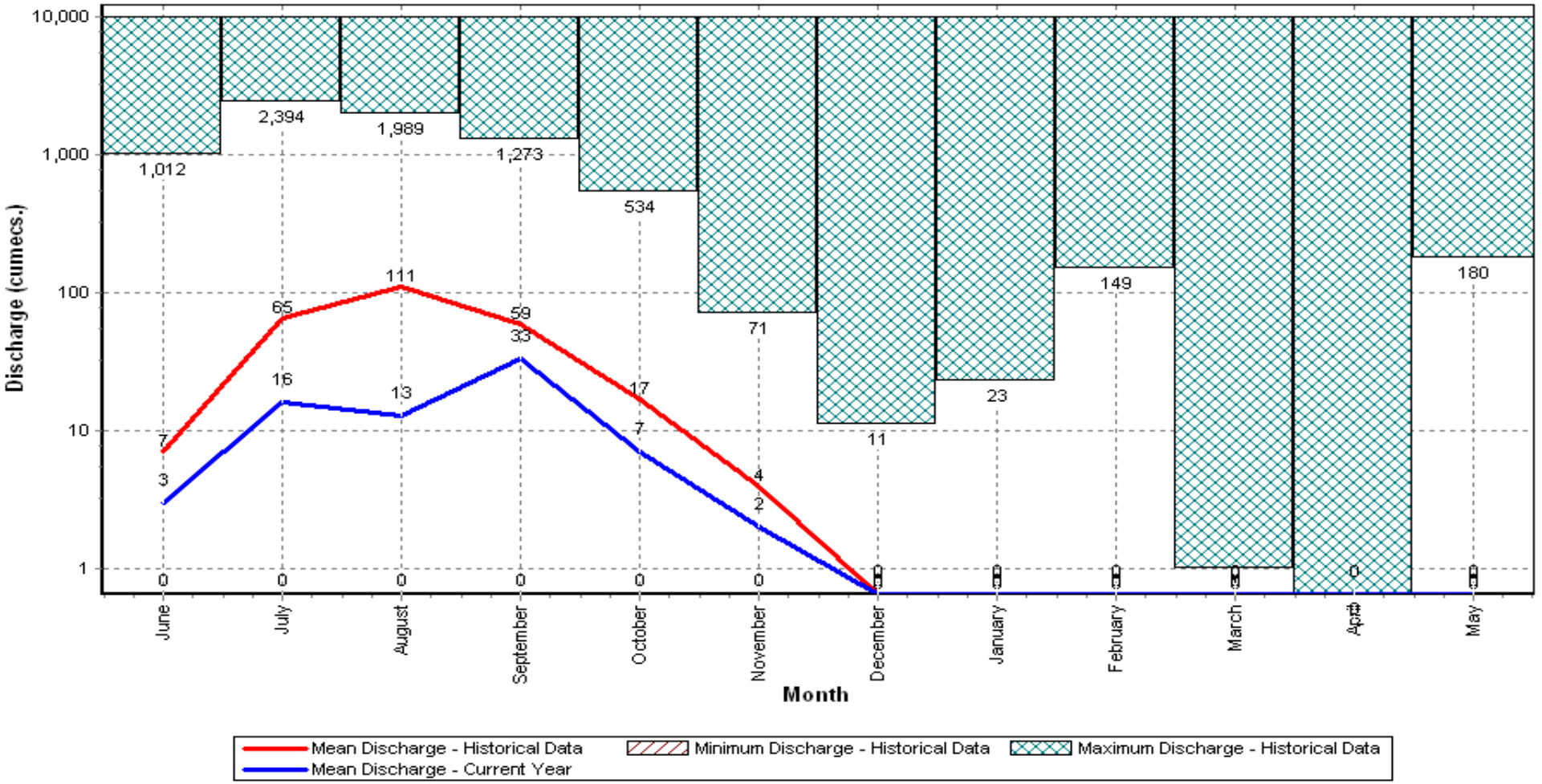
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : RAJOLI (AGH41Q4) | **Data considered : 1986-2018** | **Division : Wainganga Div., Nagpur**

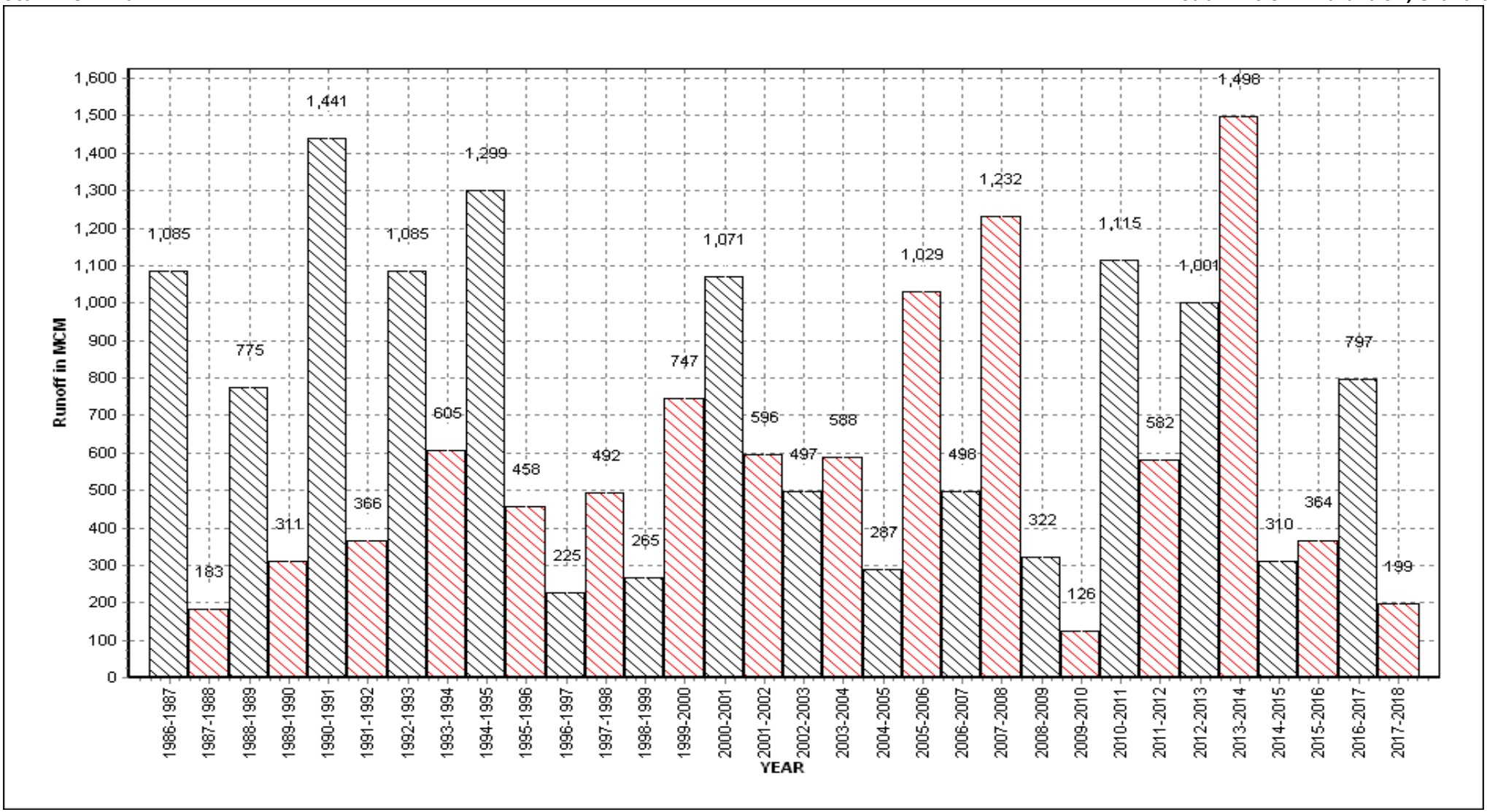
Local River : Mul | **Sub-Division : Wardha SD, Chandrapur**



Annual Runoff Values for the period: 1986 - 2018

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

Local River : Mul **Sub-Division : Wardha SD, Chandrapur**

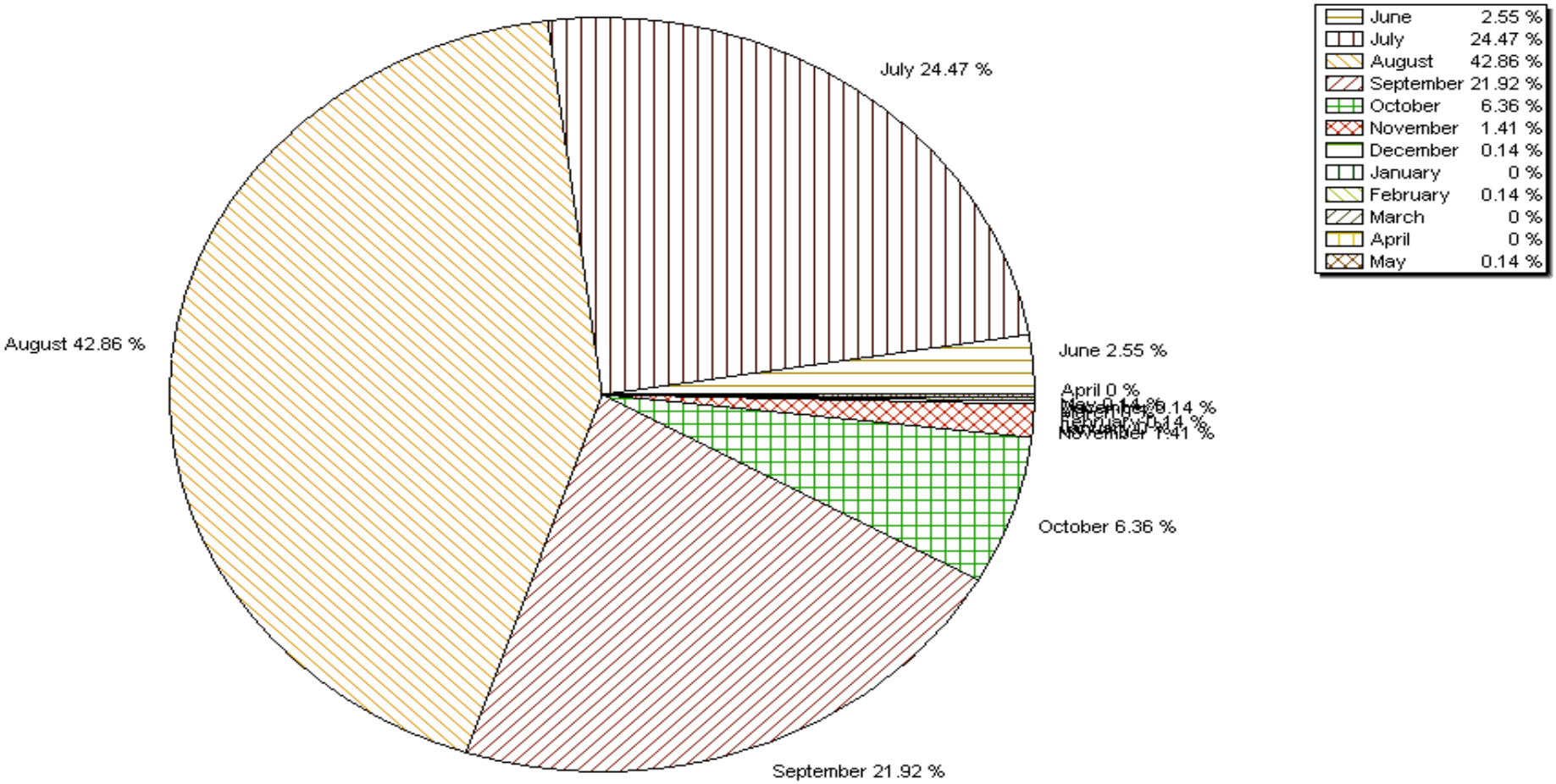


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1986-2017

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

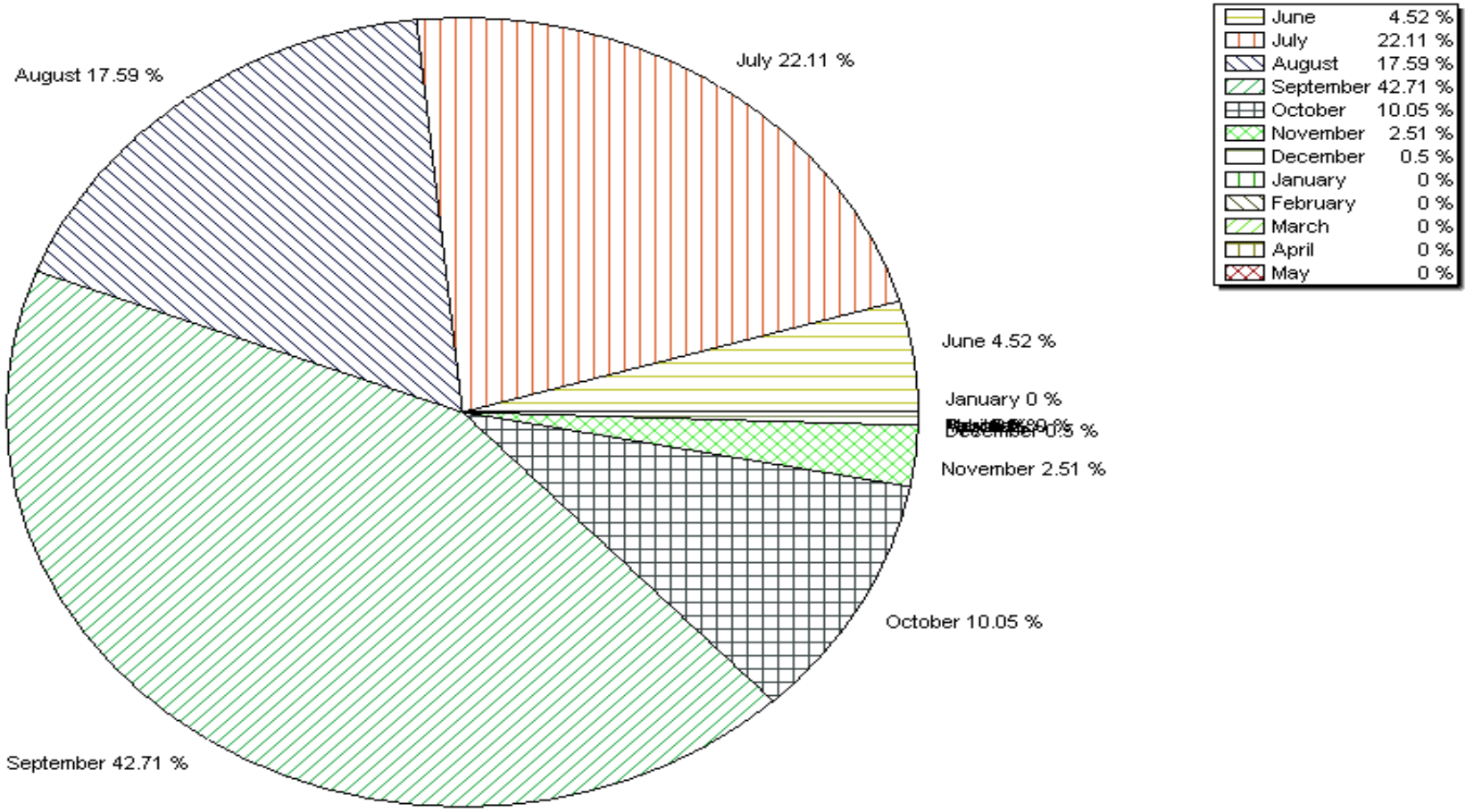
Local River : Mul **Sub-Division : Wardha SD, Chandrapur**



Monthly Runoff for the Year : 2017-2018

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

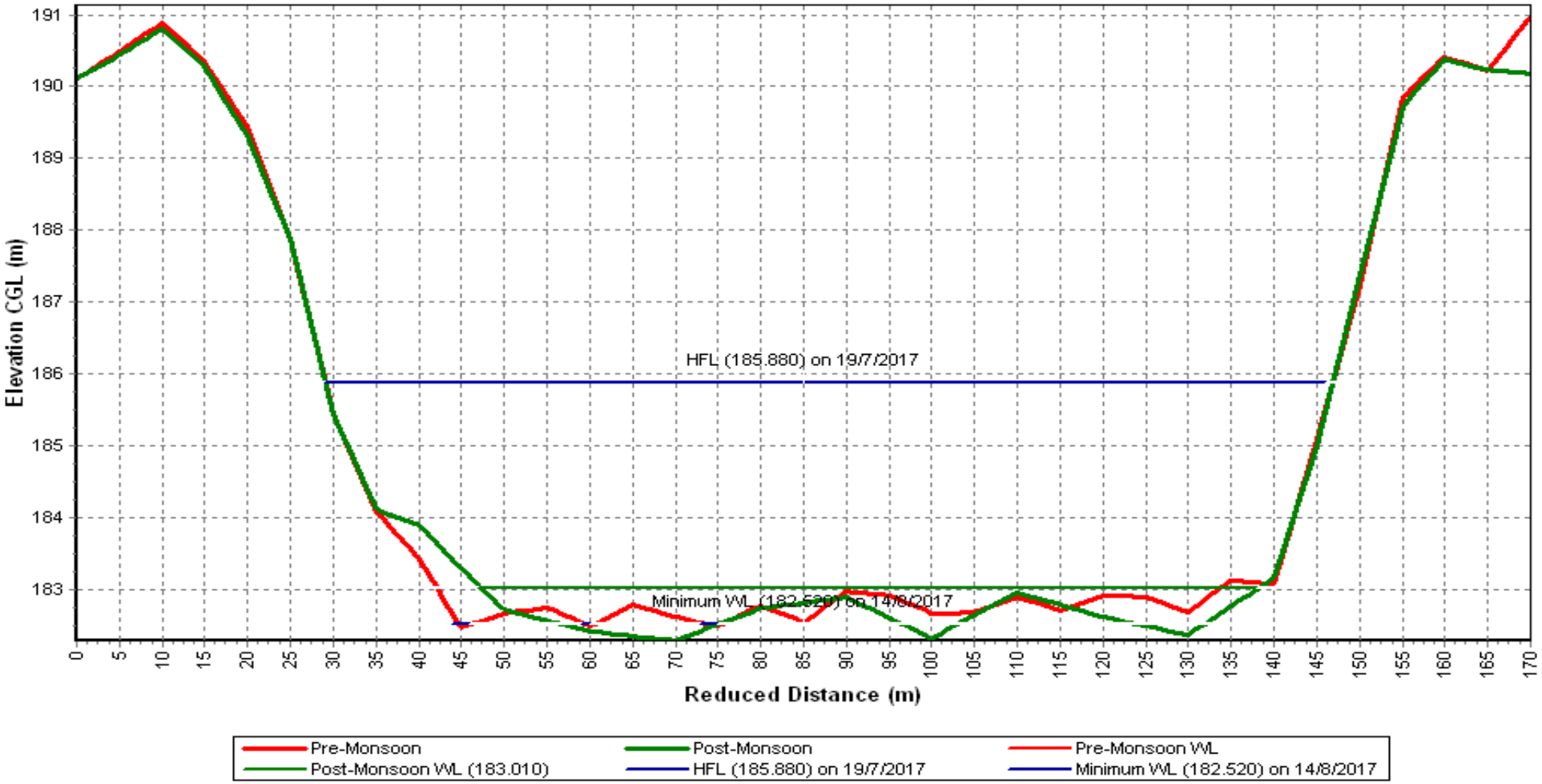
Local River : Mul **Sub-Division : Wardha SD, Chandrapur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

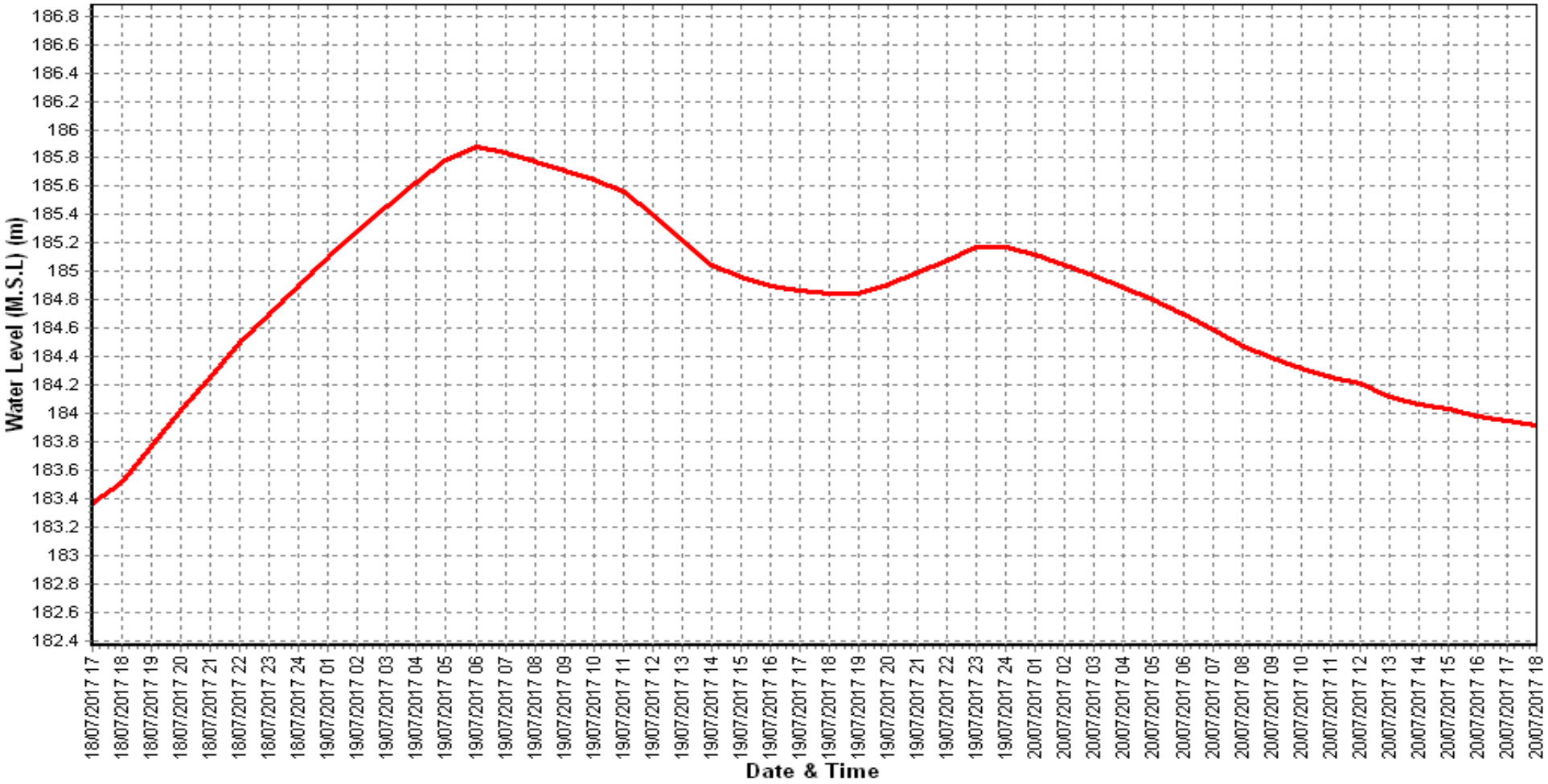
Local River : Mul **Sub-Division : Wardha SD, Chandrapur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

Local River : Mul **Sub-Division : Wardha SD, Chandrapur**

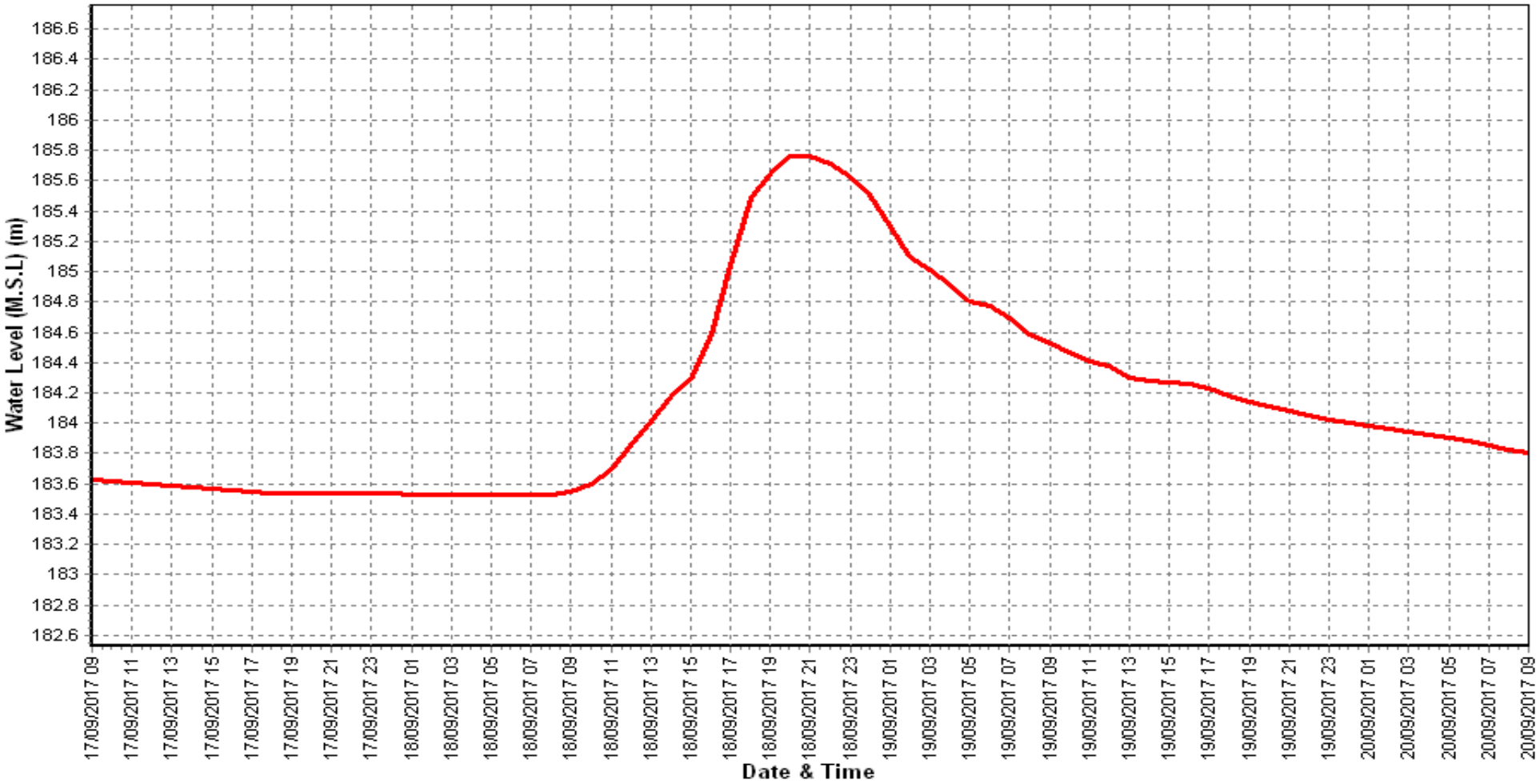


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : RAJOLI (AGH41Q4) **Division : Wainganga Div., Nagpur**

Local River : Mul **Sub-Division : Wardha SD, Chandrapur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**WAIRAGARH**	**Code**	:	**AGH46D4**
State	:	Maharashtra	District		Gadchiroli
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	Khobragarhi	Local River	:	Khobragarhi
Division	:	Wainganga Div., Nagpur	Sub-Division	:	L Wainganga SD, Chandrapur
Drainage Area	:	2600 Sq. Km.	Bank	:	Right
Latitude	:	20°25'19"	Longitude	:	80°05'30"
Zero of Gauge (m)	:	95.000 (m.s.l) 208.705 (m.s.l)	18.07.1992 01.06.1996	-	31.05.1996
		Opening Date	Closing Date		
Gauge	:	18.07.1992	**HFL During 2017-18**	:	**214.505 meter**
			Corres.Discharge	:	**991.0 Cumecs (Estimated)**
Discharge	:	07.08.1992	**Date & Time of**	:	**18.07.2017**
			Occurance	:	**20.00Hrs.**
Sediment	:				
Water Quality	:	01.10.2014			

HFL Recorded so far in m : 217.380 30/06/2007
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1993-1994	485.5	97.480	04.08.1993	0.000		20.02.1994
1994-1995	1405	100.750	11.07.1994	0.000		07.04.1995
1995-1996	766.8	98.600	02.09.1995	0.000		29.02.1996
1996-1997	455.0	213.435	02.08.1996	0.000		09.02.1997
1997-1998	418.1	213.000	12.09.1997	0.000	210.315	04.04.1998
1998-1999	363.7	212.740	13.09.1998	0.000		19.02.1999
1999-2000	299.2	212.505	09.08.1999	0.000		28.02.2000
2000-2001	1736	214.605	18.07.2000	0.000		06.02.2001
2001-2002	1543	213.955	14.06.2001	0.000		10.02.2002
2002-2003	960.0	213.275	24.08.2002	0.000	210.345	12.02.2003
2003-2004	659.7	212.880	03.08.2003	0.000	209.995	02.04.2004
2004-2005	1002	213.535	22.08.2004	0.000		06.03.2005
2005-2006	985.0	214.005	06.08.2005	0.000		11.03.2006
2006-2007	1124	214.235	31.08.2006	0.000		01.03.2007
2007-2008	2732	215.905	07.08.2007	0.002	210.725	17.01.2008
2008-2009	1011	214.305	01.08.2008	0.009	210.715	14.12.2008
2009-2010	565.5	213.355	16.07.2009	0.011	210.885	10.01.2010

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2010-2011	933.6	214.065	07.08.2010	0.000		01.03.2011
2011-2012	1330	214.455	07.09.2011	0.000		01.02.2012
2012-2013	2104	215.005	05.09.2012	0.000		26.04.2013
2013-2014	2351	215.105	23.07.2013	0.000		12.04.2014
2014-2015	1144	214.095	23.07.2014	0.000		07.04.2015
2015-2016	252.5	212.535	18.09.2015	0.000	210.905	19.06.2015
2016-2017	988.3	214.295	12.09.2016	0.000		25.02.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at WAIRAGARH in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1992-1993**	466	3	469
2	**1993-1994**	535	3	538
3	**1994-1995**	1520	22	1542
4	**1995-1996**	801	13	814
5	**1996-1997**	522	4	526
6	**1997-1998**	550	23	573
7	**1998-1999**	511	16	528
8	**1999-2000**	966	22	987
9	**2000-2001**	1076	6	1082
10	**2001-2002**	1853	4	1856
11	**2002-2003**	718	1	719
12	**2003-2004**	1141	16	1156
13	**2004-2005**	584	11	595
14	**2005-2006**	1382	15	1396
15	**2006-2007**	1198	8	1206
16	**2007-2008**	1487	9	1495
17	**2008-2009**	467	0	468
18	**2009-2010**	488	6	494
19	**2010-2011**	1045	21	1066
20	**2011-2012**	1126	7	1133
21	**2012-2013**	1625	9	1634
22	**2013-2014**	2166	43	2209
23	**2014-2015**	940	11	951
24	**2015-2016**	238	2	240
25	**2016-2017**			
26	**2017-2018**	413	7	420
Average		953	11	964

Stage-Discharge Data for the period 2017 - 2018

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000	211.245	17.63	211.550	42.31	211.235	19.93 *	210.845	5.074
2		0.000		0.000	211.195	12.02	211.335	21.44 *	211.555	43.74 *	210.845	4.931
3		0.000		0.000	211.205	12.01	211.205	13.45 *	211.370	25.76	210.835	3.936
4		0.000	211.215	12.20	211.145	10.53	211.175	11.88 #	211.255	18.86	210.825	3.545 *
5		0.000	211.105	9.288	211.145	10.45	211.155	10.89 #	211.195	13.80	210.805	3.112 *
6		0.000	211.125	9.835	211.125	9.481 *	211.055	6.593 #	211.145	15.37	210.805	2.810
7		0.000	210.990	4.172	211.105	8.601 #	211.205	15.61	211.115	14.99	210.795	2.713
8		0.000	210.915	3.056	211.150	10.89	211.125	9.481 #	211.195	17.66 *	210.785	2.624
9		0.000	210.865	1.439 *	212.580	204.7	211.155	10.89 #	211.315	24.09	210.785	2.233
10		0.000	210.845	1.047	212.135	110.0	211.245	15.70 *	211.960	85.16	210.775	2.492
11		0.000	210.835	0.865	211.793	69.48	211.265	18.60	211.635	57.09	210.765	2.327
12		0.000	210.855	1.362	211.545	33.33	211.215	16.44	211.445	37.71	210.755	2.163 *
13		0.000	210.895	2.184	211.405	26.53 *	211.205	14.30	211.495	37.13	210.745	2.351
14		0.000	210.865	1.392	211.315	20.00	211.725	65.62	211.430	29.64	210.745	2.163
15		0.000	211.160	11.78	211.285	18.14 *	211.835	66.73	211.265	21.73 *	210.735	2.187
16		0.000	212.605	204.1 *	211.225	16.97	211.540	39.27	211.185	17.76	210.735	2.050
17		0.000	211.865	74.23 #	211.185	13.71	211.325	25.60 *	211.115	15.29	210.725	1.978
18		0.000	211.975	86.10	211.155	12.41	211.830	68.02	211.075	14.91	210.725	1.916
19		0.000	214.055	656.0 *	212.085	95.26	211.685	58.35	211.035	10.08 *	210.715	1.539 *
20		0.000	212.170	115.6	211.585	42.24 *	211.995	112.2	211.005	8.918 #	210.715	1.711
21		0.000	211.860	76.60	211.430	31.65	212.680	215.6	211.065	13.38	210.715	1.660
22		0.000	211.590	35.17	211.420	31.50	212.238	132.7	211.075	11.76 *	210.705	1.220
23		0.000	211.595	43.23 *	211.270	20.62	211.913	75.47	211.025	11.06	210.695	1.134
24		0.000	211.600	33.13	211.195	14.76	211.655	53.33 *	211.005	9.995	210.695	1.017
25		0.000	211.810	74.31	211.525	36.59 *	211.505	41.91	210.975	9.512	210.695	1.271 #
26		0.000	211.635	47.28 #	211.750	55.10	211.395	27.05	210.945	7.005	210.685	1.147 *
27		0.000	211.625	46.25 #	211.455	30.52 *	211.325	25.43	210.925	6.686	210.675	0.862
28		0.000	211.575	41.27 #	211.590	44.49	211.270	20.99	210.905	6.411	210.655	0.818 #
29		0.000	211.555	29.92	211.825	71.51	211.355	25.31	210.885	5.037 *	210.655	0.818 #
30		0.000	211.405	26.53 *	211.805	74.78	211.335	26.28 *	210.865	5.566	210.705	1.374
31			211.295	18.76	211.490	39.76			210.855	5.236		
Ten-Daily Mean												
I Ten-Daily		0.000	211.009	4.104	211.403	40.62	211.221	15.82	211.334	27.94	210.810	3.347
II Ten-Daily		0.000	211.728	115.4	211.458	34.81	211.562	48.51	211.269	25.03	210.736	2.039
III Ten-Daily		0.000	211.595	42.95	211.523	41.03	211.667	64.41	210.957	8.332	210.688	1.132
Monthly												
Min.		0.000	210.835	0.000	211.105	8.601	211.055	6.593	210.855	5.037	210.655	0.818
Max.		0.000	214.055	656.0	212.580	204.7	212.680	215.6	211.960	85.16	210.845	5.074
Mean		0.000	211.496	53.78	211.463	38.89	211.483	42.91	211.179	20.04	210.745	2.173

Annual Runoff in MCM = 420 Annual Runoff in mm = 161

Peak Observed Discharge = 215.6 cumecs on 21/09/2017 Corres. Water Level :212.680 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	210.665	0.529 *	210.595	0.273		0.000		0.000		0.000		0.000
2	210.655	0.476 #	210.585	0.207		0.000		0.000		0.000		0.000
3	210.645	0.427 *	210.575	0.200 #		0.000		0.000		0.000		0.000
4	210.635	0.488	210.545	0.143		0.000		0.000		0.000		0.000
5	210.635	0.486		0.000		0.000		0.000		0.000		0.000
6	210.635	0.449		0.000		0.000		0.000		0.000		0.000
7	210.635	0.399		0.000		0.000		0.000		0.000		0.000
8	210.625	0.373		0.000		0.000		0.000		0.000		0.000
9	210.625	0.367		0.000		0.000		0.000		0.000		0.000
10	210.625	0.345 *		0.000		0.000		0.000		0.000		0.000
11	210.625	0.343		0.000		0.000		0.000		0.000		0.000
12	210.615	0.253		0.000		0.000		0.000		0.000		0.000
13	210.615	0.294		0.000		0.000		0.000		0.000		0.000
14	210.615	0.261		0.000		0.000		0.000		0.000		0.000
15	210.595	0.271		0.000		0.000		0.000		0.000		0.000
16	210.595	0.265		0.000		0.000		0.000		0.000		0.000
17	210.595	0.249 *		0.000		0.000		0.000		0.000		0.000
18	210.595	0.235		0.000		0.000		0.000		0.000		0.000
19	210.595	0.228		0.000		0.000		0.000		0.000		0.000
20	210.585	0.241		0.000		0.000		0.000		0.000		0.000
21	210.585	0.223 #		0.000		0.000		0.000		0.000		0.000
22	210.585	0.239		0.000		0.000		0.000		0.000		0.000
23	210.585	0.238		0.000		0.000		0.000		0.000		0.000
24	210.575	0.200 *		0.000		0.000		0.000		0.000		0.000
25	210.575	0.200 *		0.000		0.000		0.000		0.000		0.000
26	210.575	0.229		0.000		0.000		0.000		0.000		0.000
27	210.575	0.229		0.000		0.000		0.000		0.000		0.000
28	210.575	0.228		0.000		0.000		0.000		0.000		0.000
29	210.575	0.229		0.000				0.000		0.000		0.000
30	210.585	0.257		0.000				0.000		0.000		0.000
31	210.595	0.249 *		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	210.638	0.434	210.575	0.082		0.000		0.000		0.000		0.000
II Ten-Daily	210.603	0.264		0.000		0.000		0.000		0.000		0.000
III Ten-Daily	210.580	0.229		0.000		0.000		0.000		0.000		0.000
Monthly												
Min.	210.575	0.200	210.545	0.000		0.000		0.000		0.000		0.000
Max.	210.665	0.529	210.595	0.273		0.000		0.000		0.000		0.000
Mean	210.606	0.306	210.575	0.027		0.000		0.000		0.000		0.000

Peak Computed Discharge = 656.0 cumecs on 19/07/2017 Corres. Water Level :214.055 m

Lowest Computed Discharge = 0.200 cumecs on 24/12/2017 Corres. Water Level :210.575 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

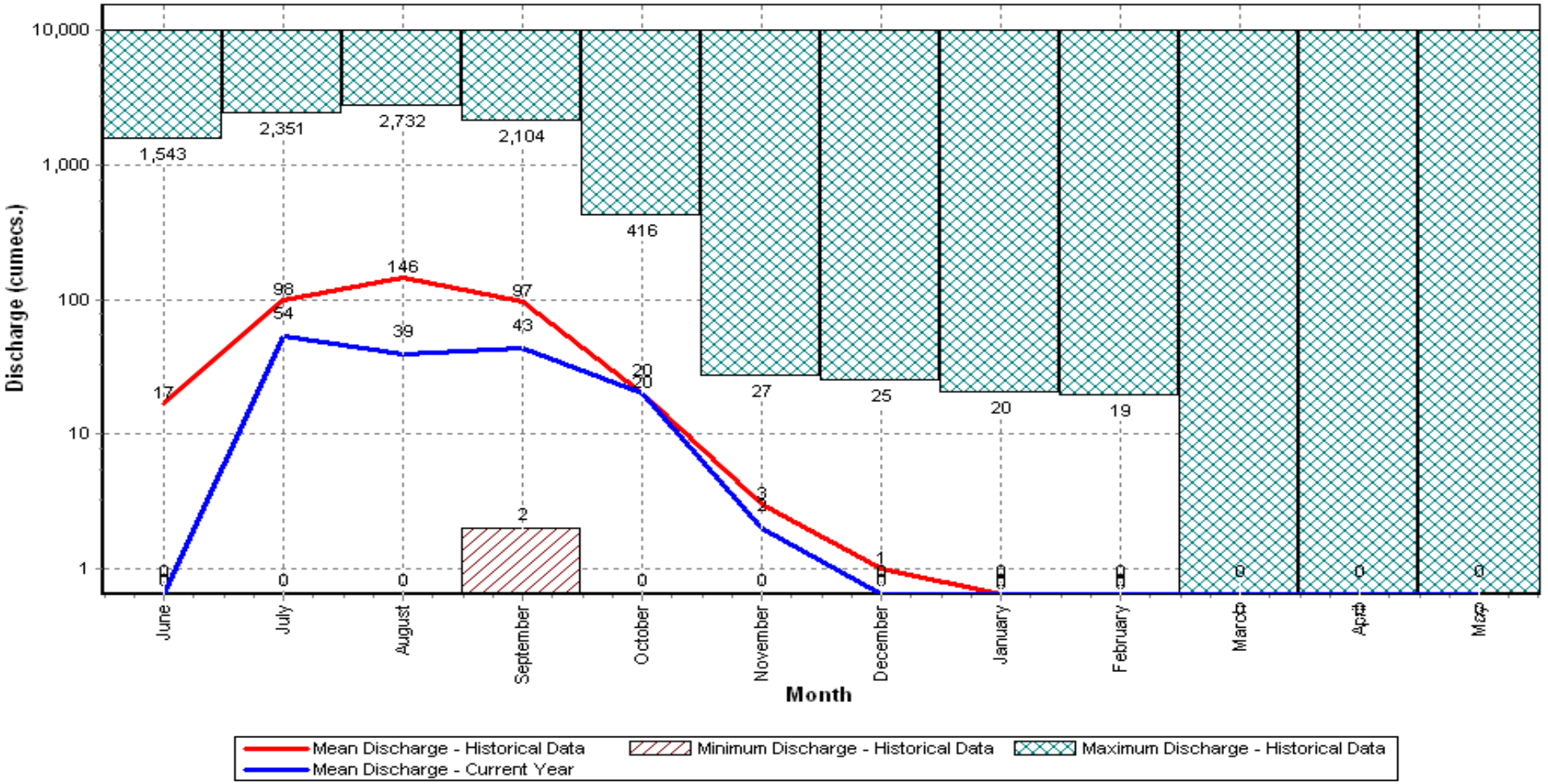
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : WAIRAGARH (AGH46D4) **Data considered : 1993-2018** **Division : Wainganga Div., Nagpur**

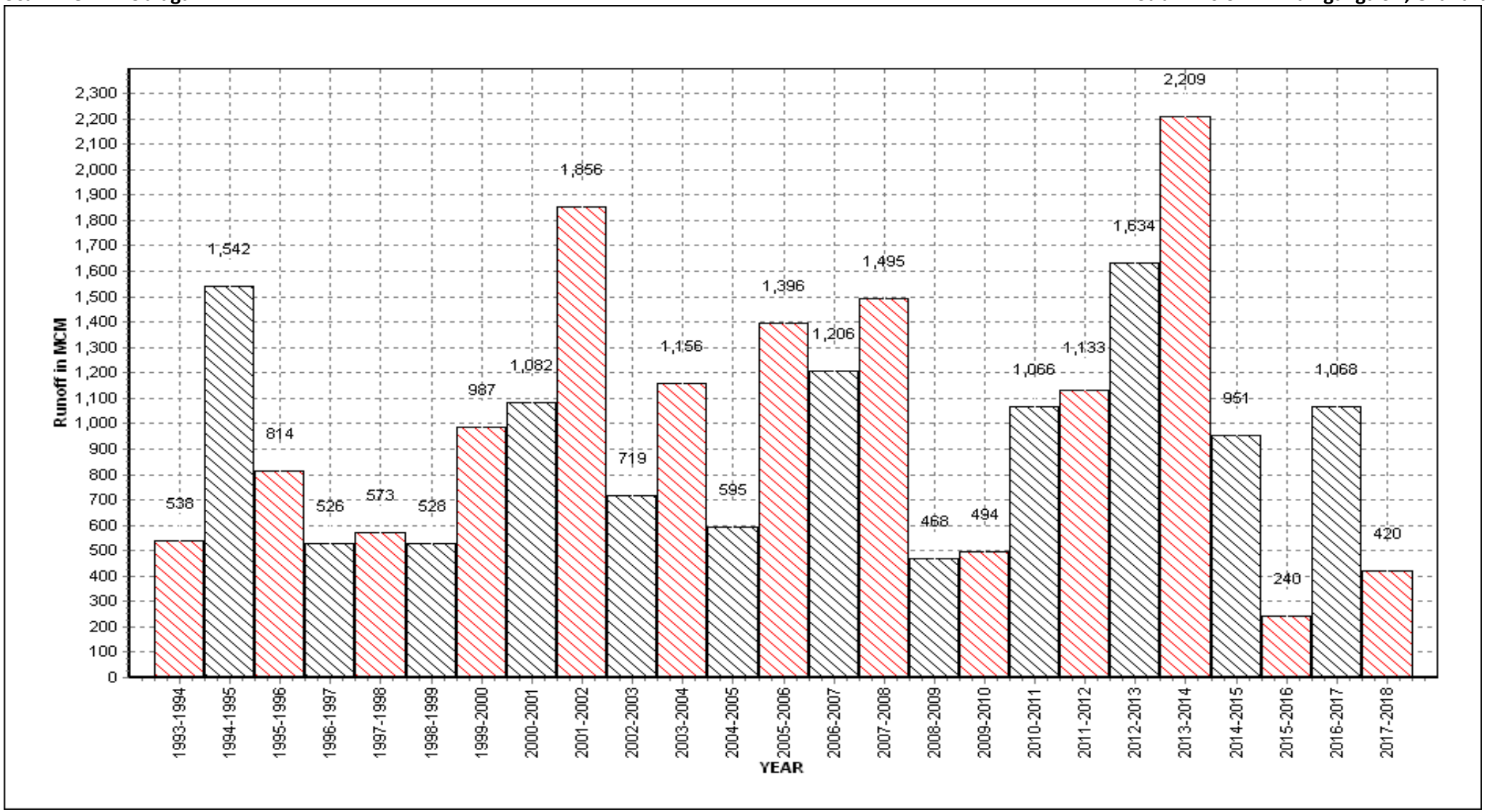
Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**



Annual Runoff Values for the period: 1993 - 2018

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**

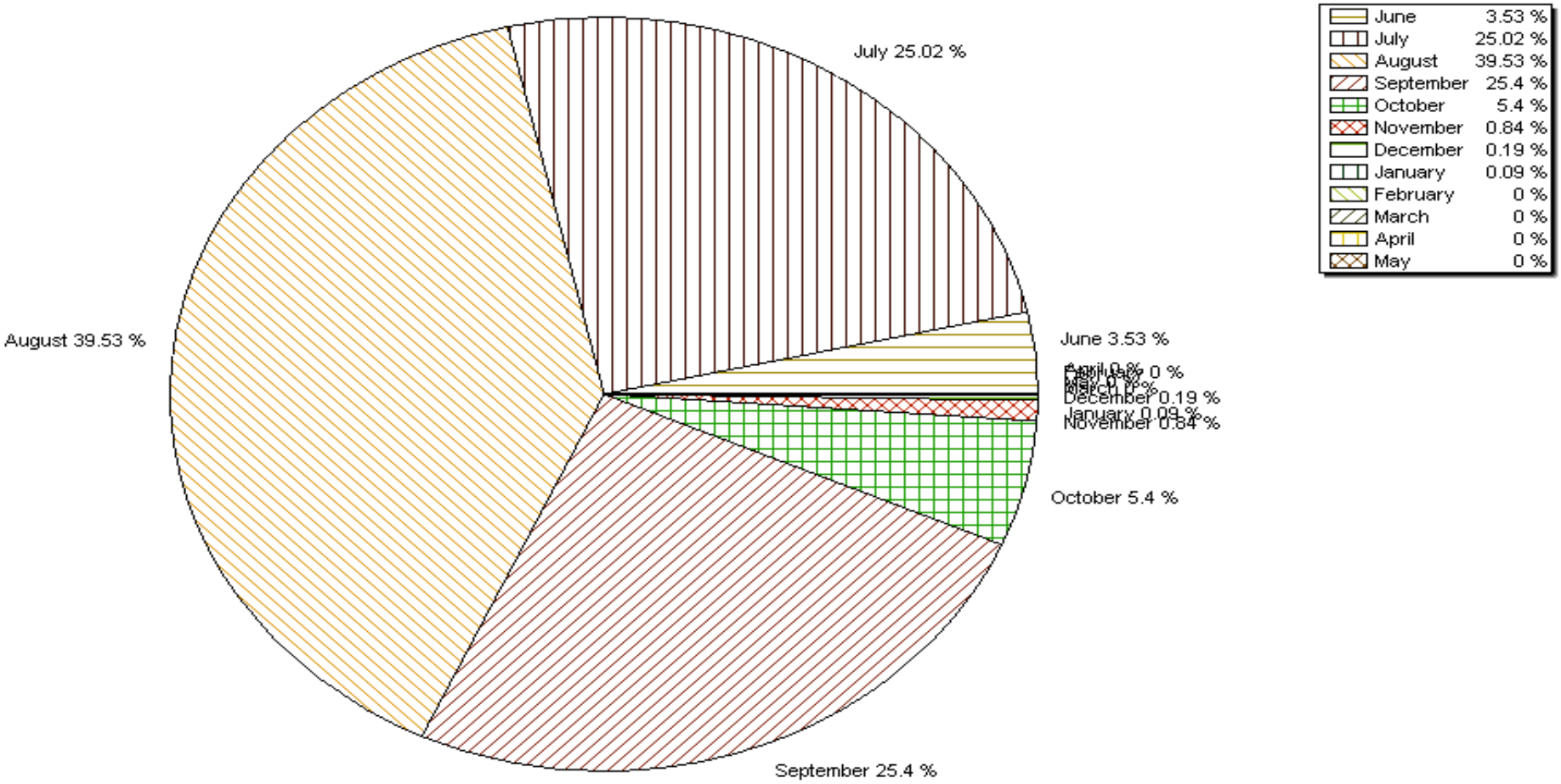


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1993-2017

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

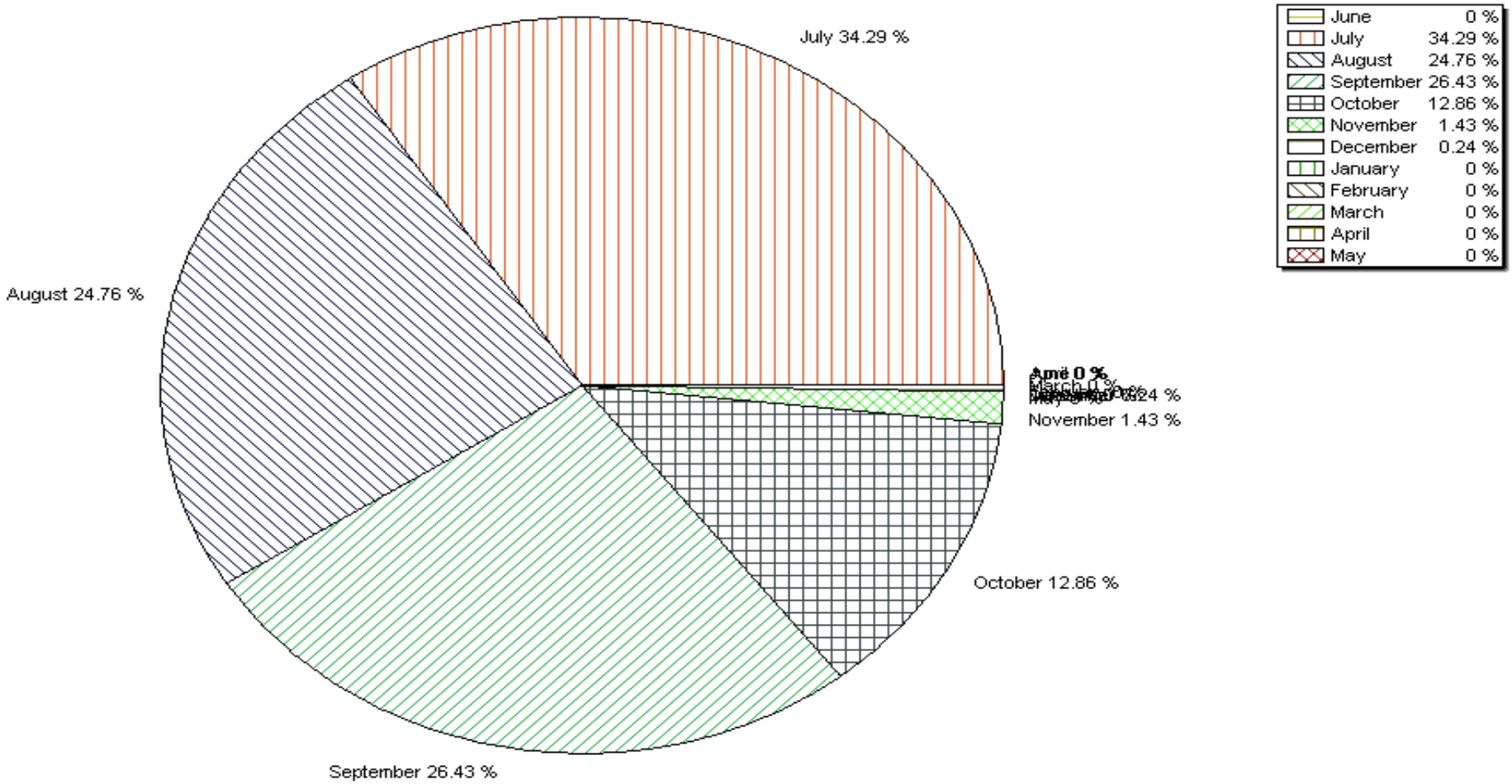
Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**



Monthly Runoff for the Year : 2017-2018

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

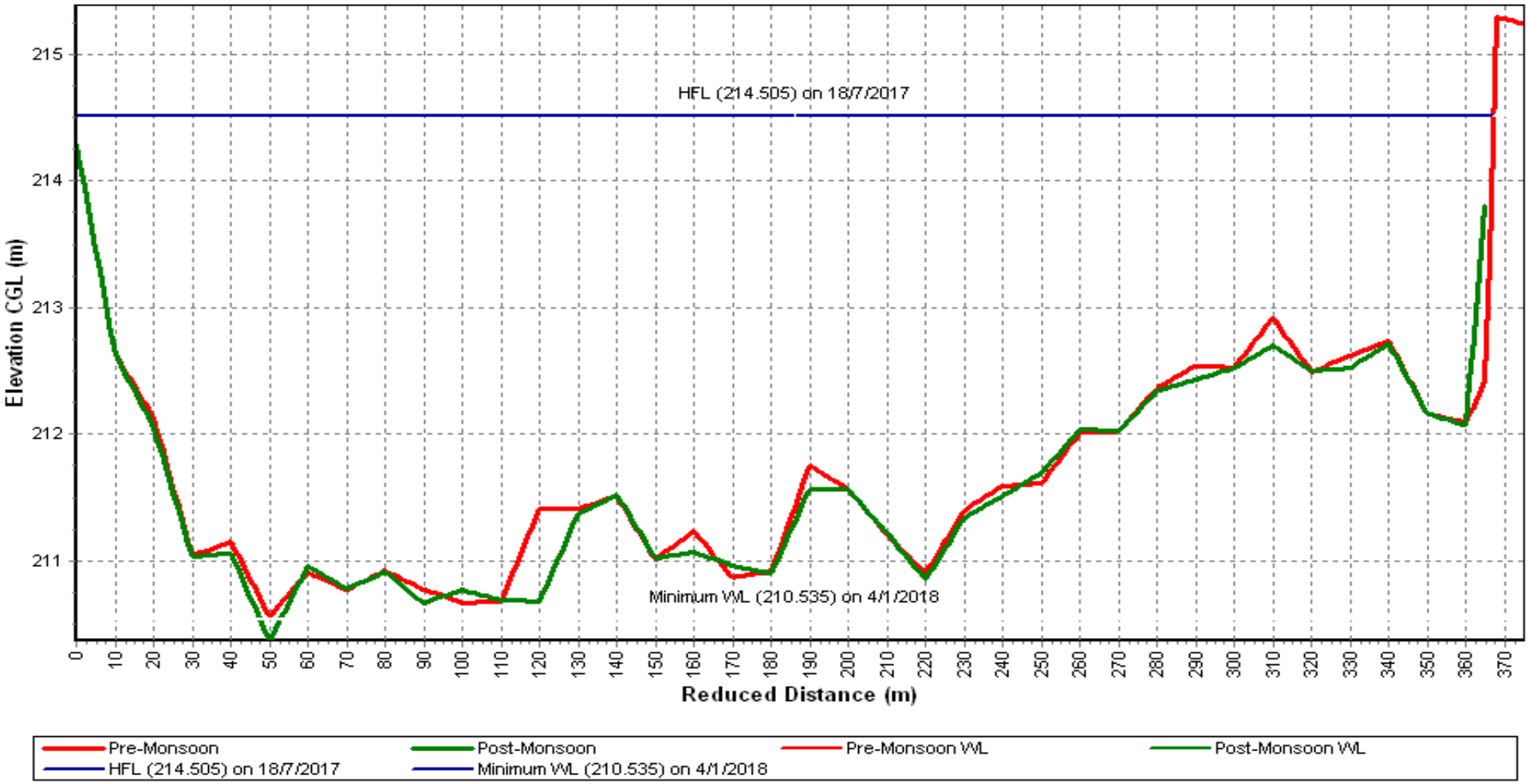
Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

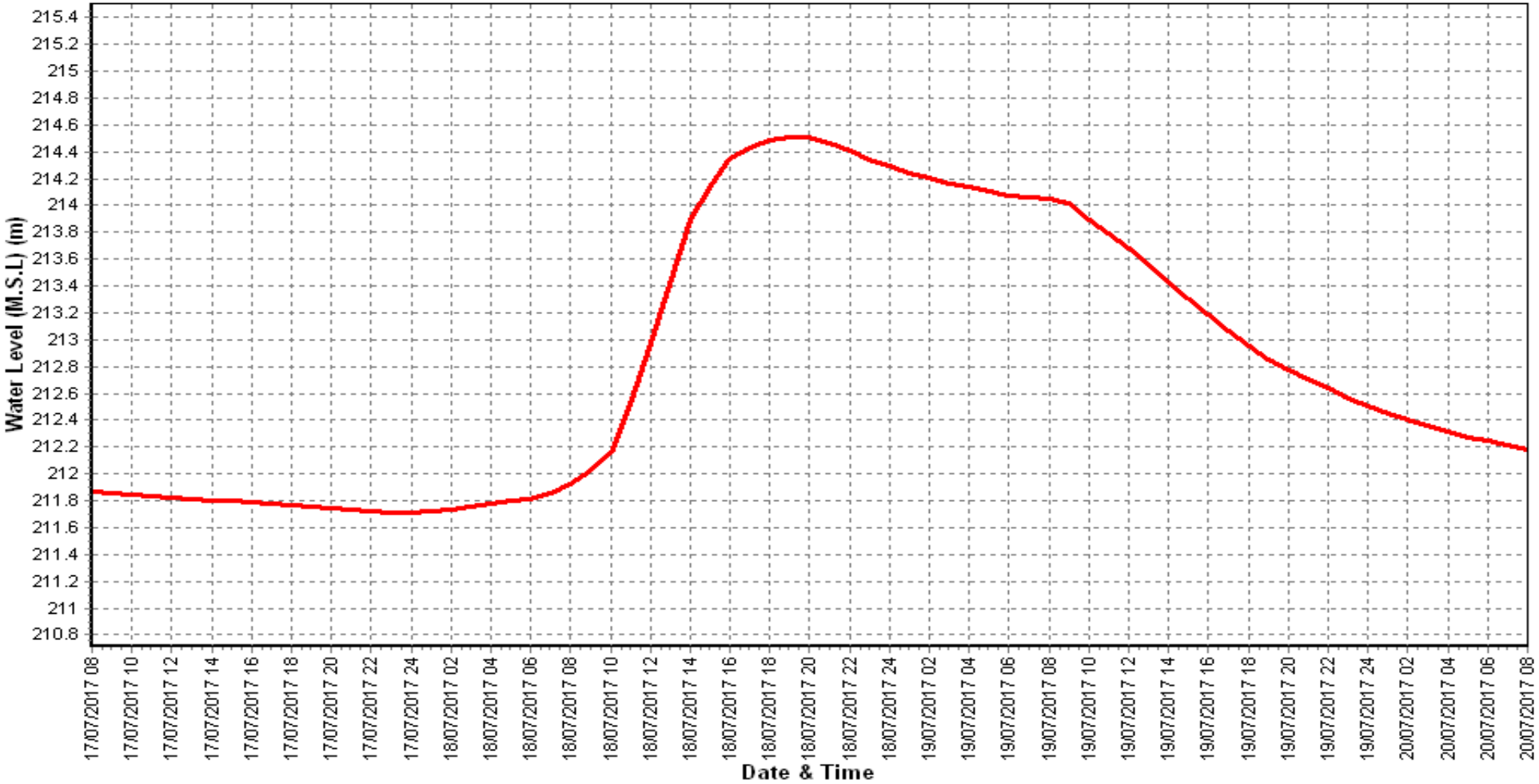
Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**

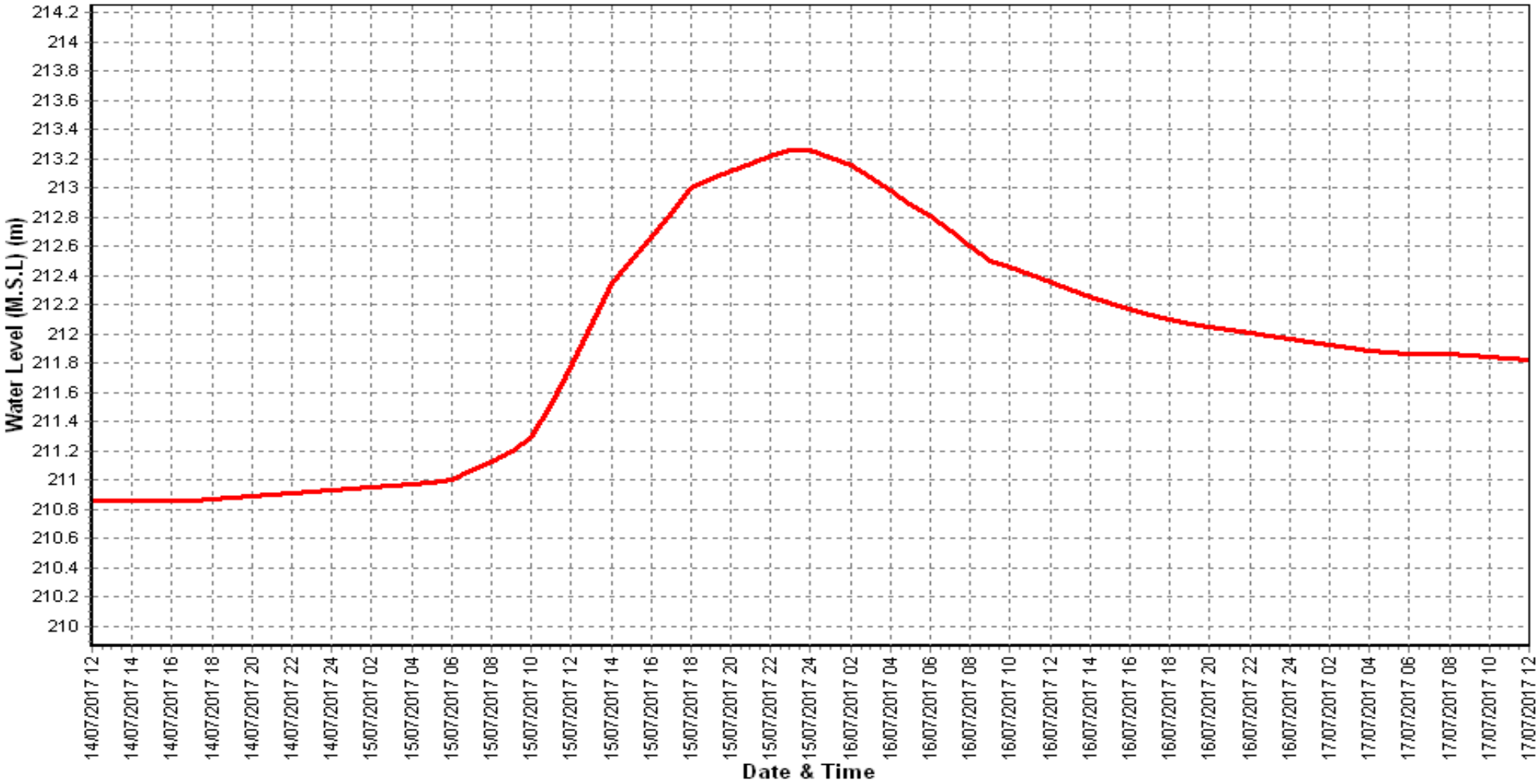


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : WAIRAGARH (AGH46D4) **Division : Wainganga Div., Nagpur**

Local River : Khobragarhi **Sub-Division : L Wainganga SD, Chandrapur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**SALEBARDI**	**Code**	:	**AGH49I1**
State	:	Maharashtra	District		Bhandra
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	Chulband	Local River	:	Chulband
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Upper Wainganga SD, Nagpur
Drainage Area	:	1800 Sq. Km.	Bank	:	Left
Latitude	:	20°54'44"	Longitude	:	79°55'40"
Zero of Gauge (m)	:	223.8 (m.s.l) 224.3 (m.s.l)	26.07.1985 01.06.1993	-	31.05.1993
		Opening Date	Closing Date		
Gauge	:	26.07.1985	**HFL During 2017-18**	:	**228.460 Meter**
			Corres.Discharge	:	**413.4 Cumecs (Estimated)**
Discharge	:	21.06.1986	**Date & Time of Occurance**	:	**29.08.2017 14.00Hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 233.550 15/09/2005
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1986-1987	2100	230.300	15.08.1986	0.000		18.04.1987
1987-1988	73.20	226.180	29.08.1987	0.000		14.04.1988
1988-1989	968.7	230.105	27.07.1988	0.000		27.03.1989
1989-1990	357.3	228.315	23.08.1989	0.000	0.000	15.03.1990
1990-1991	329.9	228.490	15.09.1990	0.000		11.05.1991
1991-1992	1266	230.565	30.07.1991	0.000		28.02.1992
1992-1993	853.7	229.775	21.08.1992	0.000		01.03.1993
1993-1994	1099	230.670	02.08.1993	0.000		20.04.1994
1994-1995	1537	231.980	11.07.1994	0.000		28.09.1994
1995-1996	868.0	230.300	02.09.1995	0.000		13.03.1996
1996-1997	332.4	229.060	27.07.1996	0.000		01.04.1997
1997-1998	630.7	229.285	23.08.1997	0.000		15.04.1998
1998-1999	1017	230.570	14.09.1998	0.000		01.04.1999
1999-2000	985.6	231.105	09.08.1999	0.000		09.03.2000
2000-2001	1860	233.130	19.07.2000	0.000		25.01.2001
2001-2002	505.1	229.090	15.06.2001	0.000		05.02.2002
2002-2003	1321	231.600	23.08.2002	0.000		14.02.2003

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2003-2004	508.8	229.085	02.09.2003	0.000		20.02.2004
2004-2005	283.8	228.390	22.08.2004	0.000		10.01.2005
2005-2006	3017	233.520	15.09.2005	0.000		19.03.2006
2006-2007	1690	231.840	14.08.2006	0.000		22.02.2007
2007-2008	1281	230.350	08.08.2007	0.015	225.380	10.01.2008
2008-2009	244.7	228.400	11.08.2008	0.001	226.070	10.12.2008
2009-2010	466.6	228.850	15.07.2009	0.041	226.150	09.07.2009
2010-2011	2399	232.440	08.09.2010	0.000		24.02.2011
2011-2012	825.8	231.010	08.09.2011	0.000		21.02.2012
2012-2013	312.5	228.845	31.07.2012	0.000		02.02.2013
2013-2014	735.4	230.580	01.08.2013	0.000		28.02.2014
2014-2015	1745	231.200	23.07.2014	0.000	226.460	16.12.2014
2015-2016	634.1	229.870	18.09.2015	0.000	226.170	29.12.2015
2016-2017	371.1	228.670	13.09.2016	0.000	226.280	30.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at SALEBARDI in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**	800	17	817
2	**1987-1988**	107	14	121
3	**1988-1989**	760	10	770
4	**1989-1990**	357	3	360
5	**1990-1991**	513	12	524
6	**1991-1992**	527	3	531
7	**1992-1993**	599	4	603
8	**1993-1994**	649	9	658
9	**1994-1995**	865	20	886
10	**1995-1996**	745	6	751
11	**1996-1997**	312	6	318
12	**1997-1998**	495	81	577
13	**1998-1999**	600	35	636
14	**1999-2000**	634	14	648
15	**2000-2001**	586	2	588
16	**2001-2002**	628	2	630
17	**2002-2003**	784	5	788
18	**2003-2004**	531	6	537
19	**2004-2005**	220	23	243
20	**2005-2006**	1102	8	1110
21	**2006-2007**	897	6	904
22	**2007-2008**	820	4	824
23	**2008-2009**	271	1	271
24	**2009-2010**	305	12	317
25	**2010-2011**	1265	12	1278
26	**2011-2012**	594	4	598
27	**2012-2013**	696	6	702
28	**2013-2014**	1371	11	1382
29	**2014-2015**	642	5	647
30	**2015-2016**	546	3	549
31	**2016-2017**			
32	**2017-2018**			
Average		641	12	652

Stage-Discharge Data for the period 2017 - 2018

Station Name : SALEBARDI (AGH49I1) **Division : Wainganga Div., Nagpur**

Local River : Chulband **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000	226.510	0.801	226.895	27.28	226.510	1.121 *	226.520	0.653
2		0.000		0.000	226.490	0.860	226.730	8.857 *	226.530	1.502 *	226.510	0.655
3		0.000		0.000	226.480	0.797	226.650	5.111 *	226.530	1.726	226.510	0.659
4		0.000	226.420	0.118 #	226.450	0.309	226.610	3.374	226.540	1.686	226.510	0.619 *
5		0.000	226.400	0.038 #	226.430	0.175 #	226.590	2.444	226.520	1.438	226.520	0.762 *
6		0.000	226.390	0.016 #	226.410	0.072 *	226.540	2.025	226.570	1.738	226.500	0.494 #
7		0.000	226.380	0.003 #	226.400	0.038 #	226.520	1.579	226.530	0.921 #	226.500	0.494 #
8		0.000	226.370	0.000	226.400	0.038 #	226.500	0.918	226.620	3.218 *	226.490	0.290
9		0.000	226.370	0.000	227.140	49.74	226.480	0.661 #	226.670	4.647	226.490	0.308
10		0.000	226.350	0.000	226.920	28.06	226.470	0.537 *	226.680	5.460	226.480	0.240
11		0.000	226.340	0.000	226.770	13.43	226.540	1.715 #	226.810	14.34	226.480	0.238
12		0.000	226.340	0.000	226.690	5.657	226.500	0.953 #	226.710	7.459	226.480	0.290 *
13		0.000	226.320	0.000	226.610	3.647 *	226.480	0.661 #	226.700	6.855	226.480	0.229
14		0.000	226.300	0.000	226.580	2.018	226.490	0.800 #	226.760	10.69	226.470	0.183
15		0.000	226.300	0.000	226.560	2.187 *	226.550	2.509	226.730	8.436 *	226.470	0.193
16		0.000	226.280	0.000	226.550	1.943 #	226.630	4.618	226.660	4.812	226.460	0.158
17		0.000	226.400	0.038 #	226.530	1.502 #	226.490	0.800 *	226.610	3.113	226.460	0.154
18		0.000	226.510	1.121 #	226.500	0.953 #	226.900	14.20	226.620	3.312	226.460	0.153
19		0.000	226.905	20.33	226.700	8.650	226.780	13.45	226.590	2.271 *	226.460	0.146 *
20		0.000	226.940	25.42	226.690	6.845 *	226.700	7.189	226.560	1.715	226.450	0.109
21		0.000	226.870	14.22	226.680	5.849	226.930	27.43	226.550	1.501	226.450	0.109
22		0.000	226.830	13.41	226.650	4.553	227.170	50.82 #	226.570	1.744 *	226.450	0.110
23		0.000	226.700	7.321 *	226.630	4.774	226.760	10.45	226.560	1.439	226.430	0.028 #
24		0.000	226.630	3.160	226.580	2.723 #	226.690	6.845 *	226.550	1.403	226.450	0.105
25		0.000	226.610	2.370	226.760	10.55 *	226.630	4.118	226.540	1.053	226.450	0.104
26		0.000	226.590	3.015 #	227.200	60.79	226.570	2.650	226.600	2.566 #	226.440	0.056 *
27		0.000	226.770	12.15	226.780	11.77 *	226.530	1.679	226.550	1.516	226.440	0.056 #
28		0.000	226.730	7.873	226.930	27.91	226.510	1.143	226.540	1.157	226.430	0.028 #
29		0.000	226.700	5.835	227.470	102.0 #	226.510	1.383	226.530	0.921 *	226.420	0.000
30		0.000	226.620	3.988 *	227.790	178.4	226.520	1.304 *	226.530	0.979	226.420	0.000
31			226.530	1.584	227.000	30.13 #			226.530	0.967		
Ten-Daily Mean												
I Ten-Daily		0.000	226.383	0.018	226.563	8.089	226.599	5.279	226.570	2.346	226.503	0.517
II Ten-Daily		0.000	226.464	4.691	226.618	4.683	226.606	4.690	226.675	6.301	226.467	0.185
III Ten-Daily		0.000	226.689	6.811	226.952	39.95	226.682	10.78	226.550	1.386	226.438	0.060
Monthly												
Min.		0.000	226.280	0.000	226.400	0.038	226.470	0.537	226.510	0.921	226.420	0.000
Max.		0.000	226.940	25.42	227.790	178.4	227.170	50.82	226.810	14.34	226.520	0.762
Mean		0.000	226.532	3.936	226.719	18.30	226.629	6.917	226.597	3.281	226.469	0.254

Annual Runoff in MCM = 87 Annual Runoff in mm = 48

Peak Observed Discharge = 178.4 cumecs on 30/08/2017 Corres. Water Level :227.790 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : SALEBARDI (AGH49I1) **Division : Wainganga Div., Nagpur**

Local River : Chulband **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	226.410	0.000	226.240	0.000		0.000		0.000		0.000		0.000
2	226.410	0.000	226.240	0.000		0.000		0.000		0.000		0.000
3	226.400	0.000	226.240	0.000		0.000		0.000		0.000		0.000
4	226.410	0.000	226.240	0.000		0.000		0.000		0.000		0.000
5	226.400	0.000	226.240	0.000		0.000		0.000		0.000		0.000
6	226.400	0.000	226.230	0.000		0.000		0.000		0.000		0.000
7	226.390	0.000	226.230	0.000		0.000		0.000		0.000		0.000
8	226.390	0.000	226.230	0.000		0.000		0.000		0.000		0.000
9	226.380	0.000	226.230	0.000		0.000		0.000		0.000		0.000
10	226.380	0.000	226.220	0.000		0.000		0.000		0.000		0.000
11	226.370	0.000	226.220	0.000		0.000		0.000		0.000		0.000
12	226.360	0.000	226.220	0.000		0.000		0.000		0.000		0.000
13	226.350	0.000	226.220	0.000		0.000		0.000		0.000		0.000
14	226.340	0.000	226.220	0.000		0.000		0.000		0.000		0.000
15	226.340	0.000	226.210	0.000		0.000		0.000		0.000		0.000
16	226.330	0.000	226.210	0.000		0.000		0.000		0.000		0.000
17	226.320	0.000	226.210	0.000		0.000		0.000		0.000		0.000
18	226.320	0.000	226.210	0.000		0.000		0.000		0.000		0.000
19	226.310	0.000		0.000		0.000		0.000		0.000		0.000
20	226.310	0.000		0.000		0.000		0.000		0.000		0.000
21	226.310	0.000		0.000		0.000		0.000		0.000		0.000
22	226.300	0.000		0.000		0.000		0.000		0.000		0.000
23	226.300	0.000		0.000		0.000		0.000		0.000		0.000
24	226.290	0.000		0.000		0.000		0.000		0.000		0.000
25	226.290	0.000		0.000		0.000		0.000		0.000		0.000
26	226.280	0.000		0.000		0.000		0.000		0.000		0.000
27	226.280	0.000		0.000		0.000		0.000		0.000		0.000
28	226.280	0.000		0.000		0.000		0.000		0.000		0.000
29	226.260	0.000		0.000				0.000		0.000		0.000
30	226.260	0.000		0.000				0.000		0.000		0.000
31	226.250	0.000		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	226.397	0.000	226.234	0.000		0.000		0.000		0.000		0.000
II Ten-Daily	226.335	0.000	226.215	0.000		0.000		0.000		0.000		0.000
III Ten-Daily	226.282	0.000		0.000		0.000		0.000		0.000		0.000
Monthly												
Min.	226.250	0.000	226.210	0.000		0.000		0.000		0.000		0.000
Max.	226.410	0.000	226.240	0.000		0.000		0.000		0.000		0.000
Mean	226.336	0.000	226.226	0.000		0.000		0.000		0.000		0.000

Peak Computed Discharge = 11.77 cumecs on 27/08/2017 Corres. Water Level :226.780 m

Lowest Computed Discharge = 0.056 cumecs on 26/11/2017 Corres. Water Level :226.440 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

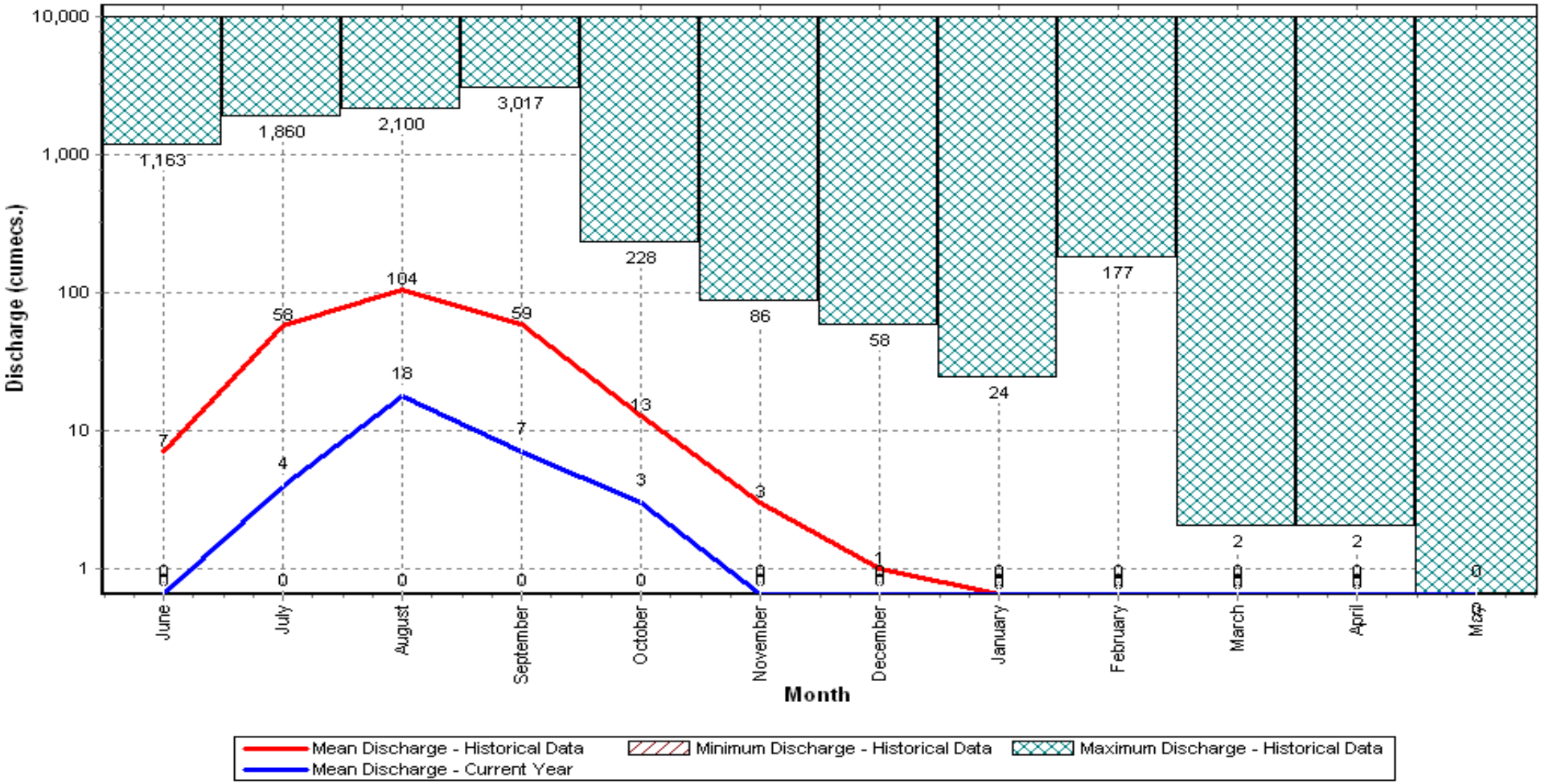
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : SALEBARDI (AGH49I1) **Data considered : 1986-2018** **Division : Wainganga Div., Nagpur**

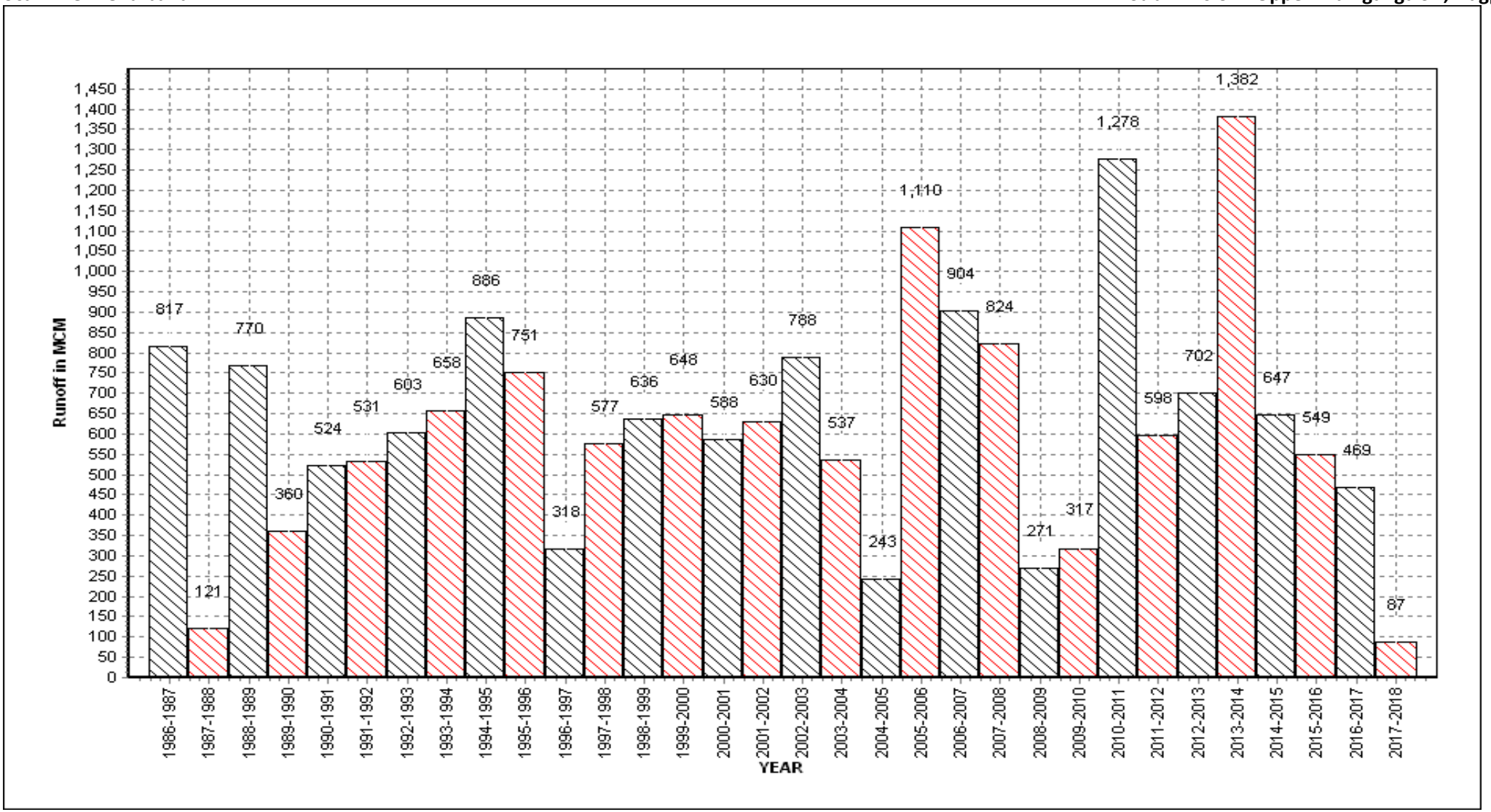
Local River : Chulband **Sub-Division : Upper Wainganga SD, Nagpur**



Annual Runoff Values for the period: 1986 - 2018

Station Name : SALEBARDI (AGH49I1) **Division : Wainganga Div., Nagpur**

Local River : Chulband **Sub-Division : Upper Wainganga SD, Nagpur**



Note: Missing values have not been considered while arriving at Annual Runoff

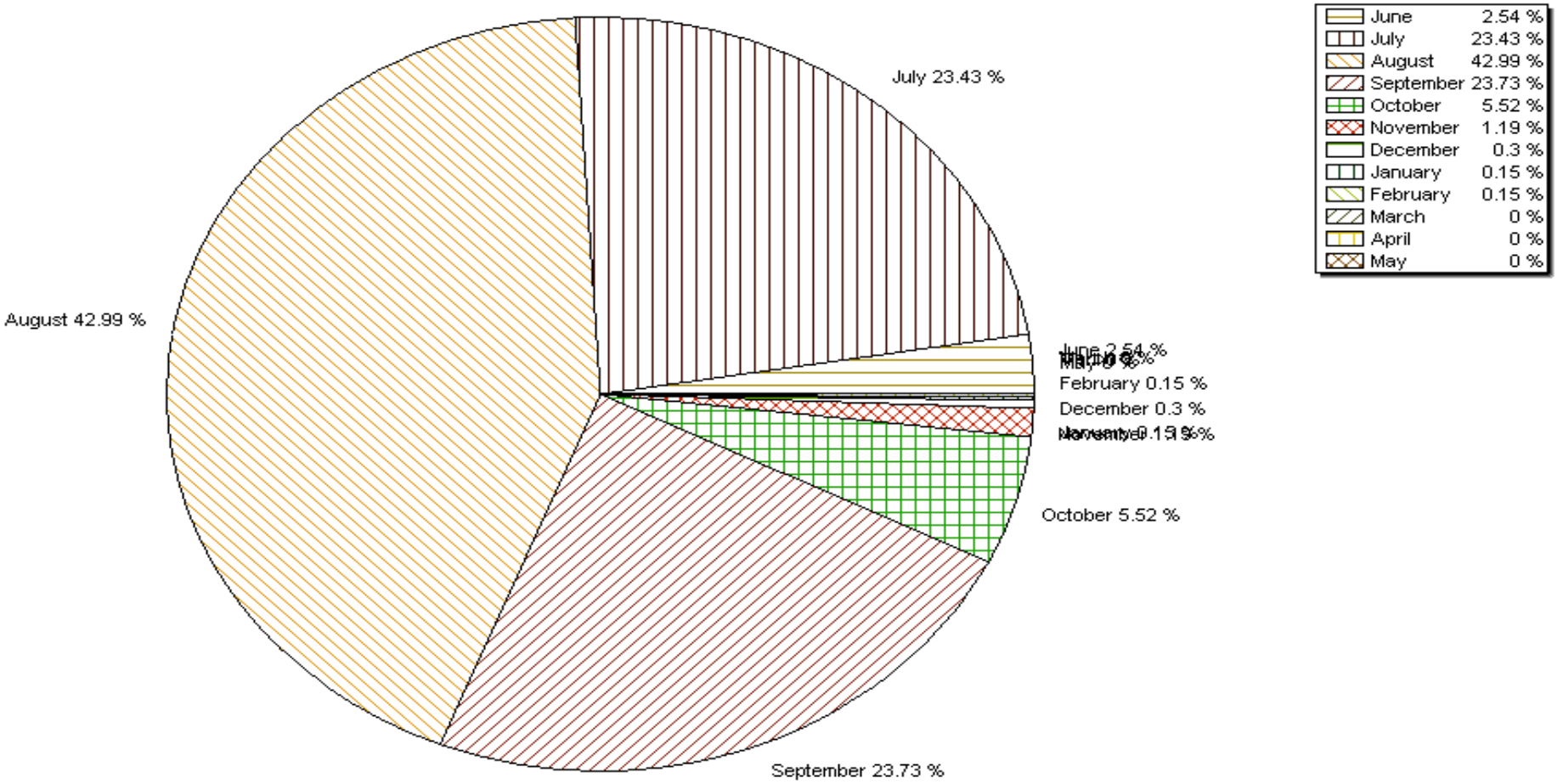
Monthly Average Runoff based on period : 1986-2017

Station Name : SALEBARDI (AGH49I1)

Division : Wainganga Div., Nagpur

Local River : Chulband

Sub-Division : Upper Wainganga SD, Nagpur



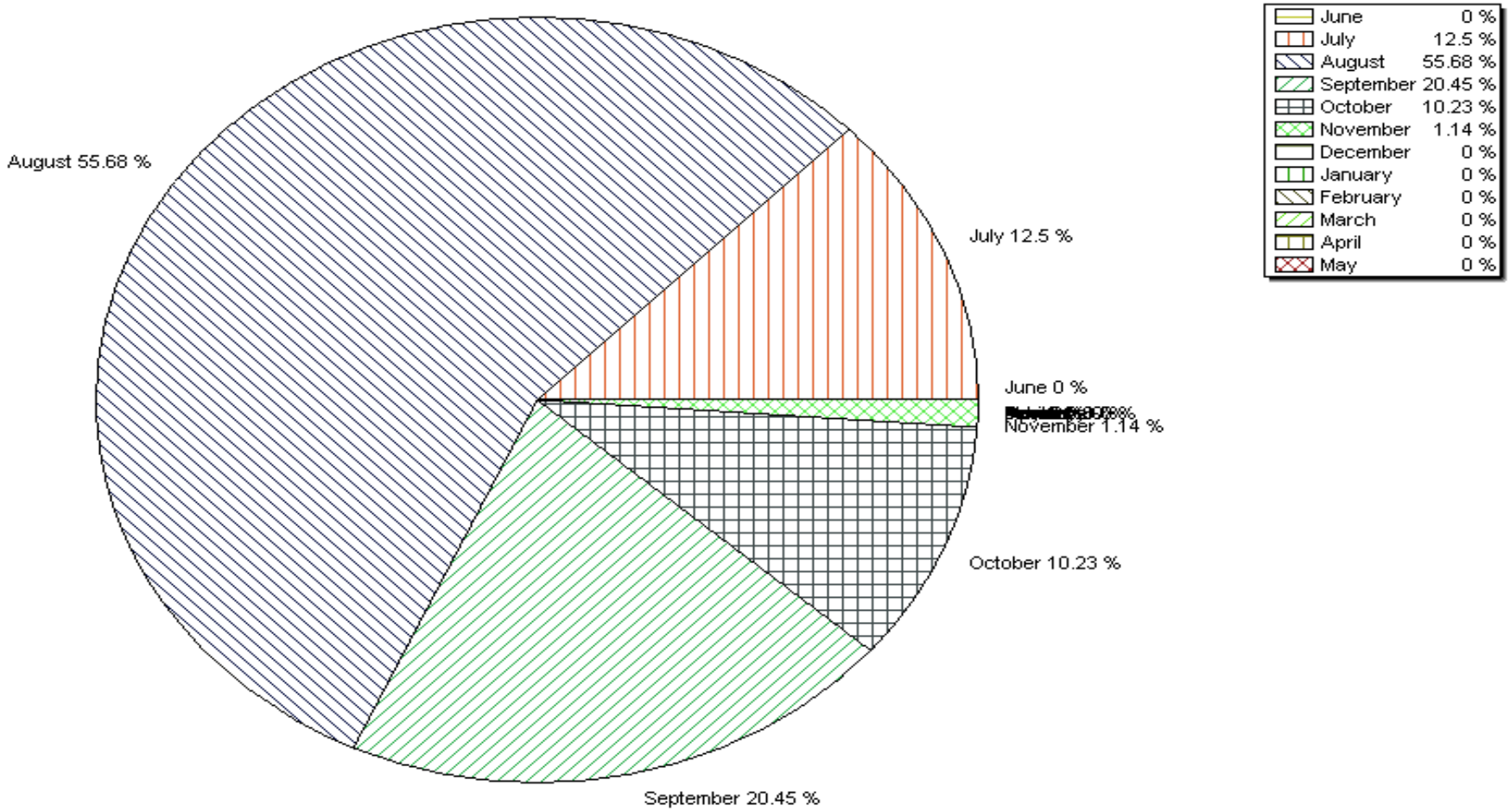
Monthly Runoff for the Year : 2017-2018

Station Name : SALEBARDI (AGH49I1)

Division : Wainganga Div., Nagpur

Local River : Chulband

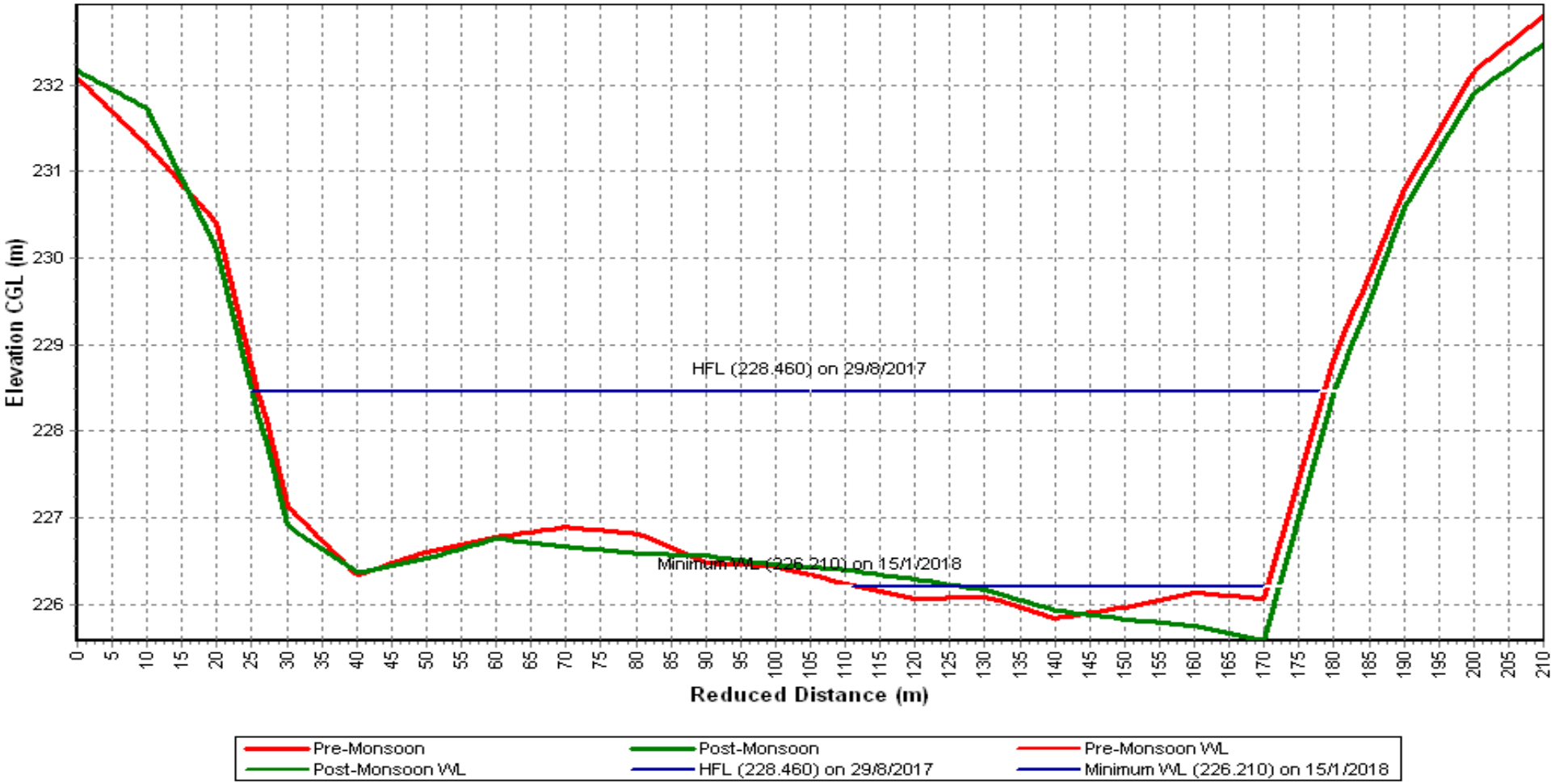
Sub-Division : Upper Wainganga SD, Nagpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : SALEBARDI (AGH49I1) **Division : Wainganga Div., Nagpur**

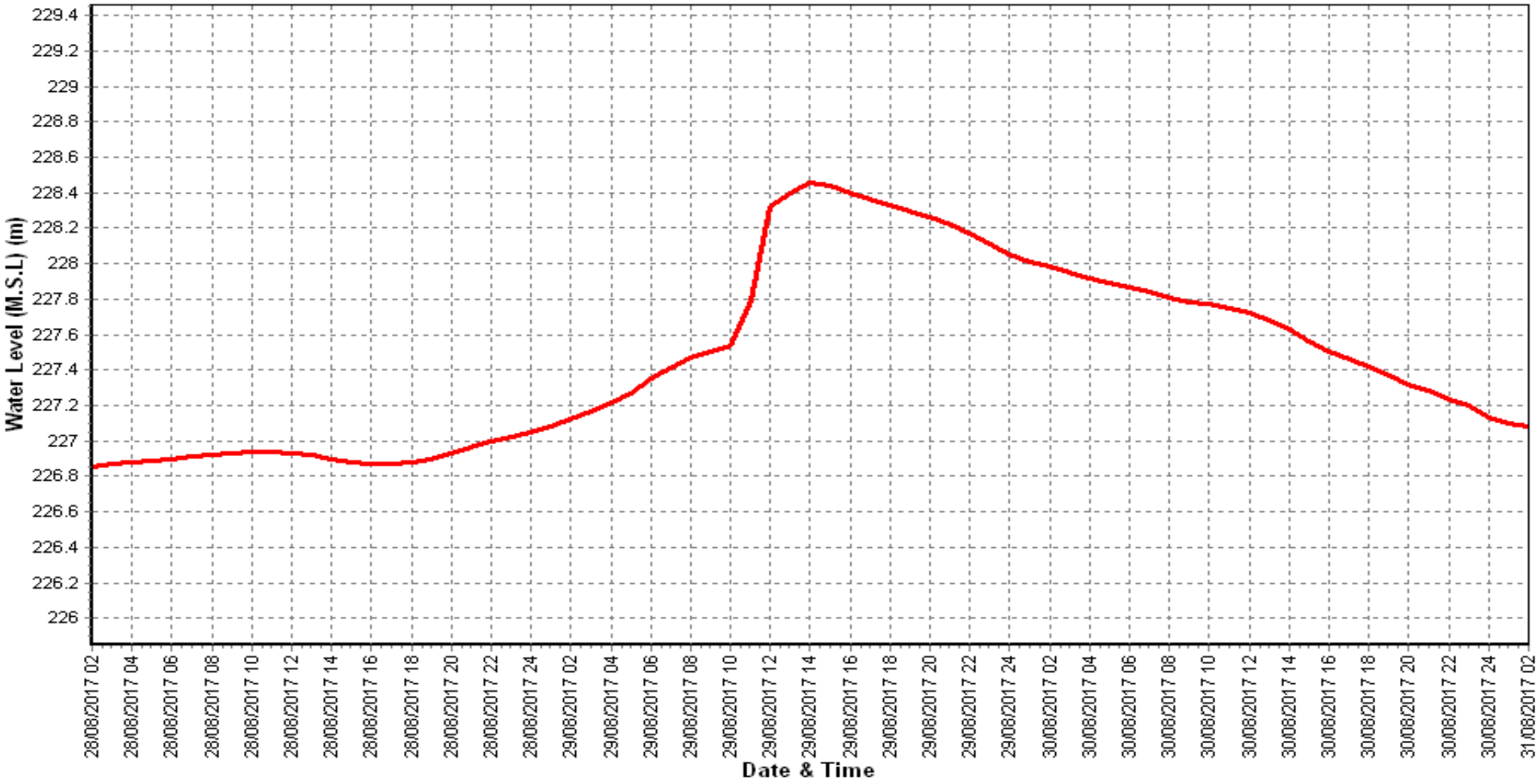
Local River : Chulband **Sub-Division : Upper Wainganga SD, Nagpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : SALEBARDI (AGH49I1) **Division : Wainganga Div., Nagpur**

Local River : Chulband **Sub-Division : Upper Wainganga SD, Nagpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**SATRAPUR**	**Code**	:	**AGH4BF6**
State	:	Maharashtra	District		Nagpur
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	Khanan	Local River	:	Khanan
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Upper Wainganga SD, Nagpur
Drainage Area	:	11100 Sq. Km.	Bank	:	Left
Latitude	:	21°13'00"	Longitude	:	79°13'59"
Zero of Gauge (m)	:	263.3 (m.s.l) 264.3 (m.s.l)	01.04.1987 07.09.1984		 - 31.03.1987
		Opening Date	Closing Date		
Gauge	:	07.09.1984	**HFL During 2017-18**	:	**267.100 Meter**
			Corres.Discharge	:	**1037 Cumecs (Estimated)**
Discharge	:	30.05.1986	**Date & Time of**	:	**21.09.2017**
			Occurance	:	**14.00Hrs.**
Sediment	:	01.08.1988			
Water Quality	:	09.12.1987			

HFL Recorded so far in m : 277.609 06/09/1994
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1986-1987	3000	275.695	15.08.1986	0.900	265.115	23.05.1987
1987-1988	218.0	267.130	29.08.1987	0.300	265.000	13.03.1988
1988-1989	1111	269.025	05.08.1988	0.500	265.050	09.06.1988
1989-1990	700.0	267.240	23.08.1989	0.370	264.630	23.04.1990
1990-1991	1698	269.295	30.08.1990	2.000	264.660	29.05.1991
1991-1992	3464	271.350	31.07.1991	0.240	264.540	31.05.1992
1992-1993	3569	271.315	17.08.1992	0.185	264.540	02.06.1992
1993-1994	1656	269.005	28.09.1993	0.980	264.760	09.06.1993
1994-1995	14161	277.610	06.09.1994	1.910	264.720	03.06.1994
1995-1996	1078	267.795	02.09.1995	1.670	264.175	08.05.1996
1996-1997	853.6	267.555	27.07.1996	0.630	264.105	29.05.1997
1997-1998	2817	270.250	26.07.1997	1.000	264.300	05.04.1998
1998-1999	2609	270.260	15.09.1998	2.700	264.010	03.05.1999
1999-2000	4968	272.890	19.09.1999	1.760	264.070	14.05.2000
2000-2001	1117	267.385	13.07.2000	0.150	263.620	13.04.2001
2001-2002	1476	267.900	14.06.2001	0.090	263.630	11.05.2002
2002-2003	554.1	266.750	19.08.2002	0.137	263.700	05.06.2002

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2003-2004	3396	271.513	28.07.2003	1.683	263.970	14.04.2004
2004-2005	857.1	267.810	05.08.2004	0.225	263.830	12.04.2005
2005-2006	3655	271.980	15.09.2005	1.187	263.750	15.05.2006
2006-2007	3173	271.295	01.09.2006	0.611	263.740	17.05.2007
2007-2008	1850	269.710	08.07.2007	1.718	263.850	06.06.2007
2008-2009	121.2	265.050	22.09.2008	1.263	263.930	09.03.2009
2009-2010	1562	268.850	23.07.2009	0.931	263.850	06.05.2010
2010-2011	994.2	267.930	07.08.2010	1.421	263.870	10.06.2010
2011-2012	869.1	267.555	15.09.2011	1.308	263.760	14.04.2012
2012-2013	5685	273.265	06.09.2012	1.066	263.840	13.04.2013
2013-2014	7955	274.340	24.08.2013	0.741	263.880	05.06.2013
2014-2015	2615	269.625	23.07.2014	0.626	263.870	21.02.2015
2015-2016	2138	269.150	05.08.2015	0.621	263.720	19.05.2016
2016-2017	1160	267.440	10.07.2016	0.512	263.800	21.04.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at SATRAPUR in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1985-1986**		0	0
2	**1986-1987**	1718	184	1902
3	**1987-1988**	372	41	413
4	**1988-1989**	2365	188	2554
5	**1989-1990**	1005	35	1041
6	**1990-1991**	1890	401	2290
7	**1991-1992**	1372	34	1406
8	**1992-1993**	1455	93	1548
9	**1993-1994**	2264	138	2402
10	**1994-1995**	6336	487	6823
11	**1995-1996**	1319	107	1426
12	**1996-1997**	1095	89	1184
13	**1997-1998**	2438	1490	3928
14	**1998-1999**	1630	506	2136
15	**1999-2000**	4690	303	4993
16	**2000-2001**	841	23	863
17	**2001-2002**	759	23	783
18	**2002-2003**	764	126	890
19	**2003-2004**	1772	289	2061
20	**2004-2005**	587	37	625
21	**2005-2006**	2180	201	2381
22	**2006-2007**	1775	106	1881
23	**2007-2008**	1752	167	1919
24	**2008-2009**	335	61	396
25	**2009-2010**	1301	188	1489
26	**2010-2011**	1544	227	1771
27	**2011-2012**	1614	149	1763
28	**2012-2013**	2848	140	2988
29	**2013-2014**	6524	216	6740
30	**2014-2015**	1056	70	1127
31	**2015-2016**	1322	79	1401
32	**2016-2017**			
33	**2017-2018**	799	46	846
Average		1862	195	1999

Stage-Discharge Data for the period 2017 - 2018

Station Name : SATRAPUR (AGH4BF6) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	263.850	0.875	264.500	50.70	264.230	15.57	264.890	112.8	264.460	37.19 *	264.130	12.04
2	263.850	0.882	264.810	80.22 *	264.210	14.74	264.640	56.91 *	264.420	33.46 *	264.120	11.83
3	263.870	1.030	264.445	25.13	264.170	13.38	264.510	42.17 *	264.390	23.06	264.110	11.57
4	263.840	0.812 *	264.320	22.42	264.140	9.949	264.440	24.06	264.350	21.12	264.100	11.54 *
5	263.840	0.832	264.300	20.15	264.100	11.69	264.380	23.29	264.330	20.33	264.090	11.07 *
6	263.840	0.828	264.240	16.59	264.080	10.60 *	264.360	22.11	264.290	19.54	264.060	9.869
7	263.830	0.741	264.260	18.14	264.070	9.402	264.340	20.74	264.270	18.43	264.040	9.363
8	263.870	1.038	264.210	14.51	264.080	10.01	264.280	18.18	264.280	22.21 *	264.020	8.932
9	263.890	1.281	264.160	14.64 *	264.060	9.309	264.495	41.98	264.400	23.69	264.030	8.957
10	263.910	1.500	263.980	7.801	264.040	9.529	264.920	97.87 *	264.400	23.49	264.020	8.838
11	263.910	1.450 *	264.050	11.53	264.050	9.742	264.750	91.99	264.495	41.94	264.020	8.828
12	263.960	2.000 #	264.040	11.31	264.070	9.360	264.600	64.82	264.530	45.51	264.000	7.305 *
13	263.950	1.884 #	264.040	11.21	264.060	9.710 *	264.670	76.47	264.410	24.42	263.990	8.209
14	263.970	2.119 #	264.020	10.46	264.040	9.480	264.995	135.8	264.390	23.26	263.980	7.956
15	263.930	1.664	264.060	11.93	264.040	8.863 *	266.015	368.1	264.390	30.82 *	263.980	7.972
16	263.920	1.598	264.030	8.457 *	264.030	9.225	265.140	156.9	264.390	23.31	263.970	7.266
17	263.950	1.884 #	264.040	11.19	264.010	8.572	264.820	81.74 *	264.380	22.74	263.970	7.132
18	263.940	1.771 *	265.265	192.2	264.000	8.337	264.710	85.13	264.340	20.57	263.960	6.878
19	263.930	1.619	264.700	73.73	266.470	710.5	265.745	286.8	264.310	24.39 *	263.960	5.948 *
20	263.920	1.558	265.320	189.0	264.700	64.60 *	265.450	229.8	264.290	18.60	264.000	8.475
21	263.920	1.527	264.945	127.1	264.380	23.25	266.950	928.9	264.270	17.67	264.000	8.393
22	264.010	8.527	264.730	79.30	264.240	17.09	265.750	287.4	264.260	20.82 *	263.990	8.115
23	263.990	8.108	264.800	78.72 *	264.100	11.43	265.280	157.4	264.250	16.96	264.010	8.592
24	263.990	7.954	264.650	66.65	264.150	13.01	264.980	108.4 *	264.270	17.77	263.970	7.152
25	263.980	6.591 *	264.470	26.68	265.250	163.8 *	264.830	88.60	264.250	16.85	264.000	8.450
26	263.970	6.251 *	264.400	22.82	264.900	113.9	264.720	86.48	264.230	15.99	263.990	6.963 *
27	264.060	11.74	264.410	23.10	264.980	108.4 *	264.630	68.27	264.190	14.40	263.980	7.390
28	265.140	178.6	264.290	18.98	264.805	98.74	264.580	62.56	264.190	14.31	263.980	7.350
29	265.290	214.7	264.250	16.94	266.295	578.3	264.540	59.16	264.170	15.21 *	263.970	7.125
30	264.625	67.18	264.290	22.92 *	266.200	535.4	264.500	41.15 *	264.140	12.46	263.970	7.135
31			264.240	16.58	265.250	165.7			264.130	12.12		
Ten-Daily Mean												
I Ten-Daily	263.859	0.982	264.322	27.03	264.118	11.42	264.525	46.01	264.359	24.25	264.072	10.40
II Ten-Daily	263.938	1.755	264.357	53.10	264.347	84.84	265.089	157.8	264.393	27.56	263.983	7.597
III Ten-Daily	264.298	51.12	264.498	45.43	264.959	166.3	265.076	188.8	264.214	15.87	263.986	7.667
Monthly												
Min.	263.830	0.741	263.980	7.801	264.000	8.337	264.280	18.18	264.130	12.12	263.960	5.948
Max.	265.290	214.7	265.320	192.2	266.470	710.5	266.950	928.9	264.530	45.51	264.130	12.04
Mean	264.031	17.95	264.396	41.97	264.490	90.05	264.897	130.9	264.318	22.34	264.014	8.555

Annual Runoff in MCM = 846 Annual Runoff in mm = 76

Peak Observed Discharge = 928.9 cumecs on 21/09/2017 Corres. Water Level :266.950 m

Lowest Observed Discharge = 0.548 cumecs on 26/05/2018 Corres. Water Level :263.710 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : SATRAPUR (AGH4BF6) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	263.970	7.032 *	263.840	1.337	263.790	1.006	263.750	0.852	263.730	0.671 *	263.750	0.698
2	263.970	7.064	263.840	1.324	263.790	0.988	263.750	0.776 *	263.710	0.575 #	263.750	0.705
3	263.960	6.602 *	263.840	1.297	263.780	0.955	263.750	0.873	263.710	0.575 #	263.750	0.700
4	263.940	6.133	263.830	1.222	263.780	0.949 *	263.730	0.671 *	263.760	0.876	263.750	0.696
5	263.940	6.060	263.840	1.289	263.780	0.959	263.710	0.728	263.750	0.838	263.740	0.668
6	263.940	5.793 *	263.840	1.324	263.780	0.968	263.710	0.721	263.750	0.825	263.740	0.722 *
7	263.940	5.984	263.840	1.377 *	263.770	0.932	263.710	0.712	263.750	0.832	263.740	0.672
8	263.950	6.129	263.850	1.481	263.770	0.935	263.710	0.739	263.740	0.722 *	263.740	0.659
9	263.950	6.129	263.850	1.507	263.770	0.917	263.720	0.622 #	263.730	0.720	263.740	0.658
10	263.940	5.793 *	263.840	1.374	263.770	0.924	263.720	0.622 #	263.720	0.622 #	263.730	0.634
11	263.940	5.824	263.840	1.365	263.780	0.949 *	263.720	0.622 *	263.720	0.622 #	263.720	0.608
12	263.940	5.927	263.840	1.337	263.850	1.458	263.730	0.671 #	263.720	0.622 #	263.720	0.603
13	263.940	5.846	263.840	1.333	263.920	2.062 #	263.730	0.671 #	263.720	0.622 #	263.720	0.622 *
14	263.940	5.798	263.830	1.299 *	263.900	1.872 #	263.730	0.671 #	263.720	0.622 #	263.720	0.608
15	263.950	5.979	263.830	1.300	263.890	1.863	263.730	0.671 #	263.720	0.622 *	263.720	0.597
16	263.950	5.922	263.830	1.315	263.890	1.828	263.730	0.671 #	263.800	1.084	263.720	0.605
17	263.940	5.793 *	263.830	1.274	263.890	1.790	263.720	0.622 #	263.790	1.050	263.720	0.601
18	263.930	5.224	263.850	1.484	263.900	1.872 *	263.720	0.622 *	263.800	1.079	263.720	0.592
19	263.930	5.200	263.850	1.471	263.930	2.161 #	263.720	0.622 #	263.800	1.061	263.720	0.595
20	263.920	5.026	263.850	1.457	263.930	2.161 #	263.720	0.622 #	263.790	1.057	263.710	0.575
21	263.900	1.969	263.840	1.377 *	263.920	2.062 #	263.720	0.622 #	263.740	0.713	263.710	0.575
22	263.900	1.978	263.820	1.217	263.910	1.965 #	263.710	0.575 #	263.740	0.722 *	263.710	0.576
23	263.890	1.884	263.820	1.208	263.910	1.965 #	263.710	0.575 #	263.740	0.710	263.710	0.560
24	263.870	1.627 *	263.820	1.182	263.880	1.741	263.710	0.575 #	263.730	0.684	263.710	0.566
25	263.860	1.541 *	263.810	1.130	263.840	1.365 *	263.720	0.622 *	263.740	0.712	263.710	0.555
26	263.850	1.568	263.810	1.151 *	263.820	1.252	263.720	0.622 #	263.750	0.721	263.710	0.548
27	263.850	1.516	263.800	1.054	263.770	0.924	263.720	0.622 #	263.750	0.721	263.720	0.622 *
28	263.850	1.496	263.800	1.081 *	263.750	0.850	263.720	0.622 #	263.750	0.710	263.730	0.627
29	263.850	1.480	263.800	1.024			263.730	0.671 *	263.750	0.776 *	263.730	0.629
30	263.850	1.473	263.800	1.061			263.730	0.671 *	263.750	0.776 *	263.740	0.649
31	263.840	1.377 *	263.790	1.019			263.740	0.744			263.740	0.650
Ten-Daily Mean												
I Ten-Daily	263.950	6.272	263.841	1.353	263.778	0.953	263.726	0.732	263.735	0.726	263.743	0.681
II Ten-Daily	263.938	5.654	263.839	1.363	263.888	1.802	263.725	0.647	263.758	0.844	263.719	0.601
III Ten-Daily	263.865	1.628	263.810	1.137	263.850	1.516	263.721	0.629	263.744	0.724	263.720	0.596
Monthly												
Min.	263.840	1.377	263.790	1.019	263.750	0.850	263.710	0.575	263.710	0.575	263.710	0.548
Max.	263.970	7.064	263.850	1.507	263.930	2.161	263.750	0.873	263.800	1.084	263.750	0.722
Mean	263.916	4.425	263.829	1.280	263.838	1.417	263.724	0.668	263.746	0.765	263.727	0.625

Peak Computed Discharge = 163.8 cumecs on 25/08/2017 **Corres. Water Level :265.250 m**

Lowest Computed Discharge = 0.622 cumecs on 11/03/2018 **Corres. Water Level :263.720 m**

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

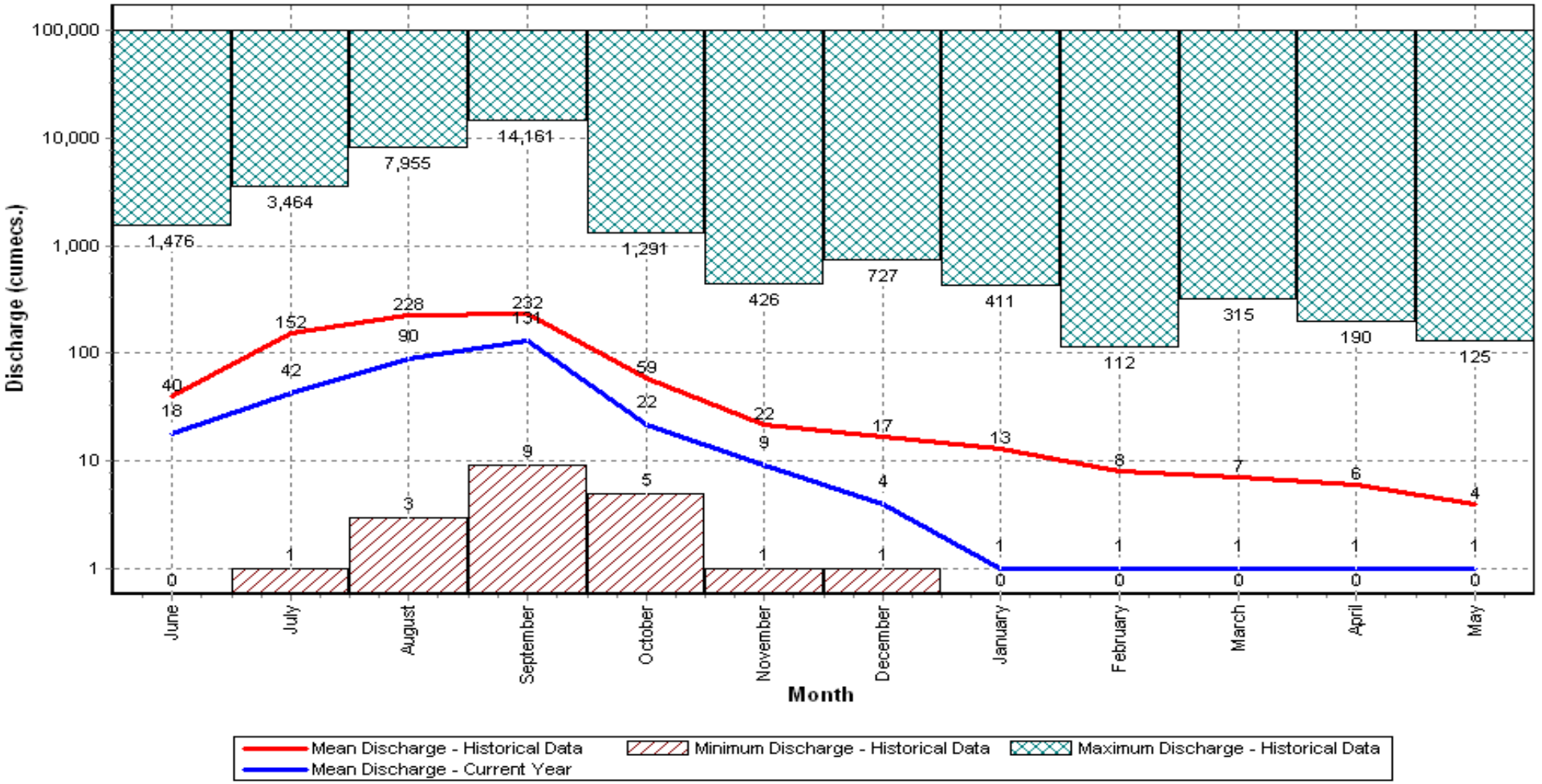
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : SATRAPUR (AGH4BF6) **Data considered : 1986-2018** **Division : Wainganga Div., Nagpur**

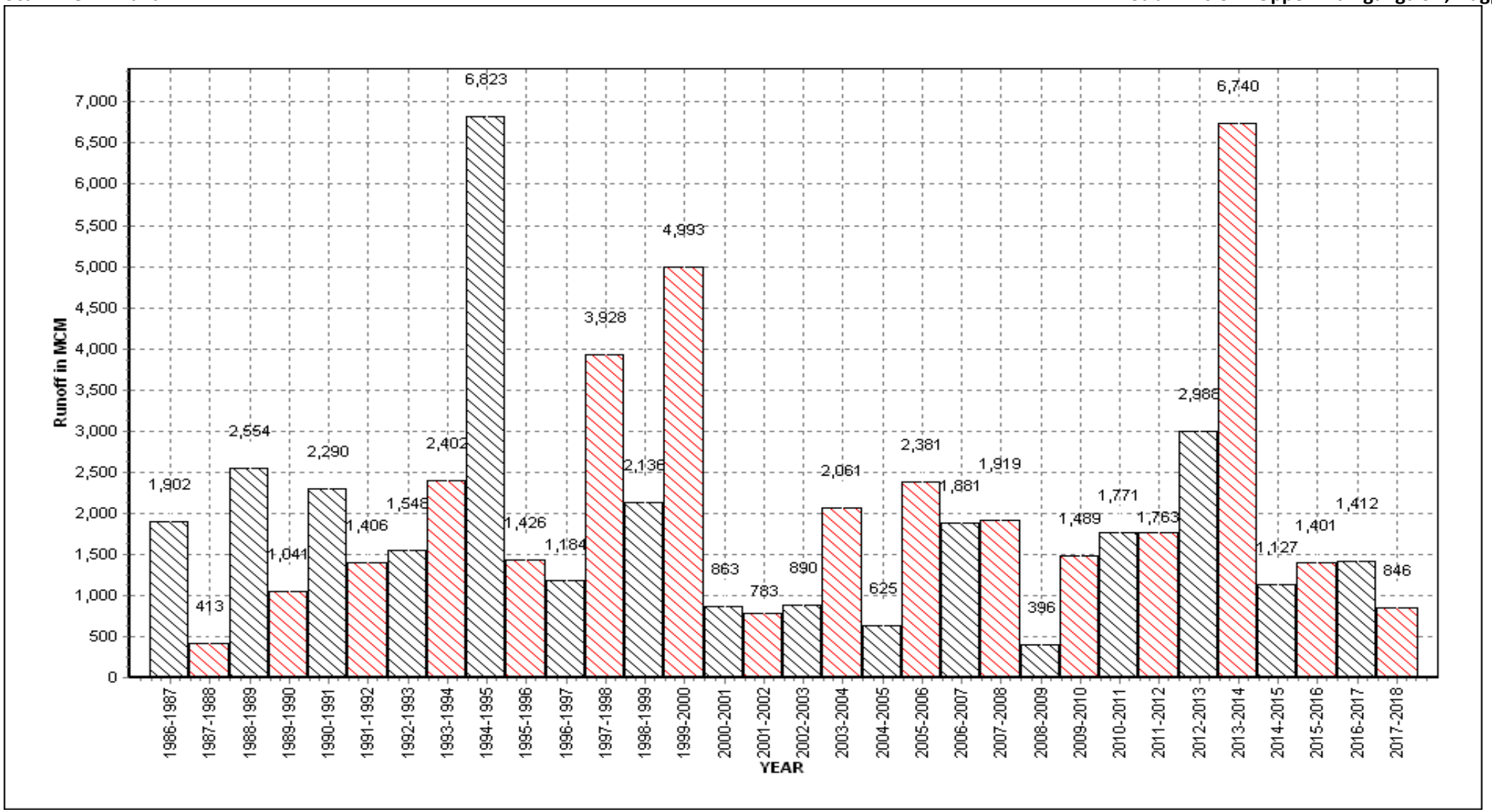
Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Annual Runoff Values for the period: 1986 - 2018

Station Name : SATRAPUR (AGH4BF6) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**

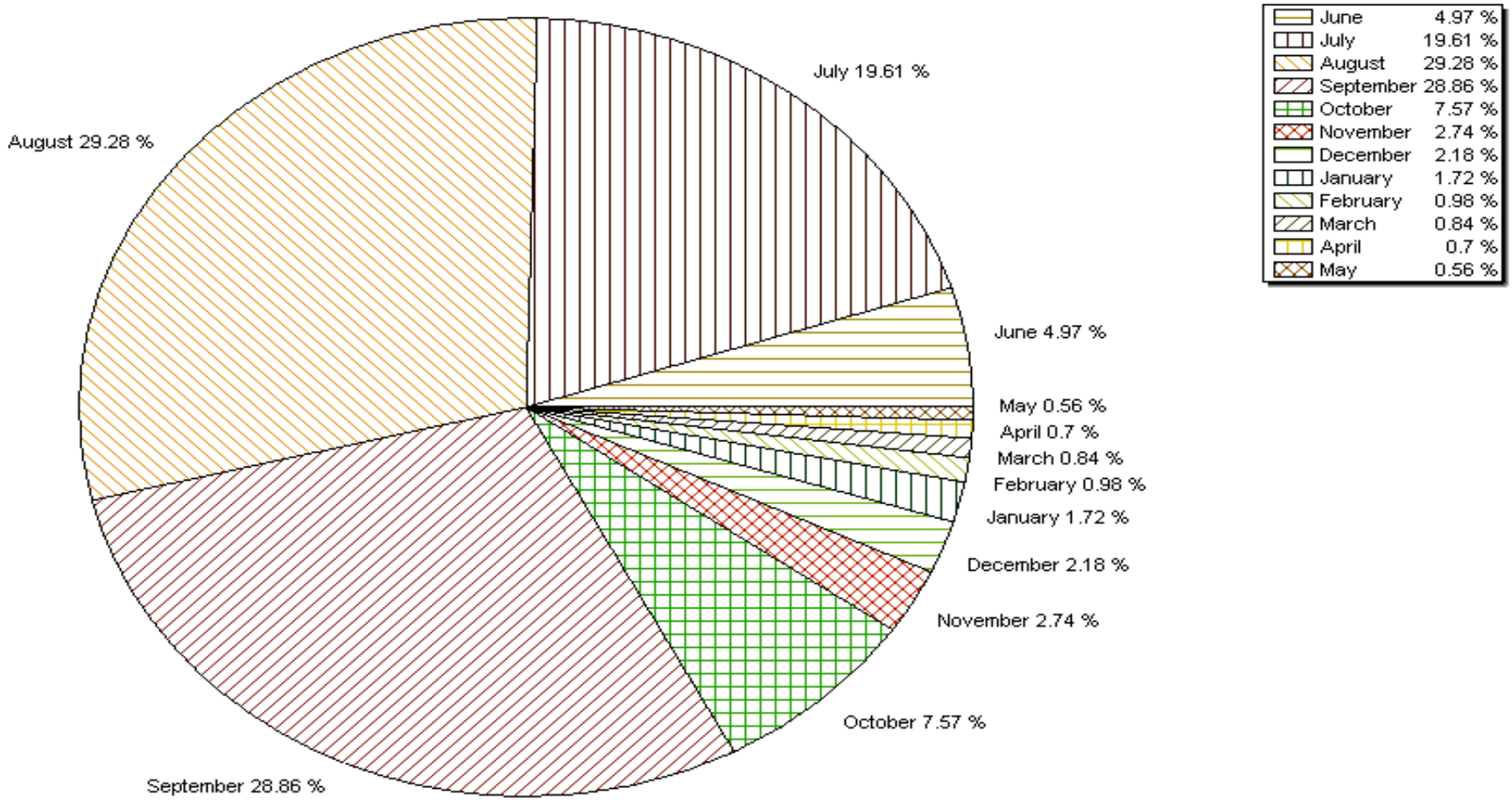


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1986-2017

Station Name : SATRAPUR (AGH4BF6) **Division : Wainganga Div., Nagpur**

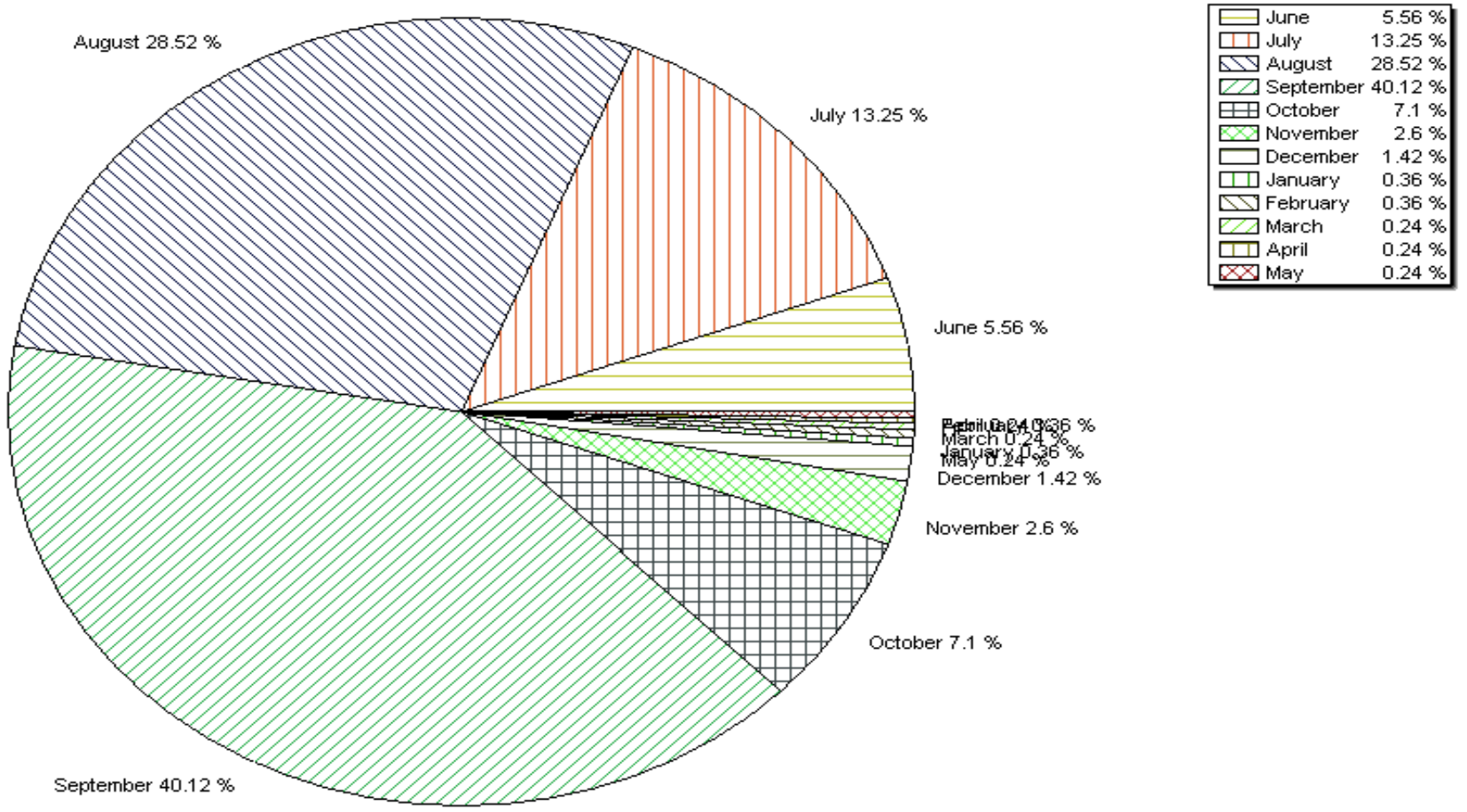
Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Monthly Runoff for the Year : 2017-2018

Station Name : SATRAPUR (AGH4BF6) **Division : Wainganga Div., Nagpur**

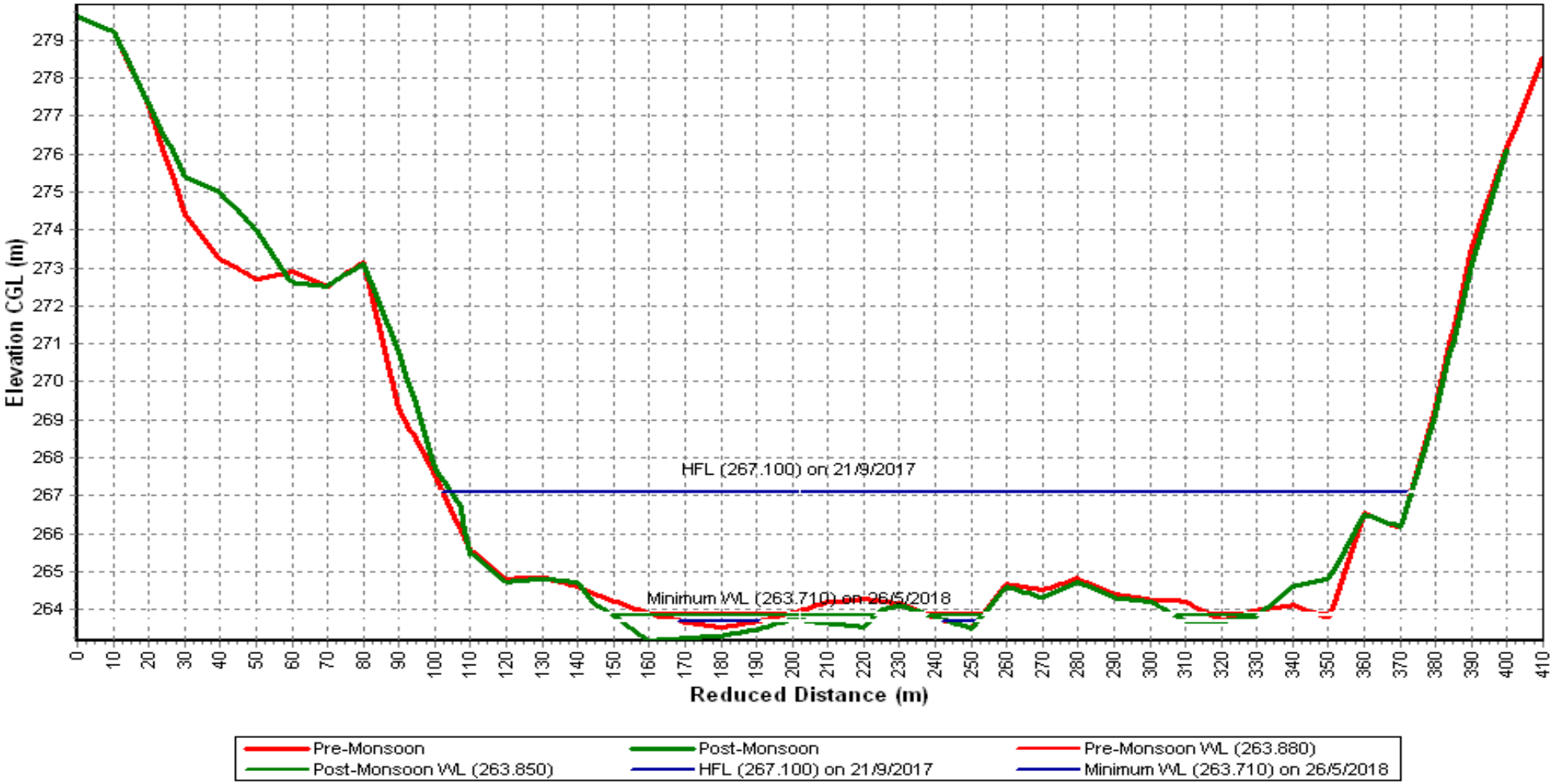
Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : SATRAPUR (AGH4BF6) **Division : Wainganga Div., Nagpur**

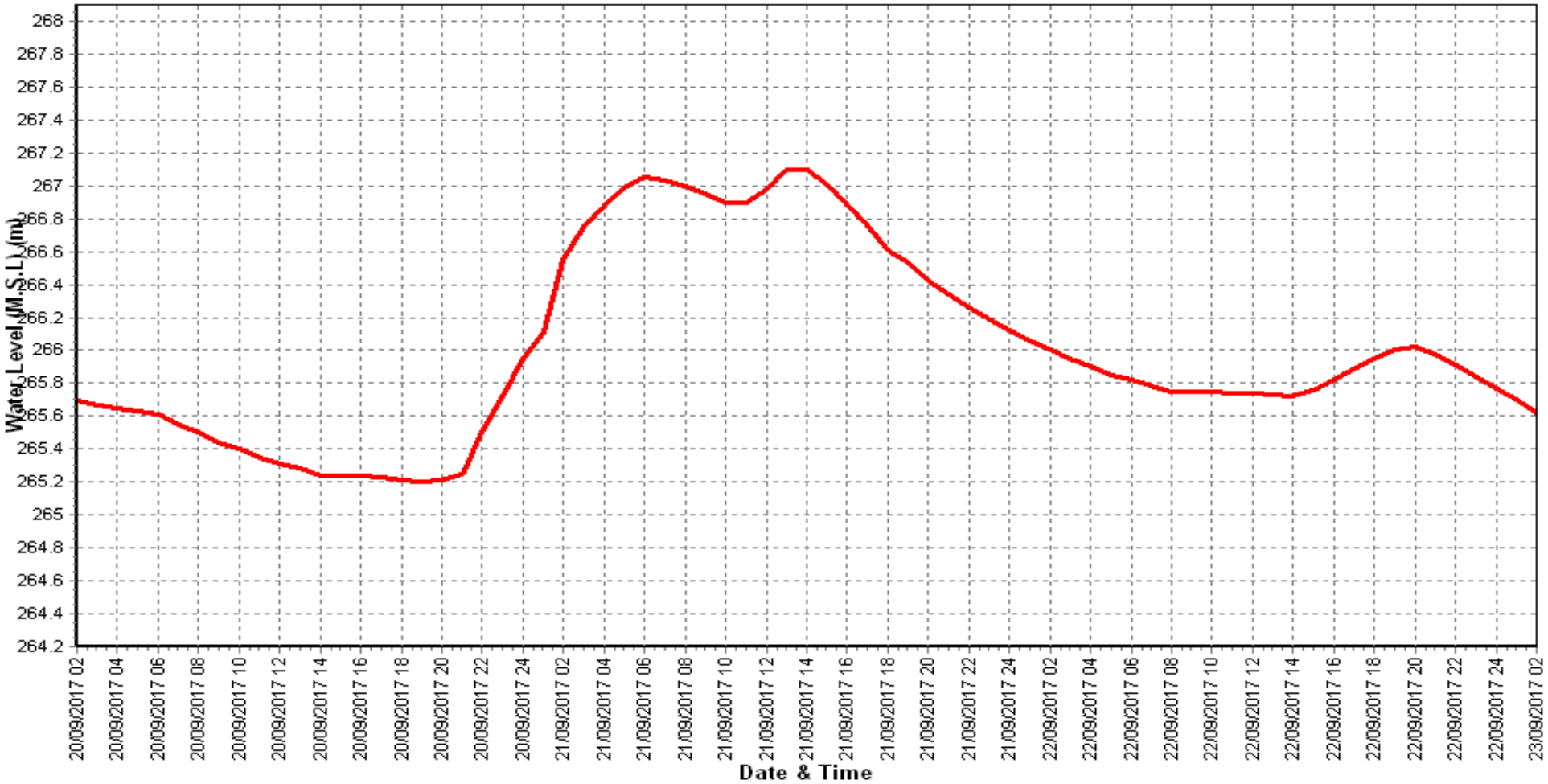
Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : SATRAPUR (AGH4BF6) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**RAMAKONA**	**Code**	:	**AGH4BQ3**
State	:	Madhya Pradesh	District		Chhindwara
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	Khanan	Local River	:	Khanan
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Upper Wainganga SD, Nagpur
Drainage Area	:	2500 Sq. Km.	Bank	:	Left
Latitude	:	21°43'12"	Longitude	:	78°49'27"
Zero of Gauge (m)	:	338 (m.s.l) 336.38 (m.s.l) 335.95 (m.s.l)	01.01.1985 01.06.1996 01.06.2002	-	31.05.1996 31.05.2002
		Opening Date	Closing Date		
Gauge	:	13.02.1986	**HFL During 2017-18**	:	**339.920 Meter**
			Corres.Discharge	:	**626.5 Cumecs (Estimated)**
Discharge	:	21.11.1986	**Date & Time of**	:	**18.09.2017**
			Occurance	:	**19.00 Hrs.**
Sediment	:	12.11.2014			
Water Quality	:	01.06.2014			

HFL Recorded so far in m : 349.89 30/07/1991
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1987-1988	480.0	342.195	28.08.1987	0.000		01.06.1987
1988-1989	450.0	342.500	22.08.1988	0.004	339.910	03.05.1989
1989-1990	710.0	343.540	13.06.1989	0.001	339.930	08.03.1990
1990-1991	1253	344.545	23.08.1990	0.000	339.910	22.03.1991
1991-1992	3560	349.500	30.07.1991	0.000	339.340	26.01.1992
1992-1993	1099	344.220	16.08.1992	0.000	339.395	20.02.1993
1993-1994	1044	344.740	16.07.1993	0.000	339.660	06.05.1994
1994-1995	2490	347.000	06.09.1994	0.000	339.485	09.05.1995
1995-1996	372.5	342.560	02.09.1995	0.076	339.670	22.05.1996
1996-1997	452.6	341.108	27.07.1996	0.029	338.005	30.06.1996
1997-1998	2126	344.980	25.07.1997	0.100	338.130	18.06.1997
1998-1999	1510	343.590	15.09.1998	0.117	338.005	30.05.1999
1999-2000	996.9	343.110	18.09.1999	0.210	338.195	20.05.2000
2000-2001	533.2	341.218	19.07.2000	0.103	338.190	20.04.2001
2001-2002	906.5	341.680	15.08.2001	0.042	338.225	05.05.2002
2002-2003	638.1	340.950	25.06.2002	0.055	337.675	29.05.2003

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2003-2004	1537	342.950	27.07.2003	0.047	337.690	11.06.2003
2004-2005	516.4	340.570	23.08.2004	0.038	337.550	17.05.2005
2005-2006	2049	344.250	15.09.2005	0.042	337.555	23.06.2005
2006-2007	1362	341.350	14.08.2006	0.058	337.400	09.05.2007
2007-2008	3071	344.150	08.07.2007	0.029	337.405	10.06.2007
2008-2009	87.78	338.710	11.08.2008	0.051	337.340	25.05.2009
2009-2010	2238	343.970	20.07.2009	0.058	337.340	16.06.2009
2010-2011	416.3	340.090	19.08.2010	0.000	337.230	15.06.2010
2011-2012	315.4	339.880	28.08.2011	0.104	337.200	30.05.2012
2012-2013	4548	346.450	07.08.2012	0.066	336.700	30.05.2013
2013-2014	3027	348.550	23.08.2013	0.067	336.700	01.06.2013
2014-2015	2627	342.500	23.07.2014	0.000	336.900	25.05.2015
2015-2016	366.6	340.300	05.08.2015	0.000	336.790	06.04.2016
2016-2017	708.0	341.370	09.07.2016	0.000	336.840	21.02.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at RAMAKONA in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**		22	22
2	**1987-1988**	207	2	209
3	**1988-1989**	497	9	507
4	**1989-1990**	464	2	465
5	**1990-1991**	1423	32	1455
6	**1991-1992**	813	3	816
7	**1992-1993**	640	4	644
8	**1993-1994**	955	31	986
9	**1994-1995**	1452	50	1502
10	**1995-1996**	396	13	410
11	**1996-1997**	550	19	569
12	**1997-1998**	974	364	1339
13	**1998-1999**	769	165	934
14	**1999-2000**	1495	68	1563
15	**2000-2001**	206	5	210
16	**2001-2002**	425	8	432
17	**2002-2003**	466	7	473
18	**2003-2004**	865	25	890
19	**2004-2005**	208	4	212
20	**2005-2006**	790	32	821
21	**2006-2007**	1031	21	1053
22	**2007-2008**	1164	25	1189
23	**2008-2009**	118	4	123
24	**2009-2010**	769	49	818
25	**2010-2011**	564	39	603
26	**2011-2012**	547	14	561
27	**2012-2013**	1587	24	1611
28	**2013-2014**	1630	70	1700
29	**2014-2015**	779	26	805
30	**2015-2016**	474	10	483
31	**2016-2017**			
32	**2017-2018**	218	4	222
Average		749	37	762

Stage-Discharge Data for the period 2017 - 2018

Station Name : RAMAKONA (AGH4BQ3) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	336.770	0.000	337.250	13.39	337.080	5.117	337.310	14.29	337.190	12.07 *	337.010	3.169
2	336.770	0.000	337.140	6.694 *	337.060	4.645	337.220	9.962 *	337.180	11.47 *	337.010	3.213
3	336.770	0.000	337.160	9.098	337.040	3.741	337.170	7.829 *	337.155	9.445	337.000	3.119
4	336.770	0.000	337.095	4.673	337.030	3.689	337.130	5.531	337.140	9.118	337.000	2.629 *
5	336.770	0.000	337.220	10.38	337.020	3.591	337.110	5.438	337.130	8.732	336.990	2.323 *
6	336.770	0.000	337.120	4.879	337.010	2.937 *	337.090	4.879	337.160	8.707	336.990	2.411
7	336.760	0.000	337.080	3.249	337.000	2.721 #	337.185	6.273	337.120	8.301	336.980	2.411
8	336.770	0.000	337.070	2.949	337.000	2.721 #	337.380	22.49	337.190	12.07 *	336.970	2.319
9	336.770	0.000	337.040	3.644 *	336.990	2.515 #	337.600	65.61	337.175	8.636	336.960	1.506 #
10	336.770	0.000	337.010	2.635	337.000	2.760	337.430	31.09 *	337.450	33.07 #	336.960	1.763
11	336.810	0.000	336.980	2.602	337.050	3.999	337.430	31.09 #	337.415	25.37	336.960	1.713
12	336.790	0.000	336.970	2.131 #	337.010	3.219	337.430	31.09 #	337.220	13.97 #	336.950	1.269 *
13	336.770	0.000	336.960	0.000	337.000	2.721 *	337.870	94.23	337.250	16.00 #	336.950	1.653
14	336.860	0.000	336.950	0.000	336.985	2.937	338.245	107.6	337.335	25.42	336.940	1.050 #
15	336.790	0.000	336.970	0.000	336.970	2.131 *	337.780	83.60	337.320	21.29 *	336.940	1.089
16	336.780	0.000	337.120	5.995 *	336.960	1.772	337.755	90.03	337.230	14.63 #	336.940	1.075
17	336.780	0.000	337.170	6.812	336.950	1.752	337.500	38.27 *	337.190	8.985	336.940	0.967
18	336.770	0.000	337.140	6.105	336.940	1.724	337.850	108.8	337.160	8.481	336.940	0.990
19	336.770	0.000	337.320	10.31	336.950	1.696	338.540	230.8 #	337.130	8.074 *	336.940	1.050 *
20	336.770	0.000	337.900	74.67	336.950	1.785 *	338.595	210.3	337.110	7.523	336.950	1.031
21	336.770	0.000	337.500	28.07 #	336.950	1.785 #	337.970	104.8	337.100	6.919	336.940	1.097
22	336.780	0.000	337.415	27.22	337.120	6.582	337.790	90.68	337.100	6.586 *	336.930	1.053
23	336.810	0.000	337.390	19.64 *	337.060	4.558	337.755	48.95	337.090	5.230	336.930	0.642
24	336.780	0.000	337.190	8.645 #	337.020	4.135	337.550	43.86 *	337.080	4.979	336.920	0.686
25	336.780	0.000	337.385	21.53	336.990	2.515 *	337.450	33.07 #	337.070	4.643	336.920	0.701
26	336.780	0.000	337.190	10.02	336.980	2.319 #	337.385	33.25	337.050	4.289	336.920	0.685 *
27	336.810	0.000	337.130	6.381	337.180	8.232 *	337.330	22.11 #	337.040	4.079	336.920	0.692
28	337.355	19.60	337.130	6.462	337.155	7.154	337.320	21.29 #	337.030	3.924	336.910	0.425
29	337.195	9.664	337.150	7.045	337.250	9.511	337.260	18.41	337.030	3.649 *	336.910	0.418
30	337.400	20.33 #	337.140	6.694 *	337.740	53.06 #	337.220	13.97 *	337.020	3.371	336.910	0.377
31			337.120	6.238	337.670	44.79 #			337.010	3.227		
Ten-Daily Mean												
I Ten-Daily	336.769	0.000	337.118	6.158	337.023	3.444	337.263	17.34	337.189	12.16	336.987	2.487
II Ten-Daily	336.789	0.000	337.148	10.86	336.976	2.374	337.900	102.6	337.236	14.97	336.945	1.189
III Ten-Daily	336.946	4.960	337.249	13.45	337.192	13.15	337.503	43.04	337.056	4.627	336.921	0.678
Monthly												
Min.	336.760	0.000	336.950	0.000	336.940	1.696	337.090	4.879	337.010	3.227	336.910	0.377
Max.	337.400	20.33	337.900	74.67	337.740	53.06	338.595	230.8	337.450	33.07	337.010	3.213
Mean	336.835	1.653	337.174	10.26	337.068	6.542	337.555	54.32	337.157	10.39	336.951	1.451

Annual Runoff in MCM = 222 Annual Runoff in mm = 89

Peak Observed Discharge = 230.8 cumecs on 19/09/2017 Corres. Water Level :338.540 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :336.770 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : RAMAKONA (AGH4BQ3) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	336.910	0.529 *	336.800	0.000	336.790	0.000	336.800	0.000	336.770	0.000	336.770	0.000
2	336.900	0.349	336.800	0.000	336.790	0.000	336.800	0.000	336.770	0.000	336.770	0.000
3	336.900	0.482 *	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
4	336.890	0.361	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
5	336.890	0.363	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
6	336.890	0.437 #	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
7	336.880	0.511	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
8	336.880	0.513	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
9	336.880	0.472	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
10	336.870	0.354 *	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
11	336.870	0.354 #	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.760	0.000
12	336.860	0.369	336.790	0.000	336.790	0.000	336.780	0.000	336.770	0.000	336.760	0.000
13	336.860	0.330	336.790	0.000	336.790	0.000	336.780	0.000	336.770	0.000	336.760	0.000
14	336.850	0.258	336.790	0.000	336.790	0.000	336.780	0.000	336.770	0.000	336.760	0.000
15	336.850	0.257	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
16	336.840	0.247	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
17	336.830	0.212 *	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
18	336.830	0.240	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
19	336.810	0.149	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
20	336.810	0.146	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
21	336.810	0.149	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
22	336.810	0.145	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
23	336.810	0.154 #	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
24	336.810	0.154	336.790	0.000	336.800	0.000	336.780	0.000	336.770	0.000	336.760	0.000
25	336.810	0.154	336.790	0.000	336.800	0.000	336.770	0.000	336.770	0.000	336.760	0.000
26	336.810	0.000	336.790	0.000	336.800	0.000	336.770	0.000	336.770	0.000	336.760	0.000
27	336.800	0.000	336.790	0.000	336.800	0.000	336.770	0.000	336.770	0.000	336.760	0.000
28	336.800	0.000	336.790	0.000	336.800	0.000	336.770	0.000	336.770	0.000	336.760	0.000
29	336.800	0.000	336.790	0.000			336.770	0.000	336.770	0.000	336.760	0.000
30	336.800	0.000	336.790	0.000			336.770	0.000	336.770	0.000	336.760	0.000
31	336.800	0.000	336.790	0.000			336.770	0.000			336.750	0.000
Ten-Daily Mean												
I Ten-Daily	336.889	0.437	336.800	0.000	336.790	0.000	336.792	0.000	336.770	0.000	336.762	0.000
II Ten-Daily	336.841	0.256	336.791	0.000	336.796	0.000	336.781	0.000	336.770	0.000	336.760	0.000
III Ten-Daily	336.805	0.069	336.790	0.000	336.800	0.000	336.774	0.000	336.770	0.000	336.759	0.000
Monthly												
Min.	336.800	0.000	336.790	0.000	336.790	0.000	336.770	0.000	336.770	0.000	336.750	0.000
Max.	336.910	0.529	336.800	0.000	336.800	0.000	336.800	0.000	336.770	0.000	336.770	0.000
Mean	336.844	0.248	336.794	0.000	336.795	0.000	336.782	0.000	336.770	0.000	336.760	0.000

Peak Computed Discharge = 43.86 cumecs on 24/09/2017 Corres. Water Level :337.550 m

Lowest Computed Discharge = 0.212 cumecs on 17/12/2017 Corres. Water Level :336.830 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

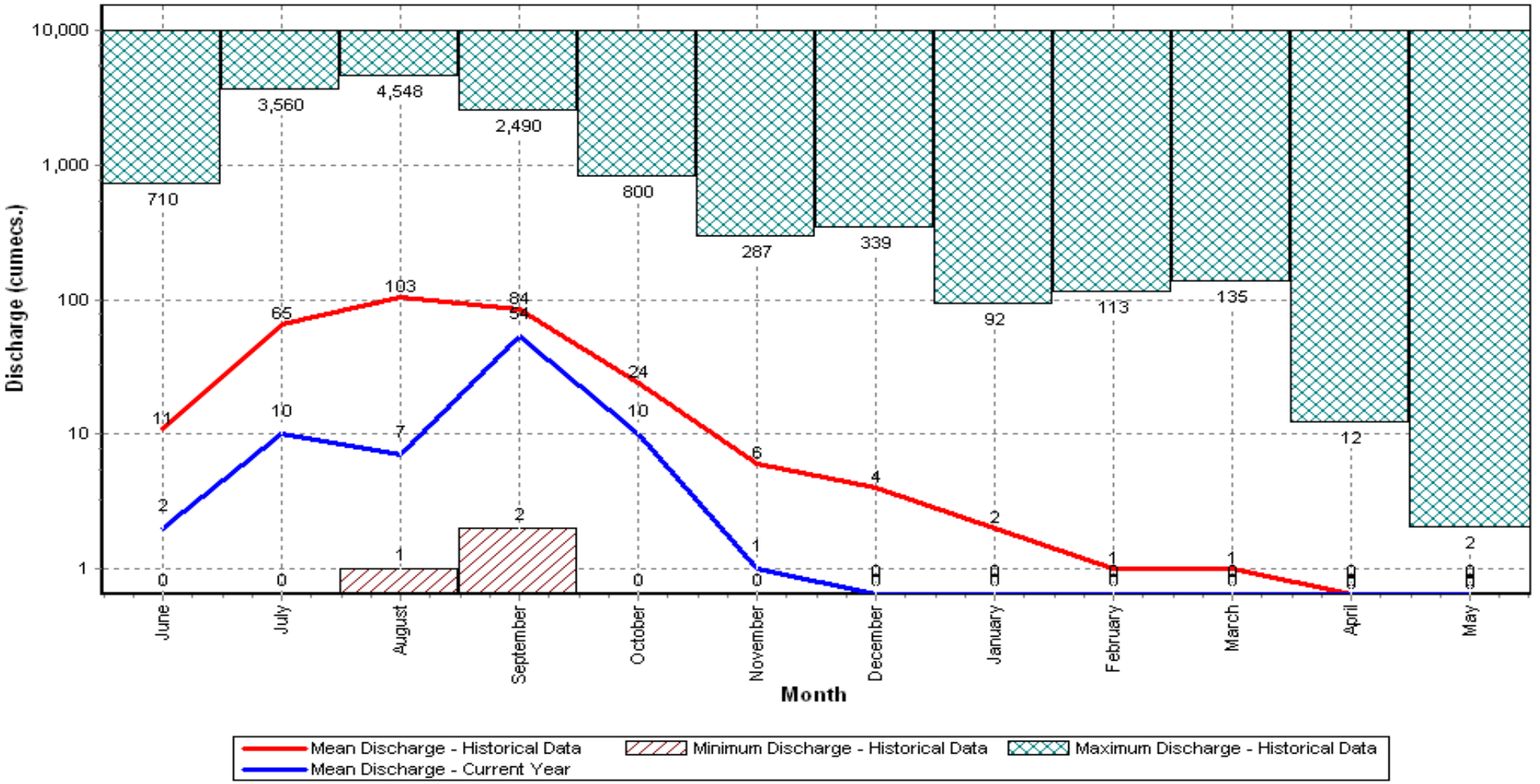
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : RAMAKONA (AGH4BQ3) **Data considered : 1987-2018** **Division : Wainganga Div., Nagpur**

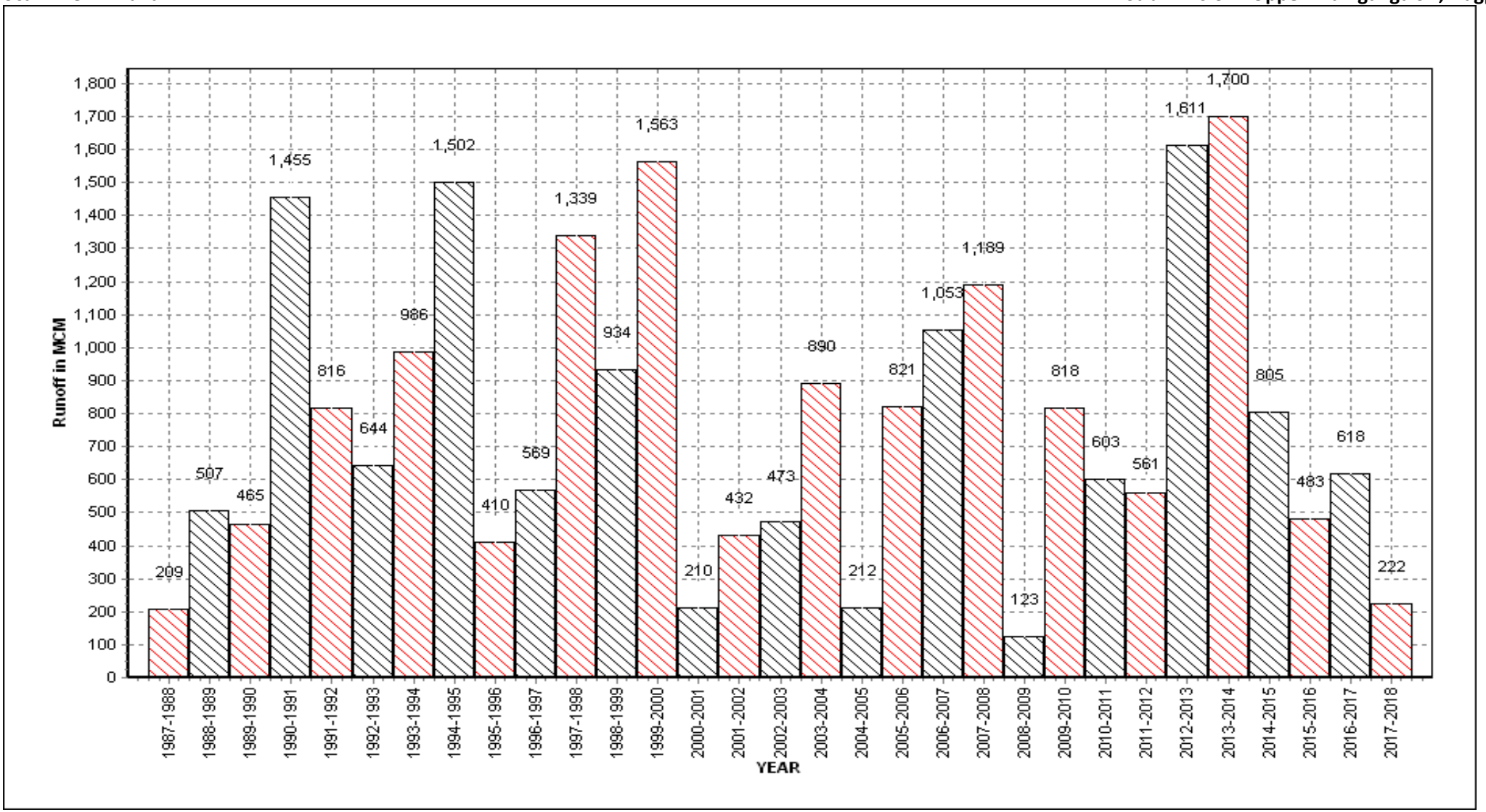
Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Annual Runoff Values for the period: 1987 - 2018

Station Name : RAMAKONA (AGH4BQ3) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**

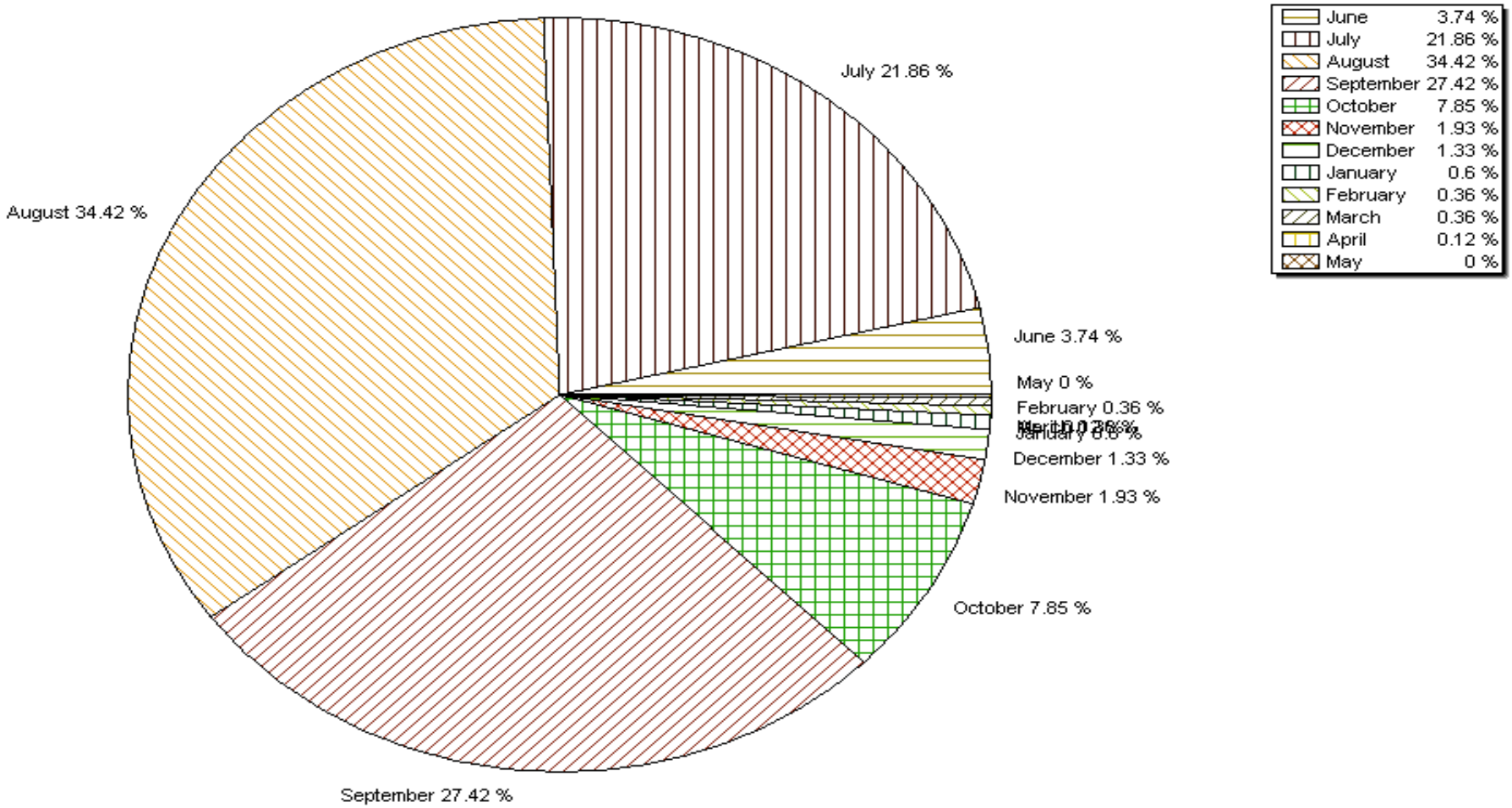


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1987-2017

Station Name : RAMAKONA (AGH4BQ3) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



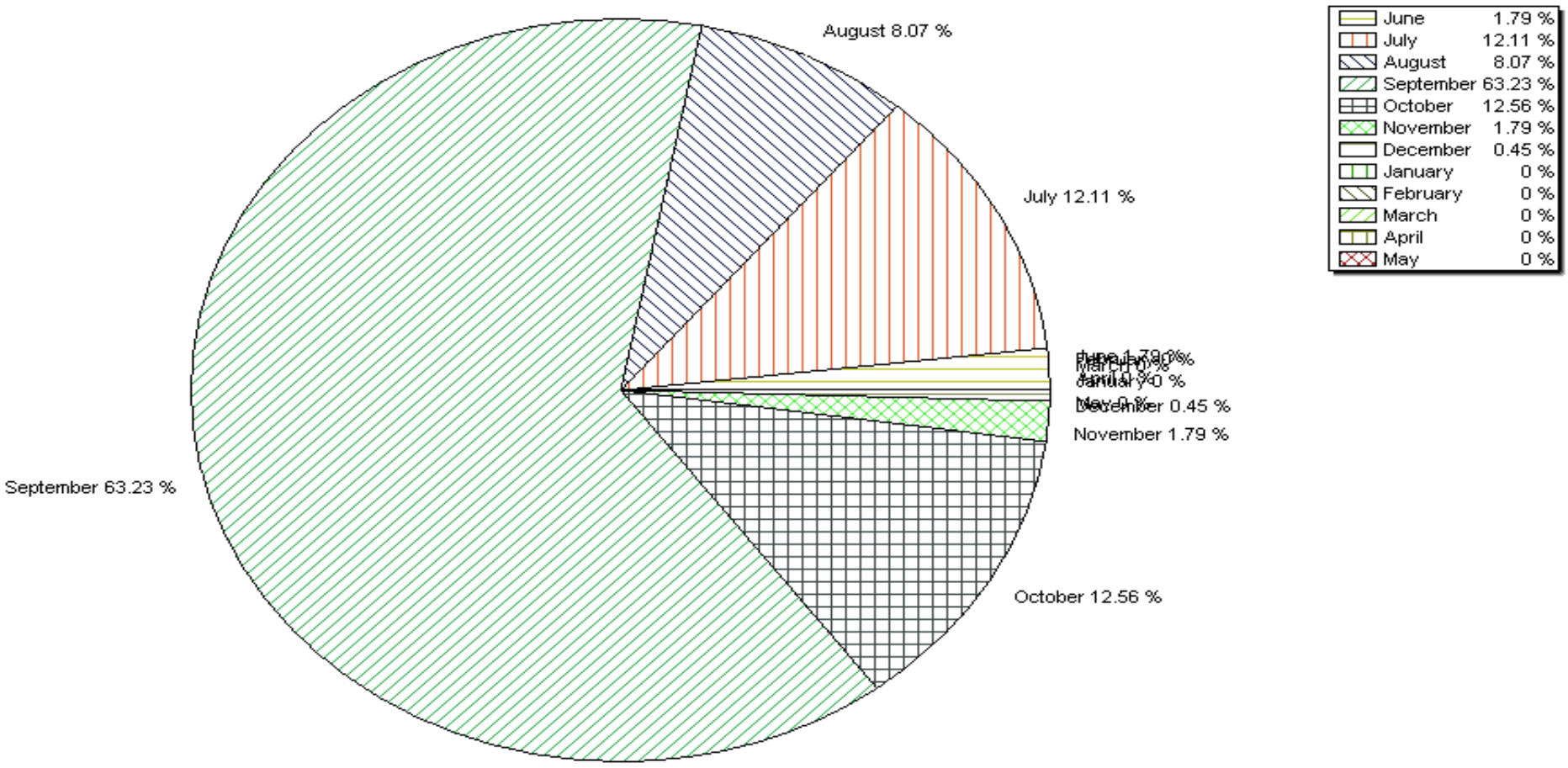
Monthly Runoff for the Year : 2017-2018

Station Name : RAMAKONA (AGH4BQ3)

Local River : Khanan

Division : Wainganga Div., Nagpur

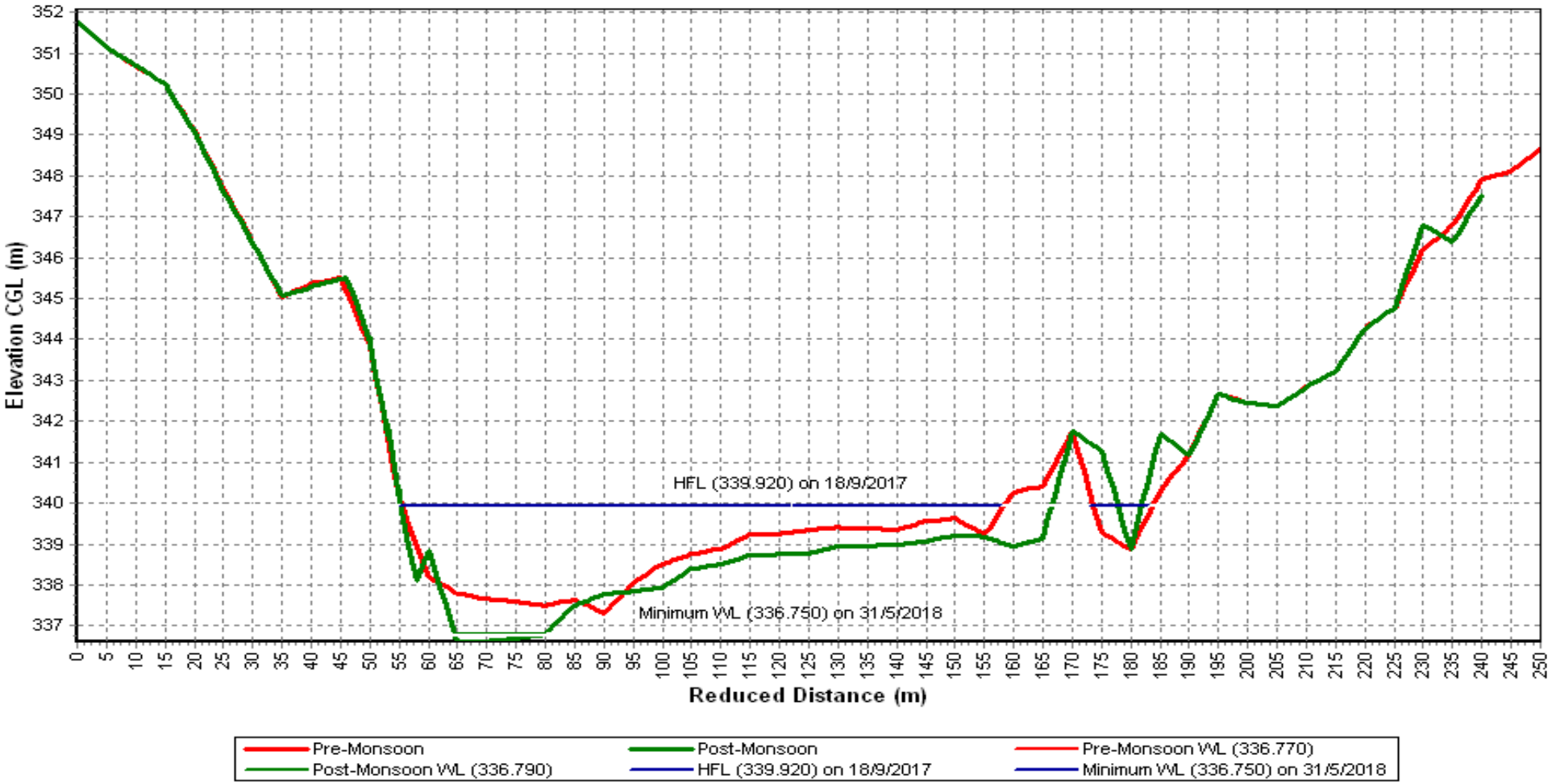
Sub-Division : Upper Wainganga SD, Nagpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : RAMAKONA (AGH4BQ3) **Division : Wainganga Div., Nagpur**

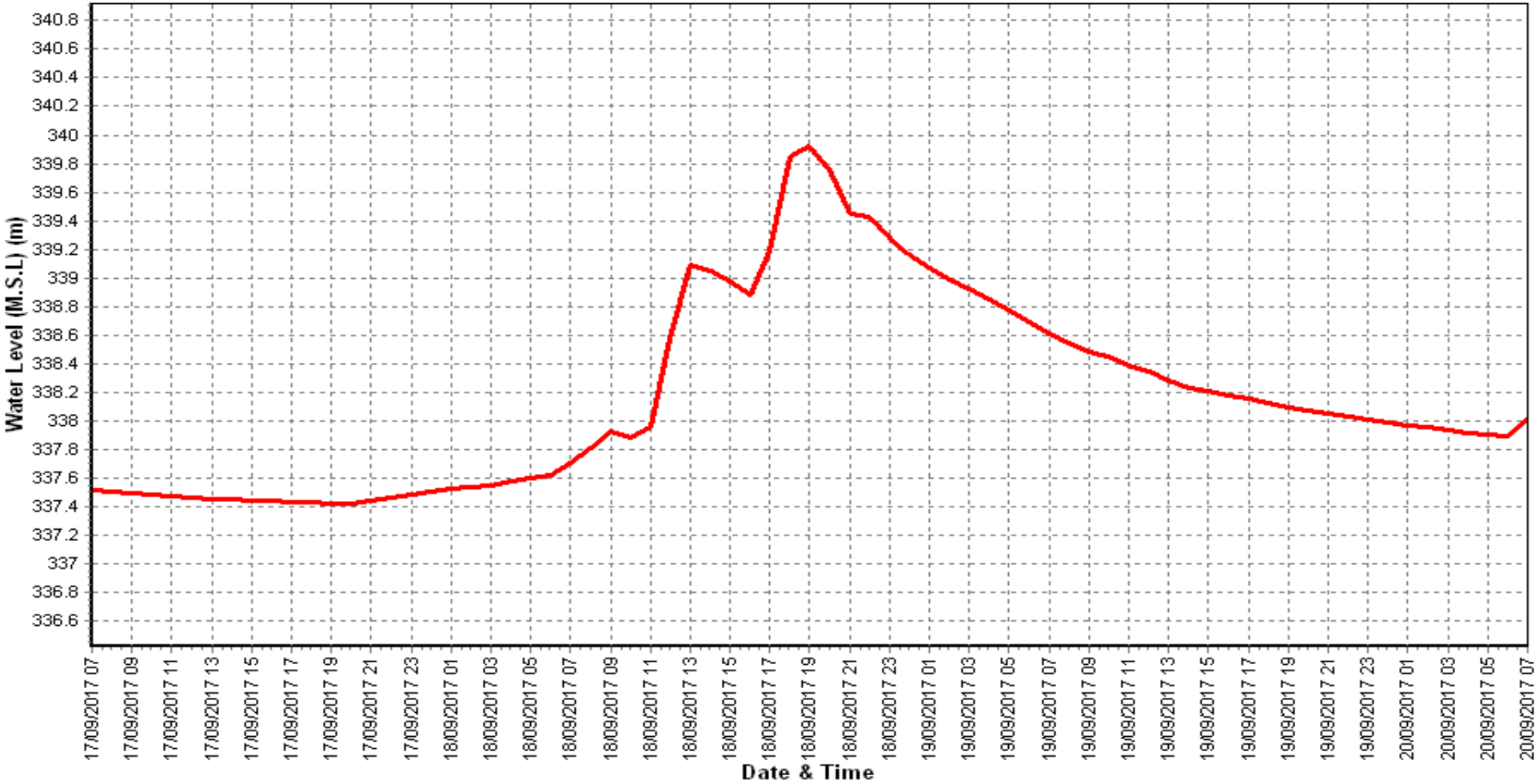
Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : RAMAKONA (AGH4BQ3) **Division : Wainganga Div., Nagpur**

Local River : Khanan **Sub-Division : Upper Wainganga SD, Nagpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**RAJEGAON**	**Code**	:	**AGH4MC3**
State	:	Madhya Pradesh	District		Balaghat
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	Bagh	Local River	:	Bagh
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Upper Wainganga SD, Nagpur
Drainage Area	:	5380 Sq. Km.	Bank	:	Right
Latitude	:	21°37'32"	Longitude	:	80°15'14"
Zero of Gauge (m)	:	272 (m.s.l)	01.12.1985		
		Opening Date	Closing Date		
Gauge	:	06.12.1985	**HFL During 2017-18**	:	**276.240 Meter**
			Corres.Discharge	:	**470.0 Cumecs (Estimated)**
Discharge	:	26.07.1986	**Date & Time of**	:	**29.08.2017**
			Occurance	:	**08.00 Hrs.**
Sediment	:	01.09.2014			
Water Quality	:	01.02.2012			

HFL Recorded so far in m : 285.015 15/09/2005
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1986-1987	3095	280.670	15.08.1986	0.000	0.000	15.07.1986
1987-1988	323.6	276.100	24.08.1987	0.000	273.380	26.04.1988
1988-1989	2192	279.465	01.08.1988	0.060	273.390	27.05.1989
1989-1990	1176	277.625	25.08.1989	0.000	273.520	11.04.1990
1990-1991	3785	280.730	22.07.1990	0.000	0.000	02.06.1990
1991-1992	2739	280.535	24.08.1991	0.000		26.04.1992
1992-1993	3248	280.480	21.08.1992	0.000		02.04.1993
1993-1994	1905	279.530	16.07.1993	0.000		07.05.1994
1994-1995	7431	283.035	06.09.1994	0.000		12.06.1994
1995-1996	3985	280.695	25.07.1995	0.000		10.05.1996
1996-1997	928.7	277.420	17.08.1996	0.000		22.04.1997
1997-1998	4478	282.170	30.07.1997	0.000		14.06.1997
1998-1999	4232	282.400	13.09.1998	0.000	273.910	06.04.1999
1999-2000	3612	281.660	18.09.1999	0.000	273.940	20.03.2000
2000-2001	1892	279.730	20.07.2000	0.000	274.360	25.01.2001
2001-2002	2532	280.025	19.07.2001	0.000		25.01.2002
2002-2003	3973	281.830	18.08.2002	0.000	274.480	25.01.2003
2003-2004	2517	280.300	28.07.2003	0.000	273.290	13.04.2004

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2004-2005	603.9	276.630	10.08.2004	0.000	273.170	03.05.2005
2005-2006	6891	284.200	15.09.2005	0.000		19.06.2005
2006-2007	5519	284.070	14.08.2006	0.000		04.05.2007
2007-2008	2132	279.505	08.07.2007	0.020	273.260	25.06.2007
2008-2009	2646	279.945	11.08.2008	0.001	273.010	03.04.2009
2009-2010	1314	277.630	15.07.2009	0.043	273.100	14.03.2010
2010-2011	2427	279.455	08.09.2010	0.000		03.04.2011
2011-2012	2907	279.780	08.09.2011	0.000		06.04.2012
2012-2013	2567	279.620	05.09.2012	0.000		25.05.2013
2013-2014	3000	280.795	26.07.2013	0.000		01.06.2013
2014-2015	9682	284.260	23.07.2014	0.000	272.800	03.05.2015
2015-2016	1035	277.450	18.09.2015	0.000	273.280	08.02.2016
2016-2017	2750	280.300	07.08.2016	0.000		17.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at RAJEGAON in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**	1403	80	1483
2	**1987-1988**	431	52	484
3	**1988-1989**	2156	40	2196
4	**1989-1990**	1111	29	1140
5	**1990-1991**	3863	158	4021
6	**1991-1992**	2036	58	2094
7	**1992-1993**	1912	30	1942
8	**1993-1994**	1934	45	1979
9	**1994-1995**	11530	196	11726
10	**1995-1996**	3269	63	3332
11	**1996-1997**	1049	32	1081
12	**1997-1998**	2798	407	3205
13	**1998-1999**	2438	197	2635
14	**1999-2000**	3385	91	3476
15	**2000-2001**	1602	14	1616
16	**2001-2002**	2475	8	2483
17	**2002-2003**	2469	9	2479
18	**2003-2004**	3033	92	3125
19	**2004-2005**	945	69	1014
20	**2005-2006**	3651	179	3830
21	**2006-2007**	3394	72	3465
22	**2007-2008**	2060	107	2167
23	**2008-2009**	1815	26	1840
24	**2009-2010**	1165	101	1266
25	**2010-2011**	2845	43	2888
26	**2011-2012**	2710	53	2763
27	**2012-2013**	2416	85	2501
28	**2013-2014**	5368	139	5507
29	**2014-2015**	2965	90	3055
30	**2015-2016**	1412	45	1457
31	**2016-2017**			
32	**2017-2018**	943	34	977
Average		2599	85	2685

Stage-Discharge Data for the period 2017 - 2018

Station Name : RAJEGAON (AGH4MC3) **Division : Wainganga Div., Nagpur**

Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	273.083	1.166	273.770	23.52	274.090	46.56	275.190	220.2	273.850	32.01 *	273.390	12.54
2	273.060	0.941	274.690	109.2 *	273.820	31.24	274.700	110.4 *	274.050	45.47 *	273.360	10.85
3	273.200	3.497	274.360	77.58	273.960	34.94	274.560	93.50 *	274.370	56.83	273.350	11.43
4	273.270	5.299 *	274.605	101.5	273.605	23.53	274.190	48.46	273.905	37.30	273.330	9.237 *
5	273.180	2.972	274.205	50.91	273.570	21.95	274.280	51.26	273.730	30.86	273.310	8.677 *
6	273.180	3.041	273.825	29.09	273.760	26.85 *	274.160	49.24	273.650	25.45	273.290	8.569
7	273.160	1.894	273.680	25.92	273.545	20.99	274.465	86.86	273.600	22.95	273.270	7.733
8	273.080	1.240	273.525	17.08	276.120	421.4	274.195	46.42	273.600	19.00 *	273.270	7.777
9	273.070	1.141	273.350	9.820 *	276.000	374.7	274.135	43.34	273.640	24.53	273.260	7.932
10	273.070	1.216	273.270	10.02	275.150	145.1	274.220	59.21 *	274.385	57.25	273.260	6.776
11	273.110	1.619 *	274.715	95.73	274.830	103.7	274.080	40.04	274.260	53.20	273.240	7.446
12	273.100	1.239	274.300	59.58	274.440	71.71	274.245	52.61	274.100	47.59	273.240	6.877 *
13	273.590	16.17	274.080	50.72	274.210	58.34 *	274.420	69.04	274.050	47.65	273.230	7.444
14	273.350	8.302	274.660	84.08	273.965	40.35	274.365	65.24	274.385	57.11	273.230	7.373
15	273.440	11.57	273.910	35.28	274.760	118.2 *	274.235	52.46	274.140	52.47 *	273.230	6.624
16	273.290	7.562	274.600	98.16 *	274.200	48.35	273.995	40.40	273.970	43.27	273.220	6.598
17	273.150	1.595	274.455	93.81	273.885	34.97	273.790	28.51 *	273.890	38.13	273.210	6.245
18	273.300	6.177 *	275.870	361.9	275.480	259.2	274.335	65.88	273.840	36.19	273.210	6.169
19	273.230	4.218 #	275.770	331.1	275.230	222.8	274.480	71.99	273.790	28.51 *	273.210	6.181 *
20	273.140	2.173 #	276.080	438.0	274.820	126.3 *	274.620	99.67	273.790	33.07	273.200	4.805
21	273.080	1.135 #	275.260	174.2	274.500	87.24	275.600	334.1	273.790	30.42	273.190	4.939
22	273.140	2.022	275.200	161.6	274.620	95.51	275.240	210.9	273.790	28.51 *	273.180	4.796
23	273.140	1.804	274.920	140.5 *	274.195	49.43	274.760	117.7	273.780	31.36	273.170	4.463
24	273.280	6.662	274.470	76.25	273.950	40.28	274.450	81.38 *	273.730	29.45	273.180	4.960
25	273.150	2.372 *	274.325	60.80	274.380	74.18 *	274.215	57.91	273.690	27.29	273.180	4.458
26	273.120	1.797 *	274.155	48.73	275.130	187.7	274.040	42.28	273.630	25.73	273.180	5.529 *
27	273.170	3.121	274.165	48.01	274.580	95.81 *	273.900	36.30	273.650	25.00	273.180	4.183
28	273.600	20.13	274.325	67.77	275.740	336.9	273.800	33.26	273.560	22.64	273.180	4.440
29	274.355	69.45	274.360	72.96	276.200	446.4	273.770	32.68	273.410	11.70 *	273.170	4.087
30	274.250	55.77	274.150	53.29 *	275.850	335.6	273.760	26.85 *	273.350	13.06	273.170	4.217
31			274.110	47.38	275.170	218.2			273.390	12.46		
Ten-Daily Mean												
I Ten-Daily	273.135	2.241	273.928	45.46	274.362	114.7	274.409	80.89	273.878	35.16	273.309	9.153
II Ten-Daily	273.270	6.063	274.844	164.8	274.582	108.4	274.257	58.58	274.022	43.72	273.222	6.576
III Ten-Daily	273.429	16.43	274.495	86.50	274.938	178.8	274.354	97.33	273.615	23.42	273.178	4.607
Monthly												
Min.	273.060	0.941	273.270	9.820	273.545	20.99	273.760	26.85	273.350	11.70	273.170	4.087
Max.	274.355	69.45	276.080	438.0	276.200	446.4	275.600	334.1	274.385	57.25	273.390	12.54
Mean	273.278	8.243	274.424	98.53	274.637	135.4	274.340	78.94	273.831	33.76	273.236	6.779

Annual Runoff in MCM = 977 Annual Runoff in mm = 182

Peak Observed Discharge = 446.4 cumecs on 29/08/2017 Corres. Water Level :276.2 m

Lowest Observed Discharge = 0.000 cumecs on 07/03/2018

Stage-Discharge Data for the period 2017 - 2018

Station Name : RAJEGAON (AGH4MC3) **Division : Wainganga Div., Nagpur**

Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	273.170	4.249 *	273.100	2.850	273.000	1.094	272.910	0.270		0.000		0.000
2	273.170	4.237	273.100	2.841	272.990	0.996	272.910	0.228 *		0.000		0.000
3	273.170	4.249 *	273.100	2.852	272.980	0.800	272.910	0.280		0.000		0.000
4	273.170	4.479	273.090	2.989	272.980	0.812 *	272.880	0.088 *		0.000		0.000
5	273.170	3.968	273.080	2.776	272.980	0.731	272.850	0.017		0.000		0.000
6	273.160	3.561	273.080	2.747	272.980	0.619	272.850	0.018		0.000		0.000
7	273.160	3.590	273.080	2.281 *	272.980	0.569		0.000		0.000		0.000
8	273.160	3.729	273.080	2.662	272.970	0.555		0.000		0.000		0.000
9	273.170	4.239	273.060	2.412	272.970	0.543		0.000		0.000		0.000
10	273.170	4.249 *	273.060	2.557	272.970	0.544		0.000		0.000		0.000
11	273.160	4.220	273.060	2.372	272.970	0.706 *		0.000		0.000		0.000
12	273.150	3.815	273.060	2.347	272.970	0.559		0.000		0.000		0.000
13	273.140	3.499	273.060	2.362	272.970	0.563		0.000		0.000		0.000
14	273.130	3.098	273.060	1.927 *	272.970	0.560		0.000		0.000		0.000
15	273.140	3.308	273.050	2.385	272.980	0.537		0.000		0.000		0.000
16	273.160	4.026	273.060	2.584	272.980	0.557		0.000		0.000		0.000
17	273.160	4.000 *	273.040	1.604 #	272.970	0.548		0.000		0.000		0.000
18	273.170	4.357	273.040	1.604 #	272.970	0.706 *		0.000		0.000		0.000
19	273.140	3.697	273.040	1.604 #	272.970	0.553		0.000		0.000		0.000
20	273.140	3.349	273.040	1.604 #	272.970	0.550		0.000		0.000		0.000
21	273.130	3.415	273.050	1.761 *	272.970	0.548		0.000		0.000		0.000
22	273.130	3.268	273.050	1.761 #	272.970	0.531		0.000		0.000		0.000
23	273.130	3.266	273.040	1.604 #	272.960	0.431		0.000		0.000		0.000
24	273.120	3.080 *	273.030	1.891	272.960	0.429		0.000		0.000		0.000
25	273.120	3.080 *	273.020	1.640	272.930	0.357 *		0.000		0.000		0.000
26	273.110	3.091	273.020	1.309 *	272.910	0.285		0.000		0.000		0.000
27	273.110	3.008	273.020	1.620	272.910	0.276		0.000		0.000		0.000
28	273.100	2.909	273.010	1.174 *	272.910	0.288		0.000		0.000		0.000
29	273.100	2.597	273.000	1.118				0.000		0.000		0.000
30	273.100	2.589	273.000	1.123				0.000		0.000		0.000
31	273.100	2.666 *	273.000	1.129				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	273.167	4.055	273.083	2.697	272.980	0.726	272.885	0.090		0.000		0.000
II Ten-Daily	273.149	3.737	273.051	2.039	272.972	0.584		0.000		0.000		0.000
III Ten-Daily	273.114	2.997	273.022	1.467	272.940	0.393		0.000		0.000		0.000
Monthly												
Min.	273.100	2.589	273.000	1.118	272.910	0.276	272.850	0.000		0.000		0.000
Max.	273.170	4.479	273.100	2.989	273.000	1.094	272.910	0.280		0.000		0.000
Mean	273.142	3.577	273.051	2.048	272.966	0.580	272.885	0.029		0.000		0.000

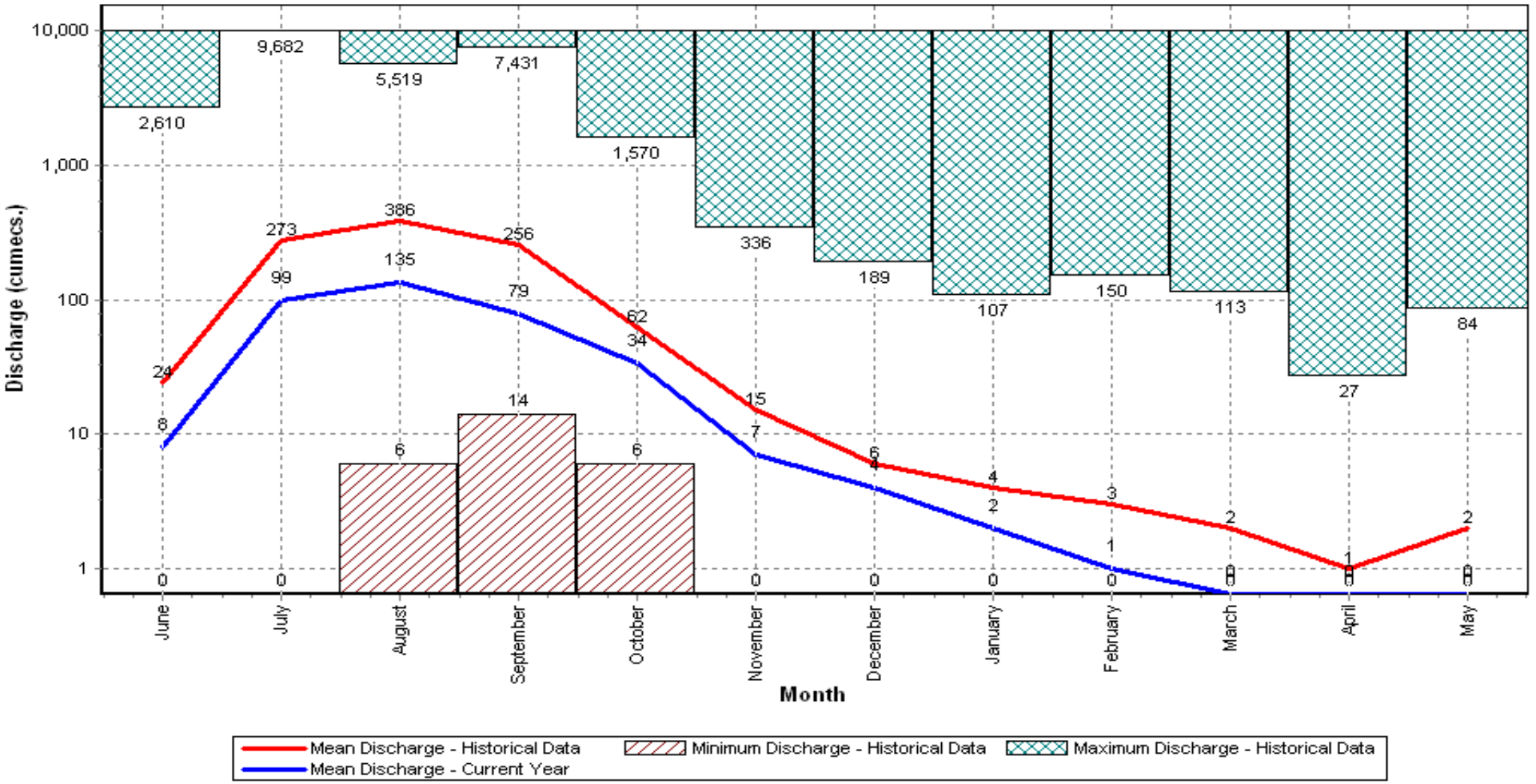
Peak Computed Discharge = 140.5 cumecs on 23/07/2017 Corres. Water Level :274.920 m

Lowest Computed Discharge = 0.088 cumecs on 04/03/2018 Corres. Water Level :272.880 m

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : RAJEGAON (AGH4MC3) **Data considered : 1986-2018** **Division : Wainganga Div., Nagpur**

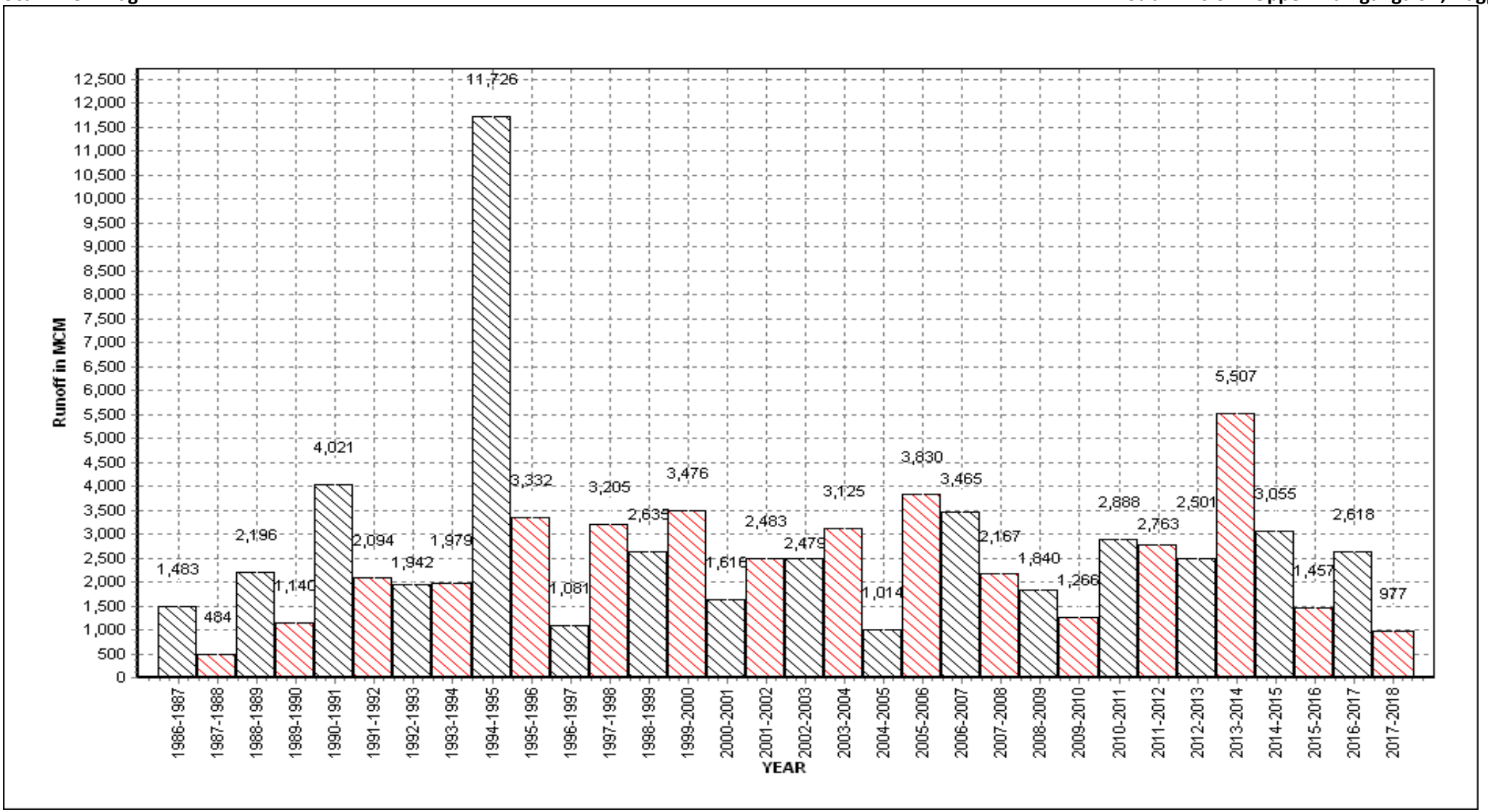
Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**



Annual Runoff Values for the period: 1986 - 2018

Station Name : RAJEGAON (AGH4MC3) **Division : Wainganga Div., Nagpur**

Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**

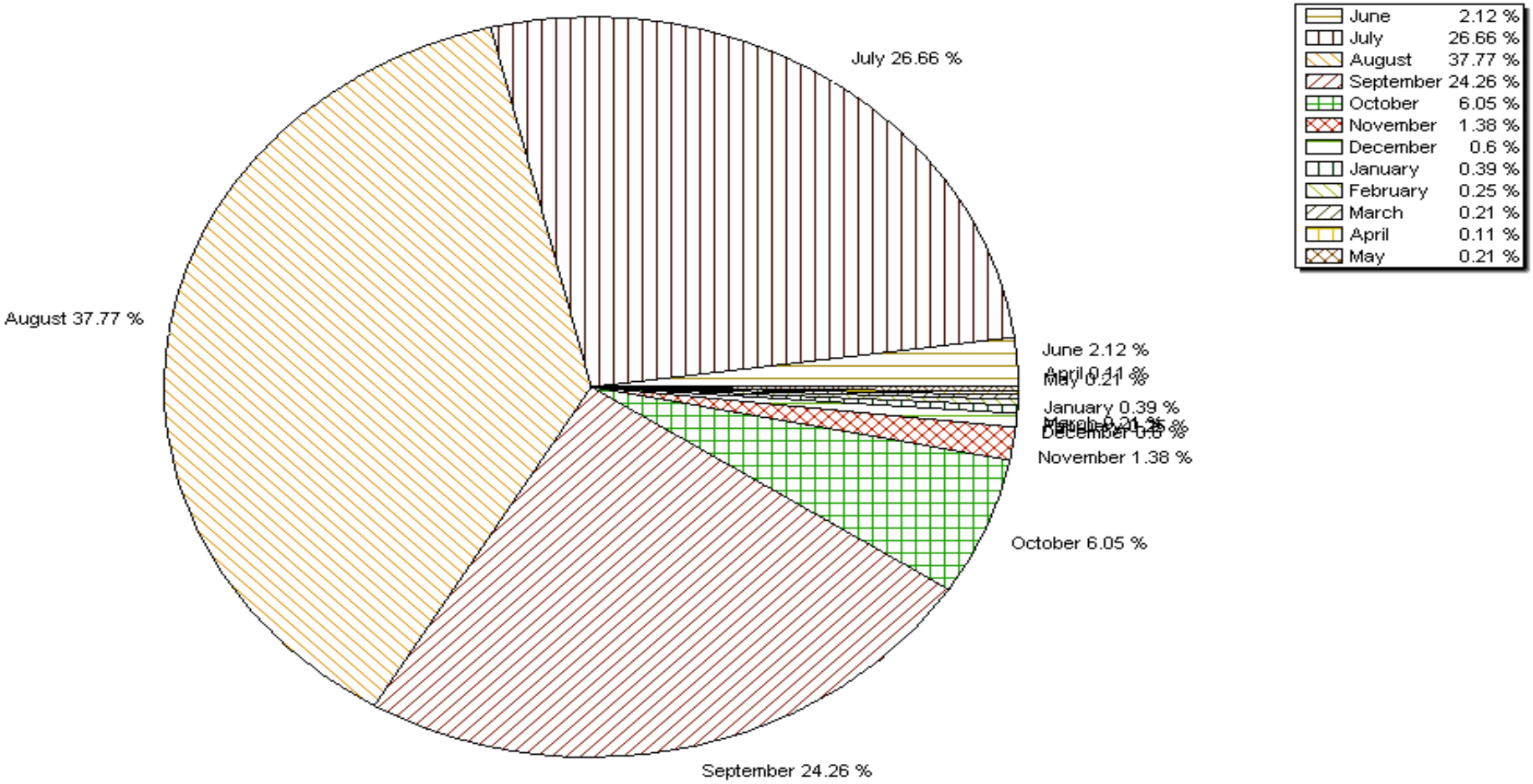


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1986-2017

Station Name : RAJEGAON (AGH4MC3) **Division : Wainganga Div., Nagpur**

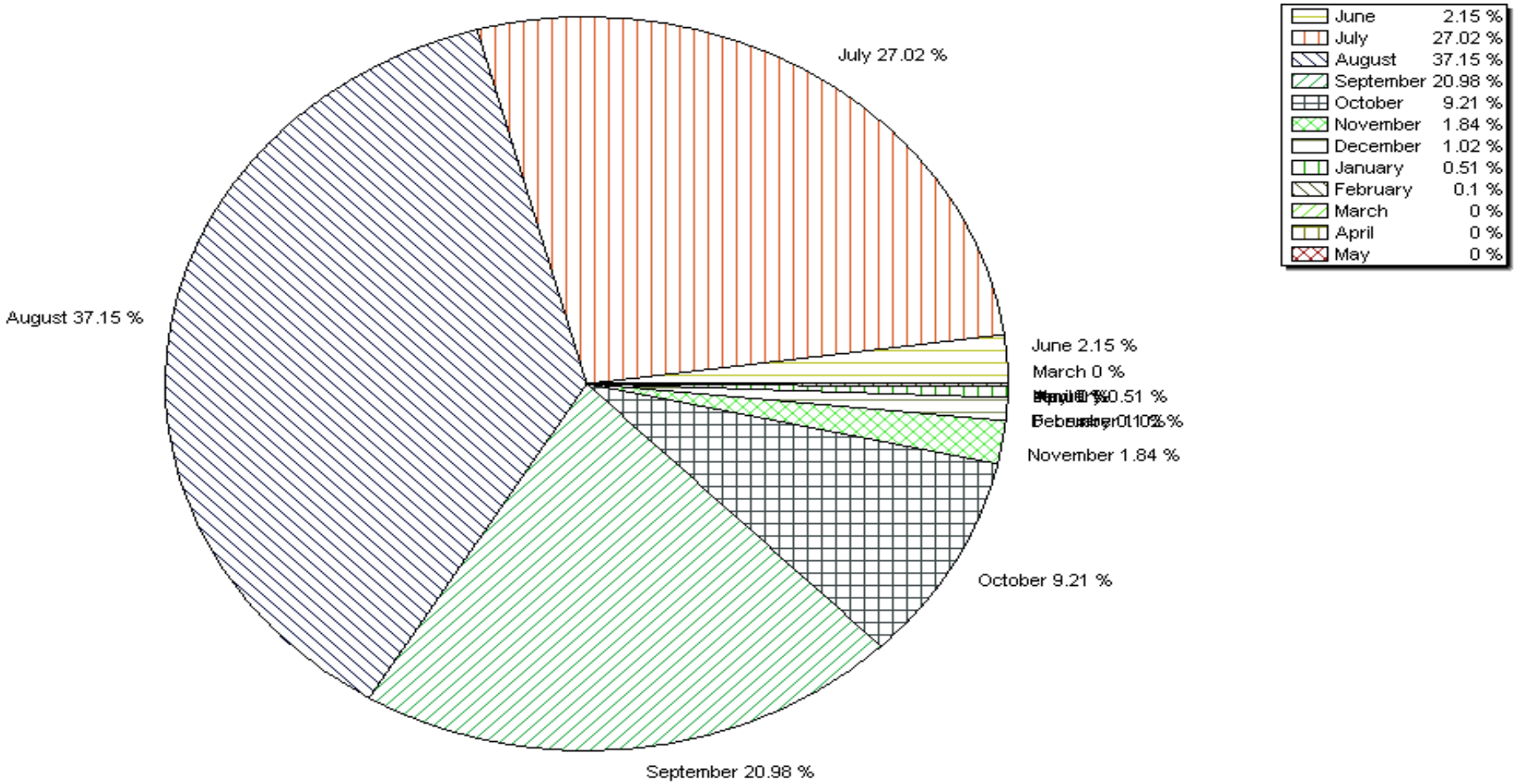
Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**



Monthly Runoff for the Year : 2017-2018

Station Name : RAJEGAON (AGH4MC3) **Division : Wainganga Div., Nagpur**

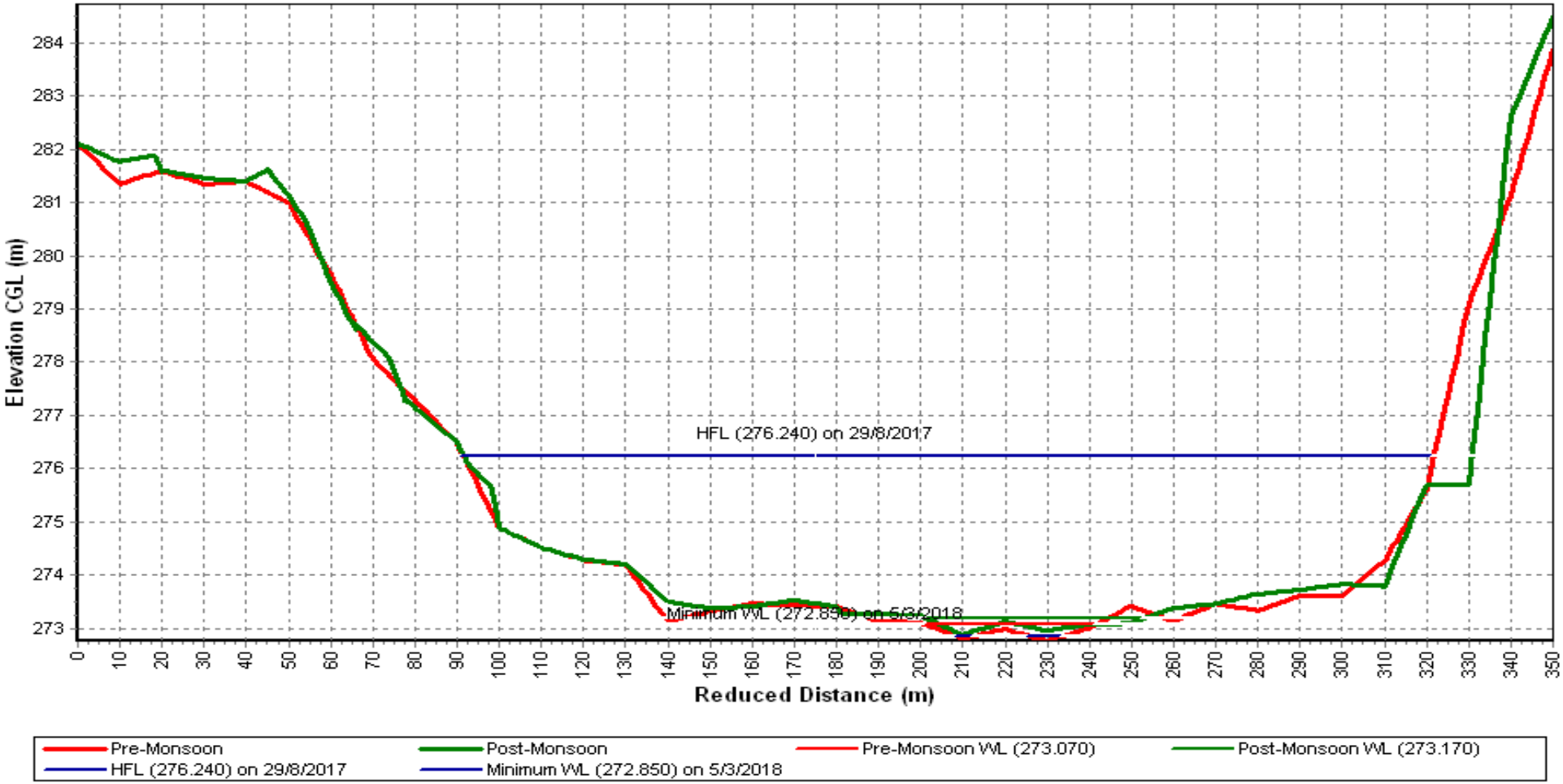
Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : RAJEGAON (AGH4MC3) **Division : Wainganga Div., Nagpur**

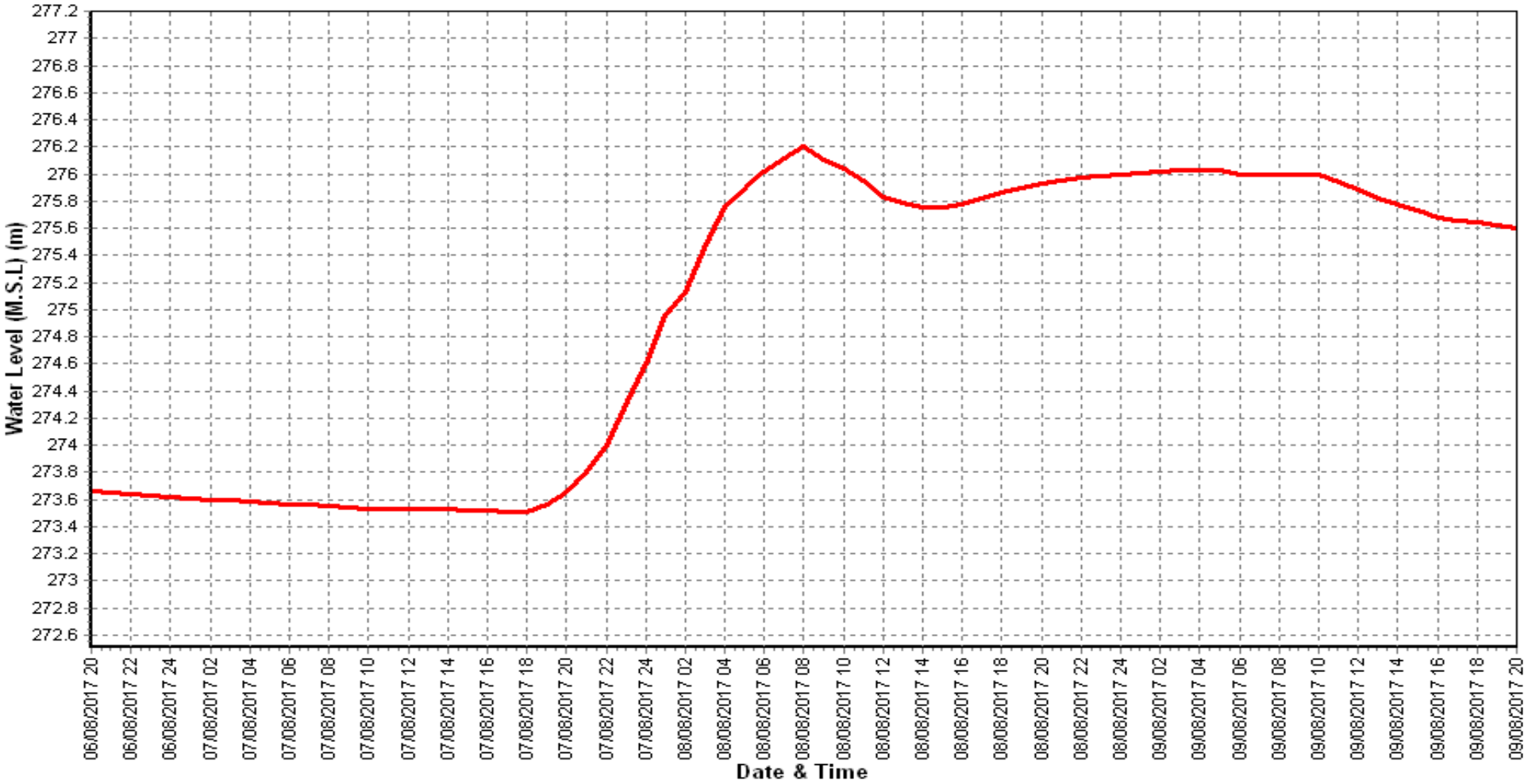
Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**



Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : RAJEGAON (AGH4MC3) **Division : Wainganga Div., Nagpur**

Local River : Bagh **Sub-Division : Upper Wainganga SD, Nagpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**KUMHARI**	**Code**	:	**AGH40R6**
State	:	Madhya Pradesh	District		Balaghat
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	-	Local River	:	Wainganga
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Upper Wainganga SD, Nagpur
Drainage Area	:	8070 Sq. Km.	Bank	:	Left
Latitude	:	21°53'03"	Longitude	:	80°10'36"
Zero of Gauge (m)	:	289 (m.s.l)	01.12.1986		
		Opening Date	Closing Date		
Gauge	:	01.12.1986	**HFL During 2017-18**	:	**293.000 Meter**
			Corres.Discharge	:	**753.5 Cumecs (Estimated)**
Discharge	:	01.12.1986	**Date & Time of**	:	**20.07.2017**
			Occurance	:	**24.00 Hrs.**
Sediment	:	01.09.2014			
Water Quality	:	01.02.2012			

HFL Recorded so far in m : 305.5 21/07/1994
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1986-1987	17.80	293.075	19.02.1987	0.000		08.10.1986
1987-1988	372.0	294.230	14.07.1987	0.000	291.325	18.06.1987
1988-1989	1784	296.830	28.07.1988	0.420	291.535	25.05.1989
1989-1990	897.5	294.723	26.08.1989	0.529	291.520	10.06.1989
1990-1991	2651	297.900	16.07.1990	0.700	291.550	06.06.1990
1991-1992	3289	299.175	24.08.1991	0.320	291.550	25.05.1992
1992-1993	2798	300.125	16.08.1992	0.190	291.680	20.05.1993
1993-1994	1414	295.105	16.07.1993	0.240	291.660	15.06.1993
1994-1995	8158	304.030	22.07.1994	0.400	291.470	04.06.1994
1995-1996	1748	296.550	20.07.1995	0.500	291.400	28.05.1996
1996-1997	1023	294.840	17.08.1996	0.280	291.320	28.04.1997
1997-1998	4380	300.120	25.07.1997	0.726	291.350	16.06.1997
1998-1999	2823	298.195	14.09.1998	0.990	291.440	27.04.1999
1999-2000	7269	303.920	17.09.1999	0.470	291.680	06.04.2000
2000-2001	2498	297.320	28.07.2000	0.263	291.390	10.05.2001
2001-2002	3434	298.670	14.08.2001	0.658	291.380	04.06.2001
2002-2003	16747	304.335	18.08.2002	0.562	291.210	23.05.2003
2003-2004	3410	298.250	15.09.2003	0.006	290.230	01.06.2003

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2004-2005	1165	294.085	23.08.2004	0.439	290.560	23.05.2005
2005-2006	4645	299.600	16.09.2005	0.336	290.530	19.06.2005
2006-2007	8767	302.620	14.08.2006	1.490	290.650	29.06.2006
2007-2008	1348	294.550	10.09.2007	0.000	290.860	26.07.2007
2008-2009	1431	294.405	01.08.2008	0.417	290.270	12.05.2009
2009-2010	3331	298.150	22.07.2009	0.461	290.260	01.06.2009
2010-2011	2740	296.700	08.09.2010	0.584	290.370	06.06.2010
2011-2012	2654	296.100	07.09.2011	0.750	290.640	28.05.2012
2012-2013	3096	296.450	31.07.2012	0.649	290.640	17.06.2012
2013-2014	10236	300.200	26.07.2013	0.640	290.550	02.06.2013
2014-2015	1969	295.500	23.07.2014	0.409	290.500	12.07.2014
2015-2016	1091	294.060	05.08.2015	0.411	290.280	29.05.2016
2016-2017	6133	297.330	09.07.2016	0.255	290.080	28.05.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at KUMHARI in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**	0	44	44
2	**1987-1988**	566	52	618
3	**1988-1989**	3525	38	3563
4	**1989-1990**	1016	26	1042
5	**1990-1991**	4845	173	5017
6	**1991-1992**	1620	26	1647
7	**1992-1993**	2590	48	2638
8	**1993-1994**	2901	102	3004
9	**1994-1995**	9667	162	9829
10	**1995-1996**	2623	108	2731
11	**1996-1997**	1605	87	1692
12	**1997-1998**	3044	1148	4192
13	**1998-1999**	3264	286	3550
14	**1999-2000**	5881	227	6108
15	**2000-2001**	1756	94	1850
16	**2001-2002**	2143	115	2258
17	**2002-2003**	3313	143	3456
18	**2003-2004**	3701	166	3866
19	**2004-2005**	1071	130	1200
20	**2005-2006**	3508	270	3778
21	**2006-2007**	3969	223	4191
22	**2007-2008**	2147	218	2365
23	**2008-2009**	1858	140	1998
24	**2009-2010**	2020	228	2248
25	**2010-2011**	3142	238	3380
26	**2011-2012**	3176	218	3394
27	**2012-2013**	2831	187	3018
28	**2013-2014**	7078	301	7379
29	**2014-2015**	1415	243	1658
30	**2015-2016**	955	130	1085
31	**2016-2017**			
32	**2017-2018**	936	83	1019
Average		2844	182	3026

Stage-Discharge Data for the period 2017 - 2018

Station Name : KUMHARI (AGH40R6) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	290.170	0.944	291.640	192.7 #	290.805	38.95	291.440	154.7	290.580	17.57 *	290.510	8.080 #
2	290.150	0.905	291.320	117.1 *	290.800	37.04	291.320	117.1 *	290.610	19.75 *	290.500	6.865 #
3	290.130	0.504 #	291.975	325.9	290.880	46.36	291.080	73.82 *	290.580	13.89	290.510	8.080 #
4	290.140	0.605 *	291.370	138.5	290.895	46.14	290.915	52.30	290.570	12.57	290.500	6.865 *
5	290.140	0.767	291.160	93.89	290.735	27.73	290.820	43.14	290.560	11.48	290.490	5.766 *
6	290.140	0.754	291.130	74.17	290.650	22.88 *	290.745	30.11	290.630	17.36	290.490	5.766 #
7	290.170	1.076	290.880	57.12	290.620	19.96	290.695	24.20	290.620	18.27	290.470	3.908 #
8	290.150	0.821	290.720	29.47	291.850	189.6	290.725	28.76	290.610	19.75 *	290.470	2.998
9	290.130	0.597	290.620	20.51 *	291.590	179.5 #	290.765	30.66	290.620	18.02	290.460	2.831
10	290.130	0.506	290.595	20.69	291.520	161.8 #	290.860	43.68 *	290.720	26.32	290.450	2.467 #
11	290.130	0.504 *	291.040	65.37	291.420	155.7	291.380	151.0	290.725	28.54	290.440	1.891 #
12	290.130	0.535	290.845	36.49	291.350	137.0	291.170	114.4	290.725	30.04	290.430	1.404 *
13	290.130	0.528	290.755	29.42	290.980	59.03 *	291.360	125.4 #	290.625	17.56	290.420	1.003 #
14	290.130	0.475	290.610	18.01	290.825	47.27	291.410	167.3	290.610	16.04	290.420	1.003 #
15	290.130	0.504	290.540	14.31	290.800	36.97 *	291.310	149.0	290.610	19.75 *	290.410	0.679 #
16	290.130	0.530	292.250	397.6 *	290.755	31.68	291.045	80.43	290.570	12.60	290.410	0.679 #
17	290.130	0.443	291.245	127.1	290.670	21.07	290.850	42.52 *	290.550	11.98	290.400	0.429 #
18	290.120	0.413 *	292.005	315.7	291.220	100.2	290.850	50.51	290.530	10.57	290.400	0.429 #
19	290.120	0.418	291.620	199.1 *	290.940	55.62	291.980	317.0	290.520	13.64 *	290.430	1.404 *
20	290.150	0.729	292.500	491.7	290.770	33.85 *	291.470	165.0	290.520	9.461	290.470	2.986
21	290.140	0.648	292.400	468.4	290.720	29.10	291.700	237.1	290.510	8.477	290.490	7.909
22	290.210	2.096	291.620	205.3	290.690	26.51	292.130	398.9	290.490	11.88 *	290.490	7.864
23	290.140	0.605 #	291.290	111.1 *	290.645	27.77	291.670	266.4	290.505	11.30	290.520	9.336
24	290.120	0.413 #	290.995	57.76	290.590	19.16	291.260	105.2 *	290.590	15.64	290.520	7.798
25	290.100	0.328 *	290.920	49.39	290.895	50.91	291.030	66.19 #	290.570	16.04	290.530	9.071
26	290.130	0.504 *	290.885	41.41	290.895	50.91	290.855	41.83	290.560	15.10	290.530	10.88 *
27	290.780	34.87 #	291.070	62.49	290.740	30.88 *	290.725	38.12	290.510	8.883	290.520	8.893
28	290.730	30.11 #	290.900	46.81	291.280	145.4	290.680	31.88	290.550	12.02	290.510	8.488
29	291.020	57.08	290.988	58.30	292.940	675.2	290.615	22.29	290.530	10.88 *	290.510	8.694
30	291.090	64.50	290.820	39.14 *	292.160	337.7	290.590	18.28 *	290.510	9.601	290.490	5.766 #
31			290.680	20.84	291.655	199.7			290.500	9.108		
Ten-Daily Mean												
I Ten-Daily	290.145	0.748	291.141	107.0	291.035	77.00	290.936	59.84	290.610	17.50	290.485	5.363
II Ten-Daily	290.130	0.508	291.341	169.5	290.973	67.84	291.283	136.3	290.599	17.02	290.423	1.191
III Ten-Daily	290.446	19.12	291.143	105.5	291.201	144.8	291.126	122.6	290.530	11.72	290.511	8.470
Monthly												
Min.	290.100	0.328	290.540	14.31	290.590	19.16	290.590	18.28	290.490	8.477	290.400	0.429
Max.	291.090	64.50	292.500	491.7	292.940	675.2	292.130	398.9	290.725	30.04	290.530	10.88
Mean	290.240	6.791	291.206	126.6	291.074	98.11	291.115	106.2	290.578	15.29	290.473	5.008

Annual Runoff in MCM = 1019 Annual Runoff in mm = 126

Peak Observed Discharge = 675.2 cumecs on 29/08/2017 Corres. Water Level :292.940 m

Lowest Observed Discharge = 0.154 cumecs on 26/05/2018 Corres. Water Level :290.190 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : KUMHARI (AGH40R6) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	290.500	9.843 *	290.470	6.220	290.260	1.465	290.470	7.471	290.180	0.440 *	290.200	0.253
2	290.520	10.12	290.380	5.571	290.260	1.577	290.410	5.695 *	290.180	0.413	290.200	0.248
3	290.530	11.52 *	290.380	5.209	290.260	1.313	290.390	4.973	290.180	0.404	290.190	0.236
4	290.530	11.24	290.590	17.47	290.250	1.321 *	290.380	4.596 *	290.180	0.394	290.200	0.243
5	290.510	10.54	290.610	17.90	290.250	1.209	290.430	5.678	290.180	0.429	290.190	0.241
6	290.520	10.72	290.600	17.38	290.250	1.216	290.320	2.724	290.180	0.416	290.190	0.202 *
7	290.470	7.662	290.610	16.78	290.250	1.252	290.270	1.784	290.170	0.413	290.190	0.245
8	290.470	7.489	290.600	17.76	290.250	1.270	290.240	1.522	290.170	0.358 *	290.190	0.184
9	290.460	6.814	290.580	15.16	290.250	1.124	290.230	1.013 #	290.180	0.440 #	290.190	0.191
10	290.440	6.932 *	290.590	18.27	290.240	1.130	290.220	0.876 #	290.180	0.334	290.190	0.199
11	290.440	6.611	290.570	14.07	290.240	1.161 *	290.220	0.876 *	290.180	0.339	290.190	0.196
12	290.410	5.324	290.560	14.12	290.260	1.817	290.210	0.938	290.180	0.336	290.190	0.203
13	290.430	5.807	290.550	13.86	290.270	1.475	290.210	0.751 #	290.190	0.533 #	290.190	0.202 *
14	290.420	5.131	290.560	13.36 *	290.320	2.345	290.210	0.870	290.200	0.637 #	290.190	0.239
15	290.390	4.401	290.560	15.29	290.830	38.86	290.210	0.930	290.250	0.541 *	290.190	0.223
16	290.425	5.347	290.570	15.90	290.730	22.02	290.200	0.637 #	290.250	0.546	290.190	0.211
17	290.360	3.938 *	290.530	11.30	290.650	19.95	290.200	0.637 #	290.260	0.591	290.190	0.222
18	290.300	2.491	290.500	9.415	290.580	14.68 *	290.200	0.637 *	290.250	0.513	290.190	0.243
19	290.300	2.508	290.420	6.468	290.540	11.44	290.200	0.575	290.240	0.452	290.190	0.223
20	290.310	2.341	290.410	6.599	290.520	11.35	290.190	0.651	290.230	0.420	290.190	0.202 *
21	290.310	2.194	290.400	5.313 *	290.530	12.49	290.190	0.620	290.220	0.374	290.180	0.160
22	290.360	3.330	290.420	6.419	290.540	12.03	290.190	0.593	290.220	0.352 *	290.180	0.159
23	290.360	3.317	290.420	6.573	290.540	11.66	290.190	0.605	290.210	0.309	290.190	0.155
24	290.360	3.938 *	290.420	6.642	290.520	11.15	290.180	0.583	290.210	0.323	290.190	0.170
25	290.360	3.938 *	290.420	6.190	290.510	10.39 *	290.180	0.440 *	290.210	0.281	290.190	0.173
26	290.400	5.313 #	290.400	5.313 *	290.500	10.44	290.190	0.588	290.210	0.297	290.190	0.154
27	290.500	10.71	290.310	2.555	290.500	10.77	290.190	0.475	290.210	0.305	290.190	0.202 *
28	290.520	10.99	290.290	2.087 *	290.520	11.29	290.190	0.454	290.200	0.296	290.190	0.163
29	290.480	8.355	290.280	2.097			290.190	0.533 *	290.200	0.248 *	290.190	0.172
30	290.490	8.962	290.270	2.054			290.180	0.440 *	290.200	0.248 *	290.180	0.162
31	290.480	8.807 *	290.260	1.723			290.180	0.473			290.180	0.159
Ten-Daily Mean												
I Ten-Daily	290.495	9.289	290.541	13.77	290.252	1.288	290.336	3.633	290.178	0.404	290.193	0.224
II Ten-Daily	290.378	4.390	290.523	12.04	290.494	12.51	290.205	0.750	290.223	0.491	290.190	0.216
III Ten-Daily	290.420	6.351	290.354	4.270	290.520	11.28	290.186	0.528	290.209	0.303	290.186	0.166
Monthly												
Min.	290.300	2.194	290.260	1.723	290.240	1.124	290.180	0.440	290.170	0.248	290.180	0.154
Max.	290.530	11.52	290.610	18.27	290.830	38.86	290.470	7.471	290.260	0.637	290.200	0.253
Mean	290.431	6.666	290.469	9.841	290.415	8.150	290.241	1.601	290.203	0.399	290.190	0.201

Peak Computed Discharge = 397.6 cumecs on 16/07/2017 Corres. Water Level :292.250 m

Lowest Computed Discharge = 0.202 cumecs on 06/05/2018 Corres. Water Level :290.190 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

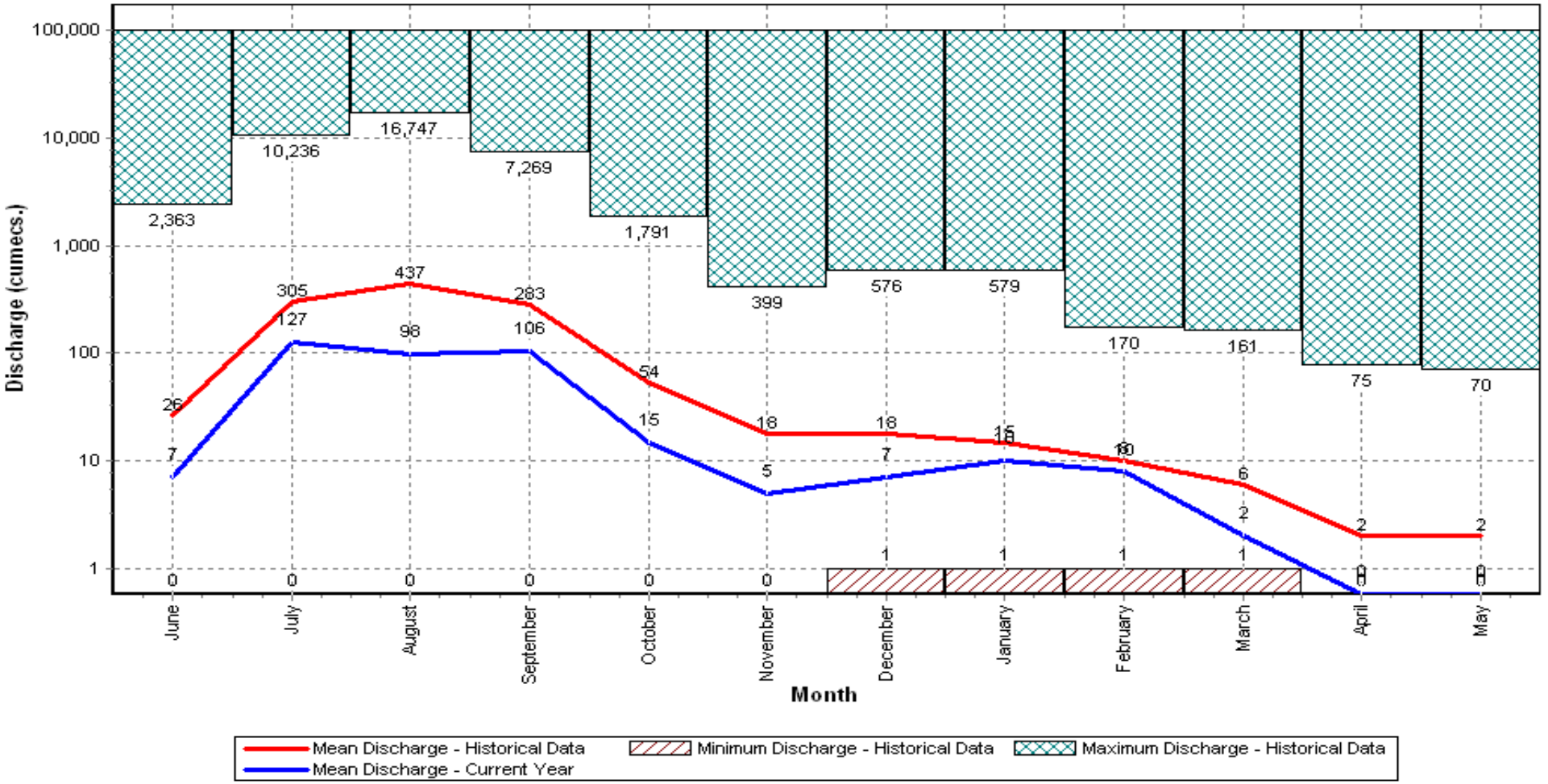
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : KUMHARI (AGH40R6) | **Data considered : 1986-2018** | **Division : Wainganga Div., Nagpur**

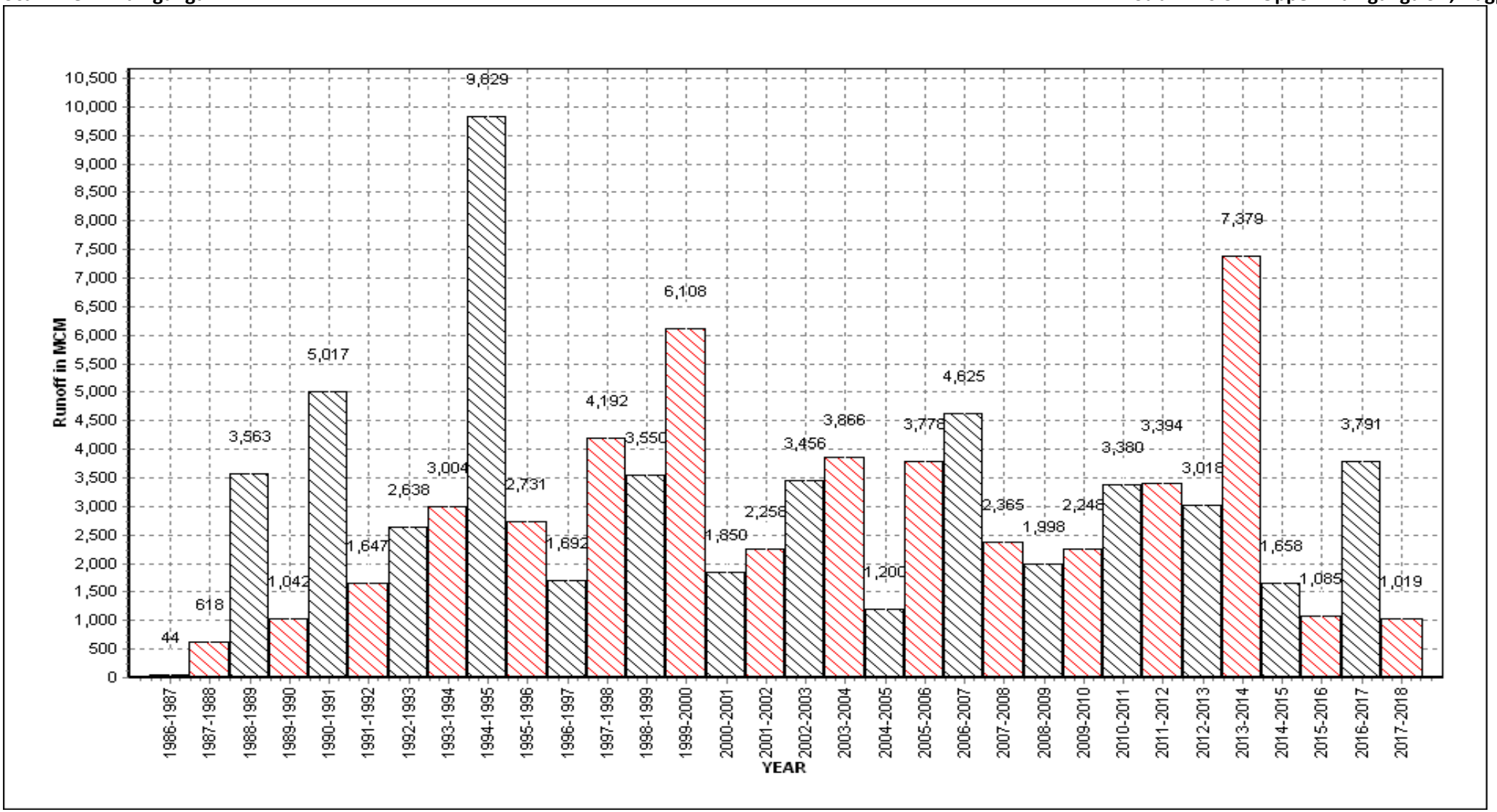
Local River : Wainganga | **Sub-Division : Upper Wainganga SD, Nagpur**



Annual Runoff Values for the period: 1986 - 2018

Station Name : KUMHARI (AGH40R6) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**

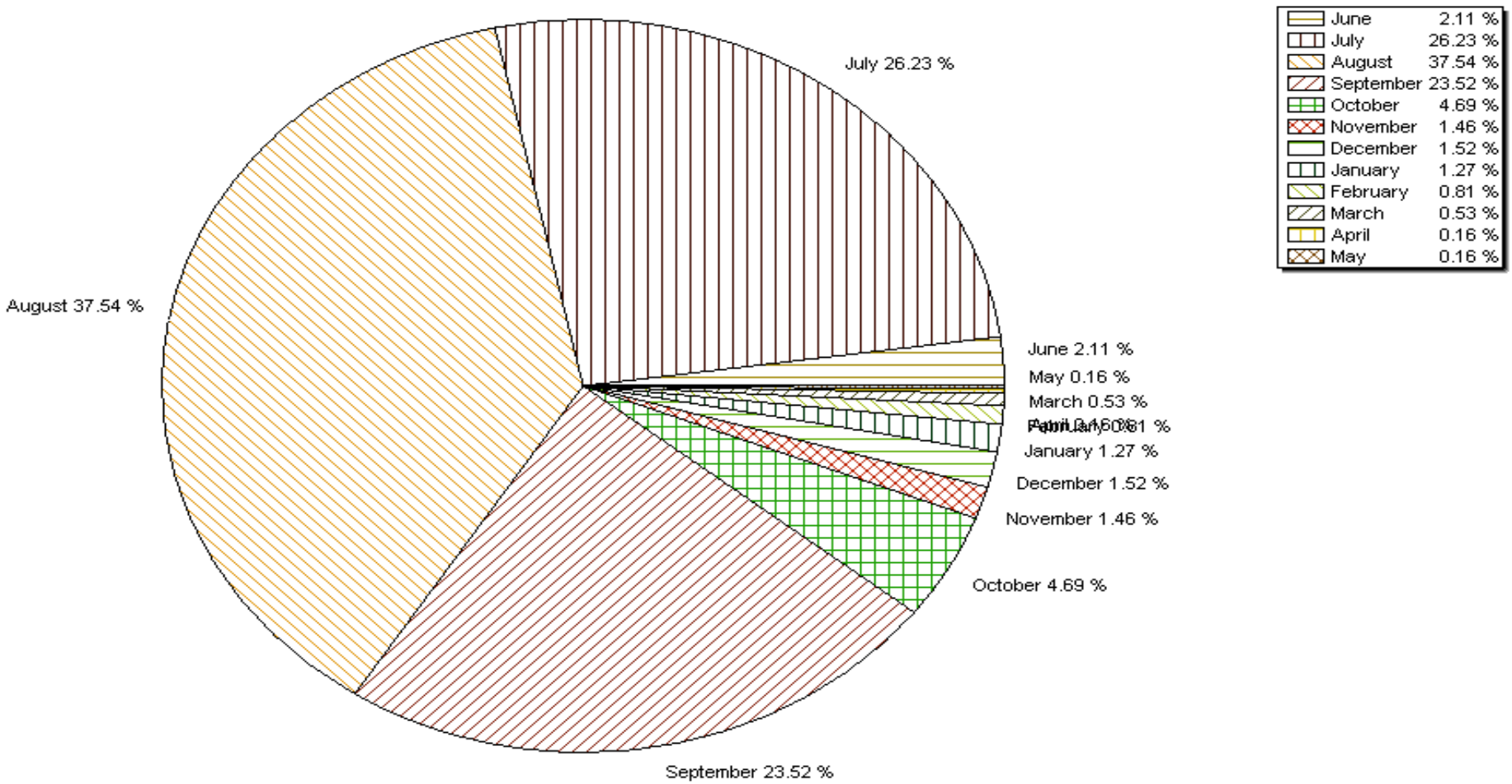


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1986-2017

Station Name : KUMHARI (AGH40R6) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**



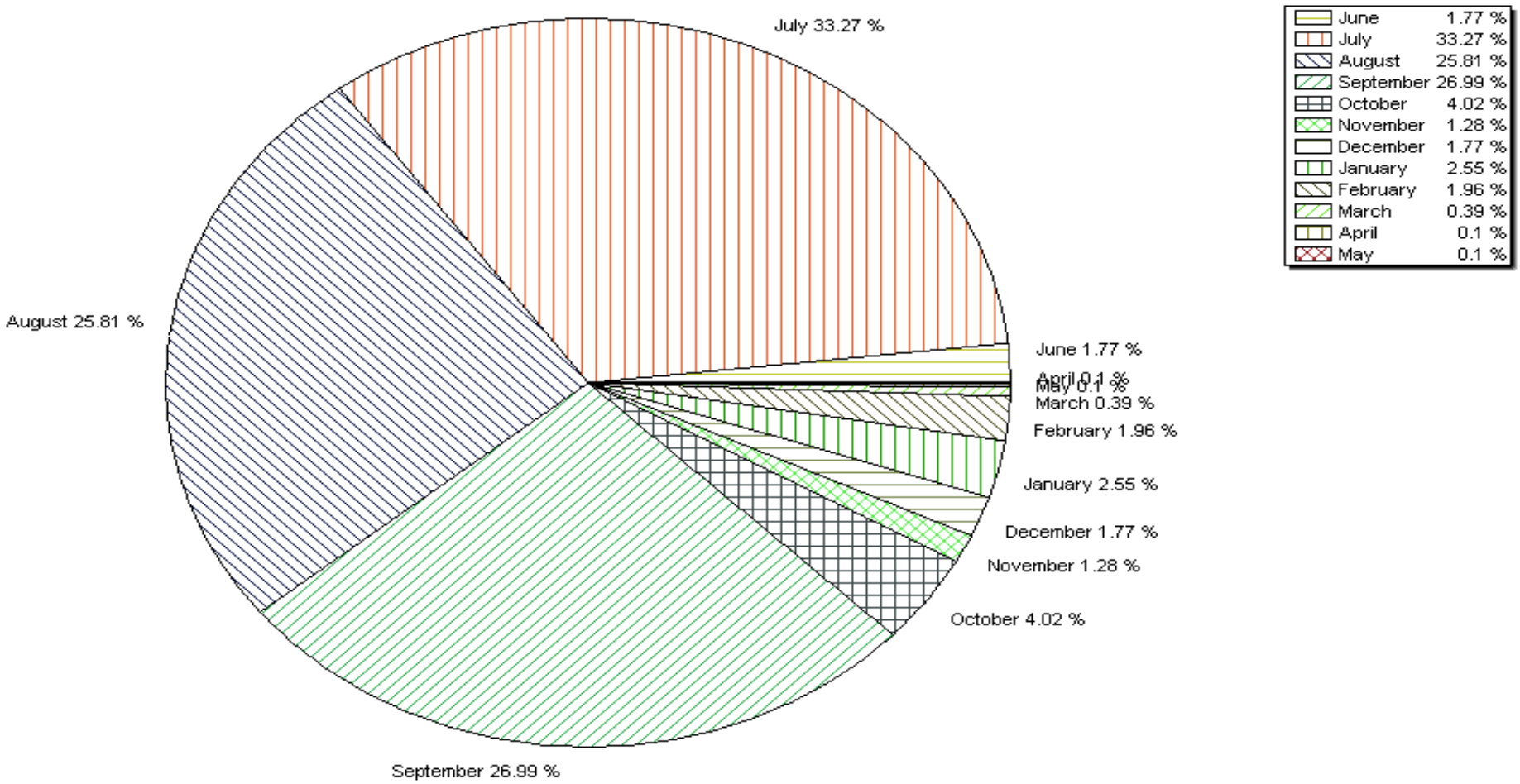
Monthly Runoff for the Year : 2017-2018

Station Name : KUMHARI (AGH40R6)

Division : Wainganga Div., Nagpur

Local River : Wainganga

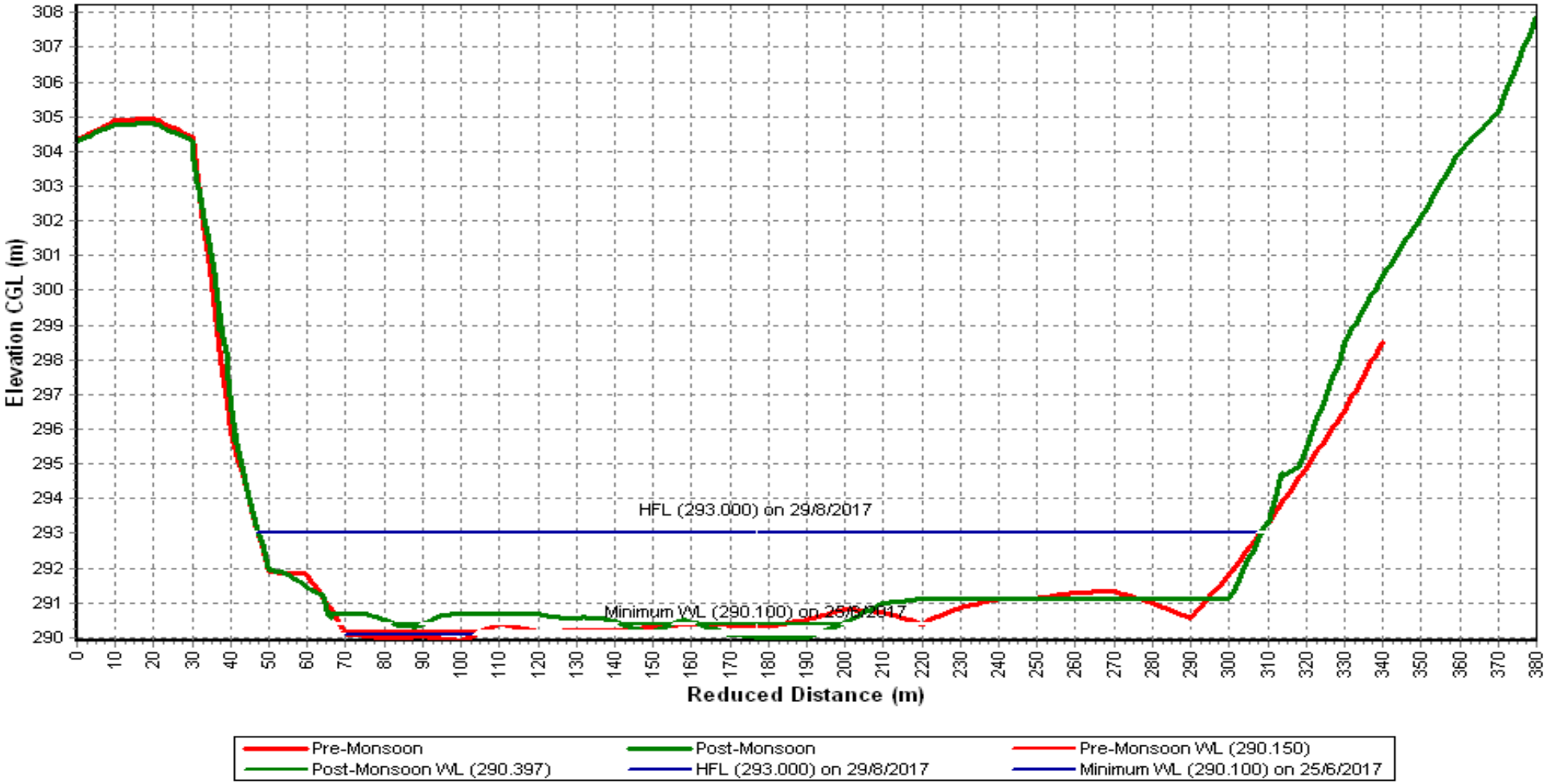
Sub-Division : Upper Wainganga SD, Nagpur



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : KUMHARI (AGH40R6) **Division : Wainganga Div., Nagpur**

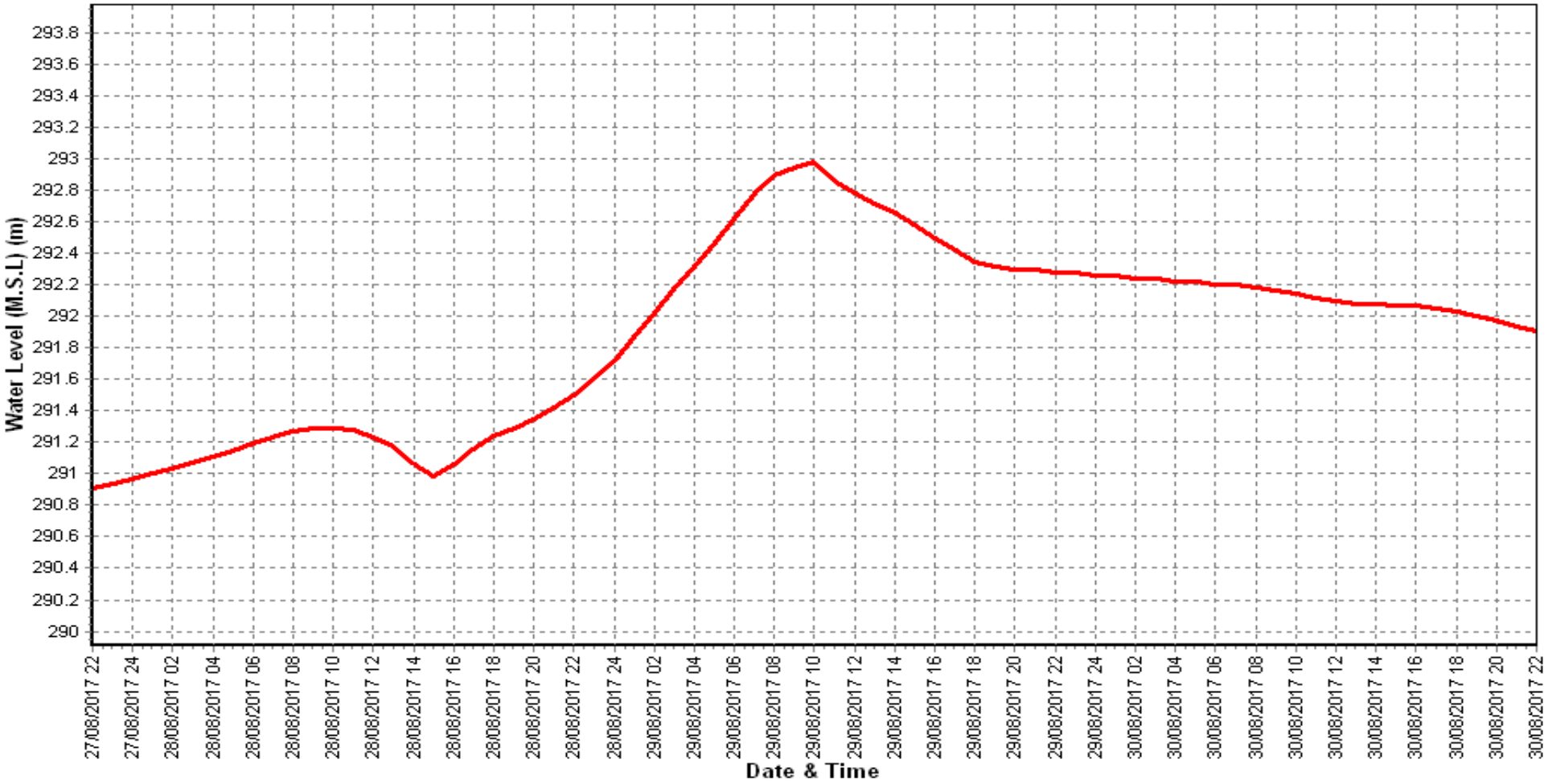
Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**



Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : KUMHARI (AGH40R6) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**KEOLARI**	**Code**	:	**AGH40V3**
State	:	Madhya Pradesh	District		Seoni
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pranhita	Sub Tributary	:	Wainganga
Sub-Sub Tributary	:	-	Local River	:	Wainganga
Division	:	Wainganga Div., Nagpur	Sub-Division	:	Upper Wainganga SD, Nagpur
Drainage Area	:	2970 Sq. Km.	Bank	:	Right
Latitude	:	22°22'50"	Longitude	:	79°54'00"
Zero of Gauge (m)	:	425 (m.s.l) 424.52 (m.s.l)	27.11.1986 01.06.2005	-	31.05.2005
		Opening Date	Closing Date		
Gauge	:	27.11.1986	**HFL During 2017-18**	:	**429.820 Meter**
			Corres.Discharge	:	**305.2 Cumecs (Estimated)**
Discharge	:	29.06.1987	**Date & Time of**	:	**18.09.2017**
			Occurance	:	**13.00 Hrs.**
Sediment	:				
Water Quality	:	01.06.2014			

HFL Recorded so far in m : 440.799 21/07/1994
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1987-1988	100.4	428.260	30.08.1987	0.000		12.04.1988
1988-1989	483.6	430.030	14.07.1988	0.000		03.05.1989
1989-1990	525.2	430.122	26.08.1989	0.000		11.04.1990
1990-1991	1065	432.335	18.08.1990	0.000		27.05.1991
1991-1992	307.6	429.400	24.08.1991	0.000		13.05.1992
1992-1993	989.3	431.645	17.08.1992	0.000	426.480	13.02.1993
1993-1994	860.0	431.825	16.07.1993	0.000		17.05.1994
1994-1995	5500	440.500	21.07.1994	0.000	427.065	30.04.1995
1995-1996	1200	432.705	20.07.1995	0.000	426.560	09.05.1996
1996-1997	694.0	431.020	06.09.1996	0.000	426.605	10.05.1997
1997-1998	1308	433.255	25.07.1997	0.000	426.460	16.06.1997
1998-1999	1779	433.910	14.09.1998	1.600	426.700	28.05.1999
1999-2000	3554	436.985	15.09.1999	0.690	426.640	20.05.2000
2000-2001	643.5	431.095	28.07.2000	0.000	426.990	25.04.2001
2001-2002	247.0	429.220	15.08.2001	0.000	426.530	02.06.2001
2002-2003	3008	435.925	18.08.2002	0.000	426.430	08.06.2002
2003-2004	2363	435.650	14.09.2003	0.114	426.515	16.06.2003

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2004-2005	166.6	428.860	22.08.2004	0.000	426.570	01.06.2004
2005-2006	2802	435.220	15.09.2005	0.000	425.940	16.06.2005
2006-2007	4058	437.920	14.08.2006	0.001	426.130	30.05.2007
2007-2008	862.8	431.435	08.09.2007	0.167	426.300	03.05.2008
2008-2009	295.6	429.120	10.07.2008	0.017	426.020	02.03.2009
2009-2010	2997	436.920	22.07.2009	0.016	426.270	30.05.2010
2010-2011	1115	432.160	05.09.2010	0.000	426.000	15.06.2010
2011-2012	1234	432.430	16.09.2011	0.077	426.220	31.05.2012
2012-2013	394.8	429.220	06.09.2012	0.000	426.360	30.05.2013
2013-2014	4518	436.170	23.08.2013	0.000	426.370	23.05.2014
2014-2015	642.1	430.170	10.09.2014	0.000	426.410	22.03.2015
2015-2016	626.5	430.170	04.08.2015	0.000	426.330	18.05.2016
2016-2017	714.9	430.620	02.09.2016	0.000	427.980	10.07.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at KEOLARI in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**		0	0
2	**1987-1988**	242	21	262
3	**1988-1989**	925	27	952
4	**1989-1990**	389	18	407
5	**1990-1991**	1547	48	1595
6	**1991-1992**	258	16	275
7	**1992-1993**	815	9	823
8	**1993-1994**	980	24	1004
9	**1994-1995**	2621	41	2662
10	**1995-1996**	892	72	964
11	**1996-1997**	659	55	715
12	**1997-1998**	852	469	1321
13	**1998-1999**	923	189	1112
14	**1999-2000**	1994	121	2115
15	**2000-2001**	412	35	447
16	**2001-2002**	262	104	366
17	**2002-2003**	1148	65	1213
18	**2003-2004**	1070	105	1175
19	**2004-2005**	246	42	289
20	**2005-2006**	1088	99	1187
21	**2006-2007**	1343	92	1435
22	**2007-2008**	870	128	998
23	**2008-2009**	253	50	302
24	**2009-2010**	862	83	945
25	**2010-2011**	1282	142	1424
26	**2011-2012**	1066	94	1160
27	**2012-2013**	664	103	766
28	**2013-2014**	2359	104	2463
29	**2014-2015**	526	0	526
30	**2015-2016**	452	78	530
31	**2016-2017**	158		158
32	**2017-2018**	166	83	248
Average		881	81	932

Stage-Discharge Data for the period 2017 - 2018

Station Name : KEOLARI (AGH40V3) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	426.460	0.000	427.720	77.76	427.200	28.71	427.100	19.45 #	426.860	9.011 *	426.750	6.241
2	426.460	0.000	427.000	14.62 *	427.040	16.47 #	427.020	15.53 *	426.830	7.984 *	426.740	6.142
3	426.550	0.000	427.330	33.17 #	426.920	11.27	426.940	12.05 *	426.800	6.510	426.730	6.045
4	426.550	0.000	427.150	22.61	426.810	7.498	426.920	11.21	426.780	6.357	426.720	4.750 *
5	426.560	0.000	427.240	25.32	426.800	7.054	426.880	10.24	426.770	6.166	426.720	4.750 *
6	426.620	0.000	426.980	15.71	426.780	6.411 *	426.820	6.667	426.750	4.860	426.720	5.855
7	426.740	0.000	426.910	10.03	426.760	5.415	426.800	6.130	426.740	4.577	426.700	4.937
8	426.740	0.000	426.820	7.268	426.750	4.498	426.760	5.509	426.720	4.750 *	426.690	4.356
9	426.650	0.000	426.740	5.276 *	426.740	4.130	426.770	5.745	426.720	4.164	426.690	3.988
10	426.630	0.000	426.660	4.363	426.760	5.299	426.940	12.05 *	426.970	10.11	426.680	3.976
11	426.650	0.000	426.630	2.723 #	426.730	4.054	427.110	21.28	427.090	16.93	426.680	3.858
12	426.680	0.000	426.630	2.723 #	426.710	3.791	427.160	23.60	427.050	17.33	426.670	3.555 *
13	426.640	0.000	426.810	7.219	426.690	4.012 *	427.100	22.53	426.950	12.46	426.670	3.814
14	426.660	0.000	426.650	4.240	426.670	2.497	427.070	22.53	426.940	12.11	426.670	3.745
15	426.680	0.000	426.740	5.943	426.650	3.125 *	427.100	22.62	426.950	12.46 *	426.670	3.761
16	426.700	0.000	427.760	68.56 *	426.630	2.417	426.940	11.40	426.900	11.66	426.670	3.578
17	426.670	0.000	427.060	17.76	426.610	2.400	426.830	7.984 *	427.040	20.24	426.670	3.641
18	426.670	0.000	428.120	69.57	426.600	2.172 *	426.790	7.599	426.990	13.70	426.680	3.807
19	426.650	0.000	427.820	61.58	426.610	2.398	427.390	32.27	426.980	13.74 *	426.680	3.780 *
20	426.620	0.000	427.830	95.05	426.630	2.723 *	427.150	22.13 #	426.930	11.53	426.680	3.823
21	426.600	0.000	427.300	28.80	426.630	2.437	428.270	126.9 #	426.910	11.01	426.700	4.185
22	426.600	0.000	427.150	22.07	426.610	2.165	427.780	75.99	426.870	9.367 *	426.740	4.863
23	426.580	0.000	427.050	16.95 *	426.600	2.092	427.320	33.15	426.810	8.462	426.740	4.954
24	426.570	0.000	427.020	14.60	426.680	2.825	427.200	24.97 *	426.670	4.579	426.740	4.855
25	426.600	0.000	426.910	11.11	426.720	4.750 *	427.170	31.90	426.720	5.195	426.740	4.899
26	426.870	0.000	426.890	9.890	427.080	14.61	426.960	10.17	426.800	7.903	426.750	5.549 *
27	426.690	0.000	426.870	9.961	427.100	19.45 *	426.930	10.78	426.800	7.966	426.750	5.719
28	426.700	0.000	427.000	14.51	426.980	12.70	426.910	11.04	426.790	7.746	426.750	5.496
29	427.160	22.86	426.960	10.35	427.200	28.37	426.890	10.60	426.780	6.411 *	426.750	5.341
30	426.830	7.298	426.850	8.661 *	427.060	22.19	426.870	9.367 *	426.770	7.048	426.750	5.077
31			426.820	7.246	426.980	13.74 #			426.760	6.863		
Ten-Daily Mean												
I Ten-Daily	426.596	0.000	427.055	21.61	426.856	9.675	426.895	10.46	426.794	6.449	426.714	5.104
II Ten-Daily	426.662	0.000	427.205	33.54	426.653	2.959	427.064	19.39	426.982	14.22	426.674	3.736
III Ten-Daily	426.720	3.016	426.984	14.01	426.876	11.39	427.230	34.49	426.789	7.505	426.741	5.094
Monthly												
Min.	426.460	0.000	426.630	2.723	426.600	2.092	426.760	5.509	426.670	4.164	426.670	3.555
Max.	427.160	22.86	428.120	95.05	427.200	28.71	428.270	126.9	427.090	20.24	426.750	6.241
Mean	426.659	1.005	427.078	22.76	426.798	8.118	427.063	21.45	426.853	9.329	426.710	4.645

Annual Runoff in MCM = 248 Annual Runoff in mm = 84

Peak Observed Discharge = 126.9 cumecs on 21/09/2017 Corres. Water Level :428.270 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :426.460 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : KEOLARI (AGH40V3) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	426.750	6.510 *	426.880	9.488	426.510	2.996	426.810	8.371	426.440	1.641 *	426.380	1.072
2	426.750	5.509	426.840	9.522	426.510	2.955	426.770	6.964 *	426.430	1.200	426.370	1.042
3	426.760	6.734 *	426.800	8.724	426.510	2.934	426.760	8.183	426.430	1.254	426.370	0.989
4	426.760	5.845	426.800	8.720	426.510	2.410 *	426.740	6.290 *	426.430	1.264	426.370	1.003
5	426.760	5.906	426.800	8.870	426.510	2.930	426.720	6.766	426.430	1.271	426.360	0.954
6	426.760	5.919	426.780	8.363	426.490	2.882	426.700	4.642	426.430	1.258	426.360	0.969 *
7	426.750	5.826	426.800	7.679 *	426.490	2.877	426.680	4.758	426.430	1.228	426.360	0.944
8	426.750	5.873	426.800	8.723	426.500	2.940	426.650	3.532	426.420	1.453 *	426.360	0.949
9	426.750	5.855	426.800	8.796	426.570	3.218	426.630	3.359	426.420	1.188	426.360	0.940
10	426.740	6.290 *	426.800	8.783	426.640	3.592	426.610	2.980	426.420	1.193	426.340	0.904
11	426.740	5.662	426.800	8.816	426.680	5.064 *	426.600	3.669 *	426.420	1.201	426.330	0.885
12	426.740	5.696	426.780	8.368	426.730	4.989	426.600	2.892	426.420	1.192	426.330	0.892
13	426.740	5.714	426.790	8.540	426.920	11.03	426.580	2.728	426.420	1.192	426.320	0.709 *
14	426.730	5.461	426.780	7.198 *	427.420	32.14	426.540	2.270	426.430	1.545 *	426.320	0.866
15	426.730	5.471	426.780	8.531	426.930	11.18	426.530	2.204	426.440	1.641 *	426.320	0.850
16	426.730	5.485	426.780	8.384	426.820	8.867	426.520	1.806	426.440	1.387	426.320	0.837
17	426.790	7.436 *	426.780	8.396	426.780	8.257	426.520	1.935	426.430	1.288	426.310	0.812
18	426.820	9.148	426.780	8.419	426.770	6.964 *	426.520	2.534 *	426.430	1.268	426.310	0.780
19	426.820	9.043	426.780	8.551	426.740	7.199	426.510	1.881	426.420	1.241	426.310	0.779
20	426.820	9.054	426.780	8.648	426.730	7.141	426.510	1.872	426.410	1.211	426.310	0.652 *
21	426.820	9.182	426.780	7.198 *	426.720	7.004	426.510	1.864	426.410	1.219	426.310	0.782
22	426.820	9.204	426.780	8.430	426.720	6.967	426.510	1.857	426.400	1.279 *	426.300	0.759
23	426.810	8.933	426.780	8.527	426.700	4.641	426.510	1.837	426.400	1.191	426.300	0.704
24	426.820	8.179 *	426.780	8.494	426.700	4.652	426.500	1.808	426.400	1.188	426.300	0.733
25	426.820	8.179 *	426.770	8.225	426.760	6.734 *	426.500	2.289 *	426.390	1.167	426.300	0.747
26	426.820	9.096	426.720	5.864 *	426.860	8.940	426.480	1.478	426.390	1.163	426.300	0.741
27	426.820	9.117	426.670	4.223	426.890	9.386	426.480	1.475	426.390	1.148	426.300	0.597 *
28	426.820	9.134	426.620	3.993 *	426.840	8.590	426.460	1.421	426.390	1.138	426.300	0.737
29	426.850	9.780	426.560	3.157			426.450	1.740 *	426.380	1.117 *	426.300	0.746
30	426.880	10.22	426.520	3.060			426.450	1.740 *	426.380	1.117 *	426.290	0.728
31	426.880	9.795 *	426.510	3.037			426.440	1.377			426.290	0.713
Ten-Daily Mean												
I Ten-Daily	426.753	6.027	426.810	8.767	426.524	2.973	426.707	5.584	426.428	1.295	426.363	0.977
II Ten-Daily	426.766	6.817	426.783	8.385	426.852	10.28	426.543	2.379	426.426	1.317	426.318	0.806
III Ten-Daily	426.833	9.165	426.681	5.837	426.774	7.114	426.481	1.717	426.393	1.173	426.299	0.726
Monthly												
Min.	426.730	5.461	426.510	3.037	426.490	2.410	426.440	1.377	426.380	1.117	426.290	0.597
Max.	426.880	10.22	426.880	9.522	427.420	32.14	426.810	8.371	426.440	1.641	426.380	1.072
Mean	426.785	7.395	426.755	7.604	426.713	6.767	426.574	3.178	426.416	1.261	426.326	0.833

Peak Computed Discharge = 68.56 cumecs on 16/07/2017 Corres. Water Level :427.760 m

Lowest Computed Discharge = 0.597 cumecs on 27/05/2018 Corres. Water Level :426.300 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

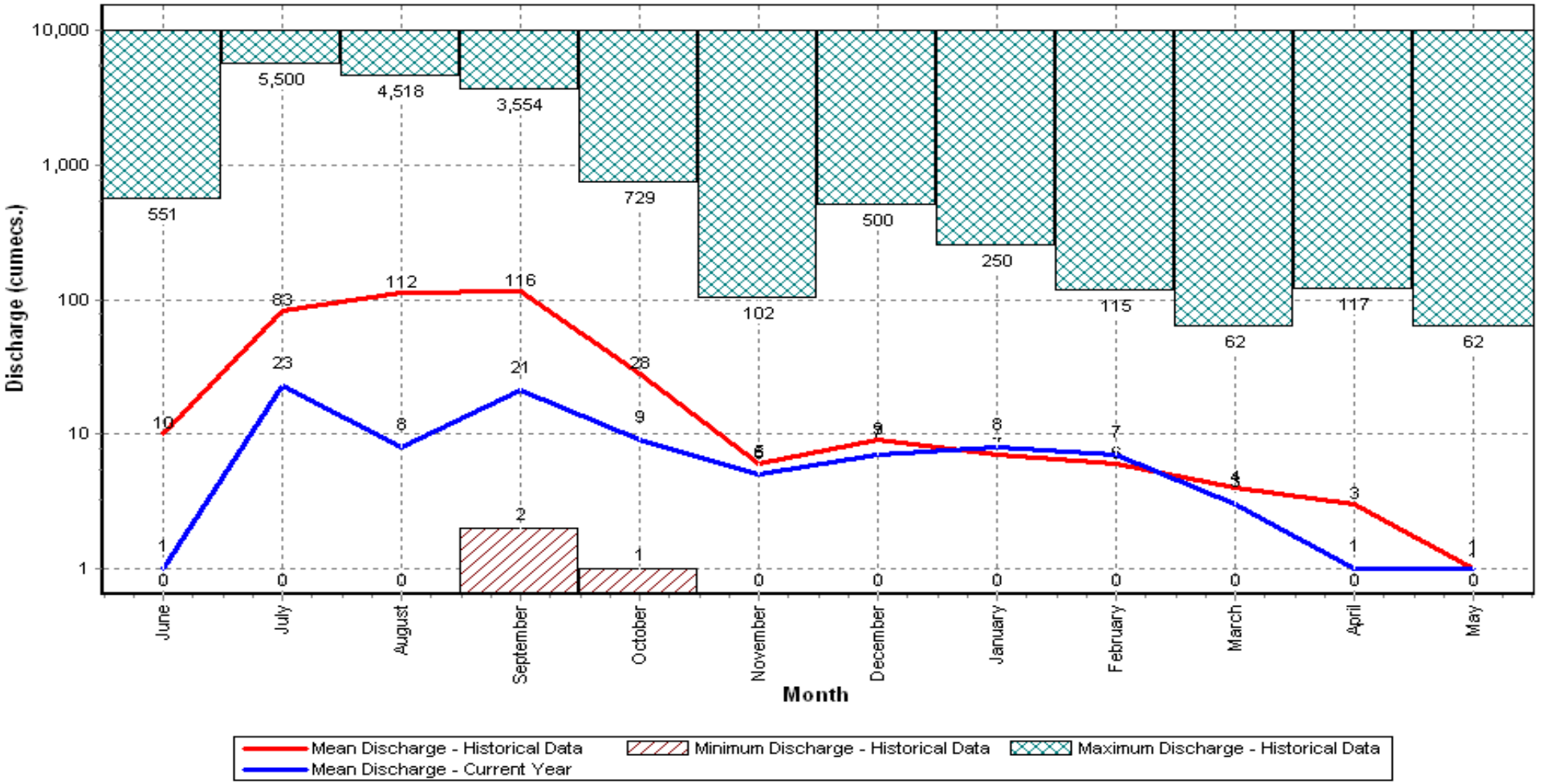
#:Discarded Discharge (values changed as per rating curve)

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : KEOLARI (AGH40V3) | **Data considered : 1987-2018** | **Division : Wainganga Div., Nagpur**

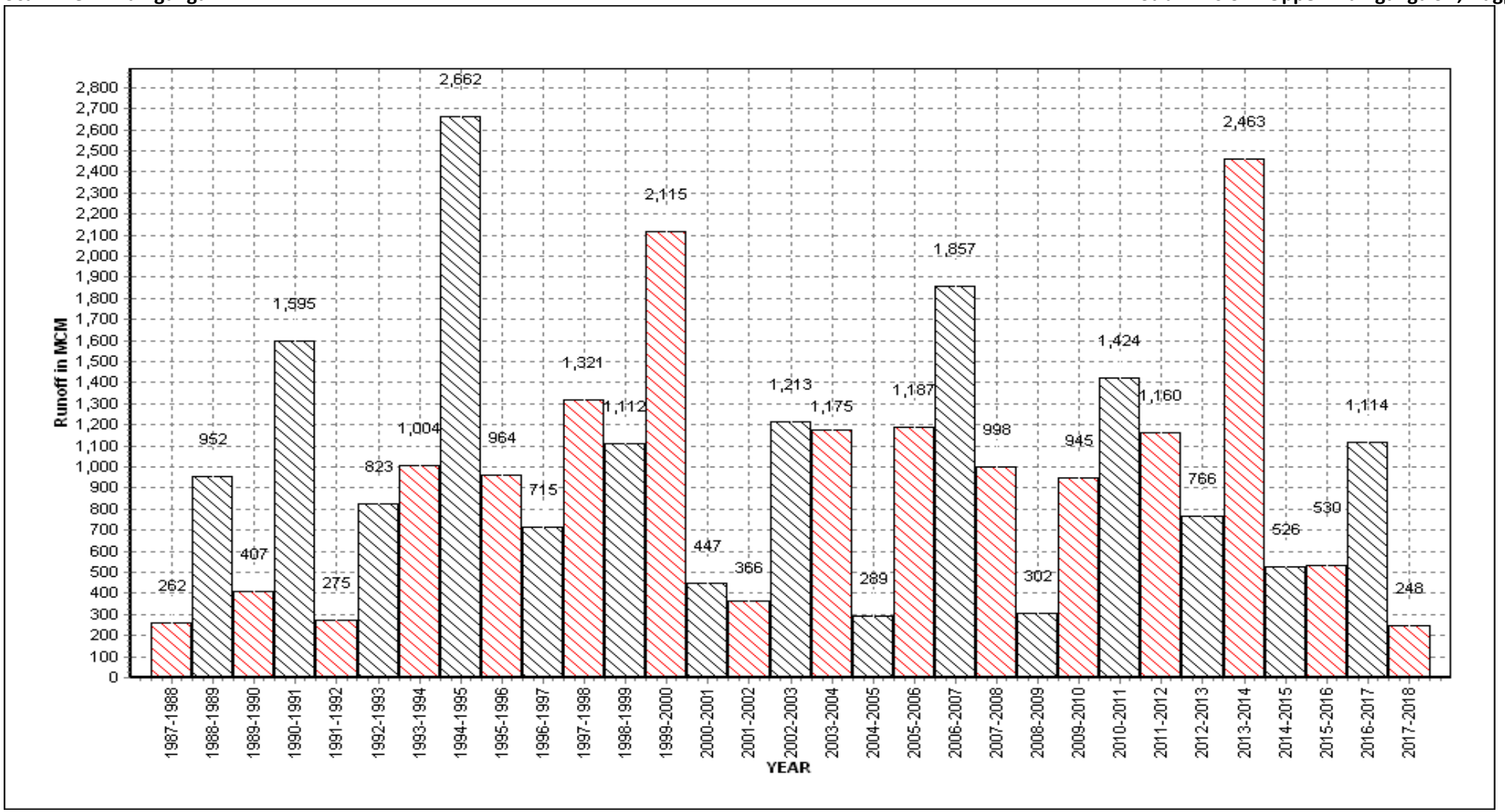
Local River : Wainganga | **Sub-Division : Upper Wainganga SD, Nagpur**



Annual Runoff Values for the period: 1987 - 2018

Station Name : KEOLARI (AGH40V3) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**

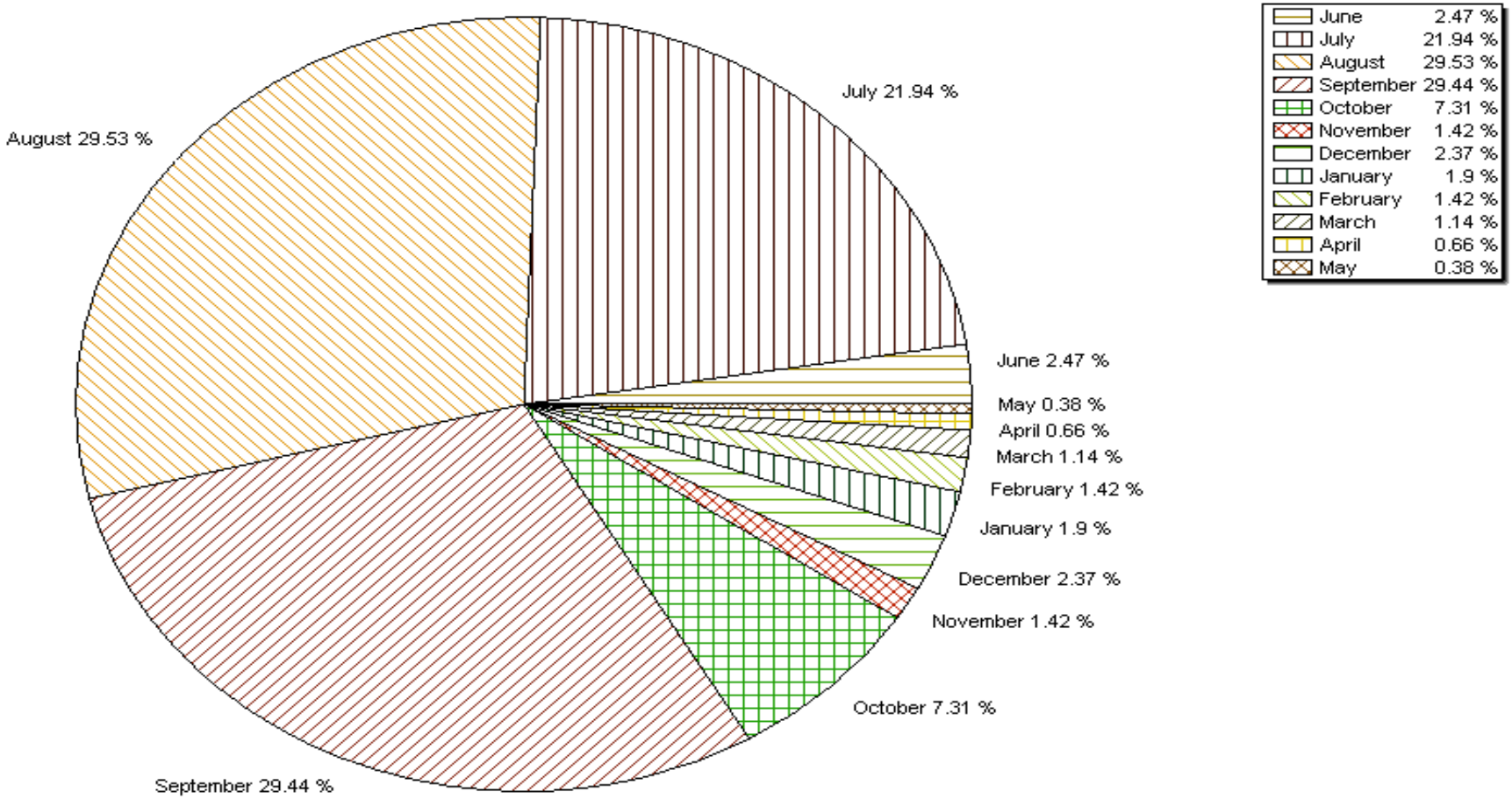


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1987-2017

Station Name : KEOLARI (AGH40V3) **Division : Wainganga Div., Nagpur**

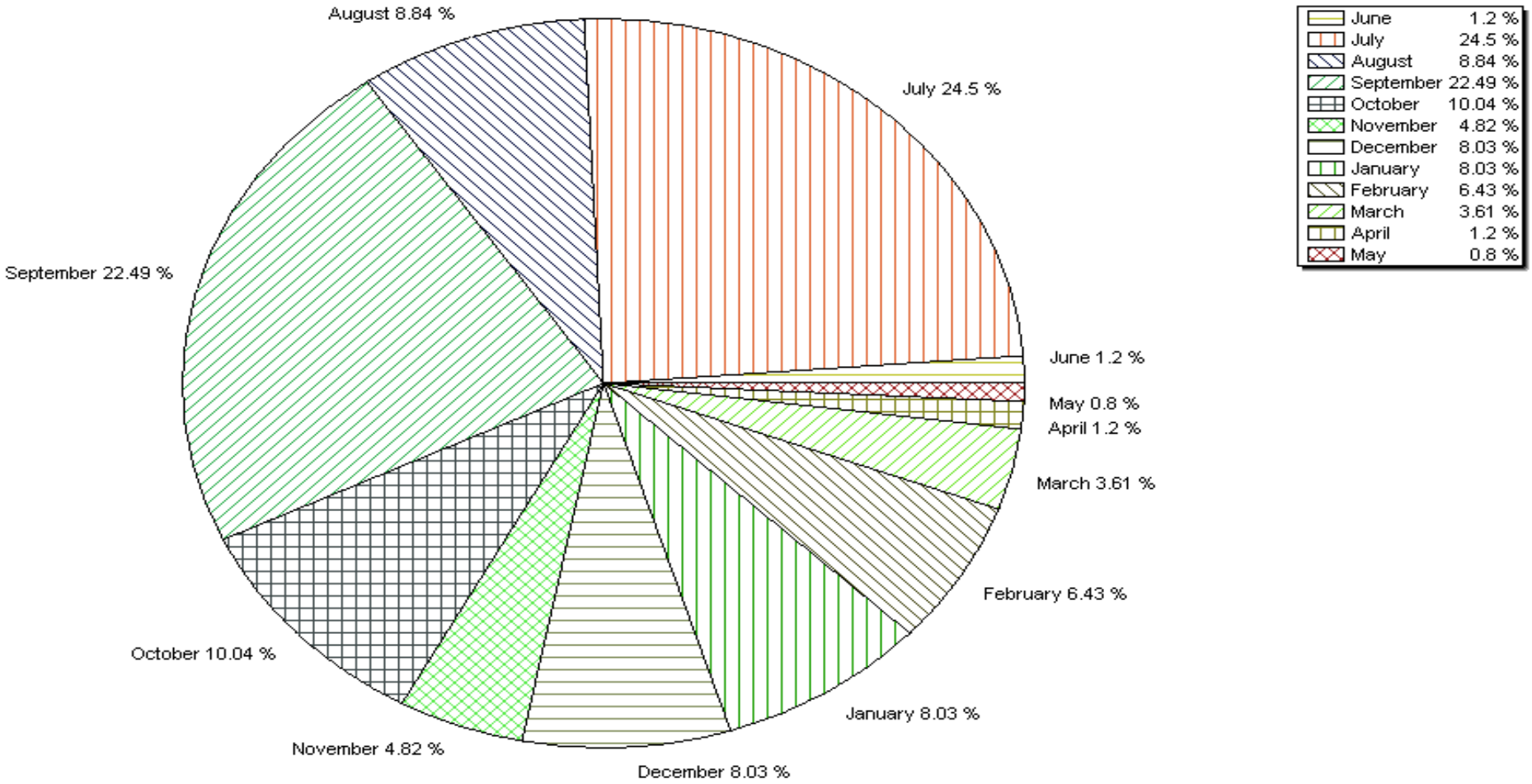
Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**



Monthly Runoff for the Year : 2017-2018

Station Name : KEOLARI (AGH40V3) **Division : Wainganga Div., Nagpur**

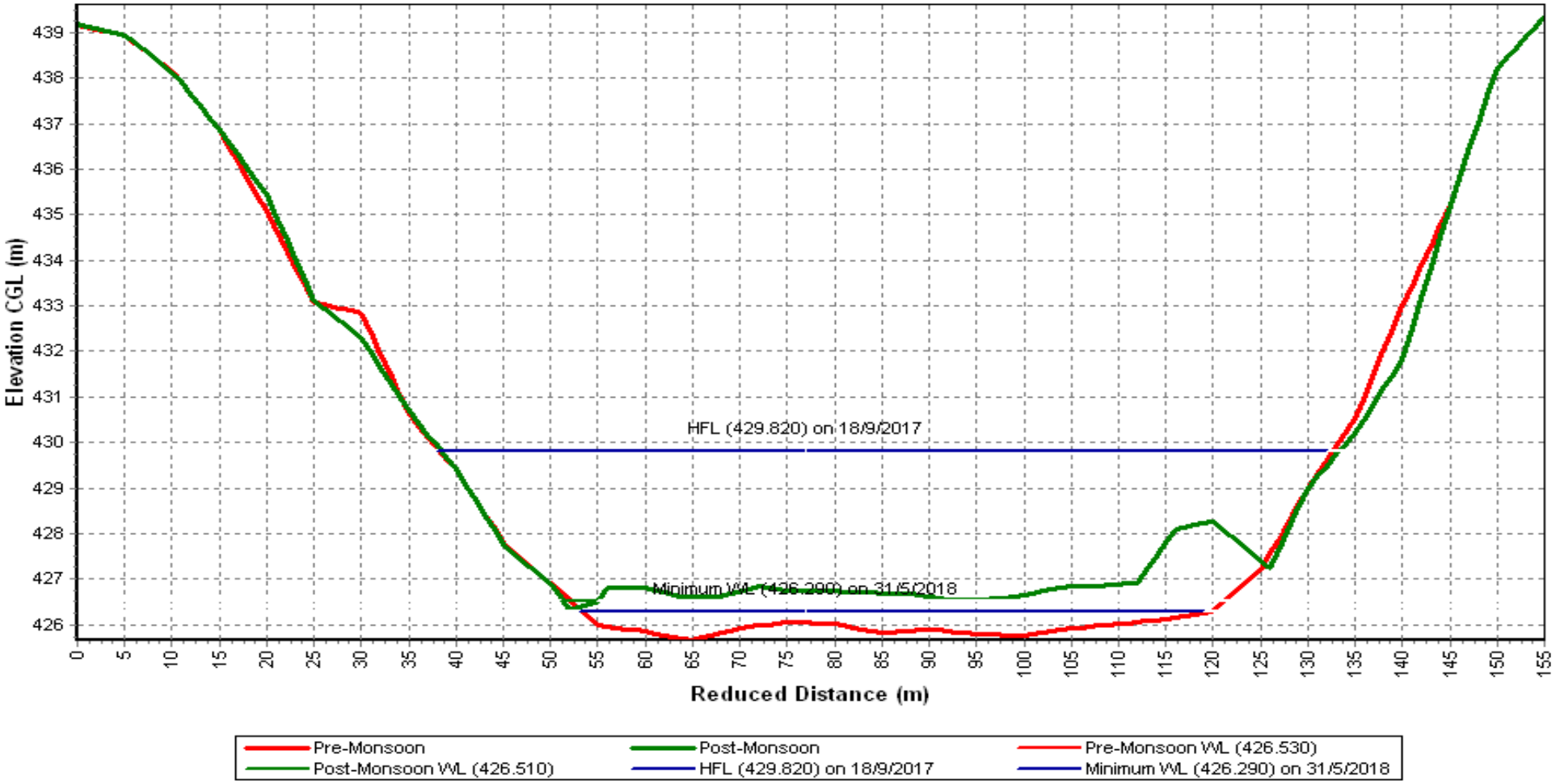
Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : KEOLARI (AGH40V3) **Division : Wainganga Div., Nagpur**

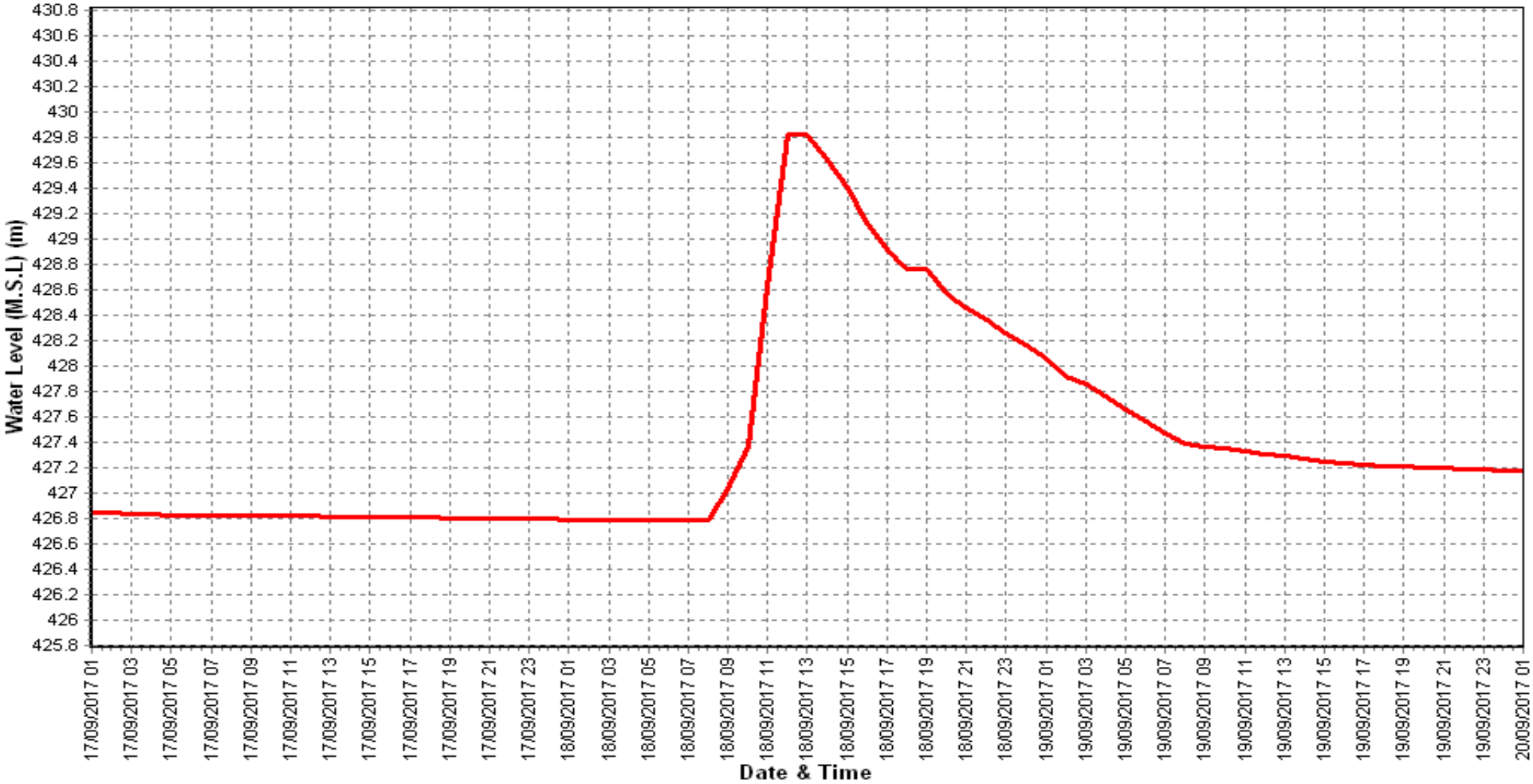
Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : KEOLARI (AGH40V3) **Division : Wainganga Div., Nagpur**

Local River : Wainganga **Sub-Division : Upper Wainganga SD, Nagpur**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	**:**	**2017-2018**
Site	**:**	**Garimillapalli**	**Code**	**:**	**Garimilapalli**
State	:	Telangana	District		Warangal
Basin	:	Godavari	Independent Riv	:	Godavari
Tributary	:	-	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Moorenchavagu
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 1, Bhadrach
Drainage Area	:	782.0 Sq. Km.	Bank	:	Left
Latitude	:	18°26'49"	Longitude	:	79°42'17"
Zero of Gauge (m)	:	95.000 (Arbitary)	01.06.2017		
		Opening Date	Closing Date		
Gauge	:	01.04.2017			
Discharge	:	01.06.2017			
Sediment	:				
Water Quality	:				

Stage-Discharge Data for the period 2017 - 2018

Station Name : GARMILLAPALLI (044-LGDHYD) **Division : Lower Godavari Div., Hyderabad**

Local River : MORANCHA VAGU **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1			0.720	2.633	0.000	0.000	0.260	2.287	0.950	10.25 *	0.380	0.841
2			0.830	7.500 *	0.000	0.000	0.190	0.325 *	0.540	5.120 *	0.400	0.974
3			0.990	10.75 *	0.000	0.000	0.340	2.950 *	1.180	13.20 *	0.400	1.030 *
4			0.950	10.10 *	0.000	0.000	0.300	2.442	1.580	22.00 *	0.390	1.000 *
5			0.430	3.783	0.020		0.880	7.560 *	1.550	20.25 *	0.380	0.920 *
6			0.410	3.400	0.000	0.000	0.440	4.210	1.280	15.60 *	0.380	0.910 *
7			0.250	1.186	0.000	0.000	1.250	12.50 *	2.500	65.00 *	0.400	1.035 *
8			0.210	1.050 *	0.050	0.000 *	1.320	15.20 *	2.120	52.00 *	0.380	1.020 *
9			0.170	0.690 *	1.260	12.85 *	0.980	10.56 *	1.880	31.00 *	0.175	0.670 *
10			0.160	0.622	1.300	14.50 *	0.550	6.120 *	1.400	18.50 *	0.180	0.700 *
11			0.190	0.730	0.850	8.521	0.900	9.121 *	1.110	12.10 *	0.200	0.810 *
12			0.170	0.620	0.550	3.670 *	0.350	1.851	0.980	10.10 *	0.230	1.000 *
13			0.190	0.745	0.280	1.200 *	0.230	0.926	1.250	14.89 *	0.250	1.100 *
14			0.590	5.896	0.480	2.889	0.200	0.618	0.750	7.650 *	0.230	1.020 *
15			0.990	10.85 *	0.430	2.450 *	0.210	0.591	0.550	5.750 *	0.220	0.980 *
16			0.500	4.780 *	1.050	10.25 *	0.180	0.353	0.450	2.499	0.220	1.100 *
17			0.630	6.277	0.740	4.704	0.200	0.512 *	0.400	1.691	0.190	1.129
18			0.900	10.20 *	0.480	2.442	0.330	1.568	0.350	1.333	0.180	1.120
19			1.020	12.12 *	1.780	26.50 *	0.695	5.529	0.350	1.450 *	0.180	1.100 *
20			0.920	10.85 *	3.300	81.86 *	0.430	2.398	0.370	1.324	0.170	1.022
21			0.550	4.348	3.250	79.00 *	0.340	1.400	0.370	1.149	0.240	1.859
22			0.450	0.454	1.340	16.50 *	0.290	0.951	0.430	2.100 *	0.230	1.728
23			0.220	1.250 *	0.550	5.005	0.250	0.741	0.320	0.763	0.320	2.732
24			0.120	0.454	0.400	3.532	0.220	0.500 *	0.400	1.715	0.300	2.640
25			0.130	0.481	0.400	3.560 *	0.200	0.401	0.400	1.471	0.280	2.447
26			0.070	0.146	0.390	3.543	0.150	0.122	0.300	0.625	0.200	1.560 *
27				0.000	1.700	27.12 *	0.160	0.128	0.360	1.150	0.120	0.797
28				0.000	1.750	29.00 *	0.380	2.246	0.400	1.255	0.130	0.806
29				0.000	1.690	23.00 *	0.740	6.145	0.410	1.280 *	0.130	0.844
30				0.000	1.300	18.50 *	1.080	11.20 *	0.380	1.005	0.140	0.879
31				0.000	0.450	4.632			0.370	0.855		
Ten-Daily Mean												
I Ten-Daily			0.512	4.171	0.263	3.039	0.651	6.415	1.498	25.29	0.347	0.910
II Ten-Daily			0.610	6.307	0.994	14.45	0.373	2.347	0.656	5.879	0.207	1.038
III Ten-Daily			0.257	0.648	1.202	19.40	0.381	2.383	0.376	1.215	0.209	1.629
Monthly												
Min.			0.070	0.000	0.000	0.000	0.150	0.122	0.300	0.625	0.120	0.670
Max.			1.020	12.12	3.300	81.86	1.320	15.20	2.500	65.00	0.400	2.732
Mean			0.491	3.61	0.832	12.84	0.468	3.715	0.828	10.49	0.254	1.192

Annual Runoff in MCM = 85 **Annual Runoff in mm =**

Peak Observed Discharge = 8.521 cumecs on 11/08/2017 **Corres. Water Level :0.850 m**

Lowest Observed Discharge = 0.000 cumecs on 27/07/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : GARMILLAPALLI (044-LGDHYD) **Division : Lower Godavari Div., Hyderabad**

Local River : MORANCHA VAGU **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	0.140	0.857	0.090	0.420 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.120	0.810 *	0.080	0.390 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.130	0.820 *	0.100	0.490 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.120	0.800	0.110	0.510 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.120	0.617	0.110	0.530 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.100	0.486	0.120	0.570 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.090	0.464	0.110	0.530 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.080	0.432	0.100	0.495 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.100	0.510 *	0.100	0.496 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.090	0.480 *	0.100	0.495 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.070	0.248	0.100	0.495 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.080	0.262	0.100	0.496 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.090	0.429	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.090	0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.100	0.491	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.100	0.485	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.100	0.490 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.090	0.470 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.060	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.050	0.221	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.040	0.174	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.050	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.040	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.040	0.170 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.030	0.150 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.020	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.020	0.085 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.020	0.095 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.060	0.250 *	0.000	0.000			0.000	0.000	0.000	0.000	0.000	0.000
30	0.070	0.300 *	0.000	0.000			0.000	0.000	0.000	0.000	0.000	0.000
31	0.080	0.320 *	0.000	0.000			0.000	0.000			0.000	0.000
Ten-Daily Mean												
I Ten-Daily	0.109	0.628	0.102	0.493	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
II Ten-Daily	0.083	0.376	0.020	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
III Ten-Daily	0.043	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Monthly												
Min.	0.020	0.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max.	0.140	0.857	0.120	0.570	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mean	0.077	0.388	0.039	0.191	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Peak Computed Discharge = 81.86 cumecs on 20/08/2017 Corres. Water Level :3.300 m

Lowest Computed Discharge = 0.000 cumecs on 08/08/2017 Corres. Water Level :0.050 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

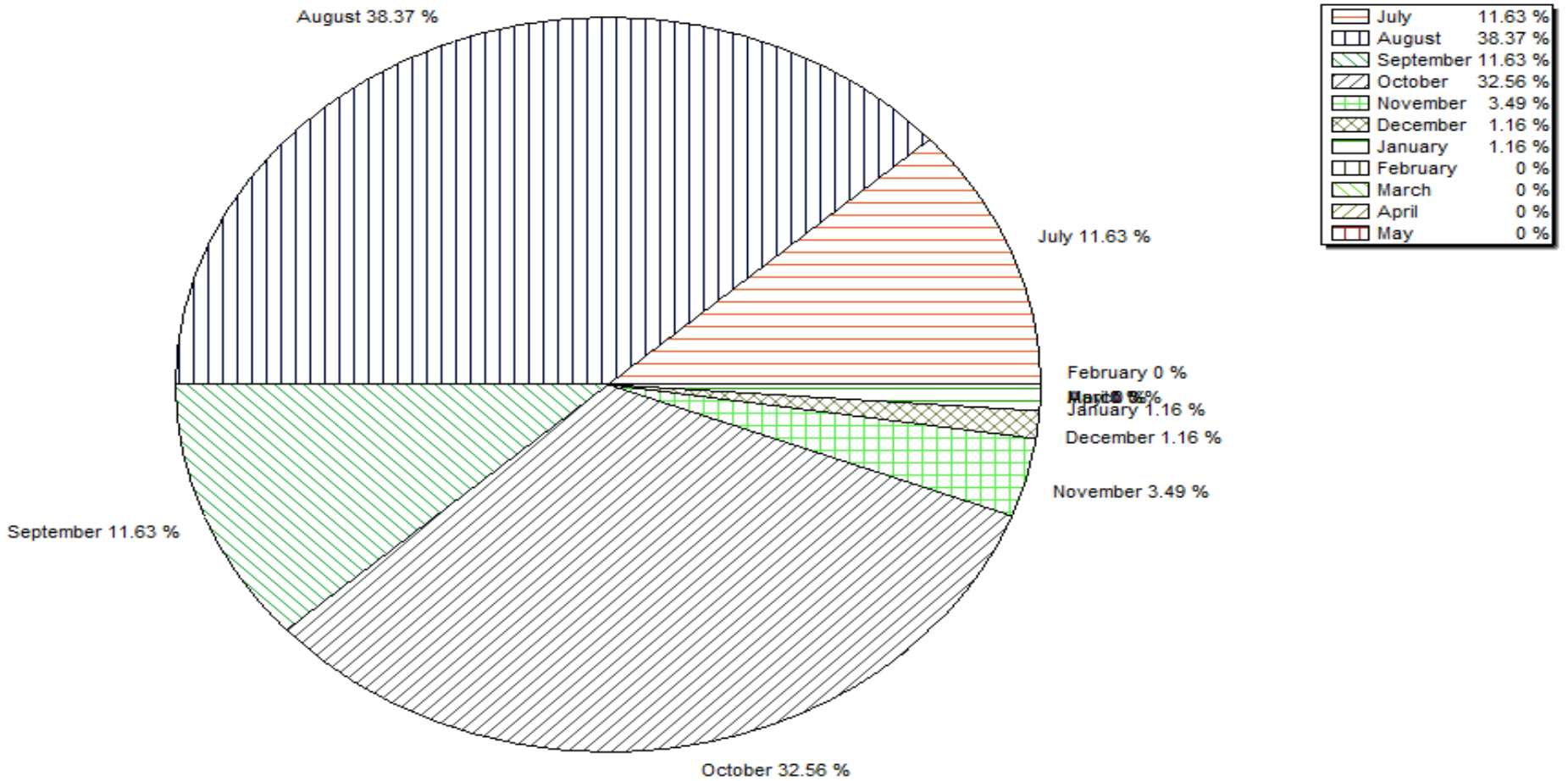
Monthly Runoff for the Year : 2017-2018

Station Name : GARMILLAPALLI (044-LGDHYD)

Local River : MORANCHA VAGU

Division : Lower Godavari Div., Hyderabad

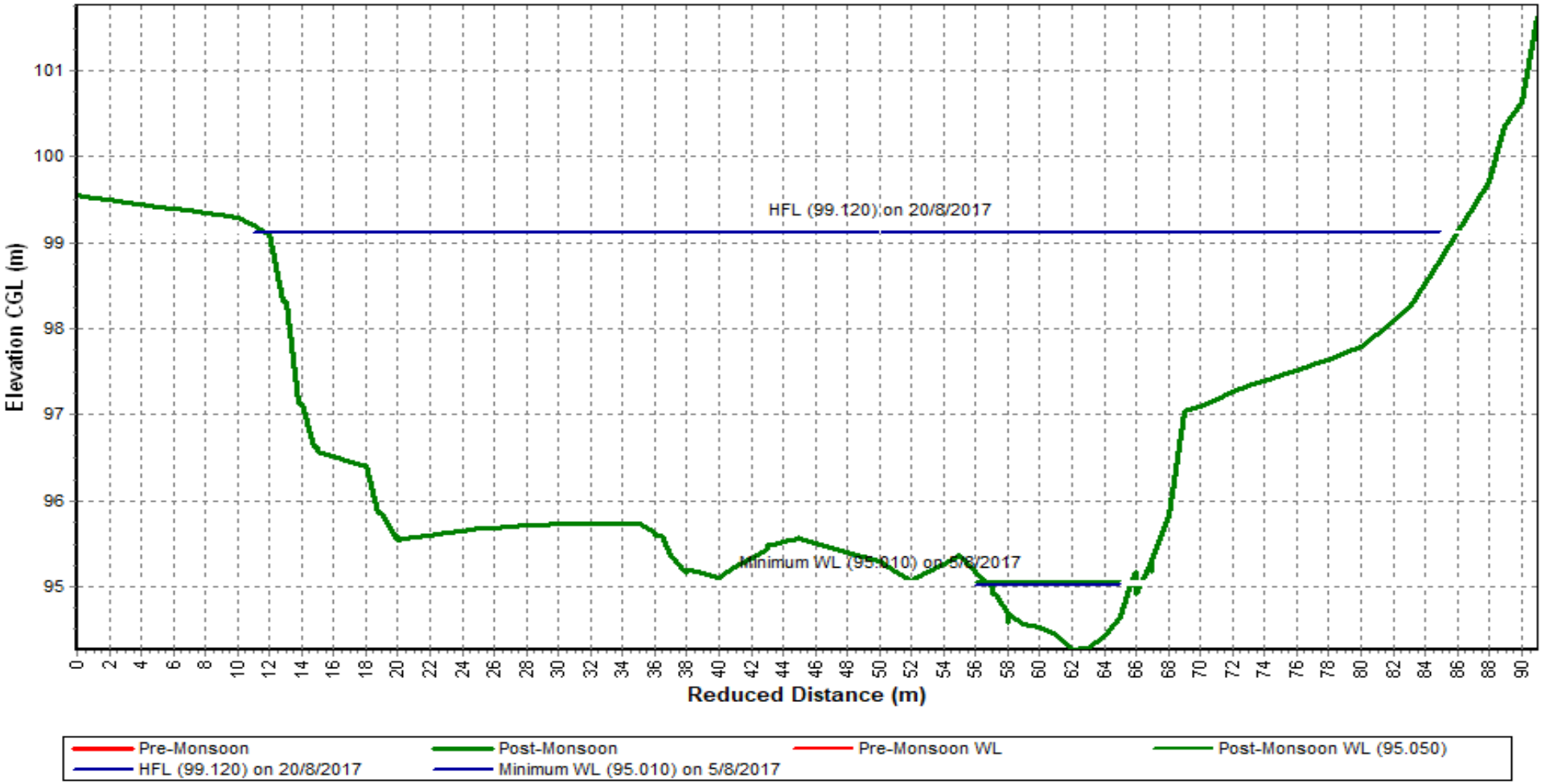
Sub-Division : Lower Godavari 1, Bhadrachalam



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : GARMILLAPALLI (044-LGDHYD) **Division : Lower Godavari Div., Hyderabad**

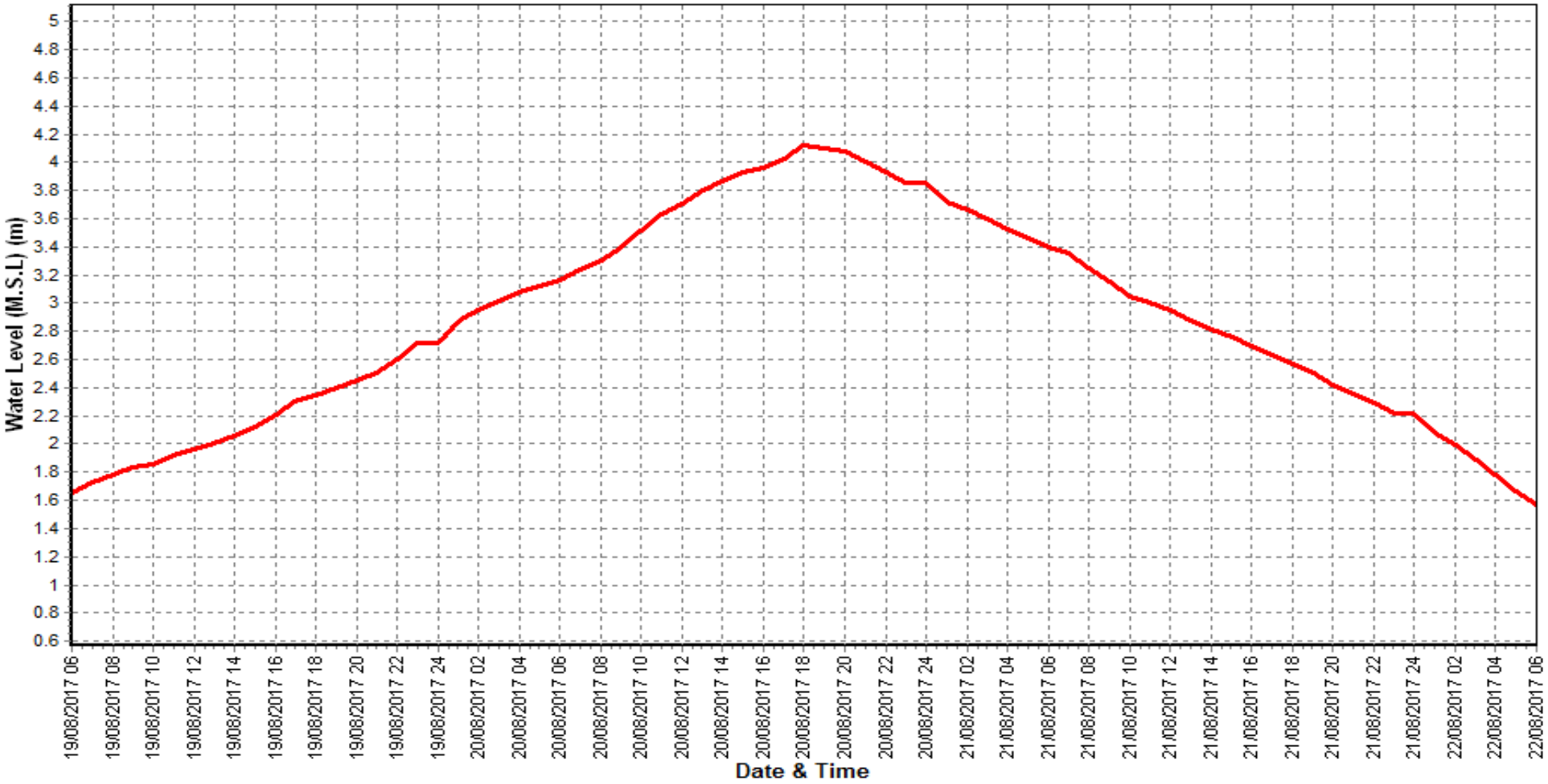
Local River : MORANCHA VAGU **Sub-Division : Lower Godavari 1, Bhadrachalam**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : GARMILLAPALLI (044-LGDHYD) **Division : Lower Godavari Div., Hyderabad**

Local River : MORANCHA VAGU **Sub-Division : Lower Godavari 1, Bhadrachalam**



HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Somanpally (Seasonal)**	**Code**	:	**AGI00C3**
State	:	Andhra Pradesh	District		Karimnagar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Maner	Sub Tributary	:	-
Sub-Sub Tributary	:	-	Local River	:	Maner
Division	:	Lower Godavari Div., Hyderabad	Sub-Division	:	Lower Godavari 1, Bhadrachalam
Drainage Area	:	12691 Sq. Km.	Bank	:	Left
Latitude	:	18°38'30"	Longitude	:	79°49'35"
Zero of Gauge (m)	:	117.975 (m.s.l) 121.444 (m.s.l) 121.000 (m.s.l)	21.11.1965 01.06.1968 01.06.1997		
		Opening Date	Closing Date		
Gauge	:	01.07.1964	**HFL During 2017-18**	:	**123.349 Meter**
			Corres. Discharge	:	**395.9 Cumecs (Estimated)**
Discharge	:	17.03.1967	**Date & Time of Occurance**	:	**21.08.2017 02:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 128.604 24/07/1989
Corresponding Discharge (cumecs) : 5155*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1967-1968	752.4	121.565	30.08.1967	0.068	118.340	11.06.1967
1968-1969	387.5	123.761	27.07.1968	0.020	121.789	19.06.1968
1969-1970	1693	125.184	21.09.1969	0.020	121.969	19.06.1969
1970-1971	1238	124.749	19.08.1970	0.177	121.919	09.05.1971
1971-1972	390.7	123.804	22.10.1971	0.040	121.874	27.05.1972
1972-1973	327.2	123.649	06.07.1972	0.011	121.959	27.05.1973
1973-1974	2254	125.519	04.10.1973	0.100	121.974	15.06.1973
1974-1975	623.1	124.004	24.10.1974	0.083	121.889	18.05.1975
1975-1976	1137	124.769	11.09.1975	0.049	121.894	01.06.1975
1976-1977	3457	126.339	21.07.1976	0.046	122.019	20.06.1976
1977-1978	807.3	124.329	02.09.1977	0.070	121.984	25.05.1978
1978-1979	4487	126.594	15.08.1978	0.070	121.984	02.06.1978
1979-1980	745.1	124.254	04.08.1979	0.090	121.979	07.05.1980
1980-1981	556.6	123.989	21.08.1980	0.047	122.024	20.03.1981
1981-1982	1965	125.254	05.08.1981	0.004	121.944	16.05.1982
1982-1983	225.2	123.424	20.07.1982	0.102	121.914	19.06.1982

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1983-1984	6359	127.294	06.10.1983	0.100	122.049	15.06.1983
1984-1985	274.9	123.229	01.08.1984	0.200	121.314	30.05.1985
1985-1986	181.0	122.964	02.08.1985	0.000	121.339	01.04.1986
1986-1987	3086	126.614	14.08.1986	0.036	121.384	07.07.1986
1987-1988	1190	125.109	09.07.1987	0.063	121.504	08.06.1987
1988-1989	2504	125.594	03.09.1988	0.310	121.574	31.05.1989
1989-1990	3360	127.344	24.07.1989	0.114	121.574	04.06.1989
1990-1991	2336	126.144	31.08.1990	4.386	121.904	14.05.1991
1991-1992	449.2	123.794	13.07.1991	0.031	121.594	06.04.1992
1992-1993	414.3	123.404	16.08.1992	0.047	121.574	01.06.1992
1993-1994	1042	124.794	29.07.1993	0.007	121.484	20.05.1994
1994-1995	595.1	124.074	23.08.1994	0.011	121.494	01.06.1994
1995-1996	2536	126.324	20.10.1995	0.067	121.524	11.06.1995
1996-1997	878.7	124.554	26.08.1996	0.470	121.974	03.06.1996
1997-1998	163.0	122.680	31.10.1997	0.039	121.390	27.01.1998
1998-1999	840.6	124.180	16.10.1998	0.047	121.390	11.06.1998
1999-2000	782.2	124.020	12.09.1999	0.033	121.260	18.04.2000
2000-2001	2377	126.000	28.08.2000	0.084	121.630	27.05.2001
2001-2002	362.8	123.250	22.08.2001	0.031	121.560	26.04.2002
2002-2003	821.0	124.160	25.08.2002	0.000		22.04.2003
2003-2004	244.7	122.990	25.10.2003	0.000		12.05.2004
2004-2005	25.79	122.020	06.08.2004	0.000		25.01.2005
2005-2006	1645	125.150	22.09.2005	0.000		21.02.2006
2006-2007	3336	126.610	05.08.2006	0.000	121.525	24.07.2006
2007-2008	952.8	124.390	18.09.2007	0.373	121.590	06.06.2007
2008-2009	1490	124.980	11.08.2008	0.000		10.03.2009
2009-2010	530.7	123.770	03.09.2009	0.000	121.470	25.07.2009
2010-2011	2884	126.300	30.07.2010	0.000		29.04.2011
2011-2012	171.3	122.920	18.09.2011	0.000	121.425	08.01.2012
2012-2013	1059	124.550	05.09.2012	0.000		17.05.2013
2013-2014	2803	125.940	27.10.2013	0.000	121.510	26.03.2014
2014-2015	431.4	123.400	08.09.2014	0.000	121.400	15.08.2014
2015-2016	477.6	123.710	22.06.2015	0.000	121.000	05.06.2015
2016-2017	627.6	124.030	25.09.2016	0.000	121.000	27.06.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Somanpally (Seasonal) in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1966-1967**		155	155
2	**1967-1968**	1056	95	1151
3	**1968-1969**	377	8	385
4	**1969-1970**	1280	55	1336
5	**1970-1971**	1391	19	1411
6	**1971-1972**	281	6	288
7	**1972-1973**	337	7	344
8	**1973-1974**	1818	19	1837
9	**1974-1975**	474	16	490
10	**1975-1976**	1157	14	1171
11	**1976-1977**	2644	17	2661
12	**1977-1978**	522	6	528
13	**1978-1979**	3513	33	3546
14	**1979-1980**	607	14	621
15	**1980-1981**	584	9	593
16	**1981-1982**	1433	34	1467
17	**1982-1983**	679	99	778
18	**1983-1984**	6813	316	7129
19	**1984-1985**	505	67	571
20	**1985-1986**	327	14	341
21	**1986-1987**	1411	40	1452
22	**1987-1988**	839	97	937
23	**1988-1989**	4978	176	5154
24	**1989-1990**	3505	197	3702
25	**1990-1991**	2473	200	2673
26	**1991-1992**	967	80	1047
27	**1992-1993**	593	70	663
28	**1993-1994**	773	14	787
29	**1994-1995**	652	91	743
30	**1995-1996**	1484	122	1607
31	**1996-1997**	1798	137	1935
32	**1997-1998**	248	29	277
33	**1998-1999**	1739	107	1846
34	**1999-2000**	1257	27	1284
35	**2000-2001**	1909	41	1950
36	**2001-2002**	521	50	571
37	**2002-2003**	446	10	456
38	**2003-2004**	259	17	276
39	**2004-2005**	11	0	11
40	**2005-2006**	754	29	783
41	**2006-2007**	2039	45	2084
42	**2007-2008**	703		703
43	**2008-2009**	1117	1	1118
44	**2009-2010**	117	2	119
45	**2010-2011**	1993	27	2020
46	**2011-2012**	314	0	314
47	**2012-2013**	1091	0	1091
48	**2013-2014**	2591	0	2591
49	**2014-2015**	302		302
50	**2015-2016**	269		269
51	**2016-2017**	967		967
Average		1278	56	1305

Stage-Discharge Data for the period 2017 - 2018

Station Name : Somanpally (Seasonal) (AGI00C3) **Division : Lower Godavari Div., Hyderabad**

Local River : Maner **Sub-Division : Lower Godavari 1, Bhadrachalam**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000	121.220	0.000	121.900	21.15	121.670	7.587 *	121.550	2.629
2		0.000		0.000	121.230	0.000	121.780	12.53 *	121.670	7.587 *	121.520	2.505
3		0.000		0.000	121.220	0.000	121.670	7.587 *	121.590	8.297	121.490	1.967
4		0.000	121.170	0.000	121.220	0.000	121.630	7.100	122.450	89.93 *	121.440	1.645
5		0.000	121.200	0.000	121.220	0.000	121.690	7.575	122.280	60.96 *	121.500	2.798 *
6	121.398	0.963	121.398	0.963	121.220	0.000	121.770	16.88	122.170	45.97 *	121.520	2.212
7	121.390	0.951	121.390	0.951	121.220	0.000	121.860	21.05	122.630	129.2 *	121.520	2.191
8		0.000	121.370	0.944 *	121.210	0.000	122.260	58.02 *	122.500	99.91 *	121.490	2.092
9		0.000	121.350	0.765 *	121.630	4.474	122.180	47.22 *	122.340	70.34 *	121.490	2.098
10		0.000	121.320	0.370	121.925	21.69	121.930	22.16 *	122.260	58.02 *	121.515	2.404
11		0.000	121.300	0.000	122.035	27.88	121.830	19.65	122.260	58.02 *	121.520	3.207 *
12		0.000	121.280	0.000	121.890	19.23 *	121.750	16.46	122.180	47.22 *	121.510	2.998 *
13		0.000	121.290	0.000	121.680	7.971 *	121.610	8.766	122.170	45.97 *	121.530	2.389
14		0.000	121.320	0.263	121.680	5.376	121.530	4.541	122.090	36.76 *	121.550	2.898
15		0.000	121.330	0.373	122.030	30.71 *	121.490	3.597	122.030	30.71 *	121.550	2.936
16		0.000	121.700	8.776 *	121.970	24.64	121.470	3.566	121.960	25.80	121.550	2.929
17		0.000	121.730	11.64	122.010	27.19	121.440	1.780 *	121.900	19.69	121.540	2.962
18		0.000	121.710	9.292	121.830	19.51	121.470	3.494	121.850	17.44	121.520	2.850
19		0.000	122.080	27.36	121.900	21.37	121.630	9.821	121.810	14.17 *	121.500	2.798 *
20		0.000	122.100	28.63	122.310	65.54 *	121.730	15.95	121.770	9.752	121.500	2.775
21		0.000	121.960	24.28	123.120	289.3 *	121.630	9.880	121.750	8.579	121.500	2.766
22		0.000	121.830	13.75	122.500	99.91 *	121.550	6.280	121.710	9.198 *	121.520	2.805
23		0.000	121.670	7.587 *	122.225	58.60	121.490	5.057	121.670	6.652	121.520	2.835
24		0.000	121.560	3.497	122.050	29.45	121.460	2.086 *	121.660	5.382	121.550	3.243
25		0.000	121.460	3.975	121.950	23.72 *	121.460	4.223	121.660	5.380	121.550	3.193
26		0.000	121.390	1.120	121.920	22.58	121.420	3.659	121.700	5.960	121.540	3.654 *
27		0.000	121.320	0.591	122.030	30.71 *	121.380	2.242	121.670	4.973	121.520	2.859
28		0.000	121.280	0.000	122.130	46.57	121.380	2.159	121.650	5.056	121.500	2.760
29		0.000	121.260	0.000	122.150	47.94	121.420	3.214	121.640	6.510 *	121.500	2.742
30		0.000	121.240	0.000	122.140	43.66	121.580	4.668 *	121.610	3.999	121.480	2.122
31			121.230	0.000	122.020	34.09			121.580	3.848		
Ten-Daily Mean												
I Ten-Daily	121.394	0.191	121.314	0.399	121.331	2.617	121.867	22.13	122.156	57.78	121.504	2.254
II Ten-Daily		0.000	121.584	8.633	121.933	24.94	121.595	8.763	122.002	30.55	121.527	2.874
III Ten-Daily		0.000	121.473	4.982	122.203	66.05	121.477	4.347	121.664	5.958	121.518	2.898
Monthly												
Min.	121.390	0.000	121.170	0.000	121.210	0.000	121.380	1.780	121.580	3.848	121.440	1.645
Max.	121.397	0.963	122.100	28.63	123.120	289.3	122.260	58.02	122.630	129.2	121.550	3.654
Mean	121.394	0.064	121.473	4.681	121.835	32.33	121.646	11.75	121.932	30.61	121.516	2.675

Annual Runoff in MCM = 219 Annual Runoff in mm = 17

Peak Observed Discharge = 58.60 cumecs on 23/08/2017 Corres. Water Level :122.225 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

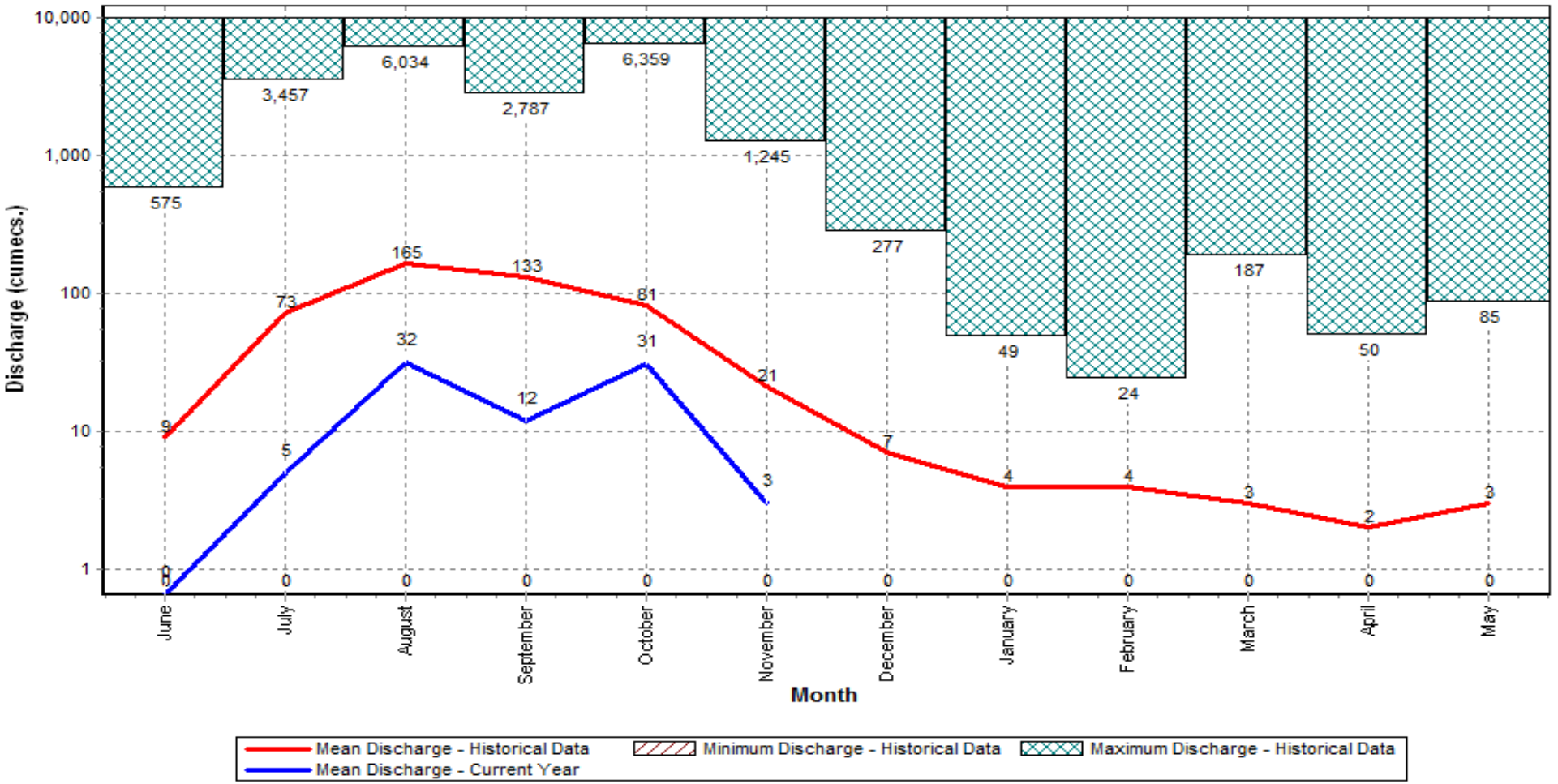
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Somanpally (Seasonal) (AGI00C3) **Data considered : 1967-2018** **Division : Lower Godavari Div., Hyderabad**

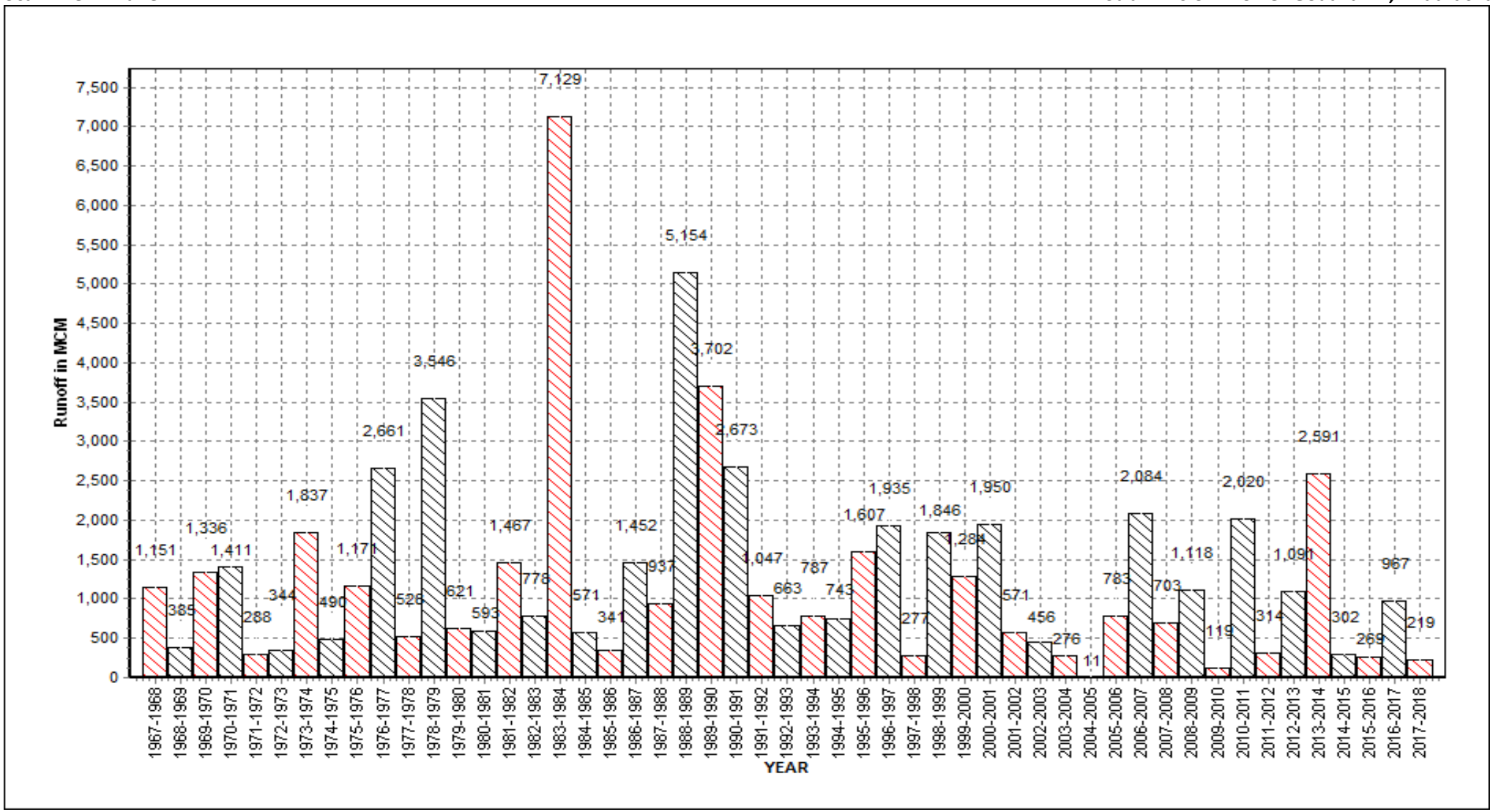
Local River : Maner **Sub-Division : Lower Godavari 1, Bhadrachalam**



Annual Runoff Values for the period: 1967 - 2018

Station Name : Somanpally (Seasonal) (AGI00C3) **Division : Lower Godavari Div., Hyderabad**

Local River : Maner **Sub-Division : Lower Godavari 1, Bhadrachalam**



Note: Missing values have not been considered while arriving at Annual Runoff

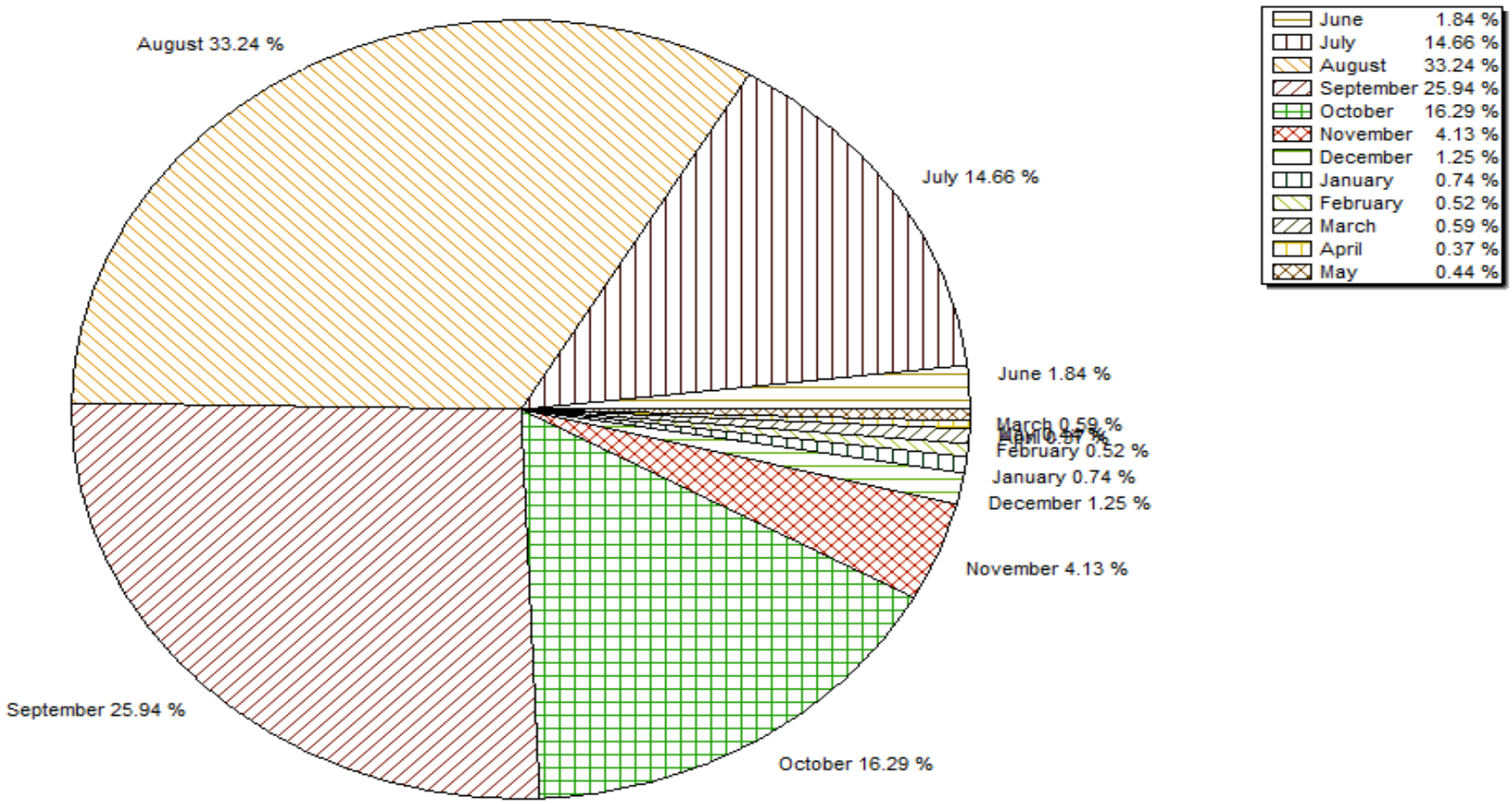
Monthly Average Runoff based on period : 1967-2017

Station Name : Somanpally (Seasonal) (AGI00C3)

Local River : Maner

Division : Lower Godavari Div., Hyderabad

Sub-Division : Lower Godavari 1, Bhadrachalam



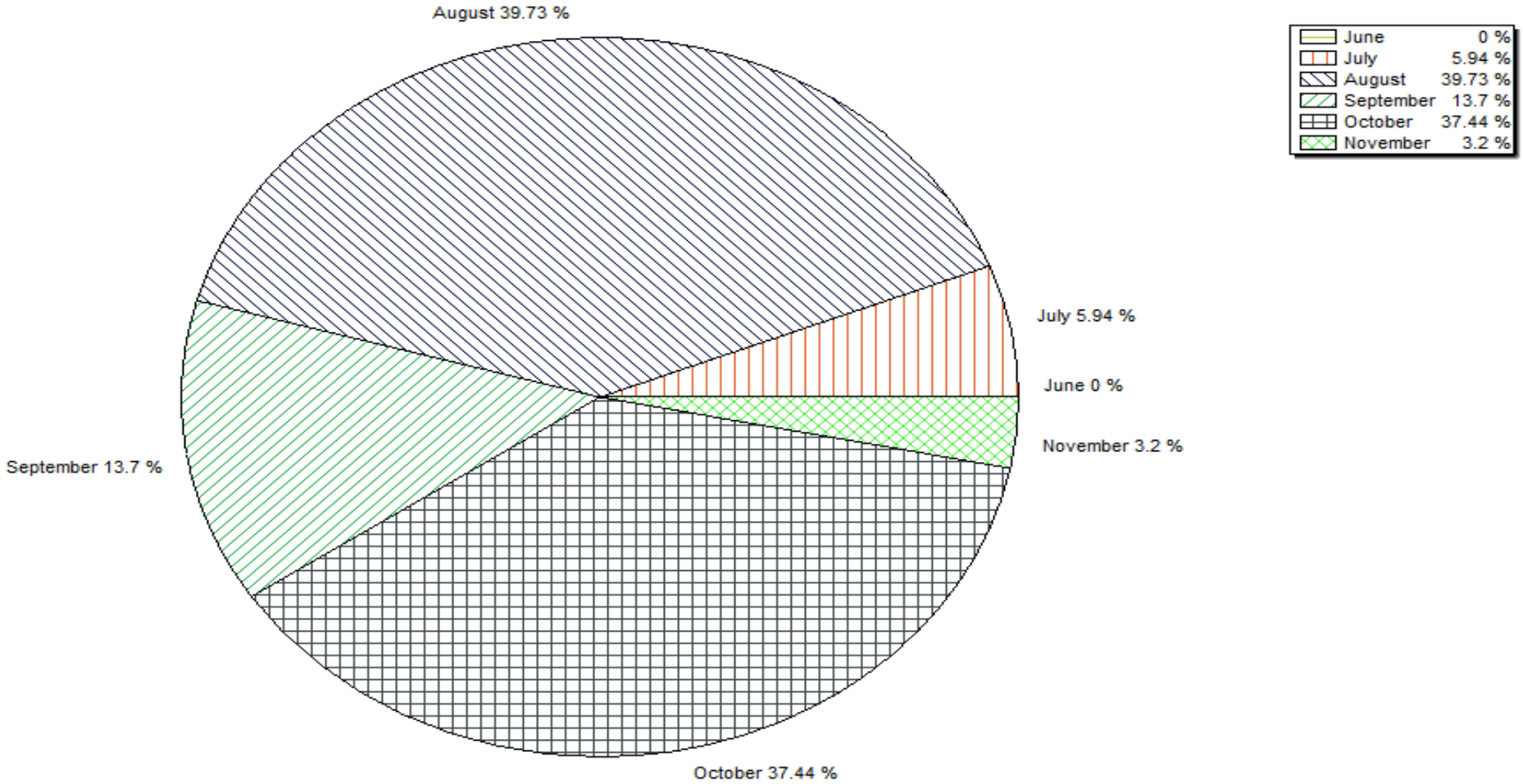
Monthly Runoff for the Year : 2017-2018

Station Name : Somanpally (Seasonal) (AGI00C3)

Local River : Maner

Division : Lower Godavari Div., Hyderabad

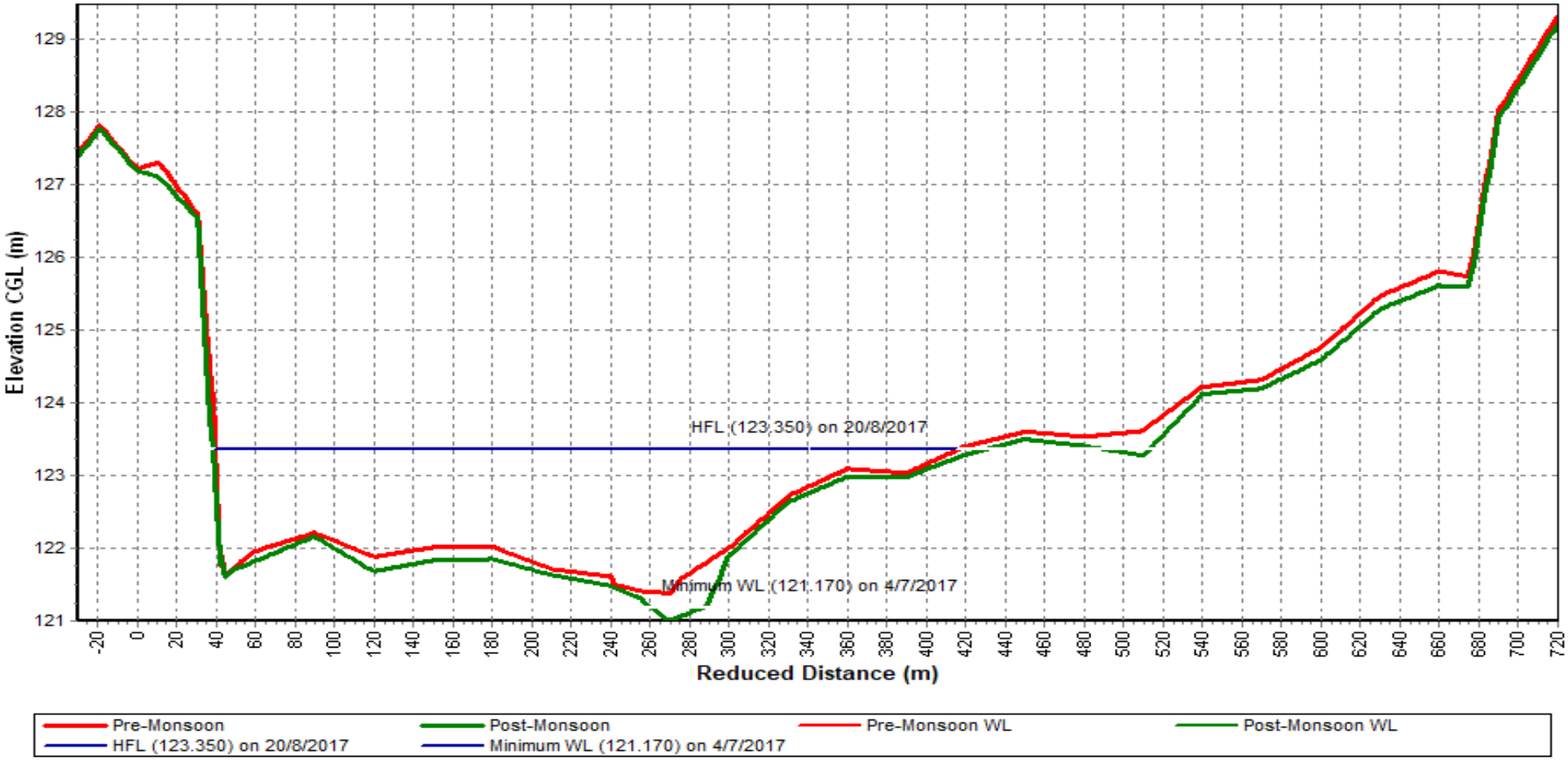
Sub-Division : Lower Godavari 1, Bhadrachalam



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Somanpally (Seasonal) (AGI00C3) **Division : Lower Godavari Div., Hyderabad**

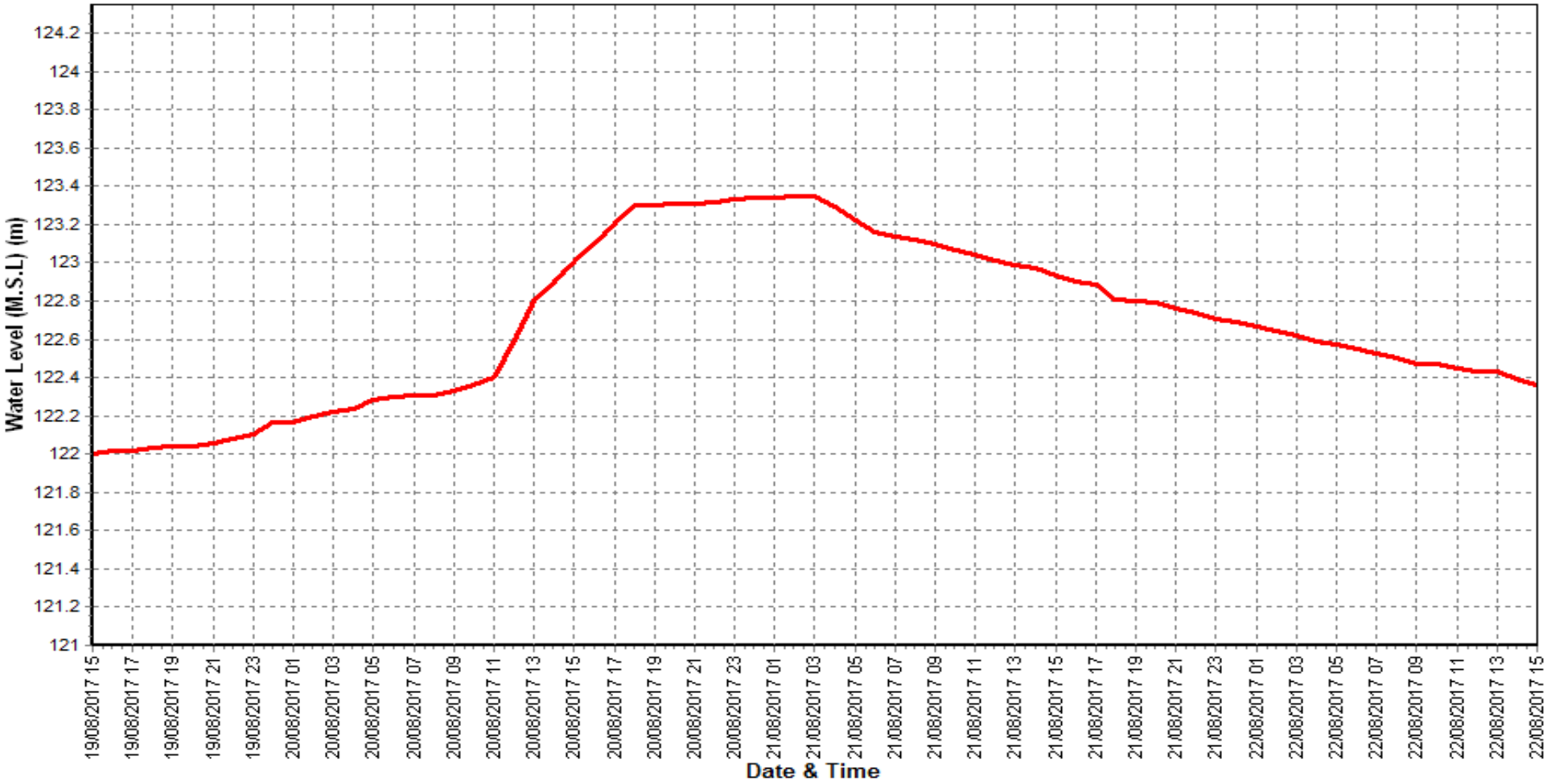
Local River : Maner **Sub-Division : Lower Godavari 1, Bhadrachalam**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Somanpally (Seasonal) (AGI00C3) **Division : Lower Godavari Div., Hyderabad**

Local River : Maner **Sub-Division : Lower Godavari 1, Bhadrachalam**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Mancherial**	**Code**	:	**AG000J3**
State	:	Andhra Pradesh	District		Adilabad
Basin	:	Godavari	Independent River	:	
Tributary	:		Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Godavari
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Manjira SD, Nizamabad
Drainage Area	:	102900 Sq. Km.	Bank	:	Left
Latitude	:	18°50'00"	Longitude	:	79°27'00"
Zero of Gauge (m)	:	124.316 (m.s.l) 124.316 (m.s.l)	01.06.2010 03.07.1964		 - 31.05.2010
		Opening Date	Closing Date		
Gauge	:	01.03.1964	**HFL During 2017-18**	:	**126.356 Meter**
			Corres. Discharge	:	**241.3 Cumecs (Estimated)**
Discharge	:	03.07.1964	**Date & Time of**	:	**12.10.2017**
			Occurance	:	**09:00 hrs.**
Sediment	:	01.07.1965			
Water Quality	:	01.12.1979			

HFL Recorded so far in m : 138.616 20/10/1995
Corresponding Discharge (cumecs) : 38774*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1966-1967	18538	134.226	05.09.1966	0.924	125.196	29.05.1967
1967-1968	9460	131.721	25.07.1967	0.800	125.176	12.06.1967
1968-1969	4740	129.906	12.08.1968	3.200	125.436	04.06.1968
1969-1970	18138	133.621	09.09.1969	5.300	125.766	29.05.1970
1970-1971	26537	136.486	20.08.1970	6.318	125.711	25.04.1971
1971-1972	6306	130.336	28.08.1971	2.018	125.636	28.05.1972
1972-1973	1490	128.206	04.07.1972	0.117	125.341	25.05.1973
1973-1974	14136	133.111	24.08.1973	0.180	125.321	02.06.1973
1974-1975	4767	130.021	25.10.1974	7.800	125.836	30.05.1975
1975-1976	11804	132.476	11.09.1975	4.245	126.060	04.05.1976
1976-1977	10527	132.206	03.09.1976	2.592	125.806	29.05.1977
1977-1978	5786	130.196	03.09.1977	2.600	125.816	06.06.1977
1978-1979	5670	130.206	17.08.1978	8.200	125.866	02.06.1978
1979-1980	6860	130.836	04.08.1979	7.958	125.791	30.05.1980
1980-1981	9000	131.526	05.09.1980	9.200	125.791	03.06.1980
1981-1982	5140	130.166	28.09.1981	9.000	125.616	31.05.1982
1982-1983	1698	128.191	22.10.1982	4.500	125.371	31.05.1983

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1983-1984	29531	137.846	12.08.1983	3.000	125.336	13.06.1983
1984-1985	377.7	127.261	13.09.1984	3.300	125.696	31.05.1985
1985-1986	871.5	127.666	03.08.1985	1.012	125.531	31.05.1986
1986-1987	10982	131.976	13.08.1986	0.800	125.581	30.05.1987
1987-1988	1694	128.441	09.07.1987	0.670	125.556	08.06.1987
1988-1989	20944	135.191	31.07.1988	2.141	125.616	04.06.1988
1989-1990	24900	136.876	25.07.1989	18.00	125.426	05.05.1990
1990-1991	23846	136.211	31.08.1990	8.496	125.516	27.05.1991
1991-1992	6463	130.759	13.07.1991	2.009	125.066	31.05.1992
1992-1993	5066	129.781	05.09.1992	0.925	125.016	09.06.1992
1993-1994	2257	128.641	04.08.1993	0.253	125.066	29.05.1994
1994-1995	2317	128.549	12.07.1994	0.205	125.046	08.06.1994
1995-1996	31820	137.386	20.10.1995	1.607	125.206	16.06.1995
1996-1997	4618	129.821	17.09.1996	4.407	125.336	13.06.1996
1997-1998	552.7	126.961	29.10.1997	0.577	125.096	31.05.1998
1998-1999	8209	131.896	18.10.1998	0.288	125.026	12.06.1998
1999-2000	8340	131.061	09.09.1999	2.278	125.416	10.06.1999
2000-2001	15840	133.336	28.08.2000	4.352	125.426	30.05.2001
2001-2002	2805	128.591	12.10.2001	2.017	125.316	04.08.2001
2002-2003	4252	129.331	25.08.2002	0.198	124.836	31.05.2003
2003-2004	4475	129.506	08.08.2003	0.000	124.766	10.06.2003
2004-2005	122.6	125.966	14.07.2004	0.000	124.666	06.05.2005
2005-2006	7376	131.511	23.09.2005	0.000	124.596	13.06.2005
2006-2007	9901	132.791	07.08.2006	0.849	125.046	22.06.2006
2007-2008	611.5	127.106	02.10.2007	3.440	125.236	23.05.2008
2008-2009	2560	128.331	25.09.2008	0.000	125.236	03.07.2008
2009-2010	296.8	126.716	04.09.2009	0.000	124.786	01.04.2010
2010-2011	7085	131.301	08.09.2010	0.000		02.07.2010
2011-2012	2133	127.676	30.08.2011	1.411	124.966	11.05.2012
2012-2013	1181	127.376	11.09.2012	0.000	124.856	20.05.2013
2013-2014	5748	129.756	24.07.2013	0.000	124.816	12.06.2013
2014-2015	2212	127.681	08.09.2014	0.000	124.866	29.04.2015
2015-2016	369.1	126.486	18.09.2015	0.000	124.836	08.06.2015
2016-2017	9226	132.241	03.10.2016	0.000	124.826	14.05.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Mancherial in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1966-1967**	14460	514	14974
2	**1967-1968**	16398	1555	17954
3	**1968-1969**	9241	742	9983
4	**1969-1970**	24445	510	24955
5	**1970-1971**	27599	713	28311
6	**1971-1972**	7919	329	8248
7	**1972-1973**	2618	61	2679
8	**1973-1974**	18336	897	19233
9	**1974-1975**	5829	641	6470
10	**1975-1976**	29200	926	30126
11	**1976-1977**	16434	404	16838
12	**1977-1978**	7043	1115	8158
13	**1978-1979**	14153	649	14802
14	**1979-1980**	6770	942	7712
15	**1980-1981**	12286	391	12678
16	**1981-1982**	10710	443	11152
17	**1982-1983**	3829	602	4431
18	**1983-1984**	44447	1067	45514
19	**1984-1985**	1486	512	1997
20	**1985-1986**	1798	285	2083
21	**1986-1987**	4454	210	4664
22	**1987-1988**	1436	440	1877
23	**1988-1989**	35047	543	35590
24	**1989-1990**	21618	782	22400
25	**1990-1991**	27983	778	28760
26	**1991-1992**	6977	311	7288
27	**1992-1993**	4460	367	4827
28	**1993-1994**	2732	142	2874
29	**1994-1995**	3485	628	4113
30	**1995-1996**	8860	583	9444
31	**1996-1997**	5830	617	6446
32	**1997-1998**	1396	146	1542
33	**1998-1999**	15410	402	15812
34	**1999-2000**	5819	455	6275
35	**2000-2001**	10929	377	11306
36	**2001-2002**	3564	365	3929
37	**2002-2003**	2451	122	2573
38	**2003-2004**	3203	117	3320
39	**2004-2005**	262	28	290
40	**2005-2006**	10898	243	11141
41	**2006-2007**	14815	300	15115
42	**2007-2008**	925	185	1110
43	**2008-2009**	2171	169	2340
44	**2009-2010**	431	34	464
45	**2010-2011**	9436	332	9767
46	**2011-2012**	2514	133	2647
47	**2012-2013**	1953	271	2224
48	**2013-2014**	6930	560	7489
49	**2014-2015**	813	204	1017
50	**2015-2016**	940	184	1124
51	**2016-2017**	7855	226	8081
Average		9816	462	10277

Stage-Discharge Data for the period 2017 - 2018

Station Name : Mancherial (AG000J3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Manjira SD, Nizamabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	124.826	0.000	124.906	0.000	124.956	4.000	125.036	4.825	125.216	8.189 *	125.136	4.472
2	124.826	0.000	124.896	0.000	124.946	3.926	124.996	3.870 *	125.246	9.030 *	125.126	4.403
3	124.816	0.000	124.896	0.000	124.946	3.881	126.206	132.9 *	125.786	36.49	125.126	4.353
4	124.816	0.000	124.916	0.000	124.936	3.677	125.596	29.77	125.806	40.50	125.116	4.270
5	124.816	0.000	124.966	5.107	124.936	3.577	125.446	24.67	125.836	44.25	125.116	5.868 *
6	124.816	0.000	124.966	5.183	124.926	3.009 *	125.351	19.01	125.546	27.60	125.111	4.110
7	124.816	0.000	125.016	8.916	124.916	2.592	125.456	23.23	125.426	24.88	125.116	4.110
8	124.826	0.000	125.016	8.748	124.906	2.026	125.326	16.15	125.896	60.48 *	125.096	3.656
9	124.826	0.000	124.986	3.735 *	124.906	1.990	125.306	15.04	125.956	66.94	125.096	3.712
10	124.836	0.000	124.986	5.725	124.896	1.766	125.036	4.455 *	125.741	38.83	125.096	3.715
11	124.836	0.000	124.976	4.898	124.896	1.729	125.191	10.97	126.056	86.53	125.096	3.702
12	125.151	12.22	124.996	7.118	124.886	1.965	125.176	4.501	126.351	236.6	125.096	5.481 *
13	124.856	0.000	124.996	7.273	124.966	3.477 *	125.196	11.69	126.166	113.0	125.096	3.693
14	124.876	0.000	125.016	8.161	124.986	5.039	125.186	11.32	125.996	85.54	125.096	3.693
15	124.876	0.000	125.016	8.257	124.986	3.735 *	125.176	9.955	126.036	87.02 *	125.096	3.515
16	124.876	0.000	125.036	4.455 *	124.986	4.335	125.426	21.09	126.016	85.61	125.086	3.506
17	124.876	0.000	125.036	8.734	124.956	2.658	125.316	11.30 *	125.456	23.81	125.086	3.457
18	124.876	0.000	125.056	9.082	124.956	2.828	125.266	12.70	125.446	23.71	125.096	3.612
19	124.876	0.000	125.066	9.152	124.956	2.822	125.236	10.90	125.846	52.93 *	125.096	5.481 *
20	124.916	0.000	125.056	8.968	124.946	3.236 *	125.196	9.710	125.411	15.35	125.106	3.929
21	124.916	0.000	125.056	8.904	125.066	5.671	125.166	4.769	125.266	8.600	125.116	4.171
22	124.916	0.000	125.046	8.667	125.076	5.732	125.176	4.618	125.226	8.461 *	125.126	4.239
23	124.916	0.000	125.046	4.613 *	125.026	4.147	125.196	5.112	125.196	6.532	125.166	5.580
24	124.916	0.000	125.046	7.591	124.976	2.614	125.186	7.419 *	125.241	8.153	125.156	5.173
25	124.916	0.000	125.016	6.771	124.926	3.009 *	125.166	4.554	125.196	6.516	125.126	4.345
26	124.916	0.000	125.006	5.821	124.986	2.853	125.176	4.838	125.176	6.110	125.116	5.868 *
27	124.916	0.000	124.996	5.698	125.196	7.668 *	125.156	3.827	125.166	5.577	125.106	3.931
28	124.906	0.000	125.006	5.689	125.151	6.268	125.146	3.639	125.146	4.822	125.106	3.959
29	124.906	0.000	124.966	4.289	125.246	7.965	125.171	4.228	125.136	6.278 *	125.106	3.970
30	124.906	0.000	124.966	3.477 *	125.216	7.547	125.286	10.27 *	125.136	4.720	125.116	4.176
31			124.956	4.079	125.136	5.972			125.136	4.482		
Ten-Daily Mean												
I Ten-Daily	124.822	0.000	124.955	3.741	124.927	3.044	125.376	27.40	125.646	35.72	125.114	4.267
II Ten-Daily	124.902	1.222	125.025	7.610	124.952	3.182	125.236	11.41	125.878	81.01	125.095	4.007
III Ten-Daily	124.913	0.000	125.010	5.964	125.091	5.404	125.183	5.327	125.184	6.386	125.124	4.541
Monthly												
Min.	124.816	0.000	124.896	0.000	124.886	1.729	124.996	3.639	125.136	4.482	125.086	3.457
Max.	125.151	12.22	125.066	9.152	125.246	7.965	126.206	132.9	126.351	236.6	125.166	5.868
Mean	124.879	0.407	124.997	5.778	124.993	3.926	125.265	14.71	125.557	39.92	125.111	4.272

Annual Runoff in MCM = 231 Annual Runoff in mm = 2

Peak Observed Discharge = 236.6 cumecs on 12/10/2017 Corres. Water Level :126.351 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :124.826 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Mancherial (AG000J3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Manjira SD, Nizamabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	125.116	4.192	125.146	3.027	125.126	1.951	125.096	2.139	125.186	2.210 *	125.266	3.034
2	125.156	5.510 *	125.146	2.967	125.116	1.911	125.076	1.600 *	125.206	2.534	125.286	4.060
3	125.156	5.510 *	125.146	2.877	125.116	1.880	125.066	1.552	125.206	2.543	125.296	4.443
4	125.156	5.513	125.136	2.770	125.116	1.880 *	125.066	1.520 *	125.206	2.490	125.296	4.428
5	125.156	5.519	125.146	2.705	125.116	1.845	125.066	1.521	125.216	2.691	125.296	4.401
6	125.166	5.748	125.146	2.679	125.116	1.886	125.066	1.536	125.196	2.331	125.296	4.410 *
7	125.166	5.678	125.136	2.325 *	125.116	1.883	125.066	1.371	125.216	2.462	125.296	4.298
8	125.166	5.642	125.126	2.363	125.106	1.709	125.056	1.148	125.216	2.460 *	125.296	4.335
9	125.166	5.630	125.116	2.262	125.076	1.476	125.076	1.269	125.226	2.646	125.296	4.372
10	125.156	5.250 *	125.126	2.300	125.096	1.590	125.076	1.268	125.216	2.354	125.276	3.201
11	125.146	4.934	125.136	2.325	125.086	1.550 *	125.076	1.270 *	125.216	2.399	125.226	2.733
12	125.146	4.948	125.146	2.336	125.086	1.530	125.086	1.494	125.216	2.352	125.216	2.483
13	125.146	4.998	125.136	2.269	125.086	1.501	125.086	1.463	125.216	2.230	125.186	1.930 *
14	125.156	5.328	125.126	2.300 *	125.076	1.436	125.086	1.422	125.206	2.132	125.196	1.993
15	125.156	5.276	125.136	2.269 *	125.076	1.451	125.086	1.413	125.206	2.130 *	125.176	1.902
16	125.146	5.057	125.136	2.164	125.076	1.456	125.131	2.371	125.196	2.004	125.166	1.858
17	125.166	5.690 *	125.126	2.131	125.096	1.575	125.266	6.310	125.166	1.649	125.166	1.843
18	125.166	5.692	125.126	2.094	125.186	4.120 *	125.296	7.300 *	125.166	1.635	125.156	1.819
19	125.166	5.653	125.126	2.058	125.236	5.887	125.296	7.312	125.186	1.878	125.156	1.835
20	125.156	5.384	125.126	2.091	125.296	7.632	125.296	7.241	125.196	2.022	125.156	1.840 *
21	125.156	5.331	125.126	2.091 *	125.316	8.464	125.296	7.734	125.186	1.896	125.156	1.765
22	125.156	5.272	125.126	1.991	125.316	8.494	125.296	7.305	125.166	1.635 *	125.156	1.723
23	125.156	5.236	125.126	1.938	125.291	7.549	125.286	7.032	125.126	1.146	125.156	1.673
24	125.156	5.230 *	125.116	1.898	125.186	4.698	125.296	7.211	125.116	1.095	125.166	1.751
25	125.156	5.230 *	125.116	1.849	125.146	3.340 *	125.286	7.032 *	125.086	0.799	125.166	1.772
26	125.146	4.083	125.116	1.849 *	125.146	3.399	125.246	4.871	125.096	0.928	125.166	1.754
27	125.136	3.412	125.116	1.738	125.146	3.304	125.226	4.307	125.096	0.970	125.166	1.750 *
28	125.136	3.315	125.116	1.750 *	125.136	3.226	125.206	3.029	125.096	0.960	125.166	1.722
29	125.126	3.166	125.116	1.901			125.196	2.650 *	125.096	0.960 *	125.166	1.729
30	125.126	3.079	125.126	1.953			125.196	2.650 *	125.126	1.150 *	125.156	1.531
31	125.136	3.315 *	125.126	2.010			125.186	2.369			125.146	1.343
Ten-Daily Mean												
I Ten-Daily	125.156	5.419	125.137	2.628	125.110	1.801	125.071	1.492	125.209	2.472	125.290	4.098
II Ten-Daily	125.155	5.296	125.132	2.204	125.130	2.814	125.170	3.760	125.197	2.043	125.180	2.024
III Ten-Daily	125.144	4.243	125.121	1.906	125.210	5.309	125.247	5.108	125.119	1.154	125.161	1.683
Monthly												
Min.	125.116	3.079	125.116	1.738	125.076	1.436	125.056	1.148	125.086	0.799	125.146	1.343
Max.	125.166	5.748	125.146	3.027	125.316	8.494	125.296	7.734	125.226	2.691	125.296	4.443
Mean	125.151	4.962	125.130	2.235	125.146	3.165	125.166	3.507	125.175	1.890	125.209	2.572

Peak Computed Discharge = 132.9 cumecs on 03/09/2017 Corres. Water Level :126.206 m

Lowest Computed Discharge = 0.960 cumecs on 29/04/2018 Corres. Water Level :125.096 m

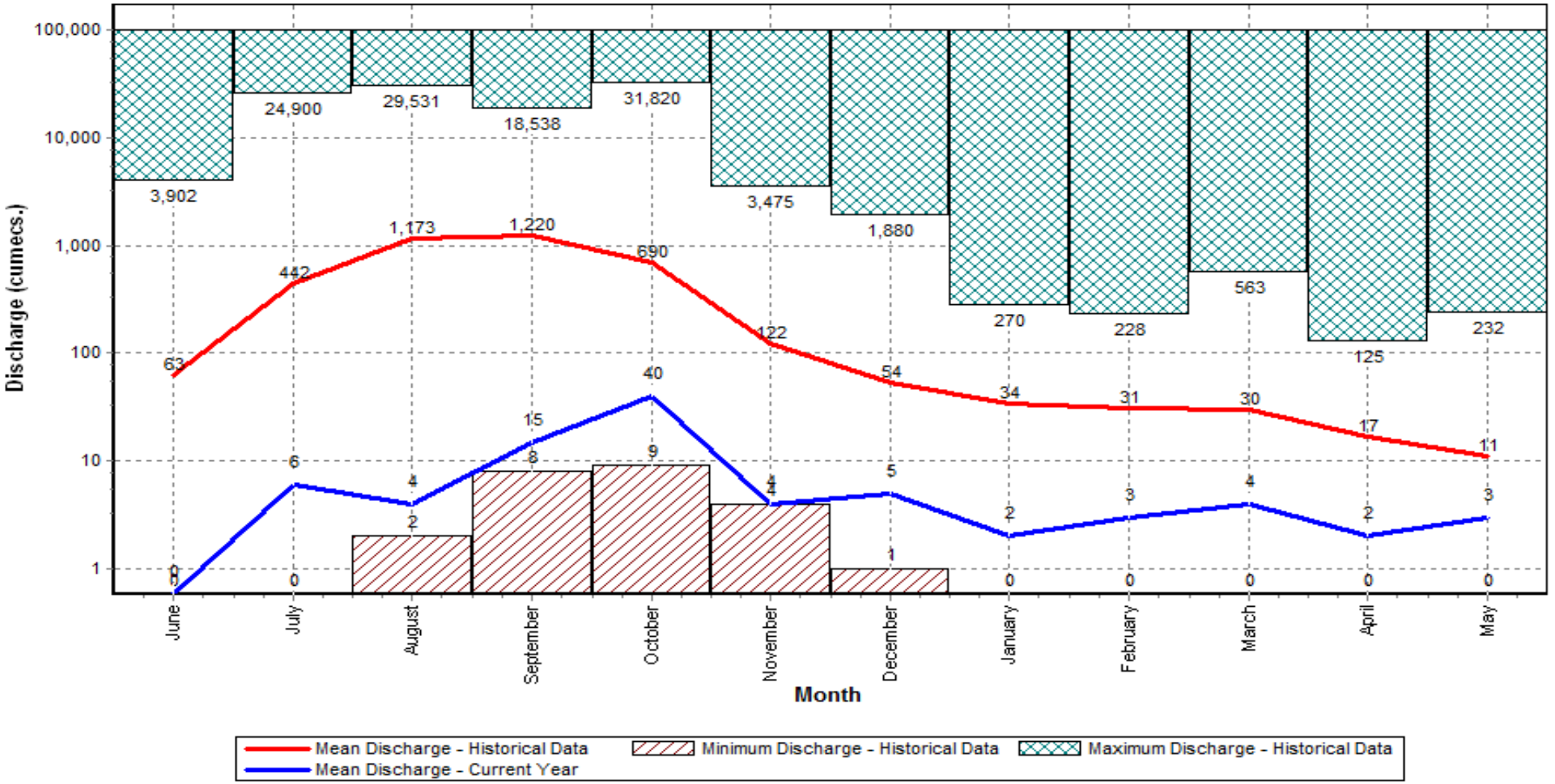
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Mancherial (AG000J3) | **Data considered : 1966-2018** | **Division : U Godavari Div., Hyderabad**

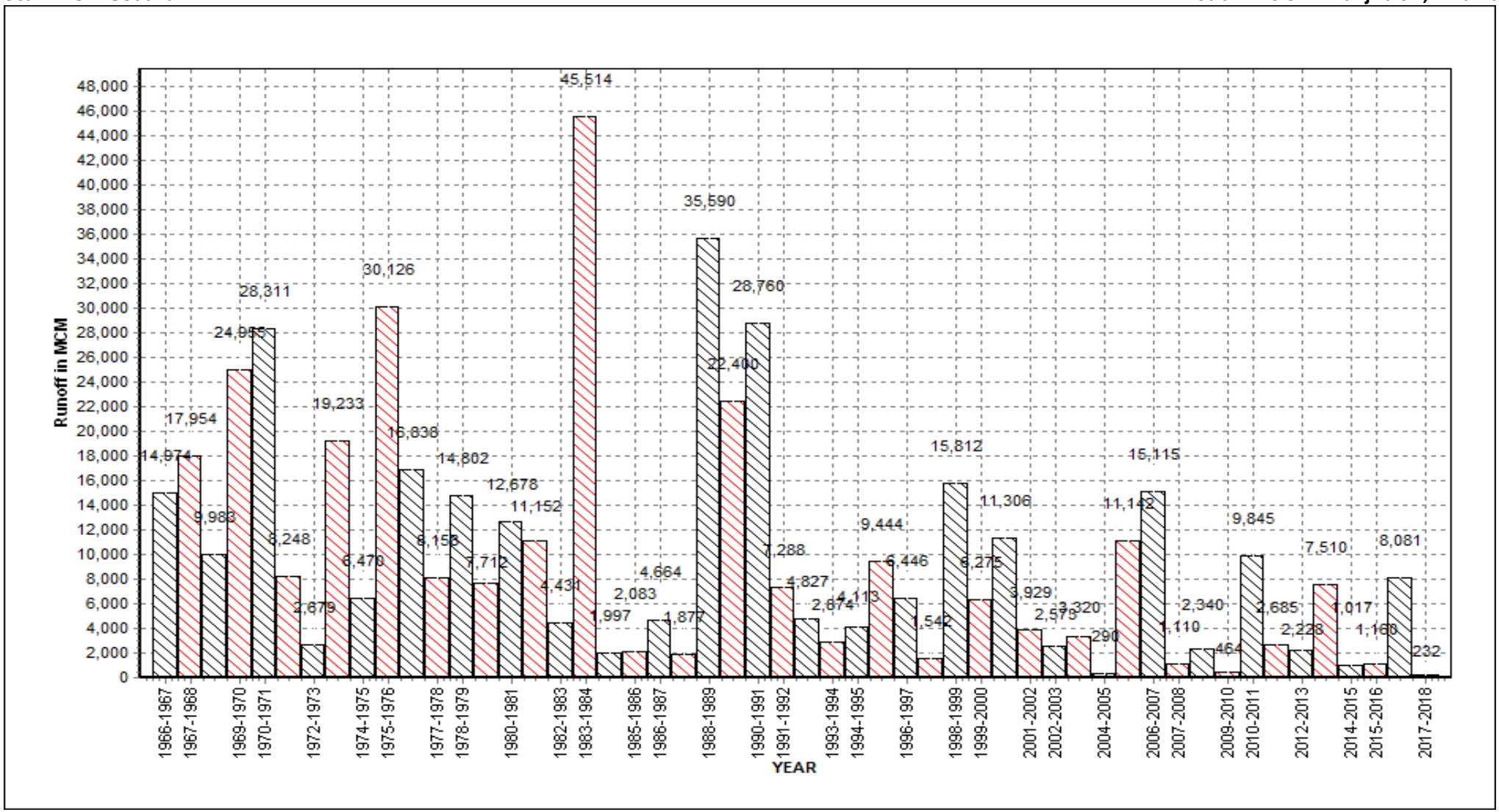
Local River : Godavari | **Sub-Division : Manjira SD, Nizamabad**



Annual Runoff Values for the period: 1966 - 2018

Station Name : Mancherial (AG000J3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Manjira SD, Nizamabad**

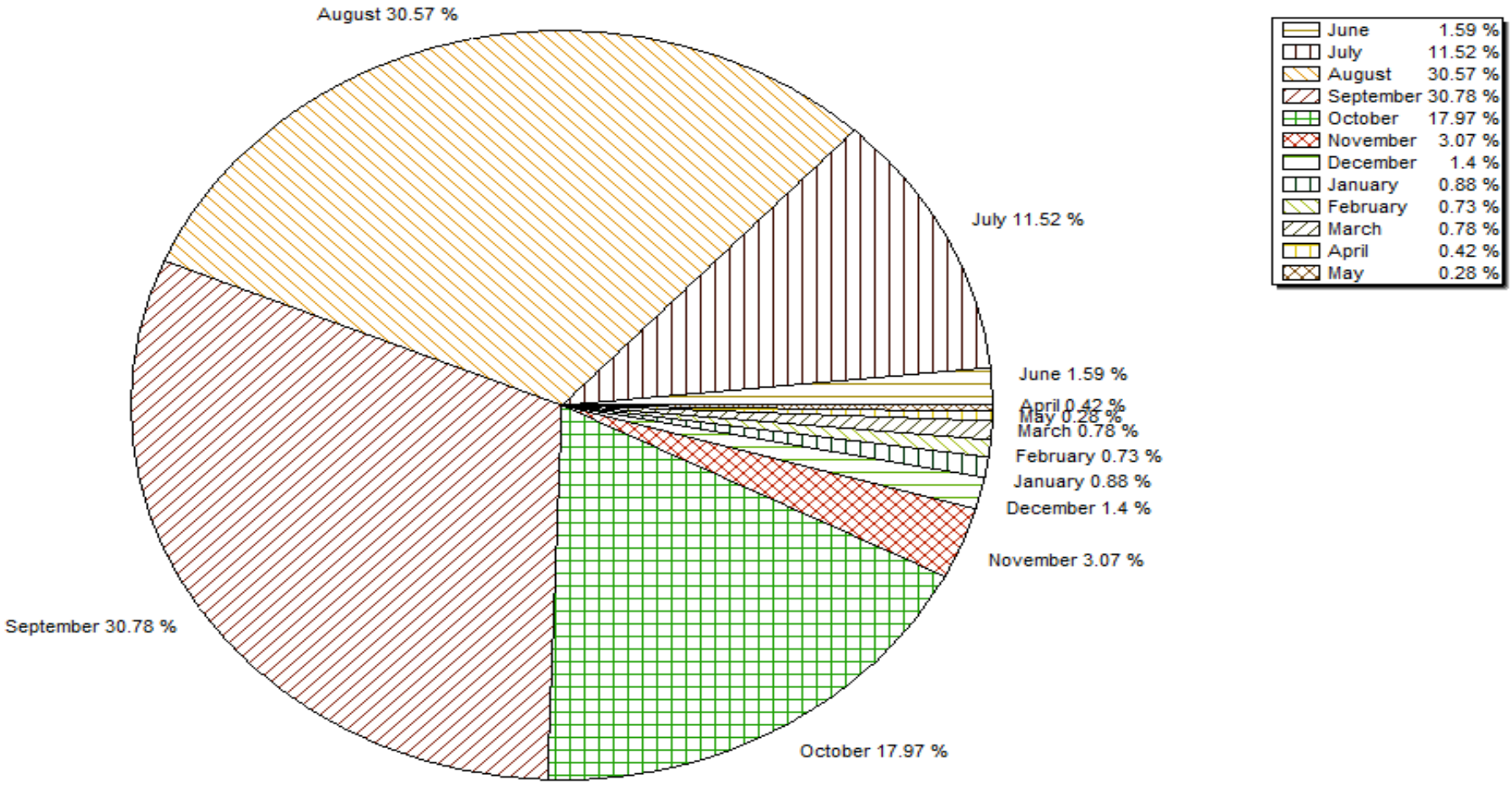


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1966-2017

Station Name : Mancherial (AG000J3)
Local River : Godavari

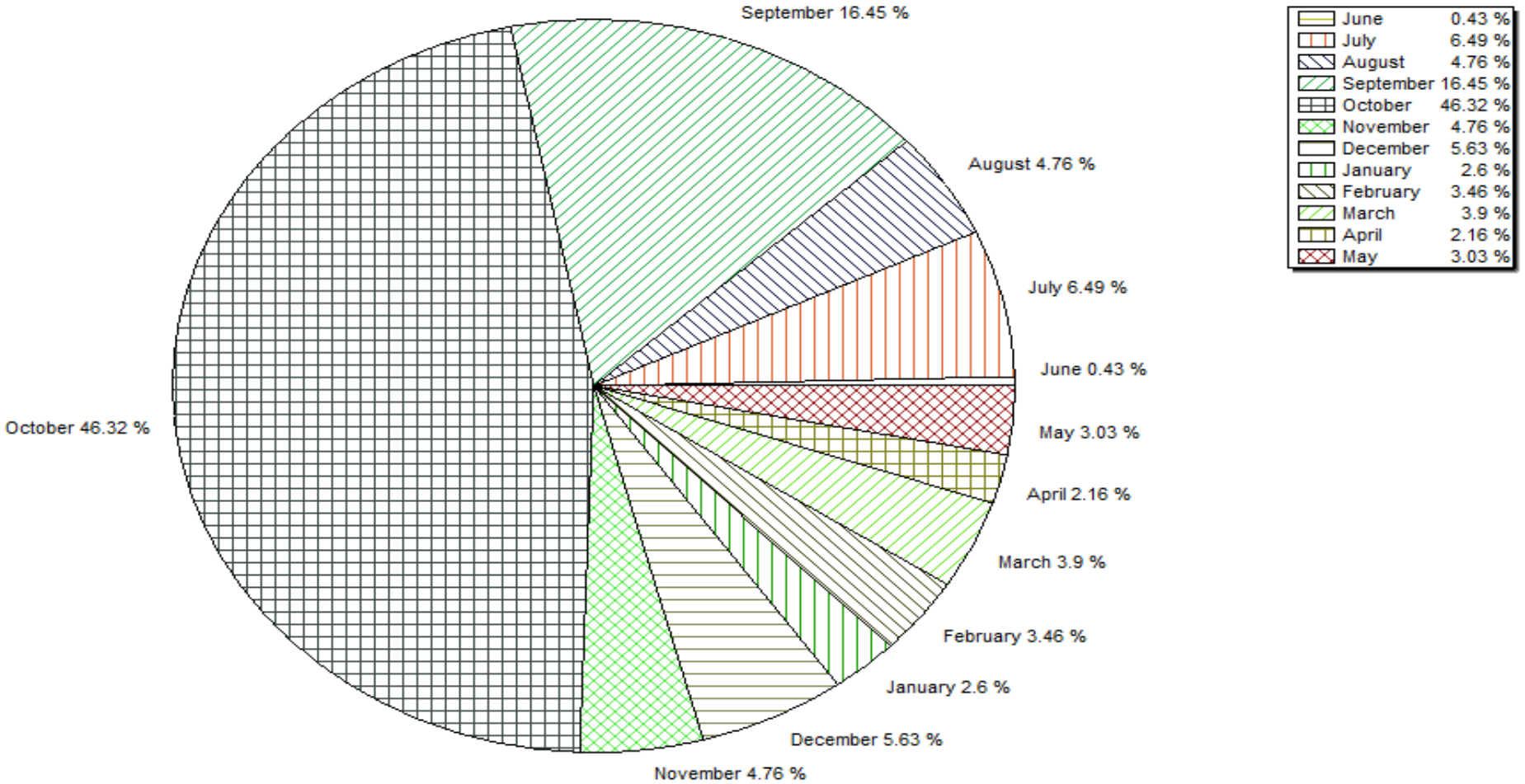
Division : U Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad



Monthly Runoff for the Year : 2017-2018

Station Name : Mancherial (AG000J3)
Local River : Godavari

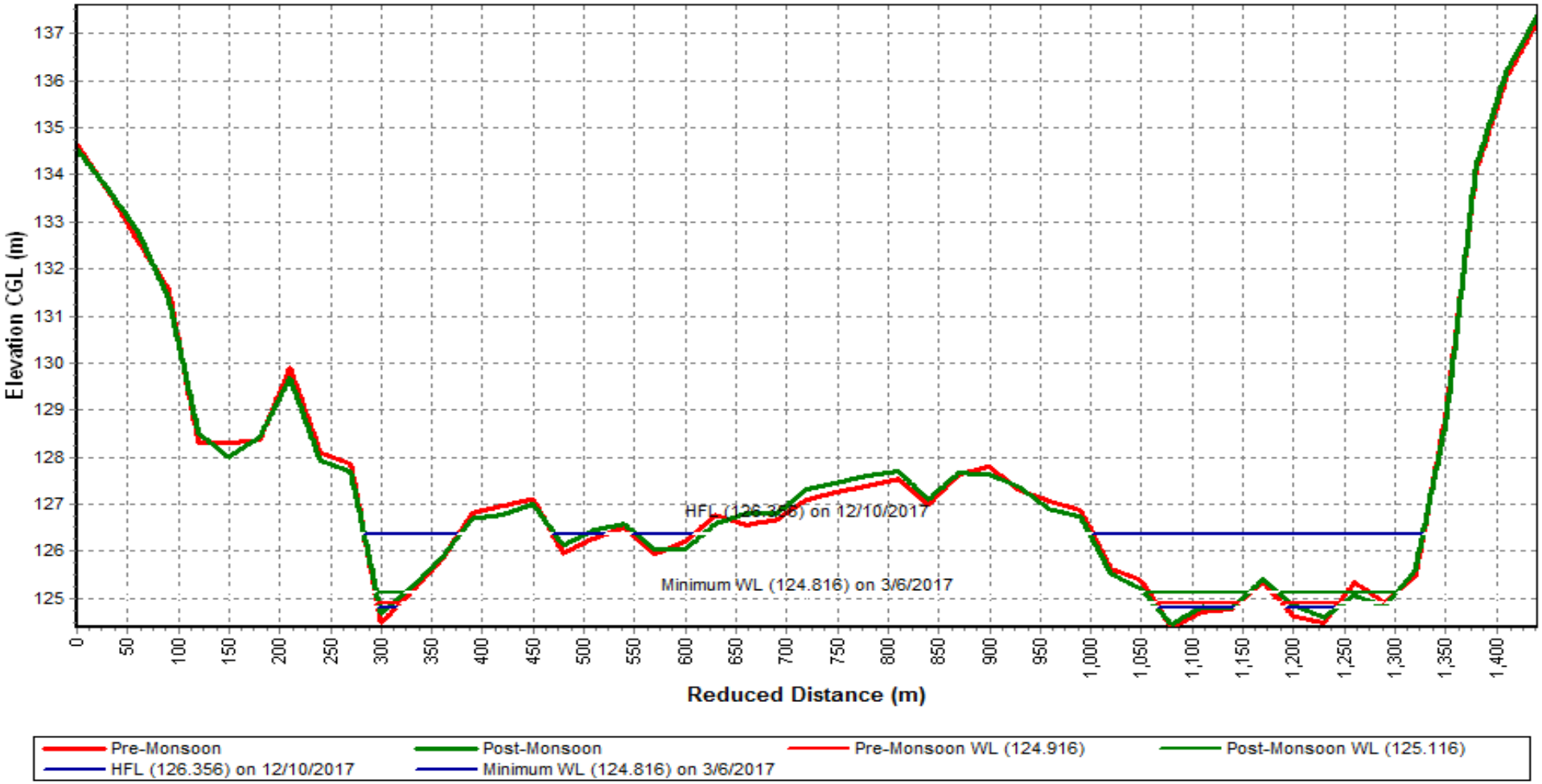
Division : U Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Mancherial (AG000J3) **Division : U Godavari Div., Hyderabad**

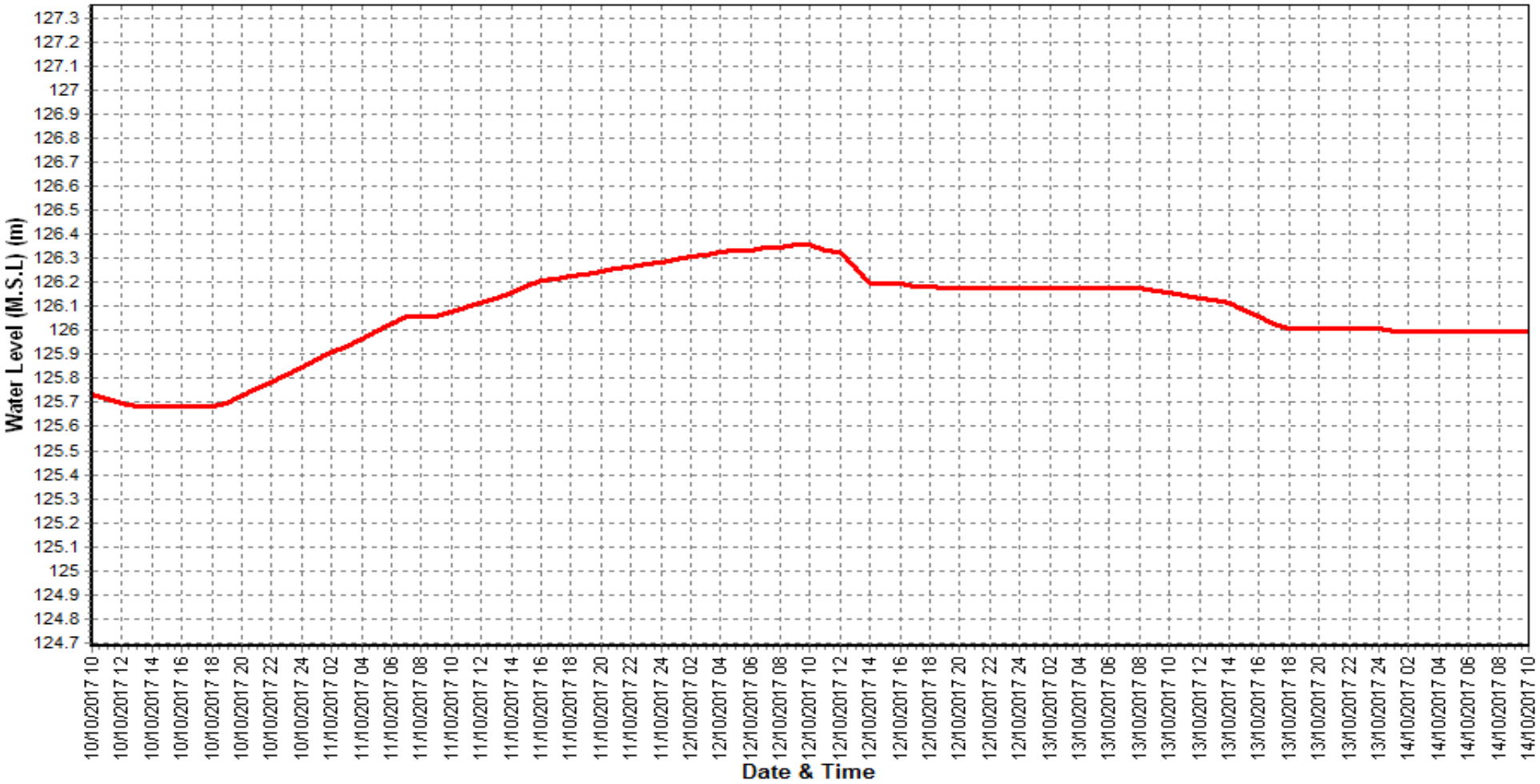
Local River : Godavari **Sub-Division : Manjira SD, Nizamabad**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Mancherial (AG000J3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Manjira SD, Nizamabad**



Time Span: 96 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Gandlapet (Teriminal site of River Peddavagu)**	**Code**	:	**AGM00G6**
State	:	Andhra Pradesh	District		Nizamabad
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Peddavagu	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Peddavagu
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Manjira SD, Nizamabad
Drainage Area	:	1360 Sq. Km.	Bank	:	
Latitude	:	18°49'16"	Longitude	:	78°26'17"
Zero of Gauge (m)	:	312.000 (m.s.l)	18.07.1986		
		Opening Date	Closing Date		
Gauge	:	18.07.1986	**HFL During 2017-18**	:	**312.359 Meter**
			Corres. Discharge	:	**0** NO FLOW
Discharge	:	10.09.1986	**Date & Time of**	:	**16.10.2017**
			Occurance	:	**08:00 hrs.**
Sediment	:	-			
Water Quality	:	31.07.1988			

HFL Recorded so far in m : 318.5 30/08/1990
Corresponding Discharge (cumecs) : 2067*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1987-1988	9.489	313.760	20.11.1987	0.000		03.01.1988
1988-1989	1326	317.215	20.08.1988	0.000		18.02.1989
1989-1990	1155	317.000	24.07.1989	0.000		25.01.1990
1990-1991	1656	317.900	30.08.1990	0.000		22.02.1991
1991-1992	1240	317.175	12.07.1991	0.000		26.01.1992
1992-1993	29.86	314.160	16.08.1992	0.000		25.01.1993
1993-1994	359.6	315.400	30.07.1993	0.000		25.01.1994
1994-1995	64.97	314.450	07.10.1994	0.000		01.03.1995
1995-1996	1072	317.150	19.10.1995	0.000		11.03.1996
1996-1997	254.0	315.010	02.10.1996	0.000		03.03.1997
1997-1998	8.252	313.885	29.10.1997	0.000		16.01.1998
1998-1999	327.8	315.515	16.10.1998	0.000		22.02.1999
1999-2000	494.8	315.800	10.09.1999	0.000		10.02.2000
2000-2001	808.5	316.420	11.08.2000	0.000		25.01.2001
2001-2002	182.3	314.880	23.08.2001	0.000		16.02.2002
2002-2003	12.90	313.820	25.08.2002	0.000		25.01.2003
2003-2004	23.90	313.940	24.08.2003	0.000		26.01.2004

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2004-2005	4.835	313.470	12.09.2004	0.000		25.01.2005
2005-2006	42.22	313.850	22.09.2005	0.000		27.01.2006
2006-2007	457.5	315.300	05.08.2006	0.000		25.01.2007
2007-2008	0.000	312.770	24.09.2007	0.000		05.02.2008
2008-2009	0.000	313.610	04.10.2008	0.000		25.01.2009
2009-2010	0.000		04.10.2009	0.000		25.01.2010
2010-2011	86.16	313.850	24.09.2010	0.000		25.01.2011
2011-2012	97.32	313.920	29.07.2011	0.000		26.01.2012
2012-2013	136.9	314.140	03.10.2012	0.000	312.265	07.11.2012
2013-2014	175.4	314.100	01.08.2013	0.000		16.02.2014
2014-2015	13.50	312.785	01.09.2014	0.000	312.000	16.12.2014
2015-2016	0.000	312.000	26.03.2016	0.000	312.000	16.10.2015
2016-2017	30.51	315.000	25.09.2016	0.000		14.07.2016

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Gandlapet in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1986-1987**	224	0	224
2	**1987-1988**	6	0	6
3	**1988-1989**	883	0	883
4	**1989-1990**	540	0	540
5	**1990-1991**	784	2	786
6	**1991-1992**	228	0	228
7	**1992-1993**	20	0	20
8	**1993-1994**	85	0	85
9	**1994-1995**	41	4	45
10	**1995-1996**	418	1	419
11	**1996-1997**	72	0	72
12	**1997-1998**	1	0	1
13	**1998-1999**	196	0	197
14	**1999-2000**	169	0	169
15	**2000-2001**	193	0	193
16	**2001-2002**	36	0	36
17	**2002-2003**	7	0	7
18	**2003-2004**	3	0	3
19	**2004-2005**	3	0	3
20	**2005-2006**	23	0	23
21	**2006-2007**	100	0	100
22	**2007-2008**	0	0	0
23	**2008-2009**	0	0	0
24	**2009-2010**	0	0	0
25	**2010-2011**	63	0	63
26	**2011-2012**	62	0	62
27	**2012-2013**	19	0	19
28	**2013-2014**	381	0	381
29	**2014-2015**	3	0	3
30	**2015-2016**	0	0	0
31	**2016-2017**	12	0	12
Average		147	0	148

Stage-Discharge Data for the period 2017 - 2018

Station Name : Gandlapet (AGM00G6) **Division : U Godavari Div., Hyderabad**

Local River : Peddavagu **Sub-Division : Manjira SD, Nizamabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000		0.000		0.000		0.000	312.290	0.000
2		0.000		0.000		0.000		0.000		0.000	312.290	0.000
3		0.000		0.000		0.000		0.000		0.000	312.290	0.000
4		0.000		0.000		0.000		0.000		0.000	312.290	0.000
5		0.000		0.000		0.000		0.000		0.000	312.290	0.000
6		0.000		0.000		0.000		0.000		0.000	312.290	0.000
7		0.000		0.000		0.000		0.000		0.000	312.290	0.000
8		0.000		0.000		0.000		0.000		0.000	312.290	0.000
9		0.000		0.000		0.000		0.000		0.000	312.290	0.000
10		0.000		0.000		0.000		0.000		0.000	312.290	0.000
11		0.000		0.000		0.000		0.000		0.000	312.290	0.000
12		0.000		0.000		0.000		0.000		0.000	312.280	0.000
13		0.000		0.000		0.000		0.000		0.000	312.280	0.000
14		0.000		0.000		0.000		0.000		0.000	312.280	0.000
15		0.000		0.000		0.000		0.000		0.000	312.280	0.000
16		0.000		0.000		0.000		0.000	312.360	0.000	312.280	0.000
17		0.000		0.000		0.000		0.000	312.360	0.000	312.280	0.000
18		0.000		0.000		0.000		0.000	312.360	0.000	312.270	0.000
19		0.000		0.000		0.000		0.000	312.360	0.000	312.270	0.000
20		0.000		0.000		0.000		0.000	312.360	0.000	312.270	0.000
21		0.000		0.000		0.000		0.000	312.360	0.000	312.270	0.000
22		0.000		0.000		0.000		0.000	312.360	0.000	312.260	0.000
23		0.000		0.000		0.000		0.000	312.360	0.000	312.260	0.000
24		0.000		0.000		0.000		0.000	312.350	0.000	312.260	0.000
25		0.000		0.000		0.000		0.000	312.350	0.000	312.260	0.000
26		0.000		0.000		0.000		0.000	312.350	0.400	312.260	0.000
27		0.000		0.000		0.000		0.000	312.350	0.688	312.260	0.000
28		0.000		0.000		0.000		0.000	312.350	0.688	312.260	0.000
29		0.000		0.000		0.000		0.000	312.350	0.400	312.260	0.000
30		0.000		0.000		0.000		0.000	312.350	0.385	312.250	0.000
31				0.000		0.000			312.350	0.386		
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000		0.000		0.000	312.290	0.000
II Ten-Daily		0.000		0.000		0.000		0.000	312.360	0.000	312.278	0.000
III Ten-Daily		0.000		0.000		0.000		0.000	312.353	0.268	312.260	0.000
Monthly												
Min.		0.000		0.000		0.000		0.000	312.350	0.000	312.250	0.000
Max.		0.000		0.000		0.000		0.000	312.360	0.688	312.290	0.000
Mean		0.000		0.000		0.000		0.000	312.355	0.095	312.276	0.000

Annual Runoff in MCM = 0 **Annual Runoff in mm = 0**

Peak Observed Discharge = 0.688 cumecs on 27/10/2017 **Corres. Water Level :312.350 m**

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Gandlapet (AGM00G6) **Division : U Godavari Div., Hyderabad**

Local River : Peddavagu **Sub-Division : Manjira SD, Nizamabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	312.250	0.000	312.130	0.000		0.000		0.000		0.000		0.000
2	312.250	0.000	312.130	0.000		0.000		0.000		0.000		0.000
3	312.250	0.000	312.130	0.000		0.000		0.000		0.000		0.000
4	312.250	0.000	312.130	0.000		0.000		0.000		0.000		0.000
5	312.250	0.000	312.120	0.000		0.000		0.000		0.000		0.000
6	312.250	0.000	312.110	0.000		0.000		0.000		0.000		0.000
7	312.240	0.000	312.100	0.000		0.000		0.000		0.000		0.000
8	312.240	0.000	312.070	0.000		0.000		0.000		0.000		0.000
9	312.240	0.000	312.050	0.000		0.000		0.000		0.000		0.000
10	312.240	0.000	312.030	0.000		0.000		0.000		0.000		0.000
11	312.240	0.000	312.030	0.000		0.000		0.000		0.000		0.000
12	312.240	0.000	312.030	0.000		0.000		0.000		0.000		0.000
13	312.230	0.000	312.020	0.000		0.000		0.000		0.000		0.000
14	312.230	0.000	312.020	0.000		0.000		0.000		0.000		0.000
15	312.220	0.000	312.020	0.000		0.000		0.000		0.000		0.000
16	312.190	0.000	312.010	0.000		0.000		0.000		0.000		0.000
17	312.190	0.000	312.010	0.000		0.000		0.000		0.000		0.000
18	312.180	0.000	312.010	0.000		0.000		0.000		0.000		0.000
19	312.170	0.000	312.010	0.000		0.000		0.000		0.000		0.000
20	312.170	0.000	312.010	0.000		0.000		0.000		0.000		0.000
21	312.170	0.000		0.000		0.000		0.000		0.000		0.000
22	312.170	0.000		0.000		0.000		0.000		0.000		0.000
23	312.170	0.000		0.000		0.000		0.000		0.000		0.000
24	312.170	0.000		0.000		0.000		0.000		0.000		0.000
25	312.160	0.000		0.000		0.000		0.000		0.000		0.000
26	312.160	0.000		0.000		0.000		0.000		0.000		0.000
27	312.160	0.000		0.000		0.000		0.000		0.000		0.000
28	312.150	0.000		0.000		0.000		0.000		0.000		0.000
29	312.140	0.000		0.000				0.000		0.000		0.000
30	312.130	0.000		0.000				0.000		0.000		0.000
31	312.130	0.000		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	312.246	0.000	312.100	0.000		0.000		0.000		0.000		0.000
II Ten-Daily	312.206	0.000	312.017	0.000		0.000		0.000		0.000		0.000
III Ten-Daily	312.155	0.000		0.000		0.000		0.000		0.000		0.000
Monthly												
Min.	312.130	0.000	312.010	0.000		0.000		0.000		0.000		0.000
Max.	312.250	0.000	312.130	0.000		0.000		0.000		0.000		0.000
Mean	312.201	0.000	312.059	0.000		0.000		0.000		0.000		0.000

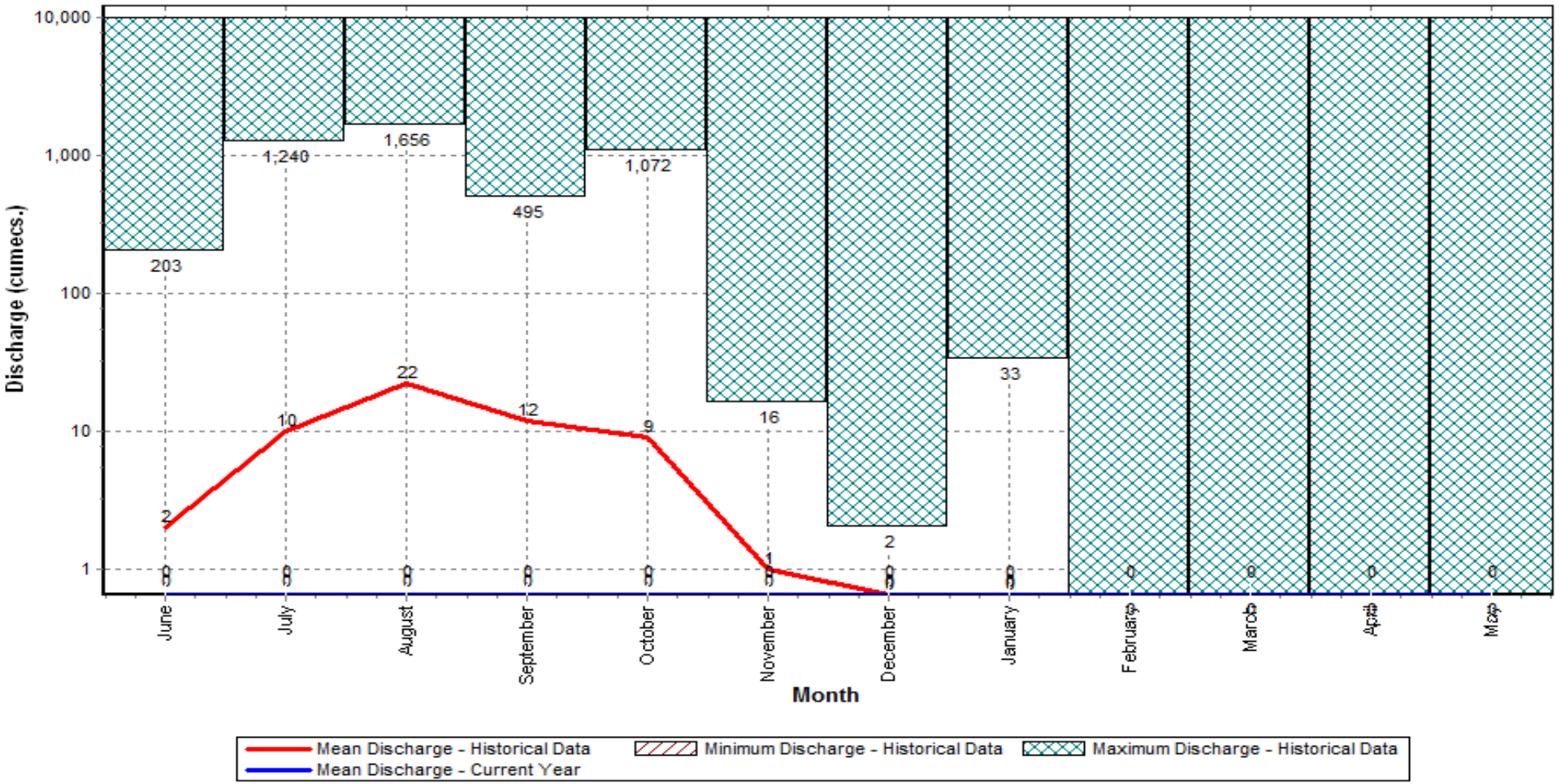
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Gandlapet (AGM00G6) | **Data considered : 1987-2018** | **Division : U Godavari Div., Hyderabad**

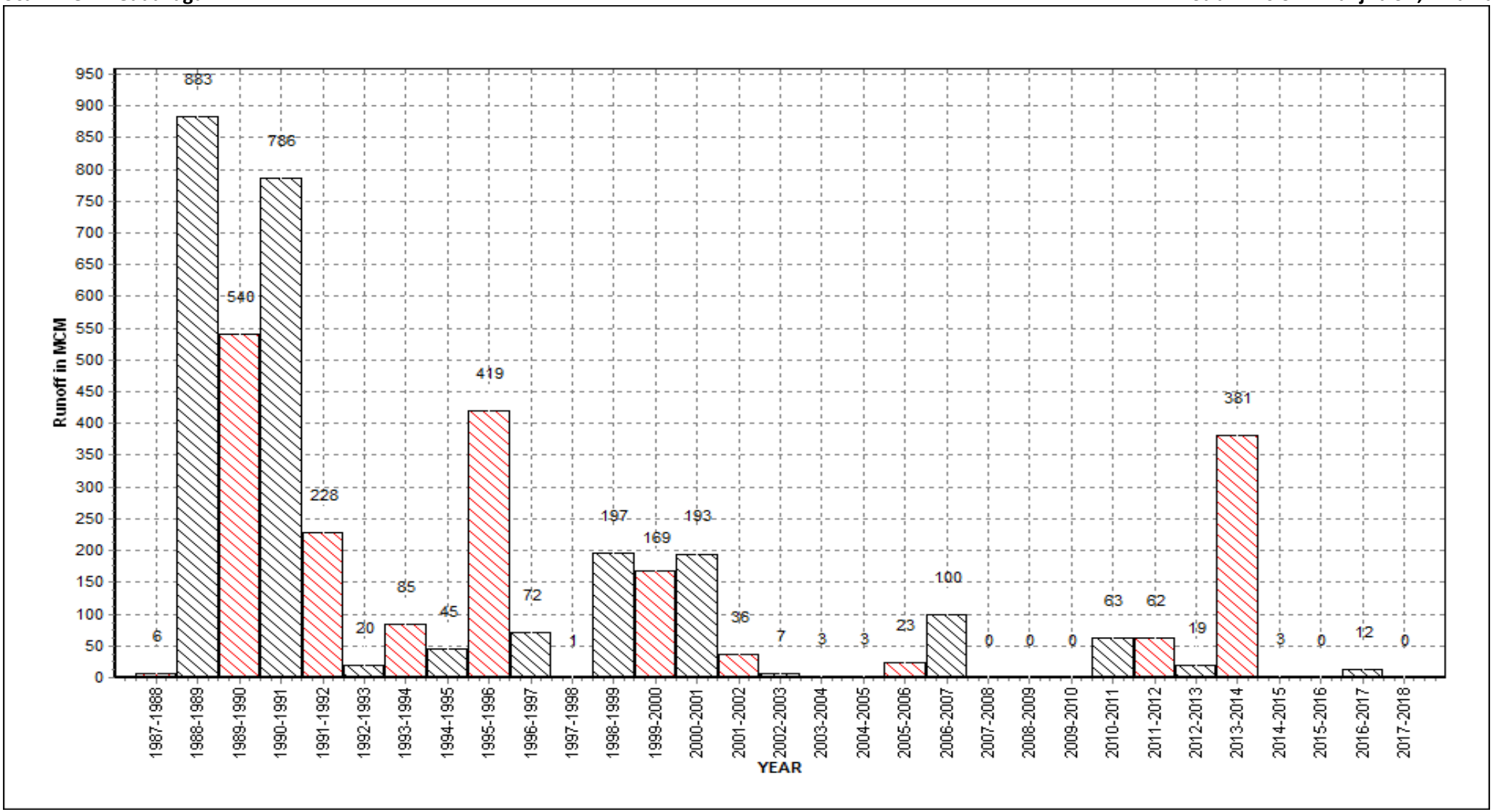
Local River : Peddavagu | **Sub-Division : Manjira SD, Nizamabad**


10,000
1,000
100
10
1
Discharge (cumecs.)
203
1,240
1,656
495
1,072
16
2
33
0
0
0
0
2
10
22
12
9
1
0
0
0
0

Annual Runoff Values for the period: 1987 - 2018

Station Name : Gandlapet (AGM00G6) **Division : U Godavari Div., Hyderabad**

Local River : Peddavagu **Sub-Division : Manjira SD, Nizamabad**

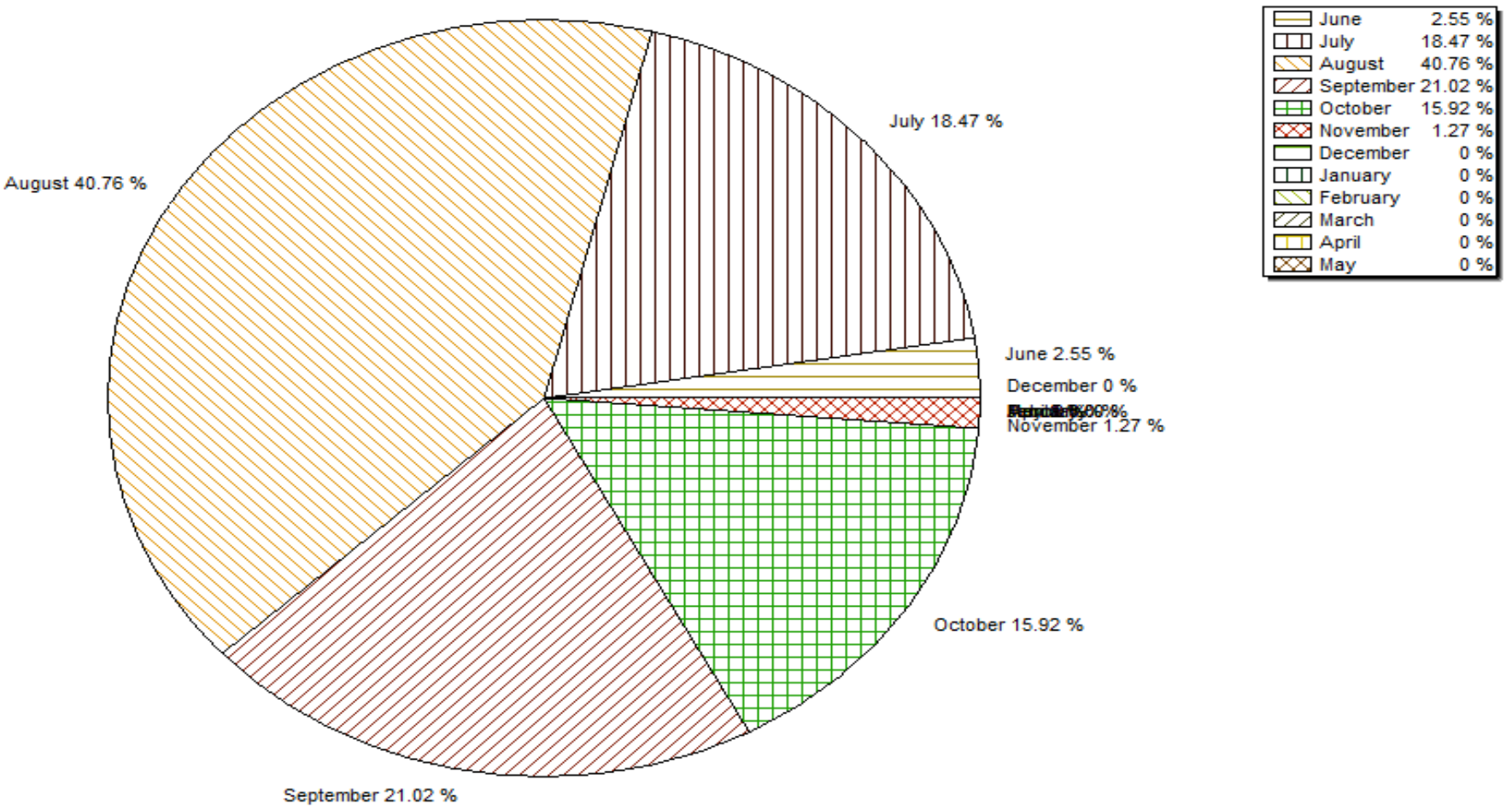


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1987-2017

Station Name : Gandlapet (AGM00G6)
Local River : Peddavagu

Division : U Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad



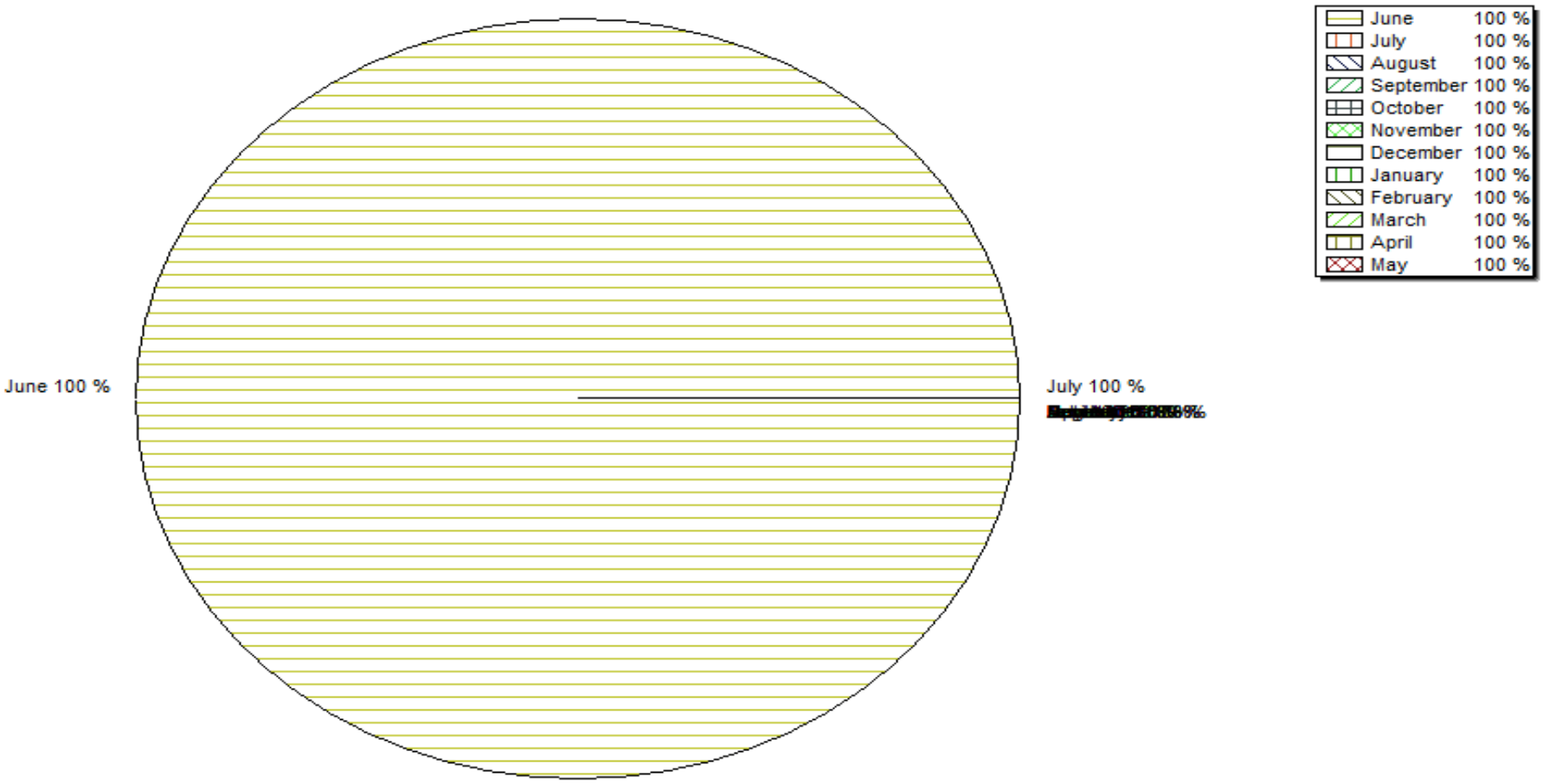
Monthly Runoff for the Year : 2017-2018

Station Name : Gandlapet (AGM00G6)

Local River : Peddavagu

Division : U Godavari Div., Hyderabad

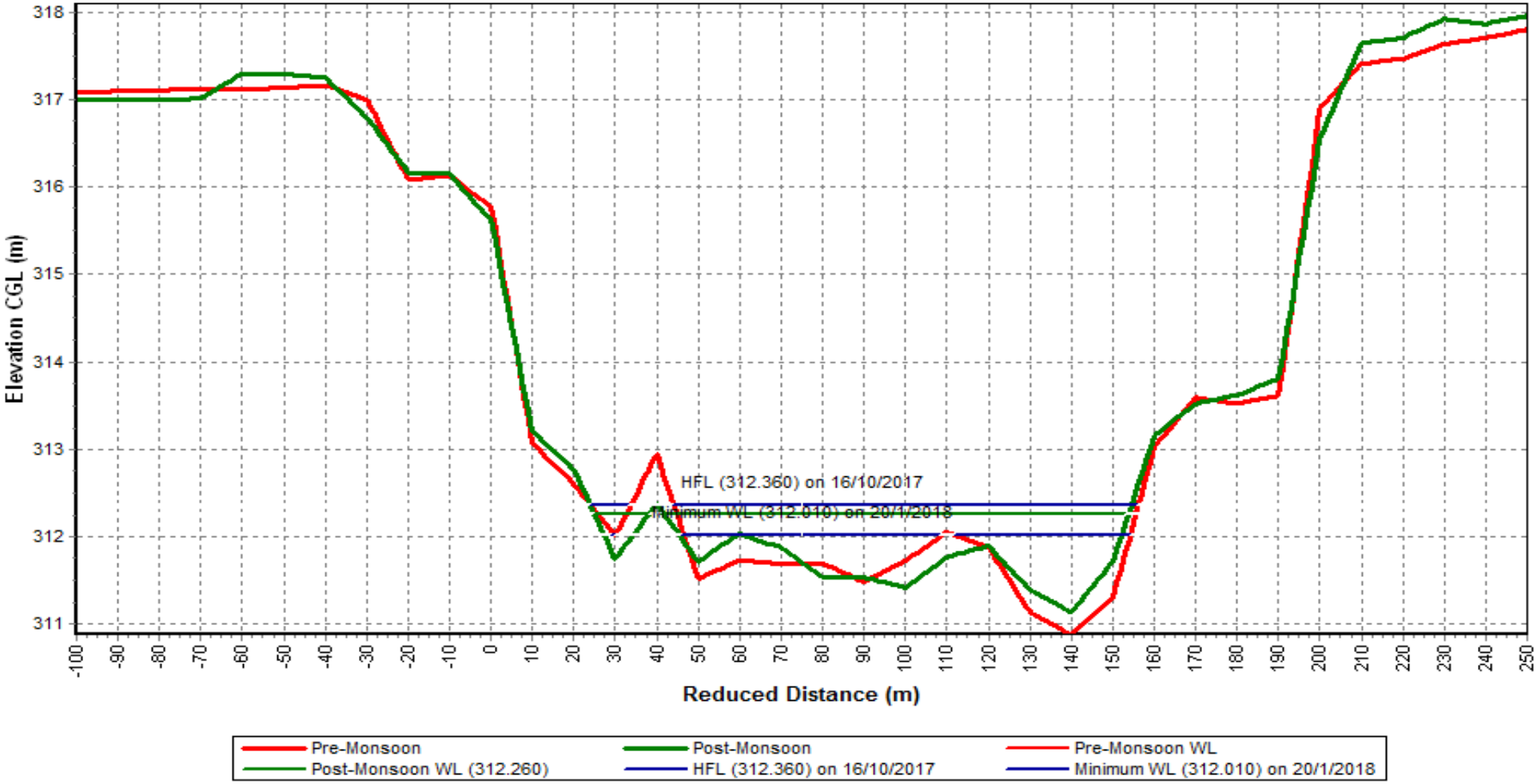
Sub-Division : Manjira SD, Nizamabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Gandlapet (AGM00G6) **Division : U Godavari Div., Hyderabad**

Local River : Peddavagu **Sub-Division : Manjira SD, Nizamabad**



HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Degloor**	**Code**	:	**AGP20F4**
State	:	Maharashtra	District		Nanded
Basin	:	Ganga-Brahm-Meghna Basin	Independent River	:	Godavari
Tributary	:	Manjira	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Lendi
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Manjira SD, Nizamabad
Drainage Area	:	1900 Sq. Km.	Bank	:	
Latitude	:	18°32'12"	Longitude	:	77°34'56"
Zero of Gauge (m)	:	352.000 (m.s.l)	16.08.1984		
		Opening Date	Closing Date		
Gauge	:	16.08.1984	**HFL During 2017-18**	:	**354.390 Meter**
			Corres. Discharge	:	**54.67 Cumecs (Estimated)**
Discharge	:	17.07.1987	**Date & Time of**	:	**10.10.2017**
			Occurance	:	**06:00 hrs.**
Sediment	:	01.01.1994			
Water Quality	:	15.09.1988			

HFL Recorded so far in m : 364.85 01/10/2016 BACKWATER EFFECT
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1988-1989	1867	361.250	02.09.1988	0.000		12.05.1989
1989-1990	1103	360.205	24.07.1989	0.000		02.03.1990
1990-1991	1678	361.045	16.08.1990	0.000		16.02.1991
1991-1992	215.9	355.985	11.07.1991	0.000		26.01.1992
1992-1993	329.4	356.865	02.09.1992	0.000		25.01.1993
1993-1994	126.6	355.150	19.10.1993	0.000		09.02.1994
1994-1995	47.58	354.380	31.08.1994	0.000		15.01.1995
1995-1996	1990	362.320	19.10.1995	0.000		23.02.1996
1996-1997	651.5	358.645	08.09.1996	0.000	352.800	27.03.1997
1997-1998	318.1	356.500	29.10.1997	0.000	352.760	22.01.1998
1998-1999	731.8	359.400	10.08.1998	0.000	352.650	11.02.1999
1999-2000	265.6	356.275	02.08.1999	0.000		26.01.2000
2000-2001	2732	363.850	24.08.2000	0.000		25.01.2001
2001-2002	358.1	356.860	05.08.2001	0.000		08.02.2002
2002-2003	135.5	355.120	25.08.2002	0.000		25.01.2003
2003-2004	1812	361.585	21.08.2003	0.000		26.01.2004
2004-2005	1000	358.815	30.07.2004	0.000	352.150	25.01.2005
2005-2006	1426	360.235	21.09.2005	0.000		01.07.2005

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2006-2007	1743	361.280	05.08.2006	0.000	352.620	24.12.2006
2007-2008	90.61	354.750	23.09.2007	0.000	352.510	26.01.2008
2008-2009	94.79	354.720	10.08.2008	0.000	352.380	25.01.2009
2009-2010	121.5	355.270	04.10.2009	0.000		25.01.2010
2010-2011	1110	359.800	26.08.2010	0.000	353.580	25.01.2011
2011-2012	441.3	357.900	01.08.2011	0.000	352.720	23.01.2012
2012-2013	541.2	358.500	03.10.2012	0.000	352.590	27.04.2013
2013-2014	199.1	355.390	23.07.2013	0.000	352.720	14.02.2014
2014-2015	102.9	354.970	31.08.2014	0.000	352.000	25.01.2015
2015-2016	0.000	352.000	24.11.2015	0.000	352.000	10.01.2016
2016-2017	1535	362.420	02.10.2016	0.000	352.400	24.02.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Degloor in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1987-1988**	136	1	137
2	**1988-1989**	1402	8	1410
3	**1989-1990**	486	8	493
4	**1990-1991**	462	3	465
5	**1991-1992**	74	0	74
6	**1992-1993**	108	0	108
7	**1993-1994**	133	0	133
8	**1994-1995**	17	5	22
9	**1995-1996**	405	2	407
10	**1996-1997**	476	0	476
11	**1997-1998**	55	7	61
12	**1998-1999**	678	12	690
13	**1999-2000**	258	0	258
14	**2000-2001**	714	0	714
15	**2001-2002**	230	0	230
16	**2002-2003**	100	0	100
17	**2003-2004**	359	0	359
18	**2004-2005**	110	0	110
19	**2005-2006**	500	3	503
20	**2006-2007**	385	1	386
21	**2007-2008**	65	0	65
22	**2008-2009**	78	0	78
23	**2009-2010**	25	0	25
24	**2010-2011**	297	0	297
25	**2011-2012**	221	0	221
26	**2012-2013**	227	0	227
27	**2013-2014**	276	7	283
28	**2014-2015**	42	0	42
29	**2015-2016**	0	0	0
30	**2016-2017**	759	0	759
Average		303	2	304

Stage-Discharge Data for the period 2017 - 2018

Station Name : Degloor (AGP20F4) **Division : U Godavari Div., Hyderabad**

Local River : Lendi **Sub-Division : Manjira SD, Nizamabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000	352.730	0.000	352.730	0.000	353.535	15.08	353.100	2.303 *	353.020	0.000
2		0.000	352.720	0.000	352.720	0.000	353.410	12.21 *	353.090	2.046 *	352.990	0.000
3		0.000	352.720	0.000	352.720	0.000	353.340	9.732 *	353.120	1.827	352.960	0.000
4		0.000	352.710	0.000	352.720	0.000	353.290	9.051	353.100	1.612	352.930	0.000
5		0.000	352.700	0.000	352.720	0.000	353.170	4.899	353.090	1.477	352.900	0.000
6		0.000	352.720	0.000	352.710	0.000	353.120	2.002	353.080	1.551	352.870	0.000
7		0.000	352.720	0.000	352.710	0.000	353.070	1.546	353.080	0.000	352.840	0.000
8		0.000	352.720	0.000	352.710	0.000	353.100	1.833	353.060	0.000	352.840	0.000
9		0.000	352.710	0.000	352.710	0.000	353.680	22.66 *	353.190	3.706	352.830	0.000
10		0.000	352.730	0.000	352.700	0.000	353.370	10.78 *	354.260	48.43 *	352.820	0.000
11		0.000	352.760	0.000	352.700	0.000	353.320	9.417	353.460	15.40	352.800	0.000
12		0.000	352.730	0.000	352.700	0.000	353.260	7.171	353.315	12.32	352.800	0.000
13		0.000	352.790	0.000	352.700	0.000	353.160	4.731	353.420	12.07	352.790	0.000
14		0.000	352.930	0.000	352.700	0.000	353.130	4.095	353.415	11.78	352.790	0.000
15		0.000	352.880	0.000	352.740	0.000	353.140	4.561	353.370	10.78 *	352.780	0.000
16		0.000	352.850	0.000	352.750	0.000	353.130	4.300	353.300	10.76	352.780	0.000
17		0.000	353.070	0.000	352.740	0.000	353.110	2.567 *	353.230	6.871	352.780	0.000
18		0.000	352.920	0.000	352.730	0.000	353.120	4.136	353.200	7.147	352.770	0.000
19		0.000	352.840	0.000	352.720	0.000	353.075	3.353	353.190	4.849 *	352.770	0.000
20	352.460	0.000	352.800	0.000	353.250	10.27	353.200	3.840	353.160	2.709	352.760	0.000
21	352.430	0.000	352.780	0.000	353.520	14.44	353.160	3.123	353.150	2.664	352.760	0.000
22	352.420	0.000	352.760	0.000	353.420	10.49	353.280	8.674	353.140	3.389 *	352.750	0.000
23	352.400	0.000	352.750	0.000	353.285	9.274	353.235	4.306	353.130	1.940	352.750	0.000
24	352.390	0.000	352.750	0.000	353.180	5.122	353.160	3.961 *	353.260	7.516	352.740	0.000
25	352.390	0.000	352.750	0.000	353.160	3.961 *	353.180	3.018	353.170	4.463	352.740	0.000
26	352.400	0.000	352.740	0.000	353.370	13.23	353.150	2.389	353.110	3.628	352.730	0.000
27	352.460	0.000	352.740	0.000	353.330	9.387 *	353.130	2.114	353.080	3.500	352.730	0.000
28	352.540	0.000	352.740	0.000	353.290	9.496	353.120	2.088	353.080	3.187	352.730	0.000
29	352.590	0.000	352.730	0.000	353.890	31.54 *	353.110	1.901	353.070	1.549 *	352.660	0.000
30	352.720	0.000	352.730	0.000	353.830	28.95 *	353.100	2.303 *	353.040	0.863 *	352.660	0.000
31			352.730	0.000	353.680	22.66 *			353.030	0.654 *		
Ten-Daily Mean												
I Ten-Daily		0.000	352.718	0.000	352.715	0.000	353.309	8.980	353.217	6.295	352.900	0.000
II Ten-Daily	352.460	0.000	352.857	0.000	352.773	1.027	353.164	4.817	353.306	9.470	352.782	0.000
III Ten-Daily	352.474	0.000	352.745	0.000	353.450	14.41	353.163	3.388	353.115	3.032	352.725	0.000
Monthly												
Min.	352.390	0.000	352.700	0.000	352.700	0.000	353.070	1.546	353.030	0.000	352.660	0.000
Max.	352.720	0.000	353.070	0.000	353.890	31.54	353.680	22.66	354.260	48.43	353.020	0.000
Mean	352.473	0.000	352.773	0.000	352.995	5.445	353.212	5.728	353.209	6.161	352.802	0.000

Annual Runoff in MCM = 46 Annual Runoff in mm = 24

Peak Observed Discharge = 15.40 cumecs on 11/10/2017 Corres. Water Level :353.460 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Degloor (AGP20F4) **Division : U Godavari Div., Hyderabad**

Local River : Lendi **Sub-Division : Manjira SD, Nizamabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	352.660	0.000	352.520	0.000	352.450	0.000	352.420	0.000	352.370	0.000	352.330	0.000
2	352.660	0.000	352.520	0.000	352.450	0.000	352.420	0.000	352.370	0.000	352.330	0.000
3	352.650	0.000	352.510	0.000	352.450	0.000	352.420	0.000	352.370	0.000	352.330	0.000
4	352.650	0.000	352.510	0.000	352.450	0.000	352.420	0.000	352.370	0.000	352.330	0.000
5	352.650	0.000	352.510	0.000	352.440	0.000	352.420	0.000	352.370	0.000	352.320	0.000
6	352.640	0.000	352.510	0.000	352.440	0.000	352.420	0.000	352.370	0.000	352.320	0.000
7	352.640	0.000	352.510	0.000	352.440	0.000	352.410	0.000	352.360	0.000	352.320	0.000
8	352.580	0.000	352.510	0.000	352.440	0.000	352.410	0.000	352.360	0.000	352.320	0.000
9	352.580	0.000	352.500	0.000	352.440	0.000	352.410	0.000	352.360	0.000	352.310	0.000
10	352.580	0.000	352.500	0.000	352.440	0.000	352.410	0.000	352.360	0.000	352.310	0.000
11	352.570	0.000	352.500	0.000	352.430	0.000	352.410	0.000	352.360	0.000	352.310	0.000
12	352.570	0.000	352.500	0.000	352.430	0.000	352.400	0.000	352.360	0.000	352.300	0.000
13	352.570	0.000	352.490	0.000	352.470	0.000	352.400	0.000	352.360	0.000	352.300	0.000
14	352.570	0.000	352.490	0.000	352.450	0.000	352.400	0.000	352.350	0.000	352.290	0.000
15	352.560	0.000	352.490	0.000	352.450	0.000	352.400	0.000	352.370	0.000	352.290	0.000
16	352.560	0.000	352.490	0.000	352.450	0.000	352.400	0.000	352.360	0.000	352.280	0.000
17	352.560	0.000	352.480	0.000	352.450	0.000	352.400	0.000	352.360	0.000	352.280	0.000
18	352.560	0.000	352.480	0.000	352.440	0.000	352.390	0.000	352.360	0.000	352.270	0.000
19	352.550	0.000	352.480	0.000	352.440	0.000	352.390	0.000	352.350	0.000	352.260	0.000
20	352.550	0.000	352.480	0.000	352.440	0.000	352.390	0.000	352.350	0.000	352.250	0.000
21	352.550	0.000	352.470	0.000	352.440	0.000	352.390	0.000	352.350	0.000	352.230	0.000
22	352.540	0.000	352.470	0.000	352.440	0.000	352.390	0.000	352.350	0.000	352.180	0.000
23	352.540	0.000	352.470	0.000	352.430	0.000	352.390	0.000	352.350	0.000	352.130	0.000
24	352.540	0.000	352.470	0.000	352.430	0.000	352.390	0.000	352.350	0.000	352.090	0.000
25	352.540	0.000	352.460	0.000	352.430	0.000	352.380	0.000	352.340	0.000		0.000
26	352.530	0.000	352.460	0.000	352.430	0.000	352.380	0.000	352.340	0.000		0.000
27	352.530	0.000	352.460	0.000	352.430	0.000	352.380	0.000	352.340	0.000		0.000
28	352.530	0.000	352.460	0.000	352.430	0.000	352.380	0.000	352.340	0.000		0.000
29	352.530	0.000	352.460	0.000			352.380	0.000	352.340	0.000		0.000
30	352.520	0.000	352.450	0.000			352.380	0.000	352.340	0.000		0.000
31	352.520	0.000	352.450	0.000			352.380	0.000				0.000
Ten-Daily Mean												
I Ten-Daily	352.629	0.000	352.510	0.000	352.444	0.000	352.416	0.000	352.366	0.000	352.322	0.000
II Ten-Daily	352.562	0.000	352.488	0.000	352.445	0.000	352.398	0.000	352.358	0.000	352.283	0.000
III Ten-Daily	352.534	0.000	352.462	0.000	352.432	0.000	352.384	0.000	352.344	0.000	352.158	0.000
Monthly												
Min.	352.520	0.000	352.450	0.000	352.430	0.000	352.380	0.000	352.340	0.000	352.090	0.000
Max.	352.660	0.000	352.520	0.000	352.470	0.000	352.420	0.000	352.370	0.000	352.330	0.000
Mean	352.574	0.000	352.486	0.000	352.441	0.000	352.399	0.000	352.356	0.000	352.278	0.000

Peak Computed Discharge = 48.43 cumecs on 10/10/2017 **Corres. Water Level :354.260m**

Lowest Computed Discharge = 0.654 cumecs on 31/10/2017 **Corres. Water Level :353.030 m**

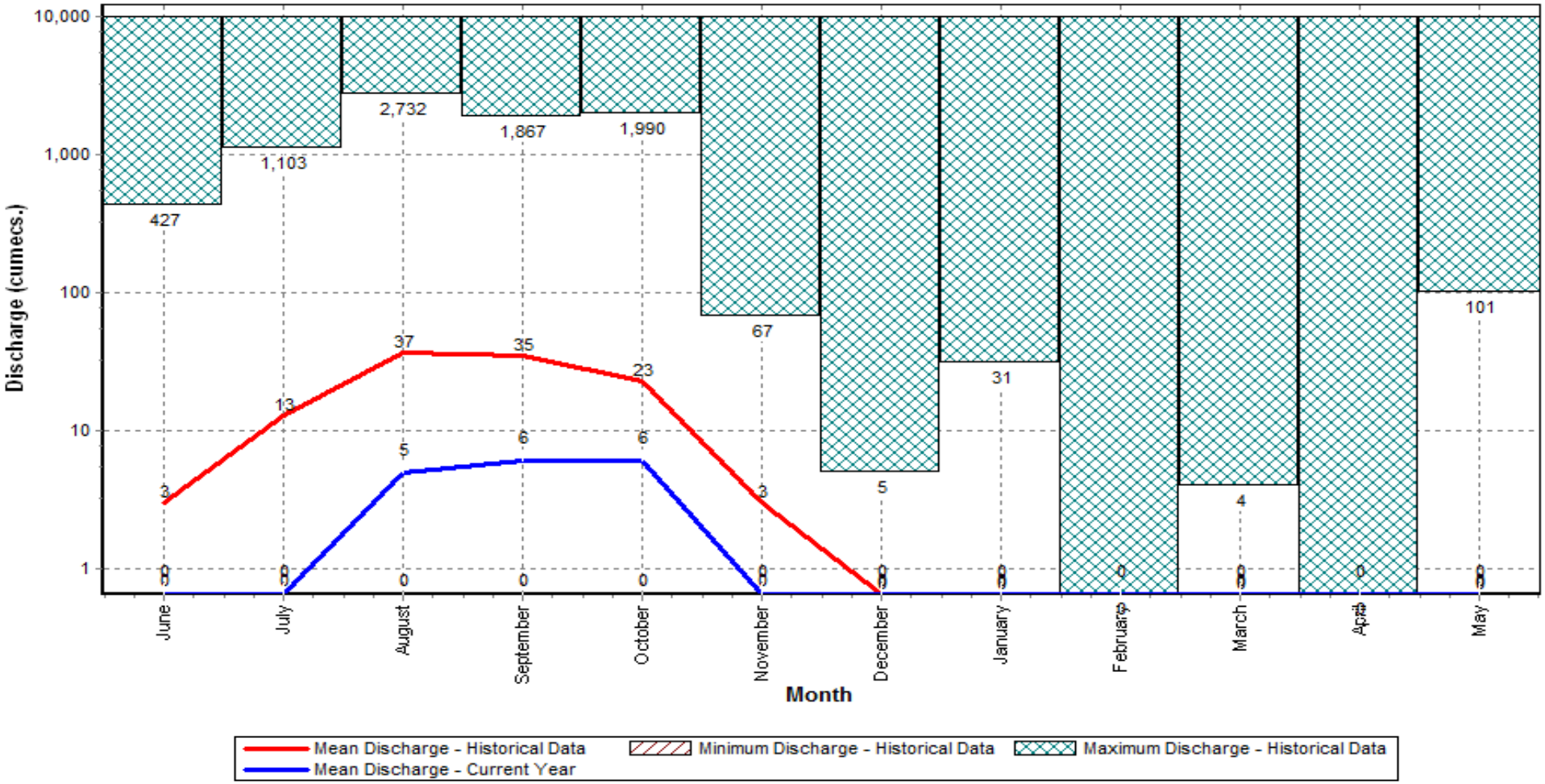
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Degloor (AGP20F4) | **Data considered : 1988-2018** | **Division : U Godavari Div., Hyderabad**

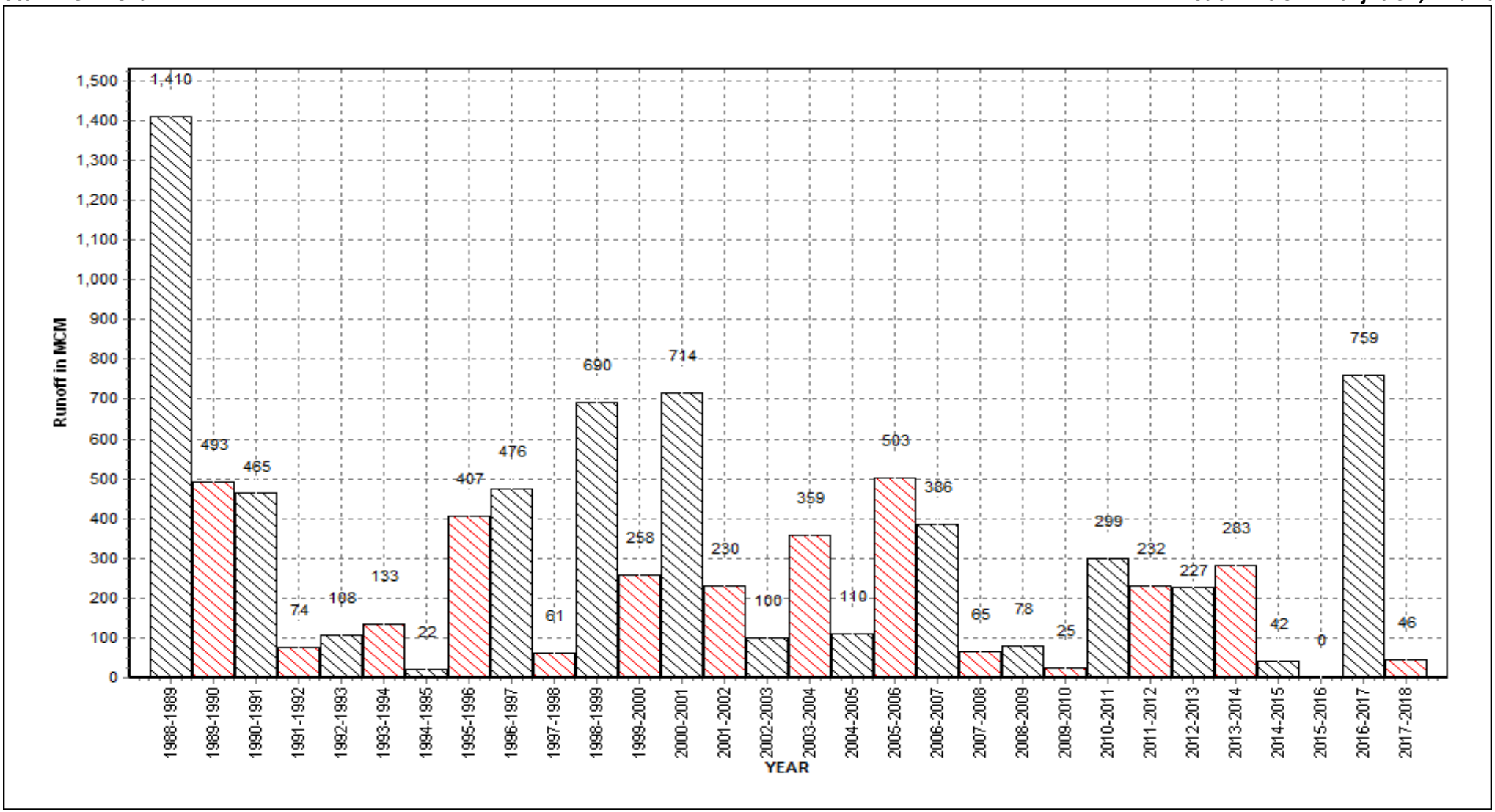
Local River : Lendi | **Sub-Division : Manjira SD, Nizamabad**



Annual Runoff Values for the period: 1988 - 2018

Station Name : Degloor (AGP20F4) **Division : U Godavari Div., Hyderabad**

Local River : Lendi **Sub-Division : Manjira SD, Nizamabad**

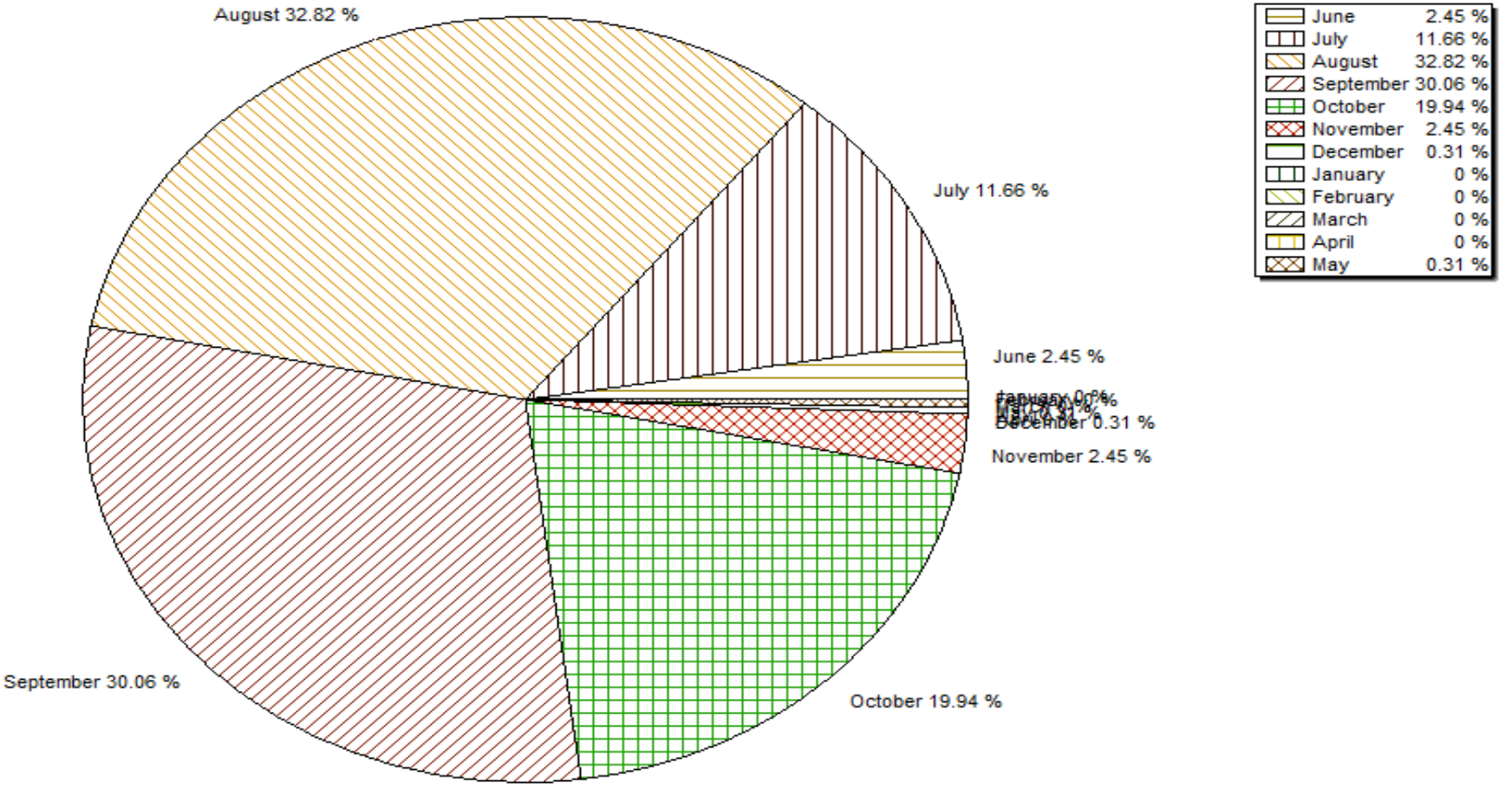


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1988-2017

Station Name : Degloor (AGP20F4)
Local River : Lendi

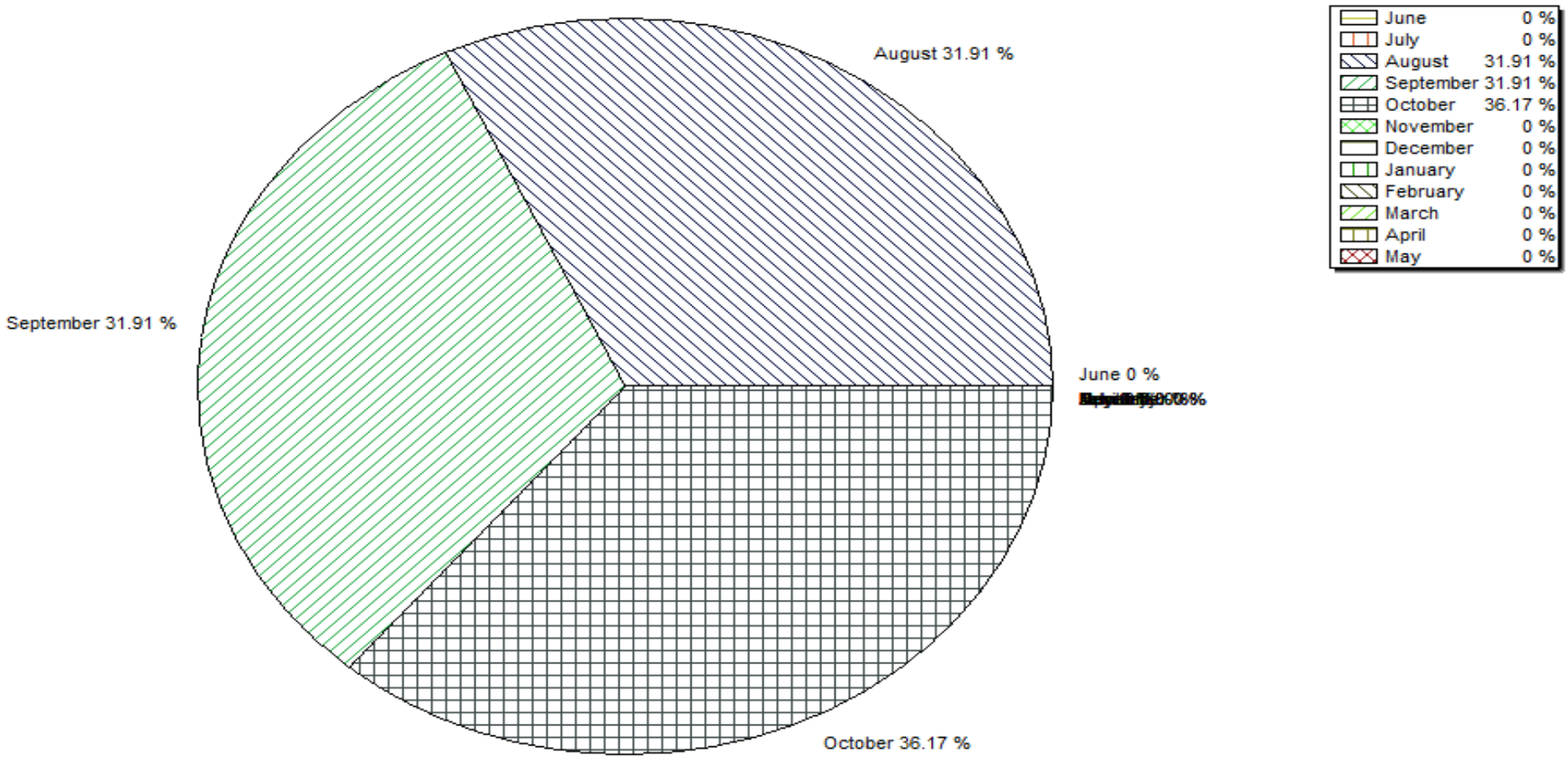
Division : U Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad



Monthly Runoff for the Year : 2017-2018

Station Name : Degloor (AGP20F4)
Local River : Lendi

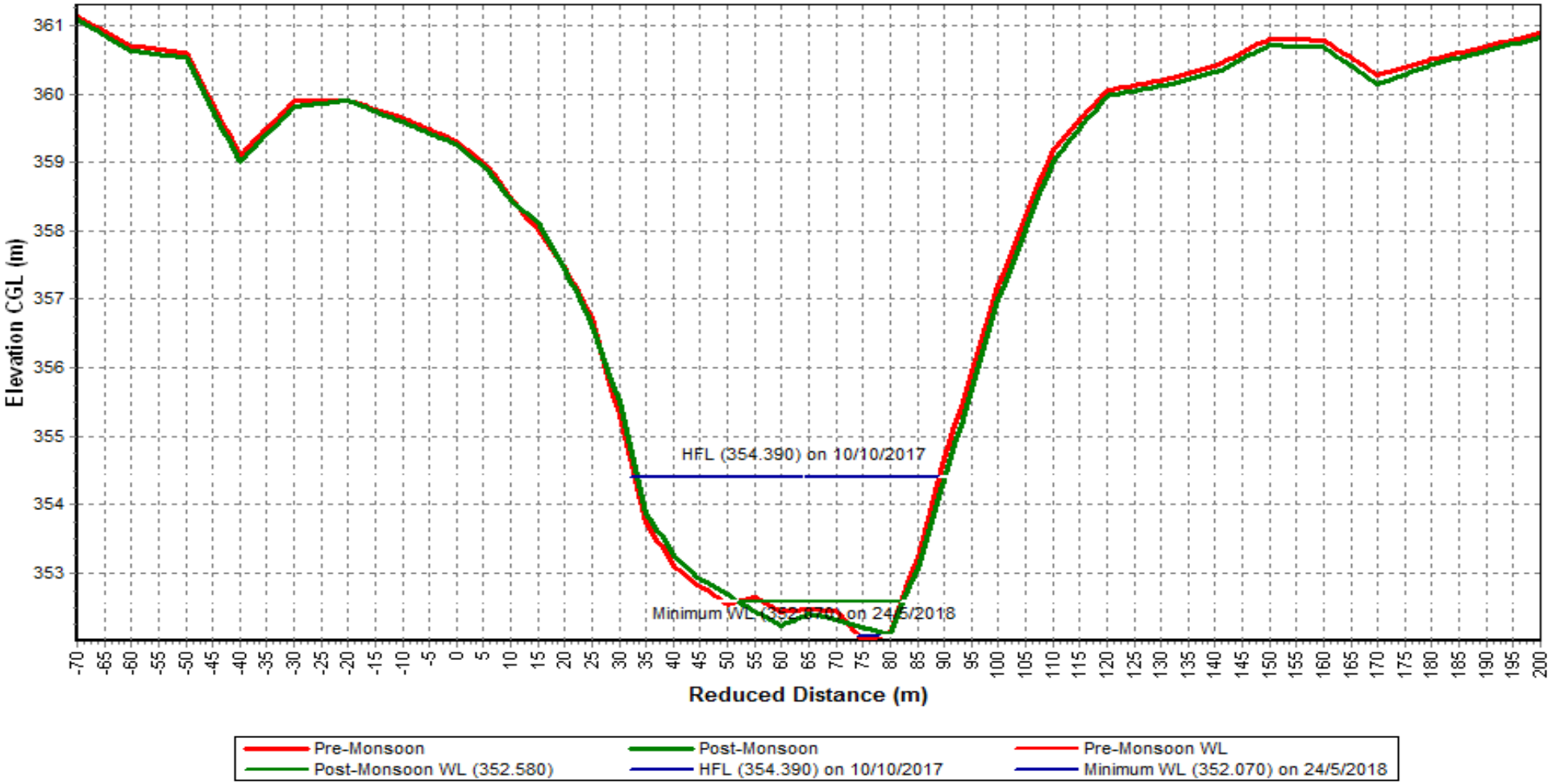
Division : U Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Degloor (AGP20F4) **Division : U Godavari Div., Hyderabad**

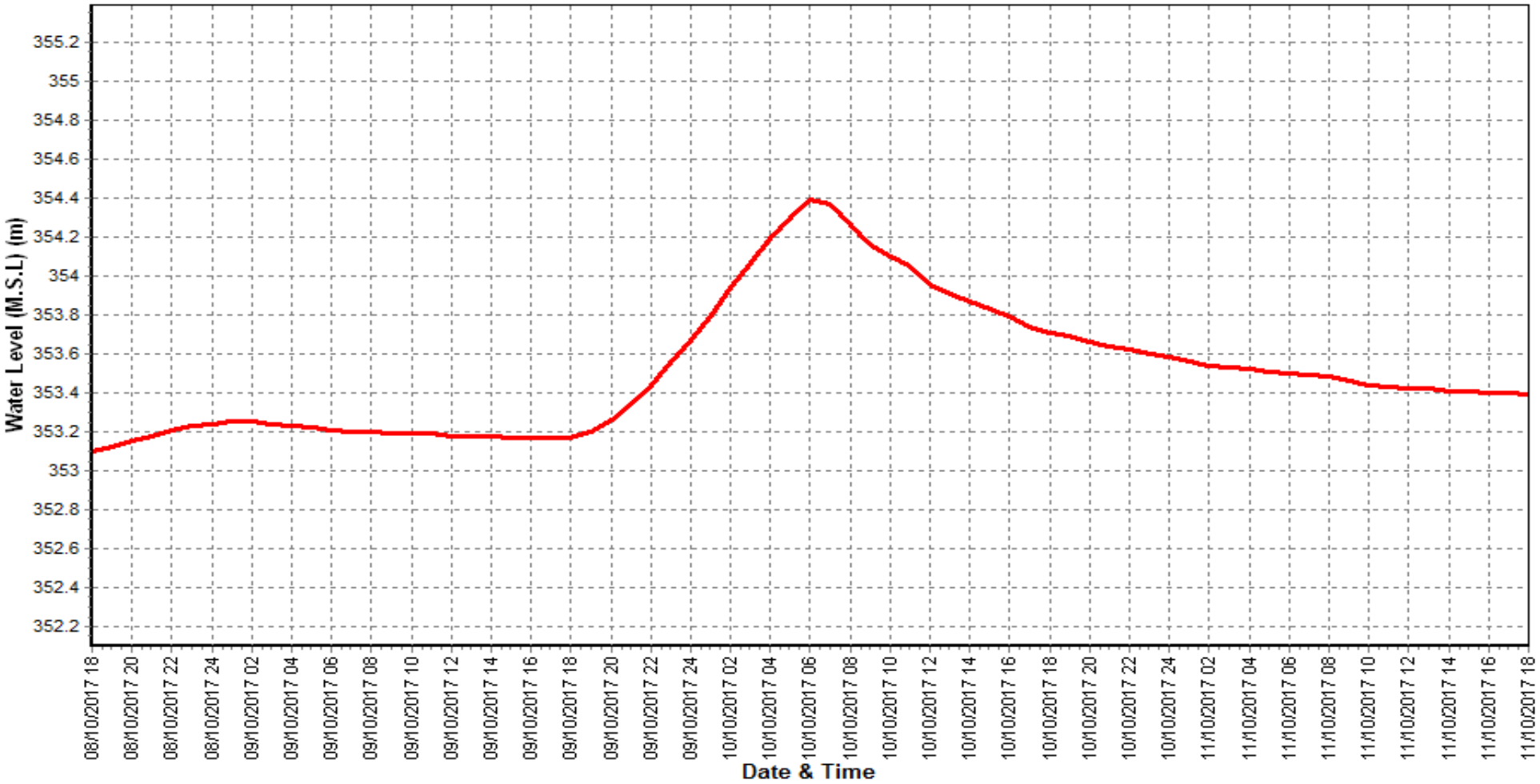
Local River : Lendi **Sub-Division : Manjira SD, Nizamabad**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Degloor (AGP20F4) **Division : U Godavari Div., Hyderabad**

Local River : Lendi **Sub-Division : Manjira SD, Nizamabad**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Betmogrra**	**Code**	:	**AGP10F7**
State	:	Maharashtra	District		Nanded
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Manjira	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Manar
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Manjira SD, Nizamabad
Drainage Area	:	2105 Sq. Km.	Bank	:	
Latitude	:	18°42'12"	Longitude	:	77°32'30"
Zero of Gauge (m)	:	347.5 (m.s.l)	01.06.2010		
		347.5 (m.s.l)	01.06.1997	-	31.05.2010
		347.5 (m.s.l)	01.01.2000	-	31.12.2004
		347.5 (m.s.l)	01.01.2005	-	31.12.2005
		349 (m.s.l)	01.04.1986	-	31.05.1997
		Opening Date	Closing Date		
Gauge	:	01.06.1997	**HFL During 2017-18**	:	**350.530 Meter**
			Corres. Discharge	:	**71.48 Cumecs (Estimated)**
Discharge	:	03.07.1997	**Date & Time of**	:	**20.08.2017**
			Occurance	:	**09:00 hrs.**
Sediment	:				
Water Quality	:	15.07.1997			

HFL Recorded so far in m : 367.5 02/10/2016
Corresponding Discharge (cumecs) : 1175*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1997-1998	119.8	351.450	29.10.1997	0.000		30.04.1998
1998-1999	611.6	354.140	26.08.1998	0.000	348.640	19.02.1999
1999-2000	166.2	351.855	13.10.1999	0.000	348.590	10.03.2000
2000-2001	1074	355.675	25.08.2000	0.000		28.03.2001
2001-2002	1129	355.715	02.10.2001	0.000	348.640	11.01.2002
2002-2003	310.8	352.450	06.09.2002	0.000		22.01.2003
2003-2004	612.3	354.110	27.09.2003	0.000		22.03.2004
2004-2005	56.22	350.115	11.09.2004	0.000		10.01.2005
2005-2006	1212	356.200	16.10.2005	0.000	348.300	10.02.2006
2006-2007	547.1	354.290	05.08.2006	0.000	348.430	26.02.2007
2007-2008	133.2	350.845	06.09.2007	0.000	348.420	20.12.2007
2008-2009	65.81	350.280	12.09.2008	0.000		25.01.2009
2009-2010	0.000		04.10.2009	0.000		25.01.2010
2010-2011	909.1	355.510	26.08.2010	0.000	348.560	25.04.2011
2011-2012	606.6	354.335	27.08.2011	0.000	348.490	21.03.2012

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2012-2013	11.05	349.380	03.10.2012	0.000		30.11.2012
2013-2014	236.5	351.900	18.08.2013	0.000	348.530	27.01.2014
2014-2015	149.6	350.920	27.08.2014	0.000	347.500	25.01.2015
2015-2016	0.000	347.500	09.06.2015	0.000	347.500	12.12.2015
2016-2017	1175	367.500	02.10.2016	0.000	347.980	19.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Betmogra in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	1997-1998	25	18	43
2	1998-1999	764	24	788
3	1999-2000	240	8	248
4	2000-2001	341	1	342
5	2001-2002	418	1	419
6	2002-2003	111	0	111
7	2003-2004	218	5	223
8	2004-2005	26	2	27
9	2005-2006	432	13	444
10	2006-2007	210	4	214
11	2007-2008	44	5	49
12	2008-2009	15	0	15
13	2009-2010	0	0	0
14	2010-2011	211	25	236
15	2011-2012	228	8	236
16	2012-2013	9	0	9
17	2013-2014	148	10	158
18	2014-2015	30	0	30
19	2015-2016	0	0	0
20	2016-2017	178	0	178
Average		182	6	189

Stage-Discharge Data for the period 2017 - 2018

Station Name : Betmogrra (AGP10F7) **Division : U Godavari Div., Hyderabad**

Local River : Manar **Sub-Division : Manjira SD, Nizamabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000		0.000	348.310	0.000	347.730	0.000		0.000
2		0.000		0.000		0.000	348.040	0.000	347.690	0.000		0.000
3		0.000		0.000		0.000	348.010	0.000	347.660	0.000		0.000
4		0.000		0.000		0.000	348.010	0.000		0.000		0.000
5		0.000		0.000		0.000	348.010	0.000		0.000		0.000
6		0.000		0.000		0.000	347.990	0.000		0.000		0.000
7		0.000		0.000		0.000	348.020	0.000		0.000		0.000
8		0.000		0.000		0.000	348.030	0.000		0.000		0.000
9		0.000		0.000		0.000	348.000	0.000		0.000		0.000
10		0.000		0.000		0.000	347.970	0.000		0.000		0.000
11	348.040	0.000		0.000		0.000	347.950	0.000		0.000		0.000
12	347.960	0.000		0.000		0.000	347.930	0.000		0.000		0.000
13	347.900	0.000		0.000		0.000	347.900	0.000		0.000		0.000
14	347.850	0.000		0.000		0.000	347.850	0.000		0.000		0.000
15	347.820	0.000		0.000		0.000	348.640	1.248		0.000		0.000
16	347.800	0.000		0.000		0.000	348.390	0.000		0.000		0.000
17	347.800	0.000		0.000		0.000	348.050	0.000		0.000		0.000
18	347.800	0.000		0.000		0.000	347.980	0.000		0.000		0.000
19	347.800	0.000		0.000		0.000	348.610	0.000		0.000		0.000
20	347.800	0.000		0.000	350.200	37.50 *	348.590	0.683		0.000		0.000
21	347.800	0.000		0.000	348.380	0.000	348.440	0.511		0.000		0.000
22	347.780	0.000		0.000	347.960	0.000	348.500	0.709		0.000		0.000
23	347.760	0.000		0.000	347.960	0.000	348.470	0.615		0.000		0.000
24	347.760	0.000		0.000	347.950	0.000	348.450	0.520 *		0.000		0.000
25		0.000		0.000	347.990	0.000	348.430	0.452		0.000		0.000
26		0.000		0.000	347.990	0.000	348.320	0.189		0.000		0.000
27		0.000		0.000	348.550	0.000	348.225	0.146		0.000		0.000
28		0.000		0.000	348.460	0.000	347.890	0.000		0.000		0.000
29		0.000		0.000	348.890	3.968	347.800	0.000		0.000		0.000
30		0.000		0.000	348.820	2.671	347.780	0.000		0.000		0.000
31				0.000	348.490	0.000				0.000		
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000	348.039	0.000	347.693	0.000		0.000
II Ten-Daily	347.857	0.000		0.000	350.200	3.750	348.189	0.193		0.000		0.000
III Ten-Daily	347.775	0.000		0.000	348.313	0.603	348.231	0.314		0.000		0.000
Monthly												
Min.	347.760	0.000		0.000	347.950	0.000	347.780	0.000	347.660	0.000		0.000
Max.	348.040	0.000		0.000	350.200	37.50	348.640	1.248	347.730	0.000		0.000
Mean	347.834	0.000		0.000	348.470	1.424	348.153	0.169	347.693	0.000		0.000

Annual Runoff in MCM = 4 Annual Runoff in mm = 2

Peak Observed Discharge = 3.968 cumecs on 29/08/2017 Corres. Water Level :348.89 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Betmogrra (AGP10F7) **Division : U Godavari Div., Hyderabad**

Local River : Manar **Sub-Division : Manjira SD, Nizamabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1		0.000		0.000		0.000		0.000		0.000		0.000
2		0.000		0.000		0.000		0.000		0.000		0.000
3		0.000		0.000		0.000		0.000		0.000		0.000
4		0.000		0.000		0.000		0.000		0.000		0.000
5		0.000		0.000		0.000		0.000		0.000		0.000
6		0.000		0.000		0.000		0.000		0.000		0.000
7		0.000		0.000		0.000		0.000		0.000		0.000
8		0.000		0.000		0.000		0.000		0.000		0.000
9		0.000		0.000		0.000		0.000		0.000		0.000
10		0.000		0.000		0.000		0.000		0.000		0.000
11		0.000		0.000		0.000		0.000		0.000		0.000
12		0.000		0.000		0.000		0.000		0.000		0.000
13		0.000		0.000		0.000		0.000		0.000		0.000
14		0.000		0.000		0.000		0.000		0.000		0.000
15		0.000		0.000		0.000		0.000		0.000		0.000
16		0.000		0.000		0.000		0.000		0.000		0.000
17		0.000		0.000		0.000		0.000		0.000		0.000
18		0.000		0.000		0.000		0.000		0.000		0.000
19		0.000		0.000		0.000		0.000		0.000		0.000
20		0.000		0.000		0.000		0.000		0.000		0.000
21		0.000		0.000		0.000		0.000		0.000		0.000
22		0.000		0.000		0.000		0.000		0.000		0.000
23		0.000		0.000		0.000		0.000		0.000		0.000
24		0.000		0.000		0.000		0.000		0.000		0.000
25		0.000		0.000		0.000		0.000		0.000		0.000
26		0.000		0.000		0.000		0.000		0.000		0.000
27		0.000		0.000		0.000		0.000		0.000		0.000
28		0.000		0.000		0.000		0.000		0.000		0.000
29		0.000		0.000				0.000		0.000		0.000
30		0.000		0.000				0.000		0.000		0.000
31		0.000		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
II Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
III Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
Monthly												
Min.		0.000		0.000		0.000		0.000		0.000		0.000
Max.		0.000		0.000		0.000		0.000		0.000		0.000
Mean		0.000		0.000		0.000		0.000		0.000		0.000

Peak Computed Discharge = 37.50 cumecs on 20/08/2017 **Corres. Water Level :350.200 m**

Lowest Computed Discharge = 0.520 cumecs on 24/09/2017 **Corres. Water Level :348.450 m**

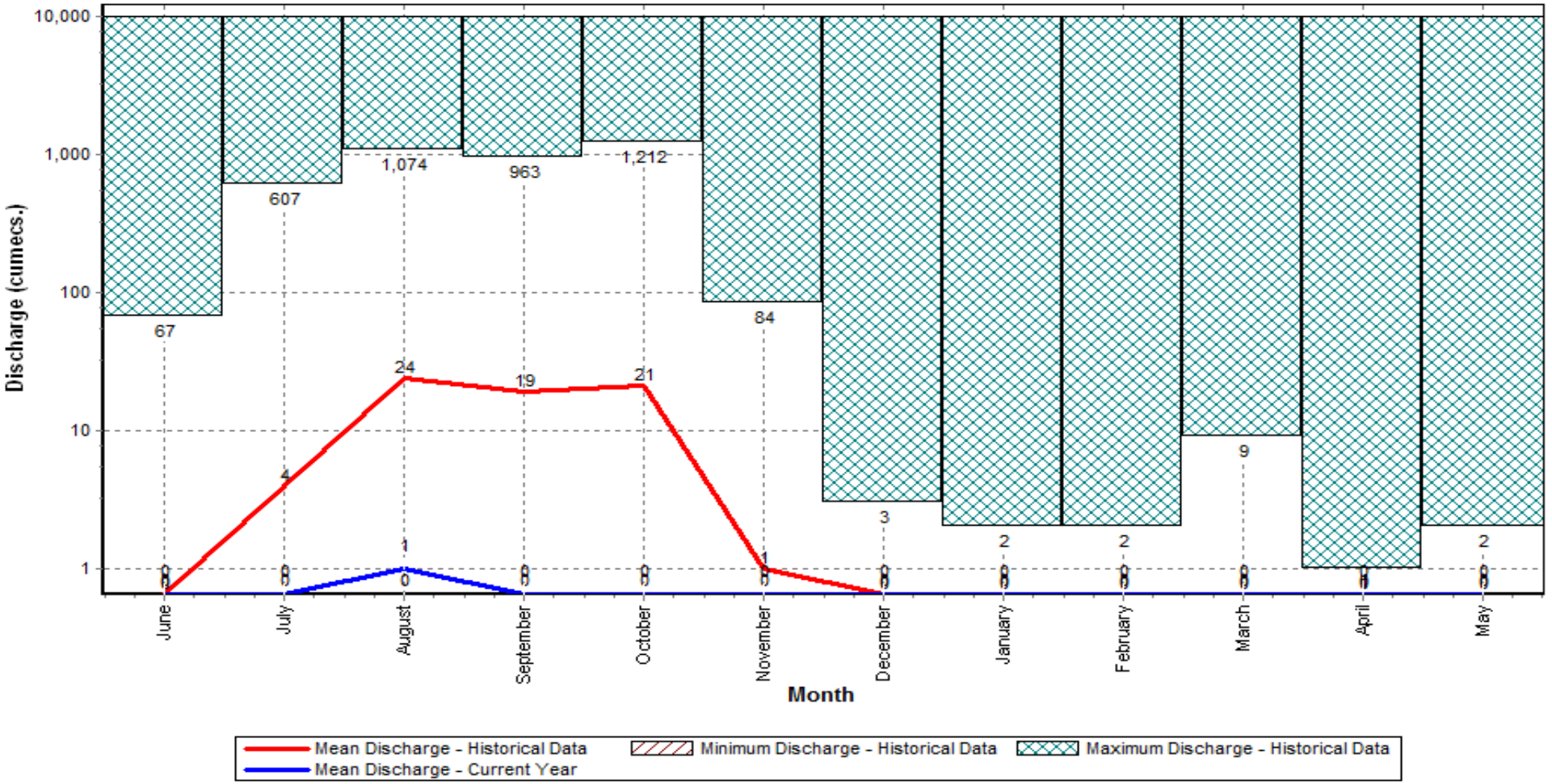
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Betmogrra (AGP10F7) | **Data considered : 1997-2018** | **Division : U Godavari Div., Hyderabad**

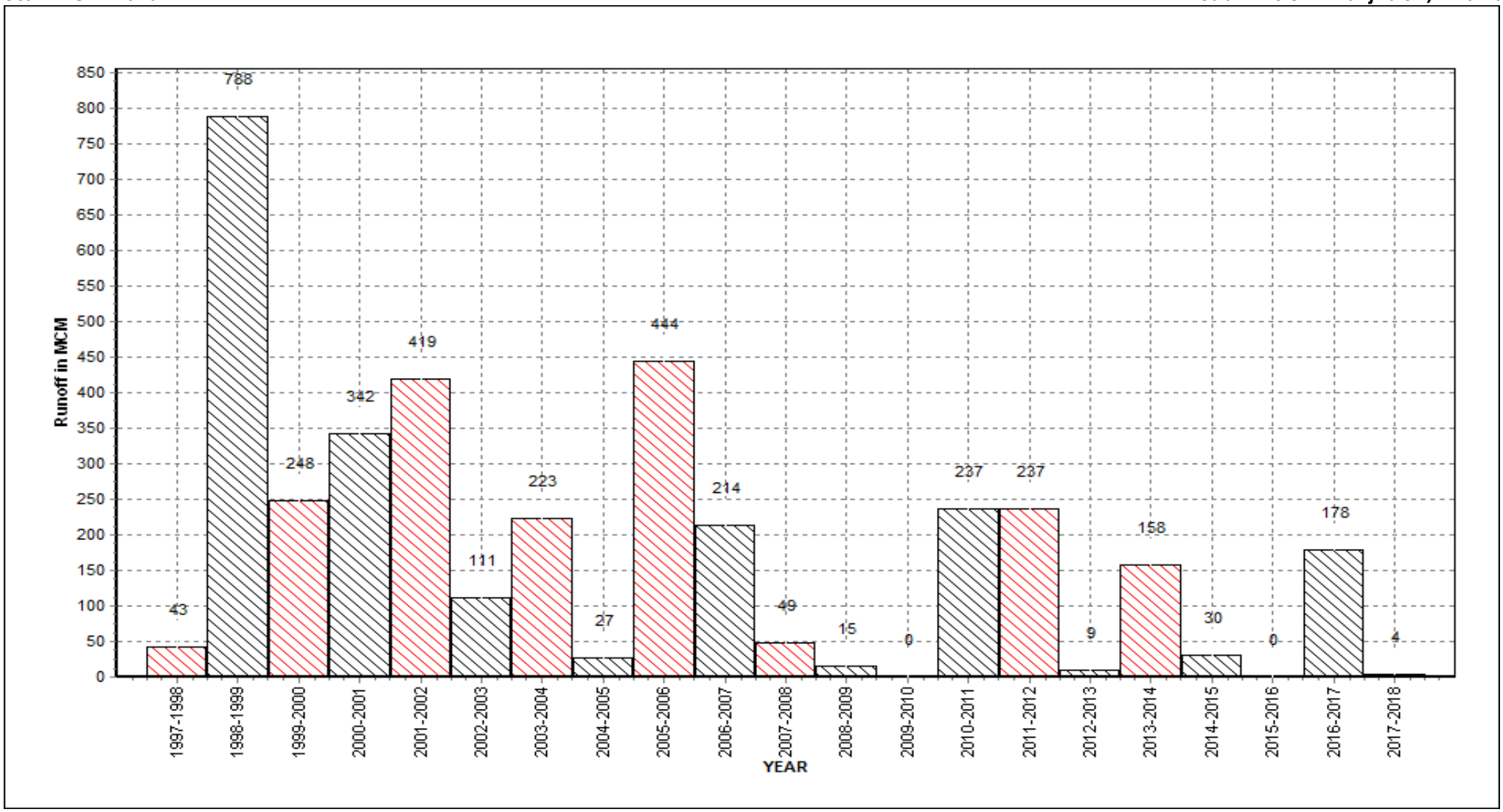
Local River : Manar | **Sub-Division : Manjira SD, Nizamabad**


10,000
1,000
100
10
1
Discharge (cumecs.)
67
607
1,074
963
1,212
84
3
2
2
9
2
24
19
21
4
1
1
0
0
0

Annual Runoff Values for the period: 1997 - 2018

Station Name : Betmogrra (AGP10F7) **Division : U Godavari Div., Hyderabad**

Local River : Manar **Sub-Division : Manjira SD, Nizamabad**



Note: Missing values have not been considered while arriving at Annual Runoff

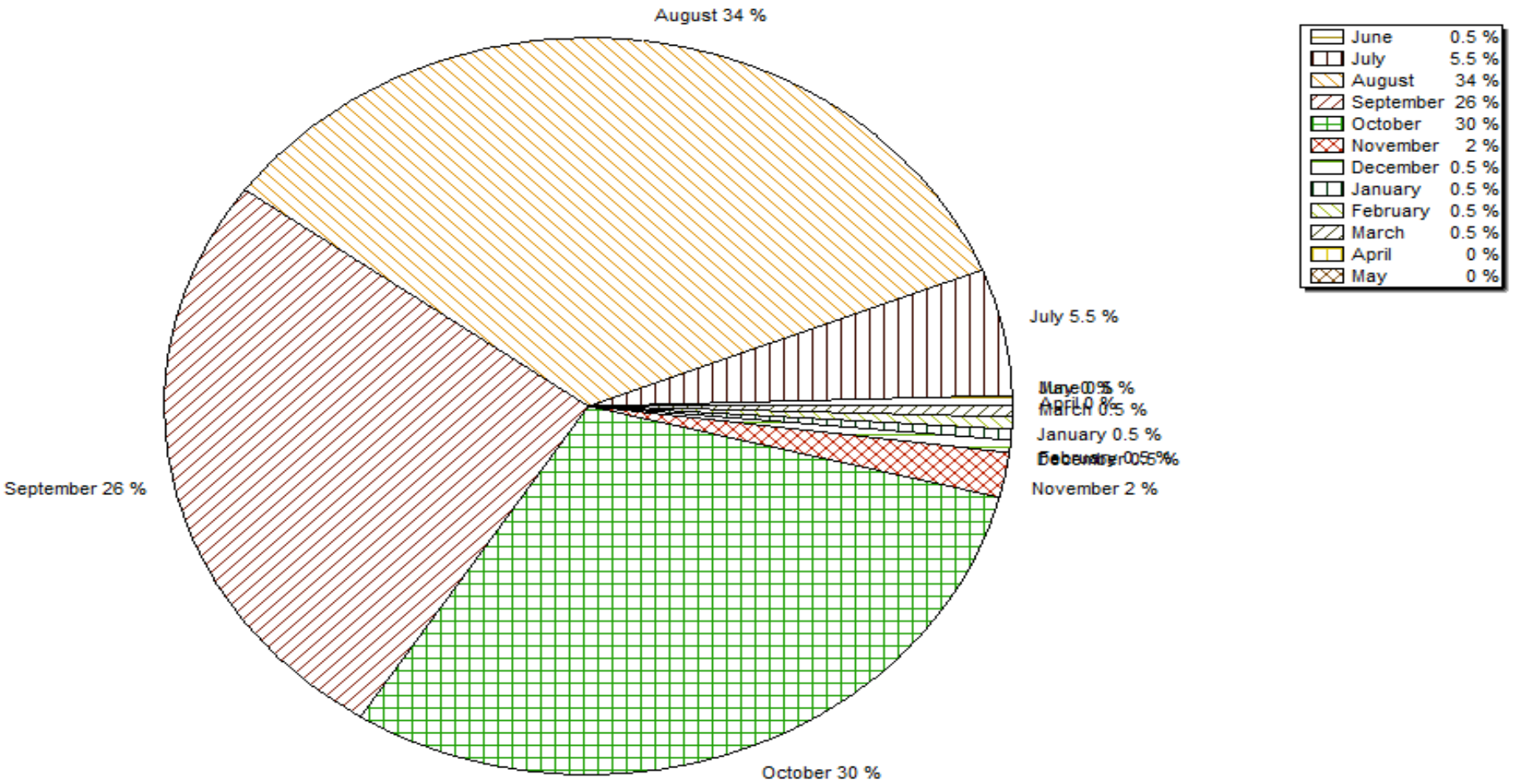
Monthly Average Runoff based on period : 1997-2017

Station Name : Betmogrra (AGP10F7)

Local River : Manar

Division : U Godavari Div., Hyderabad

Sub-Division : Manjira SD, Nizamabad



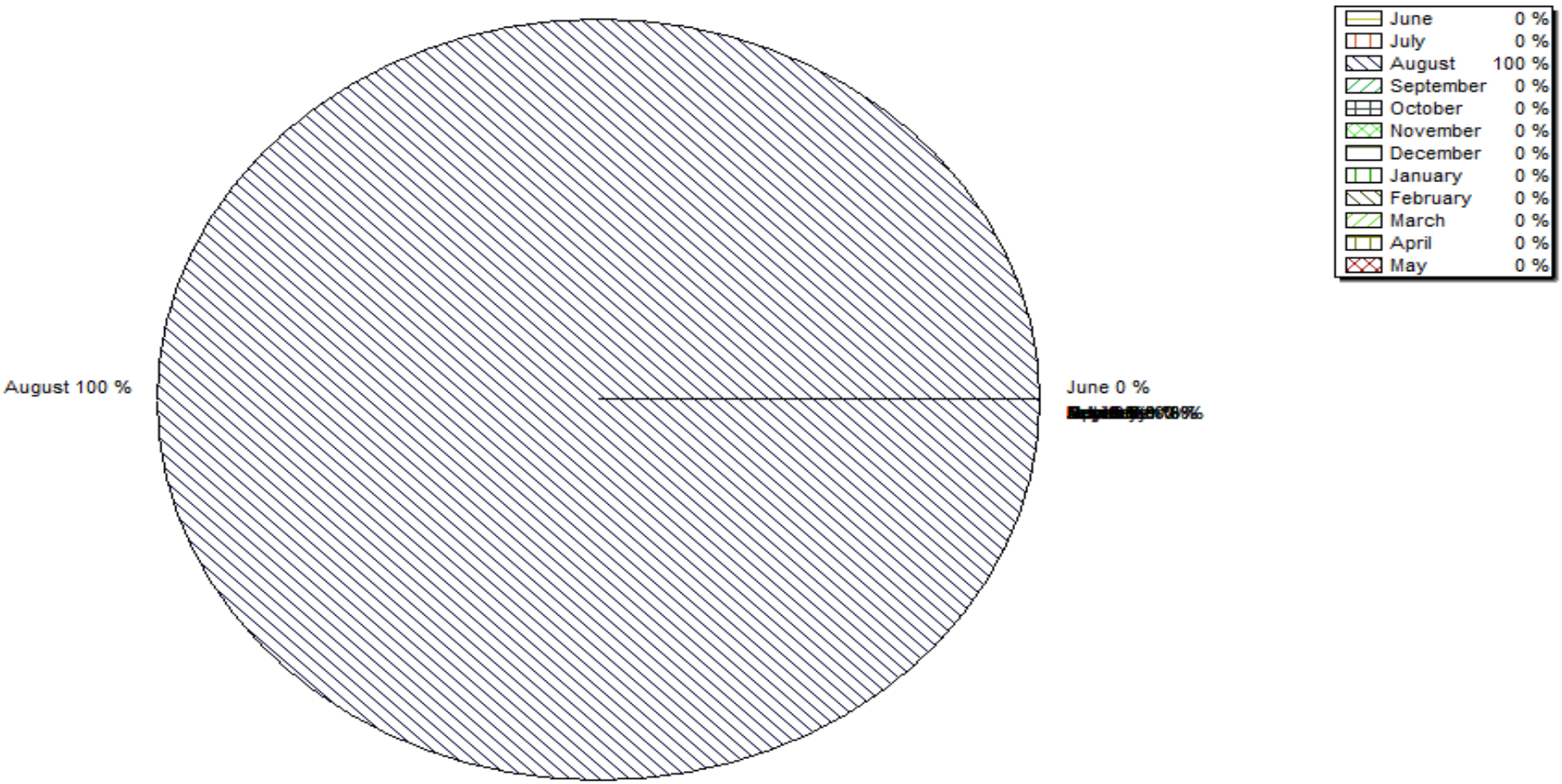
Monthly Runoff for the Year : 2017-2018

Station Name : Betmogrra (AGP10F7)

Local River : Manar

Division : U Godavari Div., Hyderabad

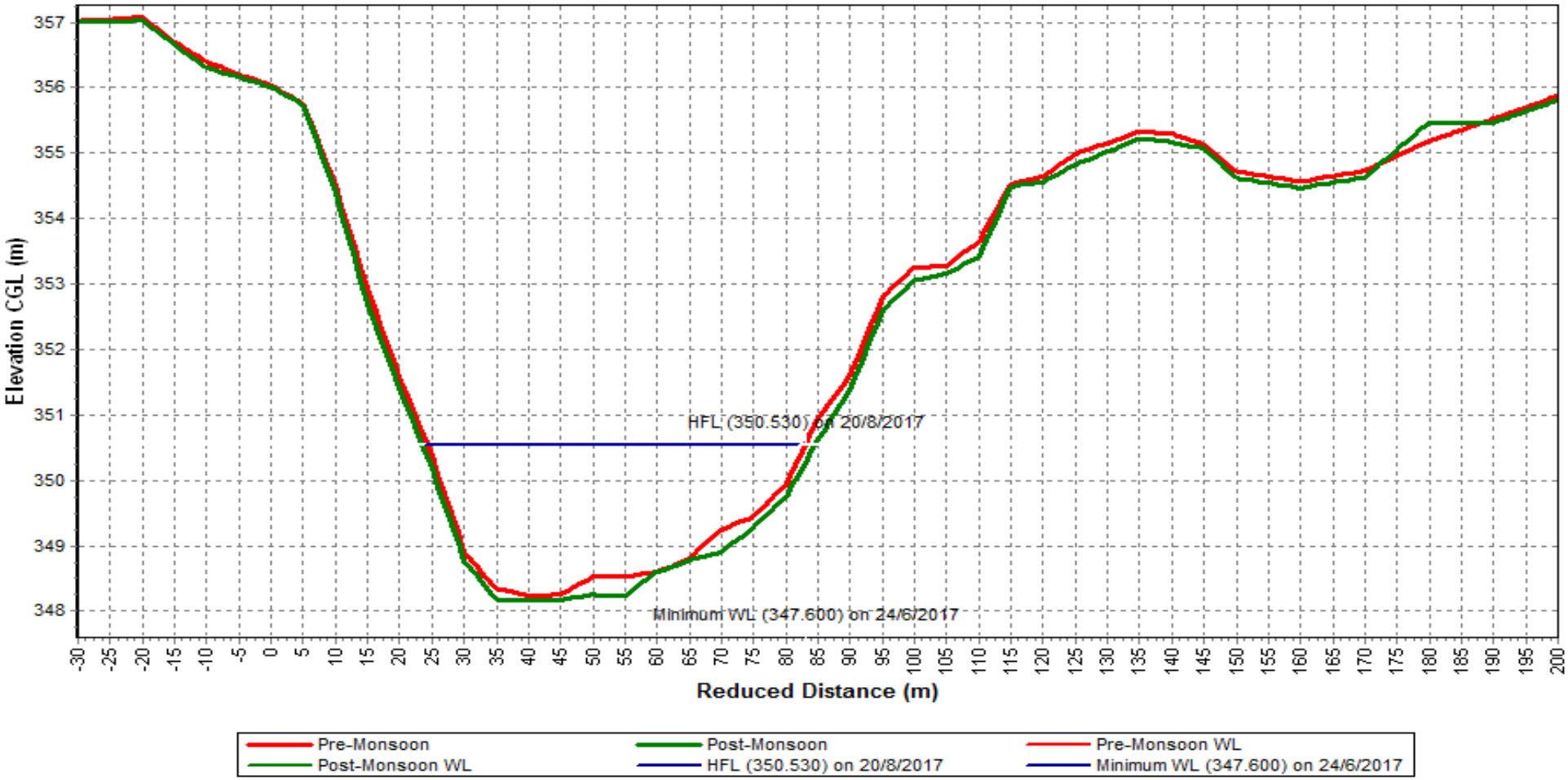
Sub-Division : Manjira SD, Nizamabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Betmogrra (AGP10F7) **Division : U Godavari Div., Hyderabad**

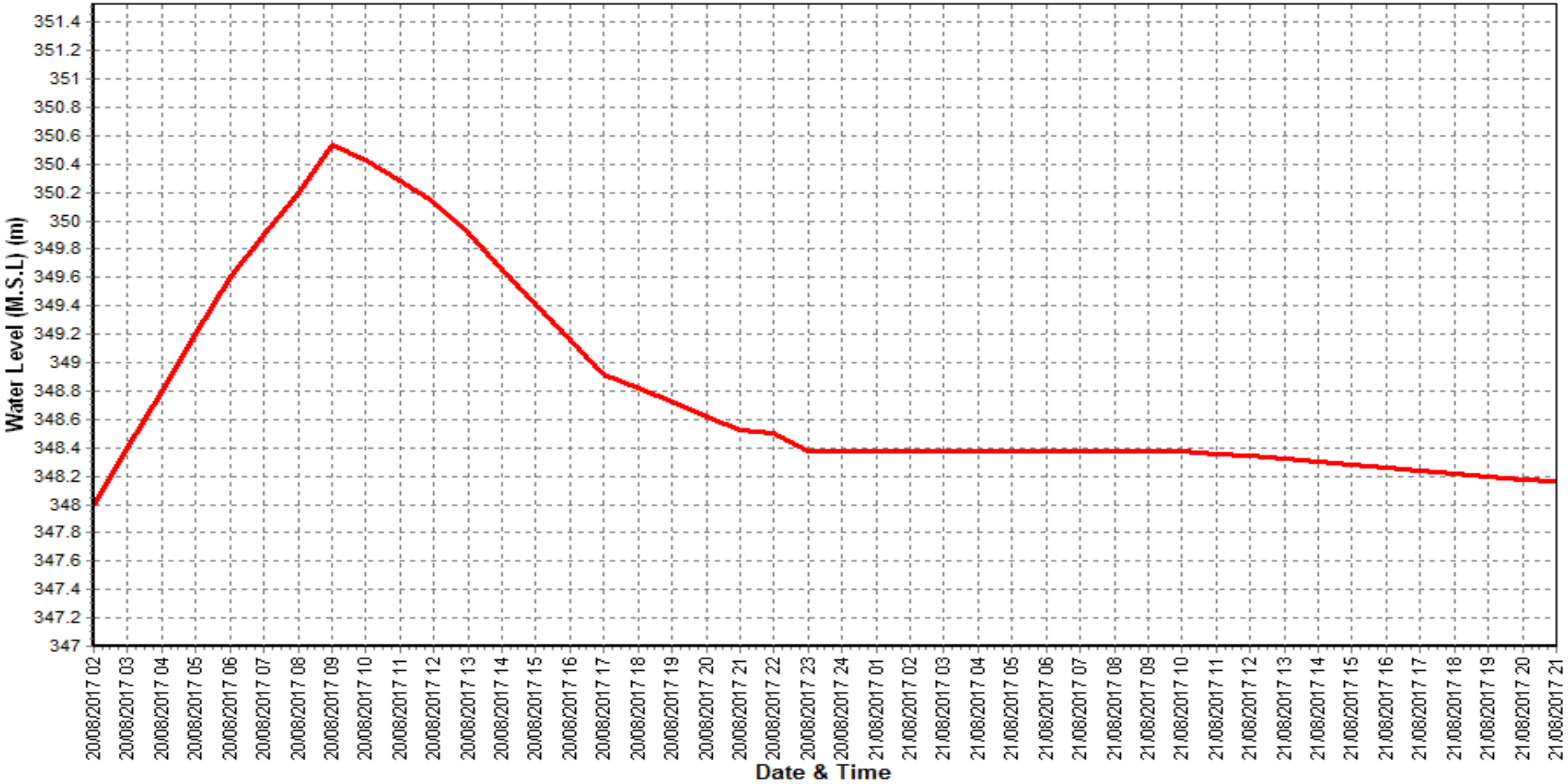
Local River : Manar **Sub-Division : Manjira SD, Nizamabad**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Betmogrra (AGP10F7) **Division : U Godavari Div., Hyderabad**

Local River : Manar **Sub-Division : Manjira SD, Nizamabad**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Saigaon**	**Code**	:	**AGP00N8**
State	:	Karnataka	District		Bidar
Basin	:	Ganga-Brahm-Meghna Basin	Independent River	:	Godavari
Tributary	:	Manjera	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Manjera
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Manjira SD, Nizamabad
Drainage Area	:	9960 Sq. Km.	Bank	:	
Latitude	:	18°03'00"	Longitude	:	77°03'00"
Zero of Gauge (m)	:	542.723 (m.s.l)	01.08.1964		
		Opening Date	Closing Date		
Gauge	:	01.08.1964	**HFL During 2017-18**	:	**549.093 Meter**
			Corres. Discharge	:	**756.8 Cumecs (Estimated)**
Discharge	:	10.11.1967	**Date & Time of**	:	**12.10.2017**
			Occurance	:	**09:00 hrs.**
Sediment	:	19.07.1973			
Water Quality	:	16.08.1973			

HFL Recorded so far in m : 556.008 07/09/1969
Corresponding Discharge (cumecs) : 4337*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1967-1968	1992	551.838	29.09.1967	0.000		10.06.1967
1968-1969	1169	550.096	02.10.1968	0.000		04.05.1969
1969-1970	2991	552.798	07.09.1969	0.000		08.05.1970
1970-1971	2716	553.143	20.09.1970	0.000		14.05.1971
1971-1972	899.1	549.308	25.08.1971	0.000		27.05.1972
1972-1973	325.2	546.238	24.06.1972	0.000		25.10.1972
1973-1974	856.8	548.683	02.07.1973	0.000		09.05.1974
1974-1975	613.9	548.233	24.10.1974	0.000		11.05.1975
1975-1976	1297	550.861	06.10.1975	0.000	543.303	17.05.1976
1976-1977	365.4	547.485	26.08.1976	0.000		22.04.1977
1977-1978	704.7	548.033	30.11.1977	0.000	543.113	05.05.1978
1978-1979	901.5	548.973	16.06.1978	0.000	543.013	16.04.1979
1979-1980	1125	550.308	28.09.1979	0.000	542.958	11.05.1980
1980-1981	791.7	549.003	24.08.1980	0.000	543.003	31.03.1981
1981-1982	676.0	548.708	18.09.1981	0.000	543.063	02.04.1982
1982-1983	462.2	547.593	22.09.1982	0.000	542.918	14.02.1983
1983-1984	3395	554.253	07.10.1983	0.000	543.093	07.05.1984
1984-1985	192.0	546.083	02.08.1984	0.000	543.233	12.01.1985

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1985-1986	438.4	547.498	05.10.1985	0.000		25.01.1986
1986-1987	119.7	545.543	18.09.1986	0.000		25.01.1987
1987-1988	499.6	548.198	16.08.1987	0.000		22.02.1988
1988-1989	1760	552.073	30.09.1988	0.000		09.05.1989
1989-1990	1507	551.553	25.07.1989	0.000		13.03.1990
1990-1991	2697	554.443	17.08.1990	0.000	543.203	21.03.1991
1991-1992	1091	550.368	09.07.1991	0.000		26.01.1992
1992-1993	1219	550.643	03.09.1992	0.000		21.03.1993
1993-1994	335.9	546.923	22.10.1993	0.000	543.153	25.01.1994
1994-1995	91.42	545.048	14.06.1994	0.000		25.01.1995
1995-1996	318.4	546.998	20.10.1995	0.000		09.02.1996
1996-1997	2486	552.653	17.09.1996	0.000	543.023	21.02.1997
1997-1998	67.33	545.028	04.07.1997	0.000		30.12.1997
1998-1999	3285	553.693	17.10.1998	0.000		05.03.1999
1999-2000	588.9	548.763	14.10.1999	0.000		08.02.2000
2000-2001	2858	553.483	26.08.2000	0.000	542.913	25.01.2001
2001-2002	822.7	548.863	01.10.2001	0.000	542.843	25.01.2002
2002-2003	87.51	545.388	24.08.2002	0.000	542.793	02.03.2003
2003-2004	277.3	546.558	25.08.2003	0.000	542.793	23.01.2004
2004-2005	169.0	546.543	31.07.2004	0.000		22.01.2005
2005-2006	1922	551.683	24.09.2005	0.000	542.793	07.02.2006
2006-2007	901.8	549.478	07.08.2006	0.000	542.983	25.01.2007
2007-2008	1206	549.658	20.09.2007	0.000		26.01.2008
2008-2009	2142	552.473	14.09.2008	0.000	542.773	19.12.2008
2009-2010	170.4	546.483	05.10.2009	0.000		25.01.2010
2010-2011	2012	552.008	26.08.2010	0.000		17.02.2011
2011-2012	803.2	549.273	27.08.2011	0.000		25.01.2012
2012-2013	275.8	546.933	04.09.2012	0.000		05.05.2013
2013-2014	160.0	546.223	20.07.2013	0.000		20.06.2013
2014-2015	45.33	546.113	31.08.2014	0.000	542.723	25.01.2015
2015-2016	1.647	543.428	19.09.2015	0.000	542.723	02.01.2016
2016-2017	3069	554.063	24.09.2016	0.000		22.02.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Saigaon in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1967-1968**	1909	201	2109
2	**1968-1969**	675	24	699
3	**1969-1970**	1652	24	1676
4	**1970-1971**	2301	38	2339
5	**1971-1972**	1090	28	1117
6	**1972-1973**	109	0	109
7	**1973-1974**	1309	33	1341
8	**1974-1975**	687	28	714
9	**1975-1976**	2253	61	2314
10	**1976-1977**	479	6	485
11	**1977-1978**	336	106	441
12	**1978-1979**	757	10	767
13	**1979-1980**	669	36	704
14	**1980-1981**	785	7	792
15	**1981-1982**	813	7	820
16	**1982-1983**	231	0	231
17	**1983-1984**	4054	37	4092
18	**1984-1985**	190	1	191
19	**1985-1986**	201	0	201
20	**1986-1987**	50	0	50
21	**1987-1988**	228	0	228
22	**1988-1989**	3487	10	3496
23	**1989-1990**	2359	20	2380
24	**1990-1991**	2925	22	2947
25	**1991-1992**	442	0	442
26	**1992-1993**	382	1	383
27	**1993-1994**	226	0	226
28	**1994-1995**	18	0	18
29	**1995-1996**	330	0	330
30	**1996-1997**	1855	1	1855
31	**1997-1998**	28	0	28
32	**1998-1999**	4593	6	4599
33	**1999-2000**	622	173	796
34	**2000-2001**	1549	0	1549
35	**2001-2002**	166	0	166
36	**2002-2003**	20	0	20
37	**2003-2004**	86	0	86
38	**2004-2005**	24	0	24
39	**2005-2006**	953	1	954
40	**2006-2007**	675	0	675
41	**2007-2008**	438	0	438
42	**2008-2009**	917	0	917
43	**2009-2010**	39	0	39
44	**2010-2011**	2367	18	2384
45	**2011-2012**	587	0	587
46	**2012-2013**	56	0	56
47	**2013-2014**	171	0	171
48	**2014-2015**	9	0	9
49	**2015-2016**	0	0	0
50	**2016-2017**	2281	0	2281
Average		968	18	986

Stage-Discharge Data for the period 2017 - 2018

Station Name : Saigaon (AGP00N8) **Division : U Godavari Div., Hyderabad**

Local River : Manjera **Sub-Division : Manjira SD, Nizamabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000	542.863	0.000		0.000	544.603	0.000	545.003	49.68 *	543.123	0.000
2		0.000	542.843	0.000		0.000	543.463	0.000	544.173	13.76 *	543.523	1.468
3		0.000	542.823	0.000		0.000	543.363	0.000	543.673	5.962	543.203	0.000
4		0.000	542.803	0.000		0.000	543.213	0.000	543.563	2.855	543.273	0.000
5		0.000	542.773	0.000		0.000	543.183	0.000	543.183	0.000	543.223	0.000
6		0.000	542.743	0.000		0.000	543.143	0.000	543.113	0.000	543.203	0.000
7		0.000		0.000		0.000	543.083	0.000	543.073	0.000	543.163	0.000
8		0.000		0.000		0.000	543.033	0.000	543.033	0.000	543.133	0.000
9		0.000		0.000		0.000	542.983	0.000	544.353	15.50	543.463	0.000
10		0.000		0.000		0.000	543.743	0.000	545.218	50.81	543.493	0.000
11		0.000		0.000		0.000	544.373	0.000	546.573	83.36	543.513	0.000
12		0.000		0.000		0.000	543.673	3.806	549.083	345.5	543.553	0.000
13		0.000		0.000		0.000	545.483	0.000	547.323	268.8	543.603	0.000
14		0.000		0.000		0.000	546.443	0.000	547.263	371.6	543.723	0.000
15		0.000		0.000		0.000	545.563	0.000	546.343	173.0 *	543.813	0.000
16		0.000		0.000		0.000	545.773	0.000	546.898	308.7	543.923	0.000
17		0.000		0.000		0.000	546.653	0.000	545.973	108.3	543.973	0.000
18	543.343	0.839 *		0.000		0.000	547.573	0.000	544.733	36.41	544.073	0.000
19	545.313	70.43 *		0.000		0.000	544.823	0.000	544.643	30.80 *	544.093	0.000
20	543.413	1.315		0.000		0.000	544.383	0.000	544.198	33.24	544.063	0.000
21	543.203	0.425		0.000	546.873	0.000	544.433	0.000	545.033	23.93	544.023	0.000
22	543.113	0.000		0.000	544.503	0.000	545.643	0.000	544.433	22.18 *	544.003	0.000
23	543.073	0.000		0.000	543.133	0.000	547.333	0.000	544.378	33.51	543.873	0.000
24	543.628	1.961		0.000	543.083	0.000	547.053	0.000 *	544.173	26.53	543.843	0.000
25	543.083	0.061 *		0.000	543.063	0.000	545.518	94.05	544.233	7.035	543.833	0.000
26	543.063	0.000		0.000	546.823	0.000	545.233	92.35	543.713	4.537	543.823	0.000
27	543.023	0.000		0.000	546.583	0.000	545.208	71.15	543.463	1.004	543.823	0.000
28	542.983	0.000		0.000	545.463	0.000	544.773	27.85	543.948	5.672	543.783	0.000
29	542.943	0.000		0.000	544.043	14.55	545.848	118.0	543.643	3.380 *	543.763	0.000
30	542.893	0.000		0.000	545.663	0.000	544.623	29.90 *	543.363	0.833	543.793	0.000
31				0.000	544.583	0.000			543.123	0.000		
Ten-Daily Mean												
I Ten-Daily		0.000	542.808	0.000		0.000	543.381	0.000	543.839	13.86	543.280	0.147
II Ten-Daily	544.023	7.259		0.000		0.000	545.474	0.381	546.303	176.0	543.833	0.000
III Ten-Daily	543.100	0.245		0.000	544.892	1.323	545.567	43.33	543.955	11.69	543.856	0.000
Monthly												
Min.	542.893	0.000	542.743	0.000	543.063	0.000	542.983	0.000	543.033	0.000	543.123	0.000
Max.	545.313	70.43	542.863	0.000	546.873	14.55	547.573	118.0	549.083	371.6	544.093	1.468
Mean	543.313	2.501	542.808	0	544.892	0.469	544.807	14.57	544.675	65.38	543.656	0.049

Annual Runoff in MCM = 221 Annual Runoff in mm = 22

Peak Observed Discharge = 371.6 cumecs on 14/10/2017 Corres. Water Level :547.263 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Saigaon (AGP00N8) **Division : U Godavari Div., Hyderabad**

Local River : Manjera **Sub-Division : Manjira SD, Nizamabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	543.763	0.000	543.073	0.000	542.763	0.000		0.000		0.000	542.843	0.000
2	543.723	0.000	543.053	0.000	542.763	0.000		0.000		0.000	542.843	0.000
3	543.673	0.000	543.023	0.000	542.753	0.000		0.000		0.000	542.833	0.000
4	543.653	0.000	543.003	0.000	542.743	0.000		0.000		0.000	542.813	0.000
5	543.613	0.000	542.993	0.000		0.000		0.000		0.000	542.803	0.000
6	543.583	0.000	542.983	0.000		0.000		0.000		0.000	542.793	0.000
7	543.573	0.000	542.973	0.000		0.000		0.000		0.000		0.000
8	543.563	0.000	542.963	0.000		0.000		0.000		0.000		0.000
9	543.553	0.000	542.953	0.000		0.000		0.000		0.000		0.000
10	543.523	0.000	542.943	0.000		0.000		0.000		0.000		0.000
11	543.503	0.000	542.933	0.000		0.000		0.000		0.000		0.000
12	543.473	0.000	542.923	0.000		0.000		0.000		0.000		0.000
13	543.443	0.000	542.913	0.000		0.000		0.000		0.000		0.000
14	543.403	0.000	542.913	0.000		0.000		0.000		0.000		0.000
15	543.473	0.000	542.893	0.000		0.000		0.000		0.000		0.000
16	543.453	0.000	542.873	0.000		0.000		0.000	543.243	0.000		0.000
17	543.453	0.000	542.863	0.000		0.000		0.000	543.243	0.000		0.000
18	543.453	0.000	542.853	0.000		0.000		0.000	543.213	0.000		0.000
19	543.443	0.000	542.843	0.000		0.000		0.000	543.183	0.000		0.000
20	543.413	0.000	542.823	0.000		0.000		0.000	543.083	0.000		0.000
21	543.393	0.000	542.823	0.000		0.000		0.000	543.023	0.000		0.000
22	543.363	0.000	542.813	0.000		0.000		0.000	542.993	0.000		0.000
23	543.333	0.000	542.813	0.000		0.000		0.000	542.963	0.000		0.000
24	543.293	0.000	542.803	0.000		0.000		0.000	542.943	0.000		0.000
25	543.273	0.000	542.793	0.000		0.000		0.000	542.923	0.000		0.000
26	543.233	0.000	542.793	0.000		0.000		0.000	542.913	0.000		0.000
27	543.213	0.000	542.783	0.000		0.000		0.000	542.903	0.000		0.000
28	543.183	0.000	542.783	0.000		0.000		0.000	542.883	0.000		0.000
29	543.153	0.000	542.773	0.000				0.000	542.863	0.000		0.000
30	543.133	0.000	542.773	0.000				0.000	542.843	0.000		0.000
31	543.093	0.000	542.763	0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	543.622	0.000	542.996	0.000	542.755	0.000		0.000		0.000	542.821	0.000
II Ten-Daily	543.451	0.000	542.883	0.000		0.000		0.000	543.193	0.000		0.000
III Ten-Daily	543.242	0.000	542.792	0.000		0.000		0.000	542.925	0.000		0.000
Monthly												
Min.	543.093	0.000	542.763	0.000	542.743	0.000		0.000	542.843	0.000	542.793	0.000
Max.	543.763	0.000	543.073	0.000	542.763	0.000		0.000	543.243	0.000	542.843	0.000
Mean	543.432	0	542.887	0	542.755	0		0	543.014	0	542.821	0

Peak Computed Discharge = 173.0 cumecs on 15/10/2017 Corres. Water Level :546.343 m

Lowest Computed Discharge = 0.000 cumecs on 24/09/2017 Corres. Water Level :547.053 m

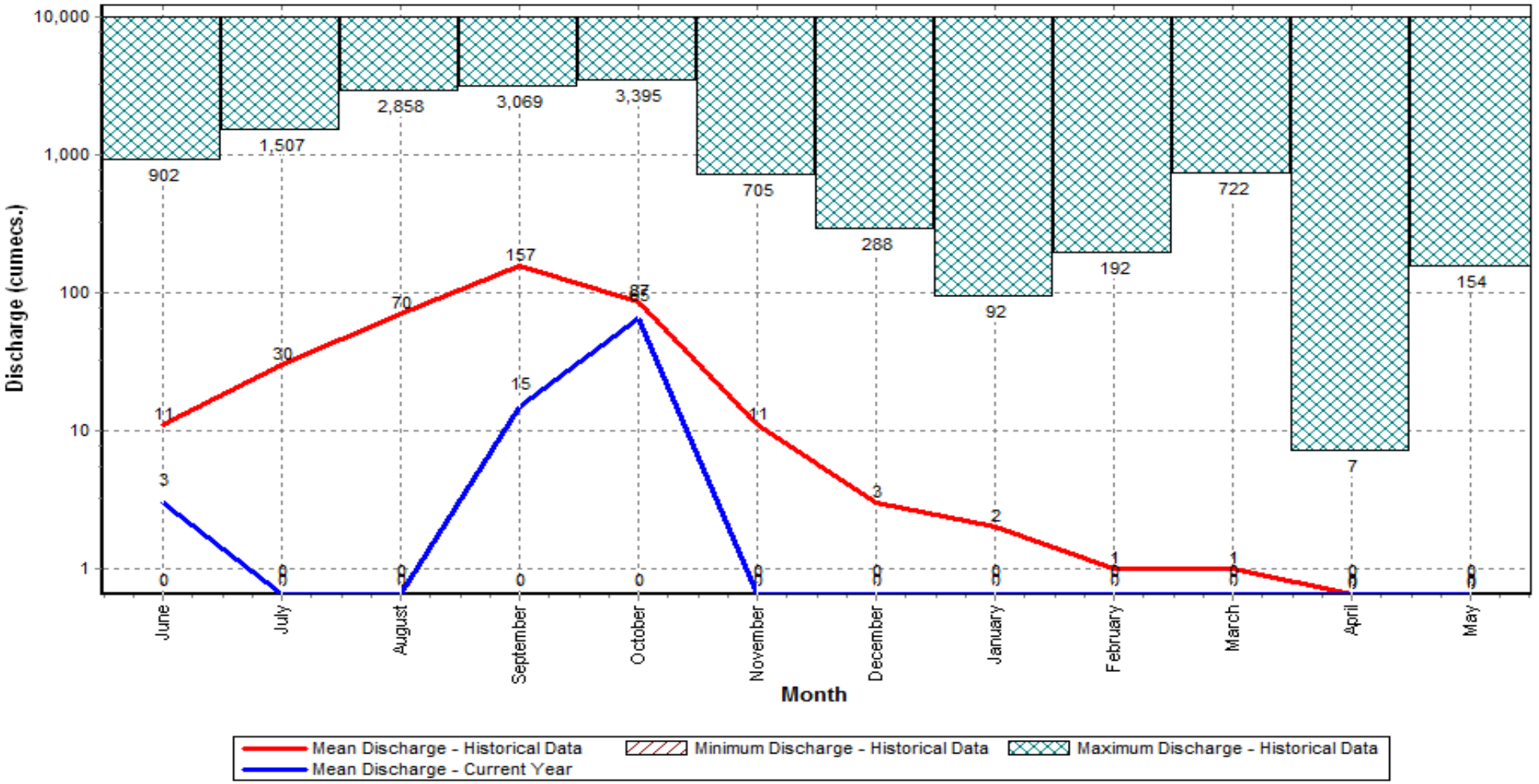
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Saigaon (AGP00N8) | **Data considered : 1967-2018** | **Division : U Godavari Div., Hyderabad**

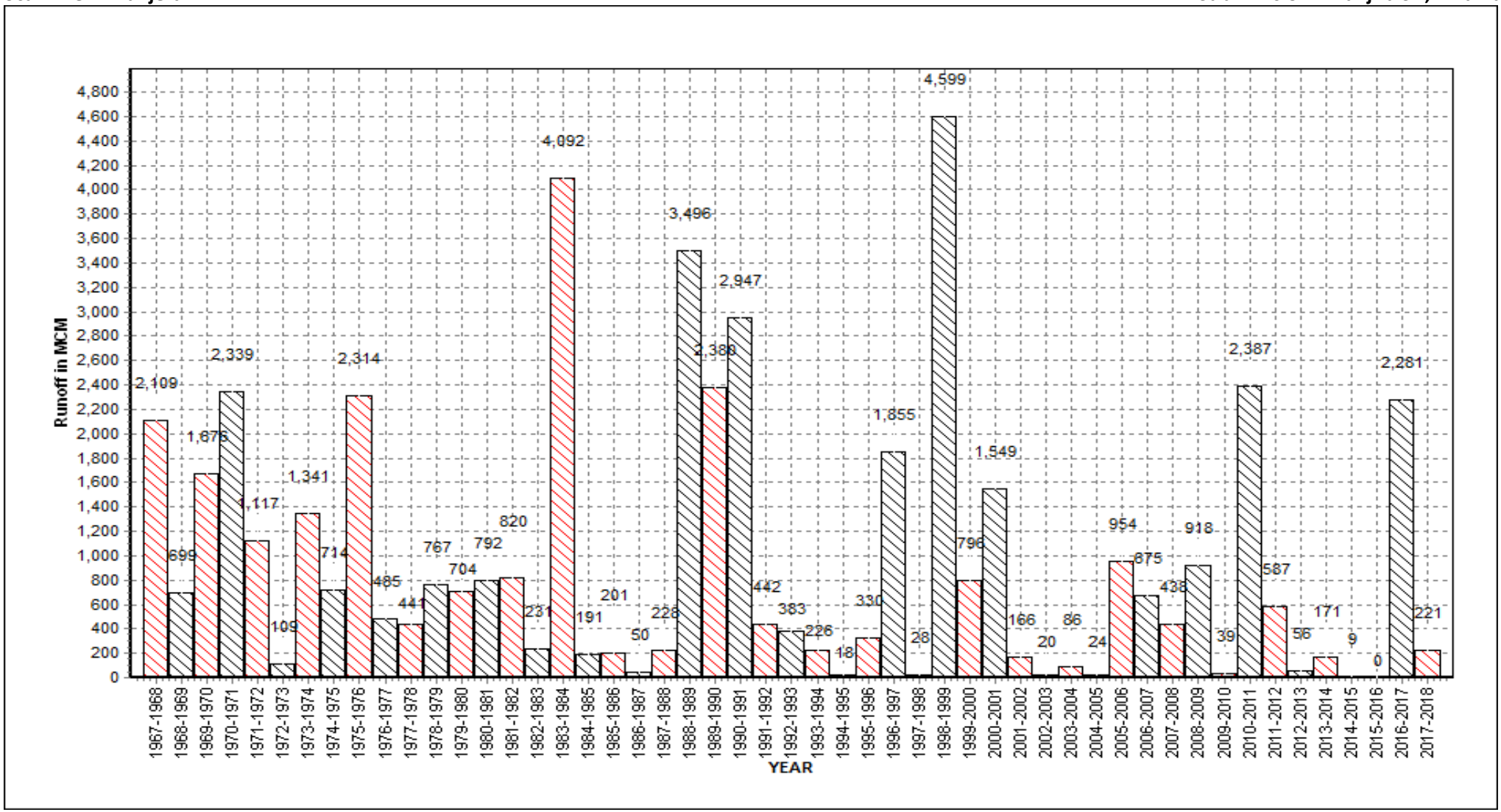
Local River : Manjera | **Sub-Division : Manjira SD, Nizamabad**



Annual Runoff Values for the period: 1967 - 2018

Station Name : Saigaon (AGP00N8) **Division : U Godavari Div., Hyderabad**

Local River : Manjera **Sub-Division : Manjira SD, Nizamabad**

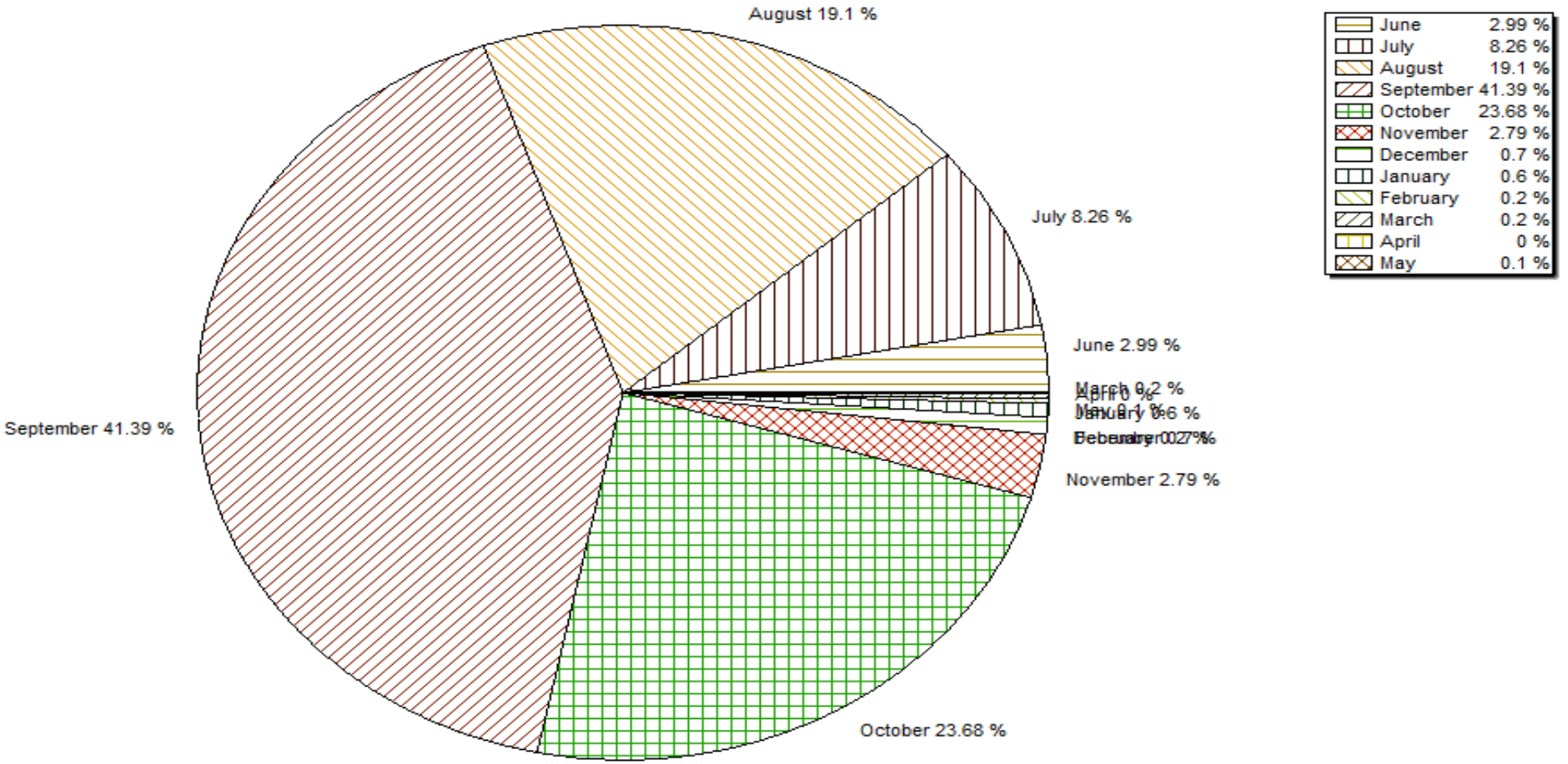


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1967-2017

Station Name : Saigaon (AGP00N8)
Local River : Manjera

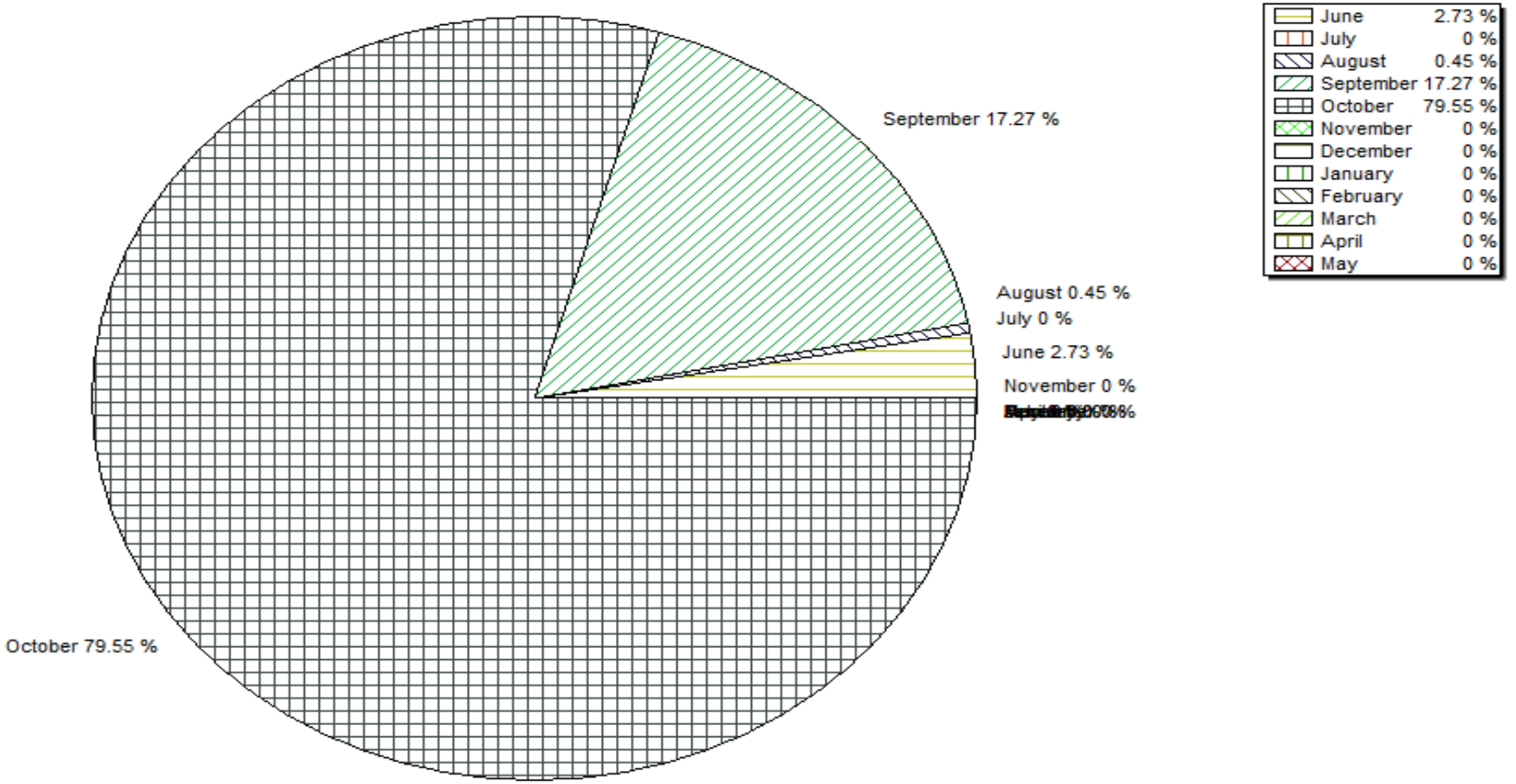
Division : U Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad



Monthly Runoff for the Year : 2017-2018

Station Name : Saigaon (AGP00N8)
Local River : Manjera

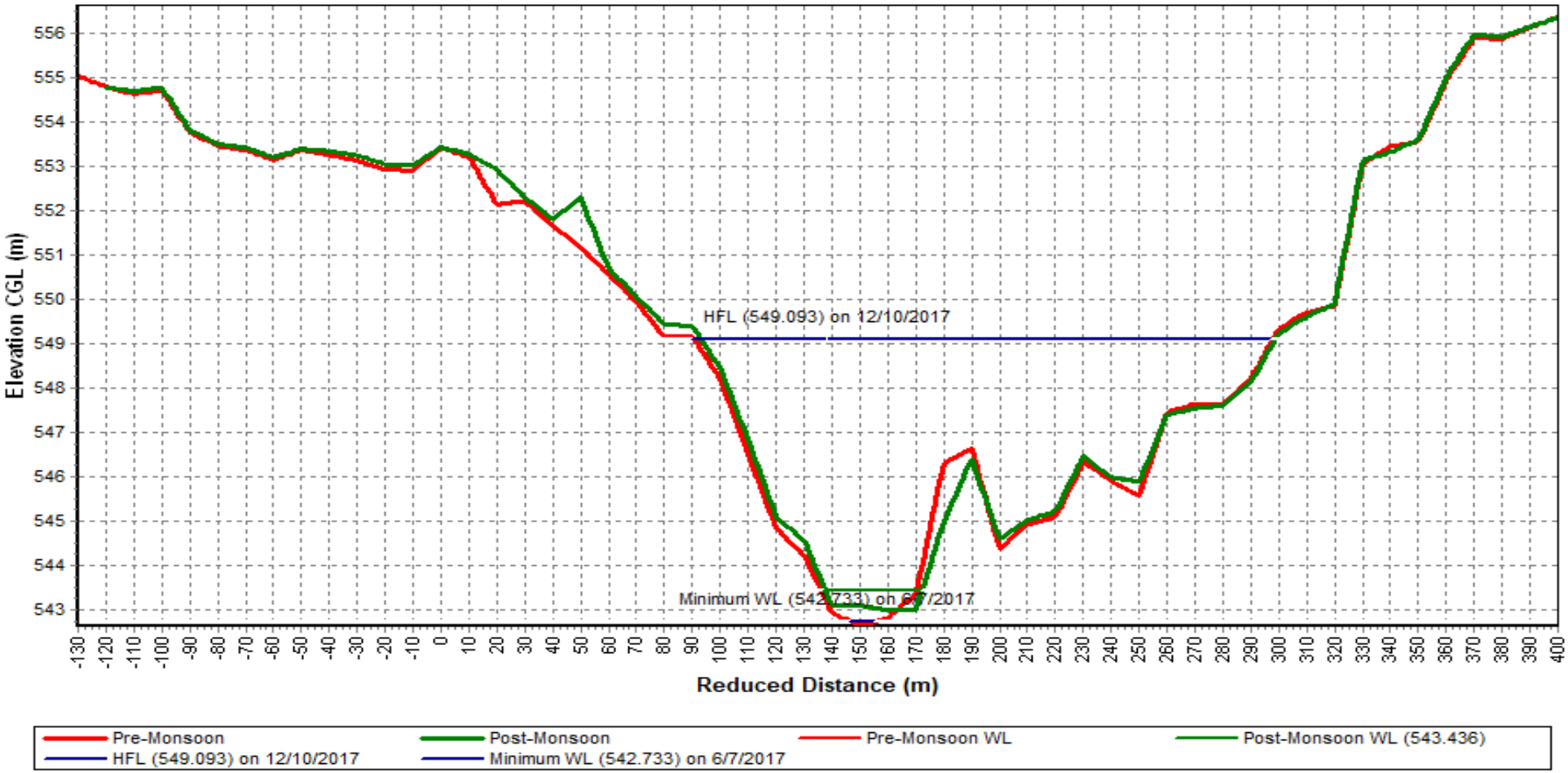
Division : U Godavari Div., Hyderabad
Sub-Division : Manjira SD, Nizamabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Saigaon (AGP00N8) **Division : U Godavari Div., Hyderabad**

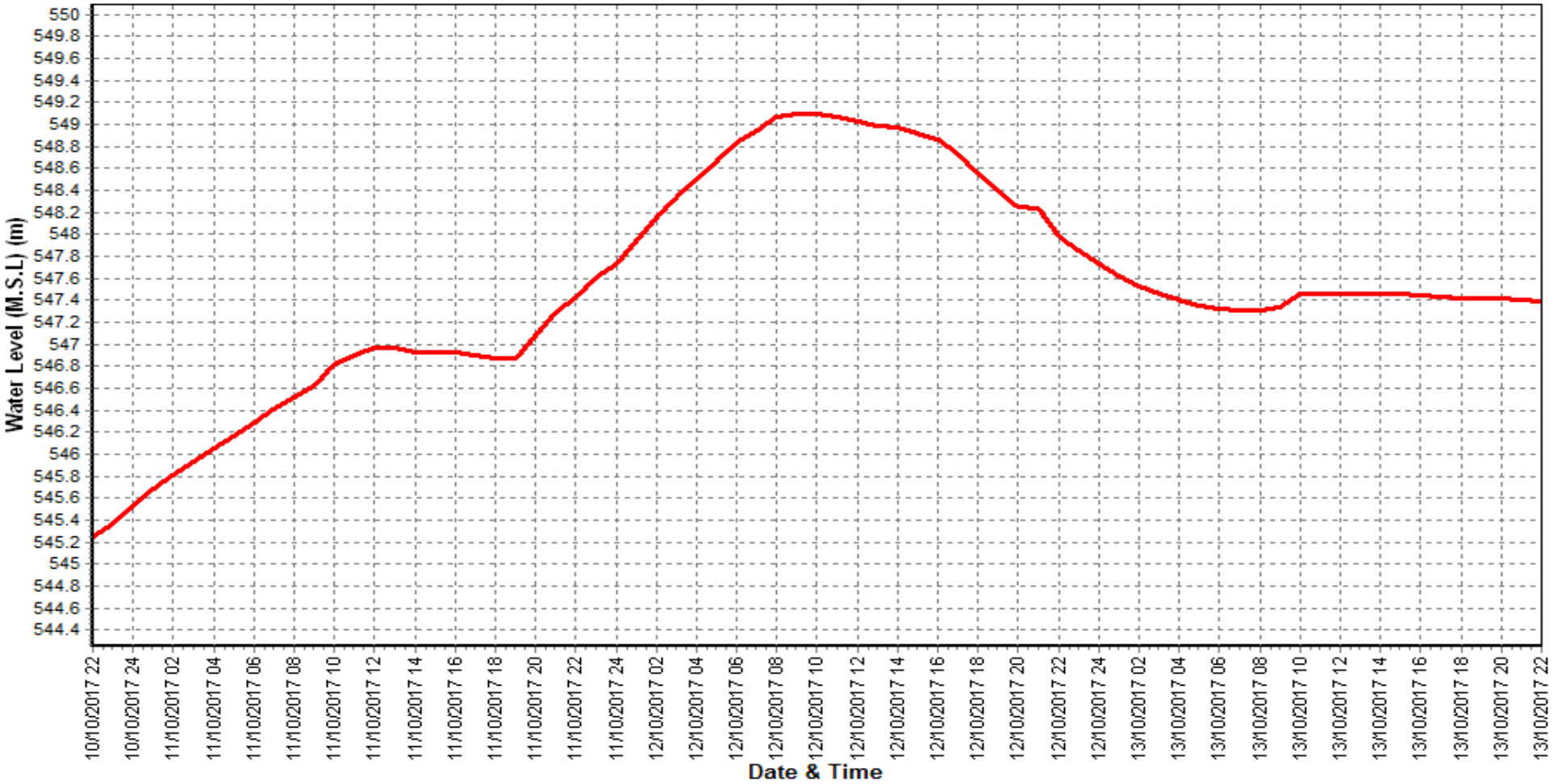
Local River : Manjera/Godavari **Sub-Division : Manjira SD, Nizamabad**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Saigaon (AGP00N8) **Division : U Godavari Div., Hyderabad**

Local River : Manjera **Sub-Division : Manjira SD, Nizamabad**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Yelli**	**Code**	:	**AG000P3**
State	:	Maharashtra	District		Nanded
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	--'
Sub-Sub Tributary	:	---	Local River	:	Godavari
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Purna SD, Nanded
Drainage Area	:	53630 Sq. Km.	Bank	:	Right
Latitude	:	19°02'00"	Longitude	:	77°28'00"
Zero of Gauge (m)	:	334.300 (m.s.l)	21.06.1976		
		Opening Date	Closing Date		
Gauge	:	21.06.1976	**HFL During 2017-18**	:	**341.780 Meter**
			Corres. Discharge	:	**0**
Discharge	:	22.04.1978	**Date & Time of**	:	**20.08.2017**
			Occurance	:	**13:00 hrs.**
Sediment	:	01.06.1978			
Water Quality	:	01.07.1978			

No flow due to back water

HFL Recorded so far in m : 354.3 07/08/2006
Corresponding Discharge (cumecs) : 12656*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1978-1979	1390	339.930	08.07.1978	7.000	335.670	28.04.1979
1979-1980	5018	345.065	27.09.1979	3.900	335.780	19.04.1980
1980-1981	5343	345.953	22.08.1980	6.064	335.790	29.04.1981
1981-1982	2284	342.338	24.09.1981	6.404	335.905	21.07.1981
1982-1983	1475	340.313	12.07.1982	0.567	335.415	20.05.1983
1983-1984	9815	351.100	13.08.1983	3.200	335.505	02.06.1983
1984-1985	2050	341.825	11.10.1984	4.000	335.750	11.03.1985
1985-1986	574.1	338.100	08.10.1985	0.000		20.04.1986
1986-1987	1655	340.118	19.07.1986	0.000		10.03.1987
1987-1988	2811	342.170	07.10.1987	0.000		02.06.1987
1988-1989	6763	347.800	31.07.1988	2.358	335.550	02.06.1988
1989-1990	8552	349.733	26.07.1989	0.002	335.640	06.02.1990
1990-1991	8720	348.025	17.08.1990	10.20	335.800	29.12.1990
1991-1992	3804	343.450	12.07.1991	0.114	335.320	31.05.1992
1992-1993	5075	345.145	03.09.1992	0.000		04.05.1993
1993-1994	1775	341.078	30.07.1993	0.000		29.04.1994
1994-1995	2490	341.990	10.09.1994	0.000		02.06.1994

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1995-1996	1800	341.073	20.10.1995	0.000		06.02.1996
1996-1997	3533	343.280	17.09.1996	0.000		10.03.1997
1997-1998	3487	343.608	19.09.1997	0.000		20.02.1998
1998-1999	5864	347.400	30.07.1998	0.000	335.300	05.05.1999
1999-2000	2958	342.970	09.09.1999	0.000	335.310	02.05.2000
2000-2001	6803	348.293	29.08.2000	0.000	335.450	11.04.2001
2001-2002	5007	345.935	02.10.2001	0.000	335.440	27.04.2002
2002-2003	2918	343.850	07.09.2002	0.000		01.05.2003
2003-2004	1882	340.922	20.07.2003	0.000		06.02.2004
2004-2005	207.0	337.415	07.10.2004	0.000		21.01.2005
2005-2006	8576	350.920	28.07.2005	0.000		11.02.2006
2006-2007	12535	354.200	07.08.2006	0.000	335.530	29.03.2007
2007-2008	2362	341.670	23.09.2007	0.000		14.02.2008
2008-2009	4106	344.110	23.09.2008	0.000		25.01.2009
2009-2010	1582	340.210	26.08.2009	0.000		25.01.2010
2010-2011	2917	342.490	14.08.2010	0.000	335.410	08.02.2011
2011-2012	1781	340.940	27.08.2011	0.000		26.01.2012
2012-2013	665.3	338.790	05.09.2012	0.000	334.870	05.11.2012
2013-2014	1603	341.545	20.09.2013	0.000	335.000	16.03.2014
2014-2015	218.3	336.370	08.09.2014	0.000	334.300	21.01.2015
2015-2016	0.000	334.610	23.09.2015	0.000	334.300	14.01.2016
2016-2017	6189	346.050	26.09.2016	0.000	339.140	04.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Yelli in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1978-1979**	2911	368	3280
2	**1979-1980**	4445	886	5332
3	**1980-1981**	7925	402	8328
4	**1981-1982**	3201	340	3542
5	**1982-1983**	1355	179	1533
6	**1983-1984**	14887	541	15428
7	**1984-1985**	1714	283	1997
8	**1985-1986**	1026	60	1087
9	**1986-1987**	843	21	864
10	**1987-1988**	2120	73	2193
11	**1988-1989**	13251	421	13673
12	**1989-1990**	8795	524	9319
13	**1990-1991**	13095	476	13571
14	**1991-1992**	4615	192	4807
15	**1992-1993**	3565	49	3614
16	**1993-1994**	1378	15	1393
17	**1994-1995**	2342	88	2429
18	**1995-1996**	1623	2	1625
19	**1996-1997**	2929	9	2938
20	**1997-1998**	694	117	811
21	**1998-1999**	10858	39	10897
22	**1999-2000**	3676	65	3741
23	**2000-2001**	4800	15	4815
24	**2001-2002**	2853	18	2871
25	**2002-2003**	2727	19	2746
26	**2003-2004**	1262	3	1265
27	**2004-2005**	185	2	187
28	**2005-2006**	9014	11	9025
29	**2006-2007**	12960	15	12974
30	**2007-2008**	1784	0	1784
31	**2008-2009**	1707	0	1707
32	**2009-2010**	511	0	511
33	**2010-2011**	4985	0	4985
34	**2011-2012**	1383	0	1383
35	**2012-2013**	145	0	145
36	**2013-2014**	2615	0	2615
37	**2014-2015**	82	0	82
38	**2015-2016**	0	0	0
39	**2016-2017**	4604	0	4604
Average		4074	134	4208

Stage-Discharge Data for the period 2017 - 2018

Station Name : Yelli (AG000P3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	334.980	0.000	335.320	0.000	336.850	0.000	338.650	0.000	339.400	0.000	340.080	0.000
2	334.980	0.000	335.320	0.000	336.840	0.000	338.570	0.000	339.400	0.000	340.070	0.000
3	334.980	0.000	335.320	0.000	336.830	0.000	338.540	0.000	339.400	0.000	340.080	0.000
4	334.980	0.000	335.310	0.000	336.790	0.000	338.550	1010	339.420	0.000	340.080	0.000
5	334.970	0.000	335.300	0.000	336.770	0.000	338.520	0.000	339.400	0.000	340.080	0.000
6	334.970	0.000	335.300	0.000	336.750	0.000	338.530	0.000	339.400	0.000	340.070	0.000
7	334.950	0.000	335.300	0.000	336.720	0.000	338.580	0.000	339.400	0.000	340.070	0.000
8	334.940	0.000	335.290	0.000	336.700	0.000	338.680	0.000	339.400	0.000	340.080	0.000
9	334.940	0.000	335.290	0.000	336.690	0.000	339.010	953.6	339.400	0.000	340.090	0.000
10	334.940	0.000	335.290	0.000	336.730	0.000	339.340	1100	339.550	0.000	340.090	0.000
11	334.930	0.000	335.290	0.000	336.740	0.000	339.080	0.000	339.601	1203	340.090	0.000
12	334.930	0.000	335.280	0.000	336.740	0.000	339.110	0.000	340.330	1364	340.080	0.000
13	334.920	0.000	335.280	0.000	336.740	0.000	339.250	0.000	339.555	1184	340.080	0.000
14	334.920	0.000	335.280	0.000	336.750	0.000	339.200	0.000	339.975	1279	340.080	0.000
15	334.920	0.000	335.280	0.000	336.740	0.000	339.220	0.000	339.580	0.000	340.080	0.000
16	335.000	0.000	335.290	0.000	336.740	0.000	339.435	1088	339.775	1229	340.080	0.000
17	335.050	0.000	335.320	0.000	336.740	0.000	339.300	0.000	339.940	1140	340.080	0.000
18	335.070	0.000	335.330	0.000	336.730	0.000	339.530	1158	339.550	0.000	340.080	0.000
19	335.070	0.000	335.360	0.000	336.730	0.000	339.350	0.000	339.550	0.000	340.080	0.000
20	335.150	0.000	336.700	0.000	339.370	0.000	339.320	0.000	339.700	0.000	340.080	0.000
21	335.170	0.000	336.800	0.000	338.400	0.000	339.370	0.000	339.750	0.000	340.120	0.000
22	335.180	0.000	336.830	0.000	338.120	0.000	339.380	0.000	339.750	0.000	340.100	0.000
23	335.190	0.000	336.840	0.000	338.200	0.000	340.400	0.000	339.820	0.000	340.050	0.000
24	335.190	0.000	336.850	0.000	338.270	0.000	339.300	0.000	339.860	0.000	340.030	0.000
25	335.190	0.000	336.850	0.000	338.300	0.000	339.360	0.000	340.050	0.000	340.010	0.000
26	335.200	0.000	336.850	0.000	338.320	0.000	339.390	0.000	339.990	0.000	340.020	0.000
27	335.300	0.000	336.850	0.000	338.630	0.000	339.400	0.000	340.000	0.000	340.000	0.000
28	335.300	0.000	336.850	0.000	338.500	0.000	339.400	0.000	340.050	0.000	339.990	0.000
29	335.330	0.000	336.850	0.000	339.050	1013	339.400	0.000	340.100	0.000	339.970	0.000
30	335.330	0.000	336.860	0.000	338.850	0.000	339.400	0.000	340.080	0.000	339.960	0.000
31			336.860	0.000	338.700	0.000			340.080	0.000		
Ten-Daily Mean												
I Ten-Daily	334.963	0.000	335.304	0.000	336.767	0.000	338.697	306.3	339.417	0.000	340.079	0.000
II Ten-Daily	334.996	0.000	335.441	0.000	337.002	0.000	339.280	224.6	339.756	739.9	340.081	0.000
III Ten-Daily	335.238	0.000	336.845	0.000	338.485	92.05	339.480	0.000	339.957	0.000	340.025	0.000
Monthly												
Min.	334.920	0.000	335.280	0.000	336.690	0.000	338.520	0.000	339.400	0.000	339.960	0.000
Max.	335.330	0.000	336.860	0.000	339.370	1013	340.400	1158	340.330	1364	340.120	0.000
Mean	335.066	0.000	335.895	0.000	337.453	32.66	339.152	177.0	339.718	238.7	340.062	0.000

Annual Runoff in MCM = 1186 Annual Runoff in mm = 22

Peak Observed Discharge = 1364 cumecs on 12/10/2017 Corres. Water Level :340.330 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :334.980 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Yelli (AG000P3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	339.950	0.000	339.730	0.000	339.320	0.000	338.900	0.000	337.450	0.000	335.490	0.000
2	339.940	0.000	339.730	0.000	339.300	0.000	338.090	0.000	337.440	0.000	335.460	0.000
3	339.930	0.000	339.730	0.000	339.270	0.000	338.000	0.000	337.400	0.000	335.430	0.000
4	339.910	0.000	339.720	0.000	339.250	0.000	338.000	0.000	337.300	0.000	335.400	0.000
5	339.880	0.000	339.710	0.000	339.240	0.000	337.950	0.000	337.230	0.000	335.360	0.000
6	339.880	0.000	339.690	0.000	339.230	0.000	337.930	0.000	337.190	0.000	335.330	0.000
7	339.900	0.000	339.680	0.000	339.200	0.000	337.910	0.000	337.160	0.000	335.280	0.000
8	339.920	0.000	339.660	0.000	339.180	0.000	337.900	0.000	337.130	0.000	335.250	0.000
9	339.900	0.000	339.650	0.000	339.160	0.000	337.850	0.000	337.090	0.000	335.200	0.000
10	339.900	0.000	339.640	0.000	339.150	0.000	337.850	0.000	337.050	0.000	335.160	0.000
11	339.910	0.000	339.620	0.000	339.130	0.000	337.840	0.000	337.030	0.000	335.120	0.000
12	339.920	0.000	339.610	0.000	339.120	0.000	337.830	0.000	337.010	0.000	335.080	0.000
13	339.900	0.000	339.530	0.000	339.120	0.000	337.820	0.000	337.000	0.000	335.050	0.000
14	339.890	0.000	339.470	0.000	339.130	0.000	337.780	0.000	336.980	0.000	335.020	0.000
15	339.880	0.000	339.450	0.000	339.130	0.000	337.750	0.000	336.960	0.000	334.980	0.000
16	339.870	0.000	339.440	0.000	339.110	0.000	337.720	0.000	336.940	0.000	334.930	0.000
17	339.860	0.000	339.430	0.000	339.100	0.000	337.700	0.000	336.880	0.000	334.880	0.000
18	339.850	0.000	339.420	0.000	339.090	0.000	337.680	0.000	336.850	0.000	334.850	0.000
19	339.830	0.000	339.380	0.000	339.070	0.000	337.670	0.000	336.810	0.000	334.820	0.000
20	339.820	0.000	339.370	0.000	339.060	0.000	337.650	0.000	336.780	0.000	334.780	0.000
21	339.800	0.000	339.360	0.000	339.050	0.000	337.630	0.000	336.750	0.000	334.740	0.000
22	339.800	0.000	339.350	0.000	339.030	0.000	337.610	0.000	336.710	0.000	334.720	0.000
23	339.780	0.000	339.350	0.000	339.020	0.000	337.600	0.000	336.670	0.000	334.710	0.000
24	339.780	0.000	339.350	0.000	338.980	0.000	337.580	0.000	336.640	0.000	334.690	0.000
25	339.760	0.000	339.350	0.000	338.960	0.000	337.560	0.000	336.600	0.000	334.650	0.000
26	339.750	0.000	339.340	0.000	338.940	0.000	337.550	0.000	336.550	0.000	334.620	0.000
27	339.730	0.000	339.340	0.000	338.920	0.000	337.540	0.000	336.520	0.000	334.600	0.000
28	339.730	0.000	339.340	0.000	338.910	0.000	337.500	0.000	336.490	0.000	334.590	0.000
29	339.730	0.000	339.350	0.000			337.490	0.000	336.450	0.000	334.580	0.000
30	339.720	0.000	339.350	0.000			337.480	0.000	335.520	0.000	334.570	0.000
31	339.720	0.000	339.340	0.000			337.460	0.000			334.570	0.000
Ten-Daily Mean												
I Ten-Daily	339.911	0.000	339.694	0.000	339.230	0.000	338.038	0.000	337.244	0.000	335.336	0.000
II Ten-Daily	339.873	0.000	339.472	0.000	339.106	0.000	337.744	0.000	336.924	0.000	334.951	0.000
III Ten-Daily	339.755	0.000	339.347	0.000	338.976	0.000	337.545	0.000	336.490	0.000	334.640	0.000
Monthly												
Min.	339.720	0.000	339.340	0.000	338.910	0.000	337.460	0.000	335.520	0.000	334.570	0.000
Max.	339.950	0.000	339.730	0.000	339.320	0.000	338.900	0.000	337.450	0.000	335.490	0.000
Mean	339.843	0.000	339.499	0.000	339.113	0.000	337.768	0.000	336.886	0.000	334.965	0.000

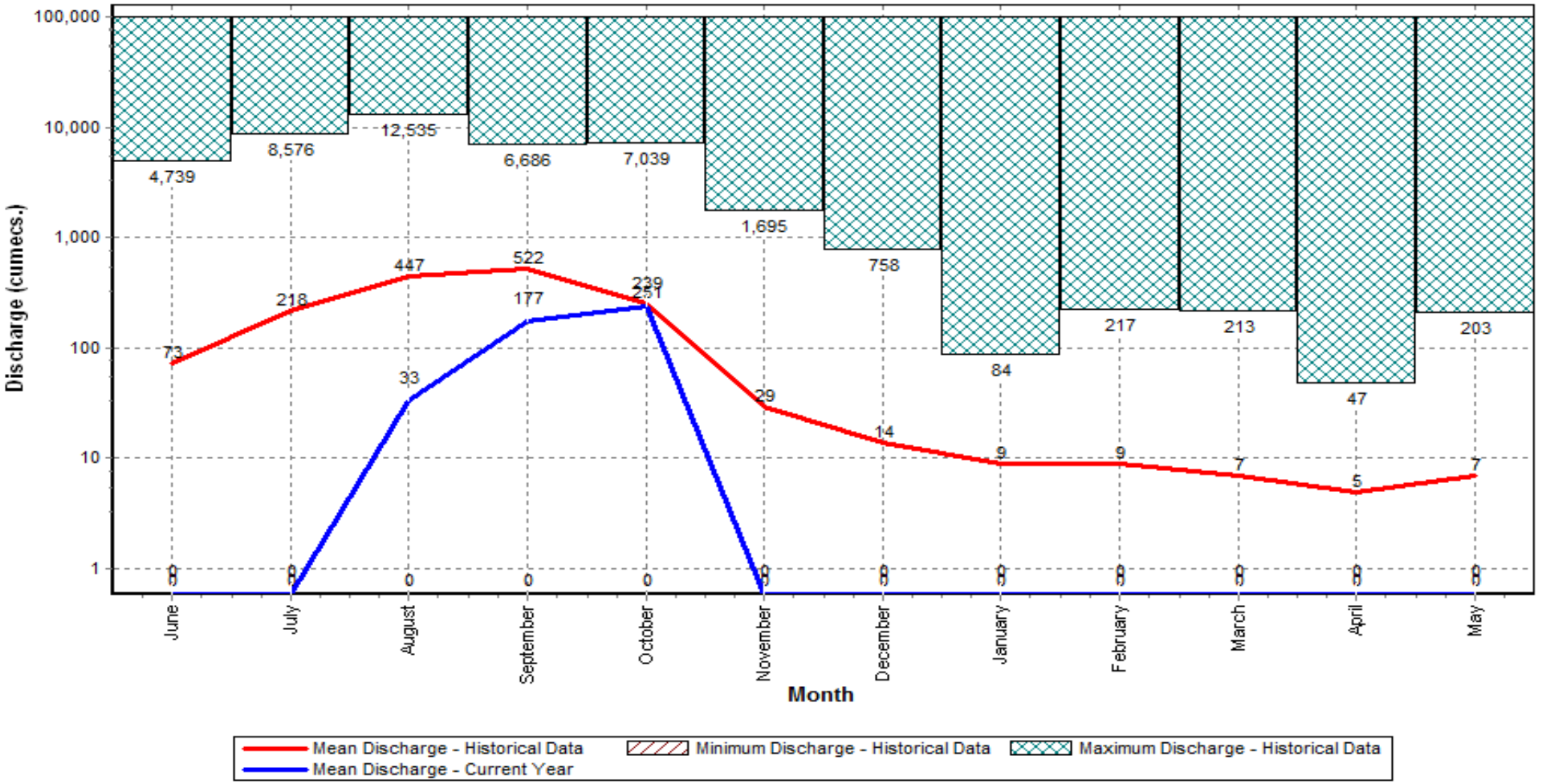
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Yelli (AG000P3) | **Data considered : 1978-2018** | **Division : U Godavari Div., Hyderabad**

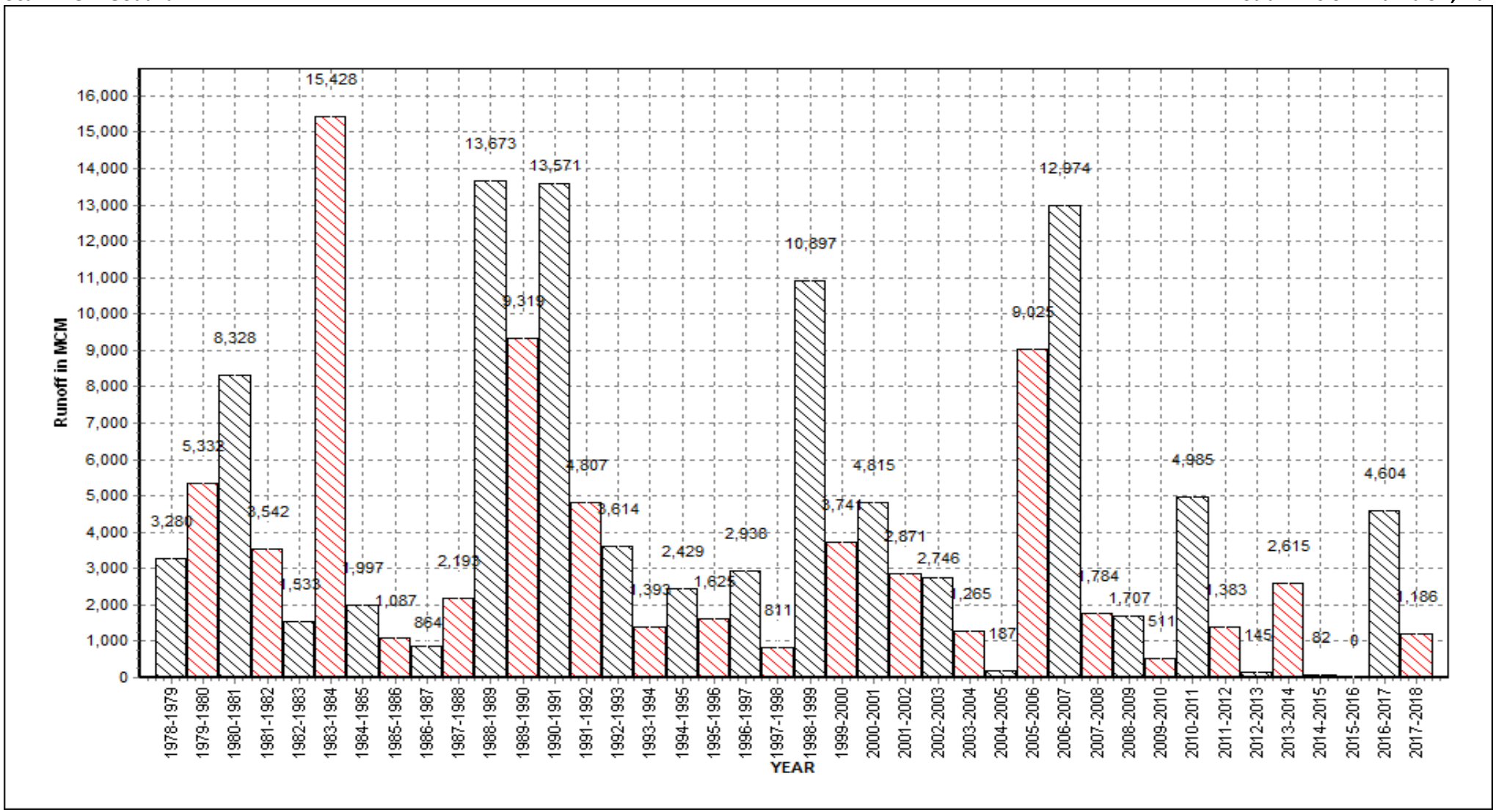
Local River : Godavari | **Sub-Division : Purna SD, Nanded**



Annual Runoff Values for the period: 1978 - 2018

Station Name : Yelli (AG000P3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**



Note: Missing values have not been considered while arriving at Annual Runoff

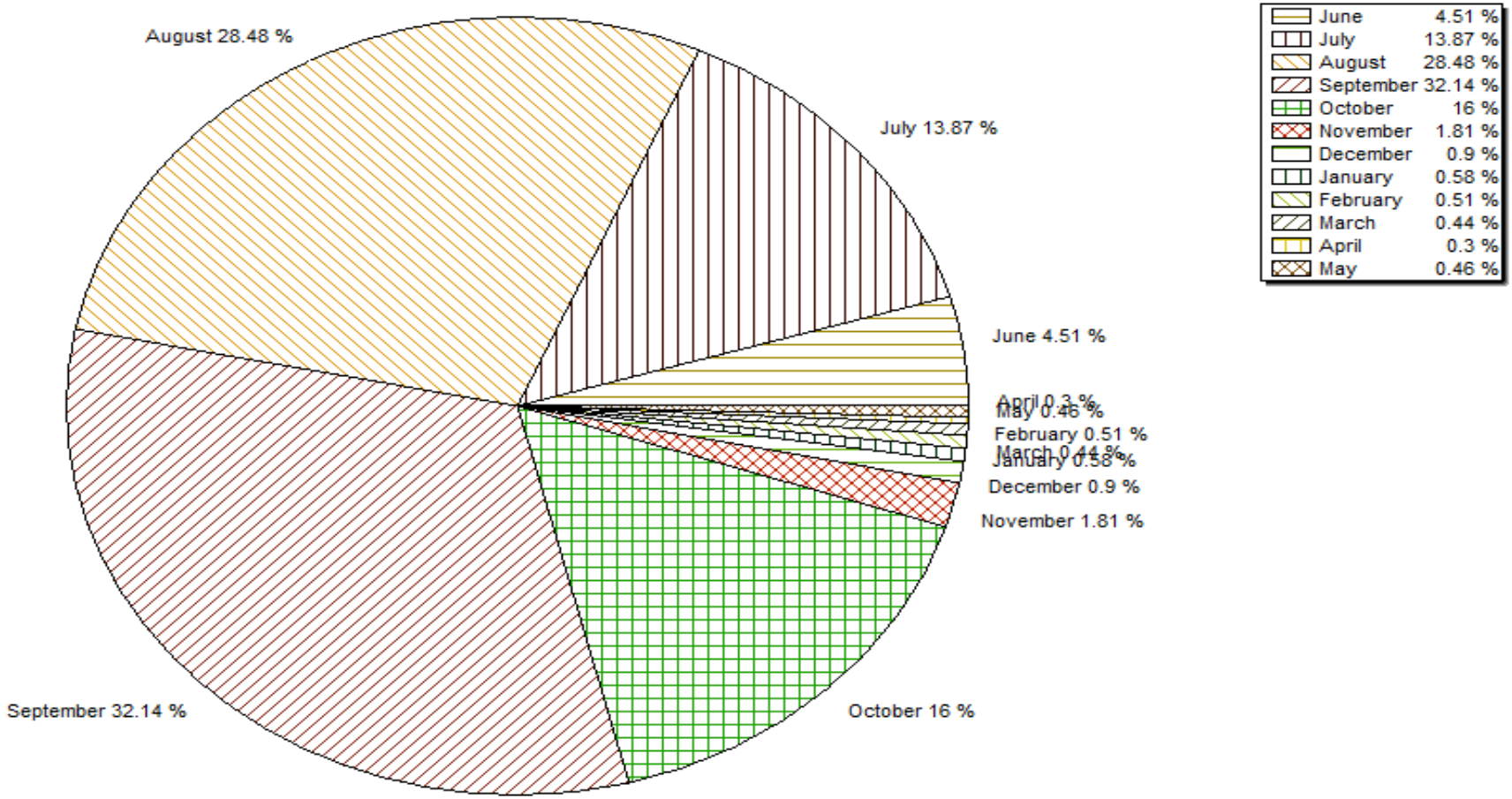
Monthly Average Runoff based on period : 1978-2017

Station Name : Yelli (AG000P3)

Local River : Godavari

Division : U Godavari Div., Hyderabad

Sub-Division : Purna SD, Nanded



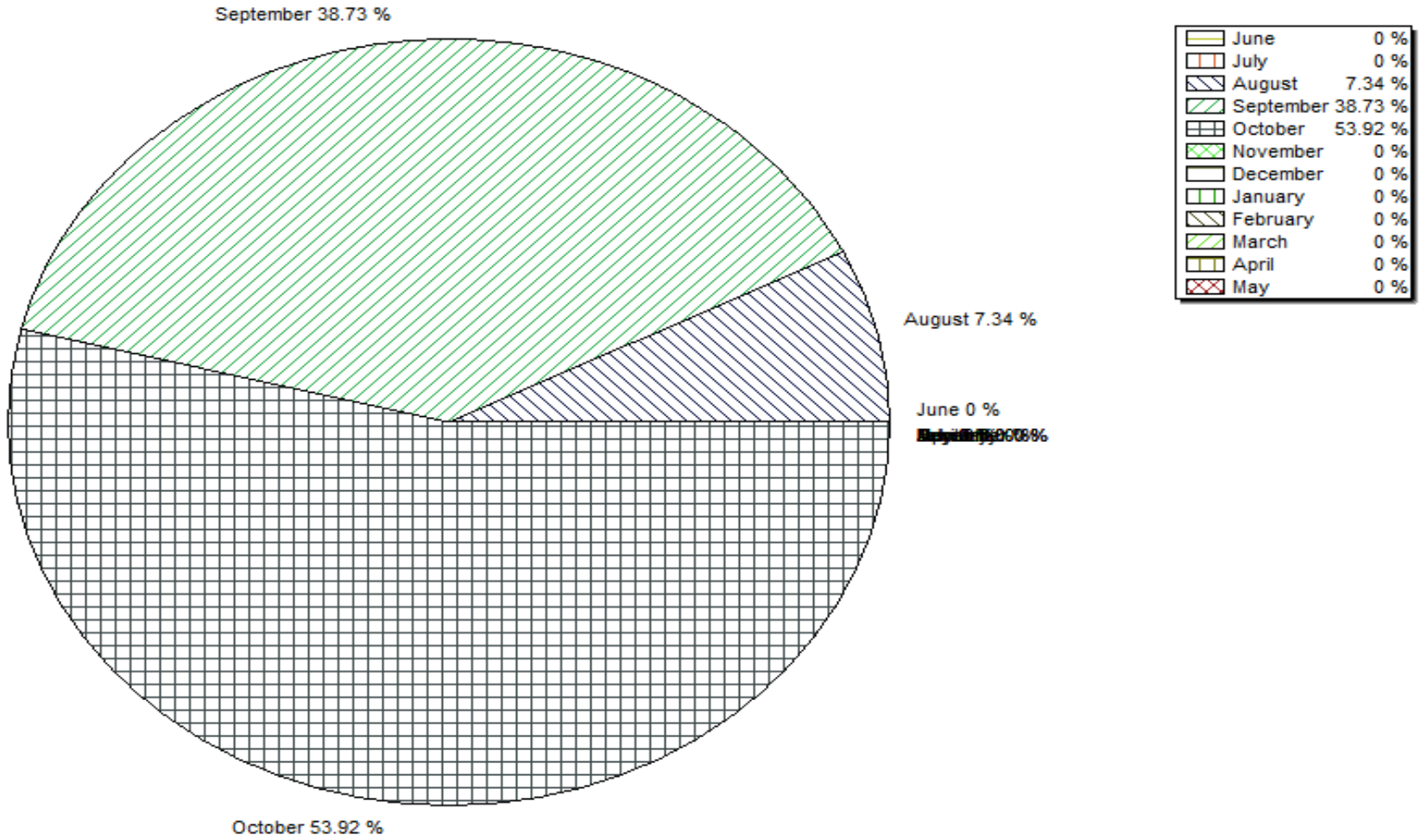
Monthly Runoff for the Year : 2017-2018

Station Name : Yelli (AG000P3)

Local River : Godavari

Division : U Godavari Div., Hyderabad

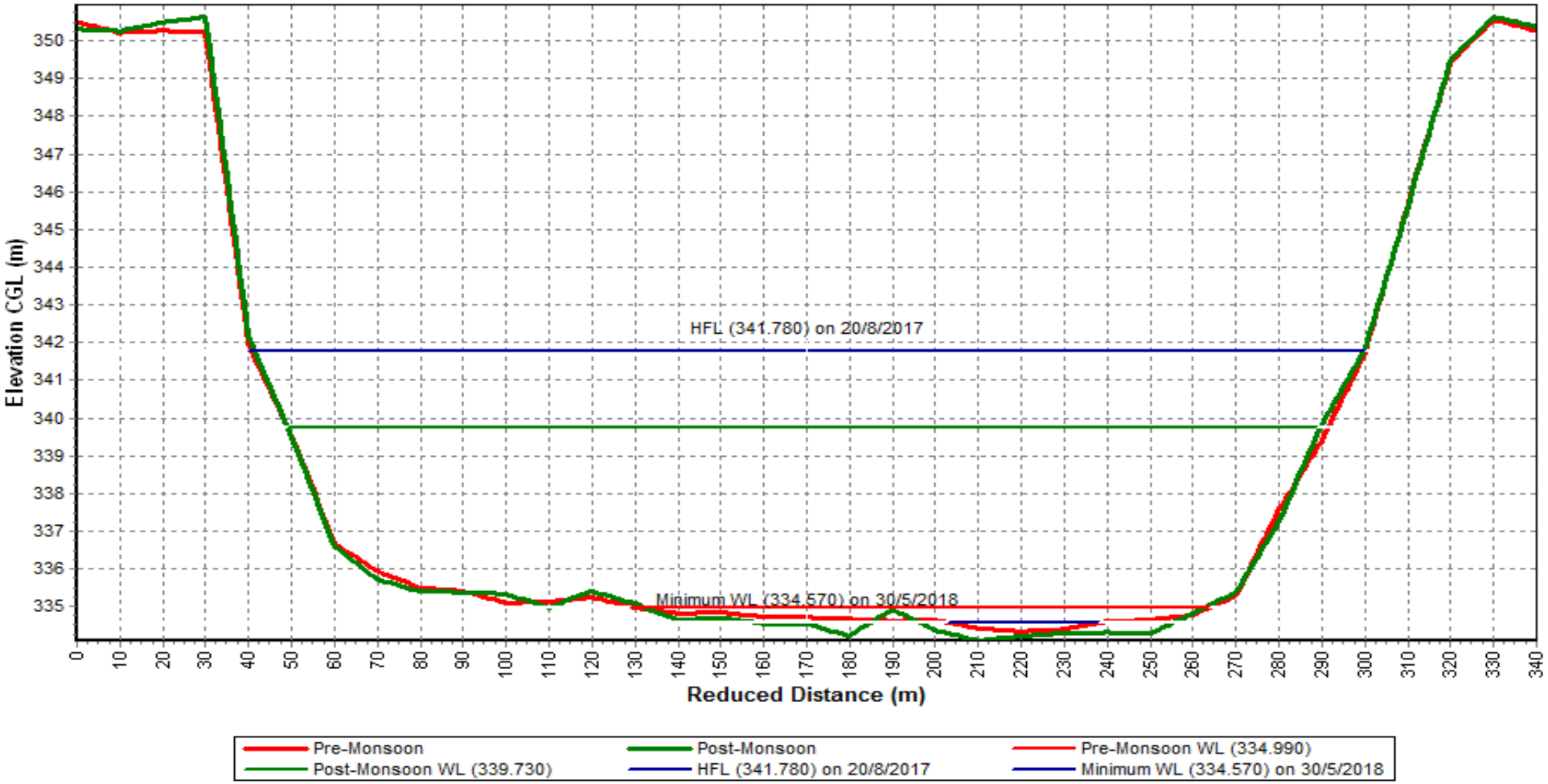
Sub-Division : Purna SD, Nanded



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Yelli (AG000P3) **Division : U Godavari Div., Hyderabad**

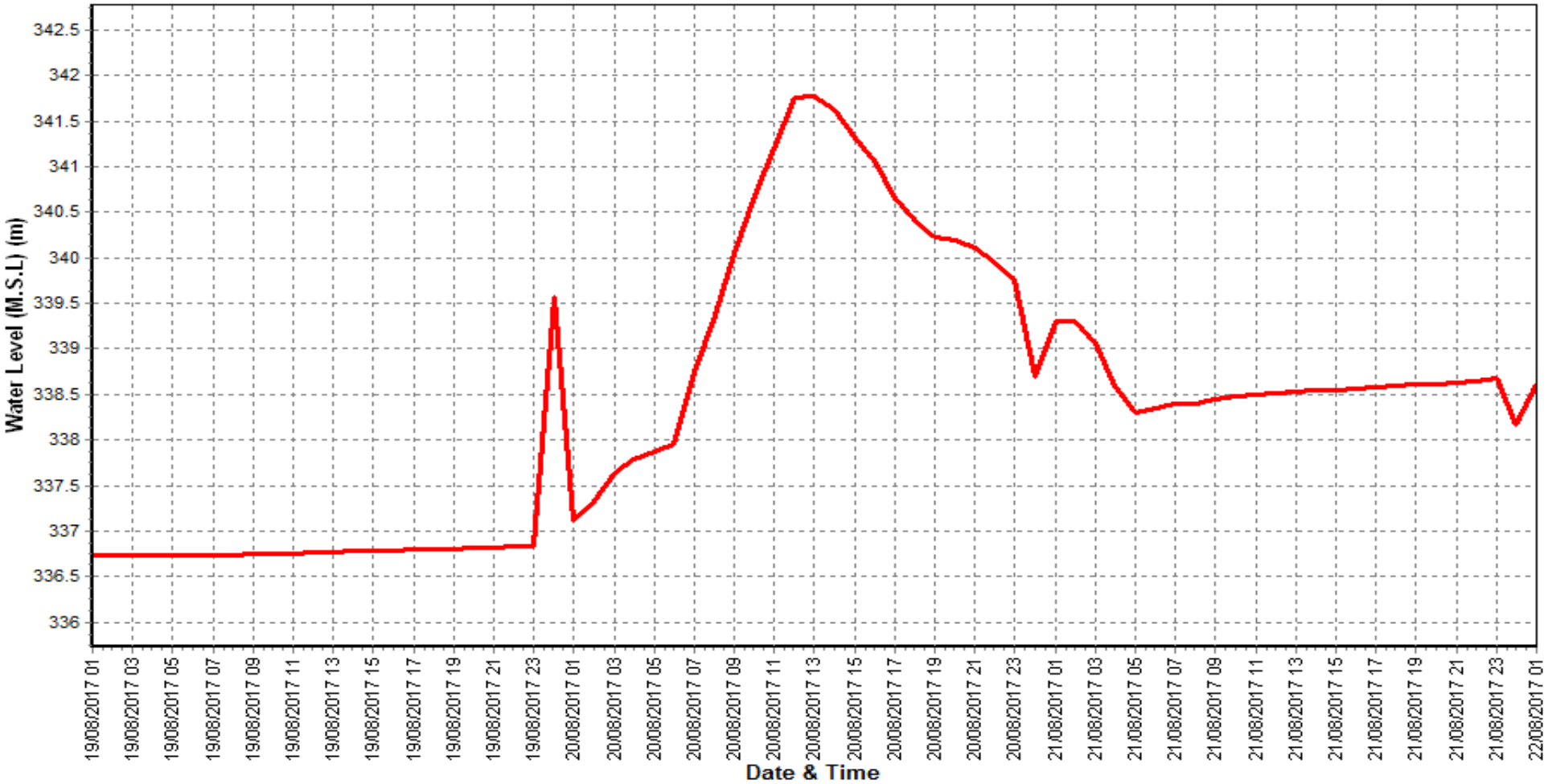
Local River : Godavari **Sub-Division : Purna SD, Nanded**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Yelli (AG000P3) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**NANDED**	**Code**	:	**NANDED**
State	:	Maharashtra	District		Nanded
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:		Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Godavari
Division	:	Upper Godavari Div., Hyderabad	Sub-Division	:	Purna SD, Nanded
Drainage Area	:	52038 Sq. Km.	Bank	:	Right
Latitude	:	19°04'00"	Longitude	:	77°30'00"
Zero of Gauge (m)	:	340.5 (m.s.l)	01.06.1977		
		Opening Date	Closing Date		
Gauge	:	01.06.1977	**HFL During 2017-18**	:	**345.400 Meter**
			Corres. Discharge	:	**0**
Discharge	:	01.06.2016	**Date & Time of**	:	**10.09.2017**
			Occurance	:	**01:00 hrs.**
Sediment	:				
Water Quality	:				

No flow due to back water

HFL Recorded so far in m : 355.65 12/08/1983 WL ONLY RECOREDED
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2014-2015	0.000	343.600	06.06.2014	0.000	343.750	27.10.2014
2015-2016	0.000	343.290	04.10.2015	0.000	341.820	26.01.2016
2016-2017	3709	349.675	26.09.2016	0.000	343.640	25.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Nanded in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**2014-2015**	0	0	0
2	**2015-2016**	0	0	0
3	**2016-2017**	3617	0	3617
Average		1206	0	1206

Stage-Discharge Data for the period 2017 - 2018

Station Name : NANDED (NANDED) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	340.920	0.000	342.140	0.000	342.140	0.000	343.100	0.000	343.630	0.000	343.750	0.000
2	340.900	0.000	342.160	0.000	342.170	0.000	343.400	0.000	343.750	0.000	343.750	0.000
3	340.900	0.000	342.190	0.000	342.170	0.000	343.580	0.000	343.800	0.000	343.700	0.000
4	340.900	0.000	342.220	0.000	342.170	0.000	343.750	0.000	343.800	0.000	343.700	0.000
5	340.900	0.000	342.220	0.000	342.180	0.000	343.470	0.000	343.800	0.000	343.700	0.000
6	340.900	0.000	342.210	0.000	342.190	0.000	343.610	0.000	343.820	0.000	343.700	0.000
7	340.950	0.000	342.210	0.000	342.190	0.000	343.720	0.000	343.720	0.000	343.670	0.000
8	340.950	0.000	342.210	0.000	342.190	0.000	343.380	0.000	343.790	0.000	343.640	0.000
9	340.950	0.000	342.220	0.000	342.200	0.000	343.975	968.0	343.840	0.000	343.610	0.000
10	340.950	0.000	342.220	0.000	342.240	0.000	343.900	940.6 *	343.690	0.000	343.590	0.000
11	340.960	0.000	342.230	0.000	342.270	0.000	343.340	0.000	344.200	887.2	343.560	0.000
12	340.960	0.000	342.250	0.000	342.280	0.000	343.450	0.000	344.800	1525	343.520	0.000
13	340.960	0.000	342.250	0.000	342.320	0.000	344.300	783.9	343.600	691.0	343.500	0.000
14	340.960	0.000	342.260	0.000	342.350	0.000	343.600	580.1	344.625	1387	343.490	0.000
15	340.960	0.000	342.290	0.000	342.350	0.000	343.180	0.000	343.160	490.5 *	343.470	0.000
16	340.990	0.000	342.310	0.000	342.360	0.000	343.800	665.5	343.850	669.7	343.450	0.000
17	341.140	0.000	342.710	0.000	342.350	0.000	343.200	0.000	344.250	844.6	343.420	0.000
18	341.310	0.000	342.900	0.000	342.350	0.000	343.620	0.000	343.800	662.6	343.380	0.000
19	341.360	0.000	343.040	0.000	342.390	0.000	343.100	0.000	343.400	550.5 *	343.300	0.000
20	341.390	0.000	342.100	0.000	344.180	0.000	343.240	0.000	344.050	742.6	343.250	0.000
21	341.440	0.000	342.010	0.000	341.600	0.000	343.350	0.000	343.600	0.000	343.180	0.000
22	341.480	0.000	341.800	0.000	342.400	0.000	343.460	0.000	343.700	0.000	343.000	0.000
23	341.510	0.000	341.910	0.000	342.720	0.000	343.300	0.000	343.780	0.000	342.950	0.000
24	341.640	0.000	342.020	0.000	342.920	0.000	343.370	0.000	343.840	0.000	342.900	0.000
25	341.700	0.000	341.850	0.000	343.080	0.000	343.240	0.000	343.690	0.000	342.820	0.000
26	341.730	0.000	341.900	0.000	343.320	0.000	343.310	0.000	343.710	0.000	342.820	0.000
27	341.880	0.000	342.000	0.000	342.800	0.000	343.400	0.000	343.740	0.000	342.800	0.000
28	341.960	0.000	342.080	0.000	342.160	0.000	343.460	0.000	343.760	0.000	342.800	0.000
29	342.070	0.000	342.100	0.000	344.375	1400	343.550	0.000	343.780	0.000	342.800	0.000
30	342.120	0.000	342.120	0.000	343.450	710.0	343.470	0.000	343.770	0.000	342.800	0.000
31			342.120	0.000	342.500	0.000			343.760	0.000		
Ten-Daily Mean												
I Ten-Daily	340.922	0.000	342.200	0.000	342.184	0.000	343.588	190.9	343.764	0.000	343.681	0.000
II Ten-Daily	341.099	0.000	342.434	0.000	342.520	0.000	343.483	202.9	343.974	845.2	343.434	0.000
III Ten-Daily	341.753	0.000	341.992	0.000	342.848	191.8	343.391	0.000	343.739	0.000	342.887	0.000
Monthly												
Min.	340.900	0.000	341.800	0.000	341.600	0.000	343.100	0.000	343.160	0.000	342.800	0.000
Max.	342.120	0.000	343.040	0.000	344.375	1400	344.300	968.0	344.800	1525	343.750	0.000
Mean	341.258	0.000	342.202	0.000	342.528	68.07	343.487	131.3	343.823	272.6	343.334	0.000

Annual Runoff in MCM = 1253 Annual Runoff in mm =

Peak Observed Discharge = 1525 cumecs on 12/10/2017 Corres. Water Level :344.800 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :340.920 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : NANDED (NANDED) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	342.790	0.000	342.300	0.000	341.780	0.000	341.470	0.000	341.070	0.000		0.000
2	342.790	0.000	342.290	0.000	341.780	0.000	341.460	0.000		0.000		0.000
3	342.790	0.000	342.270	0.000	341.770	0.000	341.450	0.000		0.000		0.000
4	342.790	0.000	342.270	0.000	341.770	0.000	341.430	0.000		0.000		0.000
5	342.790	0.000	342.260	0.000	341.760	0.000	341.420	0.000		0.000		0.000
6	342.790	0.000	342.250	0.000	341.760	0.000	341.380	0.000		0.000		0.000
7	342.780	0.000	342.250	0.000	341.750	0.000	341.340	0.000		0.000		0.000
8	342.760	0.000	342.240	0.000	341.750	0.000	341.290	0.000		0.000		0.000
9	342.750	0.000	342.240	0.000	341.750	0.000	341.250	0.000		0.000		0.000
10	342.690	0.000	342.230	0.000	341.730	0.000	341.210	0.000		0.000		0.000
11	342.620	0.000	342.220	0.000	341.700	0.000	341.200	0.000		0.000		0.000
12	342.600	0.000	342.220	0.000	341.670	0.000	341.200	0.000		0.000		0.000
13	342.600	0.000	342.120	0.000	341.650	0.000	341.190	0.000		0.000		0.000
14	342.580	0.000	342.050	0.000	341.630	0.000	341.170	0.000		0.000		0.000
15	342.560	0.000	341.900	0.000	341.620	0.000	341.170	0.000		0.000		0.000
16	342.540	0.000	341.850	0.000	341.620	0.000	341.170	0.000		0.000		0.000
17	342.530	0.000	341.820	0.000	341.600	0.000	341.160	0.000		0.000		0.000
18	342.530	0.000	341.820	0.000	341.590	0.000	341.160	0.000		0.000		0.000
19	342.520	0.000	341.820	0.000	341.570	0.000	341.150	0.000		0.000		0.000
20	342.510	0.000	341.800	0.000	341.560	0.000	341.140	0.000		0.000		0.000
21	342.500	0.000	341.800	0.000	341.550	0.000	341.140	0.000		0.000		0.000
22	342.500	0.000	341.800	0.000	341.540	0.000	341.140	0.000		0.000		0.000
23	342.500	0.000	341.800	0.000	341.540	0.000	341.130	0.000		0.000		0.000
24	342.480	0.000	341.800	0.000	341.530	0.000	341.120	0.000		0.000		0.000
25	342.440	0.000	341.800	0.000	341.520	0.000	341.110	0.000		0.000		0.000
26	342.400	0.000	341.790	0.000	341.510	0.000	341.100	0.000		0.000		0.000
27	342.380	0.000	341.790	0.000	341.510	0.000	341.100	0.000		0.000		0.000
28	342.370	0.000	341.790	0.000	341.480	0.000	341.090	0.000		0.000		0.000
29	342.360	0.000	341.780	0.000			341.090	0.000		0.000		0.000
30	342.350	0.000	341.780	0.000			341.090	0.000		0.000		0.000
31	342.330	0.000	341.780	0.000			341.090	0.000				0.000
Ten-Daily Mean												
I Ten-Daily	342.772	0.000	342.260	0.000	341.760	0.000	341.370	0.000	341.070	0.000		0.000
II Ten-Daily	342.559	0.000	341.962	0.000	341.621	0.000	341.171	0.000		0.000		0.000
III Ten-Daily	342.419	0.000	341.792	0.000	341.522	0.000	341.109	0.000		0.000		0.000
Monthly												
Min.	342.330	0.000	341.780	0.000	341.480	0.000	341.090	0.000	341.070	0.000		0.000
Max.	342.790	0.000	342.300	0.000	341.780	0.000	341.470	0.000	341.070	0.000		0.000
Mean	342.578	0.000	341.998	0.000	341.643	0.000	341.213	0.000	341.070	0.000		0.000

Peak Computed Discharge = 940.6 cumecs on 10/09/2017 Corres. Water Level :343.900 m

Lowest Computed Discharge = 490.5 cumecs on 15/10/2017 Corres. Water Level :343.160 m

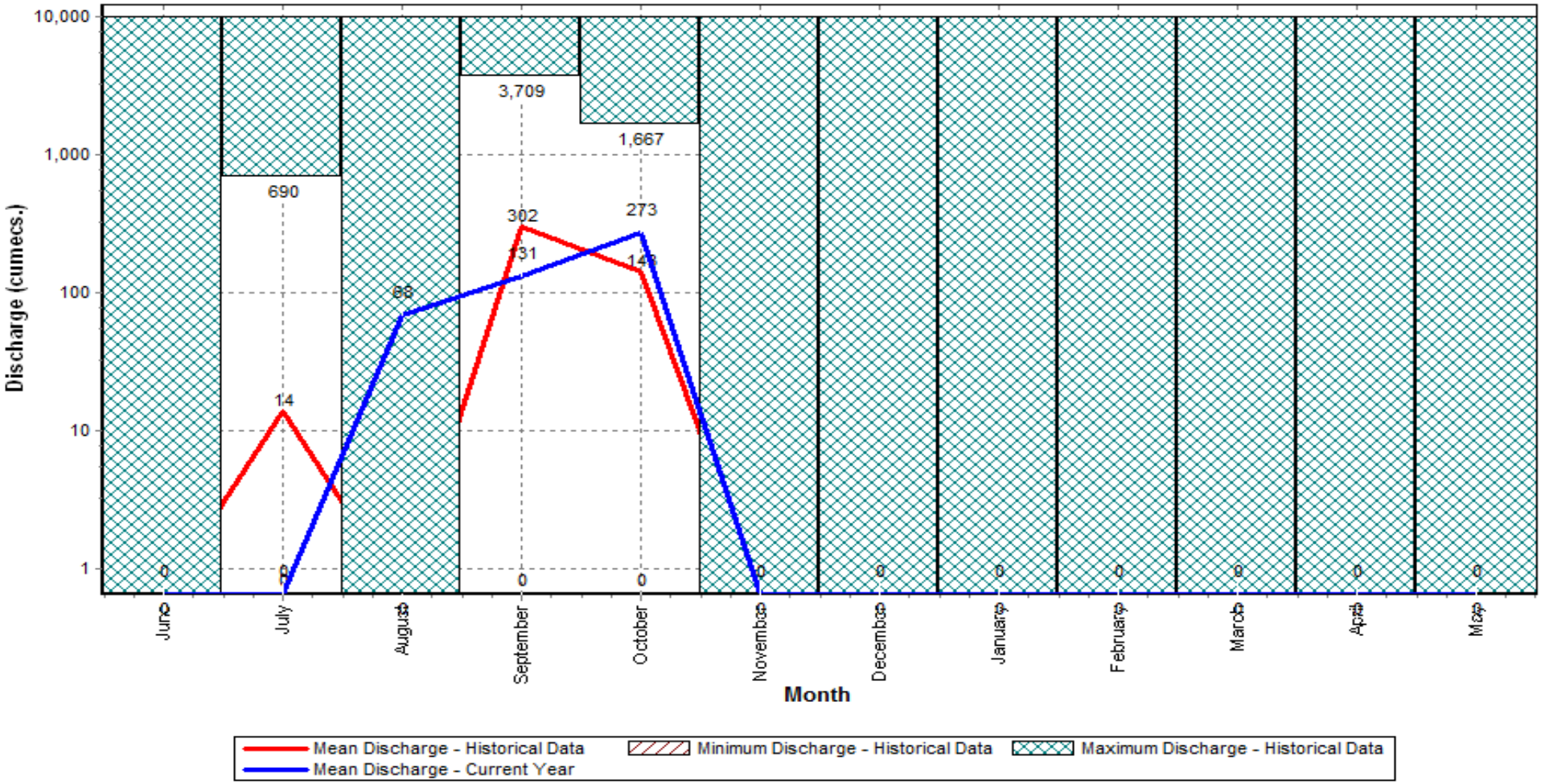
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : NANDED (NANDED) **Data considered : 2014-2018** **Division : Upper Godavari Div., Hyderabad**

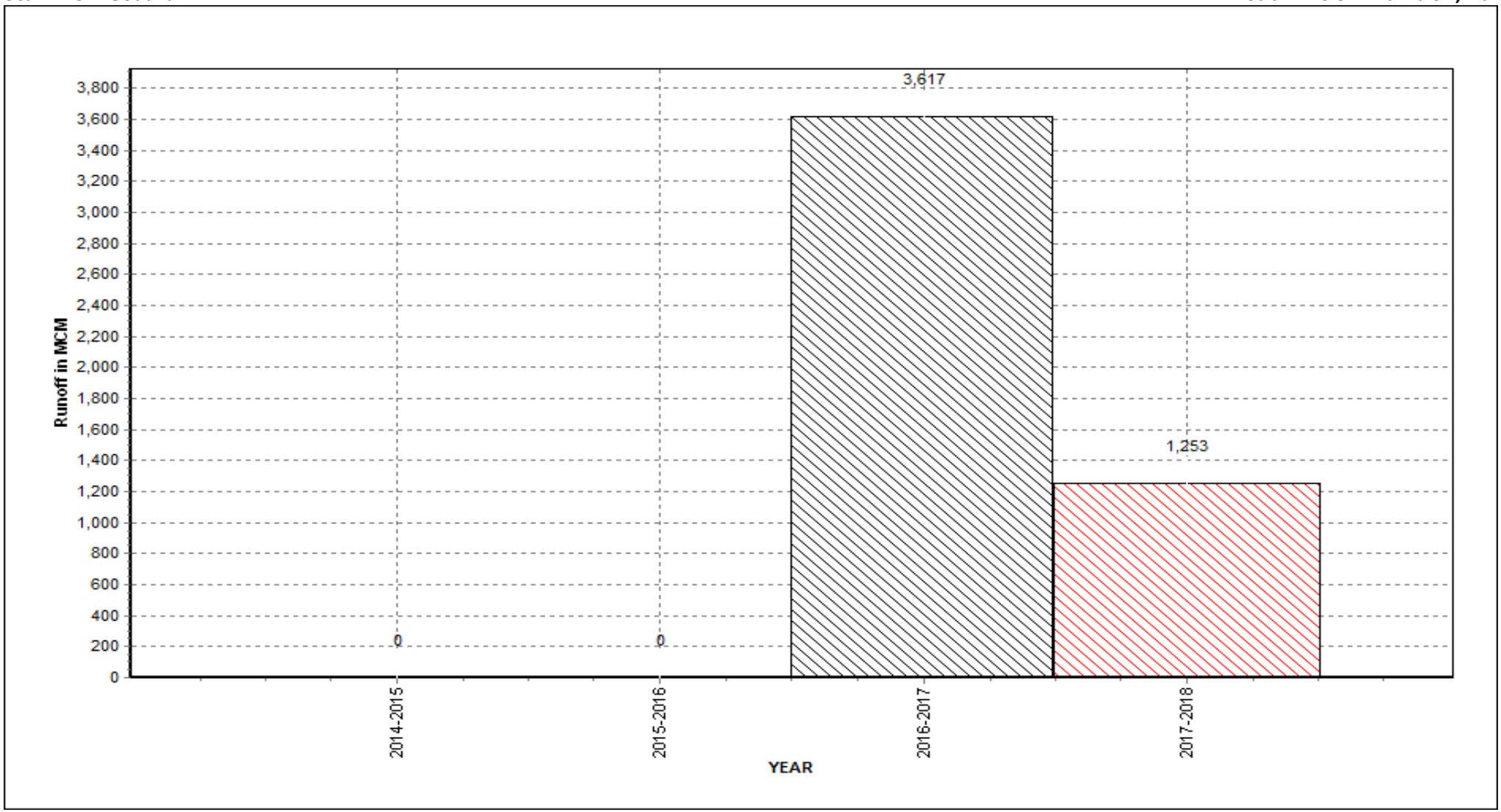
Local River : Godavari **Sub-Division : Purna SD, Nanded**



Annual Runoff Values for the period: 2014 - 2018

Station Name : NANDED (NANDED) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**



Note: Missing values have not been considered while arriving at Annual Runoff

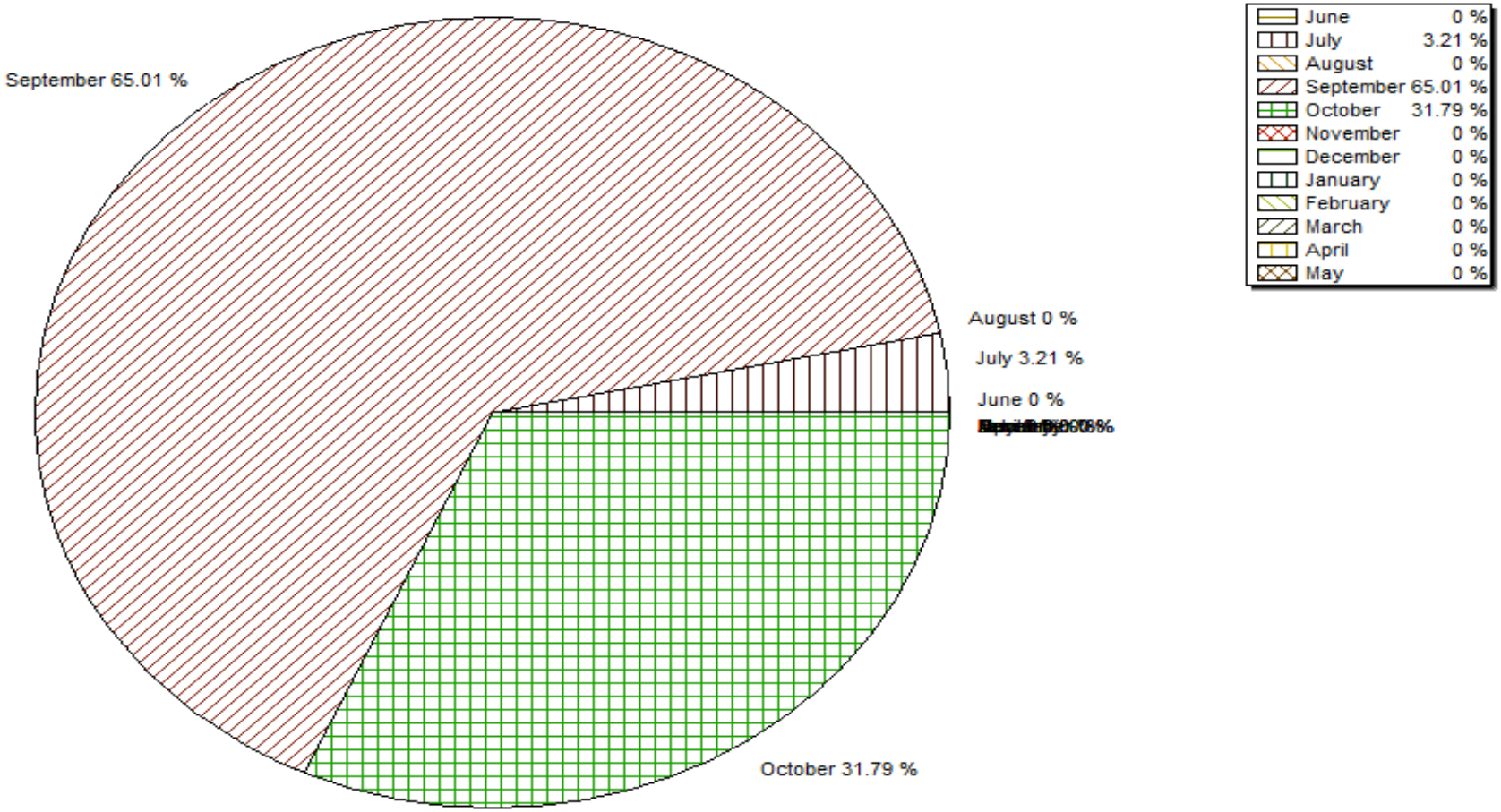
Monthly Average Runoff based on period : 2014-2017

Station Name : NANDED (NANDED)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : Purna SD, Nanded



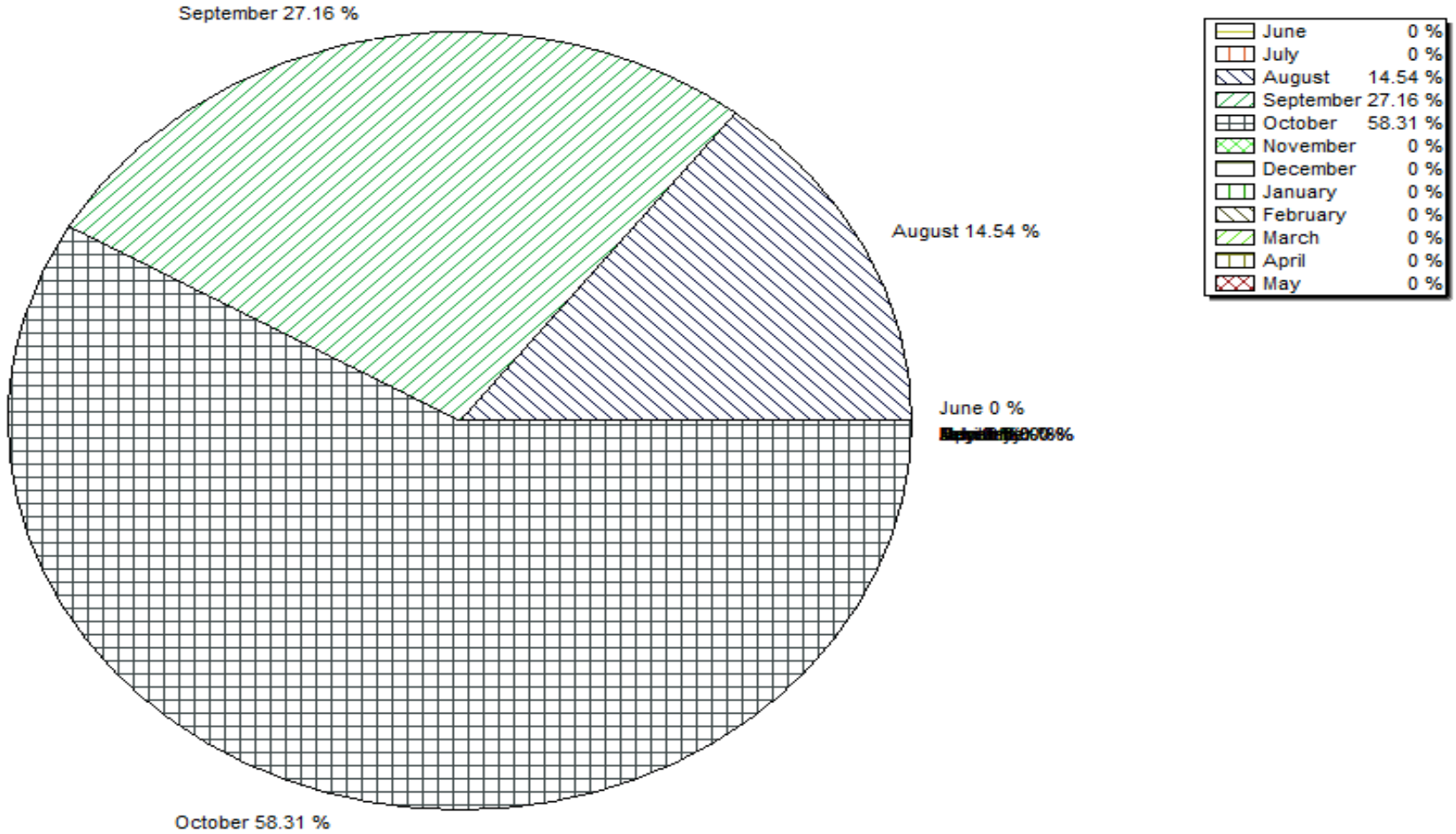
Monthly Runoff for the Year : 2017-2018

Station Name : NANDED (NANDED)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

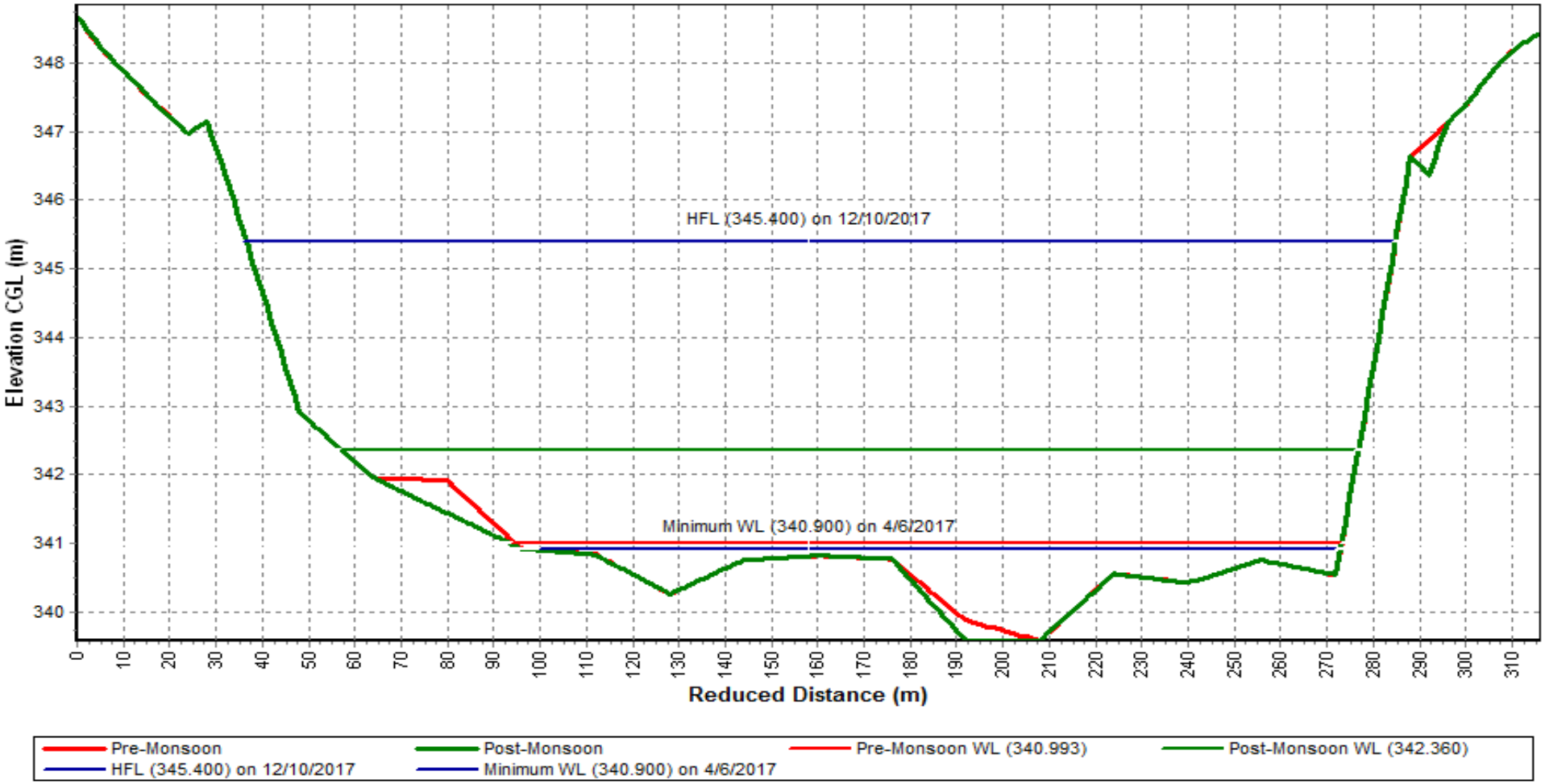
Sub-Division : Purna SD, Nanded



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : NANDED (NANDED) **Division : Upper Godavari Div., Hyderabad**

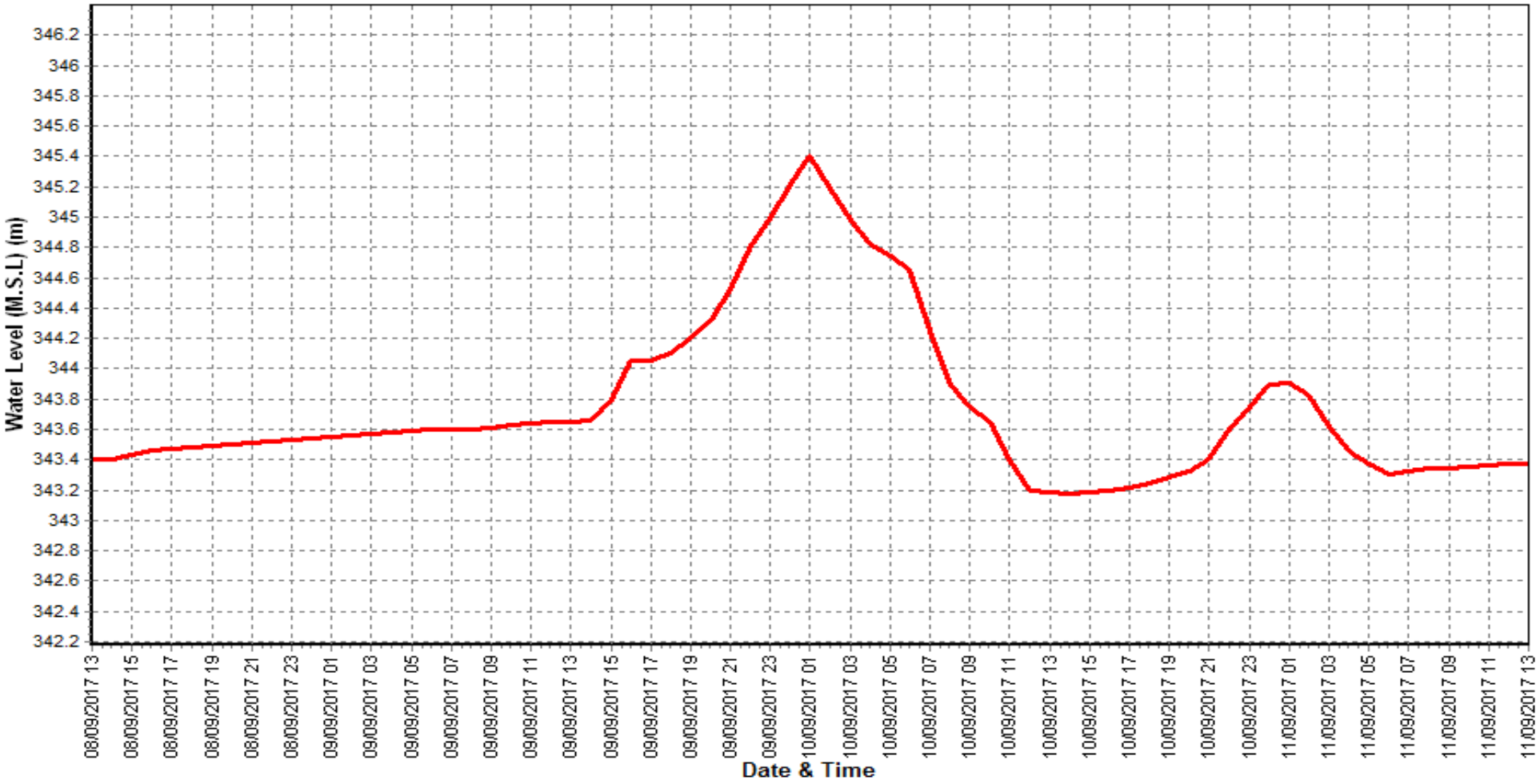
Local River : Godavari **Sub-Division : Purna SD, Nanded**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : NANDED (NANDED) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**

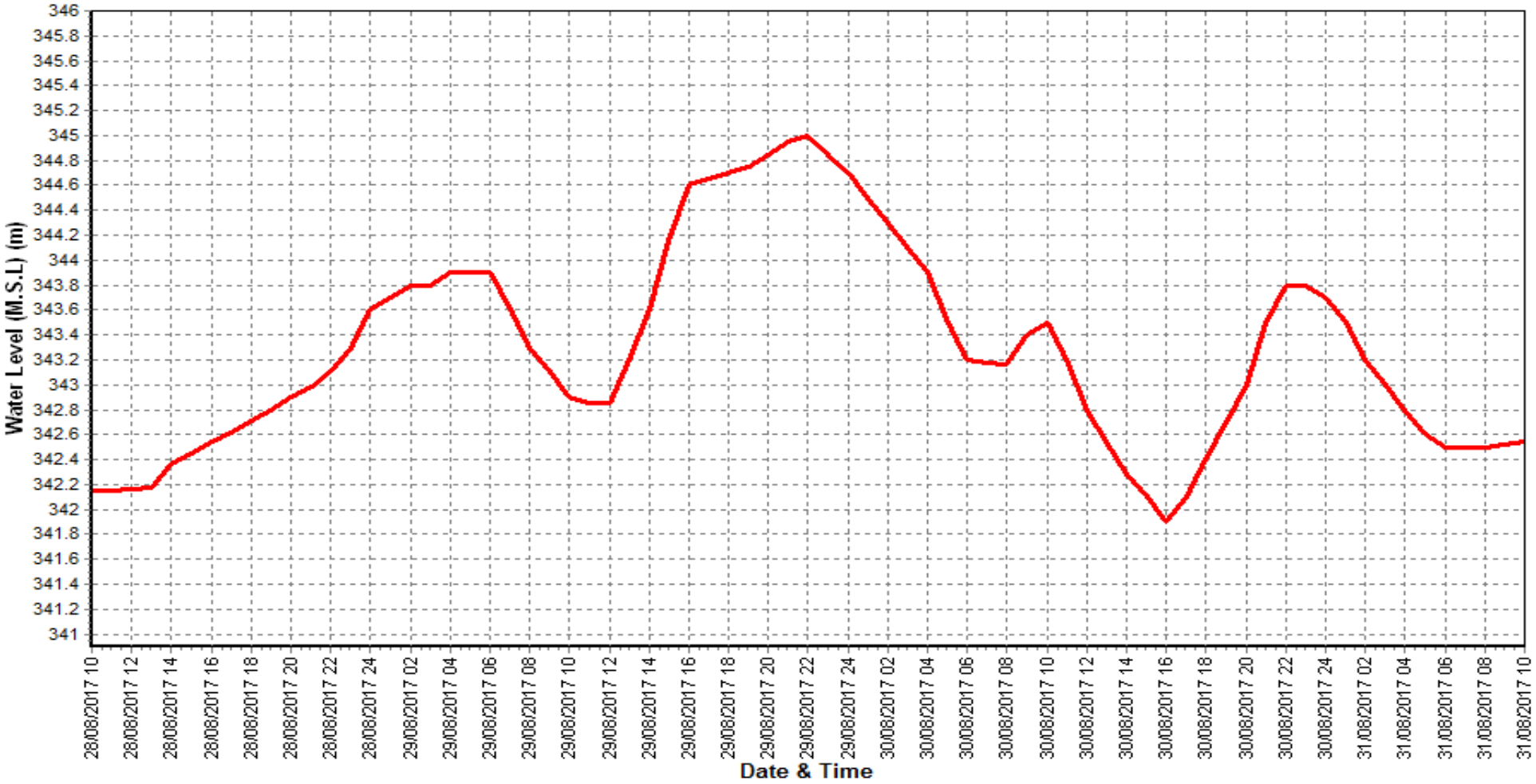


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : NANDED (NANDED) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Purna (Teriminal site of River Purna)**	**Code**	:	**AGR00A5**
State	:	Maharashtra	District		Parbhani
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Purna	Sub Tributary	:	---
Sub-Sub Tributary	:	---	Local River	:	Purna
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Purna SD, Nanded
Drainage Area	:	15000 Sq. Km.	Bank	:	Left
Latitude	:	19°11'00"	Longitude	:	77°02'00"
Zero of Gauge (m)	:	358.000 (m.s.l)	23.06.1968		
		Opening Date	Closing Date		
Gauge	:	23.06.1968	**HFL During 2017-18**	:	**362.500 Meter**
			Corres. Discharge	:	**924.1 Cumecs (Estimated)**
Discharge	:	02.09.1969	**Date & Time of**	:	**09.09.2017**
			Occurance	:	**20:00 hrs.**
Sediment	:	10.10.1972			
Water Quality	:	01.11.1972			

HFL Recorded so far in m : 372.72 27/07/2005
Corresponding Discharge (cumecs) : 12273*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1969-1970	5037	369.610	04.09.1969	0.424	358.500	23.04.1970
1970-1971	2655	365.515	17.08.1970	1.272	358.480	13.04.1971
1971-1972	4133	368.165	26.08.1971	1.000	358.460	01.04.1972
1972-1973	441.7	361.240	28.06.1972	0.000		20.04.1973
1973-1974	4738	368.880	22.08.1973	0.000		02.06.1973
1974-1975	620.6	361.195	05.08.1974	0.300	358.330	28.04.1975
1975-1976	6113	371.610	05.09.1975	1.605	358.470	08.06.1975
1976-1977	2887	365.635	31.08.1976	0.855	358.415	06.04.1977
1977-1978	2329	364.930	02.09.1977	2.100	358.540	06.06.1977
1978-1979	645.1	361.628	25.07.1978	0.728	358.390	20.05.1979
1979-1980	1750	364.570	26.09.1979	1.500	358.440	19.04.1980
1980-1981	4125	367.500	18.08.1980	1.500	358.440	11.03.1981
1981-1982	507.2	361.230	11.09.1981	0.918	358.520	11.04.1982
1982-1983	637.0	361.608	11.07.1982	0.000	358.390	13.05.1983
1983-1984	4358	367.570	13.08.1983	0.000	358.300	12.06.1983
1984-1985	677.0	361.575	10.10.1984	0.100	358.500	25.04.1985
1985-1986	320.6	360.710	07.10.1985	0.000		24.04.1986
1986-1987	707.3	361.980	18.07.1986	0.000		20.05.1987

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1987-1988	1734	364.270	06.10.1987	0.000		02.06.1987
1988-1989	5776	368.740	21.09.1988	1.530	358.780	16.06.1988
1989-1990	6133	369.540	24.07.1989	0.930	358.480	06.03.1990
1990-1991	3625	367.030	30.08.1990	1.121	358.615	15.03.1991
1991-1992	1903	363.800	11.07.1991	0.272	358.230	07.05.1992
1992-1993	5543	367.770	20.06.1992	0.174	358.310	12.06.1992
1993-1994	469.2	361.100	02.09.1993	0.000	358.120	13.02.1994
1994-1995	433.9	361.070	25.08.1994	0.000	358.190	06.02.1995
1995-1996	786.7	361.580	02.09.1995	0.000		26.01.1996
1996-1997	911.4	361.975	29.08.1996	0.000		12.01.1997
1997-1998	428.3	361.000	23.09.1997	0.000		02.04.1998
1998-1999	4376	366.825	30.07.1998	0.000		10.06.1998
1999-2000	1229	362.400	13.09.1999	0.000		07.02.2000
2000-2001	4972	367.235	28.08.2000	0.000		31.03.2001
2001-2002	4479	366.800	02.10.2001	0.000		25.01.2002
2002-2003	2456	364.400	06.09.2002	0.000		11.06.2002
2003-2004	842.5	361.650	20.07.2003	0.000		14.01.2004
2004-2005	519.9	360.800	11.09.2004	0.000		25.01.2005
2005-2006	10811	371.800	27.07.2005	0.000		27.11.2005
2006-2007	10463	371.600	07.08.2006	0.000		10.12.2006
2007-2008	268.7	360.485	21.09.2007	0.000	358.080	09.11.2007
2008-2009	641.3	361.760	22.09.2008	0.000	358.120	25.01.2009
2009-2010	466.5	361.260	26.08.2009	0.000	358.020	25.01.2010
2010-2011	1577	364.760	09.09.2010	0.000		30.06.2010
2011-2012	617.4	361.830	14.07.2011	0.000		09.01.2012
2012-2013	912.8	363.000	04.09.2012	0.000		22.11.2012
2013-2014	1475	363.780	24.07.2013	0.000	358.080	13.05.2014
2014-2015	470.3	360.990	01.09.2014	0.000	358.000	26.01.2015
2015-2016	203.9	360.348	19.09.2015	0.000	358.000	11.12.2015
2016-2017	984.8	363.290	25.09.2016	0.000		04.03.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Purna in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1969-1970**	4214	75	4289
2	**1970-1971**	3451	300	3751
3	**1971-1972**	1455	82	1537
4	**1972-1973**	171	18	190
5	**1973-1974**	2233	375	2609
6	**1974-1975**	488	42	530
7	**1975-1976**	4868	136	5004
8	**1976-1977**	1931	95	2026
9	**1977-1978**	1209	152	1361
10	**1978-1979**	731	92	823
11	**1979-1980**	1495	264	1759
12	**1980-1981**	2728	117	2845
13	**1981-1982**	665	67	731
14	**1982-1983**	307	16	323
15	**1983-1984**	4903	101	5003
16	**1984-1985**	383	42	425
17	**1985-1986**	303	9	312
18	**1986-1987**	299	7	306
19	**1987-1988**	924	50	974
20	**1988-1989**	5804	102	5906
21	**1989-1990**	2927	96	3023
22	**1990-1991**	4103	113	4216
23	**1991-1992**	1026	27	1054
24	**1992-1993**	1759	65	1824
25	**1993-1994**	425	17	442
26	**1994-1995**	169	4	173
27	**1995-1996**	419	0	419
28	**1996-1997**	883	5	888
29	**1997-1998**	214	66	280
30	**1998-1999**	4939	27	4966
31	**1999-2000**	1376	5	1382
32	**2000-2001**	1717	4	1721
33	**2001-2002**	1262	0	1262
34	**2002-2003**	2023	27	2050
35	**2003-2004**	482	18	500
36	**2004-2005**	215	0	215
37	**2005-2006**	2680	10	2689
38	**2006-2007**	5532	66	5598
39	**2007-2008**	281	13	294
40	**2008-2009**	343	0	343
41	**2009-2010**	227	0	227
42	**2010-2011**	1492	74	1565
43	**2011-2012**	344	12	357
44	**2012-2013**	243	0	243
45	**2013-2014**	1308	13	1321
46	**2014-2015**	116	0	116
47	**2015-2016**	67	0	67
48	**2016-2017**	659	4	663
Average		1579	58	1637

Stage-Discharge Data for the period 2017 - 2018

Station Name : Purna (AGR00A5) **Division : U Godavari Div., Hyderabad**

Local River : Purna **Sub-Division : Purna SD, Nanded**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000		0.000	358.700	24.55	358.090	0.000	358.140	0.000
2		0.000		0.000		0.000	358.640	15.74 *	358.060	0.000	358.140	0.000
3		0.000		0.000		0.000	358.600	13.98 *	358.050	0.000	358.140	0.000
4		0.000		0.000		0.000	358.500	7.848	358.040	0.000	358.120	0.000
5		0.000		0.000		0.000	358.450	5.697	358.020	0.000	358.100	0.000
6		0.000		0.000		0.000	358.390	4.236		0.000	358.080	0.000
7		0.000		0.000		0.000	358.340	4.069		0.000	358.050	0.000
8		0.000		0.000		0.000	358.360	4.325		0.000		0.000
9		0.000		0.000		0.000	359.990	196.1		0.000		0.000
10		0.000		0.000		0.000	360.000	156.3 *	359.115	47.18		0.000
11		0.000		0.000		0.000	358.785	20.88	360.230	154.5		0.000
12		0.000		0.000		0.000	358.825	30.94	358.950	37.62		0.000
13	358.530	6.369		0.000		0.000	359.575	83.95	358.860	32.03		0.000
14	358.640	12.58		0.000		0.000	358.995	41.11	358.650	16.97		0.000
15	358.350	6.612		0.000		0.000	359.715	94.09	358.600	13.98 *		0.000
16	358.800	36.38		0.000		0.000	359.050	34.83	358.550	11.30		0.000
17	358.730	25.71		0.000		0.000	358.790	23.42 *	358.480	12.29		0.000
18	358.540	0.000 *		0.000		0.000	358.800	18.75	358.410	7.663		0.000
19	358.360	0.000		0.000		0.000	358.700	16.57	358.370	6.079 *		0.000
20	358.150	0.000		0.000		0.000	358.530	11.19	358.350	7.316		0.000
21	358.120	0.000		0.000	359.500	85.06 *	358.480	9.003	358.330	5.971		0.000
22	358.110	0.000		0.000	358.935	39.01	358.580	18.66	358.320	4.835 *		0.000
23	358.070	0.000		0.000	358.720	15.88	358.550	11.53	358.310	5.721		0.000
24	358.040	0.000		0.000	358.490	7.178	358.450	8.413 *	358.280	4.681		0.000
25		0.000		0.000	358.670	17.14 *	358.420	6.801	358.250	3.752		0.000
26		0.000		0.000	359.020	39.26	358.400	5.813	358.240	3.289		0.000
27		0.000		0.000	359.000	37.16 *	358.320	5.080	358.200	0.000		0.000
28		0.000		0.000	359.220	55.50 *	358.390	6.291	358.160	0.000		0.000
29		0.000		0.000	360.450	229.3	358.180	2.618	358.160	0.000		0.000
30		0.000		0.000	360.380	233.6	358.130	0.000	358.150	0.000		0.000
31				0.000	359.040	33.67			358.150	0.000		
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000	358.797	43.29	358.229	4.718	358.110	0.000
II Ten-Daily	358.513	8.765		0.000		0.000	358.977	37.57	358.745	29.97		0.000
III Ten-Daily	358.085	0.000		0.000	359.220	72.06	358.390	7.422	358.232	2.568		0.000
Monthly												
Min.	358.040	0.000		0.000	358.490	0.000	358.130	0.000	358.020	0.000	358.050	0.000
Max.	358.800	36.38		0.000	360.450	233.6	360.000	196.1	360.230	154.5	358.140	0.000
Mean	358.370	2.922		0.000	359.220	25.57	358.721	29.43	358.421	12.1	358.110	0.000

Annual Runoff in MCM = 209 Annual Runoff in mm = 14

Peak Observed Discharge = 233.6 cumecs on 30/08/2017 Corres. Water Level :360.380 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Purna (AGR00A5) **Division : U Godavari Div., Hyderabad**

Local River : Purna **Sub-Division : Purna SD, Nanded**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1		0.000		0.000		0.000		0.000		0.000		0.000
2		0.000		0.000		0.000		0.000		0.000		0.000
3		0.000		0.000		0.000		0.000		0.000		0.000
4		0.000		0.000		0.000		0.000		0.000		0.000
5		0.000		0.000		0.000		0.000		0.000		0.000
6		0.000		0.000		0.000		0.000		0.000		0.000
7		0.000		0.000		0.000		0.000		0.000		0.000
8		0.000		0.000		0.000		0.000		0.000		0.000
9		0.000		0.000		0.000		0.000		0.000		0.000
10		0.000		0.000		0.000		0.000		0.000		0.000
11		0.000		0.000		0.000		0.000		0.000		0.000
12		0.000		0.000		0.000		0.000		0.000	358.950	38.26
13		0.000		0.000		0.000		0.000		0.000	358.980	39.10 *
14		0.000		0.000		0.000		0.000		0.000	358.980	39.14
15		0.000		0.000		0.000		0.000		0.000	358.960	38.79
16		0.000		0.000		0.000		0.000		0.000	359.090	49.85
17		0.000		0.000		0.000		0.000		0.000	359.090	49.22
18		0.000		0.000		0.000		0.000		0.000	358.770	21.44
19		0.000		0.000		0.000		0.000		0.000	358.220	0.000
20		0.000		0.000		0.000		0.000		0.000		0.000
21		0.000		0.000		0.000		0.000		0.000		0.000
22		0.000		0.000		0.000		0.000		0.000		0.000
23		0.000		0.000		0.000		0.000		0.000		0.000
24		0.000		0.000		0.000		0.000		0.000		0.000
25		0.000		0.000		0.000		0.000		0.000		0.000
26		0.000		0.000		0.000		0.000		0.000		0.000
27		0.000		0.000		0.000		0.000		0.000		0.000
28		0.000		0.000		0.000		0.000		0.000		0.000
29		0.000		0.000				0.000		0.000		0.000
30		0.000		0.000				0.000		0.000		0.000
31		0.000		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
II Ten-Daily		0.000		0.000		0.000		0.000		0.000	358.880	27.58
III Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
Monthly												
Min.		0.000		0.000		0.000		0.000		0.000	358.220	0.000
Max.		0.000		0.000		0.000		0.000		0.000	359.090	49.85
Mean		0.000		0.000		0.000		0.000		0.000	358.880	8.897

Peak Computed Discharge = 156.3 cumecs on 10/09/2017 Corres. Water Level :360.000 m

Lowest Computed Discharge = 0.000 cumecs on 18/06/2017 Corres. Water Level :358.540 m

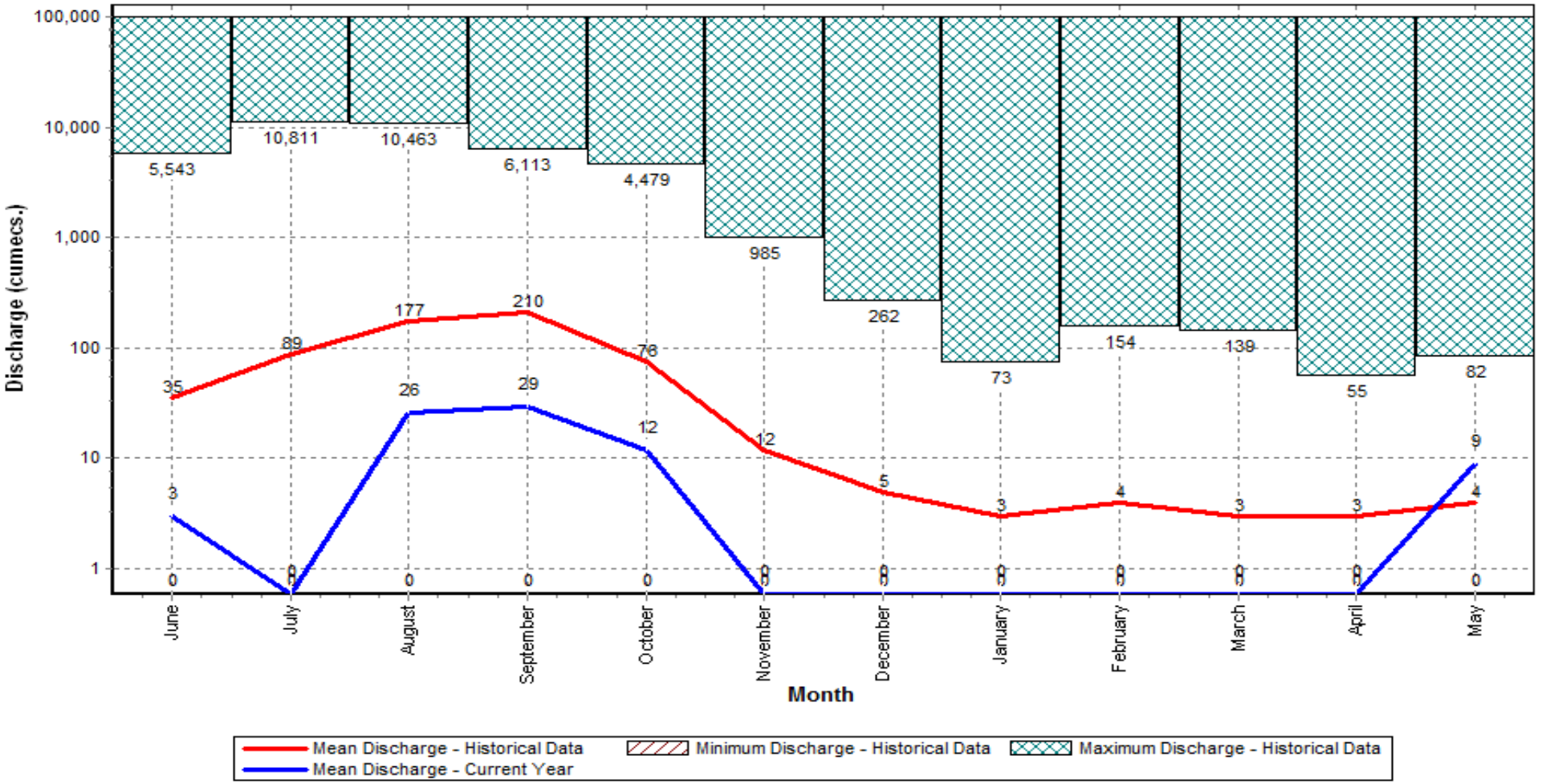
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Purna (AGR00A5) | **Data considered : 1969-2018** | **Division : U Godavari Div., Hyderabad**

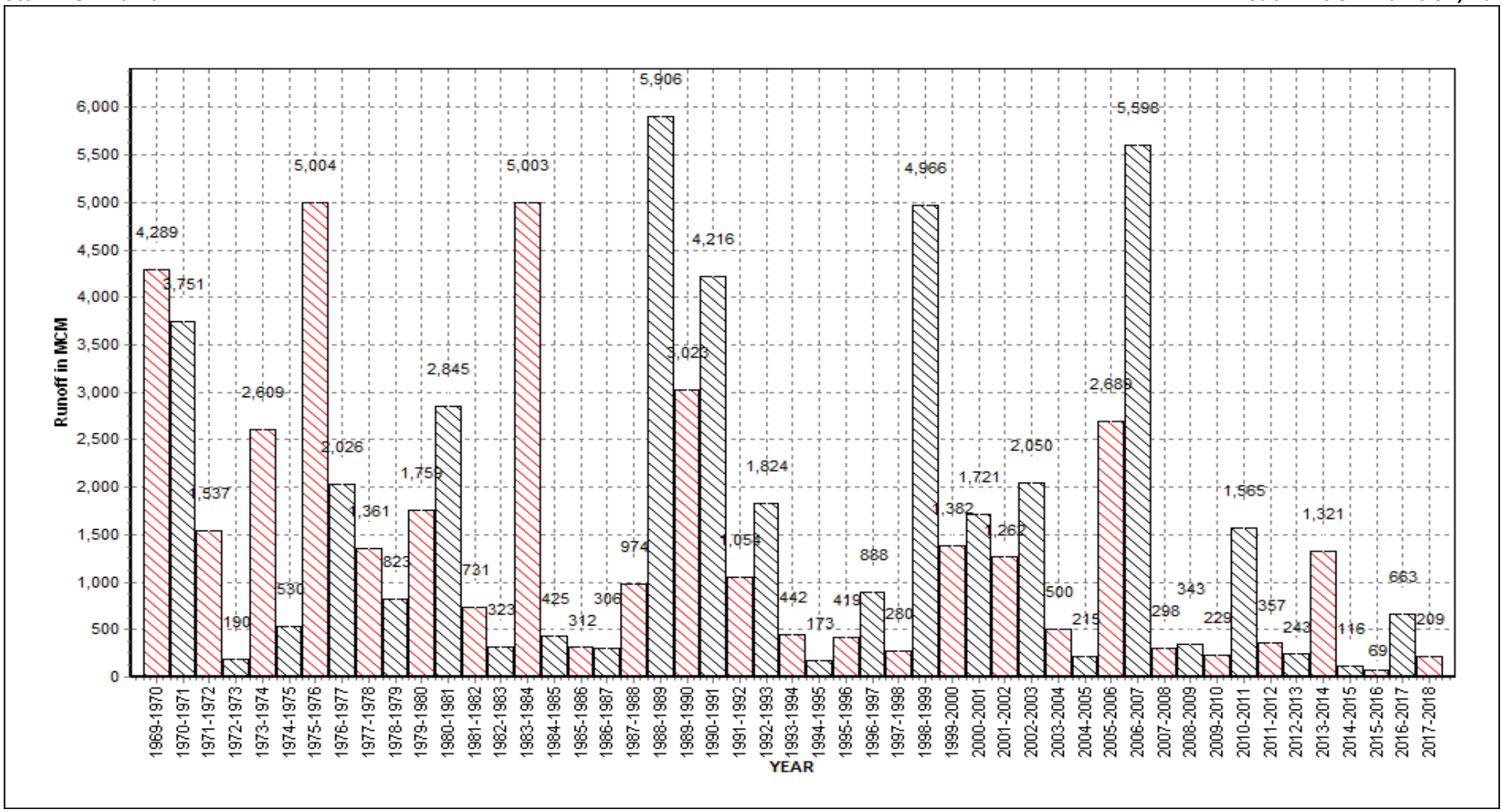
Local River : Purna | **Sub-Division : Purna SD, Nanded**



Annual Runoff Values for the period: 1969 - 2018

Station Name : Purna (AGR00A5) **Division : U Godavari Div., Hyderabad**

Local River : Purna **Sub-Division : Purna SD, Nanded**



Note: Missing values have not been considered while arriving at Annual Runoff

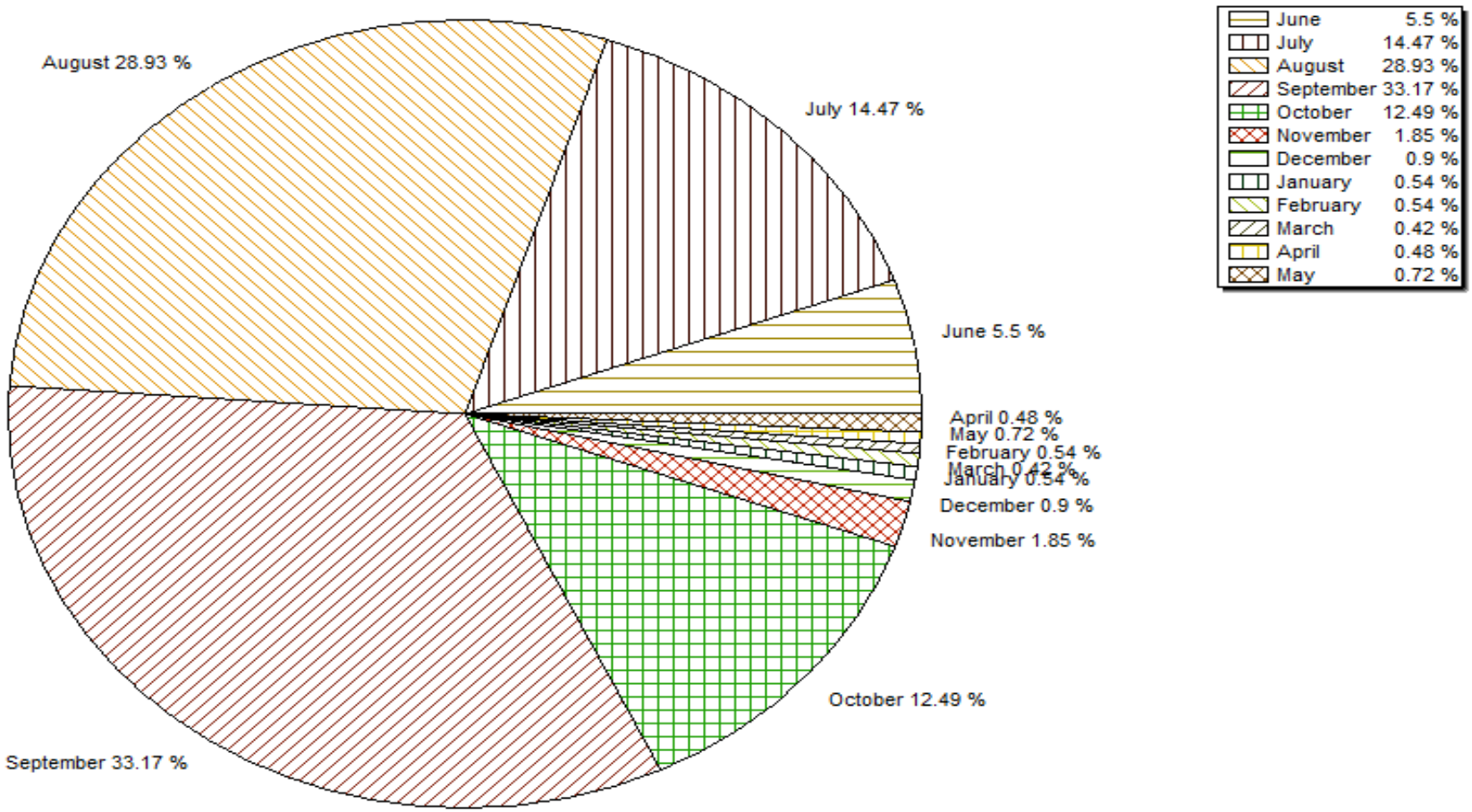
Monthly Average Runoff based on period : 1969-2017

Station Name : Purna (AGR00A5)

Local River : Purna

Division : U Godavari Div., Hyderabad

Sub-Division : Purna SD, Nanded



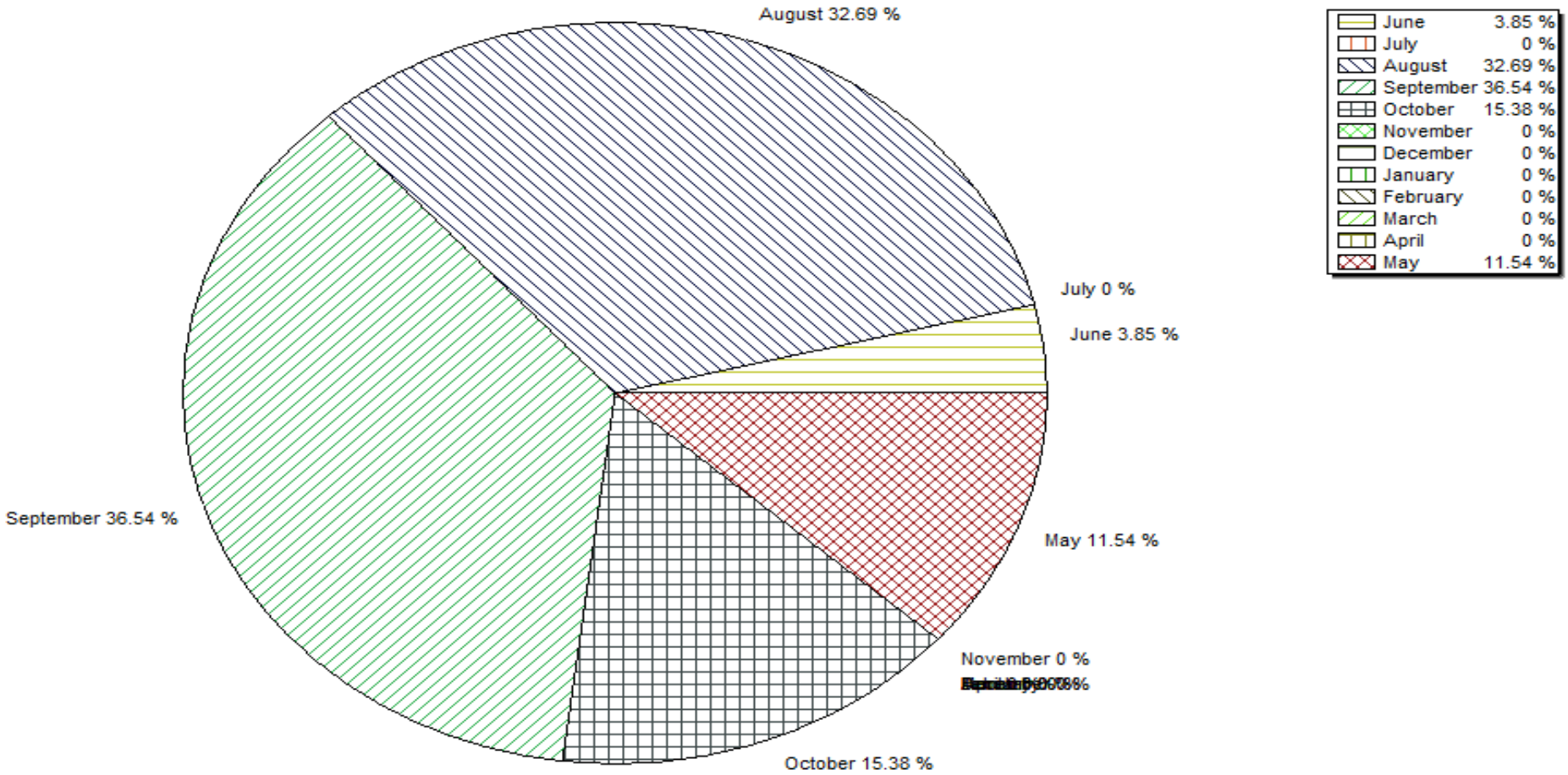
Monthly Runoff for the Year : 2017-2018

Station Name : Purna (AGR00A5)

Local River : Purna

Division : U Godavari Div., Hyderabad

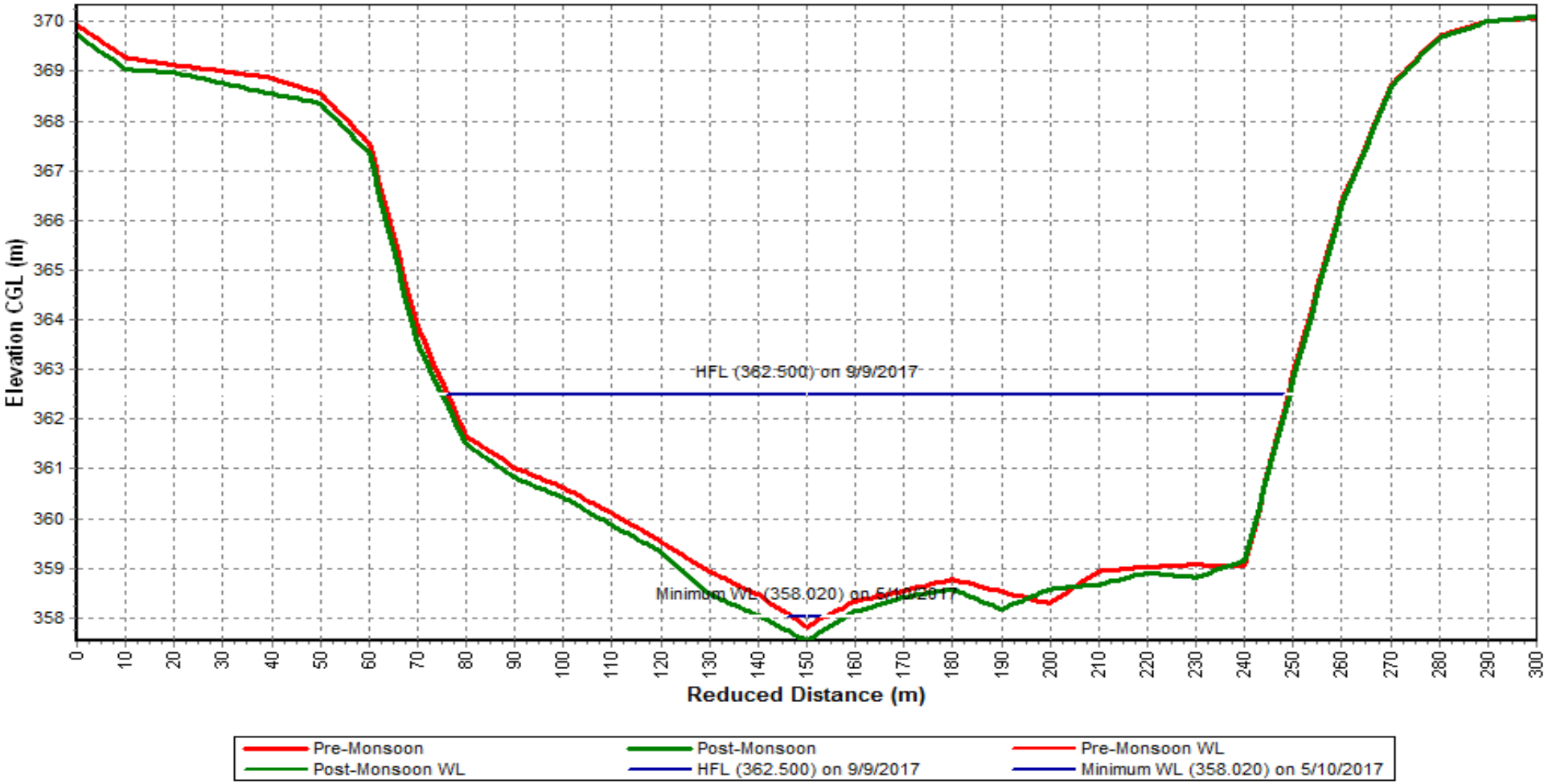
Sub-Division : Purna SD, Nanded



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Purna (AGR00A5) **Division : U Godavari Div., Hyderabad**

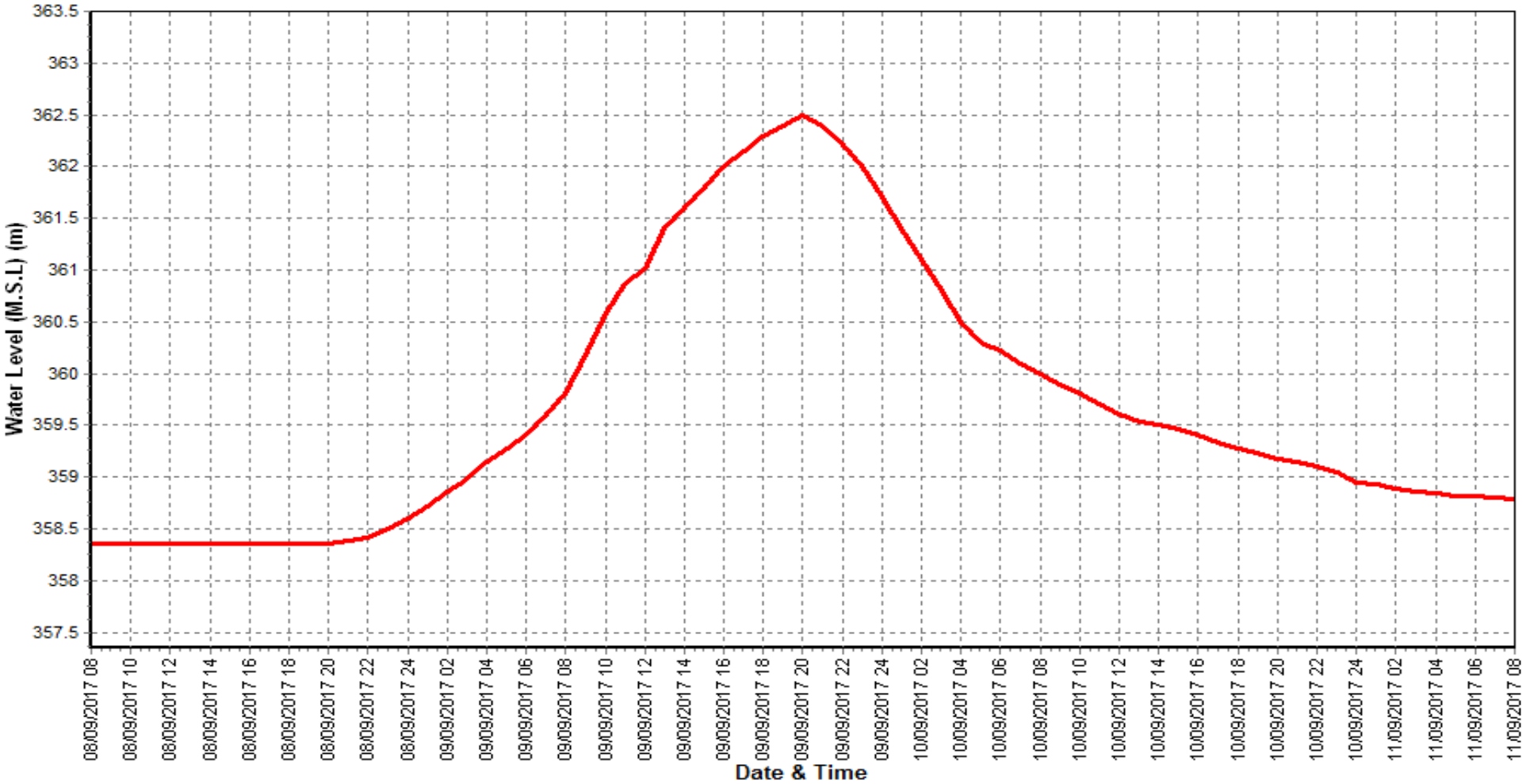
Local River : Purna **Sub-Division : Purna SD, Nanded**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Purna (AGR00A5) **Division : U Godavari Div., Hyderabad**

Local River : Purna **Sub-Division : Purna SD, Nanded**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Zari**	**Code**	:	**AGR10C6**
State	:	Maharashtra	District		Parbhani
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Purna	Sub Tributary	:	Dudhna
Sub-Sub Tributary	:	---	Local River	:	Dudhna
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Purna SD, Nanded
Drainage Area	:	5550 Sq. Km.	Bank	:	Right
Latitude	:	19°23'41"	Longitude	:	76°46'24"
Zero of Gauge (m)	:	373.000 (m.s.l)	12.07.1986		
		Opening Date	Closing Date		
Gauge	:	23.07.1986	**HFL During 2017-18**	:	**380.350 Meter**
			Corres. Discharge	:	**810.5 Cumecs (Estimated)**
Discharge	:	18.06.1987	**Date & Time of**	:	**09.09.2017**
			Occurance	:	**10:00 hrs.**
Sediment	:				
Water Quality	:	01.08.1988			

HFL Recorded so far in m : 387.385 26/07/2005
Corresponding Discharge (cumecs) : 3146*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1987-1988	1405	382.780	06.10.1987	0.000	373.035	09.02.1988
1988-1989	1920	384.560	21.09.1988	0.000		10.05.1989
1989-1990	1943	384.780	25.07.1989	0.000		26.03.1990
1990-1991	1149	381.760	17.08.1990	0.000	373.520	16.04.1991
1991-1992	824.5	381.125	11.06.1991	0.000		26.01.1992
1992-1993	1474	382.725	03.09.1992	0.000		02.02.1993
1993-1994	216.3	376.635	04.07.1993	0.000		06.03.1994
1994-1995	150.6	375.905	25.08.1994	0.000		25.01.1995
1995-1996	393.9	377.840	02.09.1995	0.000		26.01.1996
1996-1997	255.7	376.820	29.08.1996	0.000		25.01.1997
1997-1998	203.5	376.400	24.09.1997	0.000		25.01.1998
1998-1999	2223	385.510	30.07.1998	0.000		07.02.1999
1999-2000	576.3	378.865	12.09.1999	0.000		26.01.2000
2000-2001	1343	383.135	28.08.2000	0.000		25.01.2001
2001-2002	779.1	381.065	02.10.2001	0.000		25.01.2002
2002-2003	907.2	380.900	27.06.2002	0.000		25.01.2003
2003-2004	481.3	379.000	10.08.2003	0.000		26.01.2004
2004-2005	210.2	376.505	11.09.2004	0.000		25.01.2005

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2005-2006	2471	385.710	27.07.2005	0.000		25.01.2006
2006-2007	1875	384.800	07.08.2006	0.000	373.380	14.11.2006
2007-2008	152.7	375.750	30.08.2007	0.000		23.01.2008
2008-2009	398.4	377.205	14.09.2008	0.000	373.170	25.01.2009
2009-2010	566.1	378.455	25.08.2009	0.000		23.01.2010
2010-2011	891.3	381.295	31.08.2010	0.000	373.500	25.01.2011
2011-2012	419.0	377.350	02.09.2011	0.000		26.01.2012
2012-2013	156.6	376.375	04.09.2012	0.000		24.08.2012
2013-2014	584.3	378.525	20.09.2013	0.000		15.03.2014
2014-2015	386.2	376.750	01.09.2014	0.000	373.000	17.01.2015
2015-2016	4.637	373.600	14.09.2015	0.000	373.000	19.12.2015
2016-2017	2622	382.820	25.09.2016	0.000		19.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Zari in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1987-1988**	365	2	367
2	**1988-1989**	1611	8	1619
3	**1989-1990**	786	4	790
4	**1990-1991**	1133	15	1148
5	**1991-1992**	438	0	438
6	**1992-1993**	619	0	619
7	**1993-1994**	331	6	338
8	**1994-1995**	24	0	24
9	**1995-1996**	142	0	142
10	**1996-1997**	252	0	252
11	**1997-1998**	64	0	64
12	**1998-1999**	1503	1	1504
13	**1999-2000**	480	0	480
14	**2000-2001**	424	0	424
15	**2001-2002**	330	0	330
16	**2002-2003**	470	0	470
17	**2003-2004**	108	0	108
18	**2004-2005**	47	0	47
19	**2005-2006**	672	0	672
20	**2006-2007**	764	1	765
21	**2007-2008**	123	0	123
22	**2008-2009**	139	0	139
23	**2009-2010**	161	0	161
24	**2010-2011**	618	0	618
25	**2011-2012**	192	0	192
26	**2012-2013**	39	0	39
27	**2013-2014**	321	0	321
28	**2014-2015**	43	0	43
29	**2015-2016**	1	0	1
30	**2016-2017**	841	26	867
Average		435	2	437

Stage-Discharge Data for the period 2017 - 2018

Station Name : Zari (AGR10C6) **Division : U Godavari Div., Hyderabad**

Local River : Dudhna **Sub-Division : Purna SD, Nanded**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000	373.140	0.000		0.000	373.450	1.288	373.670	0.000	374.960	0.000
2		0.000	373.100	0.000		0.000	373.360	0.950 *	373.730	0.000	374.930	0.000
3		0.000	373.100	0.000		0.000	373.300	0.850 *	373.880	0.000	374.850	0.000
4		0.000		0.000		0.000	373.270	0.909	373.830	0.000	374.790	0.000
5		0.000		0.000		0.000	373.210	0.000	373.830	0.000	374.750	0.000
6		0.000		0.000		0.000	373.230	0.000	373.880	0.000	374.700	0.000
7	373.100	0.000		0.000		0.000	373.220	0.000	373.900	0.000	374.670	0.000
8	373.450	1.153		0.000		0.000	373.220	0.000	373.950	0.000	374.640	0.000
9	373.280	0.000		0.000		0.000	380.175	764.9	375.400	46.64	374.610	0.000
10	373.150	0.000		0.000		0.000	373.920	11.15 *	375.120	0.000	374.600	0.000
11	374.200	19.24 *		0.000		0.000	373.650	6.935	375.200	0.000	374.600	0.000
12	373.820	8.809 *		0.000		0.000	373.580	5.613	375.100	0.000	374.600	0.000
13	373.950	12.43		0.000		0.000	374.000	11.52	375.000	0.000	374.600	0.000
14	373.500	3.810		0.000		0.000	373.630	6.181	375.000	0.000	374.590	0.000
15	373.700	7.301		0.000	373.170	0.000	373.580	5.609	375.000	0.000	374.580	0.000
16	373.900	10.63		0.000	373.550	4.639	373.850	13.80	375.000	0.000	374.580	0.000
17	373.460	1.698		0.000	373.360	2.472	373.470	2.832 *	375.000	0.000	374.570	0.000
18	373.370	0.000 *		0.000	373.210	0.000	373.420	2.604	375.000	0.000	374.510	0.000
19	373.350	0.730		0.000	373.180	0.000	373.350	1.560	375.000	0.000	374.430	0.000
20	373.340	0.791		0.000	373.470	0.000 *	373.280	1.094	375.000	0.000	374.380	0.000
21	373.280	0.926		0.000	376.750	328.8	373.260	1.017	375.000	0.000	374.270	0.000
22	373.280	0.887		0.000	373.880	14.06	373.320	1.392	375.000	0.000	374.210	0.000
23	373.240	0.000		0.000	373.510	4.362	373.310	1.318	374.990	0.000	374.180	0.000
24	373.240	0.000		0.000	373.380	2.410	373.350	1.561 *	374.990	0.000	374.100	0.000
25	373.230	0.000		0.000	373.320	1.500 *	373.320	1.354	374.980	0.000	374.040	0.000
26	373.230	0.000		0.000	373.640	5.398	373.300	1.277	374.980	0.000	373.980	0.000
27	373.210	0.000		0.000	373.470	3.500 *	373.280	1.105	374.980	0.000	373.900	0.000
28	373.210	0.000		0.000	373.620	5.899	373.500	0.000	374.970	0.000	373.830	0.000
29	373.200	0.000		0.000	379.150	562.2	373.520	0.000	374.970	0.000	373.740	0.000
30	373.180	0.000		0.000	374.050	14.37	373.600	0.000	374.970	0.000	373.700	0.000
31				0.000	373.620	6.008			374.970	0.000		
Ten-Daily Mean												
I Ten-Daily	373.245	0.115	373.113	0.000		0.000	374.035	78.01	374.119	4.664	374.750	0.000
II Ten-Daily	373.659	6.544		0.000	373.323	0.711	373.581	5.775	375.030	0.000	374.544	0.000
III Ten-Daily	373.230	0.181		0.000	374.399	86.23	373.376	0.902	374.982	0.000	373.995	0.000
Monthly												
Min.	373.100	0.000	373.100	0.000	373.170	0.000	373.210	0.000	373.670	0.000	373.700	0.000
Max.	374.200	19.24	373.140	0.000	379.150	562.2	380.175	764.9	375.400	46.64	374.960	0.000
Mean	373.411	2.280	373.113	0.000	374.019	30.83	373.664	28.23	374.719	1.504	374.430	0.000

Annual Runoff in MCM = 166 Annual Runoff in mm = 30

Peak Observed Discharge = 764.9 cumecs on 09/09/2017 Corres. Water Level :380.175 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Zari (AGR10C6) **Division : U Godavari Div., Hyderabad**

Local River : Dudhna **Sub-Division : Purna SD, Nanded**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	373.650	0.000	374.880	0.000	373.570	0.000	373.970	0.000		0.000		0.000
2	373.600	0.000	374.870	0.000	373.560	0.000	373.950	0.000		0.000		0.000
3	373.530	0.000	374.830	0.000	373.550	0.000	373.900	0.000		0.000		0.000
4	373.510	0.000	374.800	0.000	373.540	0.000	373.880	0.000	374.900	0.000		0.000
5	373.500	0.000	374.740	0.000	373.530	0.000	373.870	0.000	373.950	0.000		0.000
6	373.480	0.000	374.700	0.000	373.520	0.000	373.870	0.000	373.400	0.000		0.000
7	373.460	0.000	374.650	0.000	373.520	0.000	373.870	0.000	373.260	0.000		0.000
8	373.450	0.000	374.600	0.000	374.200	0.000	373.850	0.000	373.240	0.000		0.000
9	373.440	0.000	374.550	0.000	374.720	0.000	373.820	0.000	373.240	0.000		0.000
10	373.430	0.000	374.510	0.000	374.300	0.000	373.800	0.000	373.240	0.000		0.000
11	373.420	0.000	374.450	0.000	374.150	0.000	373.740	0.000	373.230	0.000	374.600	0.000
12	373.410	0.000	374.390	0.000	373.950	0.000	373.650	0.000	373.230	0.000	374.540	0.000
13	373.400	0.000	374.350	0.000	374.030	0.000	373.560	0.000	373.220	0.000	374.500	0.000
14	373.390	0.000	374.320	0.000	374.100	0.000	373.450	0.000	373.220	0.000	374.480	0.000
15	373.380	0.000	374.280	0.000	374.200	0.000	373.300	0.000	373.220	0.000	374.600	0.000
16	373.350	0.000	374.230	0.000	374.300	0.000	373.230	0.000	373.210	0.000	374.620	0.000
17	373.320	0.000	374.100	0.000	374.300	0.000		0.000	373.210	0.000	374.300	0.000
18	373.310	0.000	374.000	0.000	374.210	0.000		0.000	373.200	0.000	373.400	0.000
19	373.280	0.000	373.940	0.000	374.020	0.000		0.000	373.200	0.000	373.350	0.000
20	373.250	0.000	373.900	0.000	374.000	0.000		0.000	373.200	0.000	373.260	0.000
21	373.240	0.000	373.880	0.000	374.000	0.000		0.000	373.190	0.000	373.150	0.000
22	373.240	0.000	373.850	0.000	374.000	0.000		0.000	373.180	0.000	373.140	0.000
23	375.280	0.000	373.800	0.000	374.000	0.000		0.000		0.000		0.000
24	375.360	0.000	373.750	0.000	374.000	0.000		0.000		0.000		0.000
25	375.350	0.000	373.700	0.000	374.000	0.000		0.000		0.000		0.000
26	375.090	0.000	373.640	0.000	373.990	0.000		0.000		0.000		0.000
27	375.040	0.000	373.630	0.000	373.990	0.000		0.000		0.000		0.000
28	375.000	0.000	373.620	0.000	373.990	0.000		0.000		0.000		0.000
29	374.970	0.000	373.600	0.000				0.000		0.000		0.000
30	374.930	0.000	373.590	0.000				0.000		0.000		0.000
31	374.900	0.000	373.580	0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	373.505	0.000	374.713	0.000	373.801	0.000	373.878	0.000	373.604	0.000		0.000
II Ten-Daily	373.351	0.000	374.196	0.000	374.126	0.000	373.488	0.000	373.214	0.000	374.165	0.000
III Ten-Daily	374.764	0.000	373.695	0.000	373.996	0.000		0.000	373.185	0.000	373.145	0.000
Monthly												
Min.	373.240	0.000	373.580	0.000	373.520	0.000	373.230	0.000	373.180	0.000	373.140	0.000
Max.	375.360	0.000	374.880	0.000	374.720	0.000	373.970	0.000	374.900	0.000	374.620	0.000
Mean	373.902	0.000	374.185	0.000	373.973	0.000	373.732	0.000	373.355	0.000	373.995	0.000

Peak Computed Discharge = 19.24 cumecs on 11/06/2017 **Corres. Water Level :374.200 m**

Lowest Computed Discharge = 0.000 cumecs on 18/06/2017 **Corres. Water Level :373.370 m**

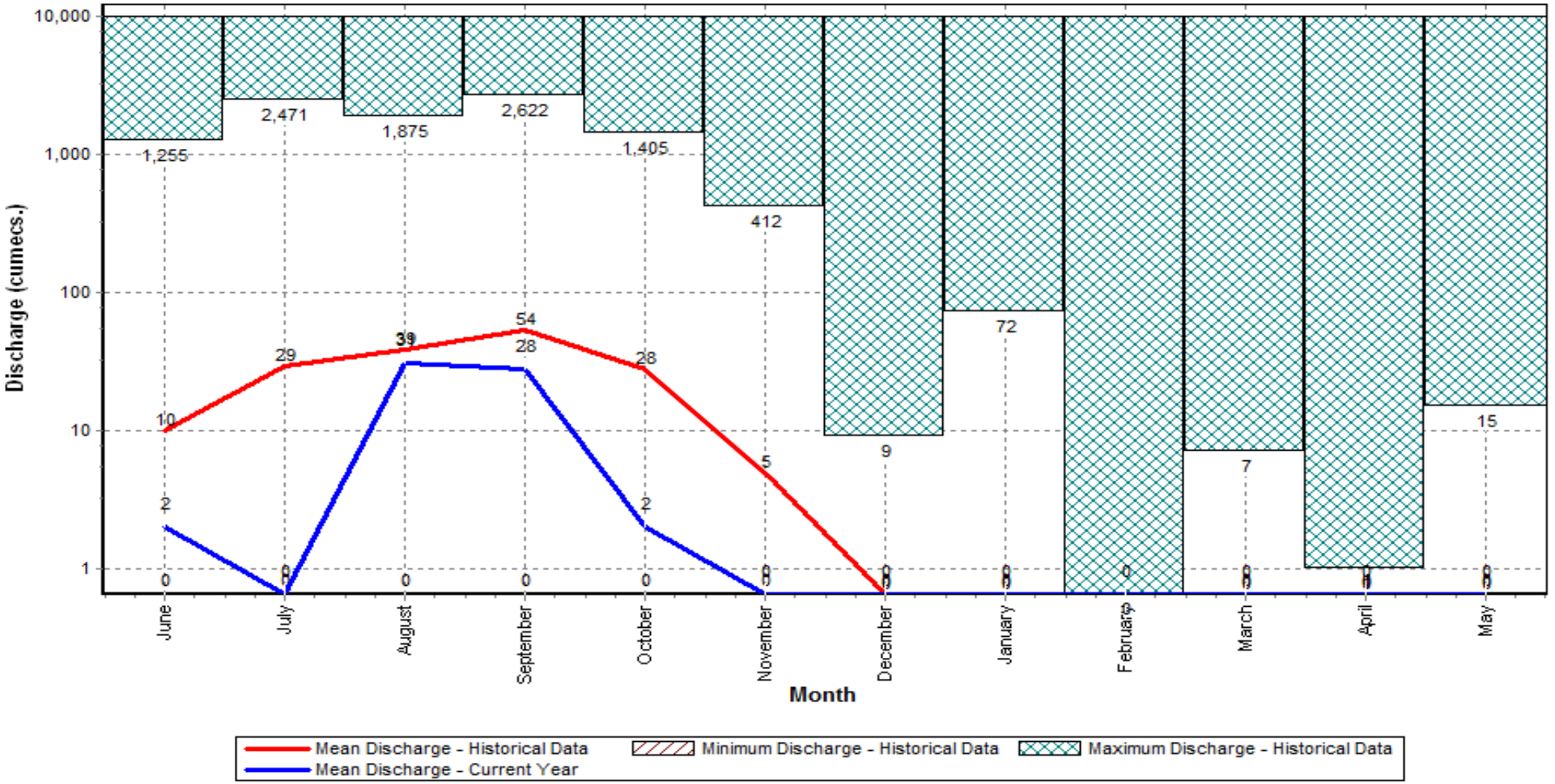
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Zari (AGR10C6) | **Data considered : 1987-2018** | **Division : U Godavari Div., Hyderabad**

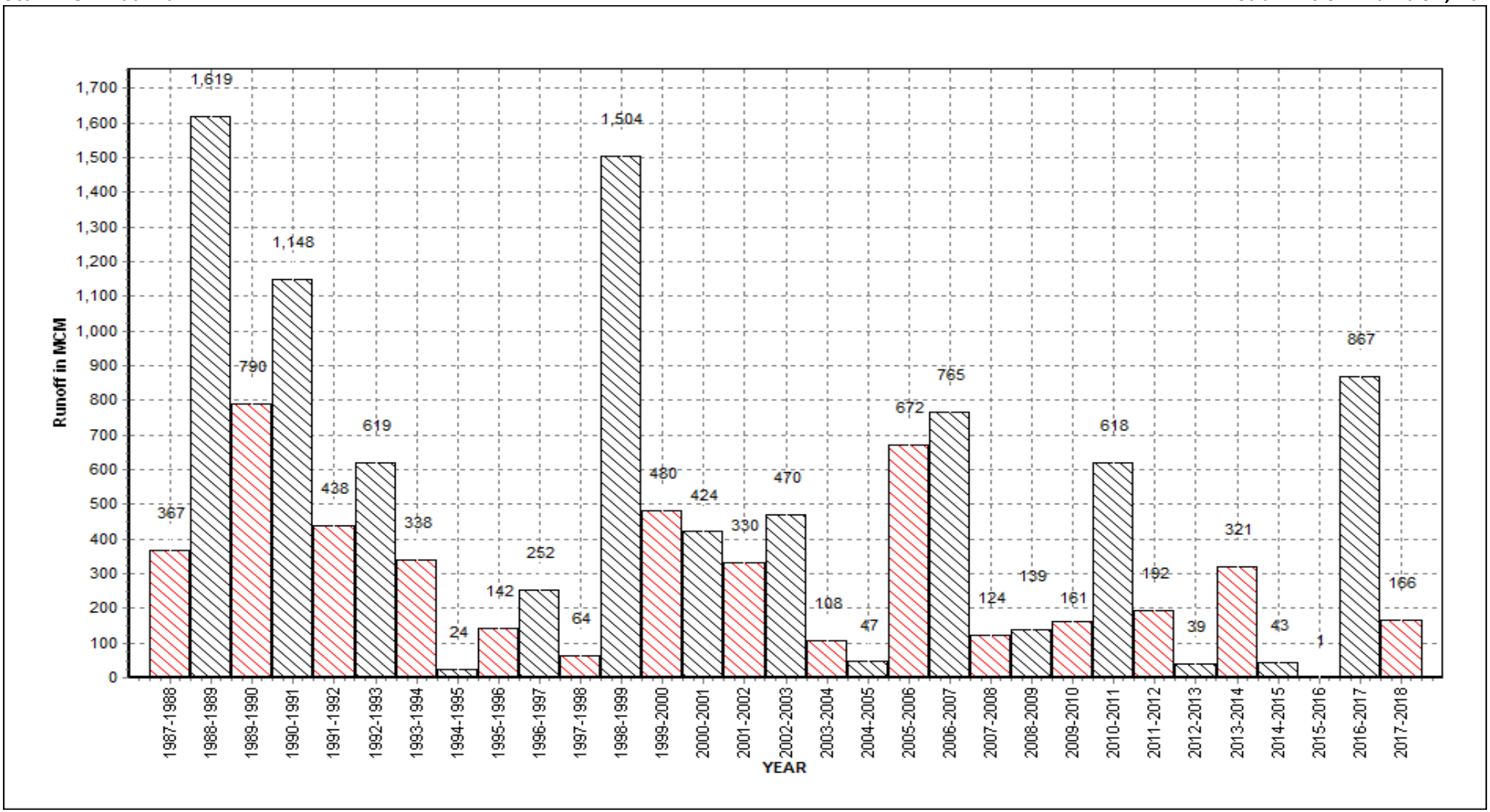
Local River : Dudhna | **Sub-Division : Purna SD, Nanded**



Annual Runoff Values for the period: 1987 - 2018

Station Name : Zari (AGR10C6) **Division : U Godavari Div., Hyderabad**

Local River : Dudhna **Sub-Division : Purna SD, Nanded**



Note: Missing values have not been considered while arriving at Annual Runoff

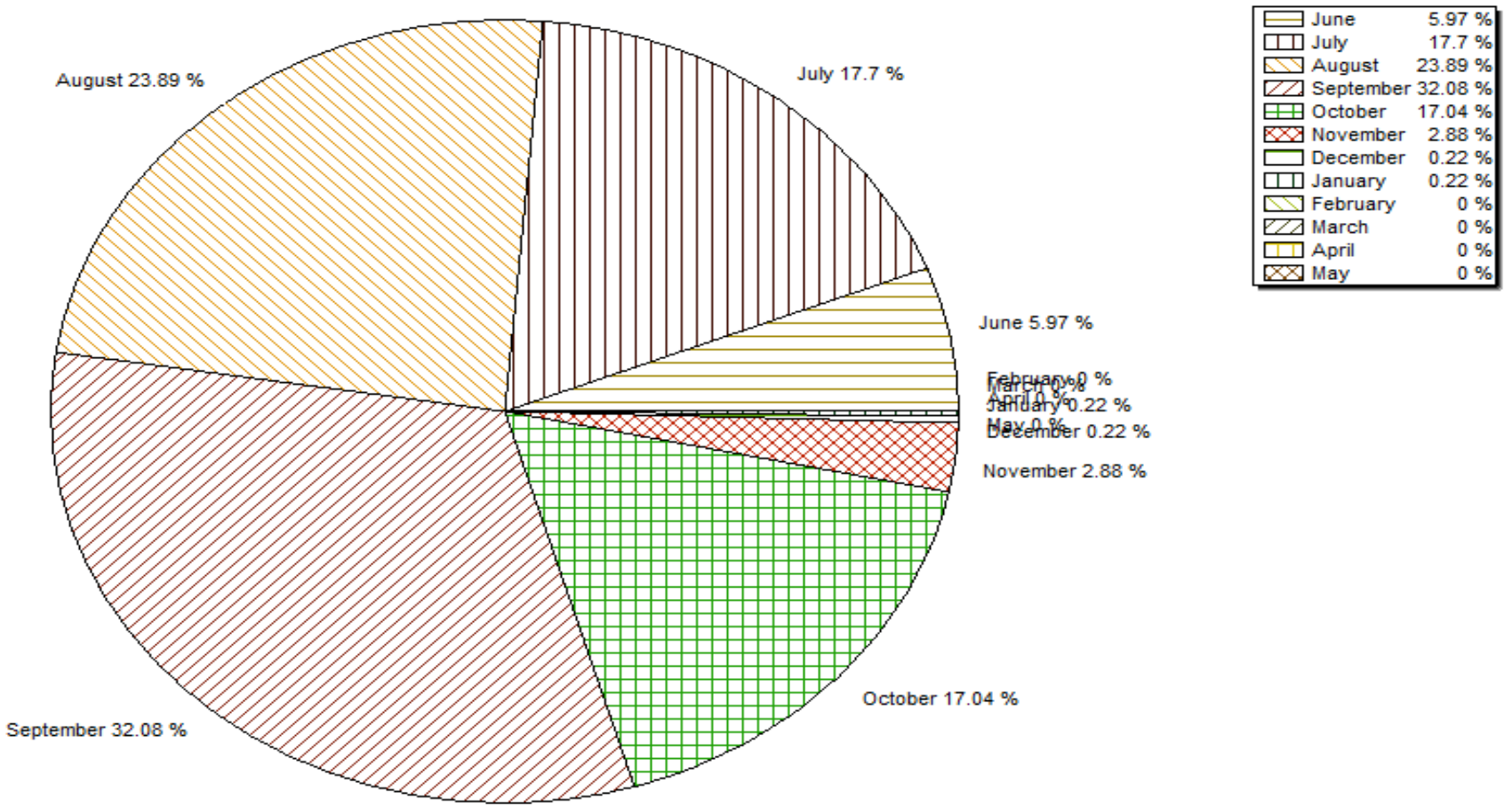
Monthly Average Runoff based on period : 1987-2017

Station Name : Zari (AGR10C6)

Local River : Dudhna

Division : U Godavari Div., Hyderabad

Sub-Division : Purna SD, Nanded



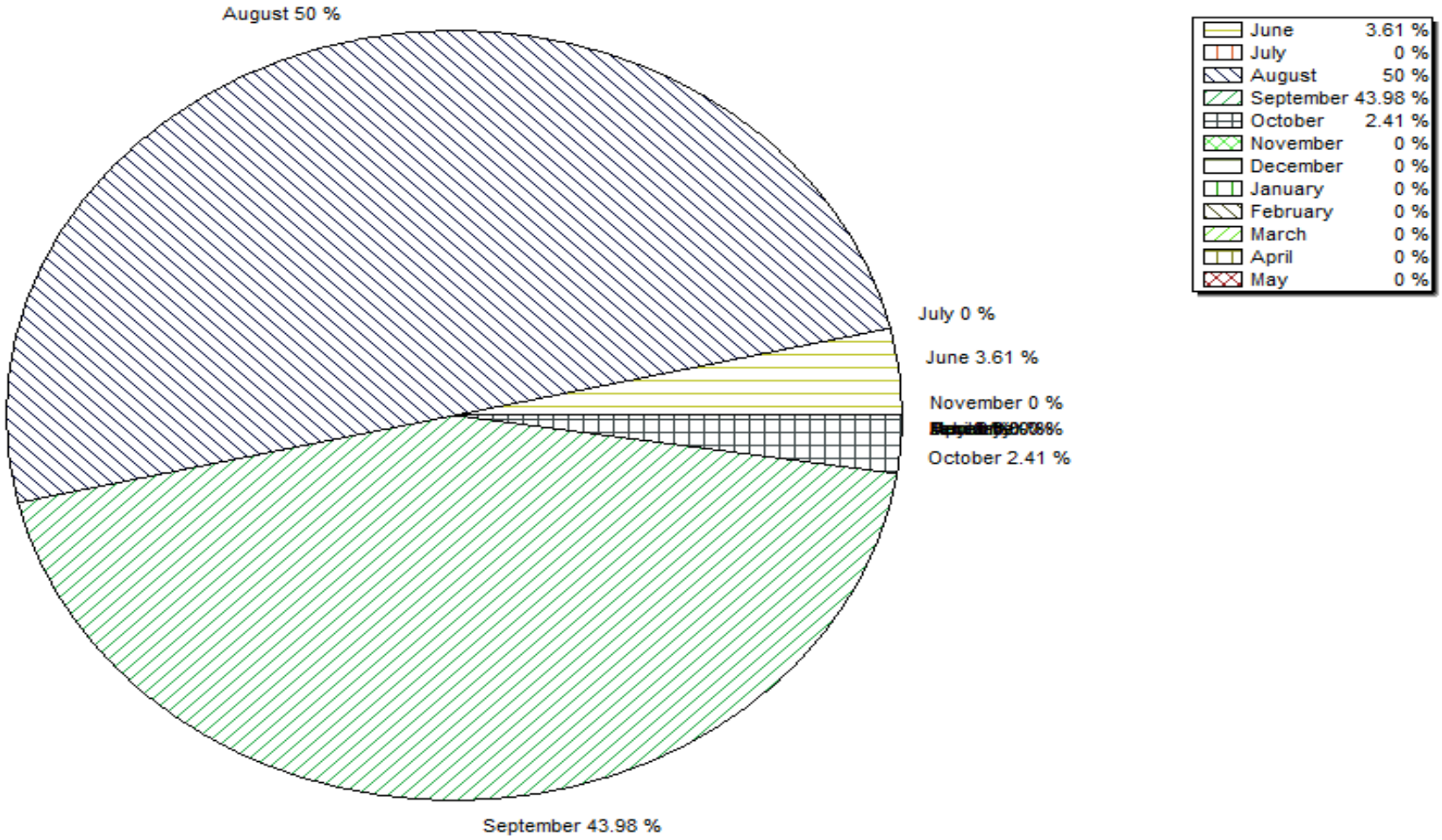
Monthly Runoff for the Year : 2017-2018

Station Name : Zari (AGR10C6)

Local River : Dudhna

Division : U Godavari Div., Hyderabad

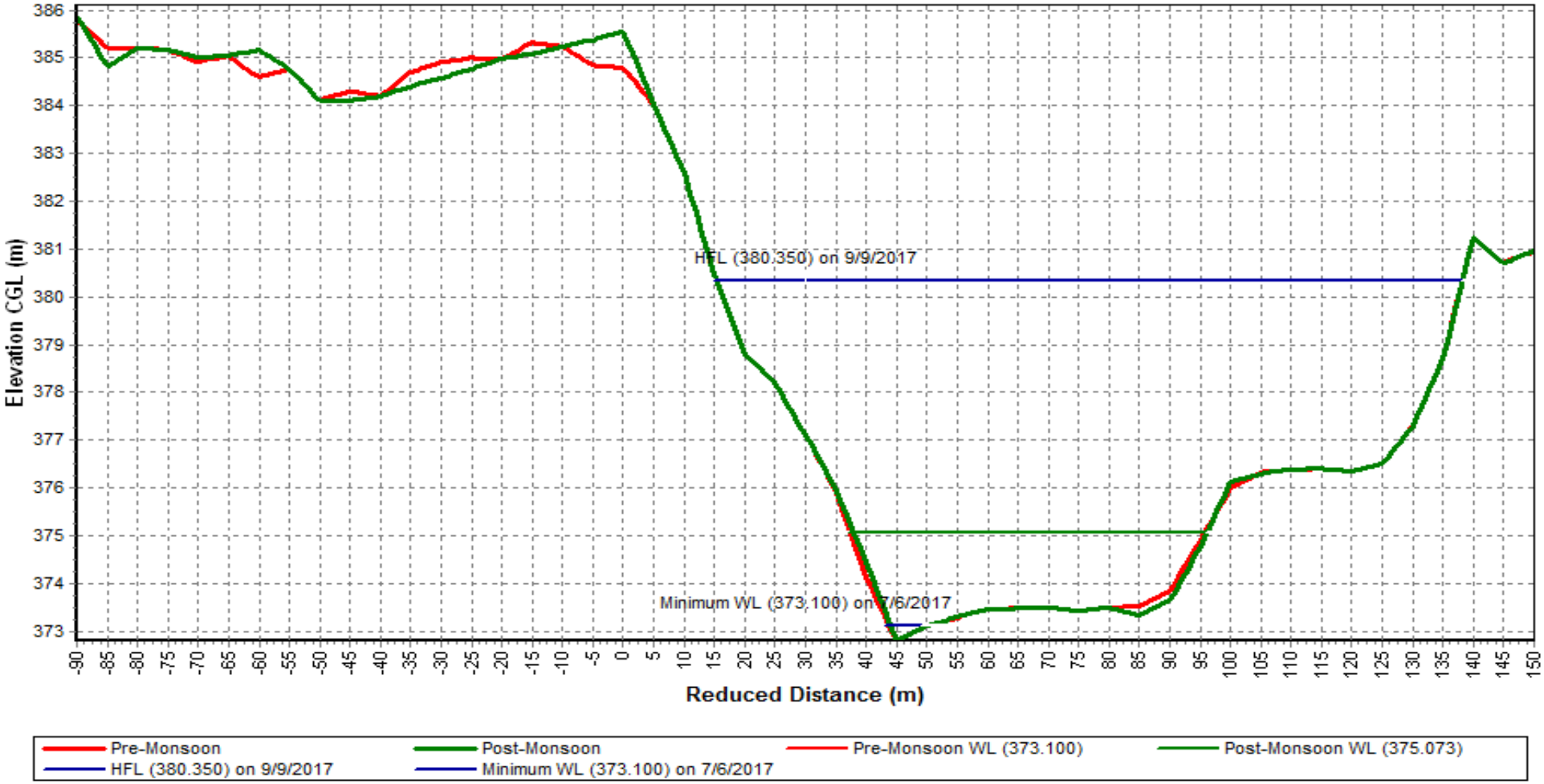
Sub-Division : Purna SD, Nanded



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Zari (AGR10C6) **Division : U Godavari Div., Hyderabad**

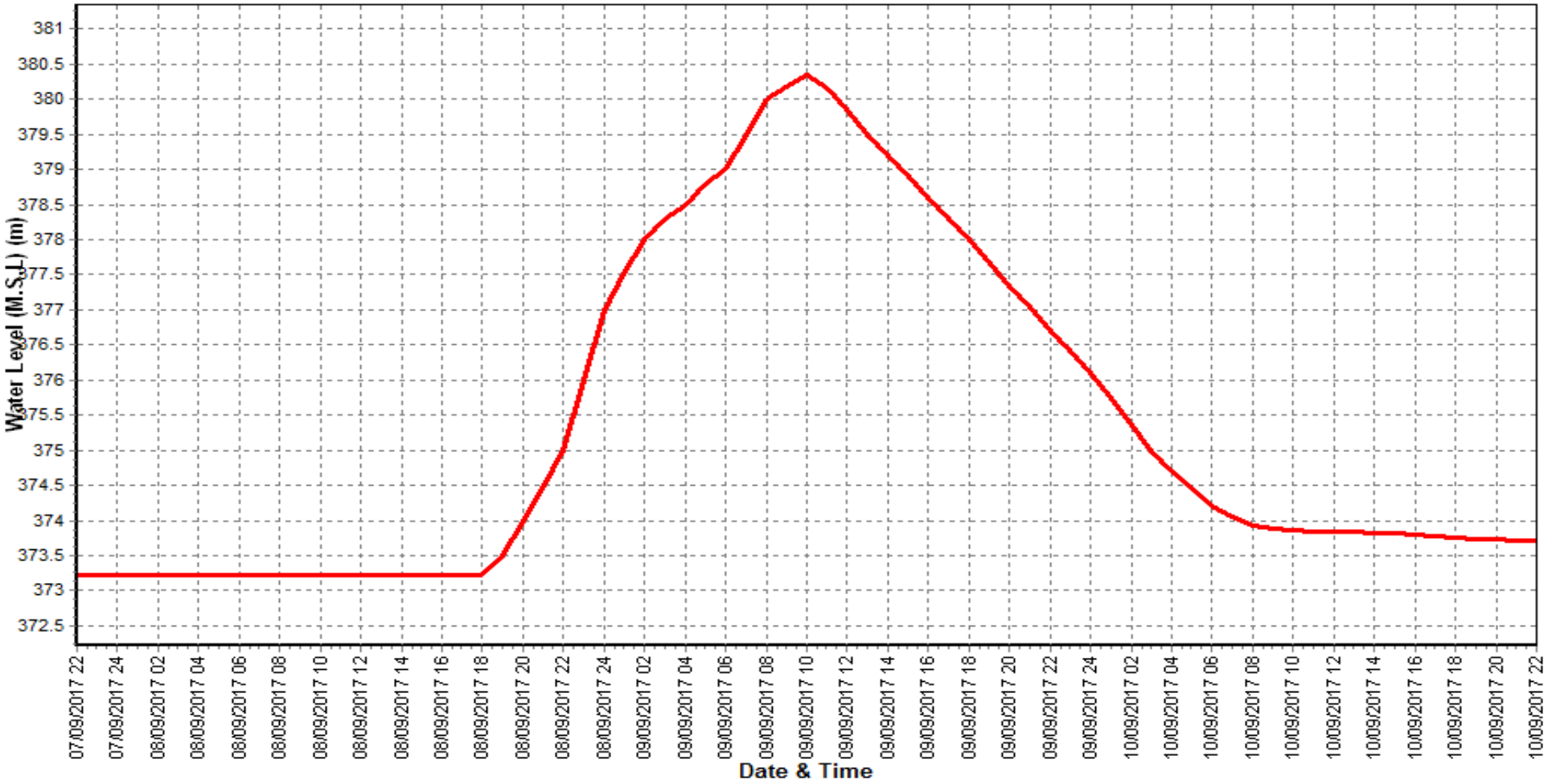
Local River : Dudhna **Sub-Division : Purna SD, Nanded**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Zari (AGR10C6) **Division : U Godavari Div., Hyderabad**

Local River : Dudhna **Sub-Division : Purna SD, Nanded**

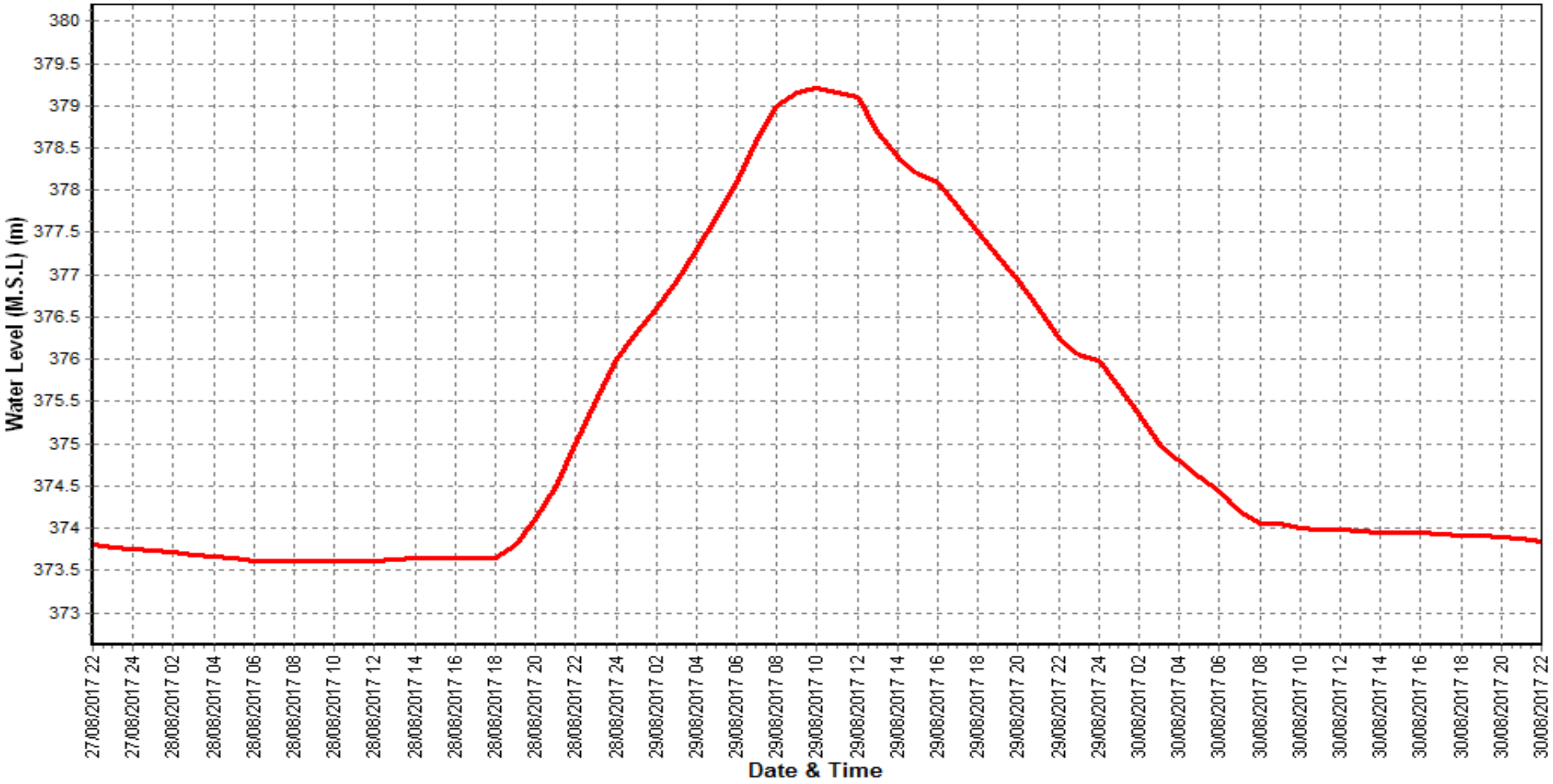


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Zari (AGR10C6) **Division : U Godavari Div., Hyderabad**

Local River : Dudhna **Sub-Division : Purna SD, Nanded**

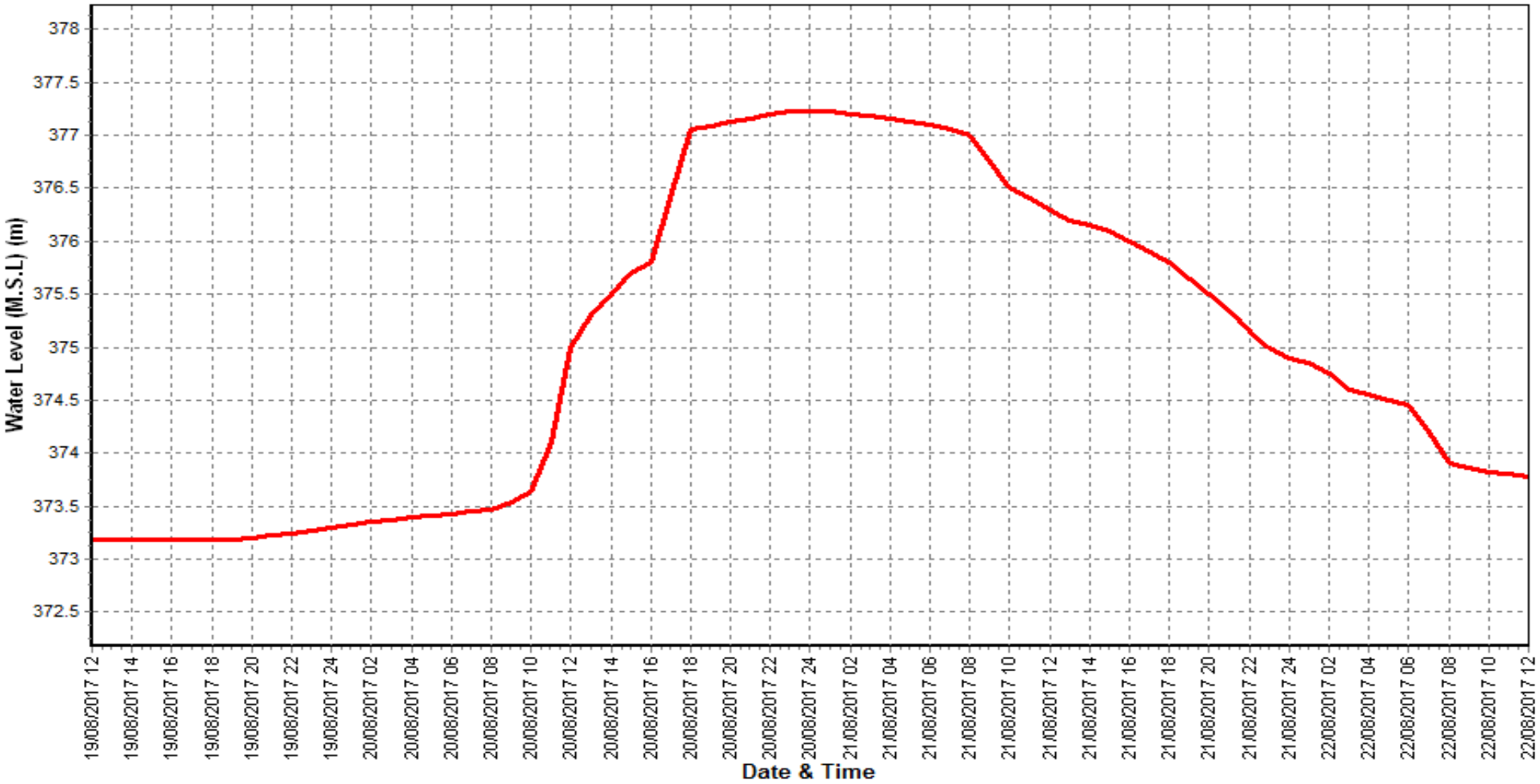


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Zari (AGR10C6) **Division : U Godavari Div., Hyderabad**

Local River : Dudhna **Sub-Division : Purna SD, Nanded**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**G.R.Bridge**	**Code**	:	**AG000R6**
State	:	Maharashtra	District		Parbhani
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	--'
Sub-Sub Tributary	:	---	Local River	:	Godavari
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	Purna SD, Nanded
Drainage Area	:	33934 Sq. Km.	Bank	:	Left
Latitude	:	18°57'00"	Longitude	:	76°45'00"
Zero of Gauge (m)	:	364.000 (m.s.l)	01.01.1976		
		Opening Date	Closing Date		
Gauge	:	17.06.1976	**HFL During 2017-18**	:	**370.940 Meter**
			Corres. Discharge	:	**1530 Cumecs (Estimated)**
Discharge	:	19.06.1976	**Date & Time of**	:	**11.10.2017**
			Occurance	:	**09:00 hrs.**
Sediment	:	01.07.1976			
Water Quality	:	01.07.1976			

HFL Recorded so far in m : 378.6 14/08/2006
Corresponding Discharge (cumecs) : 6390*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1977-1978	1173	370.065	03.07.1977	0.800	365.125	06.06.1977
1978-1979	1474	370.932	15.06.1978	0.600	365.120	08.05.1979
1979-1980	2781	373.168	27.09.1979	1.000	365.150	13.06.1979
1980-1981	3027	372.705	26.08.1980	2.100	365.360	28.04.1981
1981-1982	1556	370.750	24.09.1981	3.400	365.360	28.01.1982
1982-1983	448.4	368.075	12.07.1982	2.400	365.335	11.05.1983
1983-1984	4676	374.925	16.09.1983	3.100	365.320	04.05.1984
1984-1985	1170	369.718	10.10.1984	4.000	365.360	07.03.1985
1985-1986	308.0	367.735	07.10.1985	0.000	364.960	27.04.1986
1986-1987	393.0	367.970	19.07.1986	0.000	365.265	25.01.1987
1987-1988	824.7	369.640	07.10.1987	0.000	365.140	15.03.1988
1988-1989	2334	373.050	30.09.1988	0.000	365.250	17.06.1988
1989-1990	4114	376.785	25.07.1989	4.535	365.545	30.03.1990
1990-1991	3451	376.105	15.10.1990	3.200	365.510	09.05.1991
1991-1992	1566	371.330	01.08.1991	0.000	365.185	20.05.1992
1992-1993	2501	373.830	03.09.1992	0.000	365.200	29.03.1993
1993-1994	248.0	367.450	05.08.1993	0.000	365.200	09.03.1994

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1994-1995	2060	372.625	31.08.1994	0.000	365.370	16.04.1995
1995-1996	317.2	367.790	16.09.1995	0.000	365.140	26.01.1996
1996-1997	1301	370.350	16.09.1996	0.000		25.01.1997
1997-1998	142.6	366.820	23.09.1997	0.000	365.035	13.05.1998
1998-1999	4664	376.200	16.10.1998	0.000	365.330	24.02.1999
1999-2000	1165	370.070	02.08.1999	0.000		09.02.2000
2000-2001	4764	375.800	25.08.2000	0.019	365.100	02.06.2000
2001-2002	1392	370.630	02.10.2001	0.000	364.840	25.01.2002
2002-2003	1061	369.675	25.08.2002	0.000	364.140	25.01.2003
2003-2004	322.0	367.400	20.07.2003	0.000		11.02.2004
2004-2005	101.0	366.430	25.09.2004	0.000	364.300	13.02.2005
2005-2006	4484	375.100	22.09.2005	0.000	364.680	10.07.2005
2006-2007	6222	378.370	14.08.2006	0.000	364.990	25.01.2007
2007-2008	1457	370.850	22.09.2007	0.000	364.500	13.06.2007
2008-2009	3507	374.020	22.09.2008	0.000	365.480	25.01.2009
2009-2010	325.1	367.890	26.08.2009	0.000	364.710	25.01.2010
2010-2011	452.8	368.360	16.09.2010	0.000	365.870	25.01.2011
2011-2012	354.7	367.650	27.08.2011	0.000	367.900	26.01.2012
2012-2013	470.1	368.025	04.09.2012	0.000	366.480	30.11.2012
2013-2014	429.3	367.620	18.07.2013	0.000	369.240	19.01.2014
2014-2015	143.8	367.920	05.09.2014	0.000	365.350	23.02.2015
2015-2016	0.000	364.000	25.07.2015	0.000	364.000	14.01.2016
2016-2017	1597	373.800	25.09.2016	0.000	365.960	25.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at G.R. Bridge in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1976-1977**	4542	95	4637
2	**1977-1978**	2823	327	3150
3	**1978-1979**	1535	107	1642
4	**1979-1980**	2211	504	2715
5	**1980-1981**	4770	182	4952
6	**1981-1982**	1629	214	1843
7	**1982-1983**	529	160	689
8	**1983-1984**	5390	234	5623
9	**1984-1985**	968	220	1189
10	**1985-1986**	505	58	563
11	**1986-1987**	359	0	359
12	**1987-1988**	656	23	679
13	**1988-1989**	3505	188	3692
14	**1989-1990**	3047	214	3261
15	**1990-1991**	4261	256	4517
16	**1991-1992**	2452	109	2562
17	**1992-1993**	969	4	973
18	**1993-1994**	362	12	374
19	**1994-1995**	1773	5	1778
20	**1995-1996**	454	0	454
21	**1996-1997**	1100	0	1100
22	**1997-1998**	147	31	178
23	**1998-1999**	4379	3	4383
24	**1999-2000**	1075	0	1075
25	**2000-2001**	2640	83	2723
26	**2001-2002**	593	0	593
27	**2002-2003**	528	0	528
28	**2003-2004**	144	1	145
29	**2004-2005**	106	5	111
30	**2005-2006**	4601	44	4644
31	**2006-2007**	7075	0	7075
32	**2007-2008**	887	69	956
33	**2008-2009**	1048	0	1048
34	**2009-2010**	65	0	65
35	**2010-2011**	698	0	698
36	**2011-2012**	498	0	498
37	**2012-2013**	231	0	231
38	**2013-2014**	773	0	773
39	**2014-2015**	220	0	220
40	**2015-2016**	0	0	0
41	**2016-2017**	949	0	949
Average		1719	77	1796

Stage-Discharge Data for the period 2017 - 2018

Station Name : G.R.Bridge (AG000R6) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1	364.810	0.000	365.710	0.000	365.140	0.000	365.970	0.000	365.930	0.000	366.210	0.000
2	364.790	0.000	365.700	0.000	365.120	0.000	365.940	0.000	366.600	0.000	366.230	0.000
3	364.770	0.000	365.670	0.000	365.100	0.000	365.910	0.000	366.110	0.000	366.200	0.000
4	364.750	0.000	365.650	0.000	365.080	0.000	365.900	0.000	366.220	31.64	366.170	0.000
5	364.760	0.000	365.620	0.000	365.060	0.000	365.910	0.000	366.000	0.000	366.150	0.000
6	364.750	0.000	365.600	0.000	365.030	0.000	365.850	0.000	365.940	0.000	366.130	0.000
7	364.950	0.000	365.570	0.000	365.010	0.000	365.840	0.000	365.900	0.000	366.120	0.000
8	365.140	0.000	365.550	0.000	364.990	0.000	365.850	0.000	365.950	0.000	366.100	0.000
9	365.080	0.000	365.520	0.000	364.970	0.000	368.470	314.3	365.940	0.000	366.070	0.000
10	365.020	0.000	365.490	0.000	364.950	0.000	368.360		366.620	71.31	366.040	0.000
11	365.000	0.000	365.460	0.000	364.950	0.000	366.140	23.60	370.800	0.000	366.010	0.000
12	364.980	0.000	365.430	0.000	364.930	0.000	365.980	0.000	369.950	0.000	366.000	0.000
13	364.980	0.000	365.400	0.000	364.910	0.000	366.530	47.96	370.500	0.000	366.000	0.000
14	365.100	0.000	365.380	0.000	364.900	0.000	368.595	365.7	369.950	0.000	366.030	0.000
15	365.130	0.000	365.350	0.000	364.880	0.000	366.400	49.90	369.350	0.000	366.010	0.000
16	365.430	0.000	365.330	0.000	364.860	0.000	367.015	103.6	370.260	0.000	365.980	0.000
17	365.900	0.000	365.340	0.000	364.840	0.000	365.980		369.800	0.000	365.960	0.000
18	365.800	0.000	365.330	0.000	364.820	0.000	366.200	39.08	368.005	249.7	365.940	0.000
19	365.810	0.000	365.320	0.000	364.810	0.000	366.260	45.58	367.950		365.920	0.000
20	365.830	0.000	365.310	0.000	364.890	0.000	366.000	0.000	366.780	65.98	365.900	0.000
21	365.820	0.000	365.320	0.000	366.180	0.000	366.400	51.23	365.940	0.000	365.870	0.000
22	365.810	0.000	365.320	0.000	366.010	0.000	368.115	105.4	365.900	0.000	365.840	0.000
23	365.820	0.000	365.310	0.000	366.715	62.42	367.250	140.5	365.890	0.000	365.820	0.000
24	365.800	0.000	365.300	0.000	365.990	0.000	369.750		365.900	0.000	365.800	0.000
25	365.780	0.000	365.280	0.000	365.910	0.000	367.355	139.3	365.890	0.000	365.780	0.000
26	365.760	0.000	365.260	0.000	365.950	0.000	366.280	51.05	365.860	0.000	365.760	0.000
27	365.760	0.000	365.240	0.000	365.930	0.000	366.360	52.30	365.850	0.000	365.740	0.000
28	365.750	0.000	365.220	0.000	366.290	37.06	366.000	0.000	365.940	0.000	365.710	0.000
29	365.740	0.000	365.200	0.000	366.750	62.55	365.970	0.000	366.280	0.000	365.680	0.000
30	365.720	0.000	365.180	0.000	368.625	372.7	365.940	0.000	366.200	0.000	365.660	0.000
31			365.160	0.000	366.650	55.55			366.210	0.000		
Ten-Daily Mean												
I Ten-Daily	364.882	0.000	365.608	0.000	365.045	0.000	366.400	34.93	366.121	10.30	366.142	0.000
II Ten-Daily	365.396	0.000	365.365	0.000	364.879	0.000	366.510	75.05	369.335	35.07	365.975	0.000
III Ten-Daily	365.776	0.000	365.254	0.000	366.455	53.66	366.942	59.97	365.987	0.000	365.766	0.000
Monthly												
Min.	364.750	0.000	365.160	0.000	364.810	0.000	365.840	0.000	365.850	0.000	365.660	0.000
Max.	365.900	0.000	365.710	0.000	368.625	372.7	369.750	365.7	370.800	249.7	366.230	0.000
Mean	365.351	0	365.404	0	365.492	19.04	366.617	56.65	367.110	13.95	365.961	0

Annual Runoff in MCM = 219 Annual Runoff in mm = 6

Peak Observed Discharge = 372.7 cumecs on 30/08/2017 Corres. Water Level :368.625 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017 Corres. Water Level :364.810 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : G.R.Bridge (AG000R6) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	365.640	0.000	365.830	0.000	365.450	0.000	365.610	0.000	366.070	0.000	365.940	0.000
2	365.620	0.000	365.820	0.000	365.450	0.000	365.610	0.000	366.050	0.000	365.920	0.000
3	365.590	0.000	365.800	0.000	365.460	0.000	365.630	0.000	366.040	0.000	365.890	0.000
4	365.560	0.000	365.790	0.000	365.460	0.000	365.640	0.000	366.020	0.000	365.870	0.000
5	365.540	0.000	365.770	0.000	365.480	0.000	365.650	0.000	366.000	0.000	365.850	0.000
6	365.520	0.000	365.760	0.000	365.500	0.000	365.670	0.000	365.980	0.000	365.830	0.000
7	365.510	0.000	365.750	0.000	365.520	0.000	365.690	0.000	365.960	0.000	365.820	0.000
8	365.500	0.000	365.750	0.000	365.560	0.000	365.710	0.000	365.940	0.000	365.800	0.000
9	365.490	0.000	365.740	0.000	365.580	0.000	365.730	0.000	365.940	0.000	365.780	0.000
10	365.480	0.000	365.730	0.000	365.600	0.000	365.740	0.000	365.930	0.000	365.760	0.000
11	365.450	0.000	365.720	0.000	365.620	0.000	365.750	0.000	365.920	0.000	365.750	0.000
12	365.430	0.000	365.700	0.000	365.640	0.000	365.800	0.000	365.900	0.000	365.730	0.000
13	365.420	0.000	365.670	0.000	365.670	0.000	365.860	0.000	365.880	0.000	365.720	0.000
14	365.410	0.000	365.650	0.000	365.720	0.000	365.890	0.000	365.860	0.000	365.720	0.000
15	365.400	0.000	365.640	0.000	365.750	0.000	365.880	0.000	365.840	0.000	365.730	0.000
16	365.420	0.000	365.620	0.000	365.750	0.000	365.870	0.000	365.830	0.000	365.740	0.000
17	365.430	0.000	365.590	0.000	365.730	0.000	365.860	0.000	365.830	0.000	365.750	0.000
18	365.440	0.000	365.560	0.000	365.720	0.000	365.860	0.000	365.840	0.000	365.770	0.000
19	365.450	0.000	365.540	0.000	365.710	0.000	365.860	0.000	365.850	0.000	365.790	0.000
20	365.490	0.000	365.520	0.000	365.710	0.000	365.850	0.000	365.850	0.000	365.790	0.000
21	365.540	0.000	365.500	0.000	365.700	0.000	365.840	0.000	365.860	0.000	365.780	0.000
22	365.590	0.000	365.480	0.000	365.680	0.000	365.830	0.000	365.870	0.000	365.770	0.000
23	365.650	0.000	365.460	0.000	365.660	0.000	365.820	0.000	365.890	0.000	365.770	0.000
24	365.680	0.000	365.440	0.000	365.640	0.000	365.830	0.000	365.890	0.000	365.780	0.000
25	365.720	0.000	365.420	0.000	365.630	0.000	365.870	0.000	365.910	0.000	365.770	0.000
26	365.760	0.000	365.410	0.000	365.620	0.000	365.930	0.000	365.930	0.000	365.750	0.000
27	365.770	0.000	365.410	0.000	365.620	0.000	365.970	0.000	365.950	0.000	365.730	0.000
28	365.790	0.000	365.420	0.000	365.610	0.000	366.030	0.000	365.960	0.000	365.720	0.000
29	365.800	0.000	365.420	0.000			366.080	0.000	365.960	0.000	365.710	0.000
30	365.830	0.000	365.440	0.000			366.090	0.000	365.950	0.000	365.690	0.000
31	365.840	0.000	365.450	0.000			366.090	0.000			365.680	0.000
Ten-Daily Mean												
I Ten-Daily	365.545	0.000	365.774	0.000	365.506	0.000	365.668	0.000	365.993	0.000	365.846	0.000
II Ten-Daily	365.434	0.000	365.621	0.000	365.702	0.000	365.848	0.000	365.860	0.000	365.749	0.000
III Ten-Daily	365.725	0.000	365.441	0.000	365.645	0.000	365.944	0.000	365.917	0.000	365.741	0.000
Monthly												
Min.	365.400	0.000	365.410	0.000	365.450	0.000	365.610	0.000	365.830	0.000	365.680	0.000
Max.	365.840	0.000	365.830	0.000	365.750	0.000	366.090	0.000	366.070	0.000	365.940	0.000
Mean	365.573	0	365.606	0	365.616	0	365.824	0	365.923	0	365.777	0

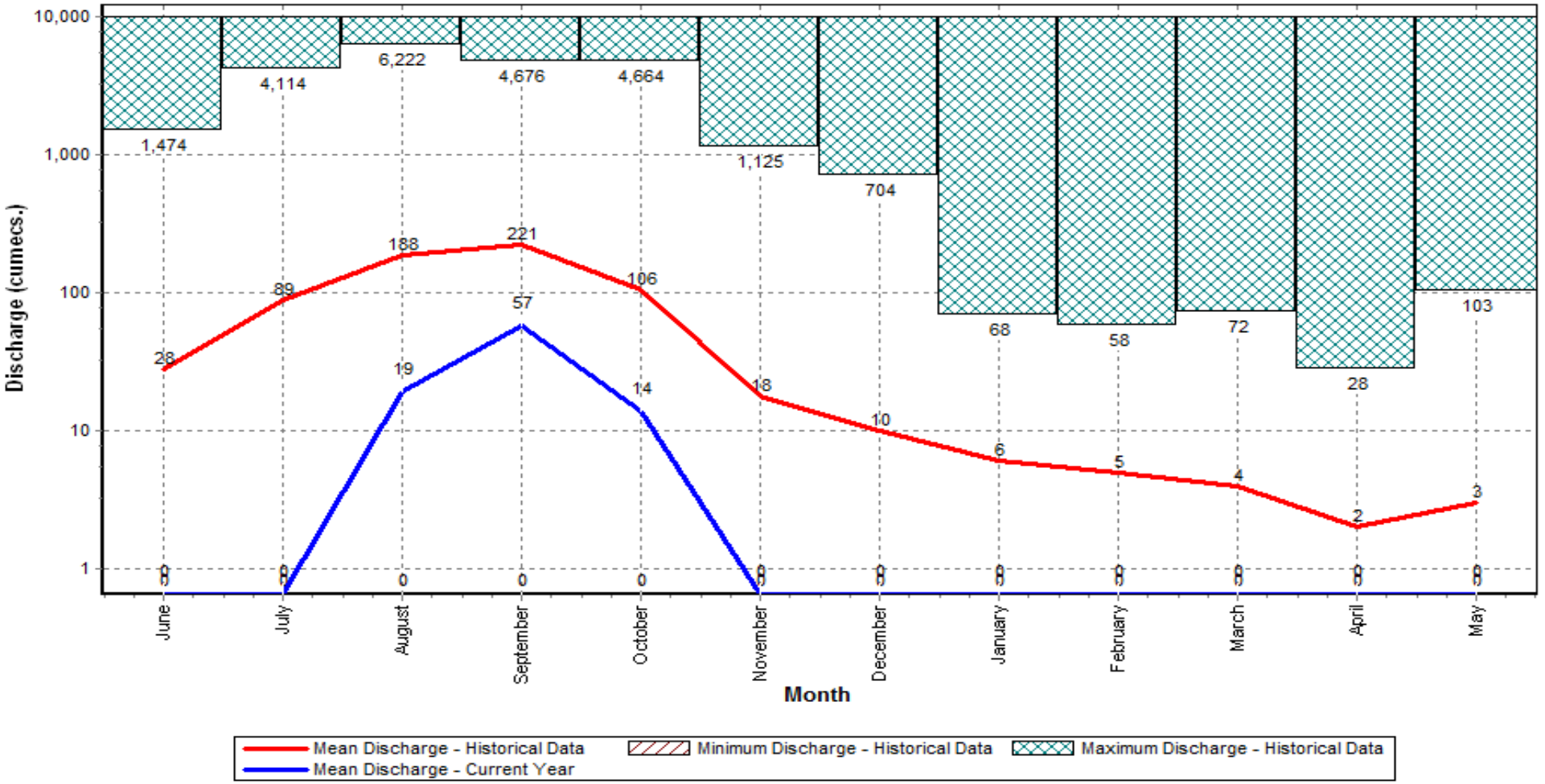
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : G.R.Bridge (AG000R6) **Data considered : 1977-2018** **Division : U Godavari Div., Hyderabad**

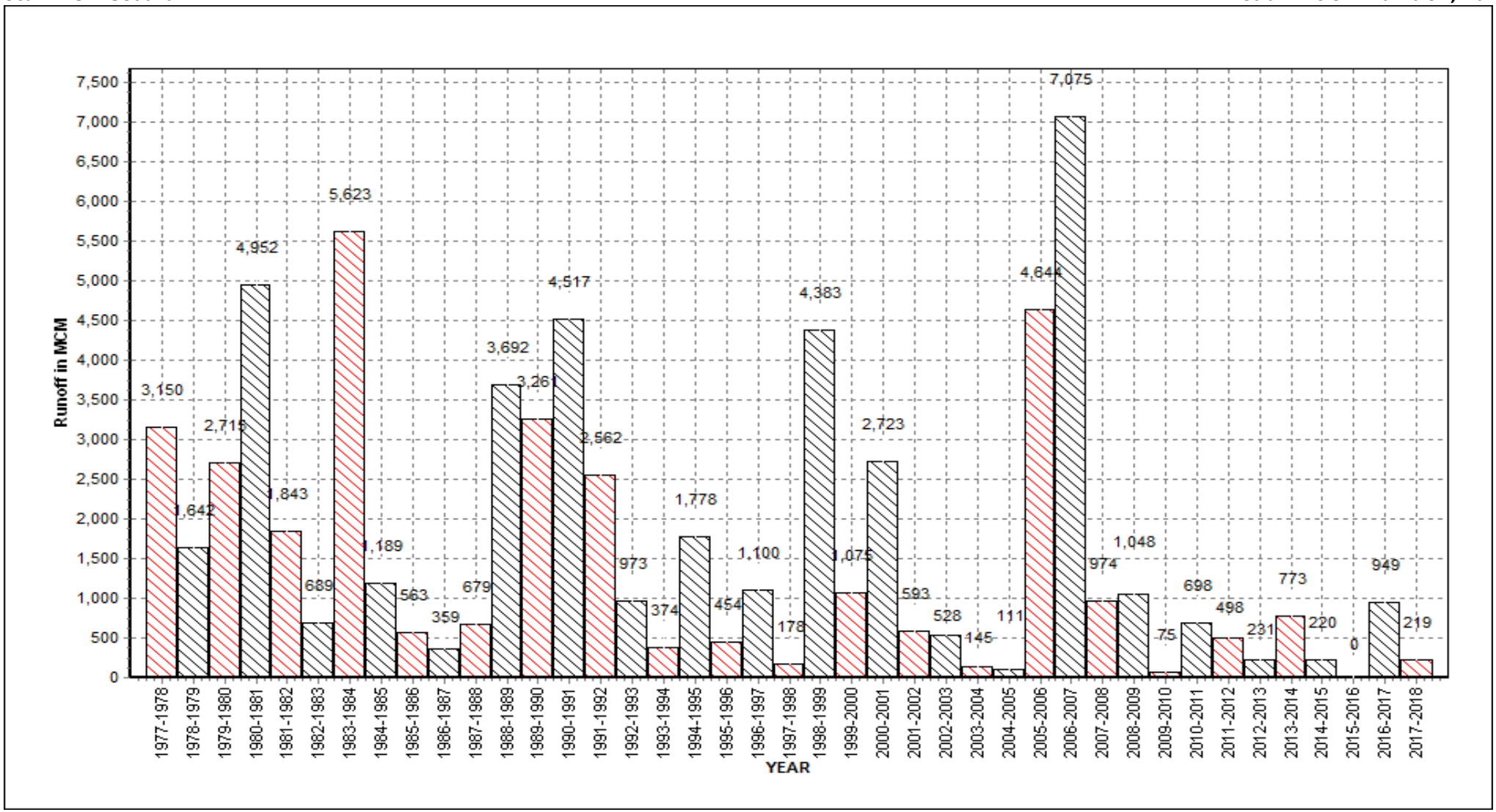
Local River : Godavari **Sub-Division : Purna SD, Nanded**



Annual Runoff Values for the period: 1977 - 2018

Station Name : G.R.Bridge (AG000R6) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**



Note: Missing values have not been considered while arriving at Annual Runoff

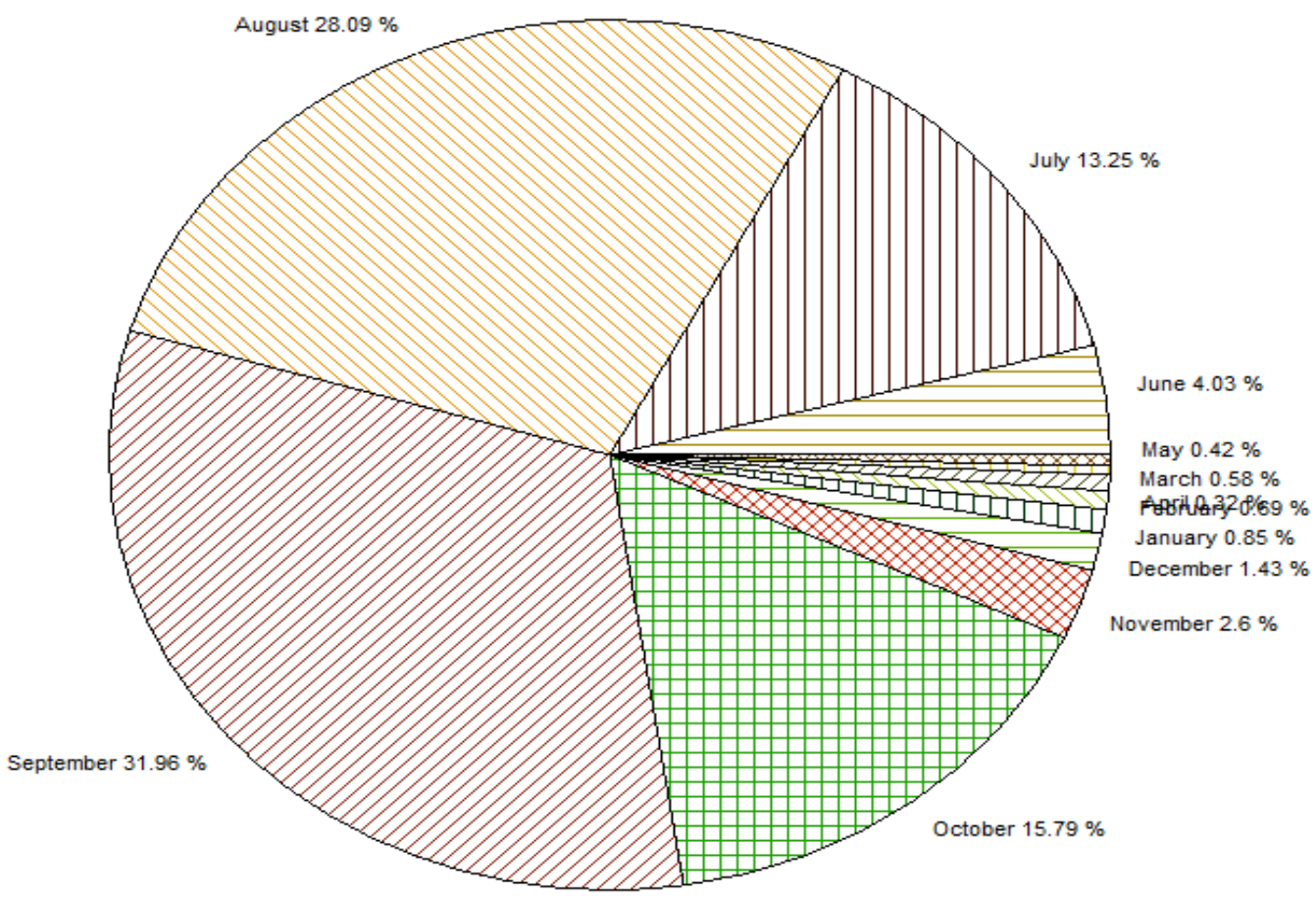
Monthly Average Runoff based on period : 1977-2017

Station Name : G.R.Bridge (AG000R6)

Division : U Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : Purna SD, Nanded



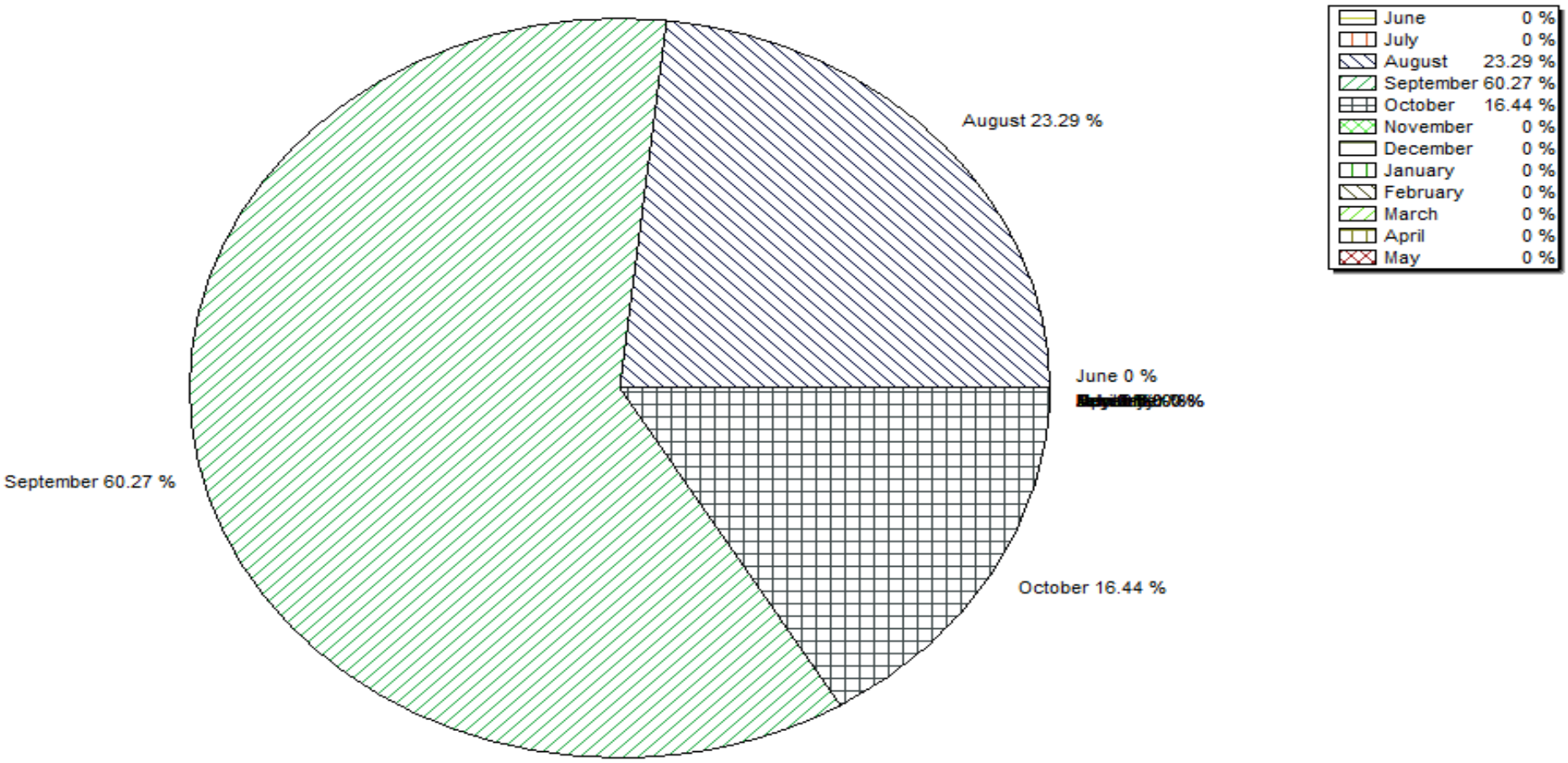
Monthly Runoff for the Year : 2017-2018

Station Name : G.R.Bridge (AG000R6)

Local River : Godavari

Division : U Godavari Div., Hyderabad

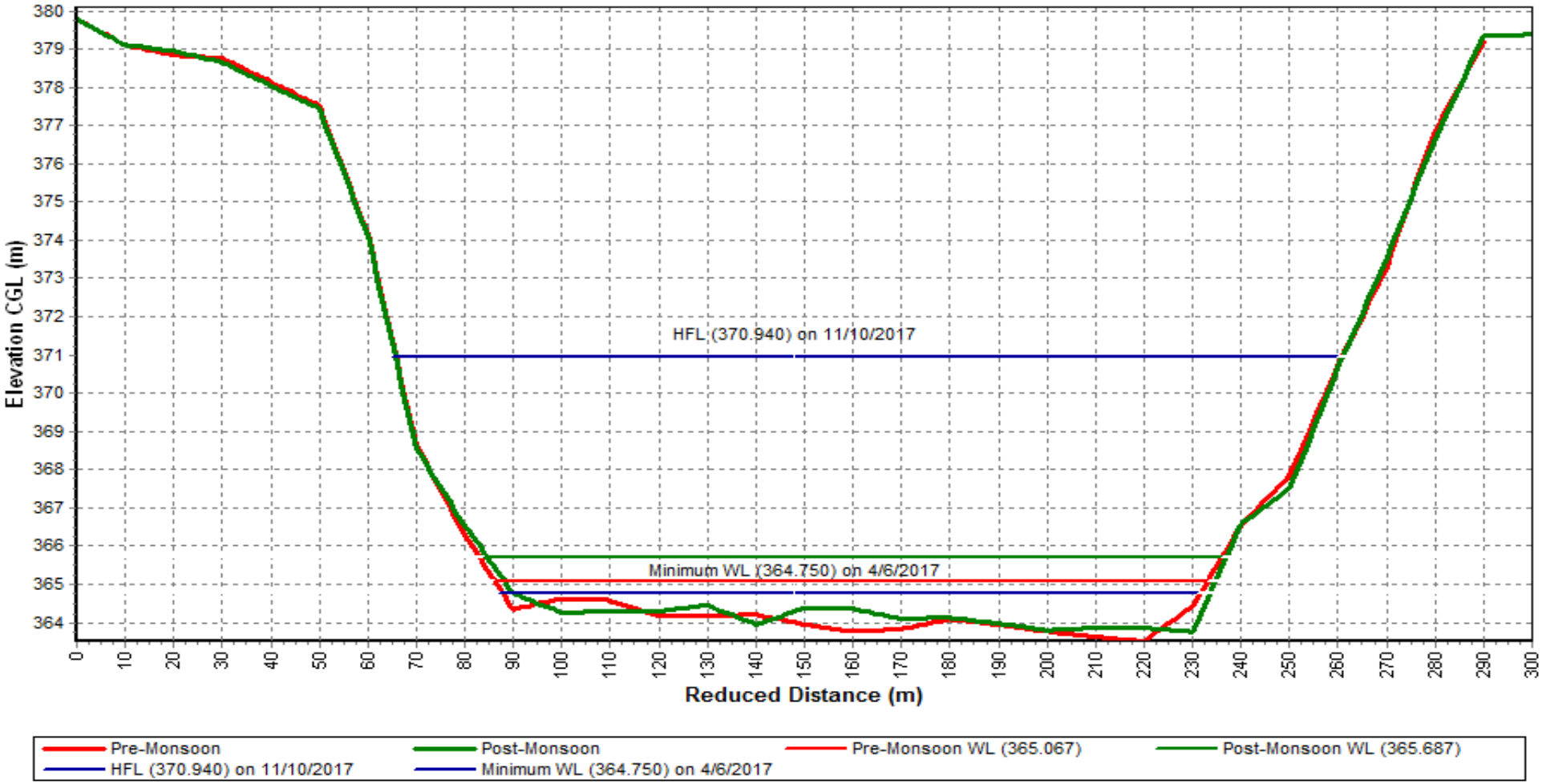
Sub-Division : Purna SD, Nanded



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : G.R.Bridge (AG000R6) **Division : U Godavari Div., Hyderabad**

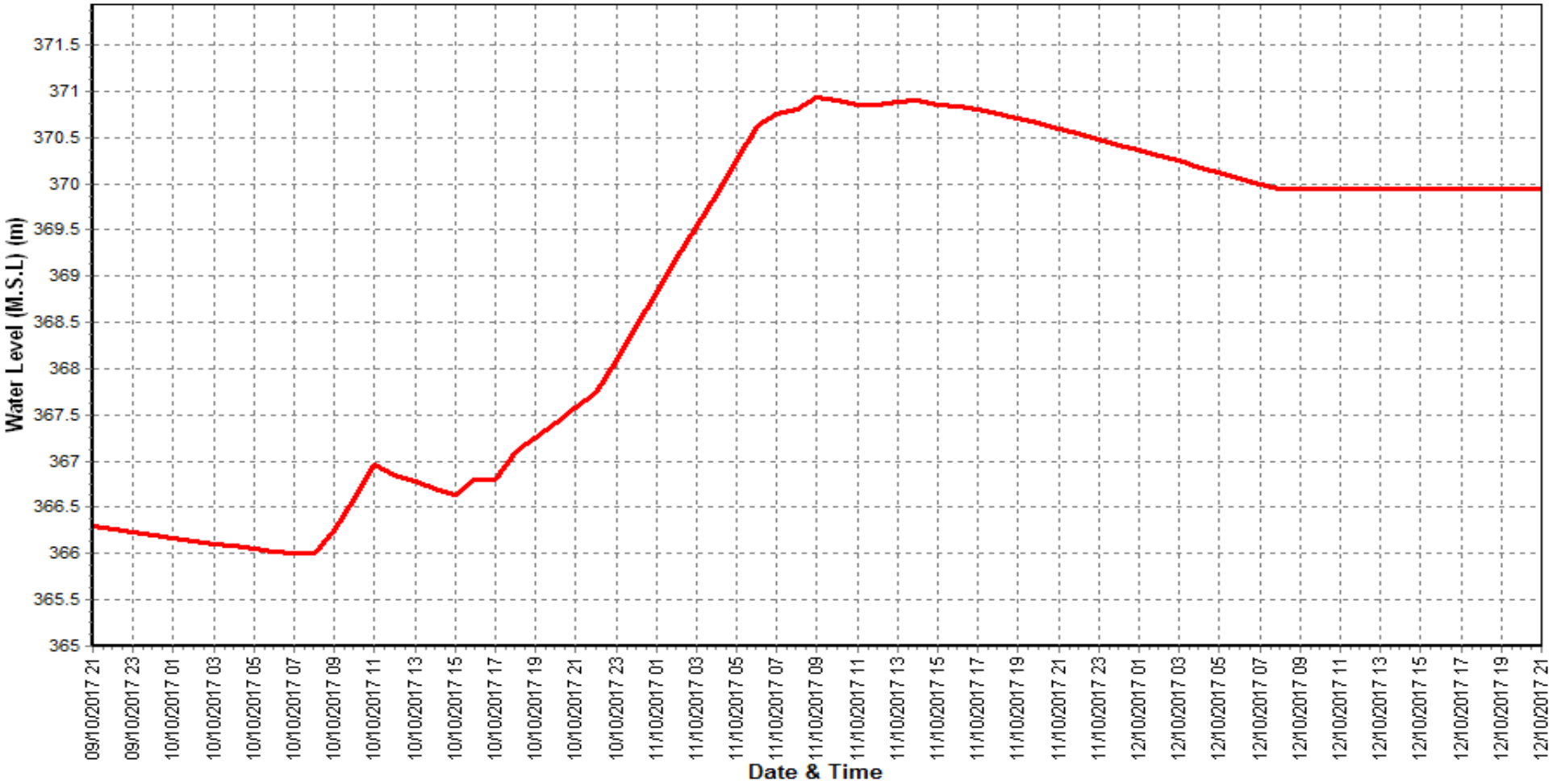
Local River : Godavari **Sub-Division : Purna SD, Nanded**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : G.R.Bridge (AG000R6) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Purna SD, Nanded**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Dhalegaon**	**Code**	:	**AG000S9**
State	:	Maharashtra	District		Parbhani
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	-	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Godavari
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	U Godavari SD, Aurangabad
Drainage Area	:	30840 Sq. Km.	Bank	:	Left
Latitude	:	19°12'00"	Longitude	:	76°22'00"
Zero of Gauge (m)	:	386.575 (m.s.l)	04.01.1964		
		Opening Date	Closing Date		
Gauge	:	04.01.1964	**HFL During 2017-18**	:	**391.425 Meter**
			Corres. Discharge	:	**0** No flow
Discharge	:	16.08.1964	**Date & Time of**	:	**13.10.2017**
			Occurance	:	**06:00 hrs.**
Sediment	:	11.07.1971			
Water Quality	:	01.07.1972			

HFL Recorded so far in m : 400.005 13/08/2006
Corresponding Discharge (cumecs) : 7832*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1965-1966	4018	395.220	21.08.1965	0.265	387.175	01.05.1966
1966-1967	3590	395.088	31.07.1966	0.013	387.010	30.05.1967
1967-1968	4054	396.193	01.08.1967	0.127	386.990	11.06.1967
1968-1969	4460	396.875	09.08.1968	0.040	386.975	31.05.1969
1969-1970	6173	398.840	14.09.1969	0.271	386.970	02.06.1969
1970-1971	3043	394.400	22.08.1970	0.392	387.090	16.05.1971
1971-1972	3082	394.935	02.10.1971	0.090	387.150	01.06.1971
1972-1973	776.5	390.618	24.08.1972	0.000	386.895	14.06.1972
1973-1974	2609	394.060	03.07.1973	0.000	386.900	02.06.1973
1974-1975	1252	391.310	16.10.1974	0.180	387.120	29.05.1975
1975-1976	3209	394.920	24.09.1975	0.230	387.225	25.05.1976
1976-1977	4586	395.623	04.08.1976	0.340	387.240	02.06.1976
1977-1978	1071	391.663	03.07.1977	1.100	387.150	09.06.1977
1978-1979	2196	393.390	15.06.1978	0.600	387.160	03.05.1979
1979-1980	2947	394.493	26.09.1979	1.150	387.190	08.06.1979
1980-1981	2535	394.030	26.08.1980	0.199	387.350	01.06.1980
1981-1982	2272	392.985	23.09.1981	2.675	387.505	22.07.1981

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1982-1983	1049	391.273	11.07.1982	2.100	387.445	07.05.1983
1983-1984	4139	395.485	28.09.1983	3.736	387.540	01.06.1983
1984-1985	717.6	390.535	11.10.1984	4.500	387.265	08.03.1985
1985-1986	348.0	389.620	06.10.1985	0.500	387.065	30.05.1986
1986-1987	809.7	390.535	18.07.1986	0.000	386.930	03.05.1987
1987-1988	677.1	390.560	06.10.1987	0.000	386.815	12.06.1987
1988-1989	2389	393.755	29.09.1988	1.059	387.240	02.06.1988
1989-1990	6732	398.065	25.07.1989	3.923	387.465	10.11.1989
1990-1991	4691	397.135	14.10.1990	3.031	387.275	25.02.1991
1991-1992	1972	392.815	01.08.1991	0.443	387.105	28.04.1992
1992-1993	2074	392.845	02.09.1992	0.000	386.680	16.05.1993
1993-1994	181.3	388.935	04.08.1993	0.000	386.725	29.06.1993
1994-1995	2196	393.555	08.09.1994	0.000	387.185	26.06.1994
1995-1996	228.9	389.060	16.09.1995	0.000		17.03.1996
1996-1997	2092	393.375	16.09.1996	0.000	387.080	01.02.1997
1997-1998	86.59	388.110	25.09.1997	0.000		08.03.1998
1998-1999	4467	396.875	16.10.1998	0.000	387.015	16.07.1998
1999-2000	1257	392.100	14.10.1999	0.000	387.025	03.05.2000
2000-2001	3328	395.835	25.08.2000	0.000	387.005	25.04.2001
2001-2002	638.4	390.225	02.10.2001	0.000		14.02.2002
2002-2003	519.7	389.715	06.09.2002	0.000		25.01.2003
2003-2004	287.7	389.210	08.08.2003	0.000	386.715	09.09.2003
2004-2005	135.4	388.575	24.09.2004	0.000		25.01.2005
2005-2006	4886	397.125	22.09.2005	0.000		03.05.2006
2006-2007	7652	399.855	13.08.2006	0.000		23.06.2006
2007-2008	1630	392.625	22.09.2007	0.000		24.03.2008
2008-2009	2976	395.505	21.09.2008	0.000	386.825	25.01.2009
2009-2010	320.5	389.485	25.08.2009	0.000		24.01.2010
2010-2011	744.3	390.925	04.07.2010	0.000	386.675	25.01.2011
2011-2012	348.4	389.575	26.08.2011	0.000		26.01.2012
2012-2013	0.000		09.01.2013	0.000	386.675	13.08.2012
2013-2014	0.000	386.815	15.08.2013	0.000	386.695	05.09.2013
2014-2015	0.000	386.675	04.10.2014	0.000	386.575	25.01.2015
2015-2016	0.000	386.575	15.10.2015	0.000	386.575	25.02.2016
2016-2017	2022	394.025	25.09.2016	0.000	386.575	12.03.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Dhalegaon in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1965-1966**	5914	76	5989
2	**1966-1967**	3650	85	3735
3	**1967-1968**	4981	515	5496
4	**1968-1969**	4529	58	4588
5	**1969-1970**	9515	106	9621
6	**1970-1971**	5077	68	5145
7	**1971-1972**	4210	70	4280
8	**1972-1973**	972	9	982
9	**1973-1974**	5232	45	5277
10	**1974-1975**	1066	110	1176
11	**1975-1976**	5859	202	6061
12	**1976-1977**	5575	99	5674
13	**1977-1978**	2544	288	2832
14	**1978-1979**	1318	90	1408
15	**1979-1980**	2139	518	2657
16	**1980-1981**	4222	173	4395
17	**1981-1982**	1488	206	1694
18	**1982-1983**	533	154	687
19	**1983-1984**	4098	238	4336
20	**1984-1985**	808	187	995
21	**1985-1986**	450	67	517
22	**1986-1987**	220	10	231
23	**1987-1988**	482	57	540
24	**1988-1989**	2661	174	2835
25	**1989-1990**	2635	221	2856
26	**1990-1991**	4009	286	4295
27	**1991-1992**	2492	135	2627
28	**1992-1993**	704	15	719
29	**1993-1994**	184	45	230
30	**1994-1995**	2150	89	2238
31	**1995-1996**	304	22	326
32	**1996-1997**	886	1	886
33	**1997-1998**	80	53	133
34	**1998-1999**	3217	34	3251
35	**1999-2000**	702	17	719
36	**2000-2001**	1681	10	1691
37	**2001-2002**	222	0	222
38	**2002-2003**	274	0	274
39	**2003-2004**	59	0	59
40	**2004-2005**	122	0	122
41	**2005-2006**	3629	5	3633
42	**2006-2007**	6550	12	6562
43	**2007-2008**	886	4	890
44	**2008-2009**	1034	0	1034
45	**2009-2010**	172	0	172
46	**2010-2011**	408	0	408
47	**2011-2012**	193	0	193
48	**2012-2013**	0	0	0
49	**2013-2014**	0	0	0
50	**2014-2015**	0	0	0
51	**2015-2016**	0	0	0
52	**2016-2017**	694	0	694
Average		2131	88	2219

Stage-Discharge Data for the period 2017 - 2018

Station Name : Dhalegaon (AG000S9) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : U Godavari SD, Aurangabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000		0.000		0.000		0.000		0.000
2		0.000		0.000		0.000		0.000	387.375	0.000		0.000
3		0.000		0.000		0.000		0.000		0.000		0.000
4		0.000		0.000		0.000		0.000		0.000		0.000
5		0.000		0.000		0.000		0.000		0.000		0.000
6		0.000		0.000		0.000		0.000		0.000		0.000
7		0.000		0.000		0.000		0.000		0.000		0.000
8		0.000		0.000		0.000		0.000		0.000		0.000
9		0.000		0.000		0.000		0.000		0.000		0.000
10		0.000		0.000		0.000		0.000	386.875	0.000		0.000
11		0.000		0.000		0.000		0.000	391.225	0.000		0.000
12		0.000		0.000		0.000		0.000	390.925	0.000		0.000
13		0.000		0.000		0.000		0.000	391.425	0.000		0.000
14		0.000		0.000		0.000		0.000	387.195	0.000		0.000
15		0.000		0.000		0.000	387.185	0.000	389.875	0.000		0.000
16		0.000		0.000		0.000		0.000	389.475	0.000		0.000
17		0.000		0.000		0.000	386.955	0.000	388.675	0.000		0.000
18		0.000		0.000		0.000		0.000	388.775	0.000		0.000
19		0.000		0.000		0.000		0.000		0.000		0.000
20		0.000		0.000		0.000		0.000		0.000		0.000
21		0.000		0.000		0.000	388.715	0.000		0.000		0.000
22		0.000		0.000	388.665	0.000	386.935	0.000		0.000		0.000
23		0.000		0.000	386.905	0.000	388.685	0.000		0.000		0.000
24		0.000		0.000		0.000	386.995	0.000		0.000		0.000
25		0.000		0.000		0.000		0.000		0.000		0.000
26		0.000		0.000		0.000	386.875	0.000		0.000		0.000
27		0.000		0.000	388.785	0.000		0.000		0.000		0.000
28		0.000		0.000	386.915	0.000		0.000		0.000		0.000
29		0.000		0.000	388.725	0.000		0.000		0.000		0.000
30		0.000		0.000	386.925	0.000		0.000		0.000		0.000
31				0.000	386.875	0.000				0.000		
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000		0.000	387.125	0.000		0.000
II Ten-Daily		0.000		0.000		0.000	387.070	0.000	389.696	0.000		0.000
III Ten-Daily		0.000		0.000	387.685	0.000	387.641	0.000		0.000		0.000
Monthly												
Min.		0.000		0.000	386.875	0.000	386.875	0.000	386.875	0.000		0.000
Max.		0.000		0.000	388.785	0.000	388.715	0.000	391.425	0.000		0.000
Mean		0.000		0.000	387.685	0.000	387.478	0.000	389.182	0.000		0.000

Annual Runoff in MCM = 0 Annual Runoff in mm = 0

Peak Observed Discharge = 0.000 cumecs on 01/06/2017

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Dhalegaon (AG000S9) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : U Godavari SD, Aurangabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1		0.000		0.000		0.000		0.000		0.000		0.000
2		0.000		0.000		0.000		0.000		0.000		0.000
3		0.000		0.000		0.000		0.000		0.000		0.000
4		0.000		0.000		0.000		0.000		0.000		0.000
5		0.000		0.000		0.000		0.000		0.000		0.000
6		0.000		0.000		0.000		0.000		0.000		0.000
7		0.000		0.000		0.000		0.000		0.000		0.000
8		0.000		0.000		0.000		0.000		0.000		0.000
9		0.000		0.000		0.000		0.000		0.000		0.000
10		0.000		0.000		0.000		0.000		0.000		0.000
11		0.000		0.000		0.000		0.000		0.000		0.000
12		0.000		0.000		0.000		0.000		0.000		0.000
13		0.000		0.000		0.000		0.000		0.000		0.000
14		0.000		0.000		0.000		0.000		0.000		0.000
15		0.000		0.000		0.000		0.000		0.000		0.000
16		0.000		0.000		0.000		0.000		0.000		0.000
17		0.000		0.000		0.000		0.000		0.000		0.000
18		0.000		0.000		0.000		0.000		0.000		0.000
19		0.000		0.000		0.000		0.000		0.000		0.000
20		0.000		0.000		0.000		0.000		0.000		0.000
21		0.000		0.000		0.000		0.000		0.000		0.000
22		0.000		0.000		0.000		0.000		0.000		0.000
23		0.000		0.000		0.000		0.000		0.000		0.000
24		0.000		0.000		0.000		0.000		0.000		0.000
25		0.000		0.000		0.000		0.000		0.000		0.000
26		0.000		0.000		0.000		0.000		0.000		0.000
27		0.000		0.000		0.000		0.000		0.000		0.000
28		0.000		0.000		0.000		0.000		0.000		0.000
29		0.000		0.000				0.000		0.000		0.000
30		0.000		0.000				0.000		0.000		0.000
31		0.000		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
II Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
III Ten-Daily		0.000		0.000		0.000		0.000		0.000		0.000
Monthly												
Min.		0.000		0.000		0.000		0.000		0.000		0.000
Max.		0.000		0.000		0.000		0.000		0.000		0.000
Mean		0.000		0.000		0.000		0.000		0.000		0.000

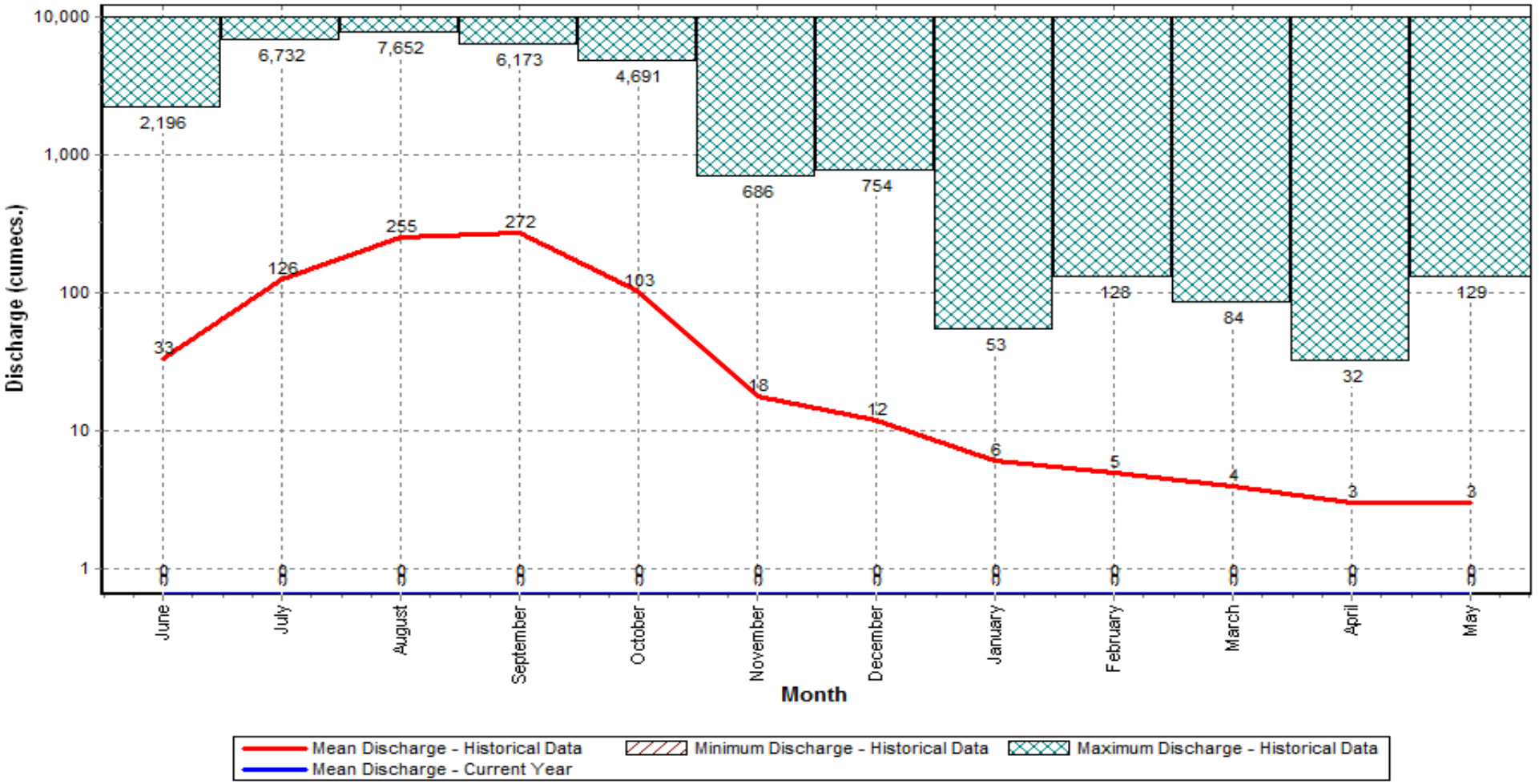
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Dhalegaon (AG000S9) | **Data considered : 1965-2018** | **Division : U Godavari Div., Hyderabad**

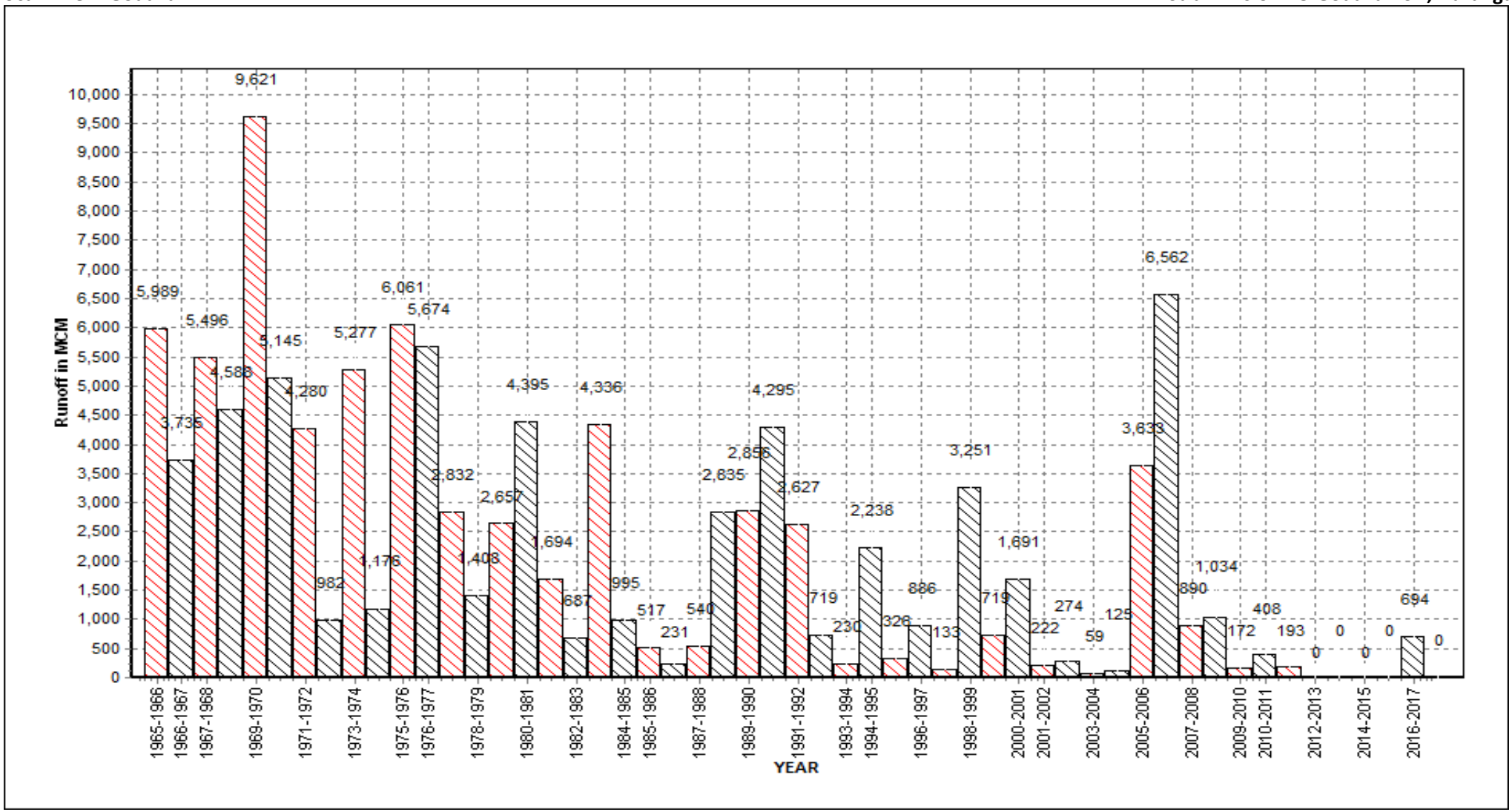
Local River : Godavari | **Sub-Division : U Godavari SD, Aurangabad**



Annual Runoff Values for the period: 1965 - 2018

Station Name : Dhalegaon (AG000S9) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : U Godavari SD, Aurangabad**

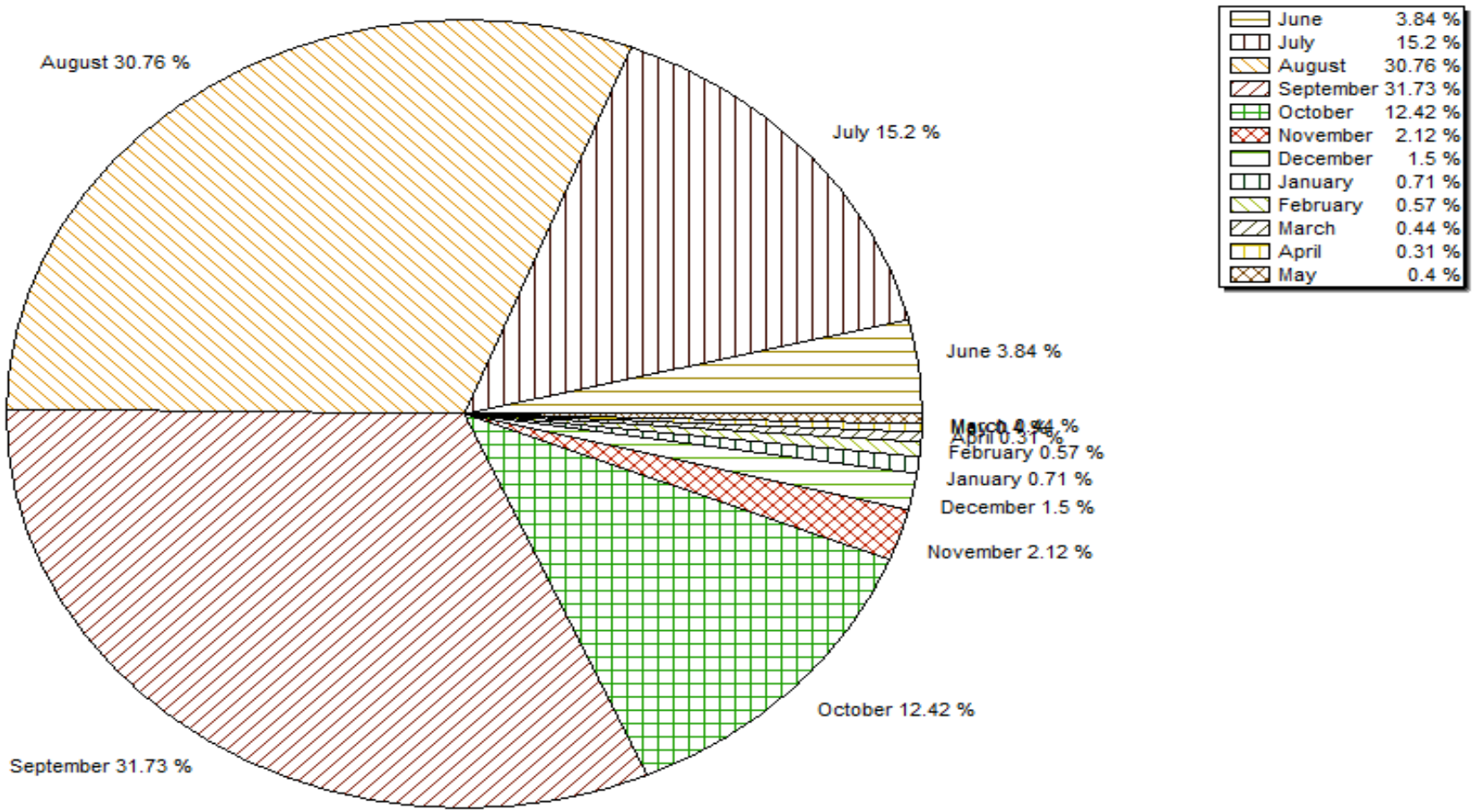


Note: Missing values have not been considered while arriving at Annual Runoff

Monthly Average Runoff based on period : 1965-2017

Station Name : Dhalegaon (AG000S9) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : U Godavari SD, Aurangabad**



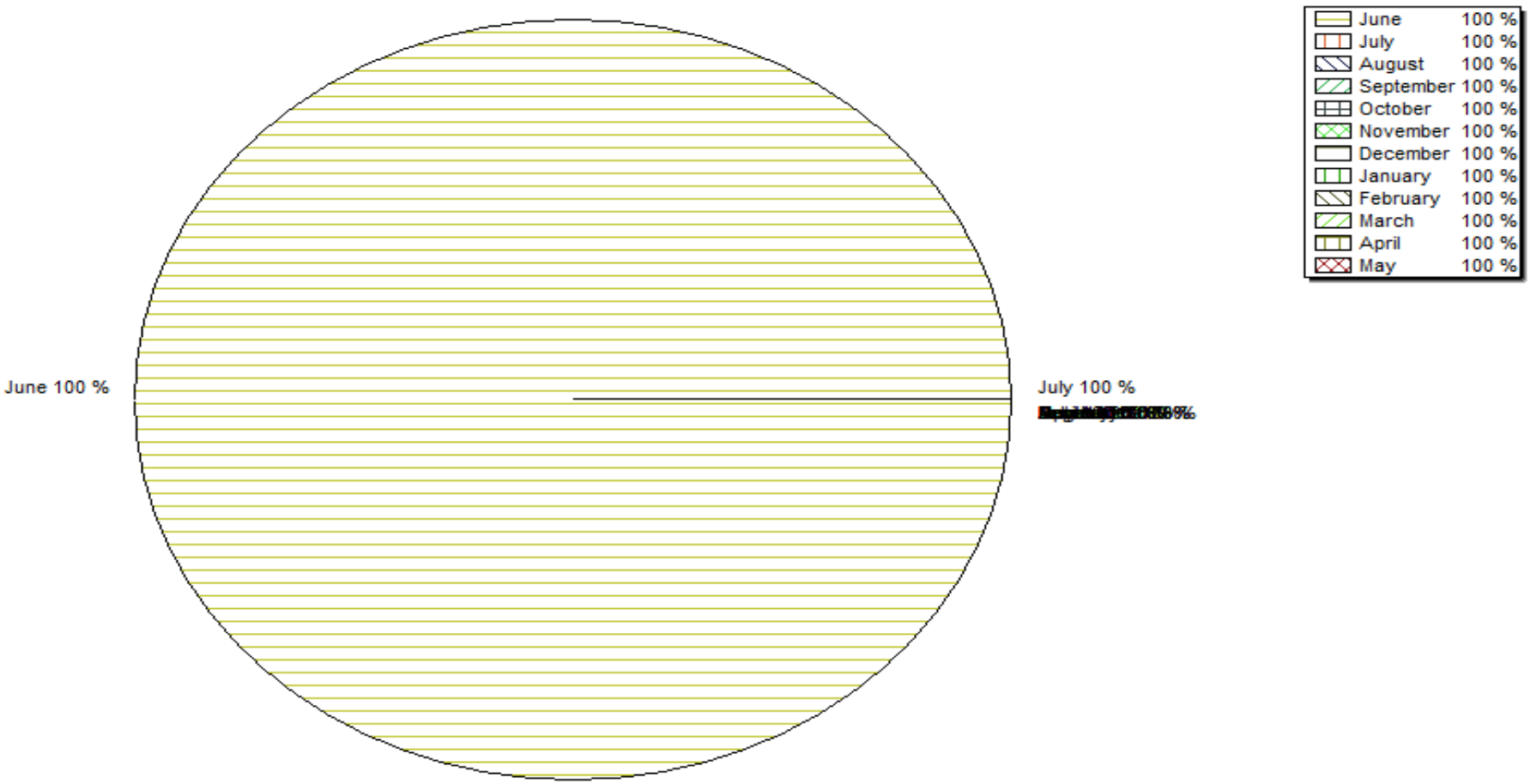
Monthly Runoff for the Year : 2017-2018

Station Name : Dhalegaon (AG000S9)

Local River : Godavari

Division : U Godavari Div., Hyderabad

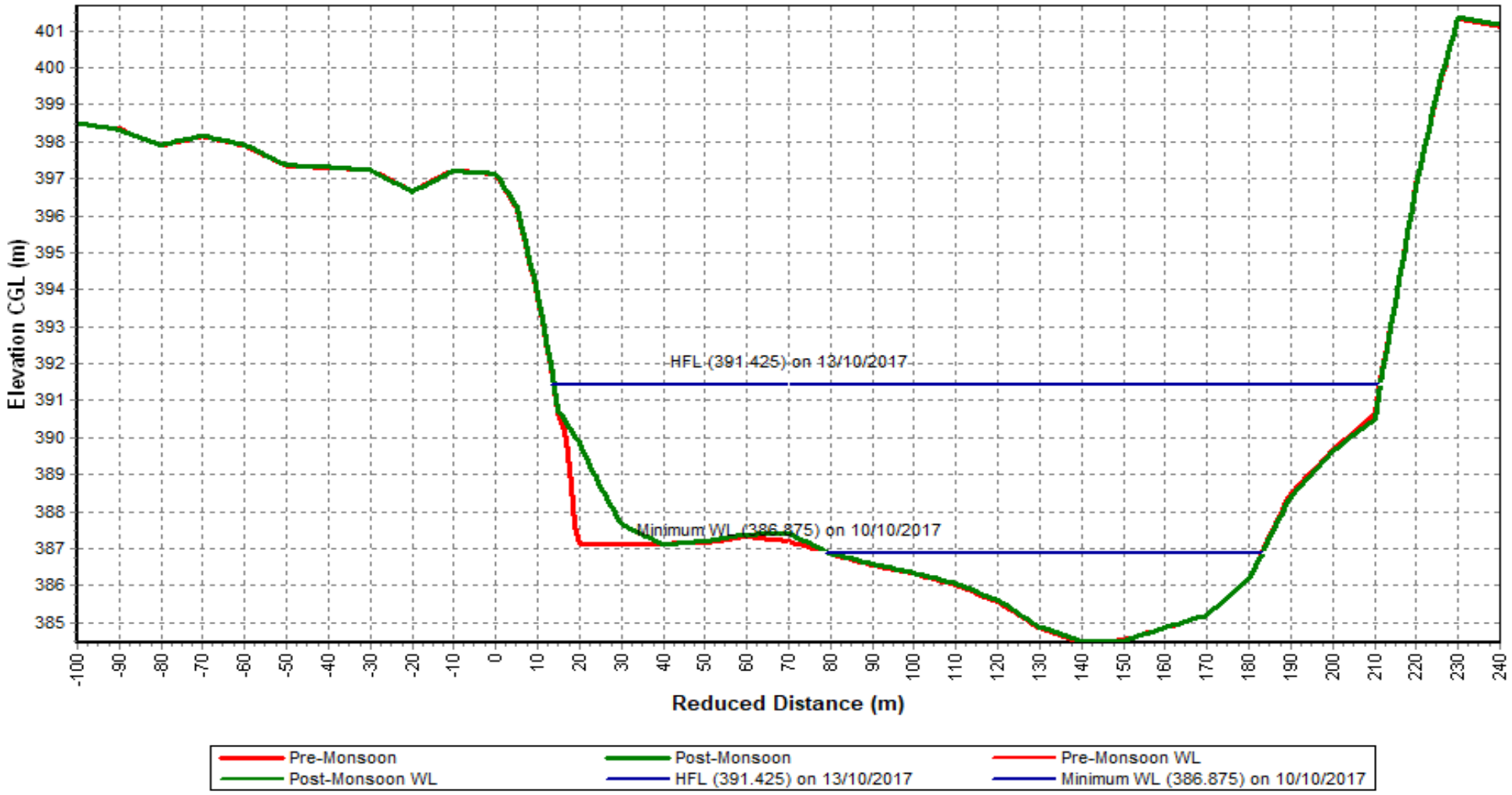
Sub-Division : U Godavari SD, Aurangabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Dhalegaon (AG000S9) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : U Godavari SD, Aurangabad**



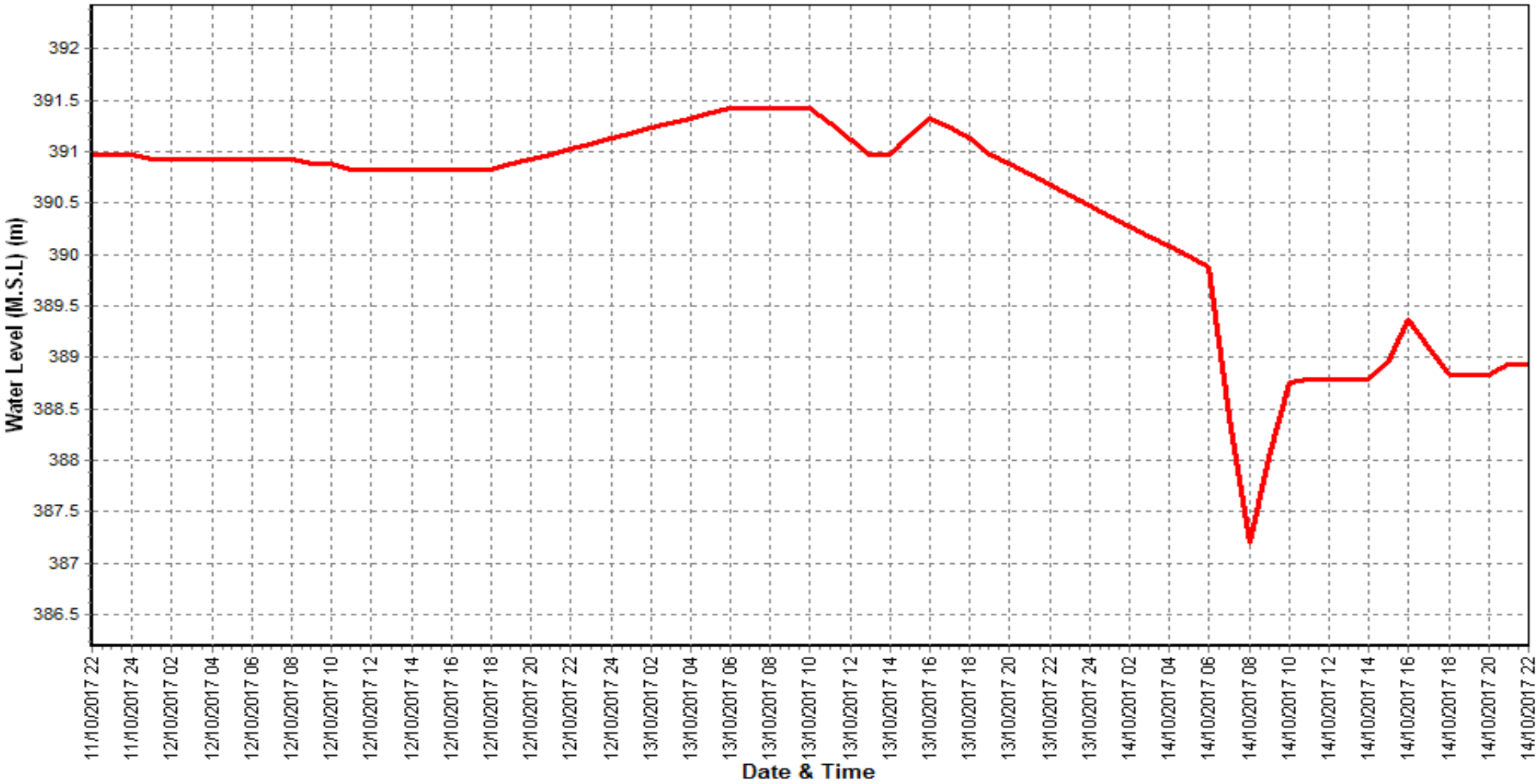
Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Dhalegaon (AG000S9)

Local River : Godavari

Division : U Godavari Div., Hyderabad

Sub-Division : U Godavari SD, Aurangabad

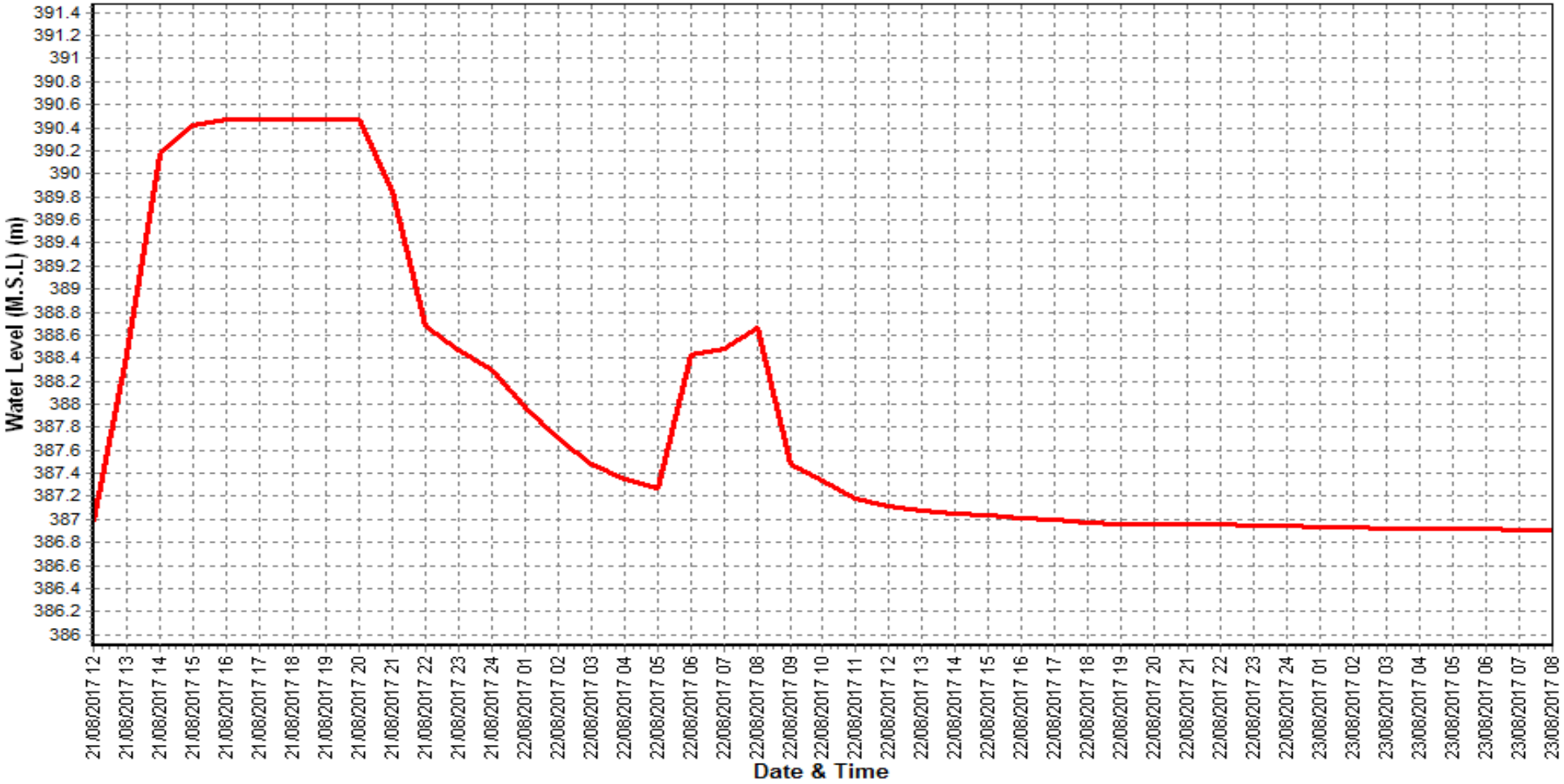


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Dhalegaon (AG000S9) **Division : U Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : U Godavari SD, Aurangabad**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Pachegaon (Teriminal site of River Pravara)**	**Code**	:	**AGU00D3**
State	:	Maharashtra	District		Ahmednagar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pravara	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Pravara
Division	:	U Godavari Div., Hyderabad	Sub-Division	:	U Godavari SD, Aurangabad
Drainage Area	:	5800 Sq. Km.	Bank	:	
Latitude	:	19°32'00"	Longitude	:	74°52'00"
Zero of Gauge (m)	:	470.000 (m.s.l)	07.12.1978		
		Opening Date	Closing Date		
Gauge	:	07.12.1978	**HFL During 2017-18**	:	**475.570 Meter**
			Corres. Discharge	:	**890.1 Cumecs (Estimated)**
Discharge	:	23.07.1983	**Date & Time of**	:	**21.09.2017**
			Occurance	:	**11:00 hrs.**
Sediment	:				
Water Quality	:				

HFL Recorded so far in m : 481.4 09/08/2006
Corresponding Discharge (cumecs) : 3929*

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
1983-1984	309.2	478.925	28.09.1983	0.000		25.03.1984
1984-1985	144.3	478.130	06.08.1984	0.000		25.01.1985
1985-1986	29.51	477.340	06.08.1985	0.000		25.01.1986
1986-1987	76.50	477.765	11.08.1986	0.000		25.01.1987
1987-1988	44.88	477.675	18.08.1987	0.000		26.01.1988
1988-1989	315.0	479.100	01.10.1988	0.000		25.01.1989
1989-1990	197.7	478.405	28.07.1989	0.000		25.01.1990
1990-1991	1234	481.450	12.10.1990	0.000	476.110	25.01.1991
1991-1992	606.4	479.950	28.07.1991	0.000	476.310	27.01.1992
1992-1993	68.50	477.320	10.09.1992	0.000		25.01.1993
1993-1994	144.5	478.100	29.09.1993	0.000	476.370	25.01.1994
1994-1995	571.7	479.910	29.08.1994	0.000	476.160	25.01.1995
1995-1996	34.84	477.120	23.07.1995	0.000	475.630	26.01.1996
1996-1997	344.6	478.600	22.10.1996	0.000	476.070	25.03.1997
1997-1998	1363	481.580	26.08.1997	0.000		25.04.1998
1998-1999	406.7	479.550	18.09.1998	0.000	475.950	06.03.1999
1999-2000	191.8	477.970	14.09.1999	0.000	476.480	29.01.2000
2000-2001	187.1	478.110	25.08.2000	0.000		25.01.2001

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2001-2002	287.3	478.610	17.08.2001	0.000	475.900	25.01.2002
2002-2003	98.15	477.295	14.08.2002	0.000		25.01.2003
2003-2004	241.4	474.020	29.07.2003	0.000		26.01.2004
2004-2005	386.8	474.395	04.08.2004	0.000		25.01.2005
2005-2006	1198	476.715	04.08.2005	0.000		25.01.2006
2006-2007	3932	481.400	09.08.2006	0.000	475.500	25.01.2007
2007-2008	750.1	474.900	20.09.2007	0.000		23.01.2008
2008-2009	1960	477.050	21.09.2008	0.000		25.01.2009
2009-2010	139.5	472.230	24.08.2009	0.000		24.01.2010
2010-2011	248.8	473.535	01.09.2010	0.000	471.130	17.01.2011
2011-2012	407.6	473.900	30.08.2011	0.000	470.000	26.01.2012
2012-2013	228.9	473.420	30.11.2012	0.000		21.09.2012
2013-2014	292.0	473.050	04.08.2013	0.000	470.680	03.09.2013
2014-2015	424.9	473.660	15.12.2014	0.000	471.100	29.01.2015
2015-2016	150.6	472.500	03.11.2015	0.000	470.000	26.01.2016
2016-2017	550.7	474.420	12.08.2016	0.000		21.01.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Pachegaon in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**1983-1984**	338	3	342
2	**1984-1985**	131	0	131
3	**1985-1986**	12	0	12
4	**1986-1987**	13	0	13
5	**1987-1988**	18	0	18
6	**1988-1989**	401	0	401
7	**1989-1990**	81	0	81
8	**1990-1991**	741	0	741
9	**1991-1992**	936	0	937
10	**1992-1993**	18	0	18
11	**1993-1994**	51	0	51
12	**1994-1995**	932	0	932
13	**1995-1996**	9	0	9
14	**1996-1997**	211	0	211
15	**1997-1998**	299	10	310
16	**1998-1999**	559	3	562
17	**1999-2000**	322	1	323
18	**2000-2001**	76	0	76
19	**2001-2002**	115	0	115
20	**2002-2003**	24	0	24
21	**2003-2004**	37	0	37
22	**2004-2005**	347	0	347
23	**2005-2006**	1277	0	1277
24	**2006-2007**	2423	0	2423
25	**2007-2008**	1414	0	1414
26	**2008-2009**	950	0	950
27	**2009-2010**	18	0	18
28	**2010-2011**	215	7	222
29	**2011-2012**	380	0	380
30	**2012-2013**	88	97	185
31	**2013-2014**	259	0	259
32	**2014-2015**	69	195	265
33	**2015-2016**	133	2	135
34	**2016-2017**	523	8	531
Average		395	10	404

Stage-Discharge Data for the period 2017 - 2018

Station Name : Pachegaon (AGU00D3) **Division : U Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : U Godavari SD, Aurangabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000	472.650	115.9	473.240	196.3	472.240	60.29 *	471.850	0.000
2		0.000		0.000	472.400	79.70	471.960	35.81 *	472.170	53.55 *	471.830	0.000
3		0.000		0.000	472.160	55.79	471.460	8.222 *	472.100	42.47	471.800	0.000
4		0.000		0.000	472.140	49.74	471.220	1.964	472.080	0.000	471.750	0.000
5		0.000		0.000	472.110	50.74	471.150	1.251	471.830	0.000	471.710	0.000
6		0.000		0.000	471.890	30.72 *	471.190	1.572	471.780	0.000	471.680	0.000
7		0.000		0.000	471.610	15.81	471.190	1.624	471.740	0.000	471.650	0.000
8		0.000		0.000	471.330	2.486	471.350	4.442	471.680	0.000	471.620	0.000
9		0.000		0.000	471.030	0.000	471.230	2.066	471.620	0.000	471.580	0.000
10		0.000		0.000	471.020	0.000	471.200	1.690 *	471.830	0.000	471.540	0.000
11		0.000		0.000	471.010	0.000	471.030	0.000	472.590	73.94	471.510	0.000
12		0.000		0.000	471.000	0.000	471.020	0.000	473.750	279.0	471.460	0.000
13		0.000		0.000	470.990	0.000	471.020	0.000	473.250	221.9	471.430	0.000
14		0.000		0.000	470.980	0.000	471.000	0.000	472.690	88.99	471.400	0.000
15		0.000		0.000	470.970	0.000	471.070	0.000	472.800	129.5 *	471.370	0.000
16		0.000		0.000	470.970	0.000	471.760	24.61	472.900	127.2	471.320	0.000
17		0.000		0.000	470.970	0.000	472.120	48.99 *	472.700	86.80	471.290	0.000
18		0.000		0.000	470.960	0.000	472.350	71.40	472.480	66.59	471.260	0.000
19		0.000		0.000	470.960	0.000	471.900	32.79	472.450	83.04 *	471.210	0.000
20		0.000		0.000	470.960	0.000	471.500	10.38	472.440	64.10	471.180	0.000
21		0.000		0.000	474.100	452.9	475.480	834.8	472.340	54.74	471.170	0.000
22		0.000		0.000	473.260	258.9	473.490	293.4	472.250	61.29 *	471.150	0.000
23		0.000		0.000	472.500	97.06	472.595	107.3	471.920	0.000	471.140	0.000
24		0.000		0.000	472.060	50.24	472.600	101.6 *	472.130	50.22	471.100	0.000
25		0.000		0.000	471.730	20.60 *	472.620	108.6	472.060	5.801	471.040	0.000
26		0.000		0.000	471.580	12.59	472.440	87.16	472.075	6.298	471.000	0.000
27		0.000		0.000	471.170	1.261 *	472.320	82.11	471.900	4.060	471.000	0.000
28		0.000		0.000	471.250	2.569	472.050	48.38	471.820	2.428	471.000	0.000
29		0.000		0.000	471.680	23.60	471.670	19.79	471.820	26.03 *	471.000	0.000
30		0.000		0.000	472.470	87.18	472.260	62.30 *	471.880	1.386	471.000	0.000
31			473.025	209.5	473.485	348.9			471.880	1.972		
Ten-Daily Mean												
I Ten-Daily		0.000		0.000	471.834	40.09	471.519	25.50	471.907	15.63	471.701	0.000
II Ten-Daily		0.000		0.000	470.977	0.000	471.477	18.82	472.805	122.1	471.343	0.000
III Ten-Daily		0.000	473.025	19.05	472.299	123.3	472.753	174.5	472.007	19.48	471.060	0.000
Monthly												
Min.		0.000	473.025	0.000	470.960	0.000	471.000	0.000	471.620	0.000	471.000	0.000
Max.		0.000	473.025	209.5	474.100	452.9	475.480	834.8	473.750	279.0	471.850	0.000
Mean		0.000	473.025	6.759	471.722	56.67	471.916	72.95	472.232	51.34	471.368	0.000

Annual Runoff in MCM = 502 Annual Runoff in mm = 87

Peak Observed Discharge = 834.8 cumecs on 21/09/2017 Corres. Water Level :475.480 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Pachegaon (AGU00D3) **Division : U Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : U Godavari SD, Aurangabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	471.000	0.000	470.830	0.000	470.870	0.000		0.000		0.000	470.900	0.000
2	471.000	0.000	470.940	0.000	470.860	0.000		0.000		0.000	470.890	0.000
3	471.000	0.000	470.940	0.000	470.860	0.000		0.000		0.000	470.880	0.000
4	471.000	0.000	470.940	0.000	470.860	0.000		0.000		0.000	470.870	0.000
5	471.000	0.000	470.930	0.000	470.850	0.000		0.000		0.000	470.860	0.000
6	470.990	0.000	470.920	0.000	470.850	0.000		0.000		0.000	470.850	0.000
7	470.980	0.000	470.910	0.000	470.850	0.000		0.000		0.000	470.840	0.000
8	470.970	0.000	470.900	0.000	470.850	0.000		0.000		0.000	470.830	0.000
9	470.960	0.000	470.900	0.000	470.850	0.000		0.000		0.000	470.820	0.000
10	470.950	0.000	470.900	0.000	470.850	0.000		0.000		0.000	470.810	0.000
11	470.940	0.000	470.900	0.000	470.850	0.000		0.000		0.000	470.800	0.000
12	470.930	0.000	470.900	0.000	470.840	0.000		0.000		0.000	470.790	0.000
13	470.920	0.000	470.900	0.000	470.840	0.000		0.000		0.000	470.780	0.000
14	470.910	0.000	470.900	0.000	470.840	0.000		0.000	471.780	30.44	470.770	0.000
15	470.900	0.000	470.890	0.000	470.830	0.000		0.000	471.890	32.48	470.760	0.000
16	470.890	0.000	470.890	0.000	470.830	0.000		0.000	471.810	0.000	470.750	0.000
17	470.880	0.000	470.890	0.000	470.830	0.000		0.000	471.360	0.000	470.740	0.000
18	470.870	0.000	470.890	0.000	470.830	0.000		0.000	471.260	0.000	470.730	0.000
19	470.860	0.000	470.890	0.000	470.830	0.000		0.000	471.000	0.000	470.720	0.000
20	470.850	0.000	470.890	0.000	470.830	0.000		0.000	471.000	0.000	470.710	0.000
21	470.840	0.000	470.880	0.000	470.820	0.000		0.000	471.000	0.000	470.700	0.000
22	470.830	0.000	470.880	0.000	470.800	0.000		0.000	470.990	0.000	470.690	0.000
23	470.820	0.000	470.880	0.000	470.780	0.000		0.000	470.980	0.000	470.680	0.000
24	470.810	0.000	470.870	0.000	470.700	0.000		0.000	470.970	0.000	470.670	0.000
25	470.800	0.000	470.870	0.000	470.600	0.000		0.000	470.960	0.000	470.660	0.000
26	470.790	0.000	470.870	0.000	470.500	0.000		0.000	470.950	0.000	470.650	0.000
27	470.780	0.000	470.870	0.000	470.400	0.000		0.000	470.940	0.000	470.640	0.000
28	470.770	0.000	470.870	0.000	470.200	0.000		0.000	470.930	0.000	470.630	0.000
29	470.760	0.000	470.870	0.000				0.000	470.920	0.000	470.600	0.000
30	470.750	0.000	470.870	0.000				0.000	470.910	0.000	470.580	0.000
31	470.740	0.000	470.870	0.000				0.000			470.560	0.000
Ten-Daily Mean												
I Ten-Daily	470.985	0.000	470.911	0.000	470.855	0.000		0.000		0.000	470.855	0.000
II Ten-Daily	470.895	0.000	470.894	0.000	470.835	0.000		0.000	471.443	6.292	470.755	0.000
III Ten-Daily	470.790	0.000	470.873	0.000	470.600	0.000		0.000	470.955	0.000	470.642	0.000
Monthly												
Min.	470.740	0.000	470.830	0.000	470.200	0.000		0.000	470.910	0.000	470.560	0.000
Max.	471.000	0.000	470.940	0.000	470.870	0.000		0.000	471.890	32.48	470.900	0.000
Mean	470.887	0.000	470.892	0.000	470.775	0.000		0.000	471.156	2.097	470.747	0.000

Peak Computed Discharge = 129.5 cumecs on 15/10/2017 **Corres. Water Level :472.800 m**

Lowest Computed Discharge = 1.261 cumecs on 27/08/2017 **Corres. Water Level :471.170 m**

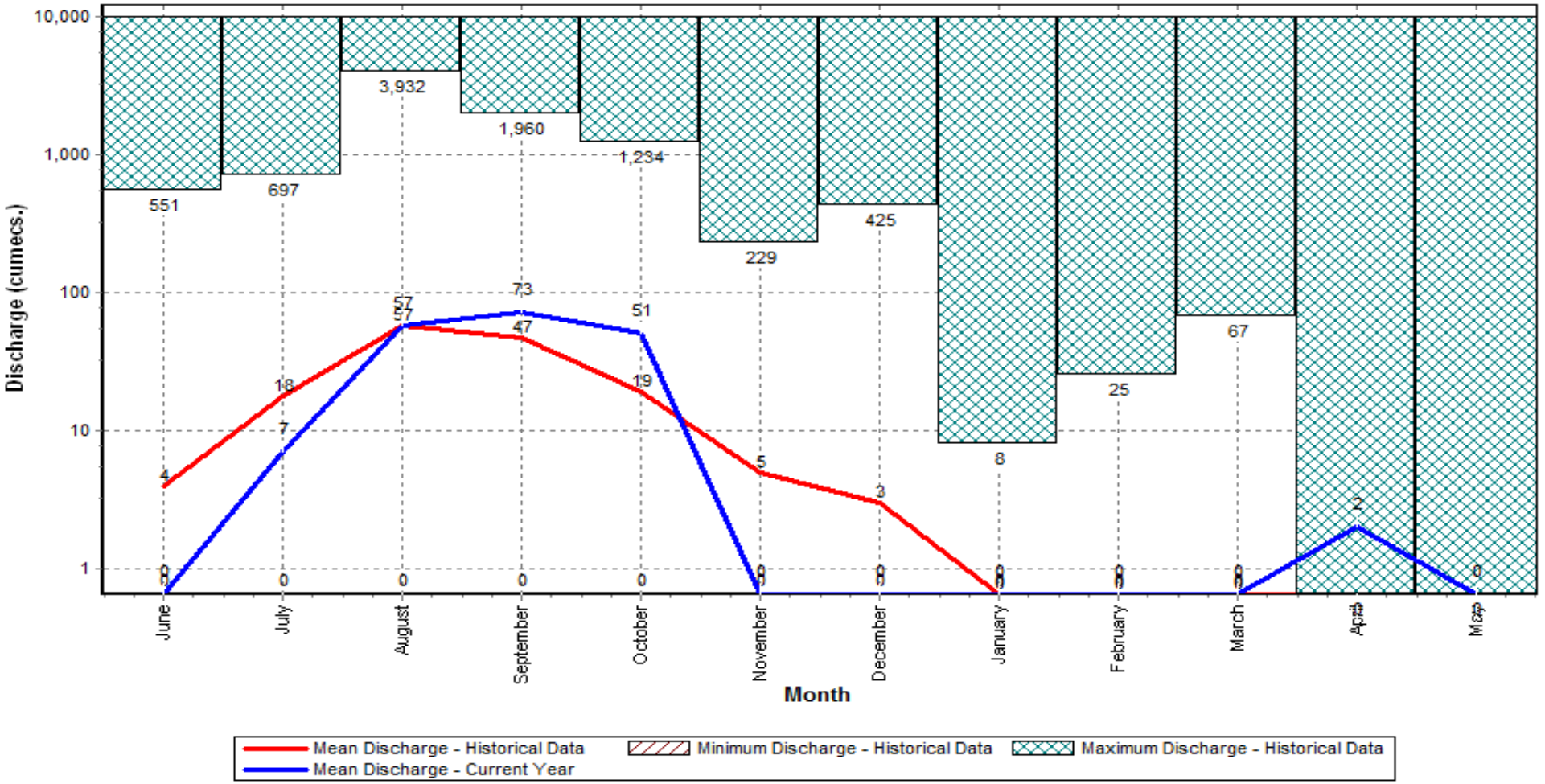
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Pachegaon (AGU00D3) | **Data considered : 1983-2018** | **Division : U Godavari Div., Hyderabad**

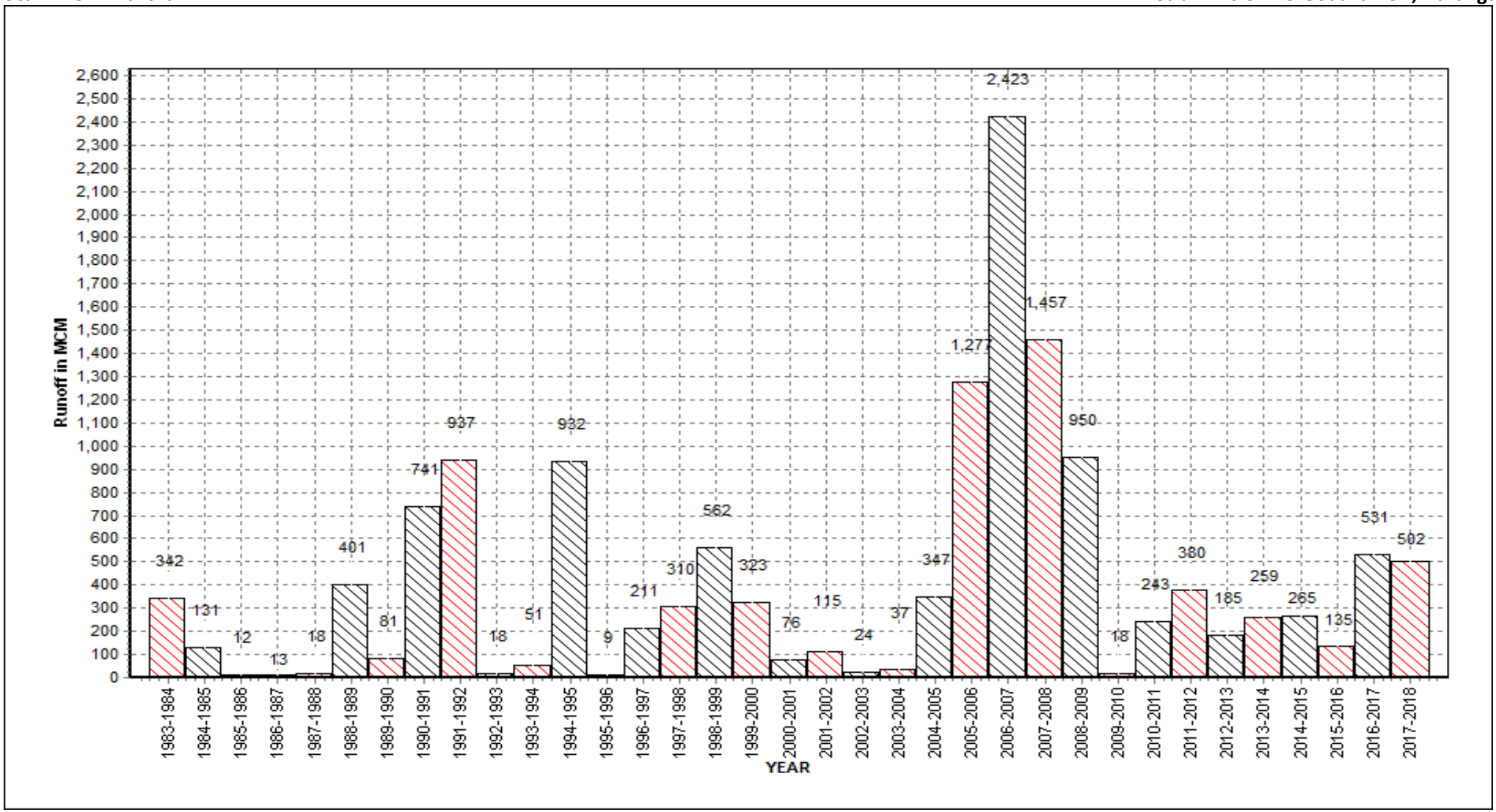
Local River : Pravara | **Sub-Division : U Godavari SD, Aurangabad**



Annual Runoff Values for the period: 1983 - 2018

Station Name : Pachegaon (AGU00D3) **Division : U Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : U Godavari SD, Aurangabad**



Note: Missing values have not been considered while arriving at Annual Runoff

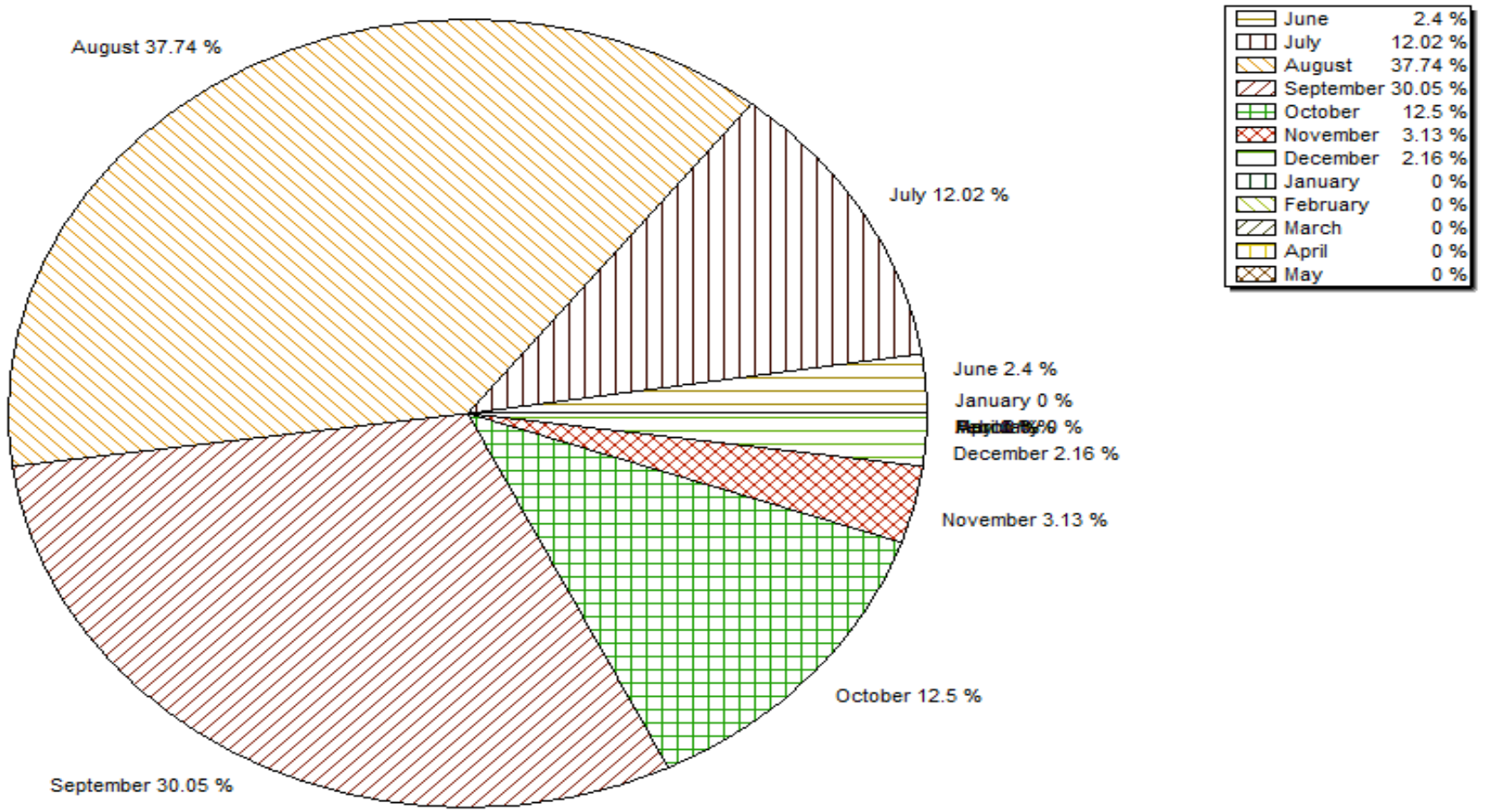
Monthly Average Runoff based on period : 1983-2017

Station Name : Pachegaon (AGU00D3)

Local River : Pravara

Division : U Godavari Div., Hyderabad

Sub-Division : U Godavari SD, Aurangabad



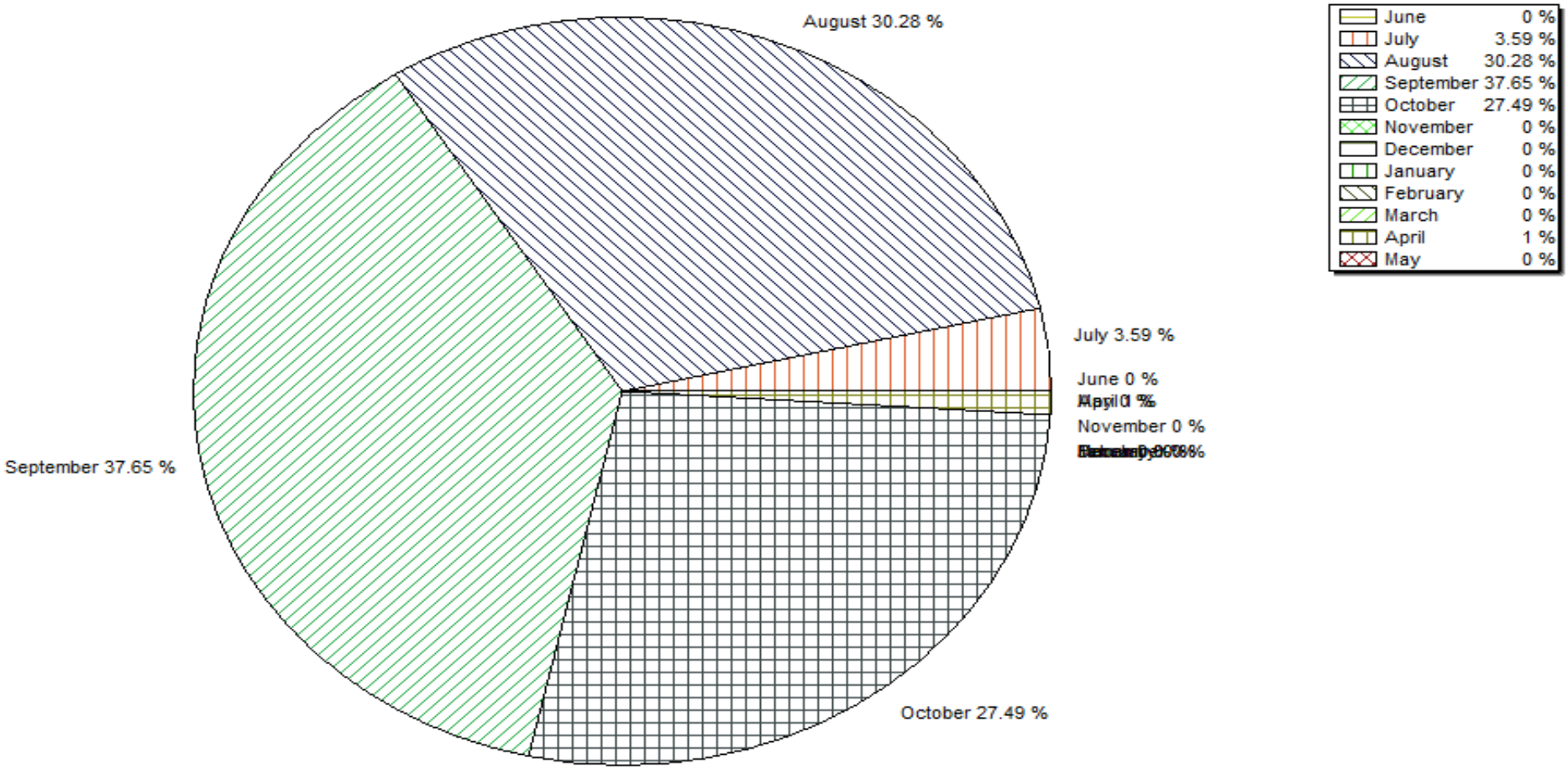
Monthly Runoff for the Year : 2017-2018

Station Name : Pachegaon (AGU00D3)

Local River : Pravara

Division : U Godavari Div., Hyderabad

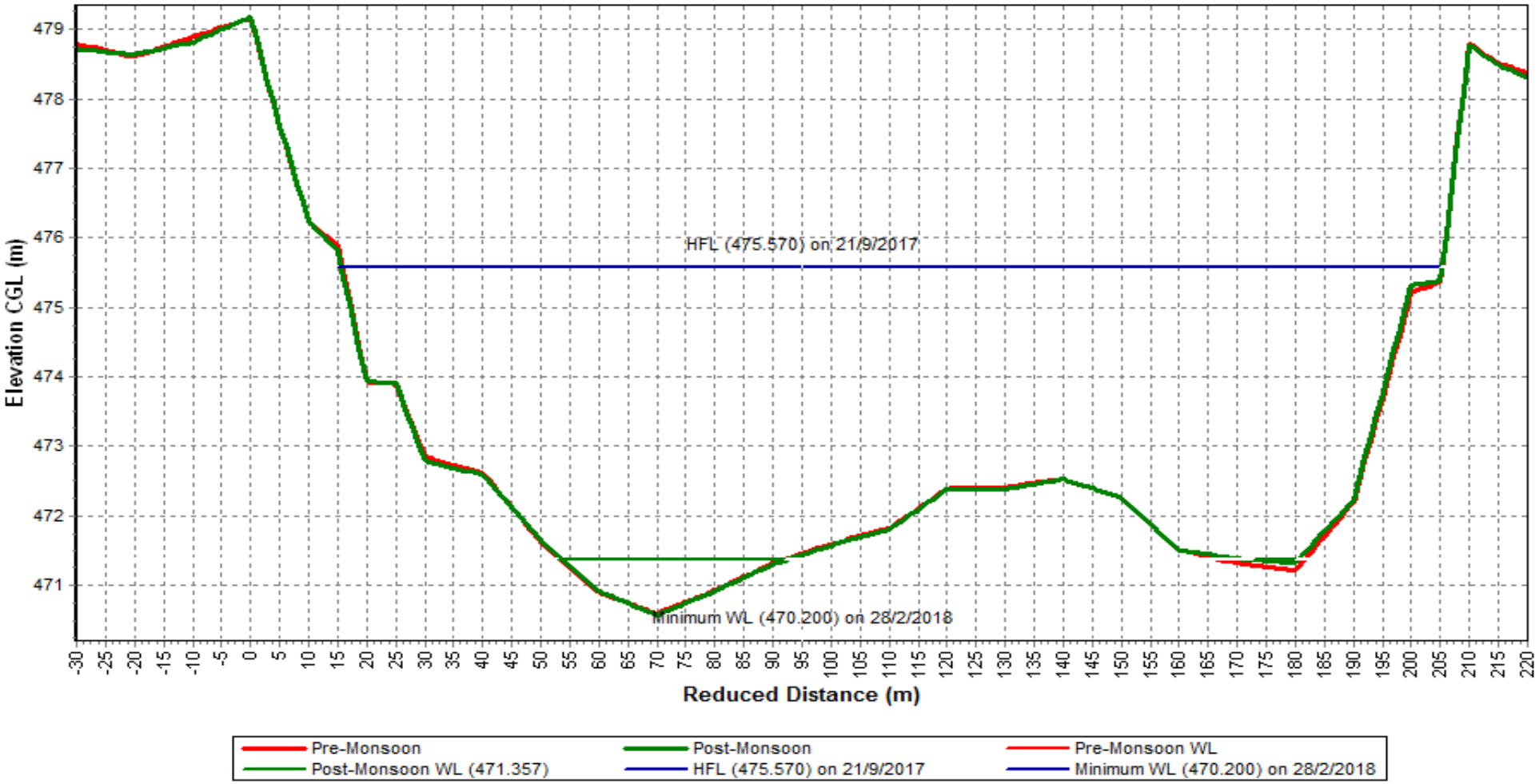
Sub-Division : U Godavari SD, Aurangabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Pachegaon (AGU00D3) **Division : U Godavari Div., Hyderabad**

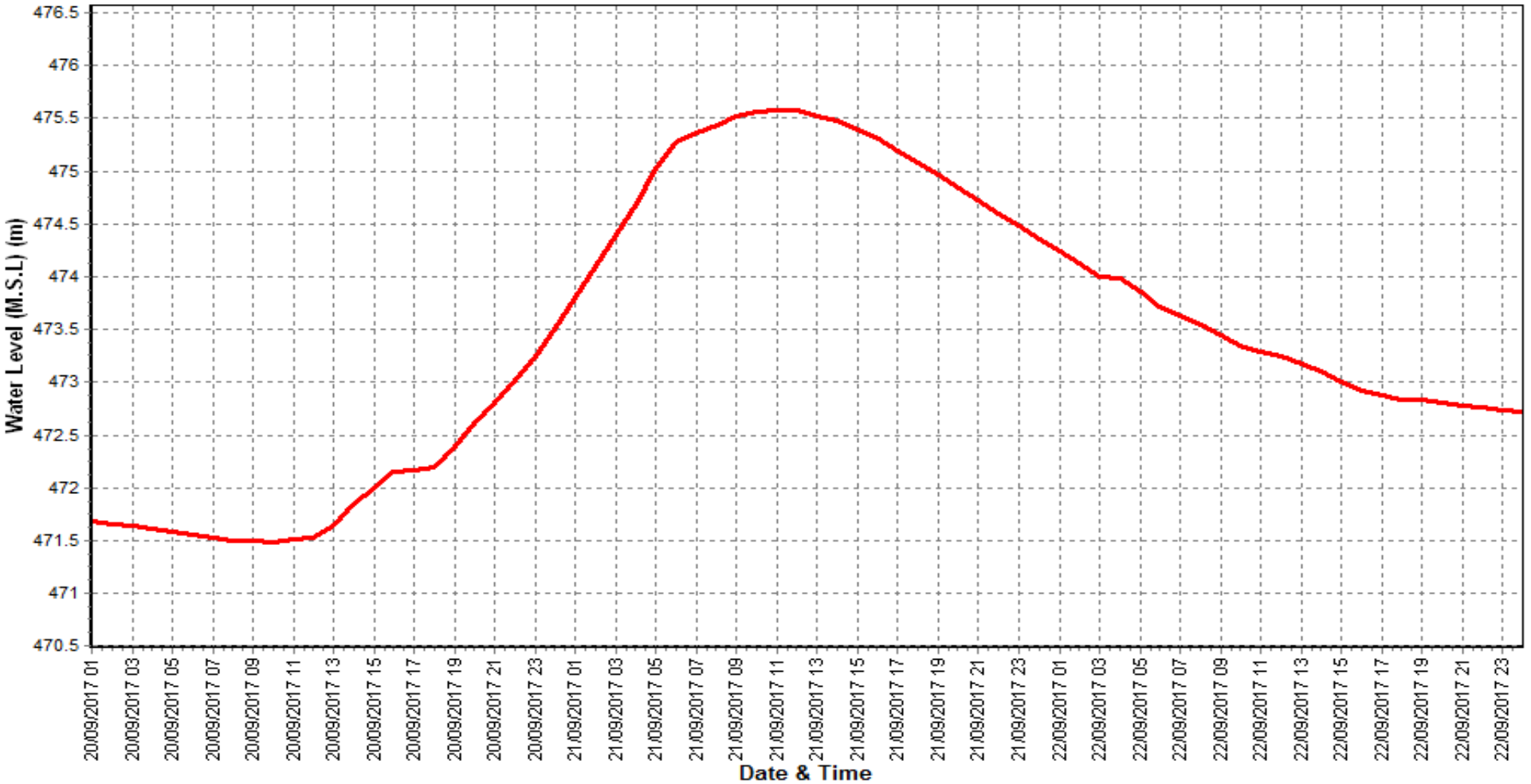
Local River : Pravara **Sub-Division : U Godavari SD, Aurangabad**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Pachegaon (AGU00D3) **Division : U Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : U Godavari SD, Aurangabad**

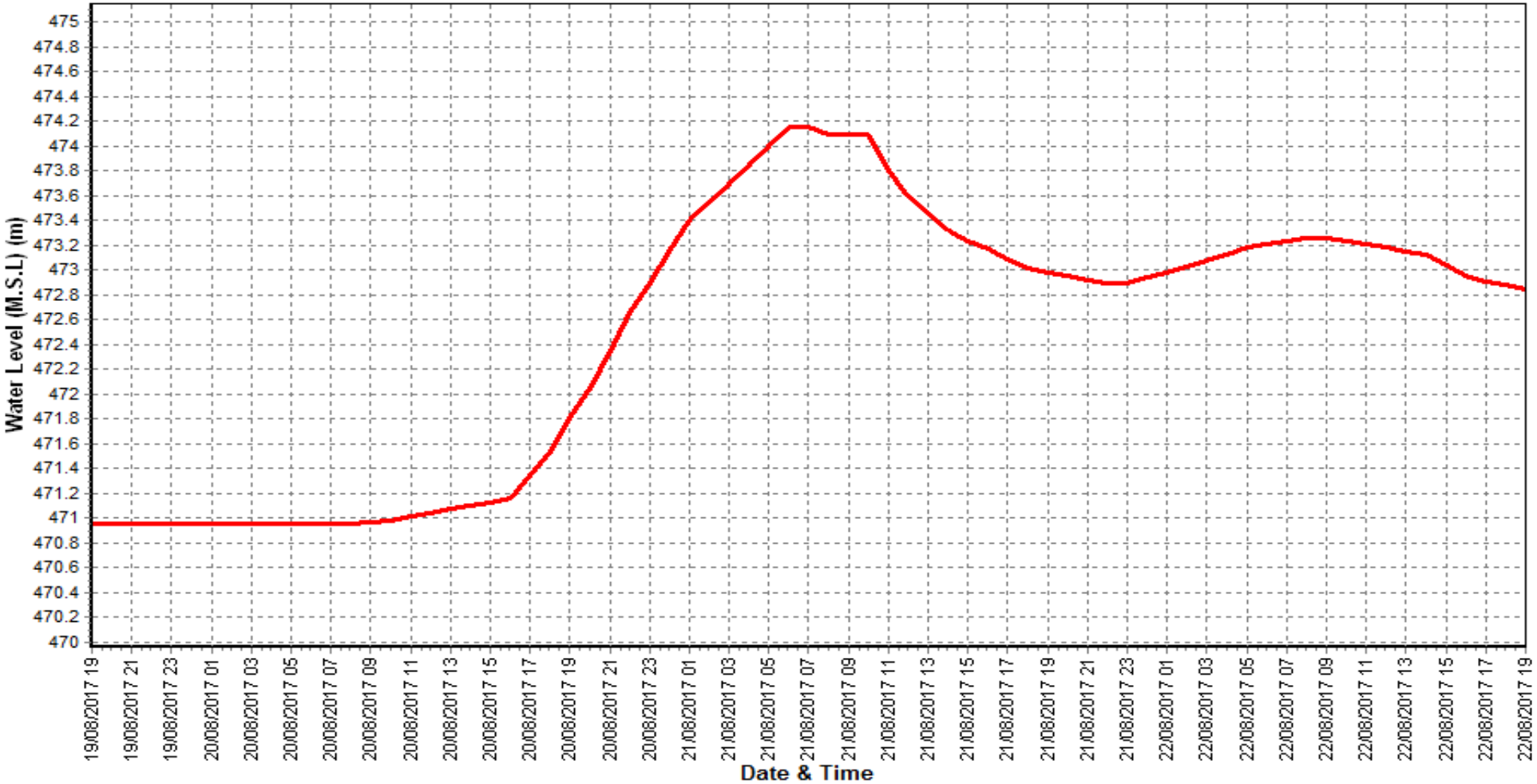


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Pachegaon (AGU00D3) **Division : U Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : U Godavari SD, Aurangabad**

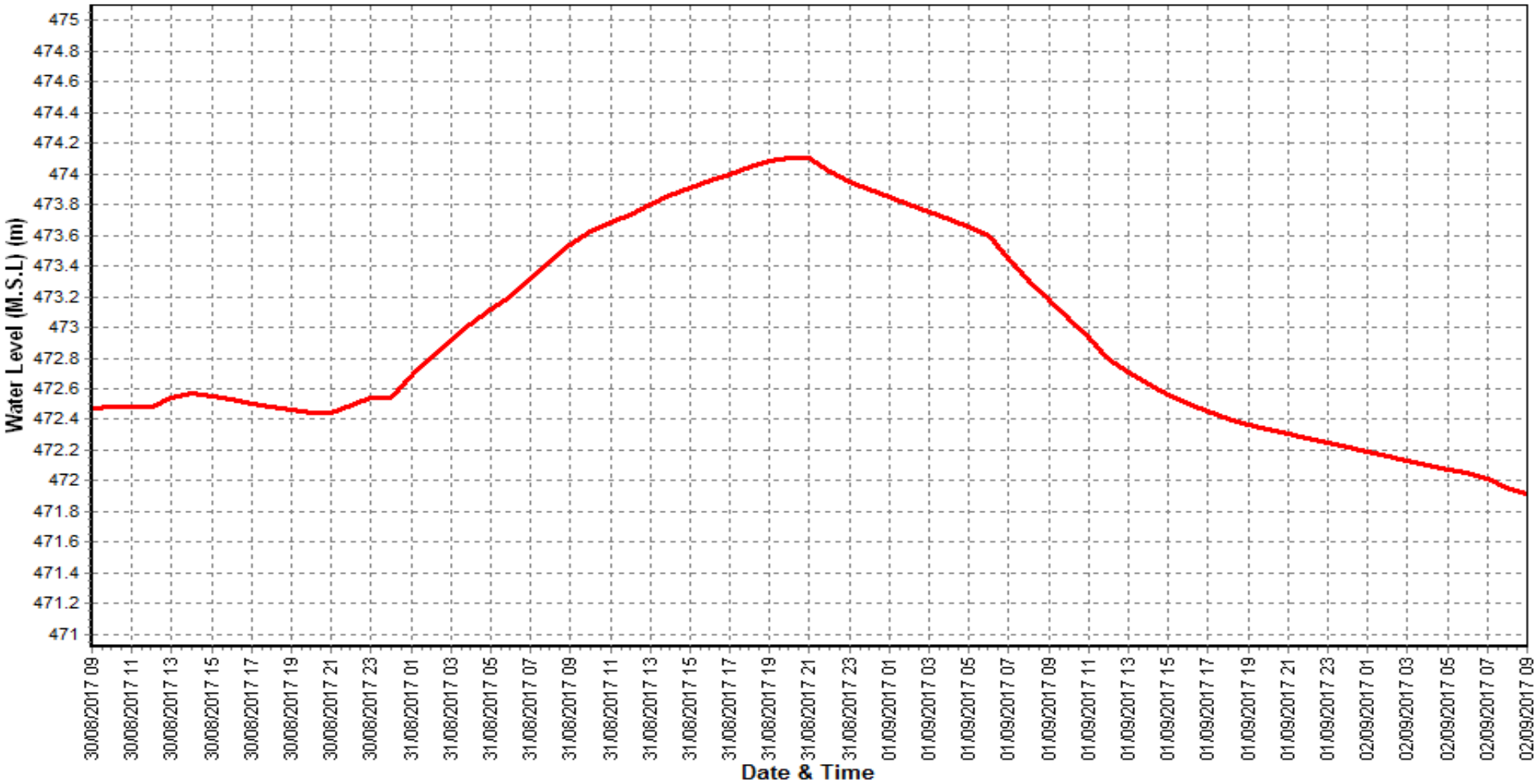


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Pachegaon (AGU00D3) **Division : U Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : U Godavari SD, Aurangabad**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Pratapur**	**Code**	:	**PRATAPUR**
State	:	Maharashtra	District		Ahmednagar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:	Pravara	Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Pravara
Division	:	Upper Godavari Div., Hyderabad	Sub-Division	:	Upper Godavari SD, Aurangabad
Drainage Area	:	1708 Sq. Km.	Bank	:	Left
Latitude	:	19°21'30"	Longitude	:	74°23'03"
Zero of Gauge (m)	:	523.000 (m.s.l)	01.11.2016		
		Opening Date	Closing Date		
Gauge	:	01.11.2016			
Discharge	:	01.06.2017			
Sediment	:				
Water Quality	:				

HFL Recorded so far in m :
Corresponding Discharge (cumecs) :

Stage-Discharge Data for the period 2017 - 2018

Station Name : Pratapur (PRATAPUR) **Division : Upper Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : Upper Godavari SD, Aurangabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000	524.510	0.000	525.400	0.000	523.560	7.550 *	523.070	0.155
2		0.000		0.000	524.380	0.000	524.710	0.000	523.410	4.250 *	523.180	1.194
3		0.000		0.000	524.370	0.000	523.560	0.000	523.300	2.295	523.300	2.493
4		0.000		0.000	524.360	0.000	523.110	0.000	523.145	1.002	523.320	2.570
5		0.000		0.000	524.350	0.000	523.060	0.000	523.070	0.170 *	523.300	2.250 *
6		0.000		0.000	524.330	0.000	523.060	0.000	523.300	2.290	523.280	2.098
7		0.000		0.000	524.180	0.000	523.050	0.000	523.300	2.250	523.240	1.677
8		0.000		0.000	523.880	0.000	523.050	0.000	523.300	2.250 *	523.220	1.411
9		0.000		0.000	523.390	5.238	523.150	0.000	523.700	12.13	523.220	1.420
10		0.000		0.000		0.000	523.280	0.000	524.160	35.50 *	523.220	1.397
11		0.000		0.000		0.000	523.300	2.327	523.920	25.25 *	523.210	1.343
12		0.000		0.000		0.000	523.320	2.513	524.320	42.50 *	523.210	1.340 *
13		0.000		0.000		0.000	523.340	2.559	523.780	18.12	523.210	1.349
14		0.000		0.000		0.000	523.300	2.285	523.770	17.84	523.200	1.214
15		0.000		0.000		0.000	523.440	5.791	523.740	15.54 *	523.200	1.207
16		0.000		0.000		0.000	523.900	0.000	523.650	11.22	523.200	1.186
17		0.000		0.000		0.000	523.880	0.000	523.590	10.03	523.190	1.116
18		0.000		0.000		0.000	523.600	10.00	524.120	32.25 *	523.190	1.105
19		0.000		0.000		0.000	524.650	0.000	524.040	27.50 *	523.180	1.050 *
20		0.000		0.000		0.000	525.510	0.000	523.830	19.55 *	523.180	1.050
21		0.000		0.000	524.850	0.000	526.300	0.000	523.775	18.24	523.180	1.055
22		0.000		0.000	524.660	0.000	526.000	0.000	523.685	15.15	523.170	1.027
23		0.000		0.000	523.950	0.000	525.300	0.000	523.450	4.944	523.170	1.041
24		0.000		0.000	523.650	11.33	524.820	0.000	523.460	4.870	523.160	0.960
25		0.000		0.000	523.420	0.000	523.610	10.26	523.470	5.533	523.160	0.960
26		0.000	523.505	7.886	523.060	0.000	523.560	9.043	523.420	4.774	523.150	0.950 *
27		0.000	523.500	8.043	523.500	7.801	523.515	7.753	523.310	2.498	523.100	0.163
28		0.000	523.480	7.233	523.700	0.000	523.820	0.000	523.150	1.008	523.040	0.000 *
29		0.000		0.000	525.310	0.000	523.760	0.000	523.080	0.170 *		0.000 *
30		0.000	525.630	0.000	526.500	0.000	523.600	0.000 *	523.070	0.166		0.000 *
31			524.970	0.000	525.870	0.000			523.070	0.152		
Ten-Daily Mean												
I Ten-Daily		0.000		0.000	524.195	0.524	523.543	0.000	523.425	6.969	523.235	1.667
II Ten-Daily		0.000		0.000		0.000	523.824	2.548	523.876	21.98	523.197	1.196
III Ten-Daily		0.000	524.217	2.106	524.406	1.739	524.429	2.705	523.358	5.228	523.141	0.616
Monthly												
Min.		0.000	523.480	0.000	523.060	0.000	523.050	0.000	523.070	0.152	523.040	0.000
Max.		0.000	525.630	8.043	526.500	11.33	526.300	10.26	524.320	42.50	523.320	2.570
Mean		0.000	524.217	0.747	524.311	0.786	523.932	1.751	523.547	11.19	523.195	1.159

Annual Runoff in MCM = 83 Annual Runoff in mm = 48

Peak Observed Discharge = 18.24 cumecs on 21/10/2017 Corres. Water Level :523.775 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Pratapur (PRATAPUR) **Division : Upper Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : Upper Godavari SD, Aurangabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1		0.000		0.000		0.000		0.000		0.000		0.000
2		0.000		0.000		0.000		0.000		0.000		0.000
3		0.000		0.000		0.000		0.000		0.000		0.000
4		0.000		0.000		0.000		0.000	523.500	7.382		0.000
5		0.000		0.000		0.000		0.000	523.950	26.50 *		0.000
6		0.000		0.000		0.000		0.000	524.000	27.50 *		0.000
7		0.000		0.000		0.000		0.000	524.100	28.50 *		0.000
8		0.000		0.000		0.000		0.000	524.100	28.50 *		0.000
9		0.000		0.000		0.000		0.000	524.100	28.50 *		0.000
10		0.000		0.000		0.000		0.000	524.080	28.20 *		0.000
11		0.000		0.000		0.000		0.000	524.050	28.30 *		0.000
12		0.000		0.000		0.000		0.000	524.000	27.50 *		0.000
13		0.000		0.000		0.000		0.000	524.000	27.54 *		0.000
14		0.000		0.000		0.000		0.000	524.000	27.50 *		0.000
15		0.000		0.000		0.000		0.000	523.980	26.20 *		0.000
16		0.000		0.000		0.000		0.000	523.980	26.20 *		0.000
17		0.000		0.000		0.000		0.000	523.780	18.05		0.000
18		0.000		0.000		0.000		0.000	523.950	25.50 *		0.000
19		0.000		0.000		0.000		0.000	524.000	27.50 *		0.000
20		0.000		0.000		0.000		0.000	523.960	25.80 *		0.000
21		0.000		0.000		0.000		0.000	523.830	22.50 *		0.000
22		0.000		0.000		0.000		0.000	523.520	7.800 *		0.000
23		0.000		0.000		0.000		0.000	523.500	7.701		0.000
24		0.000		0.000		0.000		0.000		0.000		0.000
25		0.000		0.000		0.000		0.000		0.000		0.000
26		0.000		0.000		0.000		0.000		0.000		0.000
27		0.000		0.000		0.000		0.000		0.000		0.000
28		0.000		0.000		0.000		0.000		0.000		0.000
29		0.000		0.000				0.000		0.000		0.000
30		0.000		0.000				0.000		0.000		0.000
31		0.000		0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily		0.000		0.000		0.000		0.000	523.976	17.51		0.000
II Ten-Daily		0.000		0.000		0.000		0.000	523.970	26.01		0.000
III Ten-Daily		0.000		0.000		0.000		0.000	523.617	3.800		0.000
Monthly												
Min.		0.000		0.000		0.000		0.000	523.500	0.000		0.000
Max.		0.000		0.000		0.000		0.000	524.100	28.50		0.000
Mean		0.000		0.000		0.000		0.000	523.919	15.77		0.000

Peak Computed Discharge = 42.50 cumecs on 12/10/2017 Corres. Water Level :524.320 m

Lowest Computed Discharge = 0.000 cumecs on 30/09/2017 Corres. Water Level :523.600 m

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

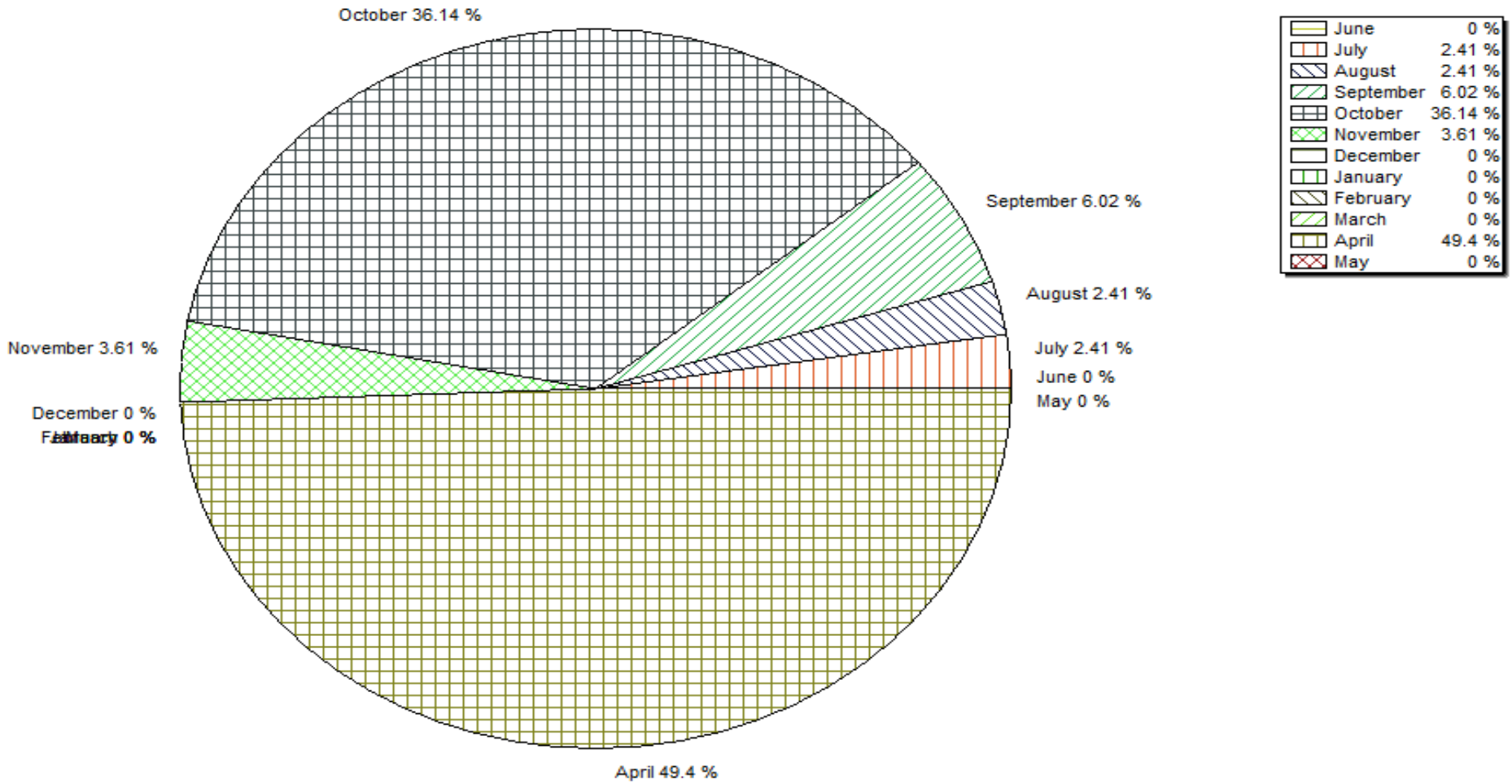
Monthly Runoff for the Year : 2017-2018

Station Name : Pratapur (PRATAPUR)

Local River : Pravara

Division : Upper Godavari Div., Hyderabad

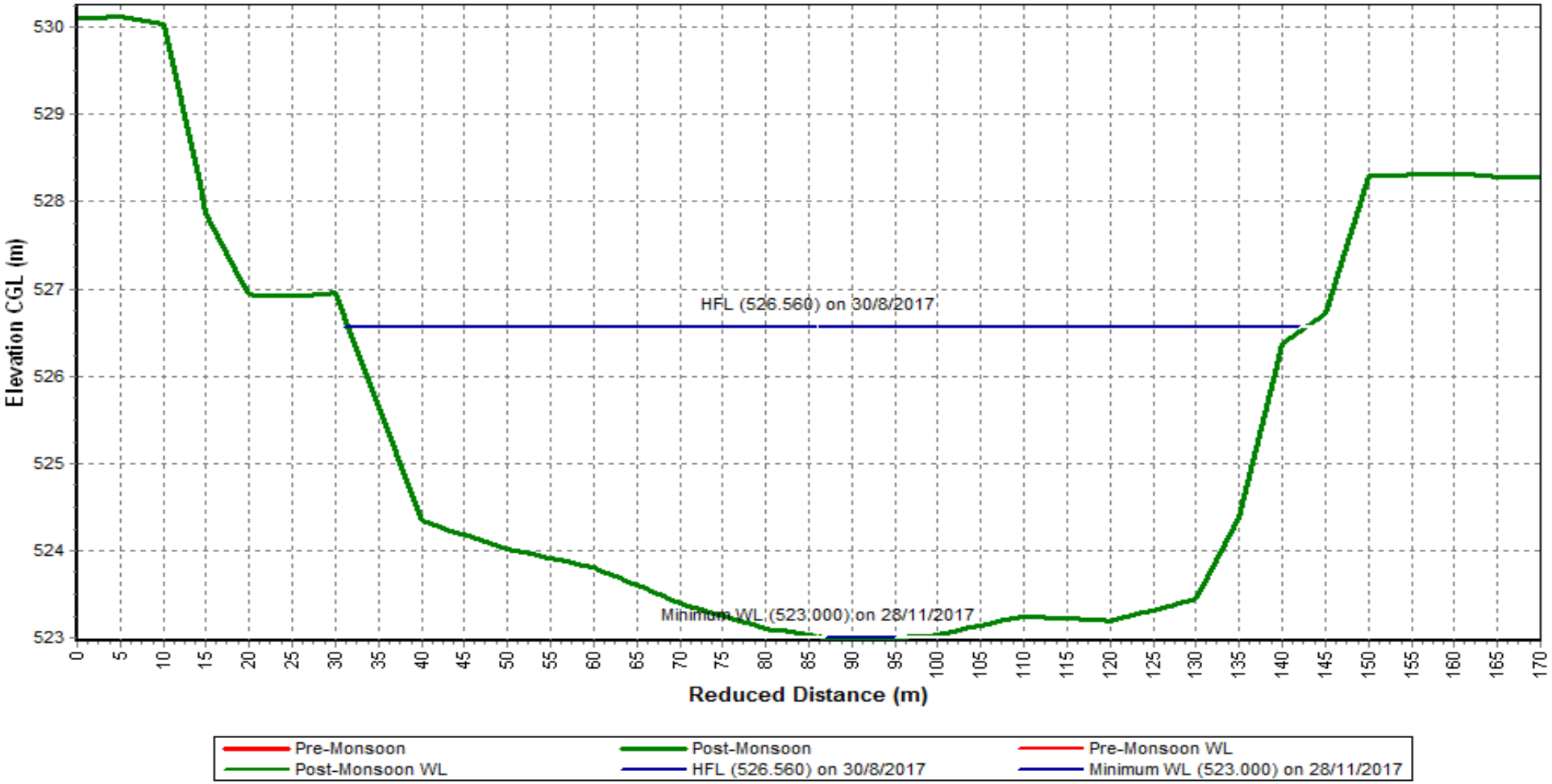
Sub-Division : Upper Godavari SD, Aurangabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Pratapur (PRATAPUR) **Division : Upper Godavari Div., Hyderabad**

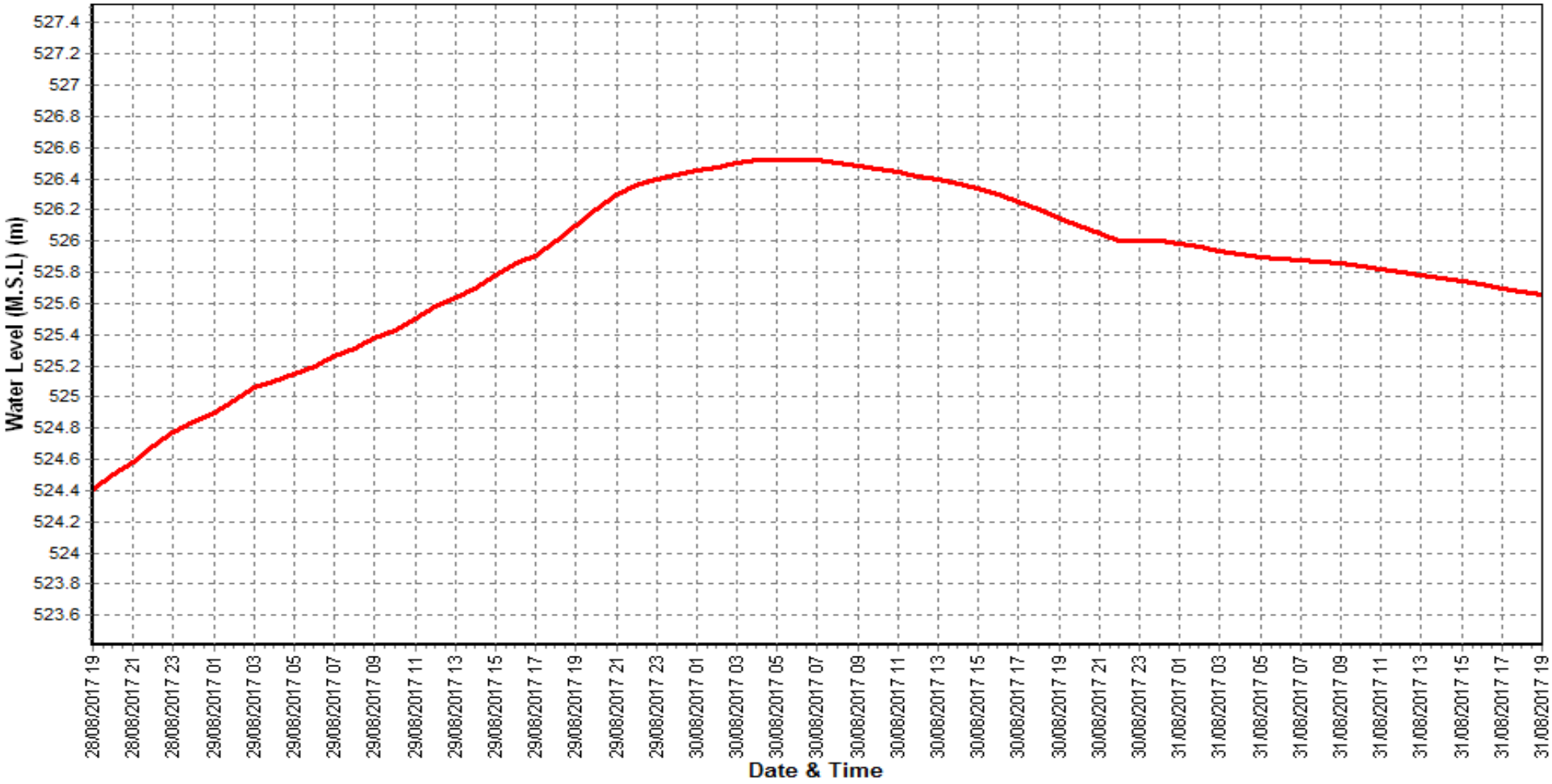
Local River : Pravara **Sub-Division : Upper Godavari SD, Aurangabad**



Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Pratapur (PRATAPUR) **Division : Upper Godavari Div., Hyderabad**

Local River : Pravara **Sub-Division : Upper Godavari SD, Aurangabad**



Time Span: 72 Hrs

HISTORY SHEET

			Water Year	:	**2017-2018**
Site	:	**Kopergaon**	**Code**	:	**KOPERGAON**
State	:	Maharashtra	District		Ahmednagar
Basin	:	Godavari	Independent River	:	Godavari
Tributary	:		Sub Tributary	:	
Sub-Sub Tributary	:		Local River	:	Godavari
Division	:	Upper Godavari Div., Hyderabad	Sub-Division	:	Upper Godavari SD, Aurangabad
Drainage Area	:	6840 Sq. Km.	Bank	:	Left
Latitude	:	19°52'00"	Longitude	:	74°28'28"
Zero of Gauge (m)	:	485.5 (m.s.l)	01.01.1977		
		Opening Date	Closing Date		
Gauge	:	25.05.1977	**HFL During 2017-18**	:	**491.400 Meter**
			Corres. Discharge	:	**1773 Cumecs (Estimated)**
Discharge	:	31.07.2014	**Date & Time of**	:	**24.07.2017**
			Occurance	:	**12:00 hrs.**
Sediment	:				
Water Quality	:	01.04.2014			

HFL Recorded so far in m : 495.950 03/08/2016
Corresponding Discharge (cumecs) :

Annual Maximum / Minimum discharge with corresponding Water Level (m.s.l)

	Maximum			Minimum		
Year	**Q (cumecs)**	**WL (m)**	**Date**	**Q (cumecs)**	**WL (m)**	**Date**
2014-2015	991.1	490.400	31.07.2014	0.000	485.500	21.01.2015
2015-2016	813.3	490.000	19.09.2015	0.000	485.500	25.01.2016
2016-2017	4029	495.600	03.08.2016	0.000	486.200	18.02.2017

Q : Observed / Computed Discharge WL : Corresponding Water Level(m.s.l)

Annual Runoff of Godavari at Kopergaon in MCM

Sl No	Year	Monsoon	Non-Monsoon	Annual
1	**2014-2015**	1150	0	1150
2	**2015-2016**	516	0	516
3	**2016-2017**	1736	0	1736
Average		1134	0	1134

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kopergaon (KOPERGAON) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Upper Godavari SD, Aurangabad**

Day	Jun		Jul		Aug		Sep		Oct		Nov	
	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q	W.L	Q
1		0.000		0.000	487.600	145.8	488.500	401.5	488.150	0.000	488.700	0.000
2		0.000		0.000	487.800	179.7	486.900	37.42 *	488.200	0.000	488.700	0.000
3		0.000	486.900	56.29	487.600	132.7	487.200	79.81 *	488.350	0.000	488.700	0.000
4		0.000	486.400	0.000	487.150	64.85	487.000	42.09	488.400	0.000	488.700	0.000
5		0.000	486.400	0.000	487.150	63.24	487.400	129.2	488.600	0.000	488.700	0.000
6		0.000	486.300	0.000	487.150	71.82 *	486.800	24.18	488.600	0.000	488.700	0.000
7		0.000	486.250	0.000	486.950	38.08	486.600	11.77	488.600	0.000	488.700	0.000
8		0.000	486.250	0.000	486.800	27.06	486.300	0.000	488.700	0.000	488.700	0.000
9		0.000	486.350	0.000	486.800	26.83	486.250	0.000	488.950	0.000	488.700	0.000
10		0.000	486.300	0.000	486.800	24.87	486.400	0.000	489.600	561.1	488.700	0.000
11		0.000	486.250	0.000	486.750	19.58	487.000	65.50	489.900	645.0	488.700	0.000
12		0.000	486.250	0.000	486.700	17.04 *	487.400	119.7	491.000	1051	488.700	0.000
13		0.000	486.250	0.000	486.650	13.03 *	486.700	16.79	489.500	520.0	488.700	0.000
14		0.000	486.250	0.000	486.600	9.788	486.400	0.000	489.400	475.5	488.700	0.000
15		0.000	489.100	514.8	486.450	0.000	486.400	0.000	489.200	0.000	488.700	0.000
16		0.000	489.100	615.6 *	486.400	0.000	487.600	132.2	489.200	0.000	488.700	0.000
17		0.000	488.400	346.4	486.400	0.000	486.700	0.000	488.900	0.000	488.700	0.000
18		0.000	488.400	328.4	486.400	0.000	486.900	0.000	488.900	0.000	488.700	0.000
19		0.000	487.000	43.38	486.400	0.000	487.500	0.000	488.700	0.000	488.650	0.000
20		0.000	487.000	40.69	486.350	0.000	487.850	0.000	488.600	0.000	488.650	0.000
21		0.000	486.950	32.04	488.800	549.5	489.400	744.1	488.600	0.000	488.650	0.000
22		0.000	489.850	1012	488.700	461.9	487.700	156.7	488.800	0.000	488.650	0.000
23		0.000	490.200	1106 *	487.900	194.8	487.400	120.7	488.850	0.000	488.600	0.000
24		0.000	491.150	1701	487.200	91.43	487.500	135.0 *	488.800	0.000	488.550	0.000
25		0.000	489.600	864.9	486.950	43.54 *	487.850	0.000	488.850	0.000	488.450	0.000
26		0.000	488.200	359.2	487.100	78.81	488.000	0.000	488.800	0.000	488.450	0.000
27		0.000	487.750	253.3	488.800	503.5 *	487.850	0.000	488.800	0.000	488.450	0.000
28		0.000	487.600	211.7	488.400	370.4	487.800	0.000	488.800	0.000	488.450	0.000
29		0.000	491.100	1474	489.400	754.3	487.800	0.000	488.700	0.000	488.450	0.000
30		0.000	489.800	913.4 *	488.900	535.6	487.950	0.000	488.700	0.000	488.450	0.000
31			488.300	325.9	490.200	1117			488.700	0.000		
Ten-Daily Mean												
I Ten-Daily		0.000	486.394	5.629	487.180	77.49	486.935	72.59	488.615	56.11	488.700	0.000
II Ten-Daily		0.000	487.400	188.9	486.510	5.944	487.045	33.42	489.330	269.1	488.690	0.000
III Ten-Daily		0.000	489.136	750.3	488.395	427.4	487.925	115.6	488.764	0.000	488.515	0.000
Monthly												
Min.		0.000	486.250	0.000	486.350	0.000	486.250	0.000	488.150	0.000	488.450	0.000
Max.		0.000	491.150	1701	490.200	1117	489.400	744.1	491.000	1051	488.700	0.000
Mean		0.000	487.781	329.0	487.395	178.6	487.302	73.89	488.898	104.9	488.635	0.000

Annual Runoff in MCM = 1832 Annual Runoff in mm = 268

Peak Observed Discharge = 1701 cumecs on 24/07/2017 Corres. Water Level :491.150 m

Lowest Observed Discharge = 0.000 cumecs on 01/06/2017

Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

Stage-Discharge Data for the period 2017 - 2018

Station Name : Kopergaon (KOPERGAON) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Upper Godavari SD, Aurangabad**

Day	Dec		Jan		Feb		Mar		Apr		May	
	W.L	Q	WL	Q	WL	Q	WL	Q	WL	Q	WL	Q
1	488.450	0.000	487.700	0.000	486.550	0.000	486.050	0.000		0.000		0.000
2	488.400	0.000	487.700	0.000	486.500	0.000	486.050	0.000		0.000		0.000
3	488.400	0.000	487.650	0.000	486.450	0.000	486.050	0.000		0.000		0.000
4	488.400	0.000	487.600	0.000	486.450	0.000	486.050	0.000		0.000		0.000
5	488.400	0.000	487.500	0.000	486.400	0.000	486.000	0.000		0.000		0.000
6	488.300	0.000	487.400	0.000	486.350	0.000	486.000	0.000		0.000		0.000
7	488.300	0.000	487.350	0.000	486.350	0.000	485.950	0.000		0.000		0.000
8	488.300	0.000	487.300	0.000	486.300	0.000	485.950	0.000		0.000		0.000
9	488.250	0.000	487.250	0.000	486.250	0.000	485.950	0.000		0.000		0.000
10	488.250	0.000	487.200	0.000	486.250	0.000	485.900	0.000		0.000		0.000
11	488.250	0.000	487.150	0.000	486.200	0.000	485.900	0.000		0.000		0.000
12	488.250	0.000	487.150	0.000	486.200	0.000	485.850	0.000		0.000		0.000
13	488.250	0.000	487.100	0.000	486.200	0.000	485.850	0.000		0.000		0.000
14	488.250	0.000	487.050	0.000	486.200	0.000	485.800	0.000		0.000		0.000
15	488.250	0.000	487.000	0.000	486.200	0.000	485.800	0.000		0.000		0.000
16	488.200	0.000	486.950	0.000	486.200	0.000	485.750	0.000		0.000		0.000
17	488.200	0.000	486.950	0.000	486.200	0.000	485.750	0.000		0.000		0.000
18	488.150	0.000	486.900	0.000	486.200	0.000	485.700	0.000		0.000		0.000
19	488.150	0.000	486.900	0.000	486.150	0.000	485.700	0.000		0.000		0.000
20	488.150	0.000	486.850	0.000	486.150	0.000	485.650	0.000		0.000		0.000
21	488.100	0.000	486.850	0.000	486.150	0.000	485.650	0.000		0.000		0.000
22	488.100	0.000	486.800	0.000	486.100	0.000	485.600	0.000		0.000		0.000
23	488.050	0.000	486.800	0.000	486.100	0.000	485.600	0.000		0.000		0.000
24	488.000	0.000	486.750	0.000	486.100	0.000		0.000		0.000		0.000
25	488.000	0.000	486.750	0.000	486.100	0.000		0.000		0.000		0.000
26	487.950	0.000	486.750	0.000	486.100	0.000		0.000		0.000		0.000
27	487.900	0.000	486.700	0.000	486.100	0.000		0.000		0.000		0.000
28	487.850	0.000	486.700	0.000	486.100	0.000		0.000		0.000		0.000
29	487.850	0.000	486.650	0.000				0.000		0.000		0.000
30	487.800	0.000	486.650	0.000				0.000		0.000		0.000
31	487.750	0.000	486.600	0.000				0.000				0.000
Ten-Daily Mean												
I Ten-Daily	488.345	0.000	487.465	0.000	486.385	0.000	485.995	0.000		0.000		0.000
II Ten-Daily	488.210	0.000	487.000	0.000	486.190	0.000	485.775	0.000		0.000		0.000
III Ten-Daily	487.941	0.000	486.727	0.000	486.106	0.000	485.617	0.000		0.000		0.000
Monthly												
Min.	487.750	0.000	486.600	0.000	486.100	0.000	485.600	0.000		0.000		0.000
Max.	488.450	0.000	487.700	0.000	486.550	0.000	486.050	0.000		0.000		0.000
Mean	488.158	0.000	487.053	0.000	486.236	0.000	485.850	0.000		0.000		0.000

Peak Computed Discharge = 1106 cumecs on 23/07/2017 Corres. Water Level :490.200 m

Lowest Computed Discharge = 13.03 cumecs on 13/08/2017 Corres. Water Level :486.650 m

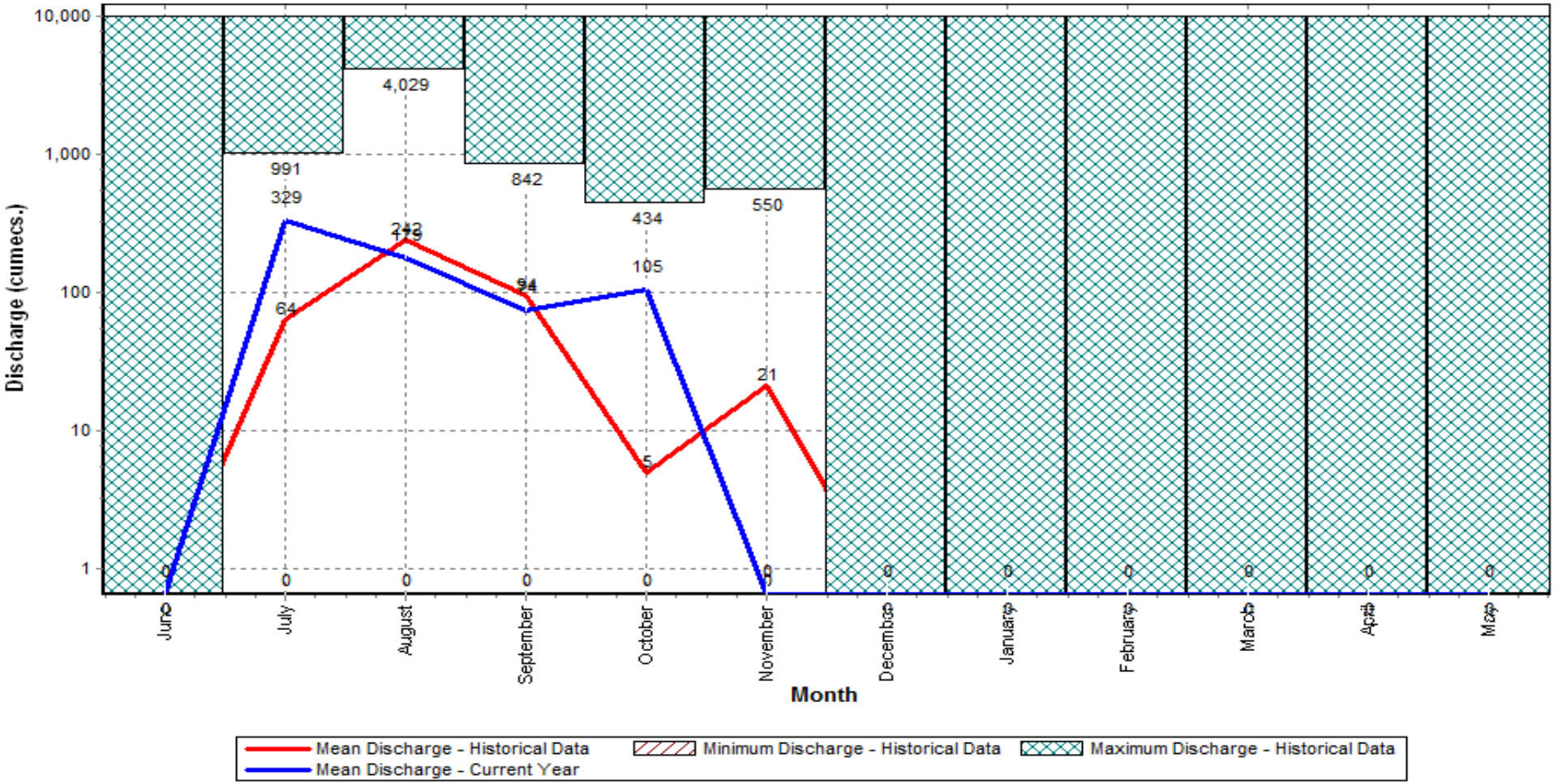
Q: Observed/Computed Discharge in cumecs WL:Corresponding Mean Water Level(m.s.l) in m *:Computed Discharge

Note:Missing values ignored while arriving at Annual Runoff

HISTOGRAM - HYDROGRAPH for Water Year : 2017-2018

Station Name : Kopergaon (KOPERGAON) | **Data considered : 2014-2018** | **Division : Upper Godavari Div., Hyderabad**

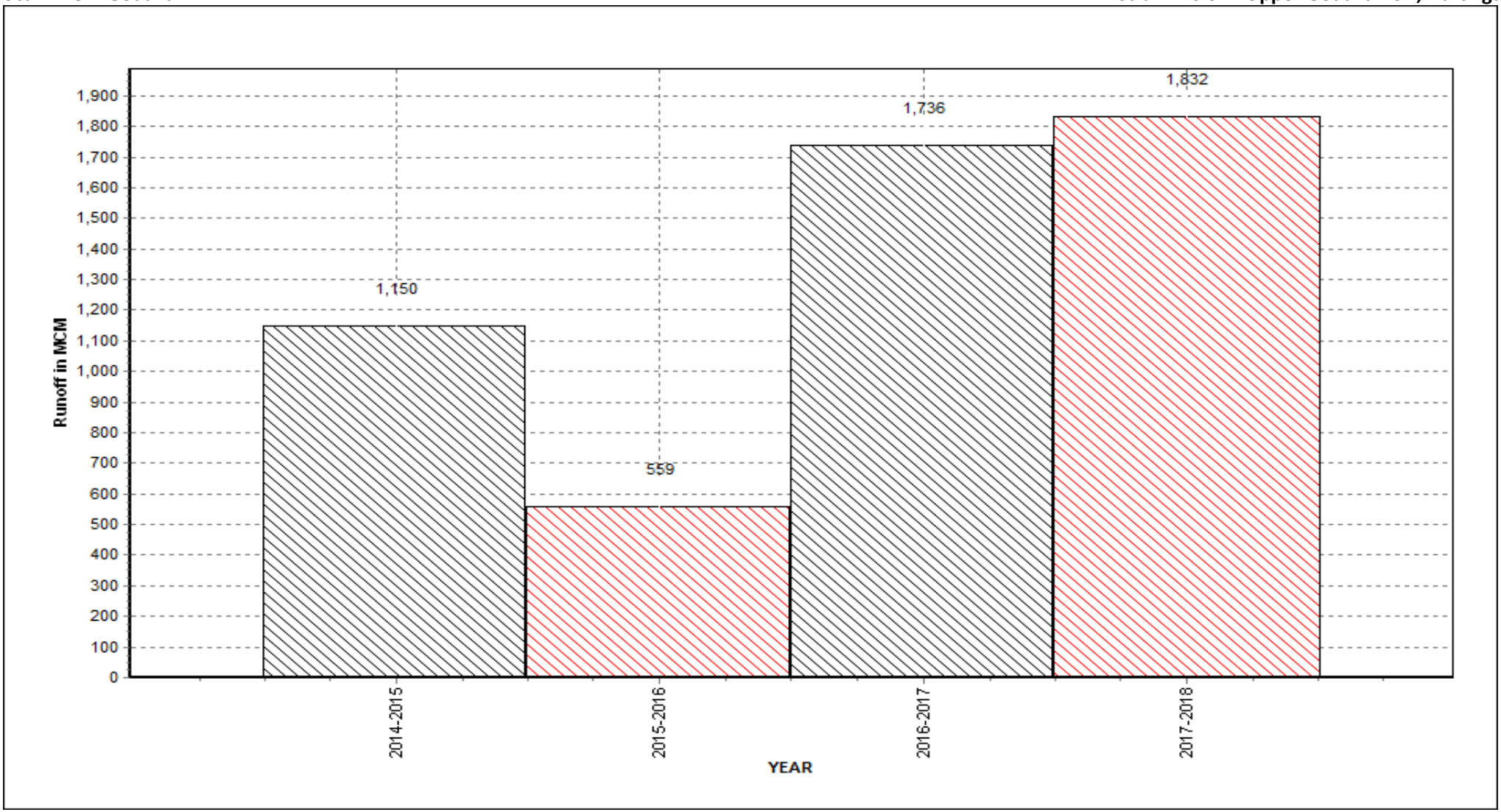
Local River : Godavari | **Sub-Division : Upper Godavari SD, Aurangabad**



Annual Runoff Values for the period: 2014 - 2018

Station Name : Kopergaon (KOPERGAON) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Upper Godavari SD, Aurangabad**



Note: Missing values have not been considered while arriving at Annual Runoff

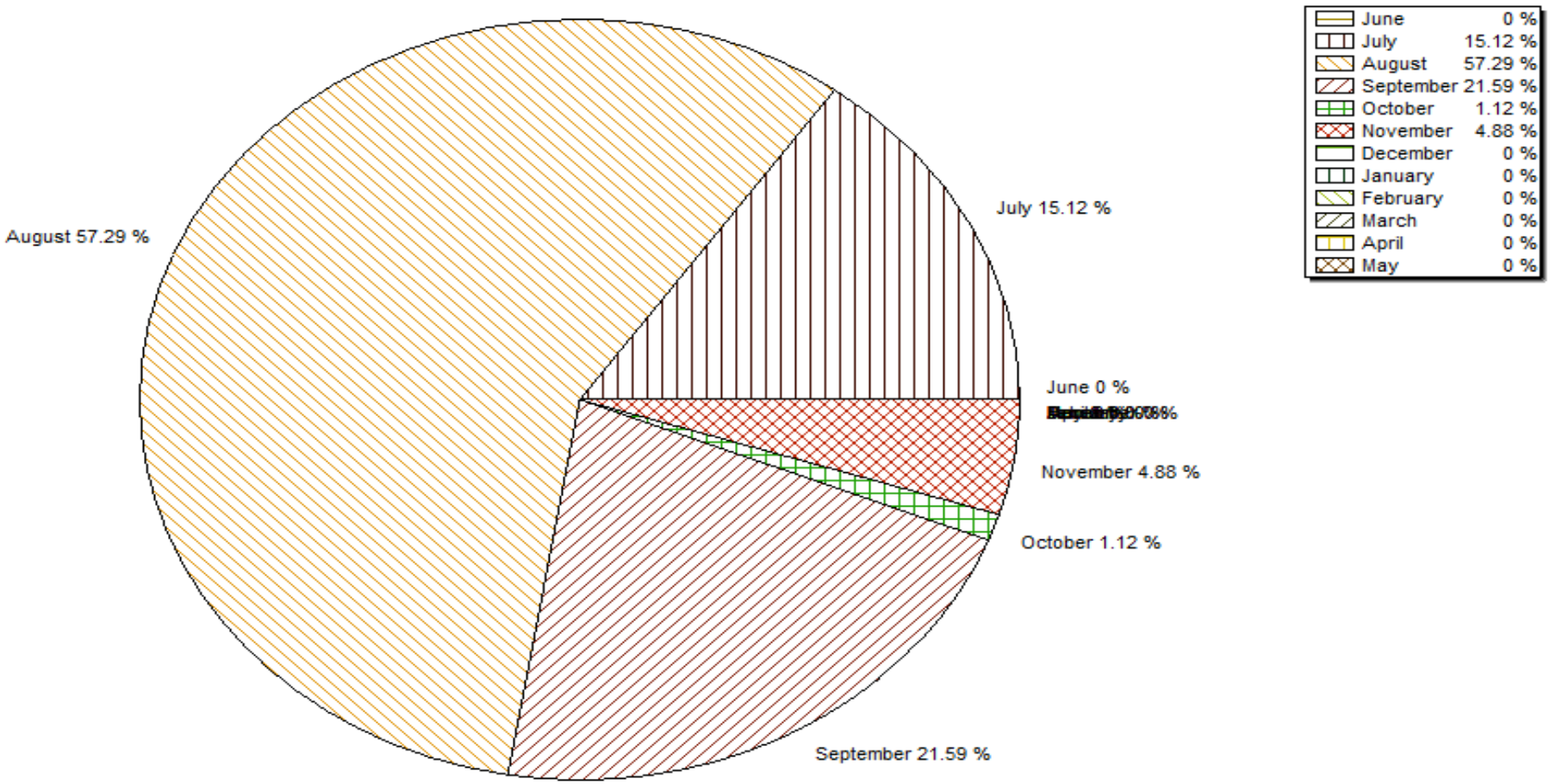
Monthly Average Runoff based on period : 2014-2017

Station Name : Kopergaon (KOPERGAON)

Division : Upper Godavari Div., Hyderabad

Local River : Godavari

Sub-Division : Upper Godavari SD, Aurangabad



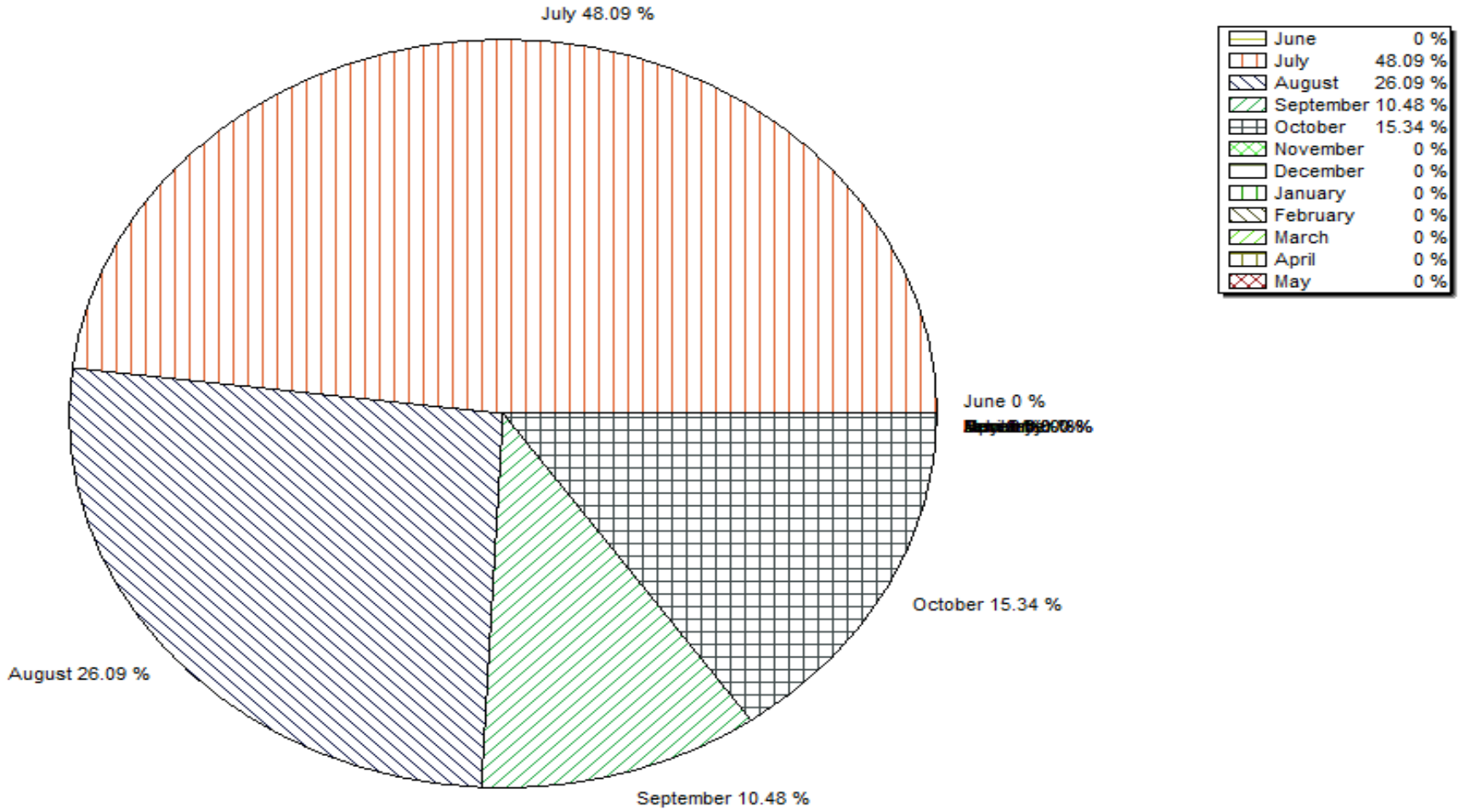
Monthly Runoff for the Year : 2017-2018

Station Name : Kopergaon (KOPERGAON)

Local River : Godavari

Division : Upper Godavari Div., Hyderabad

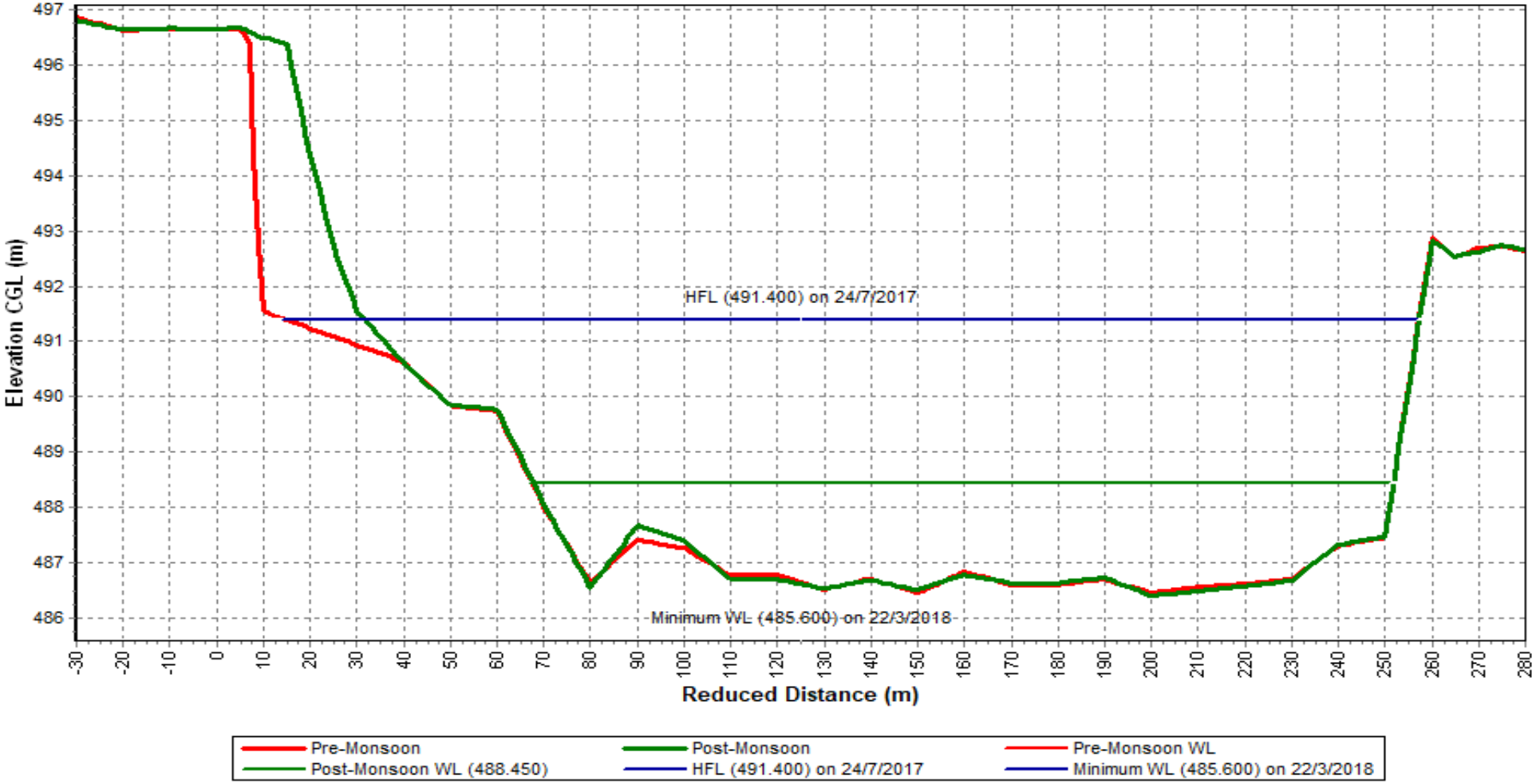
Sub-Division : Upper Godavari SD, Aurangabad



Pre-Monsoon & Post-Monsoon X-Section for Water Year : 2017-2018

Station Name : Kopergaon gauge,Rainfal,W/L (KOPERGAON) **Division : Upper Godavari Div., Hyderabad**

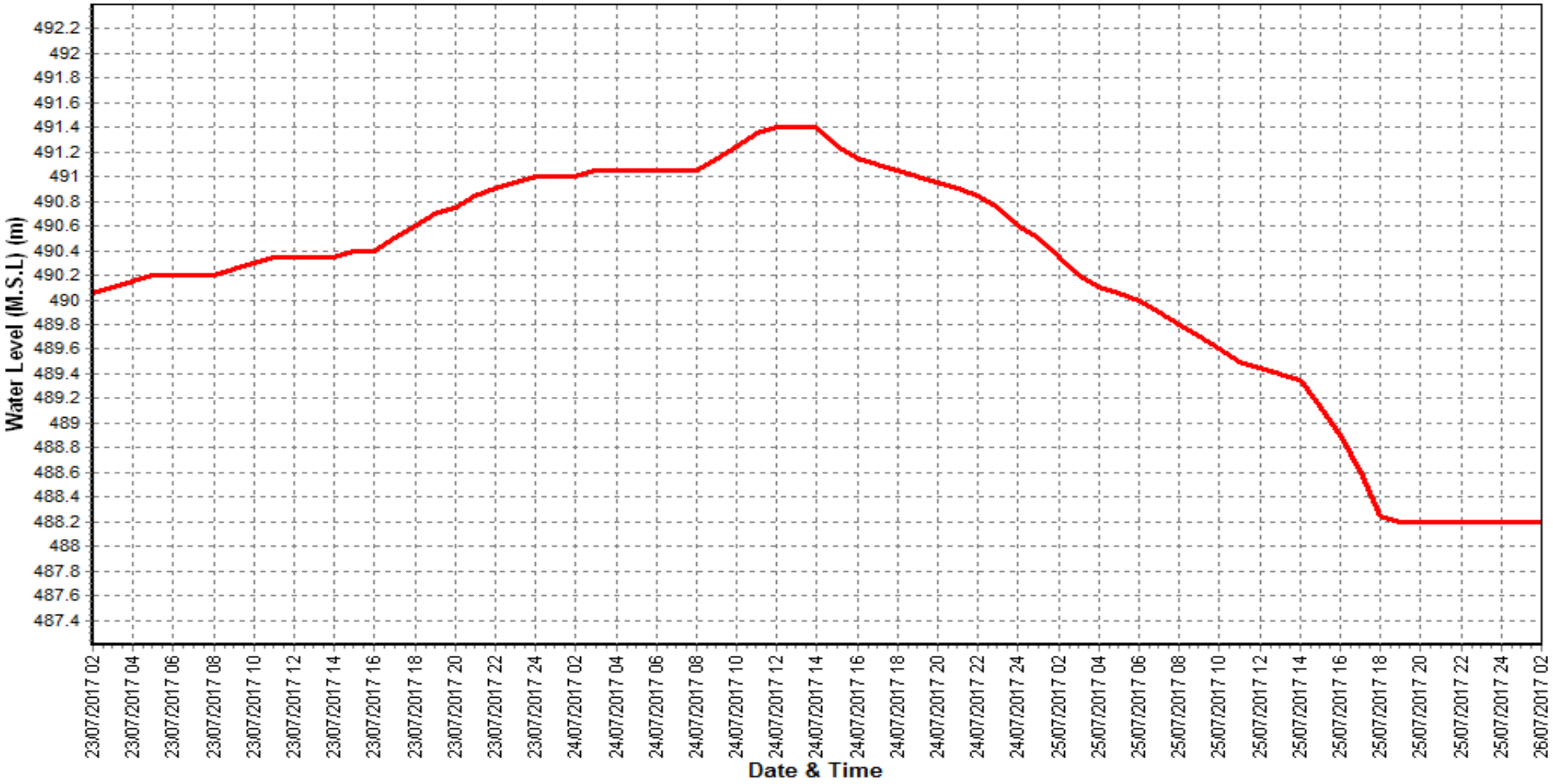
Local River : Godavari **Sub-Division : Upper Godavari SD, Aurangabad**



Water Level vs. Time - Graph of Highest Flood Peak during the Year : 2017-2018

Station Name : Kopergaon (KOPERGAON) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Upper Godavari SD, Aurangabad**

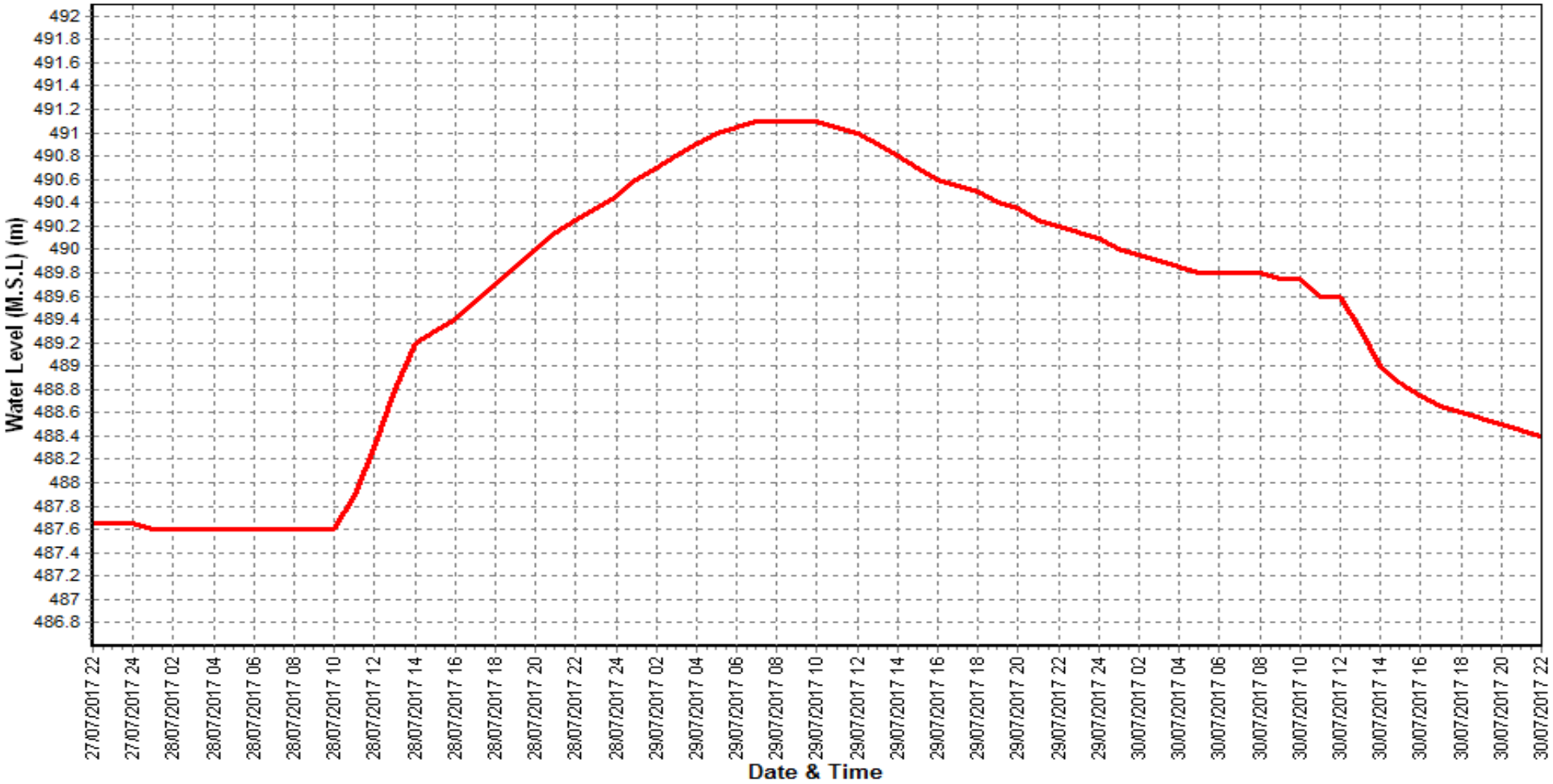


Time Span: 72 Hrs

Water Level vs. Time - Graph of 2nd Highest Flood Peak during the Year : 2017-2018

Station Name : Kopergaon (KOPERGAON) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Upper Godavari SD, Aurangabad**

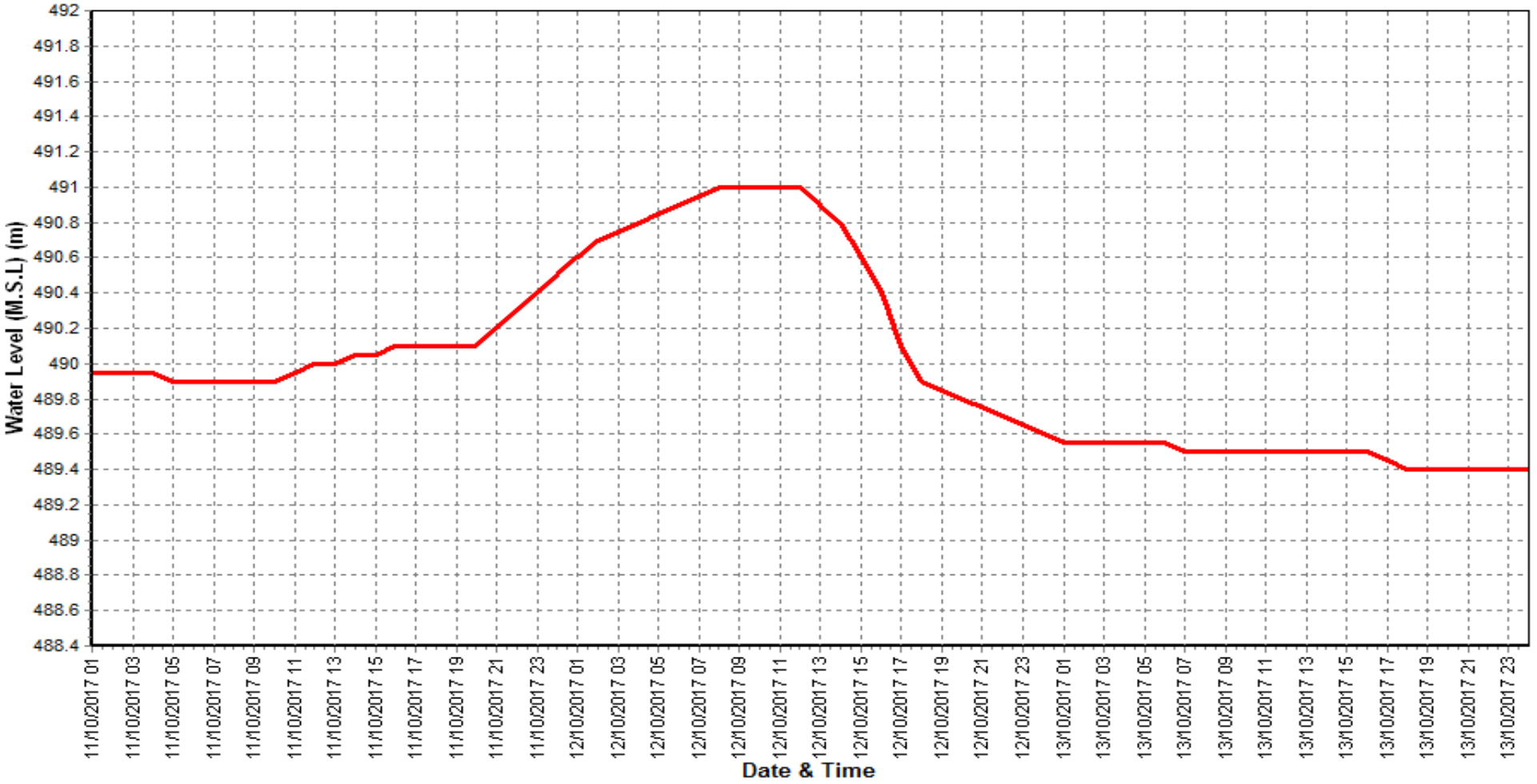


Time Span: 72 Hrs

Water Level vs. Time - Graph of 3rd Highest Flood Peak during the Year : 2017-2018

Station Name : Kopergaon (KOPERGAON) **Division : Upper Godavari Div., Hyderabad**

Local River : Godavari **Sub-Division : Upper Godavari SD, Aurangabad**



Time Span: 72 Hrs