

केवल सरकारी उपयोग हेतु

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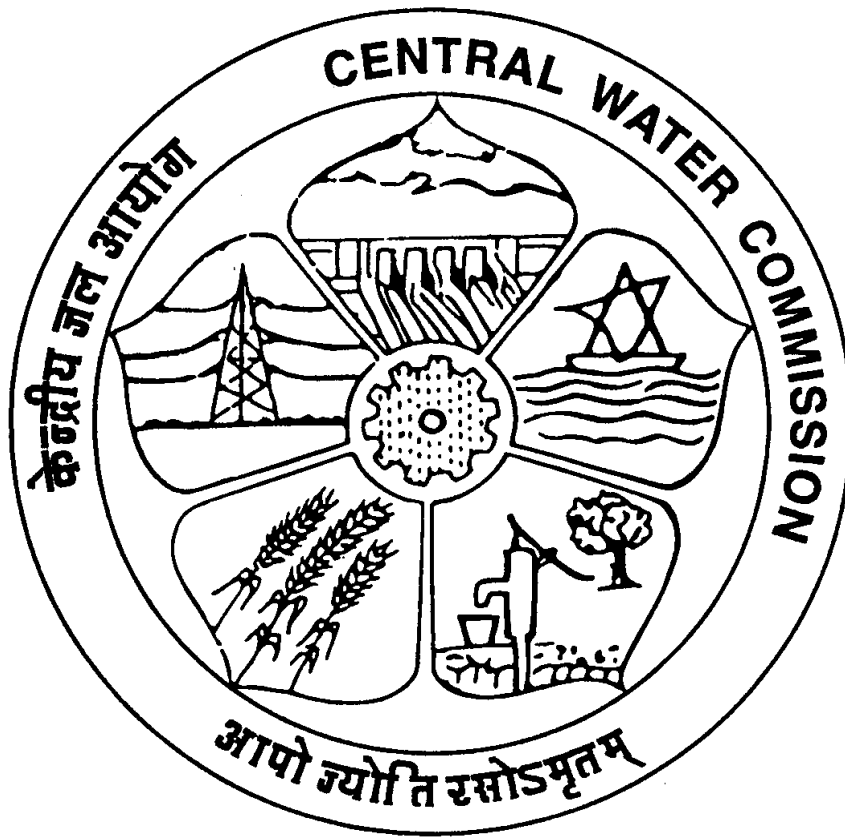
SEDIMENT DATA BOOK

नर्मदा बेसिन

Narmada Basin

जून 2018- मई 2019

June 2018 – May 2019



केन्द्रीय जल आयोग
नर्मदा बेसिन संगठन
मार्च 2020

CENTRAL WATER COMMISSION
Narmada Basin Organisation
March 2020

प्रस्तावना

जल प्रकृति द्वारा प्रदत्त एक अनमोल उपहार है। जीवन संचालन में जल की महत्वता की दृष्टि से जल संसाधनों के नियोजन, प्रबंधन एवं विकास की अत्यधिक आवश्यकता है। केंद्रीय जल आयोग, क्षेत्र में भारत सरकार की एक शीर्षस्थ तकनीकी संस्था है। आयोग के गेज एवं डिस्चार्ज मापन स्थलों पर सतही जल की मात्रा के आकलन के अलावा प्रमुख स्थलों पर जल गुणवत्ता प्रबोधन निलंबित गादभार का आकलन एवं तलछट पदार्थ के आंकड़े भी एकत्रित किये जाते हैं।

जल ग्रहण क्षेत्र की मिट्टी तीव्र वर्षा से बह कर नदी में आती है तथा निलंबित गाद के रूप में बहती हैं। जल की गति के मंद पड़ने, गाद के संगठन एवं नदी के आकार में परिवर्तन आदि कारणों से यह प्रवाह मार्ग में विभिन्न स्थलों पर निक्षेपित हो जाती है। अतः गाद भार के साथ भी करना आकलन का संगठन के पदार्थ तलछट साथ-है। महत्वपूर्ण अति

इस पुस्तक में वर्ष मंडल नर्मदा में 19-2018, भोपाल द्वारा नर्मदा नदी पर मध्य प्रदेश में स्थित तथा स्थलों 9 तापी, मंडल सूरत द्वारा गुजरात में स्थित संबंधी पदार्थ तलछट तथा भार गाद गए किए एकत्रित पर स्थलों 2 का आंकड़ोंसंकलन किया गया है।

आशा है, इस पुस्तक में संकलित आंकड़े, जल संसाधन संबंधी परियोजनाओं के नियोजन, अभिकल्पन, विकास और संबंधित अध्ययनों के लिए लाभप्रद होंगे। इस पुस्तक को और अधिक उपयोगी बनाने के लिए सुझाव आमंत्रित है।

मैं, नर्मदा बेसिन संगठन के उन सभी अधिकारियों एवं कर्मचारियों के प्रति आभार प्रकट करता हूँ, जिन्होंने इस पुस्तक को तैयार करने में समर्पण की भावना से अपना प्रशंसनीय योगदान दिया है।

स्थान भोपाल :
मार्च :2020

(मनोज तिवारी)
अधीक्षण अभियन्ता (समन्वय)

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List of Abbreviation and Symbols

A	:	Area of section
AV	:	Average
C	:	Coarse sediment
Con	:	Concentration
Cumec	:	Cubic metres per second
Cum	:	Cubic metres
D	:	Day
F	:	Fine sediment
f	:	Average silt factor
G	:	Gauge
GD	:	Gauge and Discharge
GDS	:	Gauge, Discharge and Sediment
g/l	:	Grams per litre
km	:	Kilometer
L.B.	:	Left bank
M	:	Medium sediment
m	:	Metre
mm	:	Millimetre
m ³ /s	:	Cubic metre per second
Mean dia 'd'	:	Mean Diameter
NDN	:	Narmada Division
P	:	Wetted Perimeter
%	:	Percentage
Q	:	Discharge
R	:	Hydraulic mean depth
R.B.	:	Right bank
R. Days	:	Remaining days
R.D.	:	Reduced distance
R.L.	:	Reduced level
S	:	Second
Sed	:	Sediment
S/G	:	Station gauge
km ² /sq.km	:	Square kilo metre
m ²	:	Square metre
T/D	:	Tonnes per day
TDN	:	Tapi Division
V	:	Mean velocity
W.L.	:	Water Level
W.Year	:	Water year
W.Q	:	Water Quality
0°	:	Degree
'	:	Minute
"	:	Second
*	:	Estimated by unitary method
**	:	Estimated by interpolation
***	:	Estimated by average value
@	:	Estimated by graph
MMT	:	Million Metric Tones

1 Introduction

1.1 Scope

Central Water Commission is conducting sediment load observations & bed material observation along with discharge observations etc. During the reporting year 2018-19 sediment load & bed material observations in Narmada Basin were conducted at 11 stations under the jurisdiction of the Narmada Division, Bhopal and Tapi Division, Surat. 9 of these stations are located in the state of Madhya Pradesh and 2 stations in the Gujarat State. These stations have been functioning under plan schemes viz. “Development of Water Resources Information System”, during 12th Five Year Plan. The name of the stations where suspended sediment load & bed material observations were conducted are given in Table – 1-1 :

Table 1-1: Sediment and Bed Material Observation Stations at Narmada River

Sl. No.	Name of Station	Code No.
1.	Orsang at Chandwada	010215032
2.	Narmada at Garudeshwar	010215030
3.	Narmada at Mandleshwar	010215026
4.	Narmada at Handia	010215022
5.	Narmada at Hoshangabad	010215019
6.	Narmada at Sandia	010215013
7.	Shakkar at Gadarwara	010215012
8.	Narmada at Barman	010215011
9.	Banjar at Bamni	010215006
10.	Burhner at Mohgaon	010215004
11.	Narmada at Manot	010215002

1.2 Sources of Information

The administrative controls of these 11 stations were distributed under two divisions, namely Narmada Division, Bhopal (Nine Stations) and Tapi Division, Surat (Two Stations). During the year 2018-19, the Division wise the stations and their code are given in Table 1-2:

Table 1-2: Division wise GD stations and their codes

Sl. No.	Name of Station	Code No.
Narmada Division, Bhopal		
1.	Narmada at Mandleshwar	010215026
2.	Narmada at Handia	010215022
3.	Narmada at Hoshangabad	010215019
4.	Narmada at Sandia	010215013
5.	Shakkar at Gadarwara	010215012
6.	Narmada at Barmanghat	010215011
7.	Banjar at Bamni	010215006
8.	Burhner at Mohgaon	010215004
9.	Narmada at Manot	010215002
Tapi Division, Surat		
1.	Narmada at Garudeshwar	010215030
2.	Orsang at Chandwada	010215032

1.3 Basin Description

Narmada is the largest west flowing and fifth largest river of India. It drains a large area in Madhya Pradesh besides some area in the states of Maharashtra and Gujarat. Narmada basin lies between East Longitudes 72° 32' to 81° 45' and North Latitudes 21° 20' to 23° 45'. It flows through Deccan traps in between Vindhya and Satpura ranges of hills before falling into the Gulf of Cambay in the Arabian Sea. Narmada drains an area of 98,796 km² out of which nearly 87% lies in Madhya Pradesh. The state wise distribution of drainage area is shown in Table 1-3:

Table 1-3: Statewise Distribution of Drainage Area

Sl. No.	Name of State	Drainage Area (sq. km.)	Percentage
1.	Madhya Pradesh	85, 859	86.9
2.	Maharashtra	1,538	1.5
3.	Gujarat	11,399	11.6
	Total	98,796	100.0

Narmada rises from a 'Kund' (spring) at an elevation of 1,057 m at Amarkantak in Maikal hills in Shahdol district of Madhya Pradesh and flows through Madhya Pradesh, Maharashtra and Gujarat between Vindhya and Satpura hill ranges before falling into the Gulf of Cambay in the Arabian sea about 10 km north of Bharuch. The total length of this west flowing river from its origin to outfall into the sea is 1,312 km. For the first 1,079 km it runs in Madhya Pradesh and there after forms the common boundary between Madhya Pradesh and Maharashtra for 35 km and 39 km. in Maharashtra and Gujarat boundary. In Gujarat, it stretches for 159 km. The

basin has an elongated shape, with a maximum length of 953 km from east to west and a maximum width of 234 km from north to south.

The river has a number of falls in its heads reaches. At 8 km from the origin, the river drops 24 m at the Kapildhara falls. At 0.4 km further downstream, the river again drop by 4.6 m at Dudhdhara fall. Burhner, the first major tributary of Narmada, joins the river from left at 248 km from its origin. Flowing in a generally south-westerly direction in the narrow and deep valley, the river has hairpin bends at some places. At 286 km from its source, the river turns towards the north and about 1 km further downstream, the Banjar tributary joins it. After flowing past Mandla town in a number of channels called Sahastra-dhara, the river at 404 km from the origin drops nearly 15 km at the Dhuandhar fall close to Jabalpur. Further down, the river flows through a channel through the famous marble rocks.

Emerging from the marble rocks, the Narmada enters the upper fertile plains. At a distance of 464 km from the origin, Hiran a major right bank tributary joins the river. Continuing to flow in a western direction through the upper plains, the river receives several tributaries like Sher, Shakkar, Dudhi, Tawa and Ganjal from the left and Tendon, Barna and Kolar from the right. Flowing through west, it joins the middle plains near Panghat in East Nimar district. At Nandhar, 806 km from the origin, it drops 12 m at Dhardi, 853 km from origin, it again drops 12 m. At 966 km from the origin and nearly 6.4 km downstream of Maheshwar, the Narmada again drops by about 6.7 m at Sahastra-dhara falls. During this part of the journey through the middle plains, Chhota tawa and Kundi from the left and Man from the right joins it.

Flowing further west, the river enters the lower hilly regions and flows through a gorge where Goi enters from the left and Uri and Hatni from the right. The 113 km long gorge is formed by the convergence of Vindhya ranges from the north and Satpura ranges to the south. Emerging from the gorge, the river enters the lower plains and meanders in broad curves till it reaches Bharuch. The Karjan from the left and Orsang from the right joins the Narmada in this reach. Beyond Bharuch, the river valley widens and the river enters the Gulf of Cambay. The river has 41 tributaries of which 22 are on the left bank and 19 on the right bank, having catchment area more than 500 sq.km out of these some major tributaries like Burhner, Banjar, Hiran, Tawa, Orsang and Kundi are having catchment area more than 3,550 sq.km.

The average rainfall in Narmada Basin is 1,250 mm. The maximum temperature varies between 40°C to 49°C in the month of May when the land gets heated up. The temperature drops to a minimum range of 1°C to 9°C during the dry/cold season in December/January.

At present, there are 30 proposed/ongoing/completed major hydroelectric cum Irrigation projects. There are four major hydroelectric cum irrigation project namely *Bargi*, *Indira Sagar*, *Omkareshwar* & *Sardar Sarovar* Projects on main Narmada river which are almost completed and eight completed projects on different tributaries namely Matiyari, Barna, Tawa, Kolar, Sukta, Man, Jobat and Karjan.

There are 11 sediment-monitoring stations in Narmada basin. Out of eleven, 7 stations are located on the main river and remaining 4 are located on the principal tributaries viz. Orsang, Shakkar, Banjar and Burhner.

2 Suspended Sediment Observation

3 2.1 Observation Techniques

3.1.1 Collection of Sediment Samples

Suspended sediment observations are conducted simultaneously along with discharge observation once a day starting at 08.00 hrs except on Sunday and holidays. The observations are conducted at station gauge line under normal condition. However, when the conditions become unsuitable for observation, say due to pooling, shallow depths, multi-channel formation etc., then the observation site is shifted to a temporary section at up-stream or down-stream of the station gauge line.

Sediment samples are collected at 0.6 depths from each vertical, where velocity observation is done for computation of discharge, provided depth of flow is above 0.3 m. The samples thus collected from each vertical are grouped in 1, 2, 3, 4 or 5 composite groups depending upon the width of the river in such a way that each composite group discharge $\pm 10\%$ of average segment discharge. Punjab bottle type sampler is commonly used for collection of suspended sediment sample for analysis. A uniform practice of holding the bottle in vertical position is being adopted. Thus samples from shallow depths (less 0.3 m) are collected from the surface. These surface samples at shallow depths are presumed as of 0.6 depths sampling. The water samples collected are kept in composite groups based on the data observed on previous day and carried to the site laboratory for analysis.

3.1.2 Analysis of the Suspended Sediment Samples

The analysis of the suspended sediment sample is carried out for these different grades namely, coarse sediment having particle diameter above 0.2 mm, medium sediment with diameter ranging from 0.075 mm to 0.2 mm and fine sediment with diameter less than 0.075 mm. The sediment samples from each group (as stated in para 2.1.1) are passed through 212 micron mesh sieve. The residue on sieve is washed with clean water several times, transferred to a pre-weighted crucible and its oven dried weight is determined. This gives the coarse sediments from which the concentration of the coarse sediment g/l for the group is worked out.

After removal of coarse sediment, the filtrate and washing which now contains medium and fine sediment is similarly passed through 75 micron mesh sieve. The residue on sieve is washed with clean water several times, transferred to a pre-weighted crucible and its oven dried weight is determined. This gives the medium sediment from which sediment concentration in g/l for the group is determined.

The filtrates and washing after separation of coarse and medium grades now contain only fine sediment. For fine sediment analysis, all the above groups (after removal of coarse and fine sediment) are combined into a single large sample to form a homogeneous liquid in a big bucket.

The sediment analysis of complete volume is carried out upto 10-12 litres with moderate sediment concentration. If either medium sediment is higher or volume of sample is more than 12 litres, then the water is stirred with a clean wooden rod, so that any sediment settled in the bucket mix with the whole sample thoroughly. Immediately at least four litres of homogeneous samples is taken into separate bucket for analysis of time sediment load. This homogeneous sample is kept overnight for settling. About 5 to 10 ml of 10% alum solution is added to hasten the coagulation of colloidal silt. After the settlement is complete, the supernatant liquid is siphoned off carefully and the remaining volume of suspension is filtered in pre-weighed filter paper (Whatman grade I) and transfer of entire settled additional washing with clean water ensures silt. The filter paper along with the sediment is dried and weighted to determine the concentration of fine sediment in g/l for the entire cross section.

The total suspended sediment load of the river along the section is worked out from the concentration, thus contained for coarse, medium and fine sediment group-wise for the entire cross section.

3.2 Explanatory Notes

The explanatory notes described hereunder are given to assist in the interpretation of hydrological parameters contained in the data presented. The note are, therefore, applicable in so far as the data presented in this book are concerned.

- i. Water year covers the period from 1st June of calendar year to 31st May of next calendar year and includes complete one hydrological cycle. The water year is further sub divided as:
 - Monsoon period from June to October and
 - Non-Monsoon period from November to May.
- ii. The gauging station code number is a unique nine-column numeric reference number, which facilitates storage and retrieval of sediment data in data banks. The first two columns are identifier of measuring authority. Third and fourth columns are for zone/basin fifth and sixth columns are for Independent River and last three i.e. seventh, eighth and ninth columns are for station numbers.
- iii. Sediment is classified as coarse, medium and fine according to diameter as indicated below:
 - Coarse: Sediment above 0.2 mm diameter,
 - Medium: Sediment between 0.2 & 0.075 mm diameter,
 - Fine: Sediment above 0.075 mm diameter.

3.3 Method of Presentation

Suspended sediment data is presented in Part - I of the book, comprising history sheet and suspended sediment flow tables. The chronology of suspended sediment observation station is arranged from the mouth of the river to upstream giving. The tributaries are arranged in similar fashion.

History sheet gives concise description of the suspended sediment observation station. The suspended sediment table includes the following:

- Daily observed sediment flow tables for the period from June to November, because during the period major part of the annual sediment load is transported by the rivers.
- Ten daily summary of coarse, medium and fine sediment for the full year.
- Monthly and seasonal summary of the sediment load.

3.4 Comments on Sitewise Data

3.4.1 Orsang at Chandwada

The total length of the river Orsang, a major right bank tributary of Narmada is 101 km in the plains of Gujarat state. The monitoring station Chandwada is situated at 9 km upstream of the confluence point of this river with Narmada. It has a drainage area of 3,846 sq km. The maximum value of sediment concentration is 0.004 g/l recorded on 13.09.2018 & 21.09.2018. The annual sediment load works out to 516 metric tonnes.

2.4.2. Narmada at Garudeshwar

The river has drainage area of 87,892 sq km upto this station. The river flows over length of 1,169 km upto this station. The maximum sediment concentration is recorded as 0.032 g/l, on 20.08.2018. The annual sediment load work out to 1444 metric tonnes.

2.4.3. Narmada at Mandleshwar

The river Narmada has drainage area of 72,809 sq km and length 852 km from the origin to this station. The maximum sediment concentration is 0.882 g/l, which was observed on 17.08.2018. The total annual sediment load 129340.83 metric tonnes.

2.4.4. Narmada at Handia

The station is on main Narmada having a drainage area of 54,027 sq km. The river flows for a length of 774 km from the origin to this station. The maximum sediment concentration. is 1.728 g/l, which was observed on 08.01.2019. The total annual sediment load is 2231242.31 metric tonnes.

2.4.5. Narmada at Hoshangabad

River Narmada has drainage area of 44,548 sq km and length of 521 km from the origin to this station. The maximum sediment concentration is 0.130 g/l, which was observed on 01.09.2018. The total annual sediment load is 144026.07 metric tonnes.

2.4.6. Narmada at Sandia

The station is 584 km from the origin of Narmada and has drainage area of 33,954 sq km and length 852 km from the origin to this station. The maximum sediment concentration is 0.734 g/l, which was observed on 01.09.2018. The total annual sediment load is 390036.11 metric tonnes.

2.4.7. Shakkar at Gadarwara

This station is on the tributary Shakkar on the left bank of Narmada and has a drainage area of 2,270 sq km. The length of the Shakkar upto this station is 140 km. The maximum sediment concentration is 1.699 g/l, which was observed on 08.09.2018. The total annual sediment load is 236955.83 metric tonnes.

2.4.8. Narmada at Barmanghat

Narmada traverses a length of 504 km upto this station and the drainage area is 26,453 sq km. The maximum sediment concentration is 0.771 g/l which was observed on 30.08.2018. The total annual sediment load is 634860.40 metric tonnes.

2.4.9. Banjar at Bamni

The Station is on the tributary Banjar on the left bank of Narmada and has a drainage area 1864 sq km. The maximum value of sediment concentration is 0.309 g/l, which was recorded on 24.07.2018. The annual sediment load works out to 40875.10 metric tonnes.

2.4.10. Burhner at Mohgaon

This station is on the tributary Burhner on the left bank of Narmada and has a drainage area of 3919 sq km. The length of the Burhner river upto this site is 177 km. The maximum sediment concentration is 4.543 g/l, which was observed on 08.07.2018. The total annual sediment load is 1460628.70 metric tonnes.

2.4.11. Narmada at Manot

The length and drainage area of Narmada at this station are 218 km and 4,667 sq km. respectively. The maximum sediment concentration is 1.540 g/l, which was observed on 23.07.2018. The total annual sediment load is 312569.74 metric tonnes.

4 Bed Material Observation

5 3.1 Observation Techniques

5.1.1 Collection of Samples

Depending upon the width of the river, 3 to 10 samples are collected from the site along the station gauge line. A scoop type bed material sampler is used for collecting the sample from flowing portion of the channel and where the bed is dry, samples are collected manually after scraping the upper layer at the bed to avoid local surface contamination. After drying the sample, about 1 kg of the sample is taken by coning and quartering process.

5.1.2 Packing of Samples

Bed material samples thus collected are filled in polythene bags and placed inside a thick cloth bag for protection. The details of the samples are inserted in the polythene bag and the same are sent to divisional laboratory for analysis.

5.1.3 Analysis of Sample

In the laboratory, analysis of samples is done either by sieve for Bed Material particles above 0.6 mm size or by wet process using Puri's Siltometer for particles below 0.6 mm size.

Analysis by Sieves: The sieves are arranged one above the other in order of their mesh sizes, largest at top and smallest (0.6 mm) aperture sieve at the bottom. Each representative sample is weighed and then put on the top metallic. The portion of the material passing through 0.6 mm sieve is collected in a metallic container placed at the bottom of the set of sieves. Shaking of the sieves is done either by gentle horizontal rotation or by a mechanical shaker for about 15 to 20 minutes. The material retained on each sieve is collected separately in a metallic container and is weighed. The material passing through 0.6 mm sieve is also weighed and recorded.

Analysis by Puri's Siltometer: For particles of size below 0.6 mm, the analysis is done by wet process using Puri's Siltometer. About 10 grams of the Bed Material sample passing through 0.6 mm sieve is released from the top of the siltometer. The sand, silt particles travel downwards at different velocities depending upon their diameter and the temperature of water. The trough of the Siltometer is rotated at a pre-determined rate to collect the fractions. Thus different fractions of a sample are redeposit in 20 receptacles in a trough. Each of these fractions is then collected in the silt measuring tube and compacted by tapping on the rubber pad. The volume of the each fraction is noted.

From the result of the above analysis, summation curves are plotted and the mean diameter of the samples worked out as per the standard procedure. Statistical method is also used to work out the mean diameter. The silt factor is obtained from formula:

$$f = 1.76 (d)^{1/2}$$

Where 'd' is the mean diameter in mm of the particles.

5.2 Presentation of Data

The sequence of the stations for which analysis data has been presented in this book are downstream to upstream in part - II of the book.

Sr.	Name of Station	Code No.
1.	Orsang at Chandwada	010215032
2.	Narmada at Garudeshwar	010215030
3.	Narmada at Mandleshwar	010215026
4.	Narmada at Handia	010215022
5.	Narmada at Hoshangabad	010215019
6.	Narmada at Sandia	010215013
7.	Shakkar at Gadarwara	010215012
8.	Narmada at Barman	010215011
9.	Banjar at Bamni	010215006
10.	Burhner at Mohgaon	010215004
11.	Narmada at Manot	010215002

6 Part – I Sediment Data

6.1 Orsang at Chandwada

History Sheet

		Water Year	: 2018-2019
Site	: Orsang at Chandwada	Code	: 01 02 15 032
State	: Gujarat	District	Vadodara
Basin	: Narmada	Independent River	: Narmada
Tributary	: Orsang	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Orsang
Division	: Tapi Division, Surat	Sub-Division	: LNSD,Bharuch
Drainage Area	: 3846 Sq. Km.	Bank	: Right
Latitude	: 22°01'48"	Longitude	: 73°25'30"
Zero of Gauge (m)	: 18 .000(M.S.L.)	01/10/1979	
	Opening Date	Closing Date	
Gauge	: 11/01/1979		
Discharge	: 01/11/1979		
Sediment	: 01/08/1988		
Water Quality	: 15/03/1980		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Local River : Orsang

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	16.48	0.000	0.000	0.001	0.001	1
2	0.000	0.000	0.000	0.000	0.000	0	6.380	0.000	0.000	0.000	0.000	0	12.71	0.000	0.000	0.000	0.000	0
3	0.000	0.000	0.000	0.000	0.000	0	6.380	0.000	0.000	0.000	0.000	0	11.92	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0	6.380	0.000	0.000	0.000	0.000	0	9.480	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0	6.380	0.000	0.000	0.000	0.000	0	35.45	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0	6.380	0.000	0.000	0.000	0.000	0	7.680	0.000	0.000	0.000	0.000	0
7	0.000	0.000	0.000	0.000	0.000	0	6.380	0.000	0.000	0.000	0.000	0	6.690	0.000	0.000	0.000	0.000	0
8	0.000	0.000	0.000	0.000	0.000	0	6.380	0.000	0.000	0.000	0.000	0	6.320	0.000	0.000	0.000	0.000	0
9	0.000	0.000	0.000	0.000	0.000	0	38.59	0.000	0.000	0.001	0.001	3	7.285	0.000	0.000	0.000	0.000	0
10	0.000	0.000	0.000	0.000	0.000	0	10.02	0.000	0.000	0.001	0.001	1	15.67	0.000	0.000	0.001	0.001	1
11	0.000	0.000	0.000	0.000	0.000	0	15.95	0.000	0.000	0.002	0.002	2	29.05	0.000	0.000	0.001	0.001	3
12	0.000	0.000	0.000	0.000	0.000	0	49.42	0.000	0.000	0.001	0.001	4	35.45	0.000	0.000	0.001	0.001	4
13	0.000	0.000	0.000	0.000	0.000	0	126.3	0.000	0.000	0.001	0.001	11	15.68	0.000	0.000	0.001	0.001	1
14	0.000	0.000	0.000	0.000	0.000	0	33.46	0.000	0.000	0.001	0.001	3	16.63	0.000	0.000	0.001	0.001	1
15	0.000	0.000	0.000	0.000	0.000	0	15.95	0.000	0.000	0.000	0.000	1	35.45	0.000	0.000	0.002	0.002	7
16	0.000	0.000	0.000	0.000	0.000	0	35.86	0.000	0.000	0.001	0.001	3	9.386	0.000	0.000	0.000	0.000	0
17	0.000	0.000	0.000	0.000	0.000	0	35.09	0.000	0.000	0.001	0.001	3	17.14	0.000	0.000	0.001	0.001	1
18	0.000	0.000	0.000	0.000	0.000	0	26.23	0.000	0.000	0.001	0.001	2	218.7	0.000	0.000	0.001	0.001	19
19	0.000	0.000	0.000	0.000	0.000	0	12.99	0.000	0.000	0.001	0.001	1	29.45	0.000	0.000	0.000	0.000	0
20	0.000	0.000	0.000	0.000	0.000	0	16.20	0.000	0.000	0.001	0.001	1	79.75	0.000	0.000	0.001	0.001	7
21	0.000	0.000	0.000	0.000	0.000	0	31.28	0.000	0.000	0.001	0.001	3	72.59	0.000	0.000	0.001	0.001	6
22	0.000	0.000	0.000	0.000	0.000	0	15.95	0.000	0.000	0.001	0.001	1	29.45	0.000	0.000	0.000	0.000	1
23	0.000	0.000	0.000	0.000	0.000	0	28.00	0.000	0.000	0.001	0.001	2	179.6	0.000	0.000	0.001	0.001	16
24	0.000	0.000	0.000	0.000	0.000	0	38.13	0.000	0.000	0.001	0.001	3	143.6	0.000	0.000	0.001	0.001	12
25	0.000	0.000	0.000	0.000	0.000	0	132.9	0.000	0.000	0.001	0.001	11	78.07	0.000	0.000	0.001	0.001	7
26	0.000	0.000	0.000	0.000	0.000	0	101.4	0.000	0.000	0.001	0.001	9	37.78	0.000	0.000	0.000	0.000	2
27	0.000	0.000	0.000	0.000	0.000	0	32.45	0.000	0.000	0.001	0.001	3	79.07	0.000	0.000	0.001	0.001	7
28	0.000	0.000	0.000	0.000	0.000	0	21.21	0.000	0.000	0.001	0.001	2	76.61	0.000	0.000	0.001	0.001	7
29	0.000	0.000	0.000	0.000	0.000	0	27.10	0.000	0.000	0.001	0.001	3	65.17	0.000	0.000	0.001	0.001	6
30	0.000	0.000	0.000	0.000	0.000	0	18.36	0.000	0.000	0.001	0.001	2	61.63	0.000	0.000	0.001	0.001	5
31							16.89	0.000	0.000	0.001	0.001	1	71.28	0.000	0.000	0.001	0.001	6
Ten Daily Mean																		
Ten Daily I							24.31	0.000	0.000	0.001	0.001	2	10.47	0.000	0.000	0.000	0.000	0
Ten Daily II							41.95	0.000	0.000	0.001	0.001	4	55.19	0.000	0.000	0.001	0.001	5
Ten Daily III							46.73	0.000	0.000	0.001	0.001	4	91.96	0.000	0.000	0.001	0.001	8
Monthly																		

Total

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Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	69.91	0.000	0.000	0.001	0.001	6	15.67	0.000	0.000	0.001	0.001	1						
2	114.5	0.000	0.000	0.002	0.002	16	30.25	0.000	0.000	0.002	0.002	5						
3	114.5	0.000	0.000	0.002	0.002	16	14.02	0.000	0.000	0.001	0.001	1						
4	62.82	0.000	0.000	0.001	0.001	5	7.572	0.000	0.000	0.001	0.001	0						
5	70.24	0.000	0.000	0.001	0.001	6	7.173	0.000	0.000	0.001	0.001	0						
6	61.15	0.000	0.000	0.001	0.001	5	7.537	0.000	0.000	0.001	0.001	0						
7	56.72	0.000	0.000	0.001	0.001	5	30.25	0.000	0.000	0.002	0.002	6						
8	32.99	0.000	0.000	0.001	0.001	2	5.523	0.000	0.000	0.000	0.000	0						
9	46.25	0.000	0.000	0.001	0.001	3	5.251	0.000	0.000	0.000	0.000	0						
10	29.54	0.000	0.000	0.000	0.000	1	5.008	0.000	0.000	0.000	0.000	0						
11	32.97	0.000	0.000	0.001	0.001	3	2.306	0.000	0.000	0.000	0.000	0						
12	26.58	0.000	0.000	0.001	0.001	2	2.314	0.000	0.000	0.000	0.000	0						
13	114.5	0.000	0.000	0.004	0.004	43	1.570	0.000	0.000	0.000	0.000	0						
14	28.38	0.000	0.000	0.001	0.001	2	30.25	0.000	0.000	0.002	0.002	6						
15	17.22	0.000	0.000	0.001	0.001	1	1.411	0.000	0.000	0.000	0.000	0						
16	55.45	0.000	0.000	0.003	0.003	15	1.280	0.000	0.000	0.000	0.000	0						
17	12.69	0.000	0.000	0.001	0.001	1	1.280	0.000	0.000	0.000	0.000	0						
18	11.35	0.000	0.000	0.001	0.001	1	1.277	0.000	0.000	0.000	0.000	0						
19	9.866	0.000	0.000	0.001	0.001	1	30.25	0.000	0.000	0.002	0.002	6						
20	9.460	0.000	0.000	0.001	0.001	1	1.208	0.000	0.000	0.000	0.000	0						
21	55.45	0.000	0.000	0.004	0.004	21	30.25	0.000	0.000	0.002	0.002	6						
22	8.728	0.000	0.000	0.001	0.001	1	1.165	0.000	0.000	0.000	0.000	0						
23	42.05	0.000	0.000	0.003	0.003	12	14.27	0.000	0.000	0.001	0.001	1						
24	78.29	0.000	0.000	0.001	0.001	7	14.27	0.000	0.000	0.001	0.001	1						
25	58.62	0.000	0.000	0.001	0.001	5	5.180	0.000	0.000	0.000	0.000	0						
26	45.94	0.000	0.000	0.001	0.001	4	5.180	0.000	0.000	0.000	0.000	0						
27	43.36	0.000	0.000	0.001	0.001	4	5.180	0.000	0.000	0.000	0.000	0						
28	41.04	0.000	0.000	0.001	0.001	4	4.520	0.000	0.000	0.000	0.000	0						
29	23.89	0.000	0.000	0.001	0.001	2	4.520	0.000	0.000	0.000	0.000	0						
30	42.05	0.000	0.000	0.002	0.002	6	4.520	0.000	0.000	0.000	0.000	0						
31							4.520	0.000	0.000	0.000	0.000	0						
Ten Daily Mean																		
Ten Daily I	54.77	0.000	0.000	0.001	0.001	3	8.470	0.000	0.000	0.000	0.000	0						
Ten Daily II	18.56	0.000	0.000	0.001	0.001	1	1.581	0.000	0.000	0.000	0.000	0						
Ten Daily III	42.84	0.000	0.000	0.001	0.001	4	1.165	0.000	0.000	0.000	0.000	0						
Monthly																		

Total

58

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Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
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22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
Ten Daily Mean																		
Ten Daily I																		
Ten Daily II																		
Ten Daily III																		
Monthly																		

Total

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
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24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
Ten Daily Mean																		
Ten Daily I																		
Ten Daily II																		
Ten Daily III																		
Monthly																		

Total

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1989-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1989-1990	1707848	0	1707848	1097
1990-1991	2902510	0	2902510	2782
1991-1992	1714771	0	1714771	858
1992-1993	908882	0	908882	589
1993-1994	827289	0	827289	974
1994-1995	1887533	0	1887533	4035
1995-1996	702121	0	702121	579
1996-1997	3226266	0	3226266	2348
1997-1998	1632617	0	1632617	1999
1998-1999	999417	0	999417	1389
1999-2000	2884450	0	2884450	1070
2000-2001	52131	0	52131	43
2001-2002	1397910	0	1397910	1009
2002-2003	732254	0	732254	447
2003-2004	1734616	0	1734616	1706
2004-2005	3831760	0	3831760	2297
2005-2006	4509	0	4509	953
2006-2007	2268661	0	2268661	2812
2007-2008	1191464	0	1191464	2229
2008-2009	913355	0	913355	947
2009-2010	84582	0	84582	323
2010-2011	676260	0	676260	808
2011-2012	257612	26	257638	1104
2012-2013	10657	24	10681	1439
2013-2014	308796	0	308796	4306
2014-2015	9316	0	9316	720
2015-2016	1101	0	1101	329
2016-2017	1883	0	1883	549
2017-2018	516	0	516	340
2018-2019	237	0	237	261

Sediment Data Year Book 2018-19

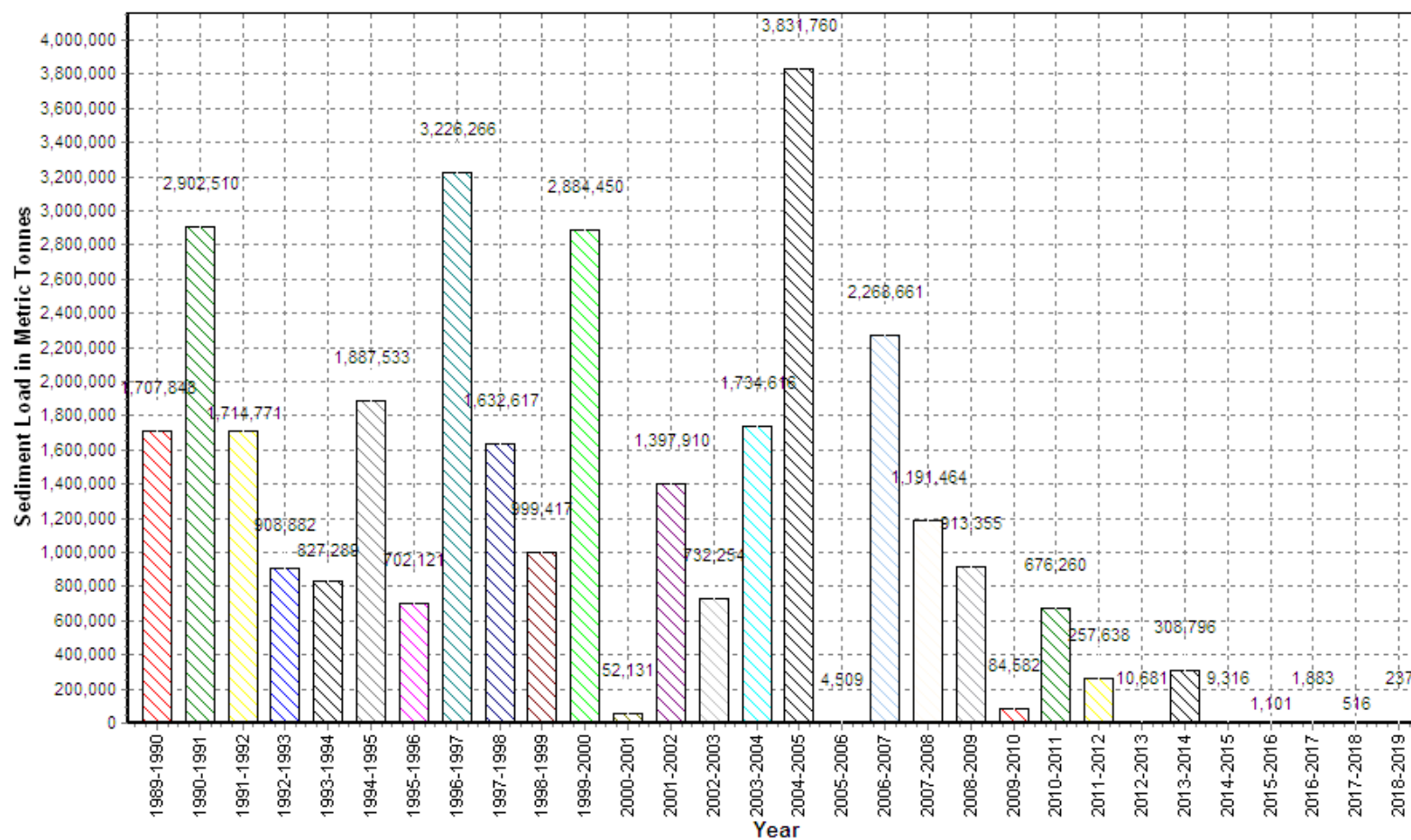
Annual Sediment Load for the period: 1989-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD, Bharuch



Sediment Data Year Book 2018-19

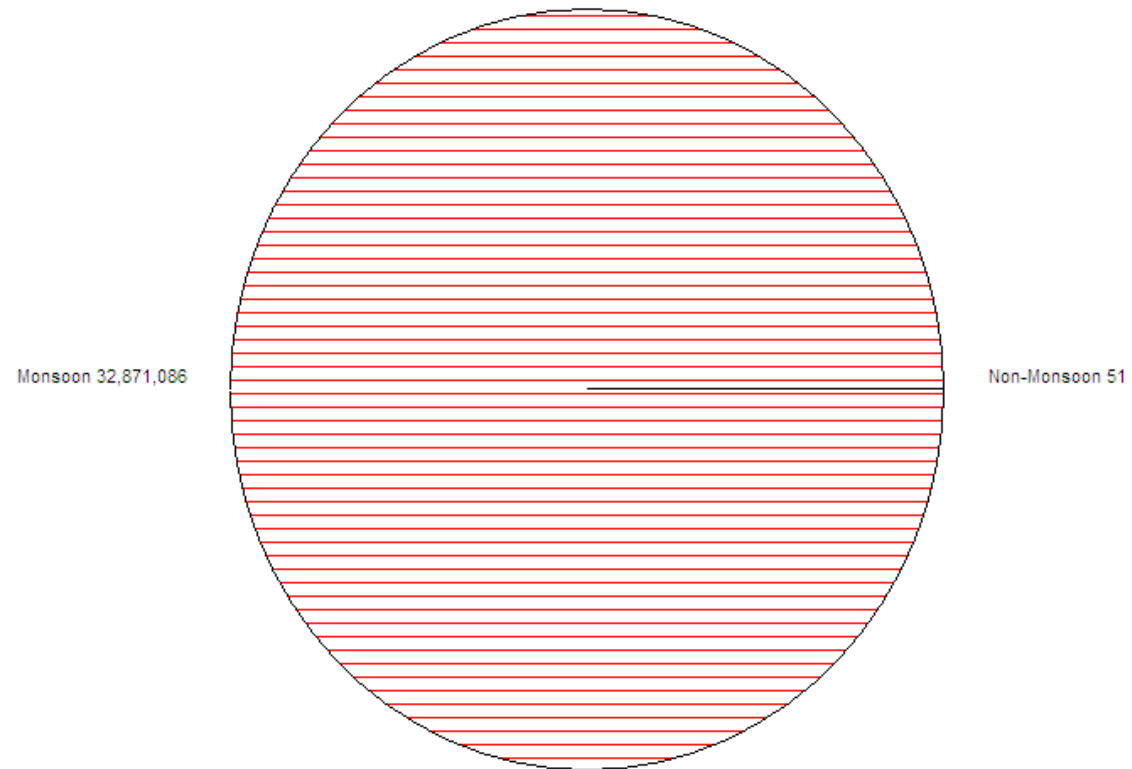
Seasonal Sediment Load for the period : 1989-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch



Sediment Data Year Book 2018-19

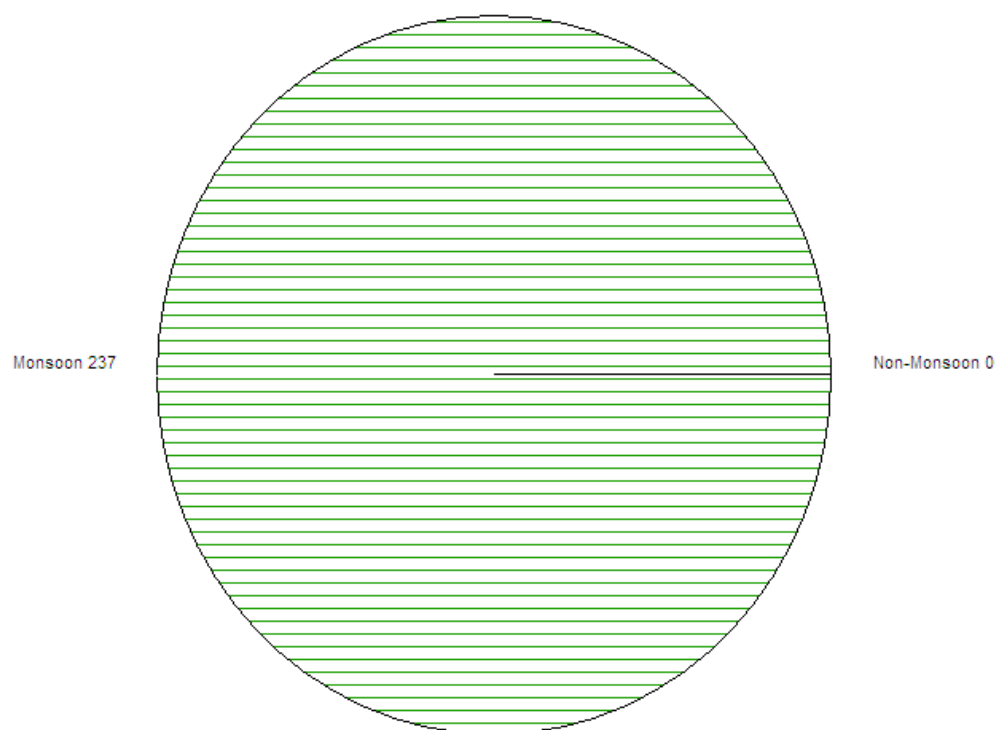
Seasonal Sediment Load for the Year: 2018-2019

Station Name : Orsang at Chandwada (01 02 15 032)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch



6.2 Narmada at Garudeshwar**History Sheet**

		Water Year	: 2018-2019
Site	: Narmada at Garudeshwar	Code	: 01 02 15 030
State	: Gujarat	District	Bharuch
Basin	: Narmada	Independent River	: Narmada
Tributary	:	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Narmada
Division	: Tapi Division, Surat	Sub-Division	: LNSD,Bharuch
Drainage Area	: 87892 Sq. Km.	Bank	: Right
Latitude	: 21°53'00"	Longitude	: 73°39'00"
Zero of Gauge (m)	: 10 .000(M.S.L.)	22/12/1971	
	Opening Date	Closing Date	
Gauge	: 22/12/1971		
Discharge	: 23/03/1972		
Sediment	: 21/03/1973		
Water Quality	: 15/06/1977		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Garudeshwar (01 02 15 030)

Division : Tapi Division, Surat

Local River : Narmada

Sub-Division : LNSD,Bharuch

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	19.67	0.000	0.000	0.000	0.000	0	45.00	0.000	0.000	0.000	0.000	0	46.27	0.000	0.000	0.000	0.000	0
2	19.69	0.000	0.000	0.000	0.000	0	46.55	0.000	0.000	0.000	0.000	0	47.42	0.000	0.000	0.000	0.000	0
3	19.00	0.000	0.000	0.000	0.000	0	25.40	0.000	0.000	0.000	0.000	0	47.07	0.000	0.000	0.000	0.000	0
4	19.53	0.000	0.000	0.000	0.000	0	23.90	0.000	0.000	0.000	0.000	0	48.05	0.000	0.000	0.000	0.000	0
5	19.67	0.000	0.000	0.000	0.000	0	21.80	0.000	0.000	0.000	0.000	0	48.00	0.000	0.000	0.000	0.000	0
6	19.18	0.000	0.000	0.000	0.000	0	19.50	0.000	0.000	0.007	0.007	12	47.30	0.000	0.000	0.000	0.000	0
7	19.02	0.000	0.000	0.000	0.000	0	23.64	0.000	0.000	0.025	0.025	51	47.00	0.000	0.000	0.006	0.006	24
8	19.00	0.000	0.000	0.000	0.000	0	16.00	0.000	0.000	0.000	0.000	0	60.59	0.000	0.000	0.006	0.006	31
9	19.30	0.000	0.000	0.000	0.000	0	18.03	0.000	0.000	0.020	0.020	31	41.63	0.000	0.000	0.002	0.002	7
10	19.00	0.000	0.000	0.000	0.000	0	19.08	0.000	0.000	0.022	0.022	36	26.00	0.000	0.000	0.000	0.000	0
11	19.00	0.000	0.000	0.000	0.000	0	19.10	0.000	0.000	0.002	0.002	3	20.64	0.000	0.000	0.000	0.000	0
12	20.40	0.000	0.000	0.000	0.000	0	18.98	0.000	0.000	0.006	0.006	10	19.00	0.000	0.000	0.000	0.000	0
13	20.47	0.000	0.000	0.000	0.000	0	20.41	0.000	0.000	0.010	0.010	18	20.83	0.000	0.000	0.006	0.006	11
14	20.41	0.000	0.000	0.000	0.000	0	19.10	0.000	0.000	0.018	0.018	30	41.36	0.000	0.000	0.006	0.006	21
15	20.10	0.000	0.000	0.000	0.000	0	19.00	0.000	0.000	0.006	0.006	10	41.00	0.000	0.000	0.000	0.000	0
16	20.00	0.000	0.000	0.000	0.000	0	24.91	0.000	0.000	0.006	0.006	13	41.49	0.000	0.000	0.006	0.006	22
17	20.00	0.000	0.000	0.000	0.000	0	24.56	0.000	0.000	0.006	0.006	13	58.34	0.000	0.000	0.004	0.004	20
18	20.24	0.000	0.000	0.000	0.000	0	25.50	0.000	0.000	0.006	0.006	13	62.49	0.000	0.000	0.012	0.012	65
19	21.44	0.000	0.000	0.000	0.000	0	27.40	0.000	0.000	0.006	0.006	14	43.00	0.000	0.000	0.000	0.000	0
20	21.56	0.000	0.000	0.000	0.000	0	27.59	0.000	0.000	0.002	0.002	5	43.08	0.000	0.000	0.032	0.032	119
21	21.27	0.000	0.000	0.000	0.000	0	42.31	0.000	0.000	0.003	0.003	11	39.28	0.000	0.000	0.000	0.000	0
22	20.20	0.000	0.000	0.000	0.000	0	50.00	0.000	0.000	0.003	0.003	13	40.00	0.000	0.000	0.000	0.000	0
23	19.25	0.000	0.000	0.000	0.000	0	46.82	0.000	0.000	0.006	0.006	24	41.15	0.000	0.000	0.060	0.060	213
24	19.00	0.000	0.000	0.000	0.000	0	45.11	0.000	0.000	0.000	0.000	0	30.73	0.000	0.000	0.000	0.000	0
25	19.50	0.000	0.000	0.000	0.000	0	47.70	0.000	0.000	0.014	0.014	58	29.66	0.000	0.000	0.000	0.000	0
26	25.46	0.000	0.000	0.000	0.000	0	60.37	0.000	0.000	0.010	0.010	52	27.00	0.000	0.000	0.000	0.000	0
27	16.49	0.000	0.000	0.000	0.000	0	60.52	0.000	0.000	0.000	0.000	0	25.03	0.000	0.000	0.000	0.000	0
28	18.22	0.000	0.000	0.000	0.000	0	60.31	0.000	0.000	0.000	0.000	0	24.43	0.000	0.000	0.026	0.026	55
29	51.98	0.000	0.000	0.000	0.000	0	60.00	0.000	0.000	0.000	0.000	0	23.24	0.000	0.000	0.000	0.000	0
30	51.29	0.000	0.000	0.000	0.000	0	58.57	0.000	0.000	0.000	0.000	0	22.73	0.000	0.000	0.000	0.000	0
31							45.38	0.000	0.000	0.000	0.000	0	23.08	0.000	0.000	0.000	0.000	0
Ten Daily Mean																		
Ten Daily I	19.31	0.000	0.000	0.000	0.000	0	25.89	0.000	0.000	0.007	0.007	13	45.93	0.000	0.000	0.001	0.001	6
Ten Daily II	20.36	0.000	0.000	0.000	0.000	0	22.66	0.000	0.000	0.007	0.007	13	39.12	0.000	0.000	0.007	0.007	26
Ten Daily III	26.27	0.000	0.000	0.000	0.000	0	52.46	0.000	0.000	0.003	0.003	14	29.67	0.000	0.000	0.008	0.008	24
Monthly																		
Total						0						416						589

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Garudeshwar (01 02 15 030)

Division : Tapi Division, Surat

Local River : Narmada

Sub-Division : LNSD,Bharuch

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	29.50	0.000	0.000	0.000	0.000	0	17.51	0.000	0.000	0.000	0.000	0	20.49	0.000	0.000	0.000	0.000	0
2	29.00	0.000	0.000	0.000	0.000	0	15.00	0.000	0.000	0.000	0.000	0	23.07	0.000	0.000	0.000	0.000	0
3	24.00	0.000	0.000	0.000	0.000	0	15.42	0.000	0.000	0.000	0.000	0	23.05	0.000	0.000	0.000	0.000	0
4	24.08	0.000	0.000	0.000	0.000	0	16.01	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
5	20.83	0.000	0.000	0.000	0.000	0	16.54	0.000	0.000	0.000	0.000	0	20.25	0.000	0.000	0.000	0.000	0
6	20.50	0.000	0.000	0.000	0.000	0	17.56	0.000	0.000	0.000	0.000	0	18.68	0.000	0.000	0.000	0.000	0
7	19.59	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
8	18.39	0.000	0.000	0.000	0.000	0	15.48	0.000	0.000	0.000	0.000	0	18.49	0.000	0.000	0.000	0.000	0
9	23.00	0.000	0.000	0.000	0.000	0	13.41	0.000	0.000	0.000	0.000	0	18.53	0.000	0.000	0.000	0.000	0
10	23.04	0.000	0.000	0.000	0.000	0	14.11	0.000	0.000	0.000	0.000	0	18.37	0.000	0.000	0.000	0.000	0
11	22.91	0.000	0.000	0.000	0.000	0	14.87	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
12	22.85	0.000	0.000	0.000	0.000	0	14.99	0.000	0.000	0.000	0.000	0	18.51	0.000	0.000	0.000	0.000	0
13	21.00	0.000	0.000	0.000	0.000	0	16.64	0.000	0.000	0.000	0.000	0	18.37	0.000	0.000	0.000	0.000	0
14	21.55	0.000	0.000	0.000	0.000	0	16.00	0.000	0.000	0.000	0.000	0	18.46	0.000	0.000	0.000	0.000	0
15	19.20	0.000	0.000	0.000	0.000	0	17.32	0.000	0.000	0.000	0.000	0	18.05	0.000	0.000	0.000	0.000	0
16	20.00	0.000	0.000	0.000	0.000	0	18.26	0.000	0.000	0.000	0.000	0	18.23	0.000	0.000	0.000	0.000	0
17	16.68	0.000	0.000	0.000	0.000	0	16.54	0.000	0.000	0.000	0.000	0	18.04	0.000	0.000	0.000	0.000	0
18	19.23	0.000	0.000	0.000	0.000	0	17.52	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
19	20.38	0.000	0.000	0.000	0.000	0	16.00	0.000	0.000	0.000	0.000	0	18.04	0.000	0.000	0.000	0.000	0
20	21.93	0.000	0.000	0.000	0.000	0	16.24	0.000	0.000	0.000	0.000	0	18.08	0.000	0.000	0.000	0.000	0
21	21.00	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
22	23.35	0.000	0.000	0.000	0.000	0	16.34	0.000	0.000	0.000	0.000	0	18.16	0.000	0.000	0.000	0.000	0
23	24.00	0.000	0.000	0.000	0.000	0	16.49	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
24	28.59	0.000	0.000	0.000	0.000	0	16.40	0.000	0.000	0.000	0.000	0	18.02	0.000	0.000	0.000	0.000	0
25	21.83	0.000	0.000	0.000	0.000	0	18.03	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
26	19.38	0.000	0.000	0.000	0.000	0	17.34	0.000	0.000	0.000	0.000	0	17.75	0.000	0.000	0.000	0.000	0
27	15.83	0.000	0.000	0.000	0.000	0	27.37	0.000	0.000	0.000	0.000	0	17.81	0.000	0.000	0.000	0.000	0
28	15.38	0.000	0.000	0.000	0.000	0	24.00	0.000	0.000	0.000	0.000	0	17.84	0.000	0.000	0.000	0.000	0
29	18.55	0.000	0.000	0.000	0.000	0	17.49	0.000	0.000	0.000	0.000	0	18.05	0.000	0.000	0.000	0.000	0
30	18.00	0.000	0.000	0.000	0.000	0	18.56	0.000	0.000	0.000	0.000	0	17.60	0.000	0.000	0.000	0.000	0
31							20.62	0.000	0.000	0.000	0.000	0						
Ten Daily Mean																		
Ten Daily I	23.19	0.000	0.000	0.000	0.000	0	15.80	0.000	0.000	0.000	0.000	0	19.69	0.000	0.000	0.000	0.000	0
Ten Daily II	20.57	0.000	0.000	0.000	0.000	0	16.44	0.000	0.000	0.000	0.000	0	18.18	0.000	0.000	0.000	0.000	0
Ten Daily III	20.59	0.000	0.000	0.000	0.000	0	19.15	0.000	0.000	0.000	0.000	0	17.92	0.000	0.000	0.000	0.000	0
Monthly																		
Total						0						0						0

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Garudeshwar (01 02 15 030)

Division : Tapi Division, Surat

Local River : Narmada

Sub-Division : LNSD,Bharuch

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	17.72	0.000	0.000	0.000	0.000	0	16.31	0.000	0.000	0.000	0.000	0	18.64	0.000	0.000	0.000	0.000	0
2	17.00	0.000	0.000	0.000	0.000	0	17.23	0.000	0.000	0.000	0.000	0	18.44	0.000	0.000	0.000	0.000	0
3	18.10	0.000	0.000	0.000	0.000	0	18.13	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
4	18.20	0.000	0.000	0.000	0.000	0	18.37	0.000	0.000	0.000	0.000	0	18.49	0.000	0.000	0.000	0.000	0
5	17.00	0.000	0.000	0.000	0.000	0	18.49	0.000	0.000	0.000	0.000	0	18.03	0.000	0.000	0.000	0.000	0
6	18.20	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0	18.20	0.000	0.000	0.000	0.000	0
7	18.28	0.000	0.000	0.000	0.000	0	20.13	0.000	0.000	0.000	0.000	0	18.35	0.000	0.000	0.000	0.000	0
8	18.57	0.000	0.000	0.000	0.000	0	22.05	0.000	0.000	0.000	0.000	0	18.32	0.000	0.000	0.000	0.000	0
9	18.00	0.000	0.000	0.000	0.000	0	21.98	0.000	0.000	0.000	0.000	0	17.49	0.000	0.000	0.000	0.000	0
10	18.69	0.000	0.000	0.000	0.000	0	21.23	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0
11	18.77	0.000	0.000	0.000	0.000	0	20.00	0.000	0.000	0.000	0.000	0	17.29	0.000	0.000	0.000	0.000	0
12	18.93	0.000	0.000	0.000	0.000	0	19.98	0.000	0.000	0.000	0.000	0	17.19	0.000	0.000	0.000	0.000	0
13	18.38	0.000	0.000	0.000	0.000	0	19.00	0.000	0.000	0.000	0.000	0	17.21	0.000	0.000	0.000	0.000	0
14	17.55	0.000	0.000	0.000	0.000	0	19.00	0.000	0.000	0.000	0.000	0	17.27	0.000	0.000	0.000	0.000	0
15	18.00	0.000	0.000	0.000	0.000	0	19.33	0.000	0.000	0.000	0.000	0	17.18	0.000	0.000	0.000	0.000	0
16	18.00	0.000	0.000	0.000	0.000	0	19.17	0.000	0.000	0.000	0.000	0	16.48	0.000	0.000	0.000	0.000	0
17	18.39	0.000	0.000	0.000	0.000	0	19.07	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0
18	18.54	0.000	0.000	0.000	0.000	0	19.49	0.000	0.000	0.000	0.000	0	18.25	0.000	0.000	0.000	0.000	0
19	20.25	0.000	0.000	0.000	0.000	0	19.30	0.000	0.000	0.000	0.000	0	18.71	0.000	0.000	0.000	0.000	0
20	18.77	0.000	0.000	0.000	0.000	0	19.00	0.000	0.000	0.000	0.000	0	18.20	0.000	0.000	0.000	0.000	0
21	18.34	0.000	0.000	0.000	0.000	0	19.68	0.000	0.000	0.000	0.000	0	18.32	0.000	0.000	0.000	0.000	0
22	17.84	0.000	0.000	0.000	0.000	0	19.85	0.000	0.000	0.000	0.000	0	18.06	0.000	0.000	0.000	0.000	0
23	17.00	0.000	0.000	0.000	0.000	0	19.94	0.000	0.000	0.000	0.000	0	17.98	0.000	0.000	0.000	0.000	0
24	17.97	0.000	0.000	0.000	0.000	0	19.44	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0
25	17.00	0.000	0.000	0.000	0.000	0	19.45	0.000	0.000	0.000	0.000	0	17.81	0.000	0.000	0.000	0.000	0
26	17.23	0.000	0.000	0.000	0.000	0	19.00	0.000	0.000	0.000	0.000	0	18.14	0.000	0.000	0.000	0.000	0
27	16.97	0.000	0.000	0.000	0.000	0	19.00	0.000	0.000	0.000	0.000	0	17.61	0.000	0.000	0.000	0.000	0
28	16.58	0.000	0.000	0.000	0.000	0	19.09	0.000	0.000	0.000	0.000	0	17.82	0.000	0.000	0.000	0.000	0
29	16.67	0.000	0.000	0.000	0.000	0	18.43	0.000	0.000	0.000	0.000	0						
30	16.00	0.000	0.000	0.000	0.000	0	18.10	0.000	0.000	0.000	0.000	0						
31	16.71	0.000	0.000	0.000	0.000	0	18.17	0.000	0.000	0.000	0.000	0						
Ten Daily Mean																		
Ten Daily I	17.98	0.000	0.000	0.000	0.000	0	19.19	0.000	0.000	0.000	0.000	0	18.10	0.000	0.000	0.000	0.000	0
Ten Daily II	18.56	0.000	0.000	0.000	0.000	0	19.33	0.000	0.000				17.48	0.000	0.000	0.000	0.000	0
Ten Daily III	17.12	0.000	0.000	0.000	0.000	0	19.10	0.000	0.000	0.000	0.000	0	17.84	0.000	0.000	0.000	0.000	0
Monthly																		
Total						0						0						0

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Garudeshwar (01 02 15 030)

Division : Tapi Division, Surat

Local River : Narmada

Sub-Division : LNSD,Bharuch

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	17.89	0.000	0.000	0.000	0.000	0	18.43	0.000	0.000	0.000	0.000	0	17.26	0.000	0.000	0.000	0.000	0
2	17.72	0.000	0.000	0.000	0.000	0	18.99	0.000	0.000	0.000	0.000	0	17.46	0.000	0.000	0.000	0.000	0
3	17.00	0.000	0.000	0.000	0.000	0	17.97	0.000	0.000	0.000	0.000	0	17.87	0.000	0.000	0.000	0.000	0
4	17.68	0.000	0.000	0.000	0.000	0	16.21	0.000	0.000	0.000	0.000	0	17.81	0.000	0.000	0.000	0.000	0
5	1.480	0.000	0.000	0.000	0.000	0	16.34	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0
6	17.21	0.000	0.000	0.000	0.000	0	16.61	0.000	0.000	0.000	0.000	0	17.81	0.000	0.000	0.000	0.000	0
7	17.24	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0	17.50	0.000	0.000	0.000	0.000	0
8	17.21	0.000	0.000	0.000	0.000	0	17.89	0.000	0.000	0.000	0.000	0	17.83	0.000	0.000	0.000	0.000	0
9	17.14	0.000	0.000	0.000	0.000	0	18.20	0.000	0.000	0.000	0.000	0	17.58	0.000	0.000	0.000	0.000	0
10	17.00	0.000	0.000	0.000	0.000	0	18.04	0.000	0.000	0.000	0.000	0	17.27	0.000	0.000	0.000	0.000	0
11	14.17	0.000	0.000	0.000	0.000	0	18.13	0.000	0.000	0.000	0.000	0	17.37	0.000	0.000	0.000	0.000	0
12	17.27	0.000	0.000	0.000	0.000	0	18.19	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0
13	16.00	0.000	0.000	0.000	0.000	0	18.41	0.000	0.000	0.000	0.000	0	17.31	0.000	0.000	0.000	0.000	0
14	16.03	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0	17.41	0.000	0.000	0.000	0.000	0
15	16.87	0.000	0.000	0.000	0.000	0	17.82	0.000	0.000	0.000	0.000	0	17.86	0.000	0.000	0.000	0.000	0
16	16.55	0.000	0.000	0.000	0.000	0	17.21	0.000	0.000	0.000	0.000	0	17.41	0.000	0.000	0.000	0.000	0
17	16.00	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0	17.61	0.000	0.000	0.000	0.000	0
18	16.56	0.000	0.000	0.000	0.000	0	17.04	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0
19	17.11	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0
20	17.73	0.000	0.000	0.000	0.000	0	17.04	0.000	0.000	0.000	0.000	0	18.05	0.000	0.000	0.000	0.000	0
21	17.00	0.000	0.000	0.000	0.000	0	17.00	0.000	0.000	0.000	0.000	0	18.37	0.000	0.000	0.000	0.000	0
22	18.09	0.000	0.000	0.000	0.000	0	16.02	0.000	0.000	0.000	0.000	0	18.15	0.000	0.000	0.000	0.000	0
23	18.43	0.000	0.000	0.000	0.000	0	16.00	0.000	0.000	0.000	0.000	0	18.21	0.000	0.000	0.000	0.000	0
24	18.00	0.000	0.000	0.000	0.000	0	16.46	0.000	0.000	0.000	0.000	0	18.45	0.000	0.000	0.000	0.000	0
25	18.50	0.000	0.000	0.000	0.000	0	16.11	0.000	0.000	0.000	0.000	0	18.49	0.000	0.000	0.000	0.000	0
26	18.39	0.000	0.000	0.000	0.000	0	17.73	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0
27	18.71	0.000	0.000	0.000	0.000	0	18.00	0.000	0.000	0.000	0.000	0	18.41	0.000	0.000	0.000	0.000	0
28	17.84	0.000	0.000	0.000	0.000	0	18.39	0.000	0.000	0.000	0.000	0	18.74	0.000	0.000	0.000	0.000	0
29	18.21	0.000	0.000	0.000	0.000	0	18.65	0.000	0.000	0.000	0.000	0	18.29	0.000	0.000	0.000	0.000	0
30	18.20	0.000	0.000	0.000	0.000	0	17.84	0.000	0.000	0.000	0.000	0	43.00	0.000	0.000	0.000	0.000	0
31	18.00	0.000	0.000	0.000	0.000	0							42.66	0.000	0.000	0.000	0.000	0
Ten Daily Mean																		
Ten Daily I	15.76	0.000	0.000	0.000	0.000	0	17.57	0.000	0.000	0.000	0.000	0	17.54	0.000	0.000	0.000	0.000	0
Ten Daily II	16.43	0.000	0.000	0.000	0.000	0	17.58	0.000	0.000	0.000	0.000	0	17.40	0.000	0.000	0.000	0.000	0
Ten Daily III	18.12	0.000	0.000	0.000	0.000	0	17.22	0.000	0.000	0.000	0.000	0	38.13	0.000	0.000	0.000	0.000	0
Monthly																		
Total						0						0						0

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Garudeshwar (01 02 15 030) Division : Tapi Division, Surat

Local River : Narmada

Sub-Division : LNSD,Bharuch

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	23596920	0	23596920	15058
1988-1989	44968910	0	44968910	33262
1989-1990	29277169	0	29277169	23454
1990-1991	51824968	0	51824968	51213
1991-1992	30082897	0	30082897	26138
1992-1993	15587484	0	15587484	20886
1993-1994	17225635	0	17225635	35989
1994-1995	36751681	0	36751681	74061
1995-1996	2218095	0	2218095	23290
1996-1997	9122661	0	9122661	27246
1997-1998	7607284	0	7607284	33802
1998-1999	4610413	0	4610413	23109
1999-2000	15376745	0	15376745	49029
2000-2001	588472	0	588472	11486
2001-2002	3084144	0	3084144	23284
2002-2003	3720112	0	3720112	21023
2003-2004	4835297	0	4835297	30308
2004-2005	2602520	0	2602520	17505
2005-2006	2678060	85099	2763159	25676
2006-2007	6639002	60256	6699258	32524
2007-2008	3310012	43520	3353532	18427
2008-2009	75144	3083	78227	4492
2009-2010	737914	7828	745742	6744
2010-2011	311630	205	311835	8295
2011-2012	84072	423	84495	21732
2012-2013	28164	451	28615	21901
2013-2014	2767532	0	2767532	49130
2014-2015	104139	0	104139	8980
2015-2016	58431	0	58431	6284
2016-2017	340982	58	341040	16018
2017-2018	1444	0	1444	1440
2018-2019	1005	0	1005	699

Sediment Data Year Book 2018-19

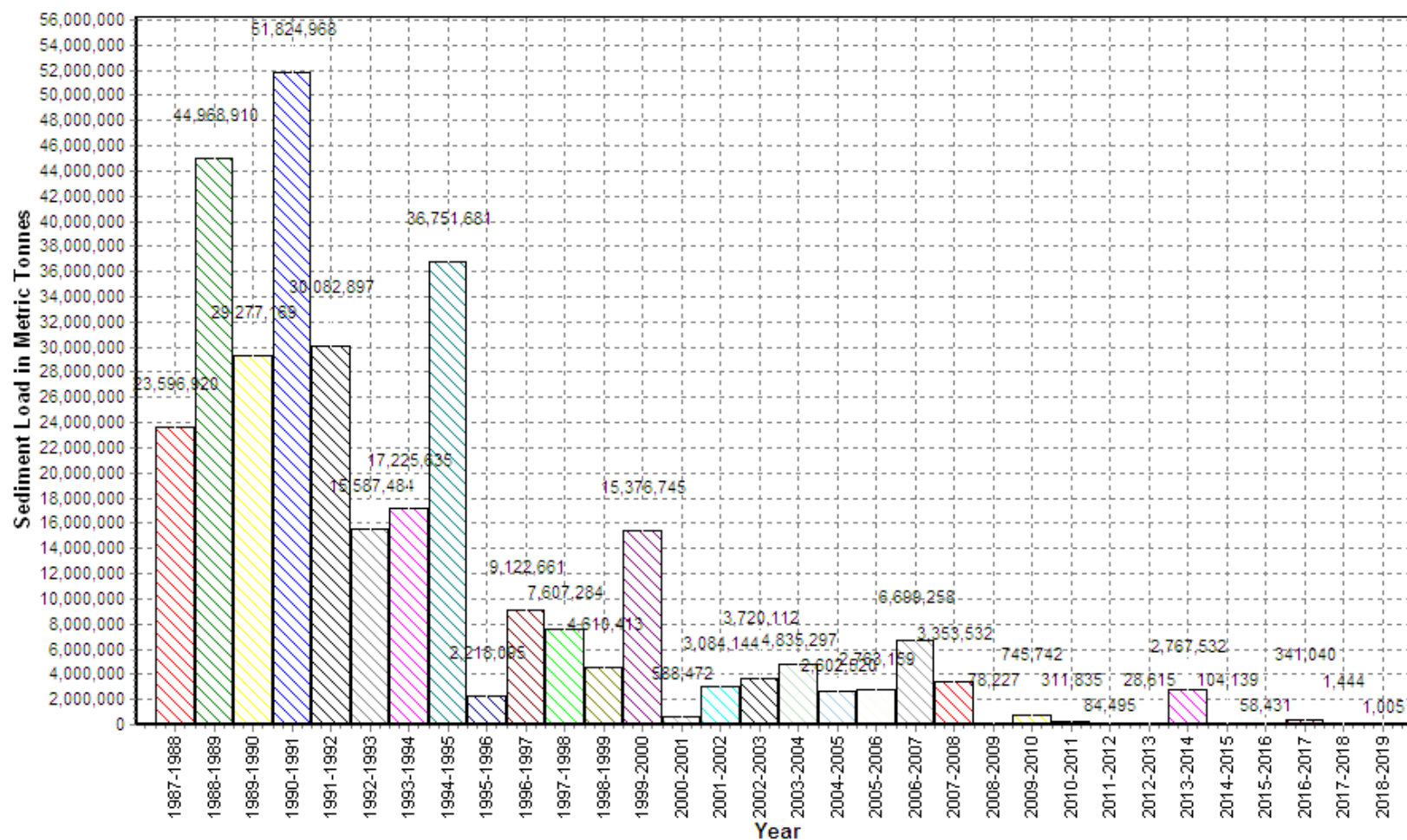
Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Garudeshwar (01 02 15 030)

Division : Tapi Division, Surat

Local River : Narmada

Sub-Division : LNSD,Bharuch



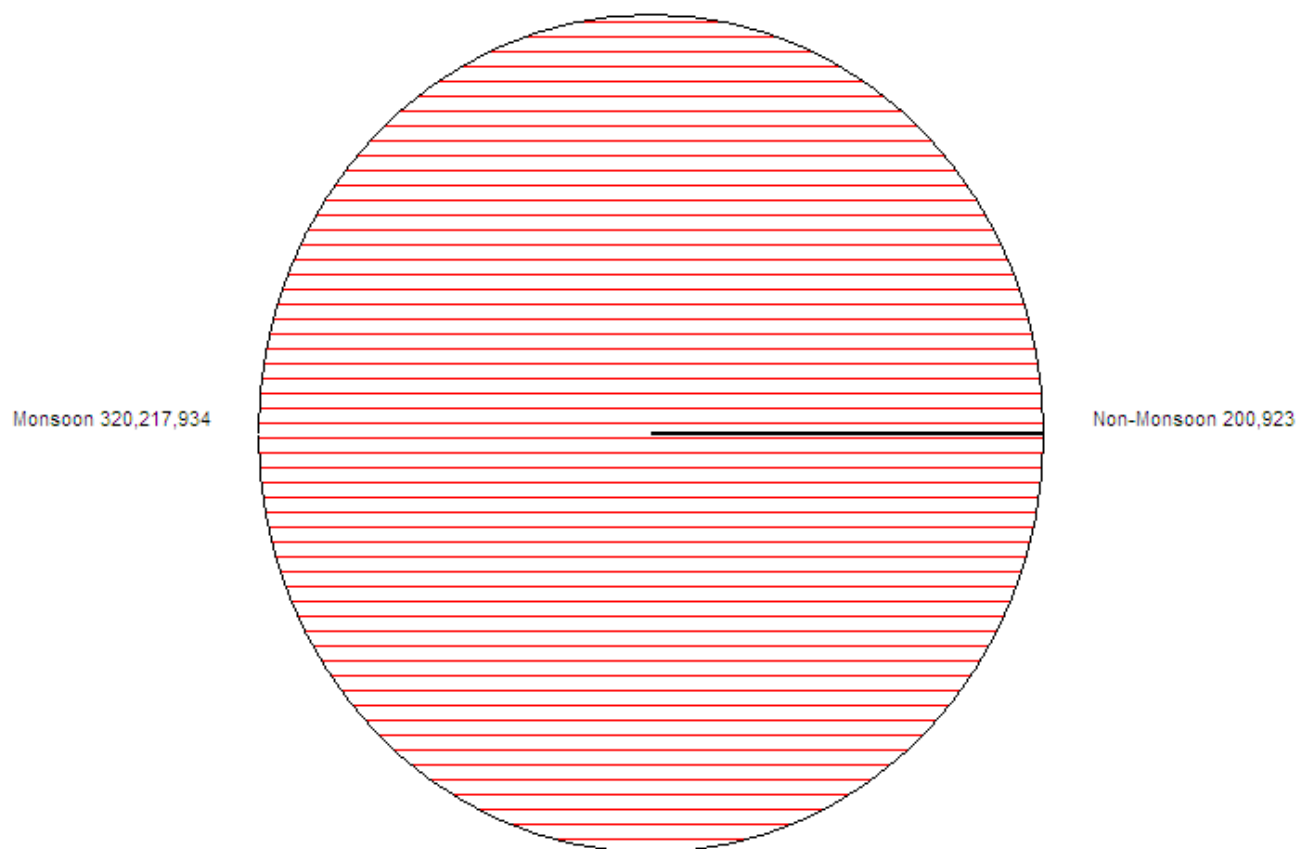
Seasonal Sediment Load for the period : 1987-2019

Station Name : Narmada at Garudeshwar (01 02 15 030)

Local River : Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch



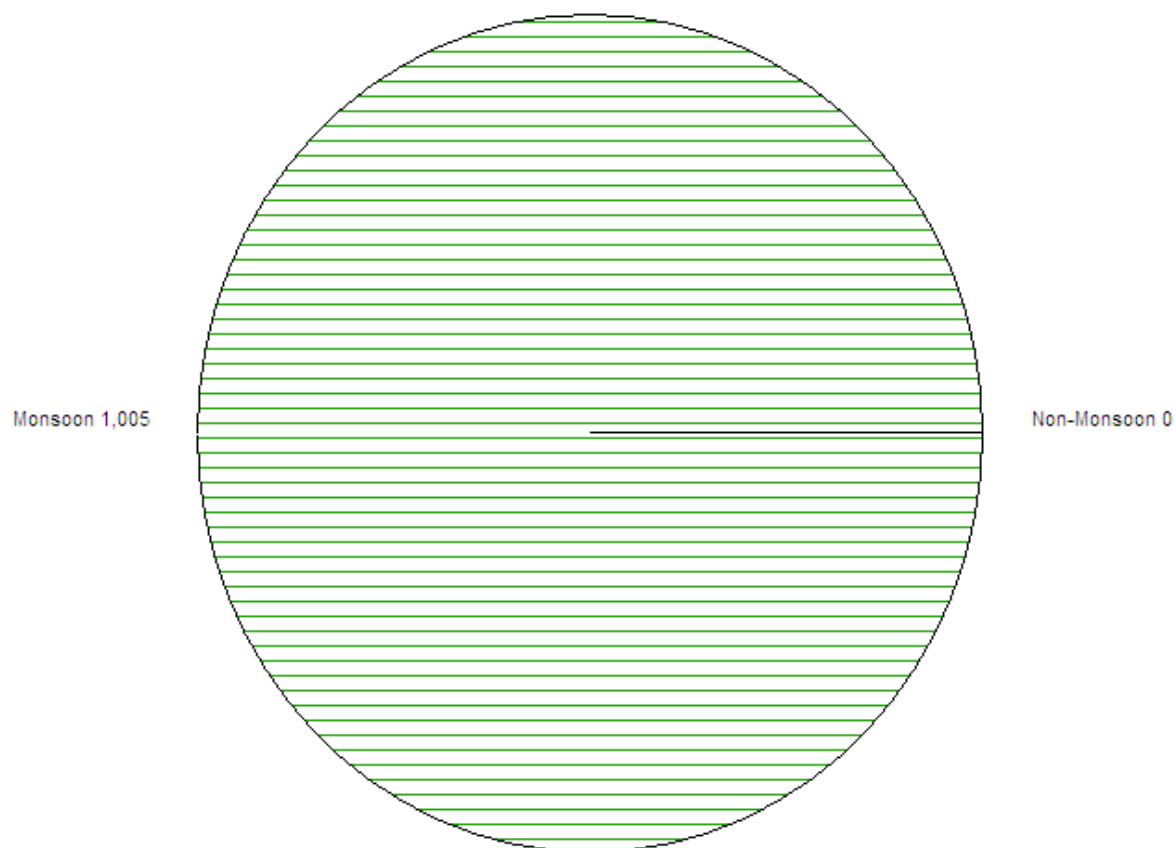
Seasonal Sediment Load for the period : 2018-2019

Station Name : Narmada at Garudeshwar (01 02 15 030)

Local River : Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch



6.3 Narmada at Mandleshwar**History Sheet**

		Water Year	:	2018-2019	
Site	:	Narmada at Mandleshwar	Code	:	010215026
State	:	Madhya Pradesh	District		Khargone
Basin	:	Narmada	Independent River	:	Narmada
Tributary	:		Local River	:	Narmada
Division	:	Narmada Division, Bhopal	Sub-Division	:	MNSD-III, Indore
Drainage Area	:	72809 Sq. Km.	Bank	:	Right
Latitude	:	22°10'18"	Longitude	:	75°39'39"
Zero of Gauge (m)	:	138 .000(M.S.L.)	16/12/1970		
		Opening Date	Closing Date		
Gauge	:	16/12/1970			
Discharge	:	28/08/1971			
Sediment	:	14/04/1972			
Water Quality	:	18/06/1979			

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Mandleshwar (010215026)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD- III, Indore

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	196.0	0.000	0.000	0.015	0.015	254	1070	0.000	0.000	0.055	0.055	5085	38.10	0.000	0.000	0.014	0.014	46
2	63.10	0.000	0.000	0.013	0.013	71	233.4	0.000	0.000	0.017	0.017	343	46.40	0.000	0.000	0.013	0.013	52
3	55.00	0.000	0.000	0.011	0.011	52	274.8	0.000	0.000	0.015	0.015	356	56.10	0.000	0.000	0.015	0.015	73
4	55.10	0.000	0.000	0.012	0.012	57	167.3	0.000	0.000	0.014	0.014	202	101.3	0.000	0.000	0.017	0.017	149
5	77.40	0.000	0.000	0.000	0.000	0	101.5	0.000	0.000	0.011	0.011	96	87.00	0.000	0.000	0.010	0.010	75
6	135.5	0.000	0.000	0.000	0.000	0	164.6	0.000	0.000	0.014	0.014	199	96.40	0.000	0.000	0.016	0.016	133
7	127.0	0.000	0.000	0.000	0.000	0	446.6	0.000	0.000	0.018	0.018	695	44.50	0.000	0.000	0.014	0.014	54
8	130.2	0.000	0.000	0.000	0.000	0	710.0	0.000	0.000	0.010	0.010	613	29.30	0.000	0.000	0.012	0.012	30
9	105.2	0.000	0.000	0.011	0.011	100	164.0	0.000	0.000	0.015	0.015	213	128.3	0.000	0.000	0.010	0.010	111
10	93.00	0.000	0.000	0.010	0.010	80	83.10	0.000	0.000	0.013	0.013	93	127.8	0.000	0.000	0.013	0.013	144
11	71.70	0.000	0.000	0.012	0.012	74	53.60	0.000	0.000	0.011	0.011	51	153.3	0.000	0.000	0.015	0.015	199
12	130.4	0.000	0.000	0.013	0.013	146	787.3	0.000	0.000	0.414	0.414	28161	186.0	0.000	0.000	0.010	0.010	161
13	289.8	0.000	0.000	0.015	0.015	376	551.2	0.000	0.000	0.019	0.019	905	149.6	0.000	0.000	0.012	0.012	155
14	264.8	0.000	0.000	0.013	0.013	297	538.2	0.000	0.000	0.016	0.016	744	241.1	0.000	0.000	0.014	0.014	292
15	119.2	0.000	0.000	0.011	0.011	113	1600	0.000	0.000	0.010	0.010	1382	128.0	0.000	0.000	0.010	0.010	111
16	125.0	0.000	0.000	0.012	0.012	130	273.4	0.000	0.000	0.030	0.030	709	191.0	0.000	0.000	0.016	0.016	264
17	95.00	0.000	0.000	0.009	0.009	74	129.8	0.000	0.000	0.019	0.019	213	4325	0.000	0.000	0.882	0.882	329586
18	167.2	0.000	0.000	0.013	0.013	188	76.40	0.000	0.000	0.016	0.016	106	653.2	0.000	0.000	0.455	0.455	25679
19	411.5	0.000	0.000	0.016	0.016	569	71.30	0.000	0.000	0.015	0.015	92	374.0	0.000	0.000	0.010	0.010	323
20	391.7	0.000	0.000	0.015	0.015	508	49.20	0.000	0.000	0.012	0.012	51	283.8	0.000	0.000	0.023	0.023	564
21	1089	0.000	0.000	0.051	0.051	4799	55.10	0.000	0.000	0.013	0.013	62	374.6	0.000	0.000	0.063	0.063	2039
22	277.0	0.000	0.000	0.021	0.021	503	52.00	0.000	0.000	0.010	0.010	45	2680	0.000	0.000	0.010	0.010	2316
23	197.8	0.000	0.000	0.019	0.019	325	72.60	0.000	0.000	0.015	0.015	94	1057	0.000	0.000	0.095	0.095	8672
24	658.0	0.000	0.000	0.063	0.063	3582	295.5	0.000	0.000	0.013	0.013	332	705.9	0.000	0.000	0.076	0.076	4635
25	228.9	0.000	0.000	0.016	0.016	316	116.3	0.000	0.000	0.012	0.012	121	466.3	0.000	0.000	0.051	0.051	2055
26	233.6	0.000	0.000	0.015	0.015	303	74.40	0.000	0.000	0.010	0.010	64	315.0	0.000	0.000	0.010	0.010	272
27	269.8	0.000	0.000	0.021	0.021	490	49.20	0.000	0.000	0.013	0.013	55	1708	0.000	0.000	0.058	0.058	8561
28	198.7	0.000	0.000	0.018	0.018	309	38.30	0.000	0.000	0.011	0.011	36	1495	0.000	0.000	0.042	0.042	5426
29	298.2	0.000	0.000	0.022	0.022	567	30.00	0.000	0.000	0.010	0.010	26	1486	0.000	0.000	0.041	0.041	5263
30	293.3	0.000	0.000	0.015	0.015	380	104.1	0.000	0.000	0.015	0.015	135	785.8	0.000	0.000	0.025	0.025	1697
31							57.20	0.000	0.000	0.013	0.013	64	1339	0.000	0.000	0.030	0.030	3471
Ten Daily Mean																		
Ten Daily I	103.8	0.000	0.000	0.007	0.007	61	341.5	0.000	0.000	0.018	0.018	790	75.52	0.000	0.000	0.013	0.013	87
Ten Daily II	206.6	0.000	0.000	0.013	0.013	247	413.0	0.000	0.000	0.056	0.056	3241	668.5	0.000	0.000	0.145	0.145	35733
Ten Daily III	374.4	0.000	0.000	0.026	0.026	1157	85.88	0.000	0.000	0.012	0.012	94	1128	0.000	0.000	0.046	0.046	4037
Monthly																		
Total						14662						41344						402605

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Mandleshwar (010215026)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	1457	0.000	0.000	0.022	0.022	2769	932.5	0.000	0.000	0.015	0.015	1209	860.1	0.000	0.000	0.015	0.015	1115
2	1290	0.000	0.000	0.019	0.019	2118	442.0	0.000	0.000	0.007	0.007	267	1519	0.000	0.000	0.017	0.017	2231
3	1339	0.000	0.000	0.017	0.017	1966	440.2	0.000	0.000	0.013	0.013	494	1678	0.000	0.000	0.018	0.018	2609
4	1168	0.000	0.000	0.016	0.016	1615	234.5	0.000	0.000	0.012	0.012	243	1540	0.000	0.000	0.017	0.017	2262
5	1371	0.000	0.000	0.021	0.021	2487	1168	0.000	0.000	0.011	0.011	1110	795.0	0.000	0.000	0.016	0.016	1099
6	427.3	0.000	0.000	0.018	0.018	665	1309	0.000	0.000	0.015	0.015	1696	569.9	0.000	0.000	0.014	0.014	689
7	170.5	0.000	0.000	0.017	0.017	250	1310	0.000	0.000	0.015	0.015	1698	341.0	0.000	0.000	0.008	0.008	236
8	124.9	0.000	0.000	0.019	0.019	205	914.3	0.000	0.000	0.016	0.016	1264	134.7	0.000	0.000	0.012	0.012	140
9	1456	0.000	0.000	0.221	0.221	27801	954.0	0.000	0.000	0.019	0.019	1566	118.4	0.000	0.000	0.013	0.013	133
10	1524	0.000	0.000	0.031	0.031	4081	944.3	0.000	0.000	0.016	0.016	1305	201.3	0.000	0.000	0.000	0.000	0
11	1752	0.000	0.000	0.032	0.032	4843	293.5	0.000	0.000	0.014	0.014	355	260.0	0.000	0.000	0.029	0.029	651
12	1065	0.000	0.000	0.029	0.029	2669	312.3	0.000	0.000	0.015	0.015	405	435.7	0.000	0.000	0.016	0.016	602
13	825.0	0.000	0.000	0.022	0.022	1568	238.9	0.000	0.000	0.013	0.013	268	665.8	0.000	0.000	0.016	0.016	920
14	645.7	0.000	0.000	0.023	0.023	1283	238.0	0.000	0.000	0.013	0.013	267	295.4	0.000	0.000	0.014	0.014	357
15	868.3	0.000	0.000	0.021	0.021	1575	687.3	0.000	0.000	0.015	0.015	891	255.6	0.000	0.000	0.013	0.013	287
16	984.0	0.000	0.000	0.024	0.024	2040	449.1	0.000	0.000	0.013	0.013	504	131.5	0.000	0.000	0.012	0.012	136
17	1244	0.000	0.000	0.019	0.019	2042	819.2	0.000	0.000	0.017	0.017	1203	188.2	0.000	0.000	0.015	0.015	244
18	1344	0.000	0.000	0.020	0.020	2322	660.0	0.000	0.000	0.013	0.013	741	428.0	0.000	0.000	0.034	0.034	1257
19	716.8	0.000	0.000	0.016	0.016	991	560.0	0.000	0.000	0.011	0.011	532	665.4	0.000	0.000	0.016	0.016	920
20	1068	0.000	0.000	0.026	0.026	2398	443.7	0.000	0.000	0.016	0.016	613	633.5	0.000	0.000	0.015	0.015	821
21	306.0	0.000	0.000	0.007	0.007	185	635.0	0.000	0.000	0.023	0.023	1262	590.0	0.000	0.000	0.014	0.014	714
22	231.1	0.000	0.000	0.022	0.022	439	230.0	0.000	0.000	0.015	0.015	298	592.6	0.000	0.000	0.015	0.015	768
23	2850	0.000	0.000	0.271	0.271	66731	228.2	0.000	0.000	0.013	0.013	256	460.0	0.000	0.000	0.012	0.012	477
24	1010	0.000	0.000	0.020	0.020	1745	455.7	0.000	0.000	0.014	0.014	551	439.6	0.000	0.000	0.013	0.013	494
25	919.3	0.000	0.000	0.019	0.019	1509	635.7	0.000	0.000	0.016	0.016	879	525.0	0.000	0.000	0.016	0.016	726
26	598.9	0.000	0.000	0.016	0.016	828	503.3	0.000	0.000	0.013	0.013	565	311.5	0.000	0.000	0.012	0.012	323
27	1172	0.000	0.000	0.023	0.023	2329	225.0	0.000	0.000	0.011	0.011	214	359.9	0.000	0.000	0.014	0.014	435
28	1299	0.000	0.000	0.025	0.025	2807	467.0	0.000	0.000	0.023	0.023	928	608.2	0.000	0.000	0.024	0.024	1261
29	1215	0.000	0.000	0.024	0.024	2519	276.0	0.000	0.000	0.013	0.013	310	238.3	0.000	0.000	0.011	0.011	226
30	1764	0.000	0.000	0.035	0.035	5334	416.7	0.000	0.000	0.014	0.014	504	440.0	0.000	0.000	0.015	0.015	570
31							477.3	0.000	0.000	0.015	0.015	619						
Ten Daily Mean																		
Ten Daily I	1033	0.000	0.000	0.040	0.040	4396	864.8	0.000	0.000	0.014	0.014	1085	775.7	0.000	0.000	0.013	0.013	1051
Ten Daily II	1051	0.000	0.000	0.023	0.023	2173	470.2	0.000	0.000	0.014	0.014	578	395.9	0.000	0.000	0.018	0.018	620
Ten Daily III	1137	0.000	0.000	0.046	0.046	8443	413.6	0.000	0.000	0.015	0.015	581	456.5	0.000	0.000	0.015	0.015	599
Monthly																		
Total						150116						23019						22705

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Mandleshwar (010215026)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	429.6	0.000	0.000	0.015	0.015	557	651.9	0.000	0.000	0.010	0.010	563	292.1	0.000	0.000	0.014	0.014	353
2	520.0	0.000	0.000	0.018	0.018	809	739.4	0.000	0.000	0.013	0.013	830	502.6	0.000	0.000	0.024	0.024	1042
3	274.7	0.000	0.000	0.012	0.012	285	640.4	0.000	0.000	0.012	0.012	664	640.0	0.000	0.000	0.030	0.030	1659
4	545.4	0.000	0.000	0.013	0.013	613	713.5	0.000	0.000	0.013	0.013	801	499.7	0.000	0.000	0.013	0.013	561
5	511.2	0.000	0.000	0.012	0.012	530	554.0	0.000	0.000	0.010	0.010	479	586.1	0.000	0.000	0.015	0.015	760
6	595.0	0.000	0.000	0.014	0.014	720	719.0	0.000	0.000	0.013	0.013	808	222.0	0.000	0.000	0.006	0.006	115
7	662.4	0.000	0.000	0.016	0.016	916	466.6	0.000	0.000	0.013	0.013	524	377.6	0.000	0.000	0.010	0.010	326
8	447.6	0.000	0.000	0.011	0.011	425	430.7	0.000	0.000	0.012	0.012	447	169.3	0.000	0.000	0.004	0.004	59
9	525.0	0.000	0.000	0.013	0.013	590	548.1	0.000	0.000	0.015	0.015	710	283.2	0.000	0.000	0.007	0.007	171
10	519.2	0.000	0.000	0.013	0.013	583	670.7	0.000	0.000	0.019	0.019	1101	680.0	0.000	0.000	0.018	0.018	1058
11	585.6	0.000	0.000	0.012	0.012	607	503.7	0.000	0.000	0.014	0.014	609	459.6	0.000	0.000	0.011	0.011	437
12	656.0	0.000	0.000	0.013	0.013	737	389.8	0.000	0.000	0.011	0.011	370	515.9	0.000	0.000	0.012	0.012	535
13	519.1	0.000	0.000	0.011	0.011	493	390.0	0.000	0.000	0.011	0.011	371	581.2	0.000	0.000	0.014	0.014	703
14	430.7	0.000	0.000	0.009	0.009	335	400.0	0.000	0.000	0.012	0.012	415	510.2	0.000	0.000	0.012	0.012	529
15	339.8	0.000	0.000	0.007	0.007	206	519.4	0.000	0.000	0.016	0.016	718	167.6	0.000	0.000	0.004	0.004	58
16	930.0	0.000	0.000	0.019	0.019	1527	525.3	0.000	0.000	0.016	0.016	726	114.6	0.000	0.000	0.003	0.003	30
17	430.2	0.000	0.000	0.012	0.012	446	294.8	0.000	0.000	0.009	0.009	229	81.00	0.000	0.000	0.002	0.002	14
18	526.4	0.000	0.000	0.011	0.011	500	371.0	0.000	0.000	0.011	0.011	353	73.80	0.000	0.000	0.014	0.014	89
19	776.6	0.000	0.000	0.016	0.016	1074	275.9	0.000	0.000	0.008	0.008	191	144.3	0.000	0.000	0.027	0.027	337
20	798.1	0.000	0.000	0.017	0.017	1172	458.0	0.000	0.000	0.014	0.014	554	295.1	0.000	0.000	0.056	0.056	1428
21	1066	0.000	0.000	0.022	0.022	2026	335.2	0.000	0.000	0.012	0.012	348	219.7	0.000	0.000	0.042	0.042	797
22	1003	0.000	0.000	0.021	0.021	1820	287.1	0.000	0.000	0.008	0.008	198	224.5	0.000	0.000	0.043	0.043	834
23	788.0	0.000	0.000	0.016	0.016	1089	182.9	0.000	0.000	0.005	0.005	79	881.3	0.000	0.000	0.167	0.167	12716
24	593.7	0.000	0.000	0.014	0.014	718	109.3	0.000	0.000	0.005	0.005	47	690.0	0.000	0.000	0.131	0.131	7810
25	762.0	0.000	0.000	0.018	0.018	1185	131.2	0.000	0.000	0.005	0.005	57	242.8	0.000	0.000	0.013	0.013	273
26	637.1	0.000	0.000	0.012	0.012	661	108.0	0.000	0.000	0.021	0.021	196	300.3	0.000	0.000	0.016	0.016	415
27	796.4	0.000	0.000	0.015	0.015	1032	503.0	0.000	0.000	0.012	0.012	522	325.3	0.000	0.000	0.017	0.017	478
28	793.2	0.000	0.000	0.015	0.015	1028	254.2	0.000	0.000	0.006	0.006	132	214.6	0.000	0.000	0.011	0.011	204
29	901.4	0.000	0.000	0.017	0.017	1324	135.1	0.000	0.000	0.011	0.011	128						
30	797.0	0.000	0.000	0.015	0.015	1033	242.9	0.000	0.000	0.006	0.006	126						
31	832.2	0.000	0.000	0.015	0.015	1079	334.5	0.000	0.000	0.016	0.016	462						
Ten Daily Mean																		
Ten Daily I	503.0	0.000	0.000	0.014	0.014	603	613.4	0.000	0.000	0.013	0.013	693	425.3	0.000	0.000	0.014	0.014	610
Ten Daily II	599.3	0.000	0.000	0.013	0.013	710	412.8	0.000	0.000	0.012	0.012	454	294.3	0.000	0.000	0.016	0.016	416
Ten Daily III	815.5	0.000	0.000	0.016	0.016	1181	238.5	0.000	0.000	0.010	0.010	209	387.3	0.000	0.000	0.055	0.055	2941
Monthly																		
Total						26118						13758						33790

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Mandleshwar (010215026)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	294.8	0.000	0.000	0.015	0.015	382	1404	0.000	0.000	0.015	0.015	1820	621.7	0.000	0.000	0.035	0.035	1880
2	664.8	0.000	0.000	0.036	0.036	2068	1558	0.000	0.000	0.017	0.017	2288	238.6	0.000	0.000	0.013	0.013	268
3	787.0	0.000	0.000	0.042	0.042	2856	716.5	0.000	0.000	0.008	0.008	495	443.5	0.000	0.000	0.025	0.025	958
4	775.0	0.000	0.000	0.041	0.041	2745	271.4	0.000	0.000	0.003	0.003	70	321.0	0.000	0.000	0.018	0.018	499
5	775.1	0.000	0.000	0.014	0.014	938	364.3	0.000	0.000	0.004	0.004	126	425.0	0.000	0.000	0.024	0.024	881
6	605.0	0.000	0.000	0.011	0.011	575	373.4	0.000	0.000	0.004	0.004	129	169.8	0.000	0.000	0.012	0.012	176
7	400.2	0.000	0.000	0.007	0.007	242	333.0	0.000	0.000	0.004	0.004	115	132.9	0.000	0.000	0.009	0.009	103
8	251.1	0.000	0.000	0.005	0.005	108	305.7	0.000	0.000	0.003	0.003	79	293.9	0.000	0.000	0.021	0.021	533
9	294.7	0.000	0.000	0.005	0.005	127	313.3	0.000	0.000	0.003	0.003	81	143.8	0.000	0.000	0.010	0.010	124
10	311.0	0.000	0.000	0.006	0.006	161	172.7	0.000	0.000	0.002	0.002	30	321.0	0.000	0.000	0.023	0.023	638
11	263.4	0.000	0.000	0.012	0.012	273	335.8	0.000	0.000	0.004	0.004	116	656.2	0.000	0.000	0.046	0.046	2608
12	214.3	0.000	0.000	0.010	0.010	185	231.5	0.000	0.000	0.002	0.002	40	574.0	0.000	0.000	0.041	0.041	2033
13	258.1	0.000	0.000	0.012	0.012	268	212.8	0.000	0.000	0.002	0.002	37	258.2	0.000	0.000	0.013	0.013	290
14	298.3	0.000	0.000	0.014	0.014	361	309.0	0.000	0.000	0.003	0.003	80	157.8	0.000	0.000	0.008	0.008	109
15	219.0	0.000	0.000	0.010	0.010	189	433.9	0.000	0.000	0.014	0.014	525	130.6	0.000	0.000	0.007	0.007	79
16	660.0	0.000	0.000	0.030	0.030	1711	769.1	0.000	0.000	0.025	0.025	1661	156.6	0.000	0.000	0.008	0.008	108
17	830.0	0.000	0.000	0.038	0.038	2725	227.0	0.000	0.000	0.007	0.007	137	142.6	0.000	0.000	0.008	0.008	99
18	508.5	0.000	0.000	0.014	0.014	615	189.4	0.000	0.000	0.012	0.012	196	301.0	0.000	0.000	0.007	0.007	182
19	398.0	0.000	0.000	0.011	0.011	378	397.0	0.000	0.000	0.025	0.025	858	320.0	0.000	0.000	0.015	0.015	415
20	774.0	0.000	0.000	0.021	0.021	1404	312.9	0.000	0.000	0.020	0.020	541	517.5	0.000	0.000	0.016	0.016	715
21	740.0	0.000	0.000	0.020	0.020	1279	433.0	0.000	0.000	0.027	0.027	1010	1441	0.000	0.000	0.014	0.014	1743
22	730.4	0.000	0.000	0.020	0.020	1262	723.2	0.000	0.000	0.015	0.015	937	614.9	0.000	0.000	0.039	0.039	2072
23	862.4	0.000	0.000	0.024	0.024	1788	702.2	0.000	0.000	0.015	0.015	910	621.6	0.000	0.000	0.017	0.017	913
24	920.0	0.000	0.000	0.025	0.025	1987	656.7	0.000	0.000	0.014	0.014	794	875.2	0.000	0.000	0.017	0.017	1285
25	752.1	0.000	0.000	0.015	0.015	975	634.8	0.000	0.000	0.013	0.013	713	188.8	0.000	0.000	0.024	0.024	391
26	1268	0.000	0.000	0.025	0.025	2739	833.2	0.000	0.000	0.017	0.017	1224	372.0	0.000	0.000	0.005	0.005	161
27	1622	0.000	0.000	0.032	0.032	4484	434.7	0.000	0.000	0.009	0.009	338	224.0	0.000	0.000	0.010	0.010	194
28	1305	0.000	0.000	0.026	0.026	2932	378.0	0.000	0.000	0.008	0.008	261	655.9	0.000	0.000	0.011	0.011	623
29	840.9	0.000	0.000	0.017	0.017	1235	197.5	0.000	0.000	0.011	0.011	188	701.0	0.000	0.000	0.032	0.032	1938
30	1441	0.000	0.000	0.029	0.029	3611	134.4	0.000	0.000	0.007	0.007	81	203.1	0.000	0.000	0.034	0.034	597
31	840.0	0.000	0.000	0.017	0.017	1234							142.7	0.000	0.000	0.010	0.010	123
Ten Daily Mean																		
Ten Daily I	515.9	0.000	0.000	0.018	0.018	1020	581.2	0.000	0.000	0.006	0.006	523	311.1	0.000	0.000	0.019	0.019	606
Ten Daily II	442.4	0.000	0.000	0.017	0.017	811	341.8	0.000	0.000	0.011	0.011	419	321.5	0.000	0.000	0.017	0.017	664
Ten Daily III	1029	0.000	0.000	0.023	0.023	2139	512.8	0.000	0.000	0.014	0.014	646	549.1	0.000	0.000	0.019	0.019	913
Monthly																		
Total						41839						15881						22741

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Mandleshwar (010215026) Division : Narmada Division, Bhopal
Local River : Narmada Sub-Division : MNSD-III, Indore

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	25830845	0	25830845	15627
1988-1989	33706127	0	33706127	31636
1989-1990	16590011	0	16590011	19676
1990-1991	43573305	0	43573305	48597
1991-1992	17919771	0	17919771	25628
1992-1993	10212181	0	10212181	19270
1993-1994	54775380	0	54775380	35866
1994-1995	107300433	0	107300433	70228
1995-1996	33242247	0	33242247	24638
1996-1997	20710748	0	20710748	23868
1997-1998	33307097	0	33307097	33380
1998-1999	19597535	0	19597535	27975
1999-2000	71022743	0	71022743	55946
2000-2001	5140065	0	5140065	12662
2001-2002	18046536	0	18046536	22925
2002-2003	23246402	0	23246402	22435
2003-2004	12526668	0	12526668	34555
2004-2005	5791854	0	5791854	19488
2005-2006	3756113	18213	3774326	33883
2006-2007	23348119	70019	23418139	33299
2007-2008	3619871	61874	3681745	24539
2008-2009	357341	257632	614973	16210
2009-2010	1250506	382715	1633220	28066
2010-2011	2824844	386277	3211121	28697
2011-2012	5268557	272974	5541530	44924
2012-2013	3053619	256865	3310484	45507
2013-2014	6692576	327613	7020190	65013
2014-2015	738527	246678	985205	25134
2015-2016	1481523	154696	1636219	21095
2016-2017	2294790.882	148062.882	2442853.764	45507.081
2017-2018	121946.92	7393.91	129340.83	5954.39
2018-2019	654450	154126	808577	16621

Sediment Data Year Book 2018-19

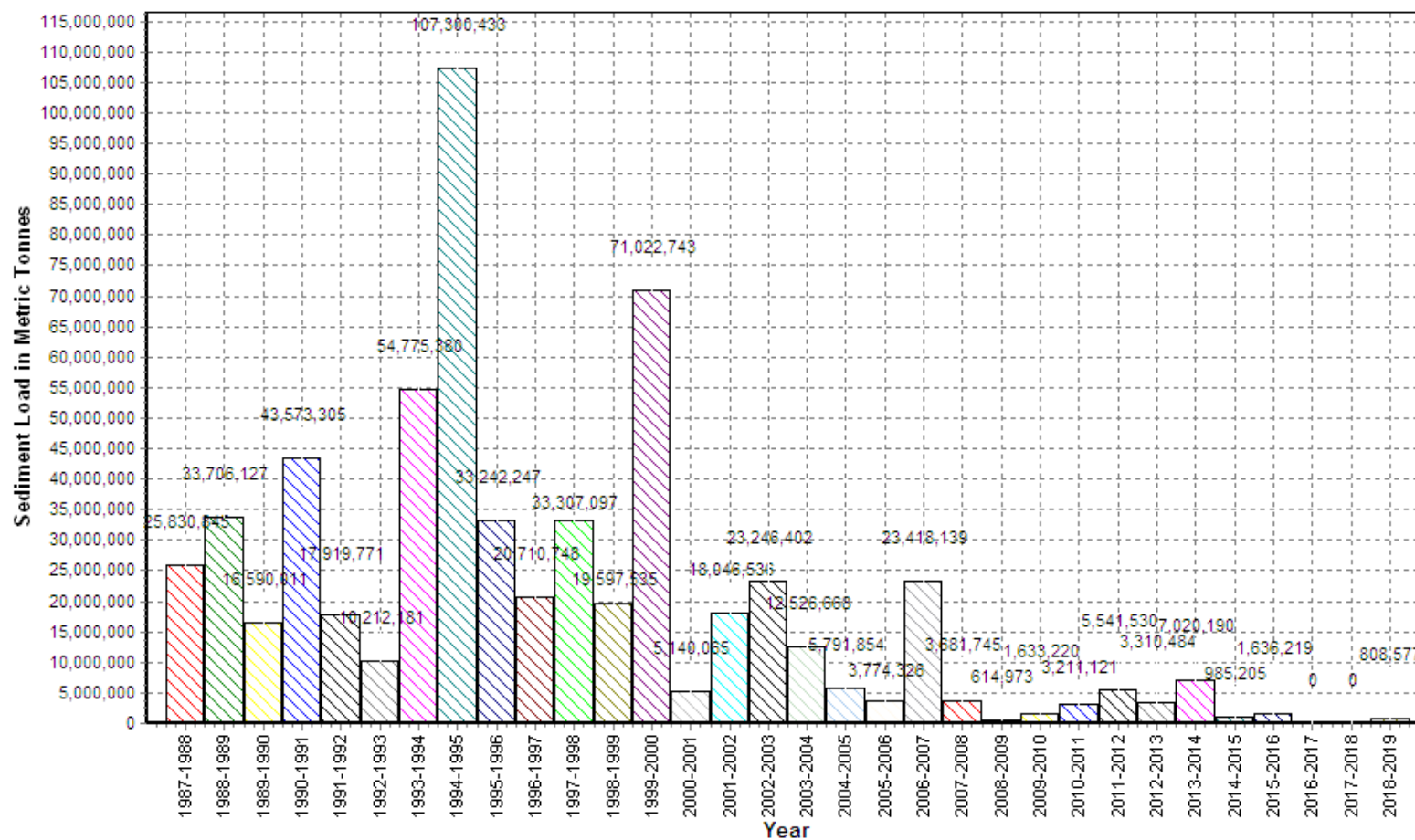
Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Mandleshwar (010215026)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-III, Indore



Sediment Data Year Book 2018-19

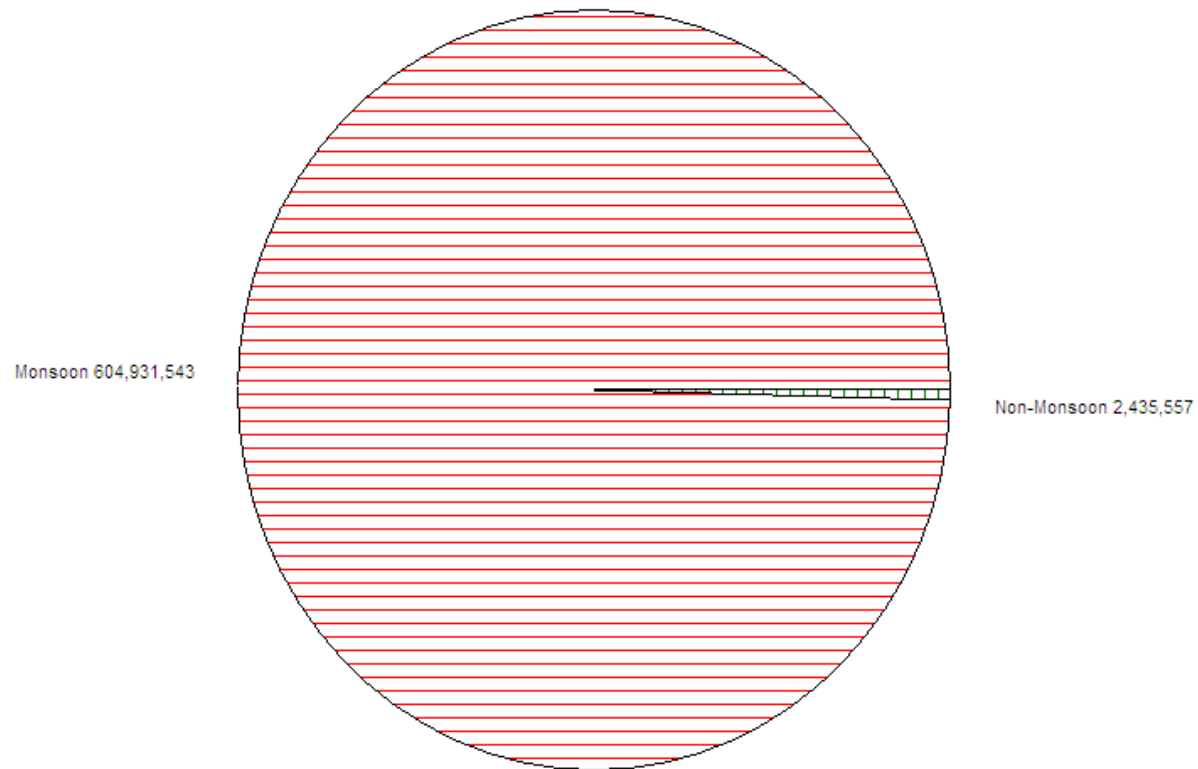
Seasonal Sediment Load for the period : 2008-2019

Station Name : Narmada at Mandleshwar (010215026)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore



Sediment Data Year Book 2018-19

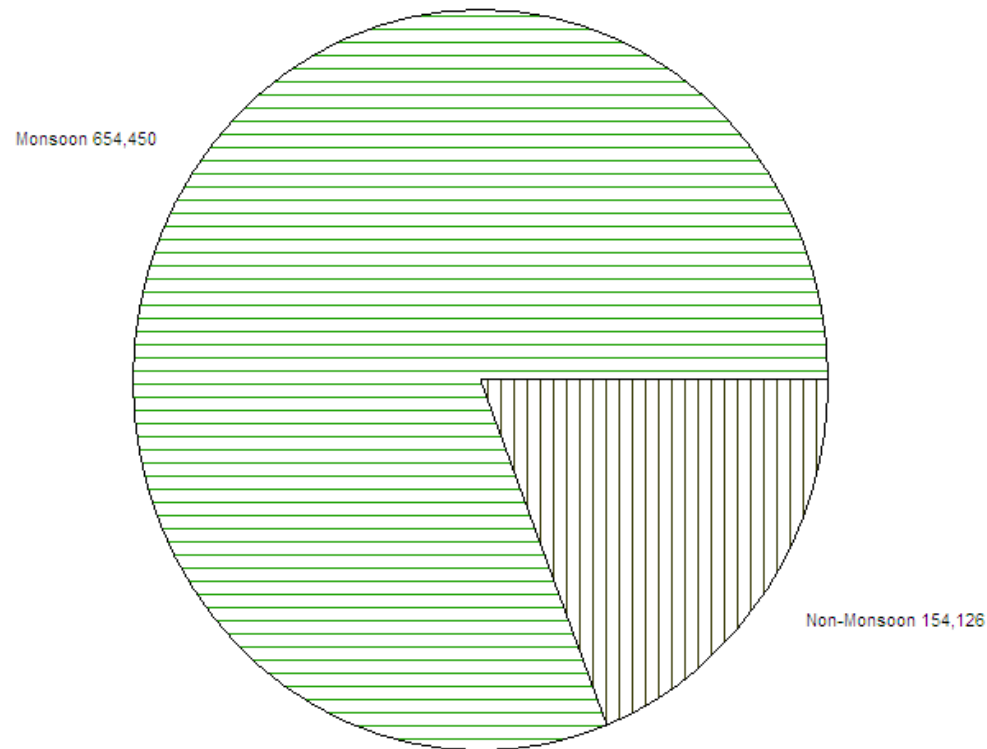
Seasonal Sediment Load for the period : 2018-2019

Station Name : Narmada at Mandleshwar (010215026)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-III, Indore



6.4 Narmada at Handia**History Sheet**

		Water Year	: 2018-2019
Site	: Narmada at Handia	Code	: 010215022
State	: Madhya Pradesh	District	Harda
Basin	: Narmada	Independent River	: Narmada
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Narmada
Division	: Narmada Division,Bhopal	Sub-Division	: MNSTD-II, Bhopal
Drainage Area	: 54027 Sq. Km.	Bank	: Left
Latitude	: 22°29'25"	Longitude	: 76°59'37"
Zero of Gauge (m)	: 258 .000(M.S.L.)	09/02/1977	
	Opening Date	Closing Date	
Gauge	: 09/02/1977		
Discharge	: 26/04/1977		
Sediment	: 11/12/1977		
Water Quality	: 01/08/1979		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Handia (010215022)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	92.70	0.000	0.000	0.187	0.187	1498	110.0	0.000	0.000	0.213	0.213	2024	948.9	0.061	0.062	0.430	0.553	45338
2	81.60	0.000	0.000	0.165	0.165	1163	107.0	0.000	0.000	0.200	0.200	1849	800.0	0.000	0.000	0.363	0.363	25091
3	94.00	0.000	0.000	0.190	0.190	1543	100.0	0.000	0.000	0.208	0.208	1793	570.0	0.000	0.000	0.258	0.258	12706
4	97.30	0.000	0.000	0.196	0.196	1649	110.0	0.000	0.000	0.210	0.210	1996	480.0	0.000	0.000	0.218	0.218	9041
5	95.00	0.000	0.000	0.192	0.192	1576	112.0	0.000	0.000	0.214	0.214	2071	460.0	0.000	0.000	0.208	0.208	8267
6	84.30	0.000	0.000	0.170	0.170	1238	120.0	0.000	0.000	0.229	0.229	2374	48.00	0.002	0.003	0.288	0.293	1214
7	87.50	0.000	0.000	0.176	0.176	1331	238.0	0.000	0.000	0.225	0.225	4627	398.0	0.002	0.003	0.288	0.293	10072
8	96.00	0.000	0.000	0.194	0.194	1609	230.0	0.000	0.000	0.217	0.217	4321	376.0	0.002	0.003	0.286	0.291	9457
9	108.0	0.000	0.000	0.218	0.218	2034	307.0	0.001	0.003	0.288	0.292	7732	370.0	0.002	0.003	0.285	0.290	9261
10	108.0	0.000	0.000	0.218	0.218	2034	691.4	0.003	0.004	0.450	0.457	27300	380.0	0.000	0.000	0.293	0.293	9620
11	103.0	0.000	0.000	0.208	0.208	1851	337.0	0.002	0.004	0.290	0.296	8619	2011	0.109	0.005	0.450	0.564	97956
12	97.20	0.000	0.000	0.198	0.198	1659	330.0	0.000	0.000	0.284	0.284	8097	1620	0.000	0.000	0.363	0.363	50808
13	96.10	0.000	0.000	0.195	0.195	1619	970.0	0.000	0.000	0.835	0.835	69980	1045	0.006	0.006	0.438	0.449	40555
14	94.60	0.000	0.000	0.192	0.192	1569	425.0	0.000	0.000	0.366	0.366	13440	860.5	0.062	0.064	0.425	0.551	40965
15	97.20	0.000	0.000	0.199	0.199	1669	320.0	0.000	0.000	0.275	0.275	7603	700.0	0.000	0.000	0.346	0.346	20926
16	95.00	0.000	0.000	0.194	0.194	1592	450.0	0.002	0.002	0.289	0.293	11404	6360	0.006	0.007	0.500	0.513	281731
17	92.00	0.000	0.000	0.188	0.188	1494	567.6	0.003	0.005	0.450	0.458	22470	664.0	0.061	0.062	0.503	0.626	35885
18	89.80	0.000	0.000	0.198	0.198	1532	1726	0.073	0.063	0.460	0.596	88884	1078	0.112	0.006	0.440	0.558	51972
19	89.00	0.000	0.000	0.200	0.200	1538	1351	0.079	0.065	0.450	0.594	69356	1550	0.000	0.000	0.633	0.633	84771
20	91.90	0.000	0.000	0.199	0.199	1578	1450	0.000	0.000	0.483	0.483	60510	1580	0.000	0.000	0.645	0.645	88050
21	101.0	0.000	0.000	0.205	0.205	1789	1411	0.070	0.058	0.448	0.576	70164	1750	0.000	0.000	0.714	0.714	107957
22	106.0	0.000	0.000	0.205	0.205	1877	900.9	0.000	0.000	0.286	0.286	22262	4067	0.103	0.006	0.468	0.576	202330
23	12.40	0.000	0.000	0.203	0.203	217	783.7	0.076	0.066	0.453	0.595	40255	4248	0.103	0.064	0.493	0.659	241998
24	102.0	0.000	0.000	1.666	1.666	14682	699.0	0.073	0.060	0.558	0.691	41732	3243	0.089	0.005	0.478	0.572	160254
25	90.60	0.000	0.000	0.203	0.203	1585	567.0	0.076	0.066	0.570	0.712	34880	2494	0.084	0.006	0.453	0.542	116842
26	95.90	0.000	0.000	0.204	0.204	1689	1800	0.000	0.000	1.180	1.180	183514	2200	0.000	0.000	0.399	0.399	75842
27	97.00	0.000	0.000	0.206	0.206	1726	2302	0.083	0.005	0.460	0.548	108924	1656	0.079	0.054	0.445	0.578	82684
28	106.0	0.000	0.000	0.205	0.205	1877	2100	0.000	0.000	0.420	0.420	76205	1382	0.077	0.052	0.443	0.572	68255
29	108.0	0.000	0.000	0.209	0.209	1950	1700	0.000	0.000	0.340	0.340	49939	970.8	0.104	0.005	0.441	0.551	46183
30	110.0	0.000	0.000	0.213	0.213	2024	1500	0.000	0.000	0.300	0.300	38880	1042	0.105	0.005	0.443	0.553	49749
31							1055	0.077	0.007	0.445	0.529	48201	3167	0.103	0.007	0.466	0.576	157541
Ten Daily Mean																		
Ten Daily I	94.44	0.000	0.000	0.191	0.191	1568	212.5	0.000	0.001	0.224	0.225	5177	483.1	0.007	0.007	0.292	0.306	14007
Ten Daily II	94.58	0.000	0.000	0.197	0.197	1610	792.7	0.016	0.014	0.418	0.448	36036	1747	0.036	0.015	0.474	0.525	79362
Ten Daily III	92.89	0.000	0.000	0.352	0.352	2942	1347	0.041	0.024	0.496	0.561	64996	2384	0.077	0.019	0.476	0.572	119058
Monthly																		
Total						61195						1127084						2243317

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Handia (010215022)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	4151	0.096	0.067	0.450	0.613	219871	534.7	0.098	0.111	0.475	0.684	31590	254.3	0.005	0.005	0.250	0.259	5699
2	4500	0.000	0.000	0.665	0.665	258552	490.0	0.000	0.000	0.435	0.435	18416	247.9	0.000	0.000	0.244	0.244	5226
3	3158	0.103	0.113	0.468	0.684	186482	479.3	0.095	0.109	0.465	0.669	27704	221.0	0.000	0.000	0.217	0.217	4143
4	2350	0.000	0.000	0.509	0.509	103347	459.1	0.094	0.107	0.463	0.664	26319	215.0	0.000	0.000	0.211	0.211	3920
5	1850	0.000	0.000	0.400	0.400	63936	456.3	0.099	0.111	0.461	0.671	26466	217.1	0.000	0.000	0.200	0.200	3751
6	1653	0.107	0.115	0.465	0.687	98087	436.1	0.093	0.008	0.460	0.561	21130	210.5	0.000	0.000	0.194	0.194	3528
7	1599	0.107	0.113	0.463	0.683	94296	415.0	0.000	0.000	0.438	0.438	15705	205.0	0.000	0.000	0.189	0.189	3348
8	1900	0.000	0.000	0.811	0.811	133134	397.9	0.094	0.008	0.458	0.559	19228	218.3	0.000	0.000	0.201	0.201	3791
9	2300	0.000	0.000	0.982	0.982	195143	374.5	0.091	0.071	0.458	0.620	20045	218.4	0.000	0.000	0.201	0.201	3793
10	3062	0.104	0.114	0.465	0.683	180663	330.0	0.080	0.063	0.403	0.546	15564	210.0	0.000	0.000	0.193	0.193	3502
11	4158	0.106	0.074	0.496	0.676	242657	313.5	0.093	0.007	0.450	0.550	14903	200.0	0.000	0.000	0.184	0.184	3180
12	2608	0.104	0.115	0.463	0.682	153551	308.5	0.091	0.007	0.440	0.538	14340	166.4	0.000	0.000	0.163	0.163	2336
13	1650	0.000	0.000	0.431	0.431	61443	310.0	0.000	0.000	0.442	0.442	11839	160.2	0.000	0.000	0.156	0.156	2159
14	1400	0.000	0.000	0.366	0.366	44235	305.0	0.000	0.000	0.435	0.435	11463	155.3	0.000	0.000	0.152	0.152	2040
15	1205	0.117	0.130	0.493	0.740	77009	305.0	0.000	0.000	0.435	0.435	11463	153.4	0.000	0.000	0.150	0.150	1988
16	900.0	0.000	0.000	0.552	0.552	42924	305.0	0.000	0.000	0.435	0.435	11463	152.4	0.000	0.000	0.149	0.149	1962
17	588.3	0.103	0.113	0.483	0.699	35504	300.0	0.000	0.000	0.428	0.428	11094	151.7	0.000	0.000	0.148	0.148	1940
18	510.7	0.095	0.108	0.482	0.685	30225	295.0	0.000	0.000	0.421	0.421	10730	155.0	0.000	0.000	0.151	0.151	2022
19	479.3	0.095	0.078	0.482	0.655	27112	293.0	0.000	0.000	0.418	0.418	10582	156.4	0.000	0.000	0.160	0.160	2162
20	477.6	0.095	0.079	0.481	0.655	27037	290.0	0.000	0.000	0.414	0.414	10373	158.9	0.000	0.000	0.163	0.163	2238
21	430.0	0.000	0.000	0.433	0.433	16087	285.0	0.000	0.000	0.406	0.406	9997	160.0	0.000	0.000	0.164	0.164	2267
22	453.1	0.097	0.110	0.400	0.607	23763	285.0	0.000	0.000	0.406	0.406	9997	156.3	0.000	0.000	0.160	0.160	2161
23	650.0	0.000	0.000	0.574	0.574	32236	284.0	0.077	0.006	0.400	0.483	11857	152.0	0.000	0.000	0.155	0.155	2036
24	604.5	0.094	0.107	0.484	0.685	35761	283.0	0.000	0.000	0.399	0.399	9756	151.4	0.000	0.000	0.155	0.155	2028
25	659.0	0.100	0.114	0.485	0.699	39799	275.3	0.063	0.006	0.375	0.444	10549	155.0	0.000	0.000	0.159	0.159	2129
26	703.6	0.100	0.114	0.488	0.702	42645	272.6	0.006	0.006	0.353	0.364	8571	153.9	0.000	0.000	0.163	0.163	2161
27	653.8	0.098	0.112	0.484	0.694	39186	264.7	0.006	0.005	0.350	0.361	8256	160.8	0.000	0.000	0.170	0.170	2362
28	600.0	0.090	0.444	0.637	0.000	33002	260.0	0.000	0.000	0.344	0.344	7728	200.0	0.000	0.000	0.211	0.211	3646
29	580.4	0.099	0.113	0.483	0.694	34817	256.6	0.005	0.005	0.325	0.334	7414	221.7	0.000	0.000	0.234	0.234	4482
30	550.0	0.000	0.000	0.457	0.457	21717	255.0	0.005	0.005	0.300	0.310	6823	210.0	0.000	0.000	0.222	0.222	4028
31							254.0	0.004	0.004	0.275	0.283	6211						
Ten Daily Mean																		
Ten Daily I	2652	0.052	0.052	0.568	0.672	153351	437.3	0.066	0.052	0.411	0.530	20660	221.8	0.000	0.000	0.210	0.211	4070
Ten Daily II	1398	0.072	0.070	0.436	0.577	69746	302.5	0.018	0.001	0.432	0.452	11825	161.0	0.000	0.000	0.158	0.158	2203
Ten Daily III	588.4	0.059	0.067	0.429	0.554	28601	270.5	0.015	0.003	0.358	0.376	8833	172.1	0.000	0.000	0.179	0.179	2730
Monthly																		
Total						2516984						422012						90027

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Handia (010215022)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	206.8	0.000	0.000	0.218	0.218	3895	265.0	0.000	0.000	0.223	0.223	5106	200.0	0.000	0.000	0.162	0.162	2799
2	205.0	0.000	0.000	0.216	0.216	3826	258.8	0.000	0.000	0.217	0.217	4852	199.6	0.000	0.000	0.161	0.161	2777
3	200.0	0.000	0.000	0.161	0.161	2786	257.9	0.000	0.000	0.217	0.217	4835	198.0	0.000	0.000	0.160	0.160	2737
4	208.6	0.000	0.000	0.168	0.168	3028	264.6	0.000	0.000	0.222	0.222	5075	197.0	0.000	0.000	0.159	0.159	2706
5	205.9	0.000	0.000	0.166	0.166	2953	264.2	0.000	0.000	0.222	0.222	5068	197.9	0.000	0.000	0.164	0.164	2808
6	209.2	0.000	0.000	0.169	0.169	3055	260.0	0.000	0.000	0.218	0.218	4897	197.3	0.000	0.000	0.160	0.160	2727
7	213.6	0.000	0.000	0.172	0.172	3174	264.4	0.000	0.000	1.600	1.600	36551	200.0	0.000	0.000	0.162	0.162	2799
8	240.0	0.000	0.000	0.193	0.193	4002	285.6	0.000	0.000	1.728	1.728	42640	202.5	0.000	0.000	0.164	0.164	2869
9	230.0	0.000	0.000	0.185	0.185	3676	285.0	0.000	0.000	1.725	1.725	42476	205.0	0.000	0.000	0.166	0.166	2940
10	211.4	0.000	0.000	0.165	0.165	3014	280.8	0.000	0.000	1.699	1.699	41220	208.0	0.000	0.000	0.168	0.168	3019
11	203.8	0.000	0.000	0.159	0.159	2800	281.9	0.000	0.000	1.706	1.706	41552	263.7	0.000	0.000	0.165	0.165	3759
12	209.1	0.000	0.000	0.163	0.163	2945	250.0	0.000	0.000	1.513	1.513	32681	202.0	0.000	0.000	0.163	0.163	2845
13	223.6	0.000	0.000	0.175	0.175	3381	240.0	0.000	0.000	1.452	1.452	30109	200.0	0.000	0.000	0.162	0.162	2799
14	218.6	0.000	0.000	0.171	0.171	3230	225.0	0.000	0.000	0.163	0.163	3159	200.0	0.000	0.000	0.162	0.162	2799
15	212.9	0.000	0.000	0.166	0.166	3053	217.7	0.000	0.000	0.157	0.157	2953	198.0	0.000	0.000	0.160	0.160	2737
16	205.0	0.000	0.000	0.160	0.160	2834	215.0	0.000	0.000	0.155	0.155	2879	197.0	0.000	0.000	0.159	0.159	2706
17	193.5	0.000	0.000	0.163	0.163	2725	215.9	0.000	0.000	0.156	0.156	2910	197.0	0.000	0.000	0.159	0.159	2706
18	201.5	0.000	0.000	0.169	0.169	2942	214.1	0.000	0.000	0.155	0.155	2867	195.8	0.000	0.000	0.158	0.158	2673
19	202.5	0.000	0.000	0.170	0.170	2974	213.8	0.000	0.000	0.154	0.154	2845	193.1	0.000	0.000	0.156	0.156	2603
20	203.7	0.000	0.000	0.171	0.171	3010	215.0	0.000	0.000	0.155	0.155	2879	187.0	0.000	0.000	0.151	0.151	2440
21	201.5	0.000	0.000	0.169	0.169	2942	214.9	0.000	0.000	0.670	0.670	12440	163.9	0.000	0.000	0.133	0.133	1883
22	204.5	0.000	0.000	0.172	0.172	3039	208.8	0.000	0.000	0.651	0.651	11744	160.0	0.000	0.000	0.129	0.129	1783
23	205.0	0.000	0.000	0.172	0.172	3046	205.1	0.000	0.000	0.639	0.639	11323	157.0	0.000	0.000	0.127	0.127	1723
24	215.0	0.000	0.000	0.181	0.181	3362	202.0	0.000	0.000	0.630	0.630	10995	155.0	0.000	0.000	0.125	0.125	1674
25	220.0	0.000	0.000	0.185	0.185	3516	206.9	0.000	0.000	0.645	0.645	11530	155.0	0.000	0.000	0.125	0.125	1674
26	255.0	0.000	0.000	0.214	0.214	4715	210.0	0.000	0.000	0.655	0.655	11884	155.0	0.000	0.000	0.125	0.125	1674
27	270.0	0.000	0.000	0.227	0.227	5295	210.0	0.000	0.000	0.655	0.655	11884	153.0	0.000	0.000	0.124	0.124	1639
28	275.0	0.000	0.000	0.231	0.231	5489	210.0	0.000	0.000	0.655	0.655	11884	153.0	0.000	0.000	0.124	0.124	1639
29	270.0	0.000	0.000	0.227	0.227	5295	204.0	0.000	0.000	0.165	0.165	2908						
30	260.0	0.000	0.000	0.218	0.218	4897	205.0	0.000	0.000	0.166	0.166	2940						
31	260.0	0.000	0.000	0.218	0.218	4897	201.9	0.000	0.000	0.163	0.163	2843						
Ten Daily Mean																		
Ten Daily I	213.1	0.000	0.000	0.181	0.181	3341	268.6	0.000	0.000	0.807	0.807	19272	200.5	0.000	0.000	0.163	0.163	2818
Ten Daily II	207.4	0.000	0.000	0.167	0.167	2989	228.8	0.000	0.000	0.577	0.577	12483	203.4	0.000	0.000	0.160	0.160	2807
Ten Daily III	239.6	0.000	0.000	0.201	0.201	4227	207.1	0.000	0.000	0.518	0.518	9307	156.5	0.000	0.000	0.127	0.127	1711
Monthly																		
Total						109797						419932						69940

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Handia (010215022)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	160.0	0.000	0.000	0.130	0.130	1793	37.30	0.000	0.000	0.037	0.037	119	43.10	0.000	0.000	0.116	0.116	432
2	165.0	0.000	0.000	0.134	0.134	1906	35.00	0.000	0.000	0.035	0.035	106	41.30	0.000	0.000	0.111	0.111	396
3	170.0	0.000	0.000	0.138	0.138	2024	35.60	0.000	0.000	0.036	0.036	111	40.00	0.000	0.000	0.108	0.108	373
4	167.0	0.000	0.000	0.135	0.135	1953	33.50	0.000	0.000	0.034	0.034	98	35.00	0.000	0.000	0.094	0.094	284
5	162.0	0.000	0.000	0.131	0.131	1838	31.10	0.000	0.000	0.031	0.031	83	35.00	0.000	0.000	0.094	0.094	284
6	149.2	0.000	0.000	0.155	0.155	1998	44.20	0.000	0.000	0.044	0.044	168	35.00	0.000	0.000	0.094	0.094	284
7	140.6	0.000	0.000	0.146	0.146	1774	65.00	0.000	0.000	0.065	0.065	365	34.00	0.000	0.000	0.094	0.094	276
8	135.0	0.000	0.000	0.140	0.140	1633	160.0	0.000	0.000	0.161	0.161	2226	34.00	0.000	0.000	0.092	0.092	270
9	125.0	0.000	0.000	0.130	0.130	1404	172.8	0.000	0.000	0.173	0.173	2583	35.90	0.000	0.000	0.155	0.155	481
10	115.0	0.000	0.000	0.119	0.119	1182	162.0	0.000	0.000	0.163	0.163	2281	35.00	0.000	0.000	0.151	0.151	457
11	118.9	0.000	0.000	0.153	0.153	1572	162.4	0.000	0.000	0.163	0.163	2287	35.00	0.000	0.000	0.151	0.151	457
12	118.6	0.000	0.000	0.152	0.152	1558	145.8	0.000	0.000	0.146	0.146	1839	35.00	0.000	0.000	0.155	0.155	469
13	117.2	0.000	0.000	0.150	0.150	1519	125.0	0.000	0.000	0.125	0.125	1350	35.00	0.000	0.000	0.155	0.155	469
14	130.0	0.000	0.000	0.167	0.167	1876	120.0	0.000	0.000	0.120	0.120	1244	33.10	0.000	0.000	0.147	0.147	420
15	150.0	0.000	0.000	0.192	0.192	2488	116.7	0.000	0.000	0.158	0.158	1593	32.40	0.000	0.000	0.143	0.143	400
16	140.0	0.000	0.000	0.180	0.180	2177	80.30	0.000	0.000	0.108	0.108	749	32.40	0.000	0.000	0.143	0.143	400
17	140.0	0.000	0.000	0.180	0.180	2177	65.00	0.000	0.000	0.088	0.088	494	31.50	0.000	0.000	0.140	0.140	381
18	140.6	0.000	0.000	0.180	0.180	2187	55.80	0.000	0.000	0.075	0.075	362	31.50	0.000	0.000	0.142	0.142	386
19	120.4	0.000	0.000	0.154	0.154	1602	49.50	0.000	0.000	0.067	0.067	287	32.00	0.000	0.000	0.158	0.158	437
20	117.0	0.000	0.000	0.150	0.150	1516	43.30	0.000	0.000	0.058	0.058	217	36.40	0.000	0.000	0.181	0.181	569
21	110.0	0.000	0.000	0.141	0.141	1340	45.00	0.000	0.000	0.061	0.061	237	41.80	0.000	0.000	0.195	0.195	704
22	105.0	0.000	0.000	0.135	0.135	1225	74.40	0.000	0.000	0.153	0.153	984	45.10	0.000	0.000	0.167	0.167	651
23	100.0	0.000	0.000	0.128	0.128	1106	73.50	0.000	0.000	0.151	0.151	959	38.50	0.000	0.000	0.162	0.162	539
24	92.00	0.000	0.000	0.118	0.118	938	70.90	0.000	0.000	0.145	0.145	888	37.50	0.000	0.000	0.158	0.158	512
25	79.60	0.000	0.000	0.102	0.102	701	68.00	0.000	0.000	0.139	0.139	817	36.40	0.000	0.000	0.151	0.151	475
26	70.70	0.000	0.000	0.091	0.091	556	64.70	0.000	0.000	0.133	0.133	743	35.00	0.000	0.000	0.151	0.151	457
27	60.00	0.000	0.000	0.077	0.077	399	64.00	0.000	0.000	0.131	0.131	724	35.00	0.000	0.000	0.151	0.151	457
28	50.00	0.000	0.000	0.064	0.064	276	60.00	0.000	0.000	0.123	0.123	638	35.00	0.000	0.000	0.147	0.147	445
29	42.60	0.000	0.000	0.055	0.055	202	58.00	0.000	0.000	0.156	0.156	782	34.00	0.000	0.000	0.153	0.153	449
30	0.000	0.000	0.000	0.051	0.051	0	51.70	0.000	0.000	0.139	0.139	621	34.50	0.000	0.000	0.153	0.153	455
31	0.000	0.000	0.000	0.000	0.000	0							33.90	0.000	0.000	0.150	0.150	439
Ten Daily Mean																		
Ten Daily I	148.9	0.000	0.000	0.069	0.069	799	77.65	0.000	0.000	0.078	0.078	814	36.83	0.000	0.000	0.111	0.111	354
Ten Daily II	129.3	0.000	0.000	0.166	0.166	1867	96.38	0.000	0.000	0.111	0.111	1042	33.43	0.000	0.000	0.152	0.152	439
Ten Daily III	64.54	0.000	0.000	0.087	0.087	613	63.02	0.000	0.000	0.133	0.133	739	36.97	0.000	0.000	0.158	0.158	507
Monthly																		
Total						33407						25955						13508

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Handia (010215022) Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	19027611	0	19027611	12386
1988-1989	22044739	0	22044739	20636
1989-1990	16984378	0	16984378	14552
1990-1991	36819507	0	36819507	34844
1991-1992	21786214	0	21786214	22333
1992-1993	30379689	0	30379689	19003
1993-1994	32853670	0	32853670	26030
1994-1995	101606688	0	101606688	58509
1995-1996	26951347	0	26951347	21017
1996-1997	10000361	0	10000361	13843
1997-1998	17324971	0	17324971	26684
1998-1999	8688917	0	8688917	21137
1999-2000	55929198	0	55929198	48510
2000-2001	4949972	0	4949972	11884
2001-2002	23651116	0	23651116	18109
2002-2003	42984927	0	42984927	20969
2003-2004	91149988	0	91149988	36177
2004-2005	20421994	0	20421994	18547
2005-2006	41467076	98453	41565529	31744
2006-2007	45194540	292973	45487513	25638
2007-2008	8965974	385964	9351938	16540
2008-2009	5445970	127525	5573495	14890
2009-2010	20454333	148158	20602491	18687
2010-2011	8459170	184097	8643268	16918
2011-2012	20529932	47316	20577247	28368
2012-2013	25035667	32777	25068444	26489
2013-2014	57330546	116888	57447434	44001
2014-2015	3431846	107423	3539270	15060
2015-2016	3935676	1084585	5020260	13485
2016-2017	20463864.06	53209.22	20517073.29	27522.35
2017-2018	1948044.49	283197.82	2231242.31	6370.2
2018-2019	6460619	672539	7133158	14245

Sediment Data Year Book 2018-19

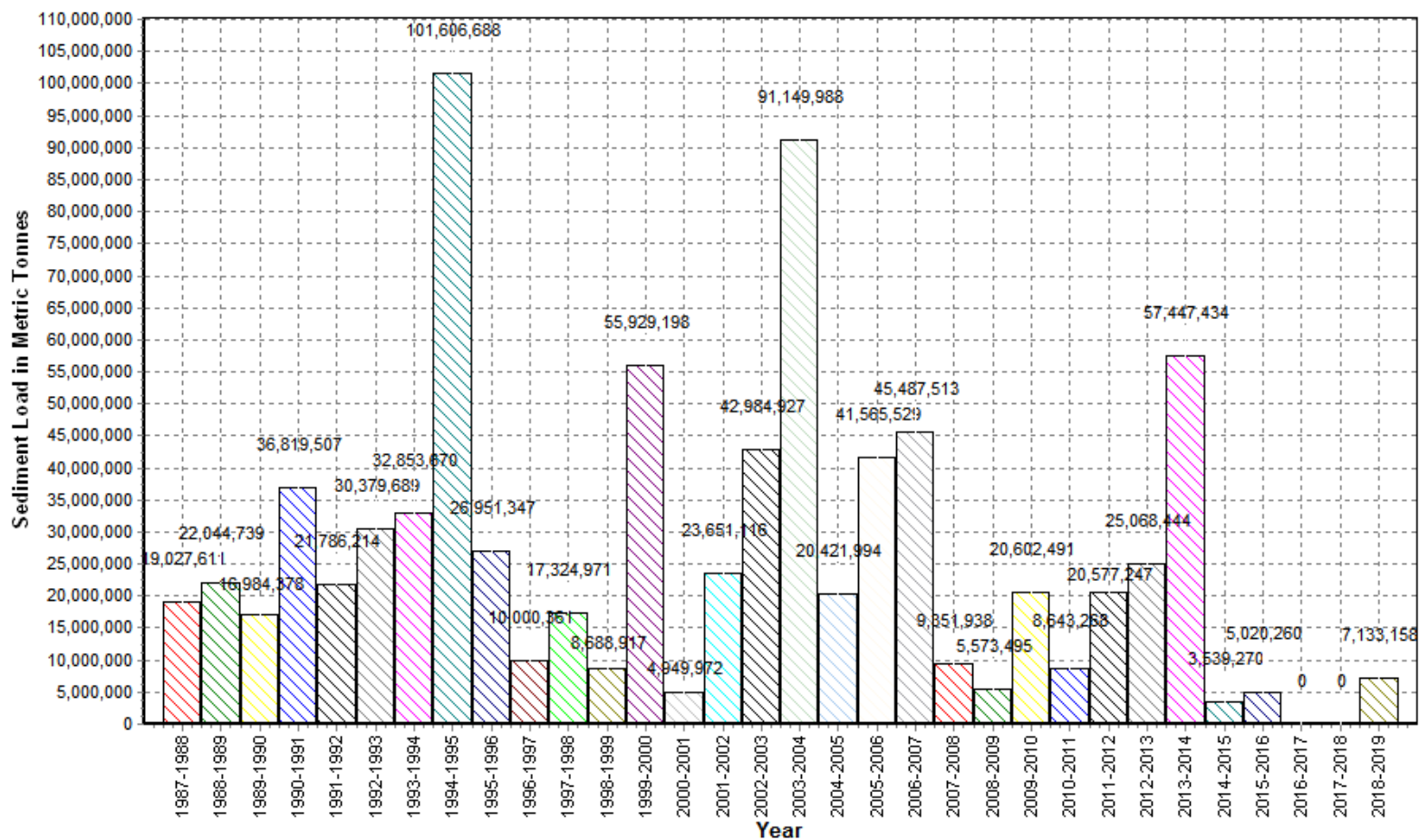
Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Handia (010215022)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD II, Bhopal



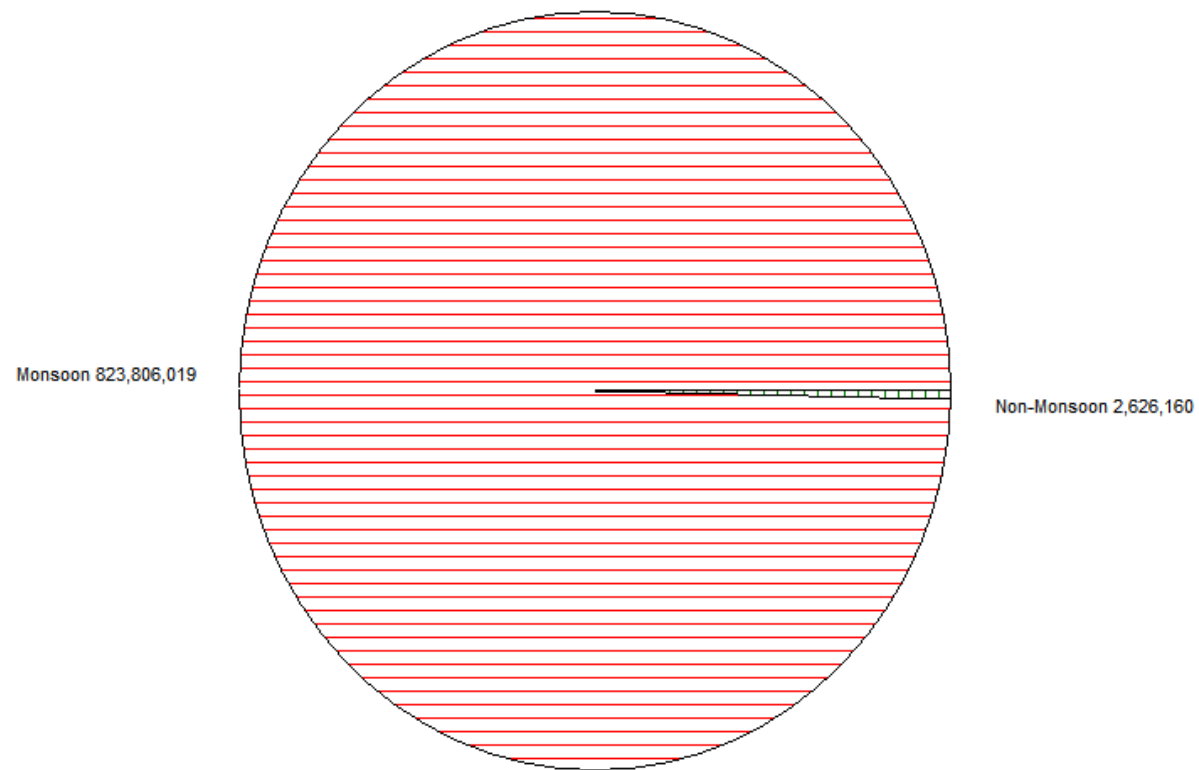
Seasonal Sediment Load for the period : 2009-2019

Station Name : Narmada at Handia (010215022)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal



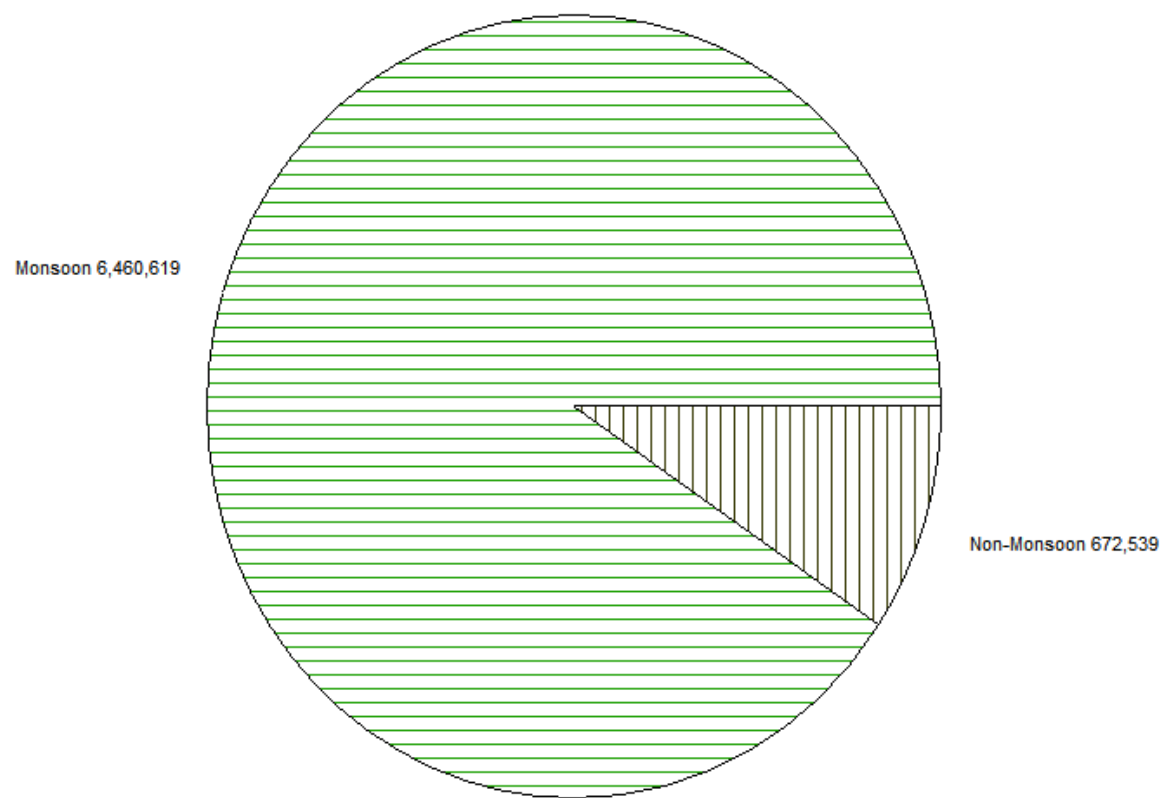
Seasonal Sediment Load for the period : 2018-2019

Station Name : Narmada at Handia (010215022)

Local River : Narmada

Division : Narmada Division Bhopal

Sub-Division : MNSD-II, Bhopal



6.5 Narmada at Hoshangabad**History sheet**

		Water Year	: 2018-2019
Site	: Narmada at Hoshangabad	Code	: 010215019
State	: Madhya Pradesh	District	Hoshangabad
Basin	: Narmada	Independent River	: Narmada
Tributary	:	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Narmada
Division	: Narmada Division, Bhopal	Sub-Division	: MNSD-I, Hoshangabad
Drainage Area	: 44548 Sq. Km.	Bank	: Left
Latitude	: 22°45'21"	Longitude	: 77°43'58"
Zero of Gauge (m)	: 282 .000(M.S.L.)	21/05/1972	
	Opening Date	Closing Date	
Gauge	: 21/05/1972		
Discharge	: 16/09/1972		
Sediment	: 29/12/1972		
Water Quality	: 15/07/1979		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Hoshangabad (010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	110.0	0.000	0.000	0.013	0.013	121	104	0.000	0.000	0.013	0.013	120	750	0.000	0.000	0.056	0.056	3614
2	110.0	0.000	0.000	0.013	0.013	121	114.7	0.000	0.000	0.014	0.014	134	360	0.000	0.000	0.027	0.027	833
3	99.00	0.000	0.000	0.011	0.011	98	170	0.000	0.000	0.020	0.020	294	330	0.000	0.000	0.025	0.025	700
4	94.50	0.000	0.000	0.012	0.012	98	184.9	0.000	0.000	0.014	0.014	220	340	0.000	0.000	0.025	0.025	743
5	99.10	0.000	0.000	0.012	0.012	105	185	0.000	0.000	0.014	0.014	220	325	0.000	0.000	0.024	0.024	679
6	99.20	0.000	0.000	0.012	0.012	105	250	0.000	0.000	0.019	0.019	402	320	0.000	0.000	0.024	0.024	658
7	98.70	0.000	0.000	0.013	0.013	107	350	0.000	0.000	0.026	0.026	787	310	0.000	0.000	0.023	0.023	617
8	84.30	0.000	0.000	0.011	0.011	80	340	0.000	0.000	0.025	0.025	743	300	0.000	0.000	0.022	0.022	578
9	84.60	0.000	0.000	0.011	0.011	81	320	0.000	0.000	0.024	0.024	658	305	0.000	0.000	0.023	0.023	598
10	94.00	0.000	0.000	0.012	0.012	100	260	0.000	0.000	0.019	0.019	434	1255	0.000	0.000	0.093	0.093	10120
11	94.50	0.000	0.000	0.012	0.012	98	320	0.000	0.000	0.024	0.024	658	1050	0.000	0.000	0.078	0.078	7084
12	99.50	0.000	0.000	0.013	0.013	110	350	0.000	0.000	0.026	0.026	787	440	0.000	0.000	0.033	0.033	1244
13	97.20	0.000	0.000	0.013	0.013	105	335	0.000	0.000	0.025	0.025	721	650	0.000	0.000	0.048	0.048	2715
14	102.3	0.000	0.000	0.013	0.013	115	300	0.000	0.000	0.022	0.022	578	600	0.000	0.000	0.045	0.045	2313
15	98.90	0.000	0.000	0.013	0.013	109	350	0.000	0.000	0.026	0.026	787	550	0.000	0.000	0.041	0.041	1944
16	81.00	0.000	0.000	0.010	0.010	73	325	0.000	0.000	0.024	0.024	679	450	0.000	0.000	0.033	0.033	1301
17	81.00	0.000	0.000	0.010	0.010	73	355	0.000	0.000	0.026	0.026	810	650	0.000	0.000	0.048	0.048	2715
18	95.60	0.000	0.000	0.012	0.012	101	370	0.000	0.000	0.028	0.028	880	870	0.000	0.000	0.065	0.065	4863
19	107.1	0.000	0.000	0.013	0.013	120	400	0.000	0.000	0.030	0.030	1028	950	0.000	0.000	0.071	0.071	5799
20	95.50	0.000	0.000	0.013	0.013	103	420	0.000	0.000	0.031	0.031	1133	840	0.000	0.000	0.062	0.062	4534
21	93.90	0.000	0.000	0.012	0.012	95	410	0.000	0.000	0.030	0.030	1080	850	0.000	0.000	0.063	0.063	4642
22	97.40	0.000	0.000	0.013	0.013	105	390	0.000	0.000	0.029	0.029	977	1650	0.000	0.000	0.123	0.123	17492
23	102.0	0.000	0.000	0.013	0.013	115	365	0.000	0.000	0.027	0.027	856	1550	0.000	0.000	0.115	0.115	15436
24	104.0	0.000	0.000	0.013	0.013	120	349	0.000	0.000	0.026	0.026	783	1350	0.000	0.000	0.100	0.100	11710
25	102.0	0.000	0.000	0.013	0.013	115	450	0.000	0.000	0.033	0.033	1301	1230	0.000	0.000	0.091	0.091	9721
26	110.6	0.000	0.000	0.013	0.013	124	1300	0.000	0.000	0.097	0.097	10858	1070	0.000	0.000	0.080	0.080	7356
27	102.4	0.000	0.000	0.013	0.013	117	1250	0.000	0.000	0.093	0.093	10039	840	0.000	0.000	0.062	0.062	4534
28	93.90	0.000	0.000	0.012	0.012	97	1200	0.000	0.000	0.089	0.089	9252	700	0.000	0.000	0.052	0.052	3148
29	102.8	0.000	0.000	0.014	0.014	120	900	0.000	0.000	0.067	0.067	5204	680	0.000	0.000	0.051	0.051	2971
30	103.1	0.000	0.000	0.013	0.013	118	850	0.000	0.000	0.063	0.063	4642	1650	0.000	0.000	0.123	0.123	17492
31							800	0.000	0.000	0.059	0.059	4112	1600	0.000	0.000	0.119	0.119	16448
Ten Daily Mean																		
Ten Daily I	69.58	0.000	0.000	0.010	0.010	74	29.96	0.000	0.000	0.003	0.003	35	0.000	0.000	0.000	0.000	0.000	0
Ten Daily II	79.06	0.000	0.000	0.010	0.010	86	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Ten Daily III	70.41	0.000	0.000	0.009	0.009	78	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Monthly																		
Total						2375						353						0

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Hoshangabad (010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	1750	0.000	0.000	0.130	0.130	19677	300	0.000	0.000	0.022	0.022	578	173.3	0.000	0.000	0.011	0.011	169
2	1700	0.000	0.000	0.126	0.126	18569	300	0.000	0.000	0.022	0.022	578	172.9	0.000	0.000	0.011	0.011	168
3	1370	0.000	0.000	0.102	0.102	12059	290	0.000	0.000	0.022	0.022	540	158.3	0.000	0.000	0.010	0.010	141
4	1160	0.000	0.000	0.086	0.086	8646	295	0.000	0.000	0.022	0.022	559	154	0.000	0.000	0.010	0.010	133
5	1075	0.000	0.000	0.080	0.080	7425	290	0.000	0.000	0.022	0.022	540	170	0.000	0.000	0.011	0.011	163
6	950	0.000	0.000	0.071	0.071	5799	295	0.000	0.000	0.022	0.022	559	185	0.000	0.000	0.012	0.012	192
7	1100	0.000	0.000	0.082	0.082	7774	280	0.000	0.000	0.021	0.021	504	192	0.000	0.000	0.01	0.01	166
8	1230	0.000	0.000	0.091	0.091	9721	270	0.000	0.000	0.020	0.020	468	180	0.000	0.000	0.009	0.009	146
9	1360	0.000	0.000	0.101	0.101	11884	1560	0.000	0.000	0.012	0.012	158	175	0.000	0.000	0.009	0.009	138
10	1700	0.000	0.000	0.126	0.126	18569	270	0.000	0.000	0.002	0.002	47	168	0.000	0.000	0.009	0.009	127
11	1600	0.000	0.000	0.119	0.119	16448	275	0.000	0.000	0.002	0.002	49	165	0.000	0.000	0.009	0.009	123
12	1120	0.000	0.000	0.083	0.083	8060	270	0.000	0.000	0.002	0.002	47	160	0.000	0.000	0.008	0.008	115
13	890	0.000	0.000	0.066	0.066	5089	272	0.000	0.000	0.002	0.002	48	158	0.000	0.000	0.008	0.008	112
14	850	0.000	0.000	0.063	0.063	4642	273	0.000	0.000	0.002	0.002	49	160	0.000	0.000	0.008	0.008	115
15	700	0.000	0.000	0.052	0.052	3148	268	0.000	0.000	0.002	0.002	47	140.4	0.000	0.000	0.01	0.01	121
16	460	0.000	0.000	0.034	0.034	1360	250	0.000	0.000	0.002	0.002	41	142.1	0.000	0.000	0.010	0.010	124
17	370	0.000	0.000	0.028	0.028	880	252	0.000	0.000	0.002	0.002	41	156	0.000	0.000	0.011	0.011	150
18	350	0.000	0.000	0.026	0.026	787	120	0.000	0.000	0.011	0.011	114	159.5	0.000	0.000	0.011	0.011	157
19	348	0.000	0.000	0.026	0.026	778	140	0.000	0.000	0.013	0.013	155	170	0.000	0.000	0.012	0.012	178
20	340	0.000	0.000	0.025	0.025	743	251	0.000	0.000	0.023	0.023	499	160.2	0.000	0.000	0.01	0.01	138
21	320	0.000	0.000	0.024	0.024	658	154	0.000	0.000	0.014	0.014	188	156.5	0.000	0.000	0.01	0.01	135
22	315	0.000	0.000	0.023	0.023	638	130.4	0.000	0.000	0.012	0.012	132	128.6	0.000	0.000	0.008	0.008	91
23	310	0.000	0.000	0.023	0.023	617	245	0.000	0.000	0.022	0.022	467	158.5	0.000	0.000	0.010	0.010	139
24	375	0.000	0.000	0.028	0.028	904	128.7	0.000	0.000	0.012	0.012	128	144.9	0.000	0.000	0.009	0.009	116
25	345	0.000	0.000	0.026	0.026	765	240	0.000	0.000	0.021	0.021	445	157.2	0.000	0.000	0.010	0.010	136
26	340	0.000	0.000	0.025	0.025	743	235	0.000	0.000	0.021	0.021	426	167.7	0.000	0.000	0.011	0.011	155
27	338	0.000	0.000	0.025	0.025	734	252	0.000	0.000	0.023	0.023	490	180	0.000	0.000	0.01	0.01	156
28	325	0.000	0.000	0.024	0.024	679	250	0.000	0.000	0.022	0.022	483	156	0.000	0.000	0.01	0.01	135
29	320	0.000	0.000	0.024	0.024	658	183.7	0.000	0.000	0.012	0.012	183	149.7	0.000	0.000	0.010	0.010	124
30	310	0.000	0.000	0.023	0.023	617	180.5	0.000	0.000	0.012	0.012	183	147.2	0.000	0.000	0.009	0.009	120
31							175	0.000	0.000	0.011	0.011	172						
Ten Daily Mean																		
Ten Daily I	0.000	0.000	0.000	0.000	0.000	0	15.60	0.000	0.000	0.001	0.001	16						
Ten Daily II	0.000	0.000	0.000	0.000	0.000	0	12.00	0.000	0.000	0.001	0.001	11						
Ten Daily III	0.000	0.000	0.000	0.000	0.000	0	56.66	0.000	0.000	0.004	0.004	57						
Monthly																		
Total						0						898						

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Hoshangabad (010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	143	0.000	0.000	0.009	0.009	113	178	0.000	0.000	0.011	0.011	175	156.5	0.000	0.000	0.010	0.010	131
2	155	0.000	0.000	0.010	0.010	133	181	0.000	0.000	0.012	0.012	181	154	0.000	0.000	0.010	0.010	126
3	155	0.000	0.000	0.010	0.010	133	183	0.000	0.000	0.012	0.012	185	150	0.000	0.000	0.009	0.009	120
4	155	0.000	0.000	0.010	0.010	133	185	0.000	0.000	0.01	0.01	160	157.9	0.000	0.000	0.010	0.010	133
5	155	0.000	0.000	0.010	0.010	133	186	0.000	0.000	0.010	0.010	162	103.8	0.000	0.000	0.01	0.01	90
6	155	0.000	0.000	0.010	0.010	133	182	0.000	0.000	0.010	0.010	155	105.8	0.000	0.000	0.010	0.010	93
7	155	0.000	0.000	0.010	0.010	133	174	0.000	0.000	0.009	0.009	141	106.1	0.000	0.000	0.010	0.010	94
8	155	0.000	0.000	0.010	0.010	133	162	0.000	0.000	0.009	0.009	123	104	0.000	0.000	0.010	0.010	90
9	155	0.000	0.000	0.010	0.010	133	168.2	0.000	0.000	0.009	0.009	132	110	0.000	0.000	0.011	0.011	101
10	155	0.000	0.000	0.010	0.010	133	162.1	0.000	0.000	0.009	0.009	123	110	0.000	0.000	0.011	0.011	101
11	155	0.000	0.000	0.010	0.010	133	159.9	0.000	0.000	0.01	0.01	138	104.6	0.000	0.000	0.010	0.010	91
12	155	0.000	0.000	0.010	0.010	133	160	0.000	0.000	0.010	0.010	138	102.4	0.000	0.000	0.01	0.01	88
13	155	0.000	0.000	0.010	0.010	133	163	0.000	0.000	0.010	0.010	144	102.1	0.000	0.000	0.010	0.010	88
14	155	0.000	0.000	0.010	0.010	133	166	0.000	0.000	0.010	0.010	149	106.2	0.000	0.000	0.010	0.010	95
15	155	0.000	0.000	0.010	0.010	133	164	0.000	0.000	0.010	0.010	145	162	0.000	0.000	0.016	0.016	221
16	155	0.000	0.000	0.010	0.010	133	162	0.000	0.000	0.010	0.010	142	165	0.000	0.000	0.016	0.016	230
17	155	0.000	0.000	0.010	0.010	133	163	0.000	0.000	0.010	0.010	144	162	0.000	0.000	0.016	0.016	221
18	155	0.000	0.000	0.010	0.010	133	161	0.000	0.000	0.01	0.01	139	108	0.000	0.000	0.011	0.011	98
19	155	0.000	0.000	0.010	0.010	133	160	0.000	0.000	0.010	0.010	137	107.5	0.000	0.000	0.01	0.01	93
20	155	0.000	0.000	0.010	0.010	133	164	0.000	0.000	0.010	0.010	144	103.1	0.000	0.000	0.010	0.010	85
21	155	0.000	0.000	0.010	0.010	133	163	0.000	0.000	0.010	0.010	143	105	0.000	0.000	0.010	0.010	89
22	155	0.000	0.000	0.010	0.010	133	162.1	0.000	0.000	0.010	0.010	141	101.2	0.000	0.000	0.009	0.009	82
23	164	0.000	0.000	0.011	0.011	149	184.4	0.000	0.000	0.011	0.011	182	104.4	0.000	0.000	0.010	0.010	88
24	162	0.000	0.000	0.010	0.010	145	165	0.000	0.000	0.010	0.010	146	102	0.000	0.000	0.009	0.009	84
25	175	0.000	0.000	0.011	0.011	170	169	0.000	0.000	0.010	0.010	153	101.2	0.000	0.000	0.009	0.009	82
26	170	0.000	0.000	0.011	0.011	160	162	0.000	0.000	0.01	0.01	140	106.4	0.000	0.000	0.01	0.01	92
27	164	0.000	0.000	0.011	0.011	149	153	0.000	0.000	0.009	0.009	125	110	0.000	0.000	0.010	0.010	98
28	163	0.000	0.000	0.010	0.010	147	156	0.000	0.000	0.010	0.010	130	119.5	0.000	0.000	0.011	0.011	116
29	176	0.000	0.000	0.011	0.011	172	156.4	0.000	0.000	0.010	0.010	130						
30	195	0.000	0.000	0.013	0.013	211	159.2	0.000	0.000	0.010	0.010	135						
31	182	0.000	0.000	0.012	0.012	183	164.4	0.000	0.000	0.010	0.010	144						
Ten Daily Mean																		
Ten Daily I							0.000	0.000	0.000	0.000	0.000	0	15.79	0.000	0.000	0.001	0.001	16
Ten Daily II							0.000	0.000	0.000	0.000	0.000	0	21.27	0.000	0.000	0.002	0.002	21
Ten Daily III							0.000	0.000	0.000	0.000	0.000	0	12.65	0.000	0.000	0.001	0.001	12
Monthly																		

Total

0

462

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Hoshangabad (010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	106.5	0.000	0.000	0.010	0.010	92	83.19	0.000	0.000	0.010	0.010	74	71.20	0.000	0.000	0.008	0.008	48
2	98.50	0.000	0.000	0.009	0.009	79	84.60	0.000	0.000	0.01	0.01	73	67.40	0.000	0.000	0.007	0.007	43
3	96.50	0.000	0.000	0.009	0.009	76	88.50	0.000	0.000	0.010	0.010	80	66.00	0.000	0.000	0.007	0.007	41
4	96.00	0.000	0.000	0.009	0.009	75	86.20	0.000	0.000	0.010	0.010	76	66.70	0.000	0.000	0.007	0.007	42
5	95.50	0.000	0.000	0.01	0.01	83	96.11	0.000	0.000	0.011	0.011	94	71.50	0.000	0.000	0.008	0.008	48
6	91.40	0.000	0.000	0.010	0.010	76	117.5	0.000	0.000	0.014	0.014	141	79.00	0.000	0.000	0.009	0.009	59
7	90.70	0.000	0.000	0.009	0.009	74	130	0.000	0.000	0.015	0.015	173	75.00	0.000	0.000	0.01	0.01	65
8	98.50	0.000	0.000	0.010	0.010	88	131.9	0.000	0.000	0.016	0.016	178	72.90	0.000	0.000	0.010	0.010	61
9	99.50	0.000	0.000	0.010	0.010	90	117.8	0.000	0.000	0.01	0.01	102	71.20	0.000	0.000	0.009	0.009	58
10	95.80	0.000	0.000	0.010	0.010	83	109.9	0.000	0.000	0.009	0.009	89	71.40	0.000	0.000	0.010	0.010	59
11	102.6	0.000	0.000	0.011	0.011	95	98.51	0.000	0.000	0.008	0.008	71	71.00	0.000	0.000	0.009	0.009	58
12	132.9	0.000	0.000	0.01	0.01	115	90.10	0.000	0.000	0.008	0.008	60	68.50	0.000	0.000	0.009	0.009	54
13	116.2	0.000	0.000	0.009	0.009	88	86.20	0.000	0.000	0.007	0.007	54	68.00	0.000	0.000	0.009	0.009	53
14	107.1	0.000	0.000	0.008	0.008	75	82.00	0.000	0.000	0.007	0.007	49	67.60	0.000	0.000	0.01	0.01	58
15	109.8	0.000	0.000	0.008	0.008	78	80.00	0.000	0.000	0.007	0.007	47	37.70	0.000	0.000	0.006	0.006	18
16	107.7	0.000	0.000	0.008	0.008	75	78.70	0.000	0.000	0.01	0.01	68	41.80	0.000	0.000	0.006	0.006	22
17	97.00	0.000	0.000	0.007	0.007	61	91.00	0.000	0.000	0.012	0.012	91	56.50	0.000	0.000	0.008	0.008	41
18	96.80	0.000	0.000	0.007	0.007	61	93.30	0.000	0.000	0.012	0.012	96	56.00	0.000	0.000	0.008	0.008	40
19	93.20	0.000	0.000	0.01	0.01	81	95.00	0.000	0.000	0.012	0.012	99	48.00	0.000	0.000	0.007	0.007	29
20	91.50	0.000	0.000	0.010	0.010	78	91.80	0.000	0.000	0.012	0.012	93	48.20	0.000	0.000	0.007	0.007	30
21	90.60	0.000	0.000	0.010	0.010	76	90.50	0.000	0.000	0.011	0.011	90	53.90	0.000	0.000	0.01	0.01	47
22	90.20	0.000	0.000	0.010	0.010	75	90.70	0.000	0.000	0.012	0.012	90	46.00	0.000	0.000	0.009	0.009	34
23	88.50	0.000	0.000	0.009	0.009	73	91.70	0.000	0.000	0.01	0.01	79	43.10	0.000	0.000	0.008	0.008	30
24	89.00	0.000	0.000	0.010	0.010	73	101.6	0.000	0.000	0.011	0.011	97	51.50	0.000	0.000	0.010	0.010	43
25	89.30	0.000	0.000	0.010	0.010	74	78.50	0.000	0.000	0.009	0.009	58	40.60	0.000	0.000	0.008	0.008	26
26	89.00	0.000	0.000	0.01	0.01	77	71.10	0.000	0.000	0.008	0.008	48	42.0	0.000	0.000	0.008	0.008	28
27	89.80	0.000	0.000	0.010	0.010	78	77.10	0.000	0.000	0.008	0.008	56	46.30	0.000	0.000	0.009	0.009	34
28	88.70	0.000	0.000	0.010	0.010	76	70.00	0.000	0.000	0.008	0.008	46	45.30	0.000	0.000	0.01	0.01	39
29	85.50	0.000	0.000	0.010	0.010	71	77.10	0.000	0.000	0.008	0.008	56	42.60	0.000	0.000	0.009	0.009	35
30	85.20	0.000	0.000	0.010	0.010	70	78.10	0.000	0.000	0.009	0.009	57	43.20	0.000	0.000	0.010	0.010	36
31	83.00	0.000	0.000	0.009	0.009	67							46.50	0.000	0.000	0.010	0.010	41
<u>Ten Daily Mean</u>																		
Ten Daily I	9.550	0.000	0.000	0.001	0.001	9	21.51	0.000	0.000	0.002	0.002	20						
Ten Daily II	19.95	0.000	0.000	0.002	0.002	19	8.000	0.000	0.000	0.001	0.001	7						
Ten Daily III	8.094	0.000	0.000	0.001	0.001	7	16.78	0.000	0.000	0.002	0.002	15						
<u>Monthly</u>																		

Total

361

419

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Hoshangabad (010215019) Division : Narmada Division, Bhopal

Local River : Narmada

SubDivision :MNSD-I, Hoshangabad

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	13696732	0	13696732	12351
1988-1989	21927043	0	21927043	20561
1989-1990	12260503	0	12260503	12621
1990-1991	28921421	0	28921421	32525
1991-1992	17163196	0	17163196	21307
1992-1993	22273546	0	22273546	17083
1993-1994	24945905	0	24945905	21370
1994-1995	41396876	0	41396876	52525
1995-1996	13478552	0	13478552	19477
1996-1997	1864008	0	1864008	11102
1997-1998	14386694	0	14386694	22983
1998-1999	6442728	0	6442728	17077
1999-2000	27754797	0	27754797	43778
2000-2001	5418046	0	5418046	10985
2001-2002	11518072	0	11518072	17112
2002-2003	12492177	0	12492177	17532
2003-2004	24976310	0	24976310	29911
2004-2005	11095494	0	11095494	15602
2005-2006	41754968	112666	41867634	29700
2006-2007	21223787	63622	21287409	20517
2007-2008	3245231	48195	3293426	12585
2008-2009	8450881	43281	8494162	12343
2009-2010	14345893	12602	14358495	13831
2010-2011	2677514	84382	2761896	12869
2011-2012	11067511	122367	11189878	25203
2012-2013	32740071	122954	32863024	21076
2013-2014	338236903	74412	338311315	38710
2014-2015	13947824	91716	14039540	12492
2015-2016	5170582	37221	5207803	12457
2016-2017	9466715.49	76137.97	9542853.46	19521.88
2017-2018	132371.6	11654.47	144026.07	5797.33
2018-2019	3627	1243	4870	407

Sediment Data Year Book 2018-19

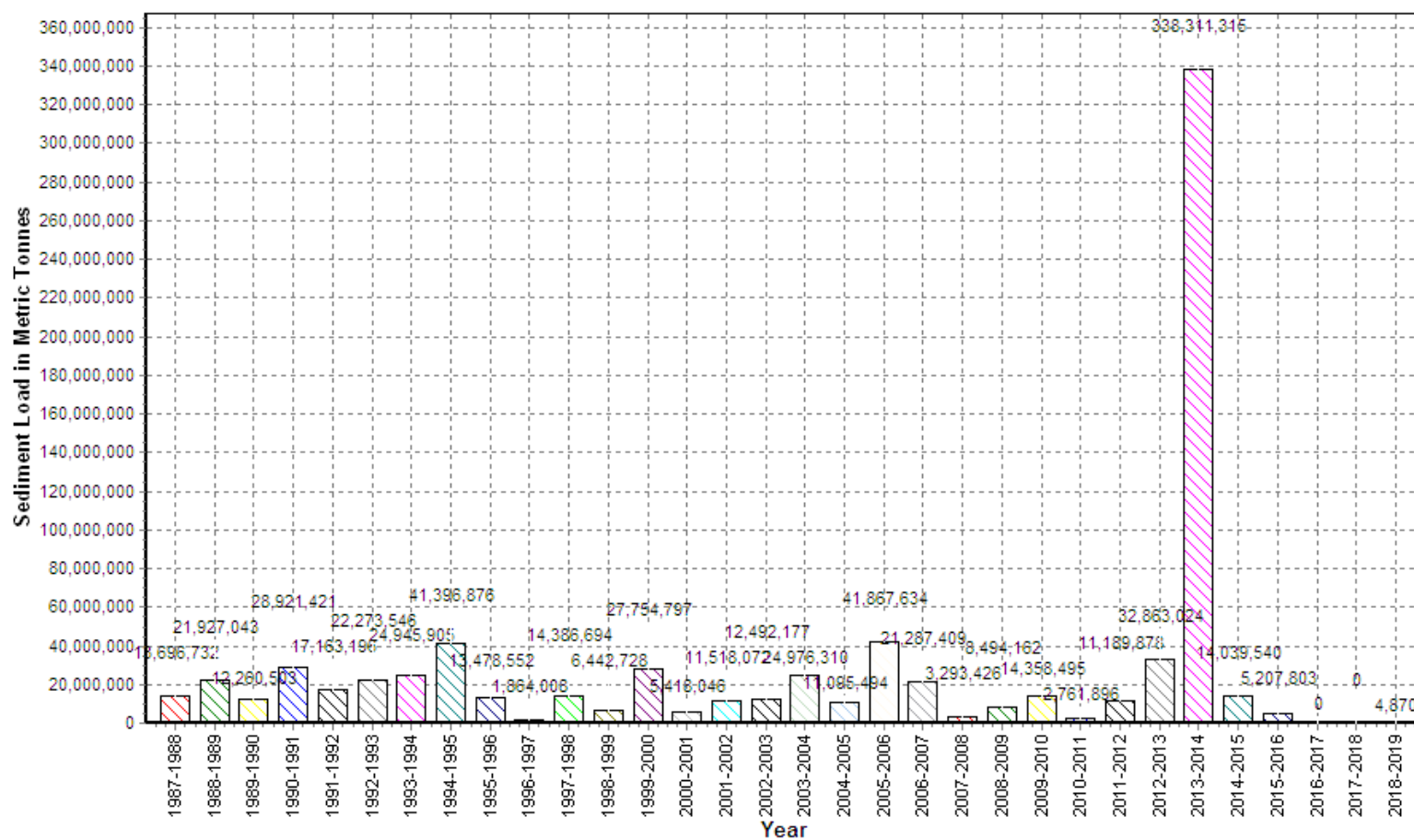
Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Hoshangabad (010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



Sediment Data Year Book 2018-19

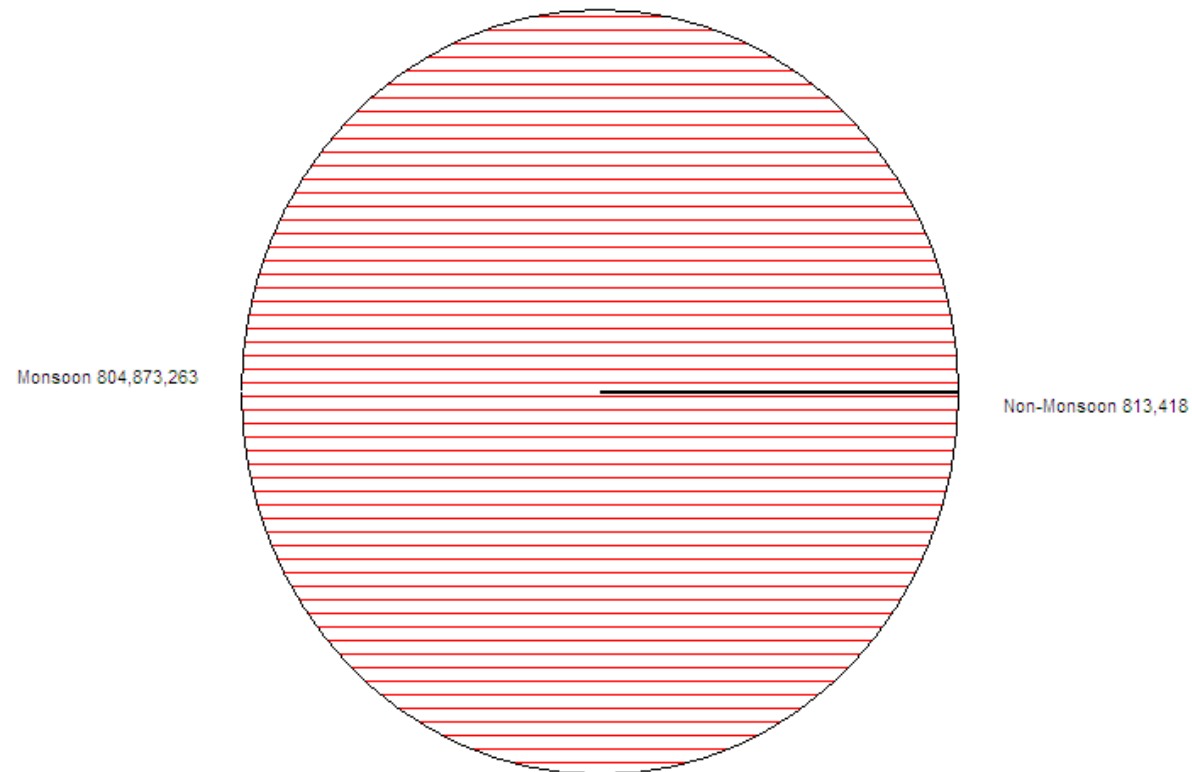
Seasonal Sediment Load for the period : 1987-2019

Station Name : Narmada at Hoshangabad (010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



Sediment Data Year Book 2018-19

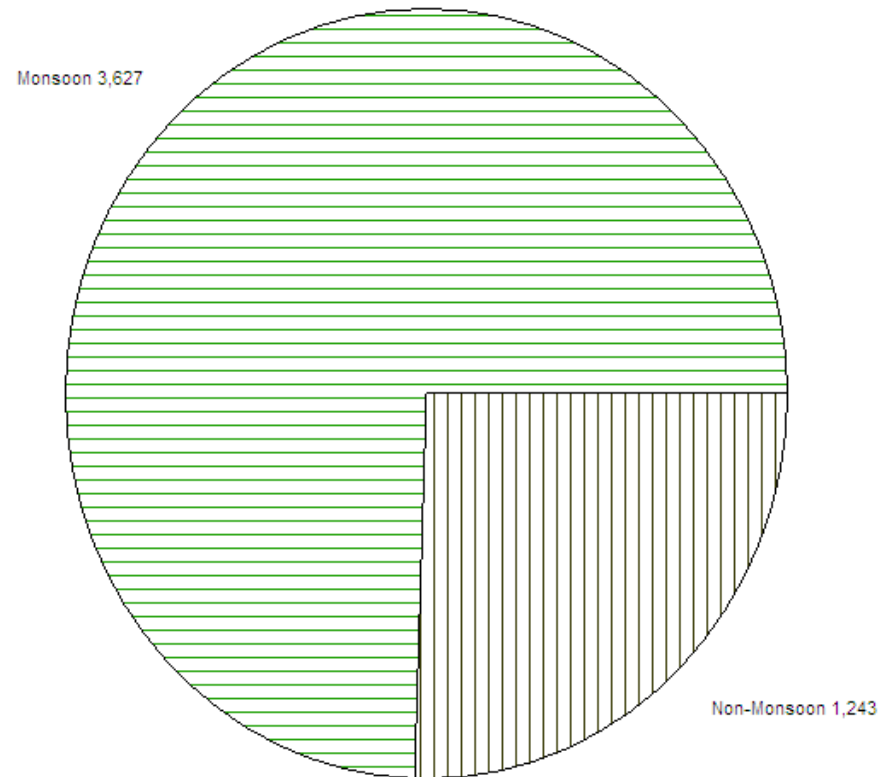
Seasonal Sediment Load for the period : 2018-2019

Station Name : Narmada at Hoshangabad (010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



6.6 Narmada at Sandia**History sheet**

		Water Year	: 2018-2019
Site	: Narmada at Sandia	Code	: 010215013
State	: Madhya Pradesh	District	Hoshangabad
Basin	: Narmada	Independent River	: Narmada
Tributary	:	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Narmada
Division	: Narmada Division,Bhopal	Sub-Division	: MNSD-I, Hoshangabad
Drainage Area	: 33953.5 Sq. Km.	Bank	: Left
Latitude	: 22°54'57"	Longitude	: 78°20'51"
Zero of Gauge (m)	: 297 .000(M.S.L.)	01/03/1978	
	Opening Date	Closing Date	
Gauge	: 01/03/1978		
Discharge	: 18/04/1978		
Sediment	: 09/08/1978		
Water Quality	: 15/09/1979		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Sandia (010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	490.0	0.000	0.000	0.112	0.112	4742
2	0.000	0.000	0.000	0.000	0.000	0	142.6	0.000	0.000	0.050	0.050	616	465.0	0.000	0.000	0.076	0.076	3053
3	0.000	0.000	0.000	0.000	0.000	0	149.8	0.000	0.000	0.050	0.050	647	350.0	0.000	0.000	0.035	0.035	1058
4	0.000	0.000	0.000	0.000	0.000	0	147.1	0.000	0.000	0.030	0.030	381	324.0	0.000	0.000	0.026	0.026	728
5	0.000	0.000	0.000	0.000	0.000	0	135.9	0.000	0.000	0.030	0.030	352	354.0	0.000	0.000	0.028	0.028	856
6	69.70	0.000	0.000	0.043	0.043	259	127.9	0.000	0.000	1.010	1.010	11161	365.0	0.000	0.000	0.018	0.018	552
7	64.30	0.000	0.000	0.043	0.043	239	147.9	0.000	0.000	0.020	0.020	256	308.8	0.000	0.000	0.028	0.028	747
8	70.80	0.000	0.000	0.045	0.045	275	146.0	0.000	0.000	0.020	0.020	252	306.1	0.000	0.000	0.087	0.087	2301
9	0.000	0.000	0.000	0.000	0.000	0	155.2	0.000	0.000	0.020	0.020	268	1520	0.000	0.000	0.248	0.248	32569
10	0.000	0.000	0.000	0.000	0.000	0	237.1	0.000	0.000	0.070	0.070	1434	1495	0.000	0.000	0.108	0.108	13950
11	91.20	0.000	0.000	0.028	0.028	221	193.5	0.000	0.000	0.030	0.030	502	1050	0.000	0.000	0.137	0.137	12429
12	96.60	0.000	0.000	0.025	0.025	209	179.4	0.000	0.000	0.020	0.020	310	565.0	0.000	0.000	0.074	0.074	3612
13	96.00	0.000	0.000	0.025	0.025	207	156.4	0.000	0.000	0.019	0.019	257	465.0	0.000	0.000	0.055	0.055	2210
14	72.60	0.000	0.000	0.027	0.027	169	314.0	0.000	0.000	0.010	0.010	271	438.0	0.000	0.000	0.068	0.068	2573
15	64.10	0.000	0.000	0.023	0.023	127	289.0	0.000	0.000	0.060	0.060	1498	433.0	0.000	0.000	0.695	0.695	26001
16	0.000	0.000	0.000	0.000	0.000	0	191.0	0.000	0.000	0.055	0.055	908	87.00	0.000	0.000	0.133	0.133	1000
17	0.000	0.000	0.000	0.000	0.000	0	296.0	0.000	0.000	0.036	0.036	921	1130	0.000	0.000	0.107	0.107	10447
18	95.20	0.000	0.000	0.023	0.023	189	446.0	0.000	0.000	0.050	0.050	1927	1240	0.000	0.000	0.193	0.193	20677
19	88.00	0.000	0.000	0.047	0.047	357	615.0	0.000	0.000	0.025	0.025	1328	1150	0.000	0.000	0.179	0.179	17785
20	68.20	0.000	0.000	0.045	0.045	265	595.0	0.000	0.000	0.140	0.140	7197	957.0	0.000	0.000	0.149	0.149	12320
21	0.000	0.000	0.000	0.000	0.000	0	422.0	0.000	0.000	0.040	0.040	1458	2670	0.000	0.000	0.620	0.620	143027
22	0.000	0.000	0.000	0.000	0.000	0	415.0	0.000	0.000	0.170	0.170	6096	3135	0.000	0.000	0.539	0.539	145996
23	0.000	0.000	0.000	0.000	0.000	0	265.0	0.000	0.000	0.110	0.110	2519	257.0	0.000	0.000	0.636	0.636	14122
24	0.000	0.000	0.000	0.000	0.000	0	575.0	0.000	0.000	0.070	0.070	3478	2180	0.000	0.000	0.644	0.644	121299
25	0.000	0.000	0.000	0.000	0.000	0	1165	0.000	0.000	0.060	0.060	6039	1980	0.000	0.000	0.636	0.636	108807
26	0.000	0.000	0.000	0.000	0.000	0	15.50	0.000	0.000	0.070	0.070	94	1195	0.000	0.000	0.384	0.384	39647
27	87.60	0.000	0.000	0.033	0.033	246	14.80	0.000	0.000	0.040	0.040	51	755.0	0.000	0.000	0.205	0.205	13373
28	91.20	0.000	0.000	0.055	0.055	433	12.70	0.000	0.000	0.020	0.020	22	580.0	0.000	0.000	0.225	0.225	11275
29	101.5	0.000	0.000	0.072	0.072	631	931.0	0.000	0.000	0.060	0.060	4826	2670	0.000	0.000	0.586	0.586	135183
30	109.5	0.000	0.000	0.108	0.108	1022	595.0	0.000	0.000	0.044	0.044	2262	2595	0.000	0.000	0.373	0.373	83517
31							550.0	0.000	0.000	0.028	0.028	1331	42.00	0.000	0.000	0.475	0.475	1724
Ten Daily Mean																		
Ten Daily I	20.48	0.000	0.000	0.013	0.013	77	139.0	0.000	0.000	0.130	0.130	1537	597.8	0.000	0.000	0.077	0.077	6056
Ten Daily II	67.19	0.000	0.000	0.024	0.024	175	327.5	0.000	0.000	0.045	0.045	1512	751.5	0.000	0.000	0.179	0.179	10905
Ten Daily III	38.98	0.000	0.000	0.027	0.027	233	451.0	0.000	0.000	0.065	0.065	2561	1642	0.000	0.000	0.484	0.484	74361
Monthly																		
Total						4851						58661						987581

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Sandia (010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	4249	0.000	0.000	0.734	0.734	269461	505.0	0.000	0.000	0.450	0.450	19634	148.6	0.000	0.000	0.120	0.120	1541
2	2421	0.000	0.000	0.418	0.418	87435	498.0	0.000	0.000	0.444	0.444	19104	138.0	0.000	0.000	0.112	0.112	1335
3	2100	0.000	0.000	0.392	0.392	71124	498.0	0.000	0.000	0.700	0.700	30119	135.0	0.000	0.000	0.109	0.109	1271
4	1895	0.000	0.000	0.320	0.320	52393	493.0	0.000	0.000	0.550	0.550	23427	160.0	0.000	0.000	0.130	0.130	1797
5	1225	0.000	0.000	0.213	0.213	22544	460.0	0.000	0.000	0.105	0.105	4173	190.0	0.000	0.000	0.154	0.154	2528
6	1320	0.000	0.000	0.230	0.230	26231	325.1	0.000	0.000	0.110	0.110	3090	191.0	0.000	0.000	0.155	0.155	2558
7	2070	0.000	0.000	0.252	0.252	45070	262.0	0.000	0.000	0.089	0.089	2015	192.0	0.000	0.000	0.155	0.155	2571
8	2065	0.000	0.000	0.251	0.251	44782	219.3	0.000	0.000	0.133	0.133	2520	160.0	0.000	0.000	0.130	0.130	1797
9	2950	0.000	0.000	0.359	0.359	91502	266.4	0.000	0.000	0.162	0.162	3729	122.0	0.000	0.000	0.099	0.099	1044
10	4220	0.000	0.000	0.514	0.514	187409	271.5	0.000	0.000	0.110	0.110	2580	110.0	0.000	0.000	0.089	0.089	846
11	2070	0.000	0.000	0.252	0.252	45070	256.6	0.000	0.000	0.085	0.085	1884	100.0	0.000	0.000	0.081	0.081	700
12	1200	0.000	0.000	0.146	0.146	15137	265.9	0.000	0.000	0.095	0.095	2183	100.0	0.000	0.000	0.081	0.081	700
13	980.0	0.000	0.000	0.261	0.261	22099	286.7	0.000	0.000	0.090	0.090	2229	100.0	0.000	0.000	0.081	0.081	700
14	875.0	0.000	0.000	0.326	0.326	24646	288.0	0.000	0.000	0.090	0.090	2239	101.0	0.000	0.000	0.082	0.082	716
15	580.0	0.000	0.000	0.178	0.178	8920	238.3	0.000	0.000	0.128	0.128	2635	126.0	0.000	0.000	0.102	0.102	1110
16	560.0	0.000	0.000	0.172	0.172	8322	242.0	0.000	0.000	0.135	0.135	2823	130.0	0.000	0.000	0.105	0.105	1179
17	530.0	0.000	0.000	0.128	0.128	5861	221.0	0.000	0.000	0.130	0.130	2482	122.0	0.000	0.000	0.099	0.099	1044
18	510.0	0.000	0.000	0.160	0.160	7050	228.2	0.000	0.000	0.075	0.075	1479	117.0	0.000	0.000	0.095	0.095	960
19	490.0	0.000	0.000	0.155	0.155	6562	250.0	0.000	0.000	0.082	0.082	1771	110.0	0.000	0.000	0.089	0.089	846
20	475.0	0.000	0.000	0.133	0.133	5458	246.5	0.000	0.000	0.125	0.125	2662	92.00	0.000	0.000	0.074	0.074	588
21	470.0	0.000	0.000	0.132	0.132	5360	244.0	0.000	0.000	0.124	0.124	2614	107.0	0.000	0.000	0.087	0.087	804
22	472.0	0.000	0.000	0.088	0.088	3568	224.5	0.000	0.000	0.183	0.183	3550	135.0	0.000	0.000	0.109	0.109	1271
23	490.0	0.000	0.000	0.045	0.045	1905	207.2	0.000	0.000	0.183	0.183	3276	155.0	0.000	0.000	0.125	0.125	1674
24	510.0	0.000	0.000	0.155	0.155	6830	236.4	0.000	0.000	0.118	0.118	2410	195.0	0.000	0.000	0.158	0.158	2662
25	525.0	0.000	0.000	0.153	0.153	6940	223.8	0.000	0.000	0.140	0.140	2707	233.0	0.000	0.000	0.189	0.189	3805
26	535.0	0.000	0.000	0.143	0.143	6610	238.7	0.000	0.000	0.133	0.133	2743	194.0	0.000	0.000	0.157	0.157	2632
27	530.0	0.000	0.000	0.093	0.093	4259	239.7	0.000	0.000	0.130	0.130	2692	130.0	0.000	0.000	0.105	0.105	1179
28	520.0	0.000	0.000	0.145	0.145	6515	218.0	0.000	0.000	0.118	0.118	2223	135.0	0.000	0.000	0.109	0.109	1271
29	512.0	0.000	0.000	0.168	0.168	7432	219.1	0.000	0.000	0.125	0.125	2366	105.0	0.000	0.000	0.085	0.085	771
30	510.0	0.000	0.000	0.167	0.167	7359	179.7	0.000	0.000	0.130	0.130	2018	147.0	0.000	0.000	0.119	0.119	1511
31							158.1	0.000	0.000	0.128	0.128	1748						
Ten Daily Mean																		
Ten Daily I	2452	0.000	0.000	0.368	0.368	89795	379.8	0.000	0.000	0.285	0.285	11039	154.7	0.000	0.000	0.125	0.125	1729
Ten Daily II	827.0	0.000	0.000	0.191	0.191	14913	252.3	0.000	0.000	0.104	0.104	2239	109.8	0.000	0.000	0.089	0.089	854
Ten Daily III	507.4	0.000	0.000	0.129	0.129	5678	217.2	0.000	0.000	0.137	0.137	2577	153.6	0.000	0.000	0.124	0.124	1758
Monthly																		
Total						1103855						161128						43412

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Sandia (010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNISD-I, Hoshangabad

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	146.0	0.000	0.000	0.118	0.118	1488	190.0	0.000	0.000	0.154	0.154	2528	82.10	0.000	0.000	0.066	0.066	468
2	121.0	0.000	0.000	0.098	0.098	1025	178.0	0.000	0.000	0.144	0.144	2215	71.50	0.000	0.000	0.058	0.058	358
3	96.00	0.000	0.000	0.087	0.087	722	190.0	0.000	0.000	0.154	0.154	2528	86.00	0.000	0.000	0.070	0.070	520
4	170.0	0.000	0.000	0.138	0.138	2027	198.0	0.000	0.000	0.160	0.160	2737	93.00	0.000	0.000	0.075	0.075	603
5	150.0	0.000	0.000	0.121	0.121	1568	170.0	0.000	0.000	0.138	0.138	2027	84.00	0.000	0.000	0.068	0.068	494
6	140.0	0.000	0.000	0.113	0.113	1367	175.0	0.000	0.000	0.142	0.142	2147	81.00	0.000	0.000	0.066	0.066	462
7	142.0	0.000	0.000	0.115	0.115	1411	147.0	0.000	0.000	0.119	0.119	1511	79.00	0.000	0.000	0.064	0.064	437
8	148.0	0.000	0.000	0.119	0.119	1522	113.0	0.000	0.000	0.091	0.091	888	85.00	0.000	0.000	0.069	0.069	507
9	194.0	0.000	0.000	0.157	0.157	2632	121.0	0.000	0.000	0.098	0.098	1025	82.00	0.000	0.000	0.066	0.066	468
10	180.0	0.000	0.000	0.146	0.146	2271	122.0	0.000	0.000	0.099	0.099	1044	81.00	0.000	0.000	0.066	0.066	462
11	145.0	0.000	0.000	0.117	0.117	1466	125.0	0.000	0.000	0.101	0.101	1091	82.00	0.000	0.000	0.070	0.070	496
12	115.0	0.000	0.000	0.093	0.093	924	133.0	0.000	0.000	0.108	0.108	1241	86.00	0.000	0.000	0.079	0.079	587
13	95.00	0.000	0.000	0.077	0.077	632	134.0	0.000	0.000	0.108	0.108	1250	98.00	0.000	0.000	0.086	0.086	728
14	145.0	0.000	0.000	0.117	0.117	1466	133.0	0.000	0.000	0.108	0.108	1241	106.0	0.000	0.000	0.079	0.079	724
15	144.0	0.000	0.000	0.117	0.117	1456	119.0	0.000	0.000	0.096	0.096	987	97.00	0.000	0.000	0.079	0.079	662
16	143.0	0.000	0.000	0.116	0.116	1433	133.0	0.000	0.000	0.108	0.108	1241	98.00	0.000	0.000	0.077	0.077	652
17	110.0	0.000	0.000	0.089	0.089	846	122.0	0.000	0.000	0.099	0.099	1044	95.00	0.000	0.000	0.078	0.078	640
18	61.70	0.000	0.000	0.050	0.050	267	127.0	0.000	0.000	0.103	0.103	1130	96.40	0.000	0.000	0.065	0.065	541
19	57.00	0.000	0.000	0.046	0.046	227	128.0	0.000	0.000	0.104	0.104	1150	80.80	0.000	0.000	0.060	0.060	419
20	130.0	0.000	0.000	0.105	0.105	1179	148.0	0.000	0.000	0.120	0.120	1534	74.00	0.000	0.000	0.081	0.081	518
21	115.0	0.000	0.000	0.093	0.093	924	146.0	0.000	0.000	0.118	0.118	1488	100.0	0.000	0.000	0.071	0.071	613
22	132.0	0.000	0.000	0.107	0.107	1220	138.0	0.000	0.000	0.112	0.112	1335	88.00	0.000	0.000	0.063	0.063	479
23	152.0	0.000	0.000	0.123	0.123	1615	97.60	0.000	0.000	0.079	0.079	666	78.00	0.000	0.000	0.079	0.079	532
24	170.0	0.000	0.000	0.138	0.138	2027	94.00	0.000	0.000	0.076	0.076	617	98.00	0.000	0.000	0.092	0.092	779
25	155.0	0.000	0.000	0.125	0.125	1674	88.00	0.000	0.000	0.071	0.071	540	114.0	0.000	0.000	0.097	0.097	955
26	162.0	0.000	0.000	0.131	0.131	1834	89.00	0.000	0.000	0.072	0.072	554	120.0	0.000	0.000	0.089	0.089	923
27	145.0	0.000	0.000	0.117	0.117	1466	88.00	0.000	0.000	0.071	0.071	540	110.0	0.000	0.000	0.070	0.070	665
28	172.0	0.000	0.000	0.139	0.139	2066	99.20	0.000	0.000	0.080	0.080	686	86.00	0.000	0.000	0.070	0.070	520
29	190.0	0.000	0.000	0.154	0.154	2528	101.4	0.000	0.000	0.082	0.082	718						
30	150.0	0.000	0.000	0.121	0.121	1568	88.40	0.000	0.000	0.072	0.072	550						
31	170.0	0.000	0.000	0.138	0.138	2027	84.60	0.000	0.000	0.068	0.068	497						
Ten Daily Mean																		
Ten Daily I	148.7	0.000	0.000	0.121	0.121	1603	160.4	0.000	0.000	0.130	0.130	1865	82.46	0.000	0.000	0.067	0.067	478
Ten Daily II	114.6	0.000	0.000	0.093	0.093	989	130.2	0.000	0.000	0.106	0.106	1191	91.32	0.000	0.000	0.075	0.075	597
Ten Daily III	155.7	0.000	0.000	0.126	0.126	1723	101.3	0.000	0.000	0.082	0.082	745	99.25	0.000	0.000	0.079	0.079	683
Monthly																		
Total						44875						38751						16212

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Sandia (010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	64.00	0.000	0.000	0.052	0.052	288	37.80	0.000	0.000	0.031	0.031	101	33.30	0.000	0.000	0.001	0.001	3
2	60.00	0.000	0.000	0.049	0.049	254	38.30	0.000	0.000	0.031	0.031	103	37.00	0.000	0.000	0.001	0.001	3
3	54.00	0.000	0.000	0.044	0.044	205	54.70	0.000	0.000	0.044	0.044	208	40.00	0.000	0.000	0.001	0.001	3
4	50.00	0.000	0.000	0.040	0.040	173	127.8	0.000	0.000	0.013	0.013	144	39.00	0.000	0.000	0.001	0.001	3
5	51.00	0.000	0.000	0.041	0.041	181	135.7	0.000	0.000	0.014	0.014	164	37.00	0.000	0.000	0.001	0.001	3
6	71.00	0.000	0.000	0.057	0.057	350	145.0	0.000	0.000	0.015	0.015	188	38.00	0.000	0.000	0.001	0.001	3
7	80.00	0.000	0.000	0.065	0.065	449	140.0	0.000	0.000	0.014	0.014	169	39.00	0.000	0.000	0.001	0.001	3
8	62.00	0.000	0.000	0.050	0.050	268	109.8	0.000	0.000	0.063	0.063	598	34.40	0.000	0.000	0.033	0.033	98
9	68.00	0.000	0.000	0.055	0.055	323	60.00	0.000	0.000	0.034	0.034	176	32.30	0.000	0.000	0.031	0.031	87
10	140.0	0.000	0.000	0.113	0.113	1367	56.70	0.000	0.000	0.033	0.033	162	31.60	0.000	0.000	0.030	0.030	82
11	128.0	0.000	0.000	0.104	0.104	1150	44.30	0.000	0.000	0.025	0.025	96	32.00	0.000	0.000	0.031	0.031	86
12	102.0	0.000	0.000	0.083	0.083	731	39.40	0.000	0.000	0.023	0.023	78	36.00	0.000	0.000	0.035	0.035	109
13	108.0	0.000	0.000	0.087	0.087	812	32.00	0.000	0.000	0.018	0.018	50	36.70	0.000	0.000	0.050	0.050	159
14	112.0	0.000	0.000	0.091	0.091	881	35.00	0.000	0.000	0.020	0.020	60	44.00	0.000	0.000	0.060	0.060	228
15	86.00	0.000	0.000	0.070	0.070	520	42.10	0.000	0.000	0.025	0.025	91	43.00	0.000	0.000	0.059	0.059	219
16	54.00	0.000	0.000	0.044	0.044	205	42.50	0.000	0.000	0.025	0.025	92	41.70	0.000	0.000	0.057	0.057	205
17	46.00	0.000	0.000	0.037	0.037	147	45.00	0.000	0.000	0.027	0.027	105	36.70	0.000	0.000	0.050	0.050	159
18	42.00	0.000	0.000	0.034	0.034	123	38.00	0.000	0.000	0.023	0.023	76	36.00	0.000	0.000	0.049	0.049	152
19	41.00	0.000	0.000	0.033	0.033	117	35.00	0.000	0.000	0.021	0.021	64	43.00	0.000	0.000	0.059	0.059	219
20	42.00	0.000	0.000	0.034	0.034	123	34.00	0.000	0.000	0.020	0.020	59	42.50	0.000	0.000	0.018	0.018	66
21	36.00	0.000	0.000	0.029	0.029	90	40.00	0.000	0.000	0.024	0.024	83	38.70	0.000	0.000	0.016	0.016	53
22	30.00	0.000	0.000	0.024	0.024	62	38.60	0.000	0.000	0.038	0.038	127	34.90	0.000	0.000	0.015	0.015	45
23	32.00	0.000	0.000	0.026	0.026	72	35.20	0.000	0.000	0.035	0.035	106	41.70	0.000	0.000	0.018	0.018	65
24	33.00	0.000	0.000	0.027	0.027	77	32.20	0.000	0.000	0.032	0.032	89	46.30	0.000	0.000	0.020	0.020	80
25	36.00	0.000	0.000	0.029	0.029	90	30.00	0.000	0.000	0.030	0.030	78	42.00	0.000	0.000	0.018	0.018	65
26	40.00	0.000	0.000	0.032	0.032	111	33.00	0.000	0.000	0.032	0.032	91	38.00	0.000	0.000	0.016	0.016	53
27	32.00	0.000	0.000	0.026	0.026	72	43.50	0.000	0.000	0.043	0.043	162	39.00	0.000	0.000	0.030	0.030	101
28	29.00	0.000	0.000	0.023	0.023	58	38.00	0.000	0.000	0.037	0.037	121	39.00	0.000	0.000	0.030	0.030	101
29	28.00	0.000	0.000	0.023	0.023	56	32.00	0.000	0.000	0.032	0.032	88	38.70	0.000	0.000	0.030	0.030	100
30	30.00	0.000	0.000	0.024	0.024	62	31.00	0.000	0.000	0.001	0.001	3	36.40	0.000	0.000	0.028	0.028	88
31	35.00	0.000	0.000	0.027	0.027	82							32.20	0.000	0.000	0.025	0.025	70
Ten Daily Mean																		
Ten Daily I	70.00	0.000	0.000	0.057	0.057	386	90.58	0.000	0.000	0.029	0.029	201	36.16	0.000	0.000	0.010	0.010	29
Ten Daily II	76.10	0.000	0.000	0.062	0.062	481	38.73	0.000	0.000	0.023	0.023	77	39.16	0.000	0.000	0.047	0.047	160
Ten Daily III	32.82	0.000	0.000	0.026	0.026	76	35.35	0.000	0.000	0.030	0.030	95	38.81	0.000	0.000	0.022	0.022	75
Monthly																		
Total						9498						3730						2713

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Sandia (010215013) Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division:MNSD-I, Hoshangabad

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	7529140	0	7529140	7469
1988-1989	16266197	0	16266197	15401
1989-1990	4764959	0	4764959	7805
1990-1991	16499579	0	16499579	23713
1991-1992	31100237	0	31100237	16572
1992-1993	7506724	0	7506724	12999
1993-1994	11324633	0	11324633	15094
1994-1995	43941942	0	43941942	37107
1995-1996	11257938	0	11257938	16228
1996-1997	2415023	0	2415023	8959
1997-1998	7382982	0	7382982	16842
1998-1999	5939963	0	5939963	13090
1999-2000	34685472	0	34685472	31756
2000-2001	10300014	0	10300014	8791
2001-2002	18040558	0	18040558	14484
2002-2003	13837434	0	13837434	11487
2003-2004	36417062	0	36417062	23001
2004-2005	11432445	0	11432445	13284
2005-2006	26940023	200265	27140288	24423
2006-2007	17843016	125370	17968386	13936
2007-2008	225892	11152	237044	9305
2008-2009	1249337	49464	1298802	9914
2009-2010	47170094	42441	47212536	11271
2010-2011	4083187	422459	4505647	9112
2011-2012	37840545	497337	38337883	22368
2012-2013	15153224	153017	15306241	13589
2013-2014	15096652	132822	15229473	28654
2014-2015	3320615	71095	3391709	10500
2015-2016	566346	58438	624785	6318
2016-2017	5051534.42	58304.64	5109839.06	15068.69
2017-2018	390036.11	0	390036.11	2852.29
2018-2019	2359487	115780	2475267	9395

Sediment Data Year Book 2018-19

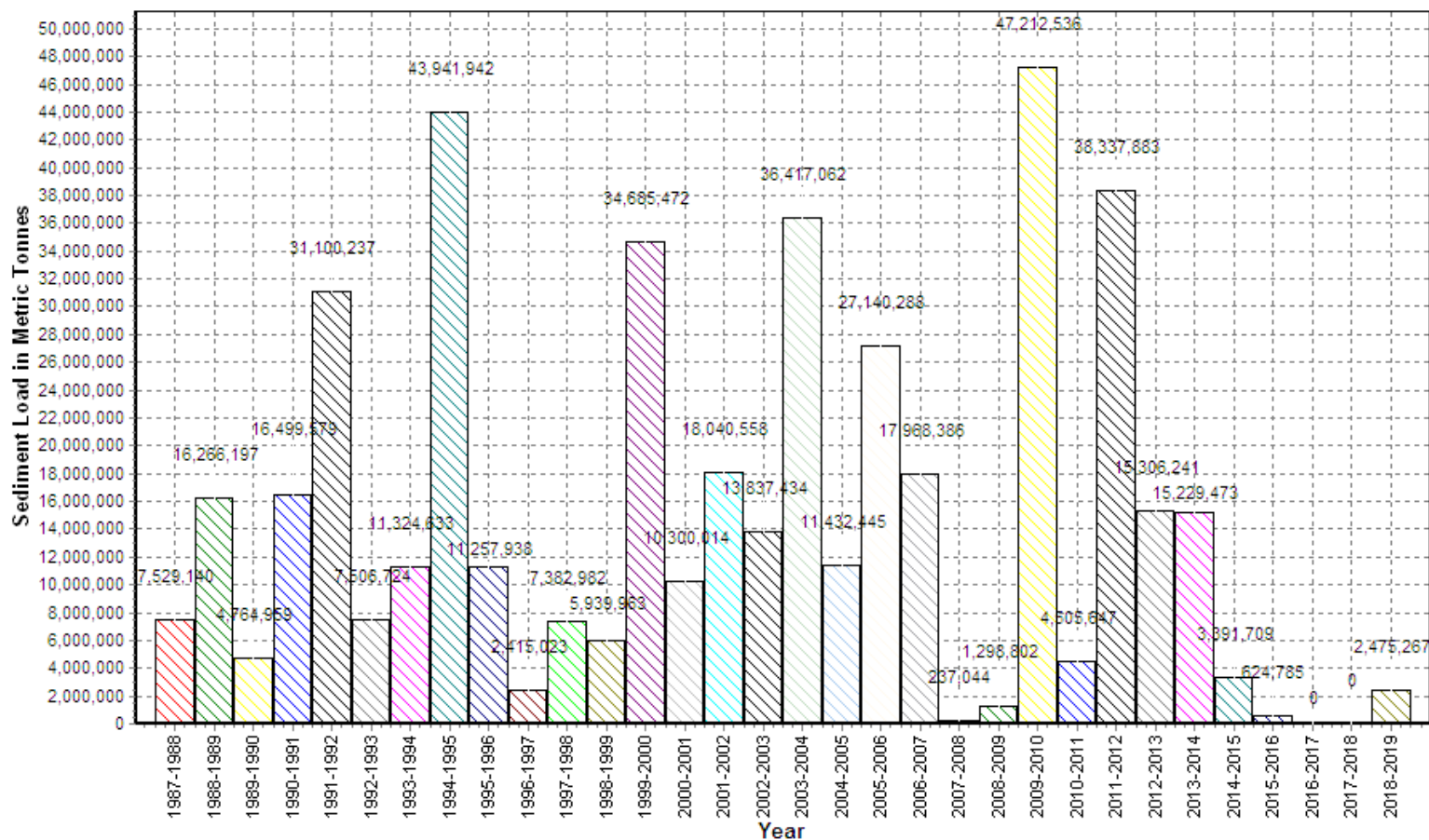
Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Sandia (010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



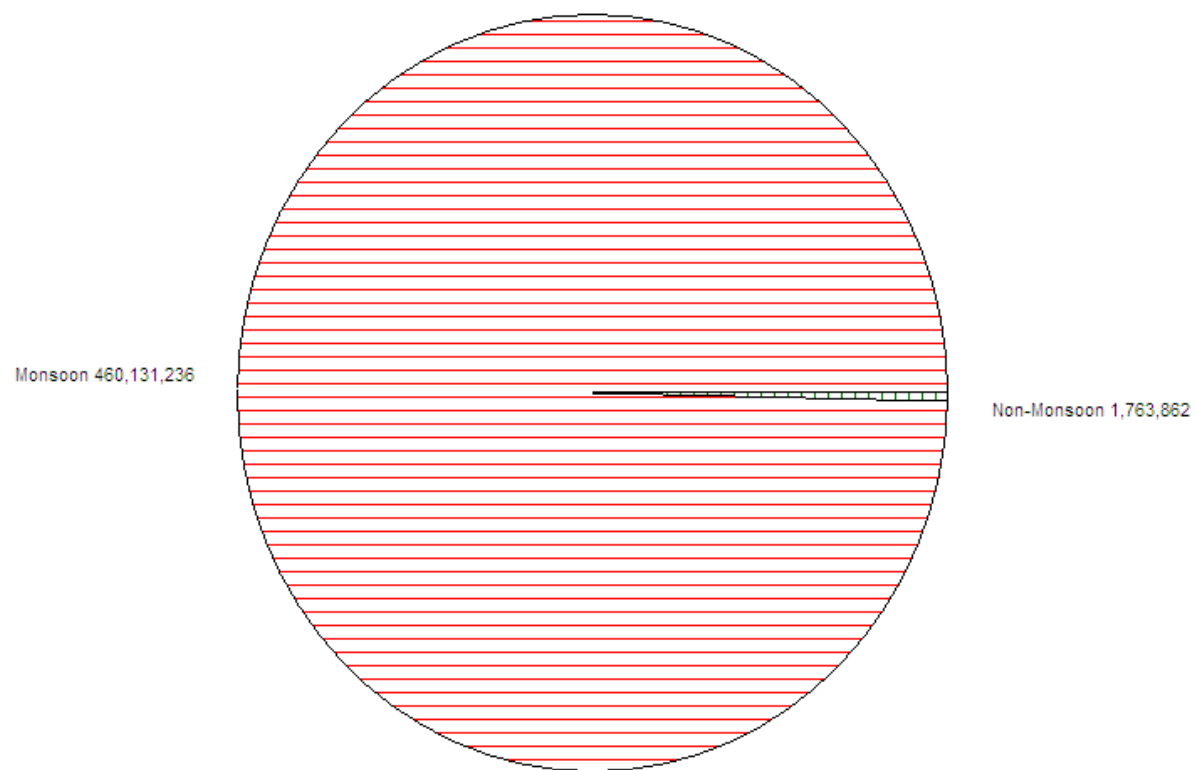
Seasonal Sediment Load for period : 1987-2019

Station Name : Narmada at Sandia (010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



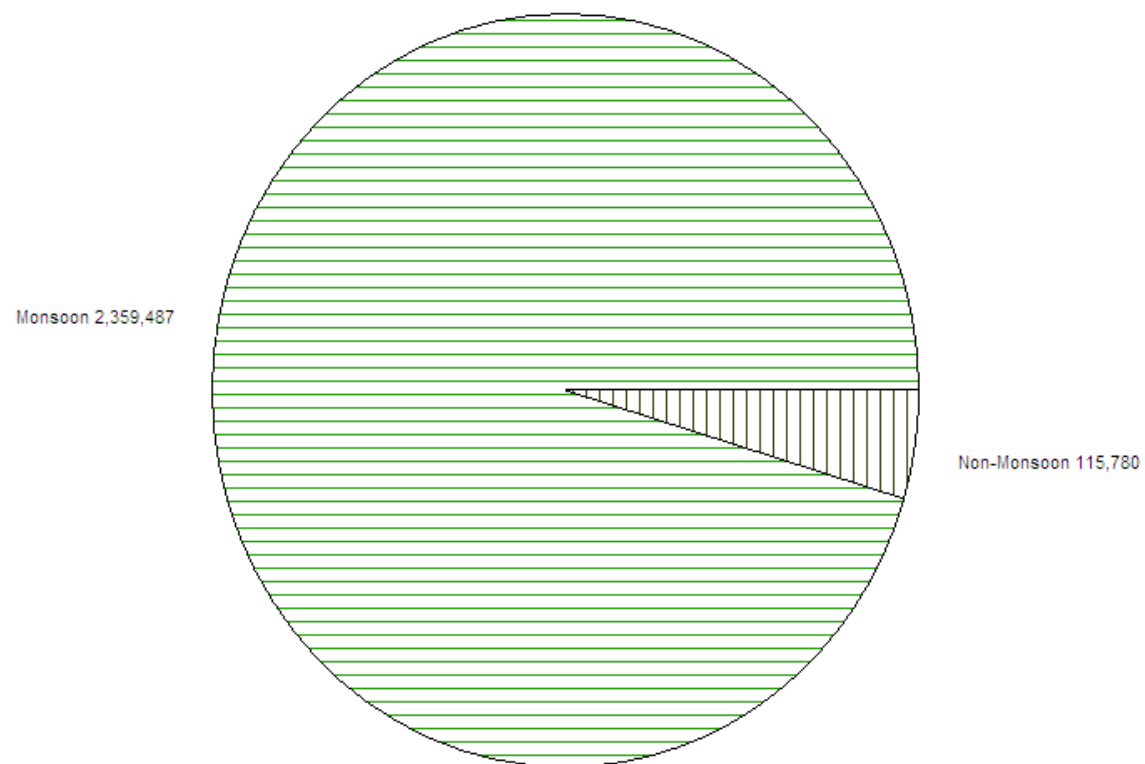
Seasonal Sediment Load for period : 2018-2019

Station Name : Narmada at Sandia (010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-1 Hoshangabad



6.7 Shakkar at Gadarwara**History sheet**

		Water Year	: 2018-2019
Site	: Shakkar at Gadarwara	Code	: 010215012
State	: Madhya Pradesh	District	Narsinghpur
Basin	: Narmada	Independent River	: Narmada
Tributary	: Shakkar	Local River	: Shakkar
Division	: Narmada Division, Bhopal	Sub-Division	: MNSD-I, Hoshangabad
Drainage Area	: 2270 Sq. Km.	Bank	: Left
Latitude	: 22°55'26"	Longitude	: 78°47'20"
Zero of Gauge (m)	: 321 .000(M.S.L.)	01/02/1977	
	Opening Date	Closing Date	
Gauge	: 01/02/1977		
Discharge	: 01/02/1977		
Sediment	: 15/06/1978		
Water Quality	: 16/08/1979		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Division : MNSD-I, Hoshangabad

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.000	0.000	0.000	0.000	0.000	0	9.480	0.000	0.000	0.000	0.000	0	55.55	0.000	0.000	0.080	0.080	384
2	0.000	0.000	0.000	0.000	0.000	0	7.256	0.000	0.000	0.028	0.028	18	53.88	0.000	0.000	0.053	0.053	247
3	0.000	0.000	0.000	0.000	0.000	0	9.767	0.000	0.000	0.034	0.034	29	49.71	0.000	0.000	0.040	0.040	172
4	0.000	0.000	0.000	0.000	0.000	0	11.86	0.000	0.000	0.033	0.033	34	43.45	0.000	0.000	0.038	0.038	143
5	0.000	0.000	0.000	0.000	0.000	0	8.471	0.000	0.000	0.025	0.025	18	32.21	0.000	0.000	0.028	0.028	78
6	0.000	0.000	0.000	0.000	0.000	0	11.64	0.000	0.000	0.035	0.035	35	43.88	0.000	0.000	0.035	0.035	133
7	0.000	0.000	0.000	0.000	0.000	0	11.46	0.000	0.000	0.030	0.030	30	33.80	0.000	0.000	0.036	0.036	105
8	0.000	0.000	0.000	0.000	0.000	0	11.64	0.000	0.000	0.030	0.030	30	70.64	0.000	0.000	0.060	0.060	366
9	0.000	0.000	0.000	0.000	0.000	0	11.97	0.000	0.000	0.034	0.034	35	11.24	0.000	0.002	0.178	0.180	175
10	0.000	0.000	0.000	0.000	0.000	0	12.16	0.000	0.000	0.035	0.035	37	162.2	0.002	0.004	0.243	0.249	3489
11	0.000	0.000	0.000	0.000	0.000	0	11.83	0.000	0.000	0.033	0.033	34	162.2	0.002	0.003	0.025	0.030	420
12	0.000	0.000	0.000	0.000	0.000	0	12.43	0.000	0.000	0.050	0.050	54	130.0	0.000	0.000	0.020	0.020	225
13	0.000	0.000	0.000	0.000	0.000	0	12.21	0.000	0.000	0.040	0.040	42	11.33	0.000	0.002	0.195	0.197	193
14	0.000	0.000	0.000	0.000	0.000	0	11.94	0.000	0.000	0.025	0.025	26	116.5	0.001	0.002	0.178	0.181	1822
15	0.000	0.000	0.000	0.000	0.000	0	11.93	0.000	0.000	0.025	0.025	26	155.2	0.002	0.002	0.298	0.302	4051
16	0.000	0.000	0.000	0.000	0.000	0	11.85	0.000	0.000	0.035	0.035	36	124.0	0.000	0.000	0.238	0.238	2550
17	0.000	0.000	0.000	0.000	0.000	0	12.18	0.000	0.000	0.040	0.040	42	124.0	0.001	0.002	0.253	0.256	2743
18	0.000	0.000	0.000	0.000	0.000	0	13.27	0.000	0.000	0.055	0.055	63	139.2	0.002	0.002	0.282	0.286	3441
19	0.000	0.000	0.000	0.000	0.000	0	14.02	0.000	0.000	0.055	0.055	67	370.5	0.000	0.000	0.969	0.969	31019
20	0.000	0.000	0.000	0.000	0.000	0	12.52	0.000	0.000	0.050	0.050	54	155.4	0.002	0.003	0.355	0.360	4833
21	0.000	0.000	0.000	0.000	0.000	0	12.44	0.000	0.000	0.048	0.048	52	376.6	0.003	0.005	0.985	0.993	32310
22	0.000	0.000	0.000	0.000	0.000	0	14.00	0.000	0.000	0.054	0.054	65	170.1	0.000	0.000	0.665	0.665	9773
23	0.000	0.000	0.000	0.000	0.000	0	13.84	0.000	0.000	0.053	0.053	63	183.4	0.003	0.004	0.657	0.664	10523
24	0.000	0.000	0.000	0.000	0.000	0	14.06	0.000	0.000	0.045	0.045	55	173.1	0.003	0.003	0.625	0.631	9435
25	0.000	0.000	0.000	0.000	0.000	0	76.67	0.000	0.000	0.078	0.078	517	184.8	0.003	0.004	0.723	0.730	11653
26	0.000	0.000	0.000	0.000	0.000	0	70.39	0.000	0.000	0.075	0.075	456	170.1	0.000	0.000	0.665	0.665	9773
27	0.000	0.000	0.000	0.000	0.000	0	171.7	0.002	0.003	0.353	0.358	5309	164.7	0.003	0.004	0.683	0.690	9819
28	0.001	0.000	0.000	0.000	0.000	0	190.5	0.002	0.003	0.275	0.280	4609	184.5	0.003	0.005	0.750	0.758	12081
29	0.002	0.000	0.000	0.000	0.000	0	181.5	0.000	0.000	0.262	0.262	4109	163.7	0.002	0.003	0.528	0.533	7540
30	0.000	0.000	0.000	0.000	0.000	0	161.1	0.002	0.003	0.258	0.263	3661	123.9	0.002	0.002	0.550	0.554	5931
31							59.42	0.001	0.001	0.115	0.117	601	169.9	0.003	0.003	0.590	0.596	8748
Ten Daily Mean																		
Ten Daily I	0.000	0.000	0.000	0.000	0.000	0	10.57	0.000	0.000	0.028	0.028	27	55.65	0.000	0.001	0.079	0.080	529
Ten Daily II	0.000	0.000	0.000	0.000	0.000	0	12.42	0.000	0.000	0.041	0.041	44	148.8	0.001	0.002	0.281	0.284	5130
Ten Daily III	0.000	0.000	0.000	0.000	0.000	0	87.78	0.001	0.001	0.147	0.148	1772	187.7	0.002	0.003	0.675	0.680	11599
Monthly																		

Total

0

20205

184174

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Division : MNSD-I, Hoshangabad

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	197.7	0.003	0.005	0.700	0.708	12094	54.53	0.000	0.000	0.063	0.063	297	2.960	0.000	0.000	0.010	0.010	3
2	407.8	0.000	0.000	1.444	1.444	50878	47.50	0.000	0.000	0.485	0.485	1990	2.900	0.000	0.000	0.010	0.010	3
3	338.3	0.004	0.006	1.230	1.240	36243	44.25	0.000	0.000	0.055	0.055	210	2.850	0.000	0.000	0.010	0.010	2
4	206.2	0.003	0.005	1.028	1.036	18458	42.80	0.000	0.000	0.053	0.053	196	2.850	0.000	0.000	0.000	0.000	0
5	184.4	0.002	0.004	0.730	0.736	11723	34.37	0.000	0.000	0.050	0.050	148	2.800	0.000	0.000	0.000	0.000	0
6	198.9	0.003	0.005	1.017	1.025	17617	29.74	0.000	0.000	0.040	0.040	103	2.800	0.000	0.000	0.010	0.010	2
7	377.7	0.005	0.009	1.593	1.607	52445	23.80	0.000	0.000	0.032	0.032	66	2.750	0.000	0.000	0.000	0.000	0
8	433.3	0.005	0.009	1.685	1.699	63602	23.81	0.000	0.000	0.030	0.030	62	2.750	0.000	0.000	0.010	0.010	2
9	208.5	0.000	0.000	0.811	0.811	14610	26.27	0.000	0.000	0.030	0.030	68	2.700	0.000	0.000	0.010	0.010	2
10	184.9	0.003	0.004	0.835	0.842	13452	18.88	0.000	0.000	0.025	0.025	41	2.650	0.000	0.000	0.010	0.010	2
11	169.9	0.002	0.003	0.703	0.708	10390	13.49	0.000	0.000	0.020	0.020	23	2.650	0.000	0.000	0.010	0.010	2
12	169.4	0.002	0.003	0.698	0.703	10287	12.58	0.000	0.000	0.016	0.016	17	2.530	0.000	0.000	0.000	0.000	0
13	169.8	0.000	0.000	0.700	0.700	10270	12.12	0.000	0.000	0.013	0.013	14	2.400	0.000	0.000	0.010	0.010	2
14	158.6	0.002	0.002	0.520	0.524	7180	11.65	0.000	0.000	0.012	0.012	12	2.400	0.000	0.000	0.000	0.000	0
15	130.0	0.001	0.002	0.500	0.503	5649	11.30	0.000	0.000	0.013	0.013	13	2.260	0.000	0.000	0.010	0.010	2
16	105.0	0.000	0.000	0.404	0.404	3665	11.51	0.000	0.000	0.000	0.000	0	2.200	0.000	0.000	0.010	0.010	2
17	77.11	0.000	0.000	0.225	0.225	1499	11.09	0.000	0.000	0.010	0.010	10	2.200	0.000	0.000	0.010	0.010	2
18	60.37	0.000	0.000	0.170	0.170	887	11.06	0.000	0.000	0.011	0.011	11	2.100	0.000	0.000	0.010	0.010	2
19	51.17	0.000	0.000	0.126	0.126	557	10.75	0.000	0.000	0.011	0.011	10	2.100	0.000	0.000	0.000	0.000	0
20	42.46	0.000	0.000	0.100	0.100	367	10.49	0.000	0.000	0.012	0.012	11	2.000	0.000	0.000	0.000	0.000	0
21	32.00	0.000	0.000	0.075	0.075	207	9.800	0.000	0.000	0.011	0.011	9	1.850	0.000	0.000	0.000	0.000	0
22	43.89	0.000	0.000	0.082	0.082	311	7.733	0.000	0.000	0.010	0.010	7	1.850	0.000	0.000	0.000	0.000	0
23	124.0	0.000	0.000	0.023	0.023	249	7.424	0.000	0.000	0.009	0.009	6	1.850	0.000	0.000	0.010	0.010	2
24	102.6	0.000	0.000	0.123	0.123	1090	6.845	0.000	0.000	0.008	0.008	5	1.850	0.000	0.000	0.010	0.010	2
25	96.53	0.000	0.000	0.102	0.102	851	5.684	0.000	0.000	0.008	0.008	4	1.700	0.000	0.000	0.000	0.000	0
26	76.73	0.000	0.000	0.093	0.093	617	5.112	0.000	0.000	0.008	0.008	4	1.700	0.000	0.000	0.000	0.000	0
27	70.54	0.000	0.000	0.088	0.088	536	4.657	0.000	0.000	0.007	0.007	3	1.700	0.000	0.000	0.000	0.000	0
28	64.78	0.000	0.000	0.087	0.087	487	4.150	0.000	0.000	0.006	0.006	2	1.500	0.000	0.000	0.000	0.000	0
29	54.17	0.000	0.000	0.072	0.072	337	3.508	0.000	0.000	0.008	0.008	2	1.250	0.000	0.000	0.000	0.000	0
30	54.15	0.000	0.000	0.072	0.072	337	3.275	0.000	0.000	0.008	0.008	2	1.000	0.000	0.000	0.000	0.000	0
31							3.044	0.000	0.000	0.007	0.007	2						
Ten Daily Mean																		
Ten Daily I	273.8	0.003	0.005	1.107	1.115	29112	34.60	0.000	0.000	0.086	0.086	318	2.801	0.000	0.000	0.007	0.007	2
Ten Daily II	113.4	0.001	0.001	0.415	0.416	5075	11.60	0.000	0.000	0.012	0.012	12	2.284	0.000	0.000	0.006	0.006	1
Ten Daily III	71.93	0.000	0.000	0.082	0.082	502	5.567	0.000	0.000	0.008	0.008	4	1.625	0.000	0.000	0.002	0.002	0
Monthly																		

Total

346894

3347

32

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Division : MNSD-I, Hoshangabad

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	1.000	0.000	0.000	0.000	0.000	0	0.012	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
2	0.850	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
3	0.700	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
4	0.700	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
5	0.550	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
6	0.550	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
7	0.400	0.000	0.000	0.000	0.000	0	0.010	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
8	0.300	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
9	0.200	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
10	0.200	0.000	0.000	0.000	0.000	0	0.080	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
11	0.200	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
12	0.200	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
13	0.200	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
14	0.200	0.000	0.000	0.000	0.000	0	0.060	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
15	0.200	0.000	0.000	0.000	0.000	0	0.060	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
16	0.180	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
17	0.160	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
18	0.160	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
19	0.160	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
20	0.160	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
21	0.160	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
22	0.160	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
23	0.140	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
24	0.140	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
25	0.140	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
26	0.140	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
27	0.140	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
28	0.140	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
29	0.140	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
30	0.120	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
31	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
Ten Daily Mean																		
Ten Daily I	0.545	0.000	0.000	0.000	0.000	0	0.015	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Ten Daily II	0.182	0.000	0.000	0.000	0.000	0	0.012	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Ten Daily III	0.129	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Monthly																		
Total						0						0						0

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Div : MNSD-I, Hoshangabad

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
2	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
3	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
7	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
8	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
9	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
10	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
11	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
12	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
13	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
14	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
15	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
16	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
17	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
18	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
19	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
20	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
21	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
22	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
23	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
24	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
25	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
26	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
27	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
28	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
29	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
30	0.000	0.000	0.000	0.000	0.000	0							0.000	0.000	0.000	0.000	0.000	0
31																		
Ten Daily Mean																		
Ten Daily I																		
Ten Daily II																		
Ten Daily III																		
Monthly																		

Total

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Division : MNSD-I, Hoshangabad

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	558684	0	558684	502
1988-1989	2457908	0	2457908	1534
1989-1990	1131618	0	1131618	1094
1990-1991	2403873	0	2403873	2210
1991-1992	869283	0	869283	725
1992-1993	1509931	0	1509931	1148
1993-1994	1449469	0	1449469	1411
1994-1995	6473197	0	6473197	3068
1995-1996	1704168	0	1704168	913
1996-1997	343576	0	343576	668
1997-1998	1511294	0	1511294	1312
1998-1999	310187	0	310187	808
1999-2000	3802366	0	3802366	3689
2000-2001	524430	0	524430	729
2001-2002	421505	0	421505	599
2002-2003	814769	0	814769	1225
2003-2004	728251	0	728251	1603
2004-2005	157004	0	157004	657
2005-2006	745498	160	745658	1411
2006-2007	2654321	38	2654359	2333
2007-2008	739549	13	739562	1630
2008-2009	115482	2	115485	796
2009-2010	5461674	79	5461752	2152
2010-2011	663097	19	663116	1598
2011-2012	612288	5	612293	1280
2012-2013	1229000	46	1229046	2222
2013-2014	3562927	462	3563388	2941
2014-2015	436903	18	436921	1066
2015-2016	632929	0	632929	1075
2016-2017	1223466.6	405.03	1223871.63	2542.02
2017-2018	236955.83	0	236955.83	803.74
2018-2019	554652	0	554652	907

Sediment Data Year Book 2018-19

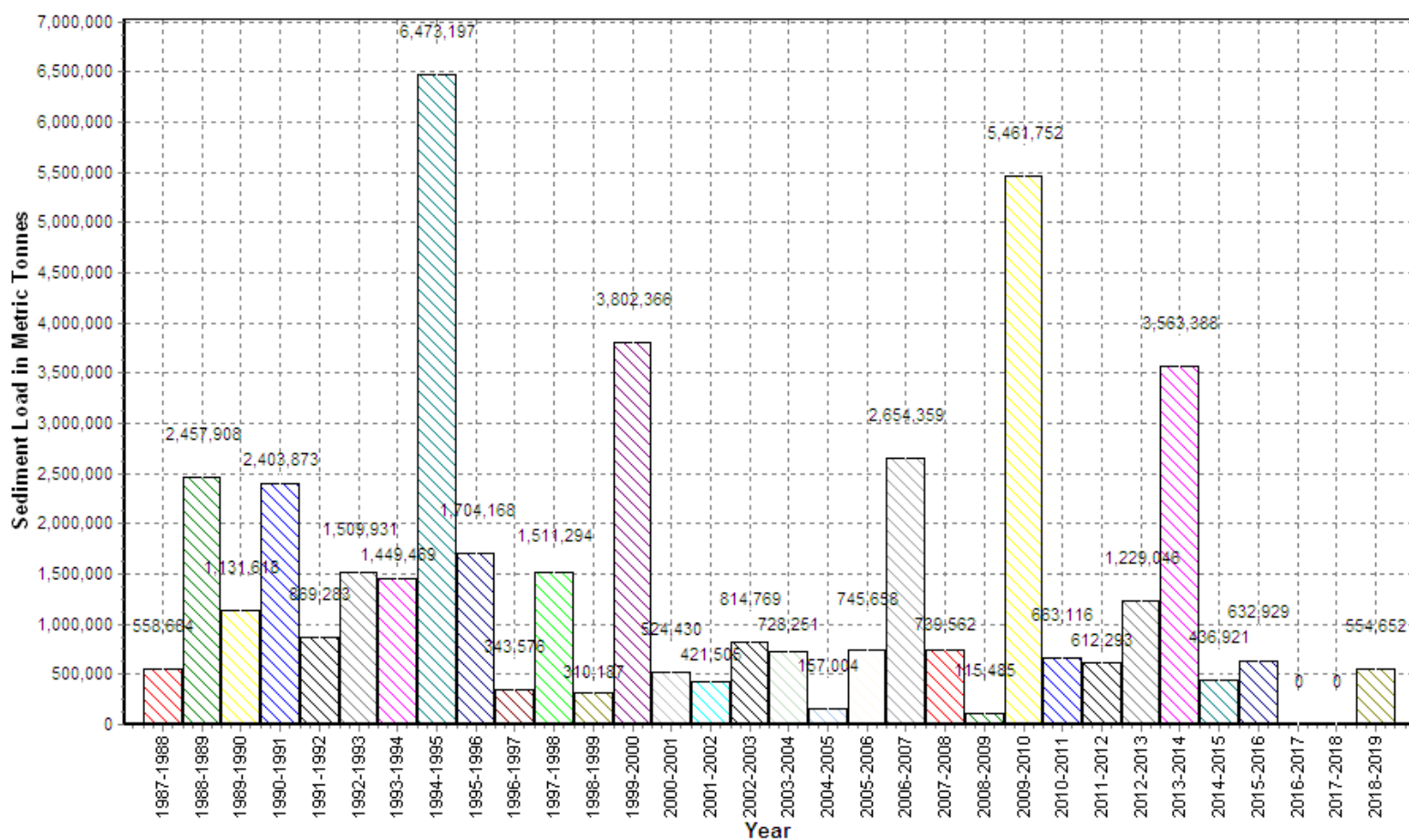
Annual Sediment Load for period : 1987-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Div : MNSD-I, Hoshangabad



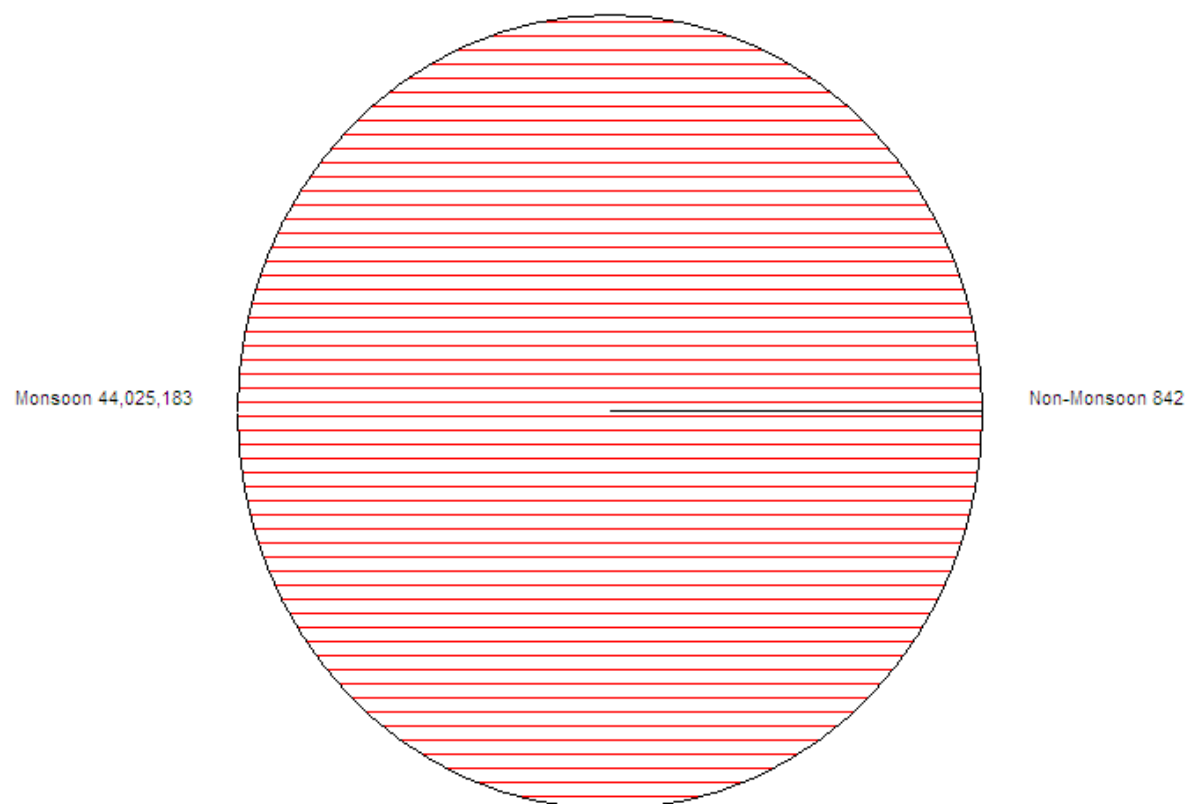
Seasonal Sediment Load for the period : 1987-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Div : MNSD-I, Hoshangabad



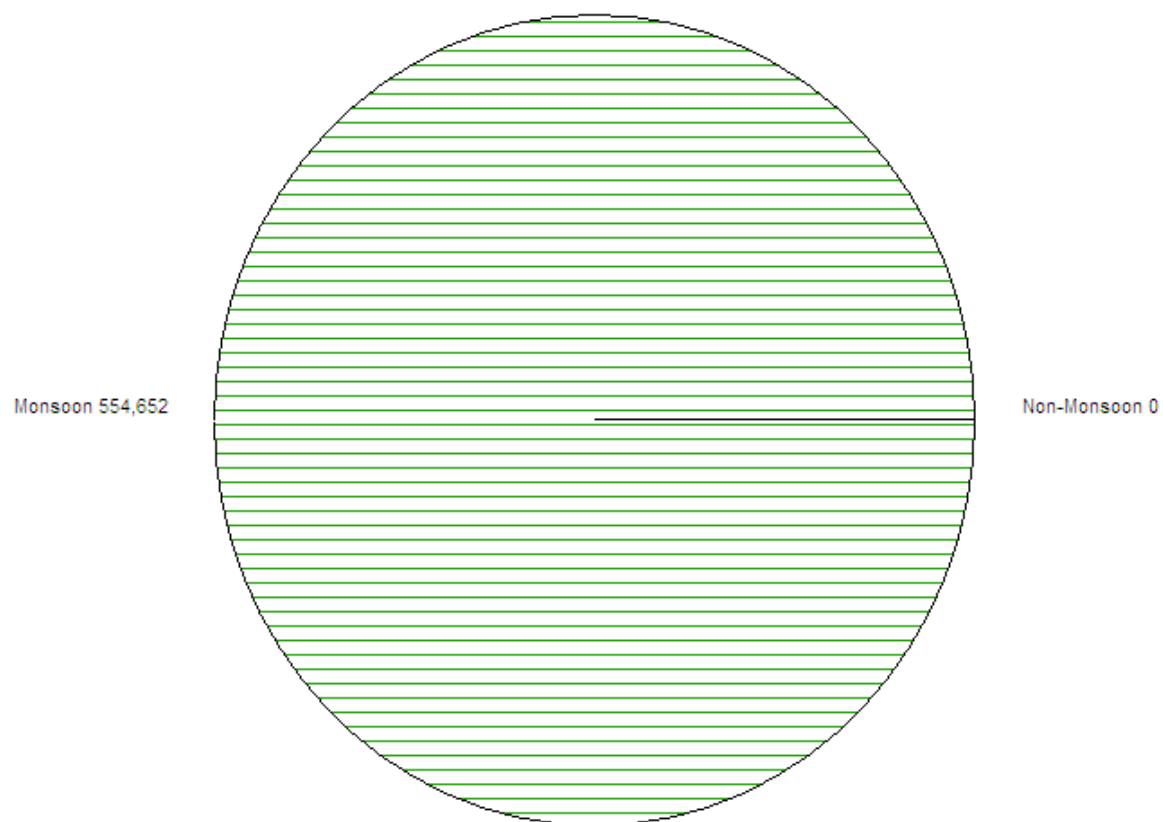
Seasonal Sediment Load for the period : 2018-2019

Station Name : Shakkar at Gadarwara (010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Div : MNSD-I, Hoshangabad



6.8 Narmada at Barman**History Sheet**

		Water Year	: 2018-2019
Site	: Narmada at Barman	Code	: 010215011
State	: Madhya Pradesh	District	Narsinghpur
Basin	: Narmada	Independent River	: Narmada
Tributary	:	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Narmada
Division	: Narmada Division, Bhopal	Sub-Division	: MNSD-I, Hoshangabad
Drainage Area	: 26453 Sq. Km.	Bank	: Right
Latitude	: 23°01'52"	Longitude	: 79°00'56"
Zero of Gauge (m)	: 306 .000(M.S.L.)	09/12/1970	
	Opening Date	Closing Date	
Gauge	: 09/12/1970		
Discharge	: 20/11/1971		
Sediment	: 27/08/1972		
Water Quality	: 01/06/1979		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Barman (010215011)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	84.30	0.000	0.000	0.013	0.013	95	125.0	0.000	0.000	0.081	0.081	875	300.0	0.000	0.000	0.320	0.320	8294
2	93.10	0.000	0.000	0.013	0.013	105	129.0	0.000	0.000	0.068	0.068	758	290.0	0.000	0.000	0.386	0.386	9672
3	100.0	0.000	0.000	0.014	0.014	121	106.0	0.000	0.000	0.072	0.072	659	285.0	0.000	0.000	0.253	0.253	6230
4	62.30	0.000	0.000	0.022	0.022	118	112.0	0.000	0.000	0.074	0.074	716	295.0	0.000	0.000	0.244	0.244	6219
5	41.20	0.000	0.000	0.015	0.015	53	111.0	0.000	0.000	0.071	0.071	681	260.0	0.000	0.000	0.022	0.022	483
6	74.20	0.000	0.000	0.015	0.015	96	113.0	0.000	0.000	0.088	0.088	859	250.0	0.000	0.000	0.148	0.148	3197
7	72.10	0.000	0.000	0.035	0.035	218	125.0	0.000	0.000	0.066	0.066	713	233.0	0.000	0.000	0.213	0.213	4288
8	64.10	0.000	0.000	0.028	0.028	155	120.0	0.000	0.000	0.063	0.063	653	320.0	0.000	0.000	0.468	0.468	12939
9	63.30	0.000	0.000	0.021	0.021	115	171.0	0.000	0.000	0.099	0.099	1463	1740	0.000	0.000	0.442	0.442	66449
10	62.00	0.000	0.000	0.021	0.021	112	153.0	0.000	0.000	0.098	0.098	1295	900.0	0.000	0.000	0.199	0.199	15474
11	78.90	0.000	0.000	0.050	0.050	341	131.0	0.000	0.000	0.095	0.095	1075	600.0	0.000	0.000	0.154	0.154	7983
12	82.80	0.000	0.000	0.041	0.041	293	128.0	0.000	0.000	0.398	0.398	4402	490.0	0.000	0.000	0.126	0.126	5334
13	68.90	0.000	0.000	0.043	0.043	256	380.0	0.000	0.000	0.652	0.652	21406	420.0	0.000	0.000	0.108	0.108	3919
14	81.70	0.000	0.000	0.039	0.039	275	233.0	0.000	0.000	0.630	0.630	12683	430.0	0.000	0.000	0.128	0.128	4755
15	95.20	0.000	0.000	0.031	0.031	255	162.0	0.000	0.000	0.438	0.438	6131	390.0	0.000	0.000	0.116	0.116	3909
16	84.00	0.000	0.000	0.052	0.052	377	171.0	0.000	0.000	0.105	0.105	1551	860.0	0.000	0.000	0.140	0.140	10403
17	80.00	0.000	0.000	0.027	0.027	187	506.0	0.000	0.000	0.407	0.407	17793	110.0	0.000	0.000	0.160	0.160	1521
18	83.70	0.000	0.000	0.033	0.033	239	390.0	0.000	0.000	0.409	0.409	13782	1080	0.000	0.000	0.177	0.177	16516
19	86.00	0.000	0.000	0.032	0.032	238	820.0	0.000	0.000	0.421	0.421	29827	940.0	0.000	0.000	0.154	0.154	12507
20	95.40	0.000	0.000	0.030	0.030	247	560.0	0.000	0.000	0.497	0.497	24047	1060	0.000	0.000	0.162	0.162	14837
21	90.20	0.000	0.000	0.028	0.028	218	280.0	0.000	0.000	0.452	0.452	10935	1900	0.000	0.000	0.587	0.587	96362
22	84.60	0.000	0.000	0.023	0.023	168	242.0	0.000	0.000	0.391	0.391	8175	2250	0.000	0.000	0.070	0.070	13511
23	119.0	0.000	0.000	0.027	0.027	278	201.0	0.000	0.000	0.125	0.125	2171	1980	0.000	0.000	0.429	0.429	73390
24	85.00	0.000	0.000	0.026	0.026	191	190.0	0.000	0.000	0.704	0.704	11557	1580	0.000	0.000	0.204	0.204	27848
25	74.20	0.000	0.000	0.029	0.029	186	167.0	0.000	0.000	0.705	0.705	10172	1040	0.000	0.000	0.098	0.098	8806
26	80.20	0.000	0.000	0.026	0.026	180	125.0	0.000	0.000	0.713	0.713	7700	620.0	0.000	0.000	0.058	0.058	3107
27	88.60	0.000	0.000	0.044	0.044	337	97.00	0.000	0.000	0.659	0.659	5523	530.0	0.000	0.000	0.216	0.216	9891
28	85.30	0.000	0.000	0.050	0.050	368	90.00	0.000	0.000	0.446	0.446	3468	580.0	0.000	0.000	0.220	0.220	11025
29	80.90	0.000	0.000	0.061	0.061	426	700.0	0.000	0.000	3.469	3.469	209805	3420	0.000	0.000	0.723	0.723	213638
30	122.0	0.000	0.000	0.079	0.079	833	560.0	0.000	0.000	0.461	0.461	22305	2820	0.000	0.000	0.771	0.771	187853
31							330.0	0.000	0.000	0.439	0.439	12517	4280	0.000	0.000	0.316	0.316	116854
Ten Daily Mean																		
Ten Daily I	71.66	0.000	0.000	0.020	0.020	119	126.5	0.000	0.000	0.078	0.078	867	487.3	0.000	0.000	0.269	0.269	13324
Ten Daily II	83.66	0.000	0.000	0.038	0.038	271	348.1	0.000	0.000	0.405	0.405	13270	638.0	0.000	0.000	0.143	0.143	8168
Ten Daily III	91.00	0.000	0.000	0.039	0.039	319	271.1	0.000	0.000	0.779	0.779	27666	1909	0.000	0.000	0.336	0.336	69299
Monthly																		
Total						7082						445698						977213

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Barman (010215011)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	3100	0.000	0.000	0.323	0.323	86512	289.0	0.000	0.000	0.036	0.036	899	63.30	0.000	0.000	0.003	0.003	16
2	1680	0.000	0.000	0.175	0.175	25402	230.0	0.000	0.000	0.029	0.029	576	51.00	0.000	0.000	0.003	0.003	13
3	139.0	0.000	0.000	0.446	0.446	5356	237.0	0.000	0.000	0.072	0.072	1474	93.50	0.000	0.000	0.004	0.004	32
4	1140	0.000	0.000	0.306	0.306	30140	218.0	0.000	0.000	0.033	0.033	622	131.0	0.000	0.000	0.006	0.006	68
5	980.0	0.000	0.000	0.392	0.392	33191	171.0	0.000	0.000	0.047	0.047	694	134.0	0.000	0.000	0.006	0.006	69
6	1110	0.000	0.000	0.153	0.153	14673	140.0	0.000	0.000	0.065	0.065	786	105.0	0.000	0.000	0.020	0.020	181
7	1180	0.000	0.000	0.206	0.206	21002	120.0	0.000	0.000	0.056	0.056	581	74.00	0.000	0.000	0.014	0.014	90
8	1360	0.000	0.000	0.226	0.226	26556	201.0	0.000	0.000	0.084	0.084	1459	59.50	0.000	0.000	0.018	0.018	93
9	4350	0.000	0.000	0.000	0.000	0	188.0	0.000	0.000	0.059	0.059	958	91.90	0.000	0.000	0.021	0.021	167
10	2320	0.000	0.000	0.303	0.303	60736	195.0	0.000	0.000	0.070	0.070	1179	69.50	0.000	0.000	0.020	0.020	120
11	980.0	0.000	0.000	0.420	0.420	35562	190.0	0.000	0.000	0.035	0.035	575	63.00	0.000	0.000	0.018	0.018	98
12	880.0	0.000	0.000	0.116	0.116	8820	225.0	0.000	0.000	0.043	0.043	836	65.40	0.000	0.000	0.028	0.028	158
13	760.0	0.000	0.000	0.732	0.732	48066	164.0	0.000	0.000	0.034	0.034	482	68.50	0.000	0.000	0.040	0.040	237
14	380.0	0.000	0.000	0.082	0.082	2692	150.0	0.000	0.000	0.031	0.031	402	68.70	0.000	0.000	0.044	0.044	261
15	306.0	0.000	0.000	0.074	0.074	1956	160.0	0.000	0.000	0.052	0.052	719	65.10	0.000	0.000	0.038	0.038	214
16	340.0	0.000	0.000	0.100	0.100	2938	105.0	0.000	0.000	0.028	0.028	254	64.40	0.000	0.000	0.045	0.045	250
17	320.0	0.000	0.000	0.253	0.253	6995	156.0	0.000	0.000	0.028	0.028	377	59.00	0.000	0.000	0.037	0.037	189
18	310.0	0.000	0.000	0.199	0.199	5330	173.0	0.000	0.000	0.030	0.030	448	60.00	0.000	0.000	0.038	0.038	197
19	300.0	0.000	0.000	0.128	0.128	3318	150.0	0.000	0.000	0.026	0.026	337	58.90	0.000	0.000	0.042	0.042	214
20	290.0	0.000	0.000	0.162	0.162	4059	131.0	0.000	0.000	0.034	0.034	385	46.40	0.000	0.000	0.038	0.038	152
21	275.0	0.000	0.000	0.070	0.070	1663	151.0	0.000	0.000	0.039	0.039	509	48.00	0.000	0.000	0.039	0.039	162
22	280.0	0.000	0.000	0.337	0.337	8153	163.0	0.000	0.000	0.018	0.018	253	57.80	0.000	0.000	0.040	0.040	200
23	305.0	0.000	0.000	0.154	0.154	4058	168.0	0.000	0.000	0.105	0.105	1524	66.00	0.000	0.000	0.046	0.046	262
24	350.0	0.000	0.000	0.154	0.154	4657	176.0	0.000	0.000	0.023	0.023	350	108.0	0.000	0.000	0.051	0.051	476
25	320.0	0.000	0.000	0.149	0.149	4120	186.0	0.000	0.000	0.021	0.021	337	111.0	0.000	0.000	0.052	0.052	499
26	300.0	0.000	0.000	0.045	0.045	1166	165.0	0.000	0.000	0.046	0.046	656	91.20	0.000	0.000	0.057	0.057	449
27	280.0	0.000	0.000	0.045	0.045	1089	167.0	0.000	0.000	0.016	0.016	231	72.10	0.000	0.000	0.058	0.058	361
28	255.0	0.000	0.000	0.076	0.076	1674	130.0	0.000	0.000	0.012	0.012	135	62.00	0.000	0.000	0.050	0.050	268
29	250.0	0.000	0.000	0.079	0.079	1706	109.0	0.000	0.000	0.020	0.020	188	64.30	0.000	0.000	0.042	0.042	233
30	0.000	0.000	0.000	0.000	0.000	0	93.50	0.000	0.000	0.016	0.016	129	58.80	0.000	0.000	0.047	0.047	239
31							66.90	0.000	0.000	0.028	0.028	162						
Ten Daily Mean																		
Ten Daily I	1736	0.000	0.000	0.253	0.253	30357	198.9	0.000	0.000	0.055	0.055	923	87.27	0.000	0.000	0.012	0.012	85
Ten Daily II	486.6	0.000	0.000	0.227	0.227	11974	160.4	0.000	0.000	0.034	0.034	481	61.94	0.000	0.000	0.037	0.037	197
Ten Daily III	261.5	0.000	0.000	0.111	0.111	2829	143.2	0.000	0.000	0.031	0.031	407	73.92	0.000	0.000	0.048	0.048	315
Monthly																		
Total						451591						18518						5968

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Barman (010215011)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	58.90	0.000	0.000	0.047	0.047	239	111.0	0.000	0.000	0.049	0.049	470	44.70	0.000	0.000	0.024	0.024	93
2	48.00	0.000	0.000	0.038	0.038	158	124.0	0.000	0.000	0.055	0.055	589	47.10	0.000	0.000	0.025	0.025	102
3	120.0	0.000	0.000	0.044	0.044	456	135.0	0.000	0.000	0.060	0.060	700	63.00	0.000	0.000	0.033	0.033	180
4	116.0	0.000	0.000	0.043	0.043	431	127.0	0.000	0.000	0.056	0.056	614	69.50	0.000	0.000	0.027	0.027	162
5	110.0	0.000	0.000	0.040	0.040	380	109.0	0.000	0.000	0.048	0.048	452	74.10	0.000	0.000	0.029	0.029	186
6	105.0	0.000	0.000	0.039	0.039	354	151.0	0.000	0.000	0.040	0.040	522	65.10	0.000	0.000	0.025	0.025	141
7	101.0	0.000	0.000	0.037	0.037	323	68.90	0.000	0.000	0.035	0.035	208	64.30	0.000	0.000	0.025	0.025	139
8	114.0	0.000	0.000	0.042	0.042	414	68.50	0.000	0.000	0.035	0.035	207	63.30	0.000	0.000	0.025	0.025	137
9	100.0	0.000	0.000	0.037	0.037	320	72.60	0.000	0.000	0.037	0.037	232	68.30	0.000	0.000	0.027	0.027	159
10	95.90	0.000	0.000	0.013	0.013	108	97.60	0.000	0.000	0.050	0.050	422	70.00	0.000	0.000	0.027	0.027	163
11	77.70	0.000	0.000	0.011	0.011	74	99.80	0.000	0.000	0.051	0.051	440	76.90	0.000	0.000	0.028	0.028	186
12	69.50	0.000	0.000	0.009	0.009	54	94.90	0.000	0.000	0.048	0.048	394	87.40	0.000	0.000	0.032	0.032	242
13	71.30	0.000	0.000	0.010	0.010	62	80.00	0.000	0.000	0.041	0.041	283	91.90	0.000	0.000	0.033	0.033	262
14	67.70	0.000	0.000	0.009	0.009	53	79.50	0.000	0.000	0.036	0.036	247	80.70	0.000	0.000	0.029	0.029	202
15	57.60	0.000	0.000	0.008	0.008	40	86.50	0.000	0.000	0.039	0.039	291	63.10	0.000	0.000	0.023	0.023	125
16	52.00	0.000	0.000	0.007	0.007	31	86.00	0.000	0.000	0.039	0.039	290	69.60	0.000	0.000	0.025	0.025	150
17	48.50	0.000	0.000	0.012	0.012	50	86.30	0.000	0.000	0.039	0.039	291	74.00	0.000	0.000	0.027	0.027	173
18	48.10	0.000	0.000	0.012	0.012	50	86.80	0.000	0.000	0.039	0.039	292	48.20	0.000	0.000	0.046	0.046	192
19	102.0	0.000	0.000	0.025	0.025	220	86.00	0.000	0.000	0.039	0.039	290	61.00	0.000	0.000	0.058	0.058	306
20	106.0	0.000	0.000	0.026	0.026	238	95.00	0.000	0.000	0.043	0.043	353	65.90	0.000	0.000	0.063	0.063	359
21	108.0	0.000	0.000	0.023	0.023	215	79.80	0.000	0.000	0.066	0.066	455	73.60	0.000	0.000	0.070	0.070	445
22	105.0	0.000	0.000	0.050	0.050	454	79.80	0.000	0.000	0.066	0.066	455	73.20	0.000	0.000	0.070	0.070	443
23	94.00	0.000	0.000	0.053	0.053	430	83.00	0.000	0.000	0.069	0.069	495	82.90	0.000	0.000	0.079	0.079	566
24	113.0	0.000	0.000	0.046	0.046	449	71.70	0.000	0.000	0.059	0.059	365	80.00	0.000	0.000	0.076	0.076	525
25	119.0	0.000	0.000	0.062	0.062	637	76.00	0.000	0.000	0.063	0.063	414	108.0	0.000	0.000	0.036	0.036	336
26	103.0	0.000	0.000	0.066	0.066	587	72.10	0.000	0.000	0.060	0.060	374	99.80	0.000	0.000	0.033	0.033	285
27	140.0	0.000	0.000	0.053	0.053	641	60.00	0.000	0.000	0.050	0.050	259	63.30	0.000	0.000	0.021	0.021	115
28	150.0	0.000	0.000	0.046	0.046	596	95.00	0.000	0.000	0.050	0.050	410	43.80	0.000	0.000	0.015	0.015	57
29	119.0	0.000	0.000	0.062	0.062	637	71.80	0.000	0.000	0.038	0.038	236						
30	100.0	0.000	0.000	0.044	0.044	380	74.20	0.000	0.000	0.039	0.039	250						
31	137.0	0.000	0.000	0.061	0.061	722	61.50	0.000	0.000	0.032	0.032	170						
Ten Daily Mean																		
Ten Daily I	96.88	0.000	0.000	0.038	0.038	318	106.5	0.000	0.000	0.047	0.047	442	62.94	0.000	0.000	0.027	0.027	146
Ten Daily II	70.04	0.000	0.000	0.013	0.013	87	88.08	0.000	0.000	0.041	0.041	317	71.87	0.000	0.000	0.036	0.036	220
Ten Daily III	117.1	0.000	0.000	0.051	0.051	523	74.99	0.000	0.000	0.054	0.054	353	78.08	0.000	0.000	0.050	0.050	346
Monthly																		
Total						9803						11471						6428

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Barman (010215011)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	41.00	0.000	0.000	0.014	0.014	50	33.80	0.000	0.000	0.049	0.049	143	40.30	0.000	0.000	0.030	0.030	104
2	57.40	0.000	0.000	0.019	0.019	94	35.50	0.000	0.000	0.051	0.051	156	48.20	0.000	0.000	0.036	0.036	150
3	52.00	0.000	0.000	0.017	0.017	76	121.0	0.000	0.000	0.175	0.175	1830	47.00	0.000	0.000	0.035	0.035	142
4	48.00	0.000	0.000	0.016	0.016	66	112.0	0.000	0.000	0.162	0.162	1568	44.70	0.000	0.000	0.033	0.033	127
5	71.00	0.000	0.000	0.027	0.027	166	126.0	0.000	0.000	0.183	0.183	1992	44.00	0.000	0.000	0.033	0.033	125
6	47.00	0.000	0.000	0.018	0.018	73	114.0	0.000	0.000	0.165	0.165	1625	35.00	0.000	0.000	0.026	0.026	79
7	40.40	0.000	0.000	0.015	0.015	52	91.00	0.000	0.000	0.132	0.132	1038	31.20	0.000	0.000	0.220	0.220	593
8	99.30	0.000	0.000	0.038	0.038	326	40.40	0.000	0.000	0.042	0.042	147	35.00	0.000	0.000	0.247	0.247	747
9	114.0	0.000	0.000	0.043	0.043	424	30.70	0.000	0.000	0.032	0.032	85	25.60	0.000	0.000	0.181	0.181	400
10	100.0	0.000	0.000	0.038	0.038	328	34.80	0.000	0.000	0.036	0.036	108	27.80	0.000	0.000	0.196	0.196	471
11	63.20	0.000	0.000	0.039	0.039	213	35.00	0.000	0.000	0.036	0.036	109	37.20	0.000	0.000	0.262	0.262	842
12	77.70	0.000	0.000	0.048	0.048	322	25.70	0.000	0.000	0.027	0.027	60	37.00	0.000	0.000	0.261	0.261	834
13	87.40	0.000	0.000	0.054	0.054	408	40.20	0.000	0.000	0.042	0.042	146	35.90	0.000	0.000	0.018	0.018	56
14	46.40	0.000	0.000	0.029	0.029	116	0.000	0.000	0.000	0.000	0.000	0	38.00	0.000	0.000	0.019	0.019	62
15	38.00	0.000	0.000	0.023	0.023	76	38.10	0.000	0.000	0.033	0.033	109	33.80	0.000	0.000	0.017	0.017	50
16	43.50	0.000	0.000	0.027	0.027	101	40.60	0.000	0.000	0.035	0.035	123	31.90	0.000	0.000	0.016	0.016	44
17	52.00	0.000	0.000	0.032	0.032	144	21.00	0.000	0.000	0.018	0.018	33	48.00	0.000	0.000	0.024	0.024	100
18	48.60	0.000	0.000	0.061	0.061	256	35.50	0.000	0.000	0.031	0.031	95	49.00	0.000	0.000	0.025	0.025	106
19	40.30	0.000	0.000	0.051	0.051	178	32.10	0.000	0.000	0.028	0.028	78	48.70	0.000	0.000	0.028	0.028	118
20	35.50	0.000	0.000	0.045	0.045	138	40.30	0.000	0.000	0.035	0.035	122	55.50	0.000	0.000	0.017	0.017	82
21	35.00	0.000	0.000	0.044	0.044	133	43.00	0.000	0.000	0.018	0.018	67	55.50	0.000	0.000	0.015	0.015	72
22	35.90	0.000	0.000	0.045	0.045	140	35.90	0.000	0.000	0.026	0.026	81	49.90	0.000	0.000	0.015	0.015	65
23	31.10	0.000	0.000	0.039	0.039	105	34.30	0.000	0.000	0.025	0.025	74	48.70	0.000	0.000	0.011	0.011	46
24	30.00	0.000	0.000	0.038	0.038	98	26.40	0.000	0.000	0.019	0.019	43	35.40	0.000	0.000	0.009	0.009	28
25	29.10	0.000	0.000	0.057	0.057	143	26.30	0.000	0.000	0.019	0.019	43	28.40	0.000	0.000	0.008	0.008	20
26	26.40	0.000	0.000	0.052	0.052	119	38.00	0.000	0.000	0.028	0.028	92	25.70	0.000	0.000	0.008	0.008	18
27	23.30	0.000	0.000	0.046	0.046	93	44.50	0.000	0.000	0.032	0.032	123	27.20	0.000	0.000	0.014	0.014	33
28	25.70	0.000	0.000	0.050	0.050	111	44.00	0.000	0.000	0.032	0.032	122	35.40	0.000	0.000	0.018	0.018	55
29	31.20	0.000	0.000	0.061	0.061	164	35.10	0.000	0.000	0.026	0.026	79	25.60	0.000	0.000	0.013	0.013	29
30	27.20	0.000	0.000	0.053	0.053	125	31.10	0.000	0.000	0.023	0.023	62	42.90	0.000	0.000	0.022	0.022	82
31	48.00	0.000	0.000	0.094	0.094	390							44.70	0.000	0.000	0.023	0.023	89
Ten Daily Mean																		
Ten Daily I	67.01	0.000	0.000	0.025	0.025	166	73.92	0.000	0.000	0.103	0.103	869	37.88	0.000	0.000	0.104	0.104	294
Ten Daily II	53.26	0.000	0.000	0.041	0.041	195	30.85	0.000	0.000	0.029	0.029	87	41.50	0.000	0.000	0.069	0.069	229
Ten Daily III	31.17	0.000	0.000	0.053	0.053	147	35.86	0.000	0.000	0.025	0.025	79	38.13	0.000	0.000	0.014	0.014	49
Monthly																		
Total						5228						10350						5767

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Barman (010215011) Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division: MNSD-I, Hoshangabad

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	13696732	0	13696732	12351
1988-1989	21927043	0	21927043	20561
1989-1990	12260503	0	12260503	12621
1990-1991	28921421	0	28921421	32525
1991-1992	17163196	0	17163196	21307
1992-1993	22273546	0	22273546	17083
1993-1994	24945905	0	24945905	21370
1994-1995	41396876	0	41396876	52525
1995-1996	13478552	0	13478552	19477
1996-1997	1864008	0	1864008	11102
1997-1998	14386694	0	14386694	22983
1998-1999	6442728	0	6442728	17077
1999-2000	27754797	0	27754797	43778
2000-2001	5418046	0	5418046	10985
2001-2002	11518072	0	11518072	17112
2002-2003	12492177	0	12492177	17532
2003-2004	24976310	0	24976310	29911
2004-2005	11095494	0	11095494	15602
2005-2006	41754968	112666	41867634	29700
2006-2007	21223787	63622	21287409	20517
2007-2008	3245231	48195	3293426	12585
2008-2009	8450881	43281	8494162	12343
2009-2010	14345893	12602	14358495	13831
2010-2011	2677514	84382	2761896	12869
2011-2012	11067511	122367	11189878	25203
2012-2013	32740071	122954	32863024	21076
2013-2014	338236903	74412	338311315	38710
2014-2015	13947824	91716	14039540	12492
2015-2016	5170582	37221	5207803	12457
2016-2017	8001661.45	39094.35	8040755.8	11706.22
2017-2018	609270.82	25589.58	634860.4	2933.71
2018-2019	410212	22702	432914	8511

Sediment Data Year Book 2018-19

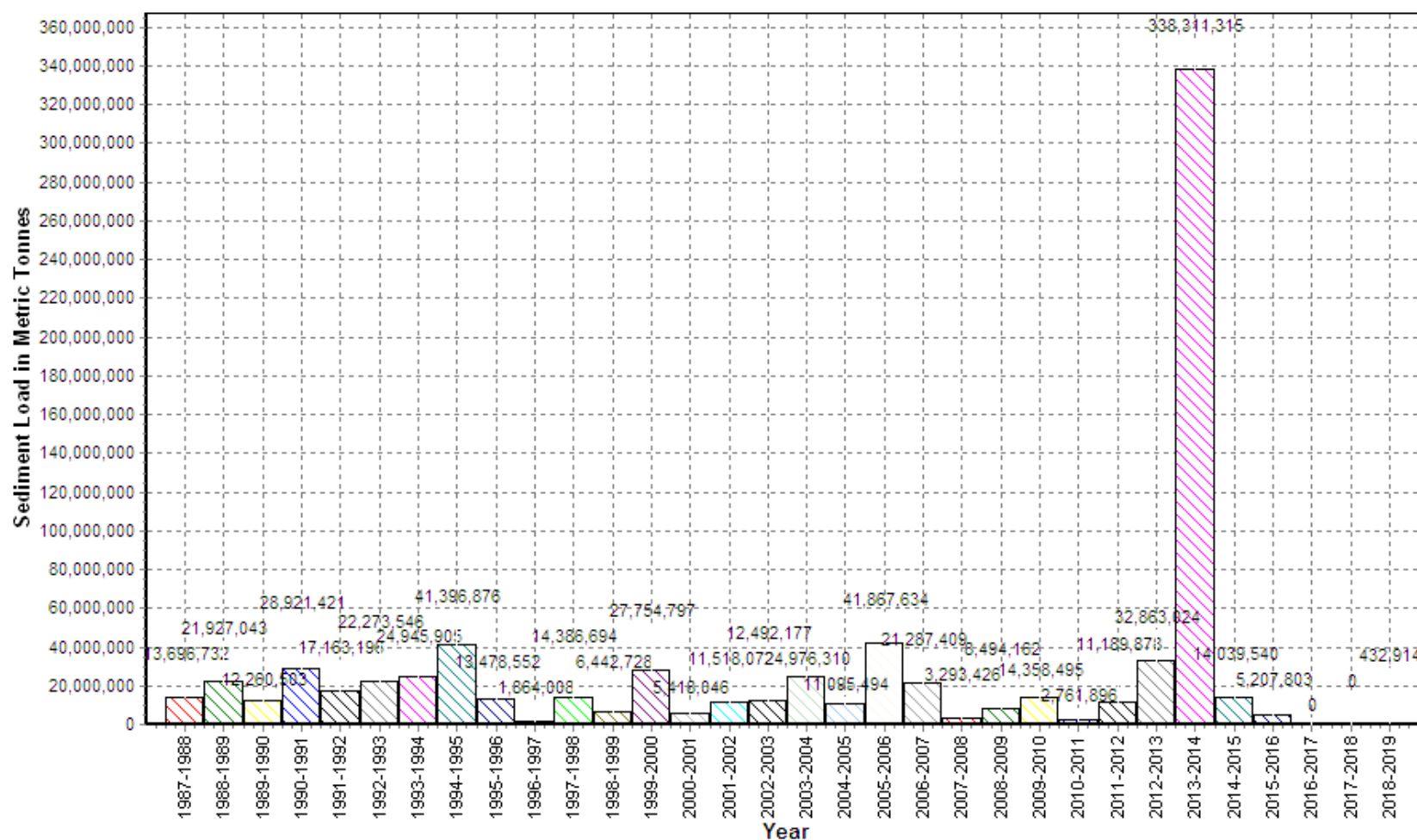
Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Barman (010215011)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



Sediment Data Year Book 2018-19

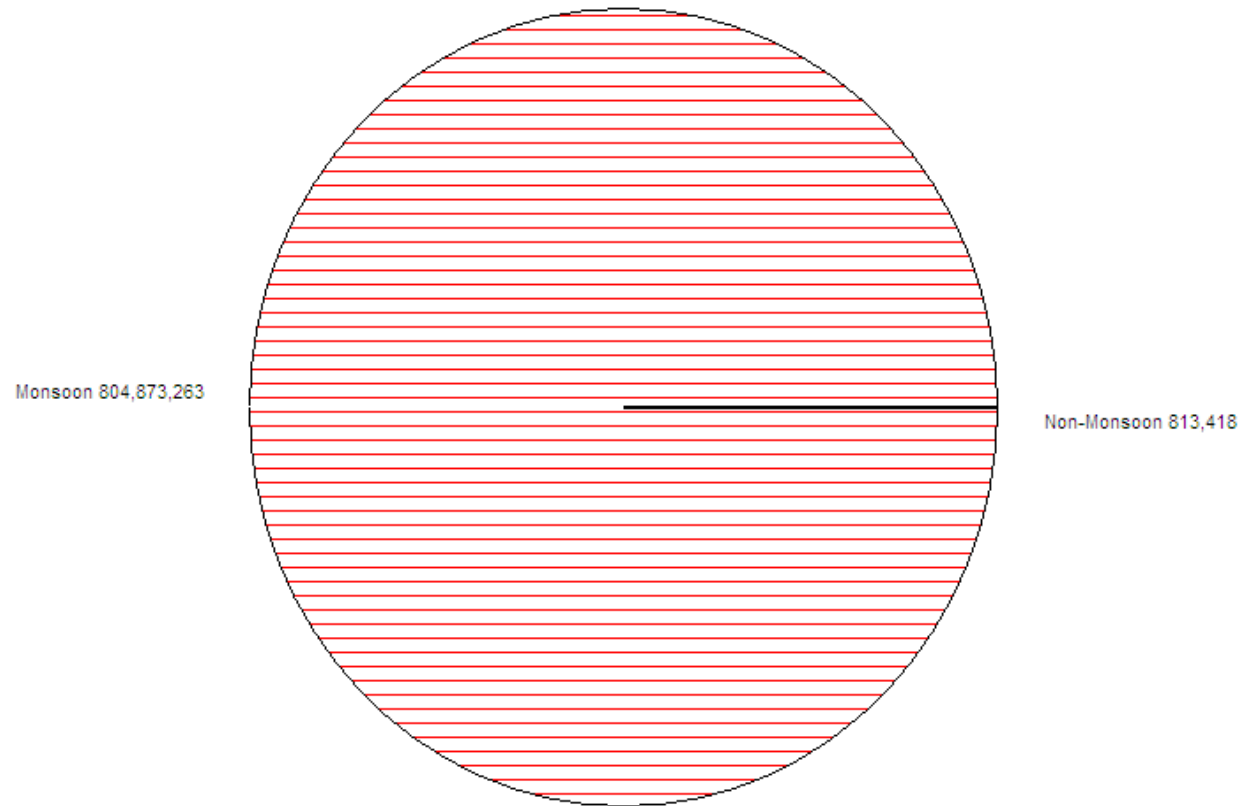
Seasonal Sediment Load for period : 1987-2019

Station Name : Narmada at Barman (010215011)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



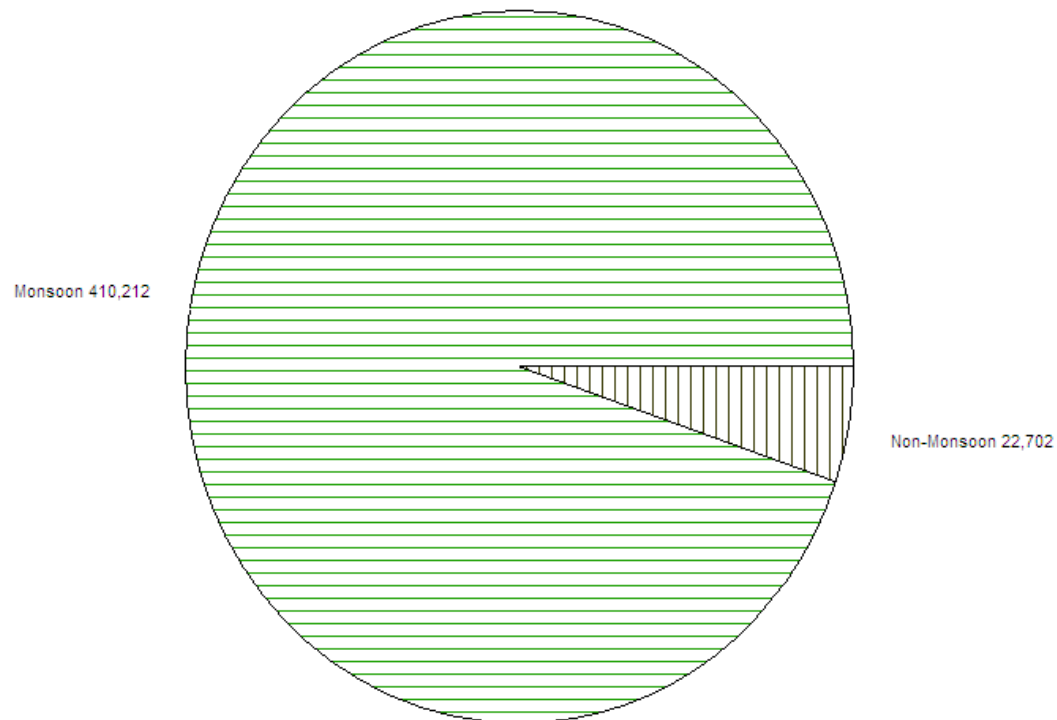
Seasonal Sediment Load for period : 2018-2019

Station Name : Narmada at Barman (010215011)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Hoshangabad



6.9 Banjar at Bamni**History sheet****Water Year : 2018-2019**

Site	: Banjar at Bamni	Code	: CWC SITE
State	: Madhya Pradesh	District	Mandla
Basin	: Narmada	Independent River	: Narmada
Tributary	: Banjar	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Banjar
Division	: Narmada Division, Bhopal	Sub-Division	: UNSD, Jabalpur
Drainage Area	: 1864 Sq. Km.	Bank	: Left
Latitude	: 22°29'06"	Longitude	: 80°22'58"
Zero of Gauge (m)	: 440 .000(M.S.L.)	20/06/1999	
	Opening Date	Closing Date	
Gauge	: 20/06/1999		
Discharge	: 30/11/1999		
Sediment	: 01/07/2002		
Water Quality	: 01/07/2002		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Banjar at Bamni

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	22.41	0.000	0.000	0.092	0.092	178
2	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	18.13	0.000	0.000	0.089	0.089	139
3	0.000	0.000	0.000	0.000	0.000	0	8.328	0.000	0.000	0.087	0.087	63	15.89	0.000	0.000	0.079	0.079	108
4	0.000	0.000	0.000	0.000	0.000	0	8.000	0.000	0.000	0.084	0.084	58	14.69	0.000	0.000	0.078	0.078	99
5	0.000	0.000	0.000	0.000	0.000	0	9.529	0.000	0.000	0.089	0.089	73	10.00	0.000	0.000	0.090	0.090	78
6	0.000	0.000	0.000	0.000	0.000	0	9.165	0.000	0.000	0.088	0.088	70	9.565	0.000	0.000	0.075	0.075	62
7	0.000	0.000	0.000	0.000	0.000	0	11.22	0.000	0.000	0.091	0.091	88	18.01	0.000	0.000	0.084	0.084	131
8	0.000	0.000	0.000	0.000	0.000	0	9.810	0.000	0.000	0.080	0.080	68	31.81	0.000	0.000	0.093	0.093	256
9	0.000	0.000	0.000	0.000	0.000	0	9.846	0.000	0.000	0.090	0.090	77	94.73	0.012	0.013	0.099	0.124	1015
10	0.000	0.000	0.000	0.000	0.000	0	100.4	0.013	0.014	0.106	0.133	1154	96.87	0.012	0.014	0.104	0.130	1088
11	0.000	0.000	0.000	0.000	0.000	0	42.51	0.000	0.000	0.099	0.099	364	184.2	0.015	0.016	0.109	0.140	2228
12	0.000	0.000	0.000	0.000	0.000	0	187.3	0.016	0.016	0.110	0.142	2298	43.00	0.000	0.000	0.025	0.025	93
13	0.000	0.000	0.000	0.000	0.000	0	263.8	0.018	0.019	0.115	0.152	3464	126.6	0.014	0.015	0.106	0.135	1477
14	0.000	0.000	0.000	0.000	0.000	0	301.5	0.020	0.021	0.117	0.158	4116	41.37	0.000	0.000	0.102	0.102	365
15	0.000	0.000	0.000	0.000	0.000	0	184.8	0.000	0.000	0.072	0.072	1150	38.10	0.000	0.000	0.000	0.000	0
16	0.000	0.000	0.000	0.000	0.000	0	104.4	0.013	0.014	0.106	0.133	1200	38.29	0.000	0.000	0.101	0.101	334
17	0.000	0.000	0.000	0.000	0.000	0	253.7	0.018	0.018	0.113	0.149	3266	111.8	0.015	0.016	0.110	0.141	1362
18	0.000	0.000	0.000	0.000	0.000	0	336.3	0.022	0.023	0.120	0.165	4794	42.40	0.000	0.000	0.103	0.103	377
19	0.000	0.000	0.000	0.000	0.000	0	241.4	0.016	0.017	0.111	0.144	3003	36.20	0.000	0.000	0.008	0.008	25
20	0.000	0.000	0.000	0.000	0.000	0	110.7	0.014	0.015	0.108	0.137	1310	96.48	0.012	0.014	0.103	0.129	1075
21	0.000	0.000	0.000	0.000	0.000	0	43.10	0.000	0.000	0.103	0.103	384	180.0	0.015	0.016	0.108	0.139	2162
22	0.000	0.000	0.000	0.000	0.000	0	44.20	0.000	0.000	0.103	0.103	393	111.0	0.000	0.000	0.000	0.000	0
23	0.000	0.000	0.000	0.000	0.000	0	114.1	0.015	0.016	0.109	0.140	1380	41.14	0.000	0.000	0.104	0.104	370
24	0.000	0.000	0.000	0.000	0.000	0	594.3	0.054	0.055	0.200	0.309	15866	37.17	0.000	0.000	0.100	0.100	321
25	0.000	0.000	0.000	0.000	0.000	0	363.6	0.025	0.026	0.155	0.206	6471	33.58	0.000	0.000	0.097	0.097	281
26	0.000	0.000	0.000	0.000	0.000	0	107.2	0.016	0.018	0.113	0.147	1362	32.00	0.000	0.000	0.092	0.092	254
27	0.000	0.000	0.000	0.000	0.000	0	112.3	0.017	0.018	0.121	0.156	1514	32.44	0.000	0.000	0.094	0.094	263
28	0.000	0.000	0.000	0.000	0.000	0	66.93	0.000	0.000	0.106	0.106	613	242.1	0.017	0.018	0.112	0.147	3075
29	0.000	0.000	0.000	0.000	0.000	0	42.90	0.000	0.000	0.096	0.096	356	264.0	0.019	0.020	0.115	0.154	3513
30	0.000	0.000	0.000	0.000	0.000	0	32.94	0.000	0.000	0.096	0.096	273	335.8	0.020	0.021	0.119	0.160	4642
31							30.96	0.000	0.000	0.094	0.094	251	190.7	0.016	0.017	0.110	0.143	2356
Ten Daily Mean																		
Ten Daily I	0.000	0.000	0.000	0.000	0.000	0	16.63	0.001	0.001	0.072	0.074	165	33.21	0.002	0.003	0.088	0.093	315
Ten Daily II	0.000	0.000	0.000	0.000	0.000	0	202.6	0.014	0.014	0.107	0.135	2497	75.84	0.006	0.006	0.077	0.088	734
Ten Daily III	0.000	0.000	0.000	0.000	0.000	0	141.1	0.012	0.012	0.118	0.141	2624	136.4	0.008	0.008	0.096	0.112	1567
Monthly																		
Total						0						55479						27728

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Banjar at Bamni

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	112.3	0.014	0.015	0.108	0.137	1329	14.71	0.000	0.000	0.037	0.037	47	0.000	0.000	0.000	0.000	0.000	0
2	97.00	0.000	0.000	0.093	0.093	779	14.00	0.000	0.000	0.035	0.035	42	0.000	0.000	0.000	0.000	0.000	0
3	43.58	0.000	0.000	0.104	0.104	392	13.34	0.000	0.000	0.035	0.035	40	0.000	0.000	0.000	0.000	0.000	0
4	39.99	0.000	0.000	0.095	0.095	328	12.73	0.000	0.000	0.033	0.033	36	0.000	0.000	0.000	0.000	0.000	0
5	41.43	0.000	0.000	0.096	0.096	344	11.99	0.000	0.000	0.032	0.032	33	0.000	0.000	0.000	0.000	0.000	0
6	94.57	0.010	0.011	0.098	0.119	972	11.53	0.000	0.000	0.032	0.032	32	0.000	0.000	0.000	0.000	0.000	0
7	97.38	0.011	0.012	0.097	0.120	1010	11.00	0.000	0.000	0.031	0.031	29	0.000	0.000	0.000	0.000	0.000	0
8	99.40	0.011	0.012	0.098	0.121	1039	9.845	0.000	0.000	0.027	0.027	23	0.000	0.000	0.000	0.000	0.000	0
9	43.00	0.000	0.000	0.042	0.042	156	9.845	0.000	0.000	0.020	0.020	17	0.000	0.000	0.000	0.000	0.000	0
10	41.15	0.000	0.000	0.090	0.090	320	9.199	0.000	0.000	0.020	0.020	16	0.000	0.000	0.000	0.000	0.000	0
11	38.09	0.000	0.000	0.087	0.087	286	9.007	0.000	0.000	0.020	0.020	16	0.000	0.000	0.000	0.000	0.000	0
12	31.88	0.000	0.000	0.084	0.084	231	7.175	0.000	0.000	0.019	0.019	12	0.000	0.000	0.000	0.000	0.000	0
13	31.00	0.000	0.000	0.000	0.000	0	6.984	0.000	0.000	0.019	0.019	11	0.000	0.000	0.000	0.000	0.000	0
14	30.21	0.000	0.000	0.081	0.081	211	6.890	0.000	0.000	0.019	0.019	11	0.000	0.000	0.000	0.000	0.000	0
15	29.12	0.000	0.000	0.075	0.075	189	6.979	0.000	0.000	0.018	0.018	11	0.000	0.000	0.000	0.000	0.000	0
16	25.80	0.000	0.000	0.066	0.066	147	6.467	0.000	0.000	0.017	0.017	9	0.000	0.000	0.000	0.000	0.000	0
17	22.56	0.000	0.000	0.071	0.071	138	6.272	0.000	0.000	0.016	0.016	9	0.000	0.000	0.000	0.000	0.000	0
18	20.52	0.000	0.000	0.070	0.070	124	6.056	0.000	0.000	0.015	0.015	8	0.000	0.000	0.000	0.000	0.000	0
19	18.31	0.000	0.000	0.070	0.070	111	5.500	0.000	0.000	0.014	0.014	7	0.000	0.000	0.000	0.000	0.000	0
20	17.84	0.000	0.000	0.068	0.068	105	4.040	0.000	0.000	0.014	0.014	5	0.000	0.000	0.000	0.000	0.000	0
21	17.00	0.000	0.000	0.065	0.065	95	3.940	0.000	0.000	0.014	0.014	5	0.000	0.000	0.000	0.000	0.000	0
22	20.45	0.000	0.000	0.071	0.071	125	3.845	0.000	0.000	0.012	0.012	4	0.000	0.000	0.000	0.000	0.000	0
23	30.60	0.000	0.000	0.106	0.106	280	3.838	0.000	0.000	0.012	0.012	4	0.000	0.000	0.000	0.000	0.000	0
24	37.84	0.000	0.000	0.086	0.086	281	3.868	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
25	38.51	0.000	0.000	0.085	0.085	283	3.546	0.000	0.000	0.008	0.008	2	0.000	0.000	0.000	0.000	0.000	0
26	31.27	0.000	0.000	0.084	0.084	227	3.329	0.000	0.000	0.007	0.007	2	0.000	0.000	0.000	0.000	0.000	0
27	30.51	0.000	0.000	0.083	0.083	219	3.179	0.000	0.000	0.006	0.006	2	0.000	0.000	0.000	0.000	0.000	0
28	26.15	0.000	0.000	0.081	0.081	183	2.865	0.000	0.000	0.005	0.005	1	0.000	0.000	0.000	0.000	0.000	0
29	23.51	0.000	0.000	0.080	0.080	163	2.550	0.000	0.000	0.006	0.006	1	0.000	0.000	0.000	0.000	0.000	0
30	19.11	0.000	0.000	0.065	0.065	107	2.531	0.000	0.000	0.005	0.005	1	0.000	0.000	0.000	0.000	0.000	0
31							2.482	0.000	0.000	0.005	0.005	1						
Ten Daily Mean																		
Ten Daily I	70.98	0.005	0.005	0.092	0.102	667	11.82	0.000	0.000	0.030	0.030	32	0.000	0.000	0.000	0.000	0.000	0
Ten Daily II	26.53	0.000	0.000	0.067	0.067	154	6.537	0.000	0.000	0.017	0.017	10	0.000	0.000	0.000	0.000	0.000	0
Ten Daily III	27.50	0.000	0.000	0.081	0.081	196	3.270	0.000	0.000	0.008	0.008	2	0.000	0.000	0.000	0.000	0.000	0
Monthly																		
Total						10176						442						0

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Banjar at Bamni

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
2	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
3	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
7	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
8	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
9	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
10	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
11	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
12	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
13	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
14	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
15	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
16	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
17	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
18	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
19	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
20	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
21	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
22	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
23	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
24	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
25	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
26	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
27	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
28	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
29	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
30	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
31	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
Ten Daily Mean																		
Ten Daily I	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Ten Daily II	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Ten Daily III	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Monthly																		
Total						0						0						0

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Banjar at Bamni

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
2	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
3	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
4	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
5	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
6	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
7	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
8	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
9	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
10	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
11	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
12	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
13	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
14	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
15	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
16	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
17	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
18	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
19	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
20	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
21	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
22	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
23	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
24	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
25	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
26	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
27	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
28	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
29	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
30	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
31	0.000	0.000	0.000	0.000	0.000	0							0.000	0.000	0.000	0.000	0.000	0
Ten Daily Mean																		
Ten Daily I	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Ten Daily II	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Ten Daily III	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0
Monthly																		
Total						0						0						0

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 2002-2019

Station Name : Banjar at Bamni

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
2002-2003	368398	0	368398	607
2003-2004	782914	0	782914	1401
2004-2005	323458	0	323458	742
2005-2006	1639533	0	1639533	1467
2006-2007	324825	0	324825	697
2007-2008	171622	133	171755	568
2008-2009	208836	0	208836	472
2009-2010	137064	103	137167	272
2010-2011	186273	0	186273	477
2011-2012	219514	1406	220919	745
2012-2013	84554	1107	85661	532
2013-2014	209201	733	209934	1376
2014-2015	131573	3093	134666	878
2015-2016	73949	821	74771	527
2016-2017	117094.36	451.582	117545.944	888.597
2017-2018	40875.1	0	40875.1	349.93
2018-2019	93824	0	93824	674

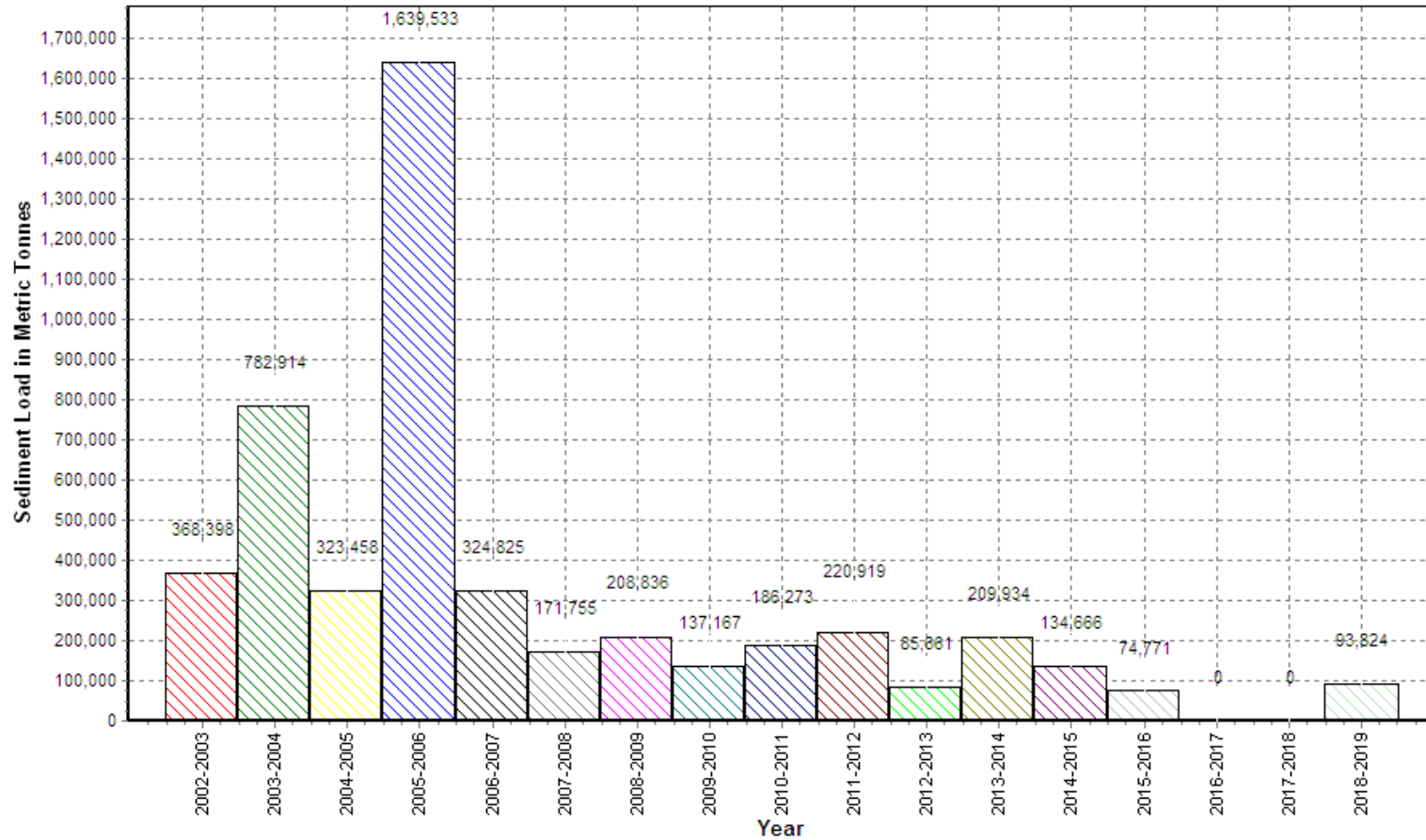
Annual Sediment Load for period : 2002-2019

Station Name : Banjar at Bamni

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur



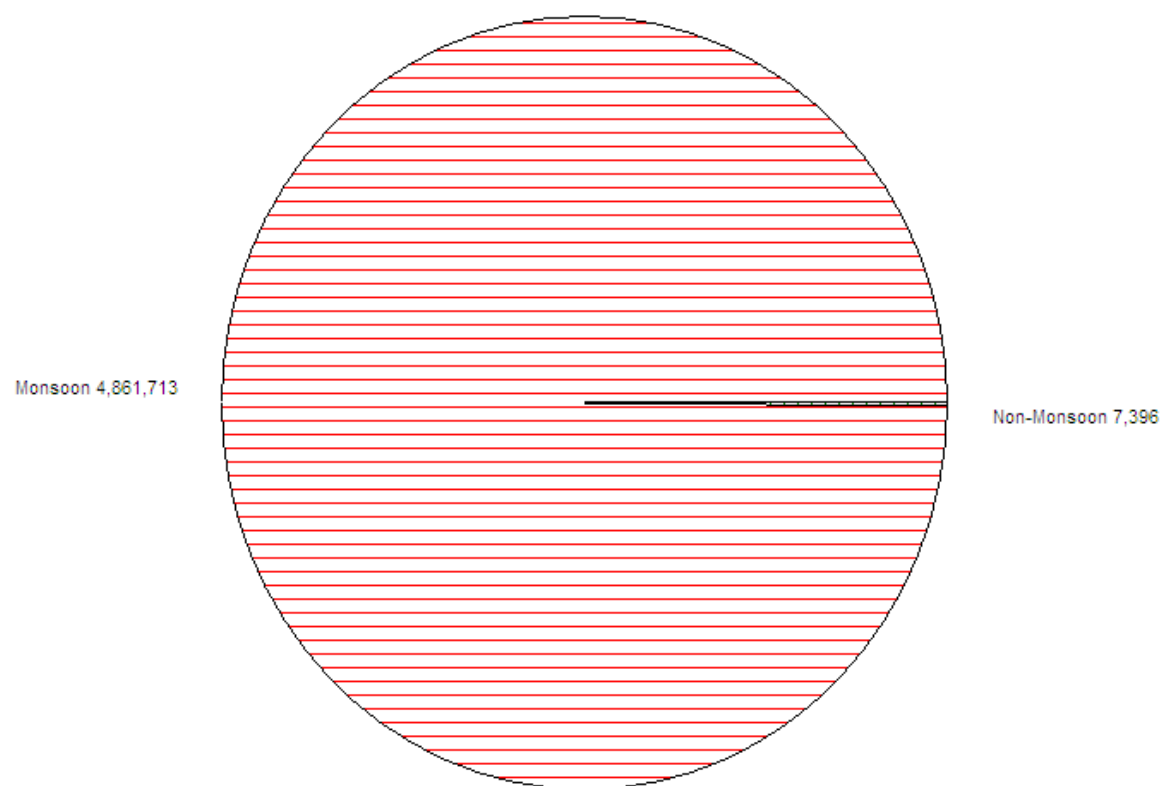
Station Name : Banjar at Bamni

Local River : Banjar

Seasonal Sediment Load for period : 2002-2019

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur



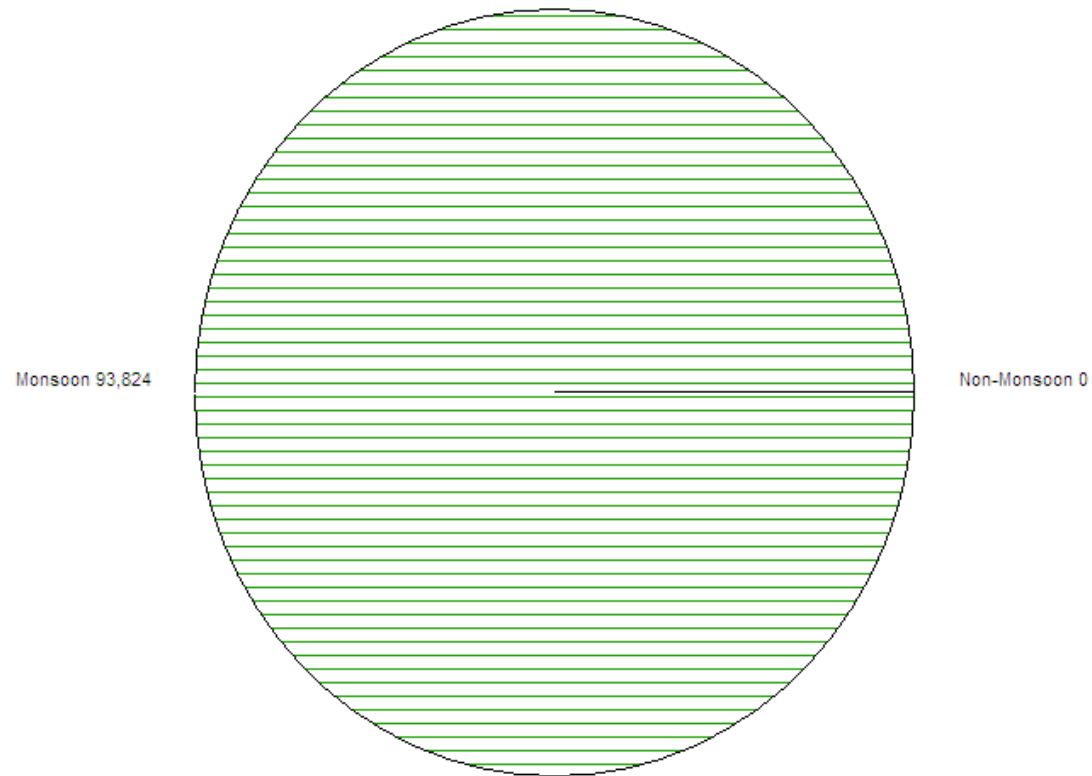
Seasonal Sediment Load for period : 2018-2019

Station Name : Banjar at Bamni

Local River : Banjar

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur



6.10 Burhner at Mohgaon**History Sheet**

		Water Year	: 2018-2019
Site	: Burhner at Mohgaon	Code	: 010215004
State	: Madhya Pradesh	District	Mandla
Basin	: Narmada	Independent River	: Narmada
Tributary	: Burhner	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Burhner
Division	: Narmada Division, Bhopal	Sub-Division	: UNSD, Jabalpur
Drainage Area	: 3919 Sq. Km.	Bank	: Right
Latitude	: 22°45'57"	Longitude	: 80°37'22"
Zero of Gauge (m)	: 447 .000(M.S.L.)	13/01/1977	
	Opening Date	Closing Date	
Gauge	: 13/01/1977		
Discharge	: 13/01/1977		
Sediment	: 27/08/1992		
Water Quality	: 16/09/1986		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	0.025	0.000	0.000	0.000	0.000	0	34.00	0.000	0.000	0.550	0.550	1616	78.06	0.000	0.000	0.030	0.030	202
2	0.025	0.000	0.000	0.000	0.000	0	55.60	0.000	0.000	0.793	0.793	3809	76.08	0.000	0.000	0.376	0.376	2472
3	0.025	0.000	0.000	0.000	0.000	0	123.6	0.000	0.000	0.675	0.675	7208	89.24	0.000	0.000	0.406	0.406	3130
4	0.010	0.000	0.000	0.000	0.000	0	31.93	0.000	0.000	1.007	1.007	2778	53.97	0.000	0.000	0.359	0.359	1674
5	0.025	0.000	0.000	0.000	0.000	0	32.50	0.000	0.000	1.277	1.277	3586	44.00	0.000	0.000	0.293	0.293	1114
6	0.040	0.000	0.000	0.000	0.000	0	43.04	0.000	0.000	1.319	1.319	4905	37.94	0.000	0.000	0.324	0.324	1062
7	0.040	0.000	0.000	0.000	0.000	0	26.52	0.000	0.000	1.126	1.126	2580	35.44	0.000	0.000	0.260	0.260	796
8	0.025	0.000	0.000	0.000	0.000	0	107.0	0.000	0.000	4.543	4.543	41999	80.29	0.000	0.000	0.327	0.327	2268
9	58.50	0.000	0.000	1.673	1.673	8456	58.64	0.000	0.000	1.013	1.013	5132	624.1	0.025	0.081	0.815	0.921	49662
10	36.00	0.000	0.000	1.030	1.030	3204	122.9	0.000	0.000	0.731	0.731	7762	20.46	0.000	0.000	0.581	0.581	1027
11	77.96	0.000	0.000	1.192	1.192	8029	104.9	0.000	0.000	0.734	0.734	6653	206.9	0.000	0.000	0.209	0.209	3736
12	22.53	0.000	0.000	0.453	0.453	882	11.60	0.000	0.000	0.822	0.822	824	260.0	0.000	0.000	0.263	0.263	5908
13	17.50	0.000	0.000	0.330	0.330	499	186.4	0.000	0.000	1.003	1.003	16153	197.7	0.000	0.000	0.653	0.653	11154
14	23.48	0.000	0.000	0.338	0.338	686	166.6	0.000	0.000	0.795	0.795	11443	197.7	0.000	0.000	0.551	0.551	9412
15	56.59	0.000	0.000	0.494	0.494	2415	250.0	0.000	0.000	1.193	1.193	25769	180.0	0.000	0.000	0.502	0.502	7807
16	19.00	0.000	0.000	0.166	0.166	273	961.8	0.031	0.133	2.033	2.197	182570	145.1	0.000	0.000	0.524	0.524	6569
17	10.00	0.000	0.000	0.087	0.087	75	493.2	0.022	0.993	1.418	2.433	103676	225.6	0.000	0.000	0.492	0.492	9590
18	5.079	0.000	0.000	0.586	0.586	257	211.2	0.000	0.000	0.781	0.781	14251	171.8	0.000	0.000	0.454	0.454	6739
19	6.480	0.000	0.000	0.662	0.662	371	160.5	0.000	0.000	0.820	0.820	11371	290.0	0.000	0.000	0.766	0.766	19193
20	5.028	0.000	0.000	0.435	0.435	189	430.9	0.015	0.058	1.239	1.312	48845	560.0	0.008	0.024	0.728	0.760	36772
21	4.937	0.000	0.000	0.205	0.205	87	278.7	0.000	0.000	0.746	0.746	17963	257.7	0.000	0.000	0.461	0.461	10264
22	4.802	0.000	0.000	0.275	0.275	114	250.0	0.000	0.000	0.669	0.669	14450	205.0	0.000	0.000	0.367	0.367	6500
23	12.15	0.000	0.000	0.732	0.732	768	2196	0.045	0.350	2.280	2.675	507540	175.3	0.000	0.000	0.401	0.401	6074
24	8.000	0.000	0.000	0.482	0.482	333	706.4	0.026	0.085	1.158	1.269	77451	130.7	0.000	0.000	0.389	0.389	4393
25	45.73	0.000	0.000	0.513	0.513	2027	276.2	0.000	0.000	0.728	0.728	17373	123.4	0.000	0.000	0.379	0.379	4041
26	20.53	0.000	0.000	0.350	0.350	621	256.3	0.000	0.000	0.812	0.812	17981	123.0	0.000	0.000	0.378	0.378	4017
27	12.30	0.000	0.000	0.695	0.695	739	223.8	0.000	0.000	0.799	0.799	15450	182.0	0.000	0.000	0.428	0.428	6730
28	21.83	0.000	0.000	0.353	0.353	666	253.2	0.000	0.000	0.635	0.635	13892	183.8	0.000	0.000	0.438	0.438	6956
29	77.08	0.000	0.000	1.246	1.246	8298	190.0	0.000	0.000	0.477	0.477	7830	544.6	0.007	0.027	1.241	1.275	59993
30	37.56	0.000	0.000	0.607	0.607	1970	124.0	0.000	0.000	0.540	0.540	5785	384.9	0.005	0.023	0.990	1.018	33854
31							92.47	0.000	0.000	0.503	0.503	4019	251.5	0.000	0.000	0.524	0.524	11386
Ten Daily Mean																		
Ten Daily I	9.472	0.000	0.000	0.270	0.270	1166	63.57	0.000	0.000	1.303	1.303	8138	114.0	0.003	0.008	0.377	0.388	6341
Ten Daily II	24.36	0.000	0.000	0.474	0.474	1368	297.7	0.007	0.118	1.084	1.209	42156	243.5	0.001	0.002	0.514	0.517	11688
Ten Daily III	24.49	0.000	0.000	0.546	0.546	1562	440.6	0.006	0.040	0.850	0.896	63612	232.9	0.001	0.005	0.545	0.551	14019
Monthly																		
Total						40958						1202665						334496

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	207.0	0.000	0.000	0.203	0.203	3631	26.69	0.000	0.000	0.028	0.028	65	8.266	0.000	0.000	0.025	0.025	18
2	200.0	0.000	0.000	0.196	0.196	3387	25.50	0.000	0.000	0.027	0.027	59	7.849	0.000	0.000	0.024	0.024	16
3	188.2	0.000	0.000	0.464	0.464	7545	24.69	0.000	0.000	0.030	0.030	64	7.449	0.000	0.000	0.022	0.022	14
4	177.5	0.000	0.000	0.428	0.428	6564	23.12	0.000	0.000	0.030	0.030	60	7.400	0.000	0.000	0.022	0.022	14
5	123.7	0.000	0.000	0.413	0.413	4414	22.61	0.000	0.000	0.024	0.024	47	7.400	0.000	0.000	0.022	0.022	14
6	131.6	0.000	0.000	0.399	0.399	4537	22.08	0.000	0.000	0.029	0.029	55	7.000	0.000	0.000	0.020	0.020	12
7	412.2	0.000	0.000	0.509	0.509	18128	21.00	0.000	0.000	0.028	0.028	51	7.000	0.000	0.000	0.020	0.020	12
8	636.5	0.008	0.028	0.554	0.590	32446	19.96	0.000	0.000	0.029	0.029	50	7.000	0.000	0.000	0.020	0.020	12
9	270.0	0.000	0.000	0.235	0.235	5482	20.61	0.000	0.000	0.029	0.029	52	6.600	0.000	0.000	0.010	0.010	6
10	199.1	0.000	0.000	0.298	0.298	5126	19.70	0.000	0.000	0.029	0.029	49	6.600	0.000	0.000	0.020	0.020	11
11	161.2	0.000	0.000	0.059	0.059	822	18.98	0.000	0.000	0.028	0.028	46	6.600	0.000	0.000	0.020	0.020	11
12	127.0	0.000	0.000	0.295	0.295	3237	18.05	0.000	0.000	0.028	0.028	44	6.600	0.000	0.000	0.020	0.020	11
13	120.0	0.000	0.000	0.279	0.279	2893	16.38	0.000	0.000	0.028	0.028	40	6.200	0.000	0.000	0.020	0.020	11
14	86.03	0.000	0.000	0.266	0.266	1977	16.00	0.000	0.000	0.027	0.027	37	6.160	0.000	0.000	0.026	0.026	14
15	74.97	0.000	0.000	0.246	0.246	1593	15.76	0.000	0.000	0.028	0.028	38	6.081	0.000	0.000	0.025	0.025	13
16	70.00	0.000	0.000	0.230	0.230	1391	15.05	0.000	0.000	0.029	0.029	38	6.041	0.000	0.000	0.026	0.026	14
17	60.11	0.000	0.000	0.182	0.182	945	14.52	0.000	0.000	0.028	0.028	35	5.966	0.000	0.000	0.025	0.025	13
18	52.92	0.000	0.000	0.142	0.142	649	14.20	0.000	0.000	0.029	0.029	36	5.900	0.000	0.000	0.025	0.025	13
19	48.62	0.000	0.000	0.126	0.126	529	14.15	0.000	0.000	0.029	0.029	35	5.889	0.000	0.000	0.025	0.025	13
20	44.72	0.000	0.000	0.116	0.116	448	14.14	0.000	0.000	0.028	0.028	34	5.781	0.000	0.000	0.025	0.025	12
21	40.00	0.000	0.000	0.104	0.104	359	14.00	0.000	0.000	0.028	0.028	34	5.700	0.000	0.000	0.000	0.000	12
22	58.77	0.000	0.000	0.031	0.031	157	13.68	0.000	0.000	0.028	0.028	33	5.641	0.000	0.000	0.025	0.025	12
23	65.00	0.000	0.000	0.034	0.034	191	13.04	0.000	0.000	0.028	0.028	32	5.600	0.000	0.000	0.025	0.025	12
24	71.94	0.000	0.000	0.203	0.203	1262	12.45	0.000	0.000	0.028	0.028	30	5.600	0.000	0.000	0.025	0.025	12
25	48.83	0.000	0.000	0.138	0.138	582	12.07	0.000	0.000	0.028	0.028	29	5.600	0.000	0.000	0.025	0.025	12
26	45.67	0.000	0.000	0.123	0.123	485	11.66	0.000	0.000	0.027	0.027	27	5.553	0.000	0.000	0.025	0.025	12
27	41.05	0.000	0.000	0.030	0.030	106	10.84	0.000	0.000	0.028	0.028	26	5.465	0.000	0.000	0.025	0.025	12
28	33.52	0.000	0.000	0.031	0.031	90	10.30	0.000	0.000	0.027	0.027	24	5.400	0.000	0.000	0.025	0.025	12
29	29.28	0.000	0.000	0.030	0.030	76	9.630	0.000	0.000	0.027	0.027	22	5.359	0.000	0.000	0.025	0.025	12
30	28.00	0.000	0.000	0.029	0.029	70	9.394	0.000	0.000	0.027	0.027	22	5.231	0.000	0.000	0.025	0.025	11
31							8.975	0.000	0.000	0.027	0.027	21						
Ten Daily Mean																		
Ten Daily I	254.6	0.001	0.003	0.370	0.374	9126	22.60	0.000	0.000	0.028	0.028	55	7.256	0.000	0.000	0.021	0.021	13
Ten Daily II	84.56	0.000	0.000	0.194	0.194	1449	15.72	0.000	0.000	0.028	0.028	38	6.122	0.000	0.000	0.021	0.021	11
Ten Daily III	46.21	0.000	0.000	0.075	0.075	338	11.46	0.000	0.000	0.028	0.028	27	5.515	0.000	0.000	0.013	0.013	6
Monthly																		

Total

109123

1235

301

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	4.965	0.000	0.000	0.025	0.025	11	4.535	0.000	0.000	0.025	0.025	10	6.717	0.000	0.000	0.025	0.025	15
2	4.900	0.000	0.000	0.025	0.025	11	4.346	0.000	0.000	0.024	0.024	9	6.300	0.000	0.000	0.023	0.023	13
3	4.853	0.000	0.000	0.025	0.025	10	4.261	0.000	0.000	0.023	0.023	8	5.700	0.000	0.000	0.021	0.021	10
4	4.699	0.000	0.000	0.024	0.024	10	4.212	0.000	0.000	0.023	0.023	8	5.700	0.000	0.000	0.021	0.021	10
5	4.527	0.000	0.000	0.023	0.023	9	4.000	0.000	0.000	0.022	0.022	8	4.900	0.000	0.000	0.030	0.030	13
6	4.414	0.000	0.000	0.023	0.023	9	4.000	0.000	0.000	0.022	0.022	8	4.600	0.000	0.000	0.028	0.028	11
7	4.400	0.000	0.000	0.023	0.023	9	4.090	0.000	0.000	0.025	0.025	9	4.000	0.000	0.000	0.024	0.024	8
8	4.250	0.000	0.000	0.022	0.022	8	3.953	0.000	0.000	0.024	0.024	8	6.300	0.000	0.000	0.039	0.039	21
9	4.250	0.000	0.000	0.022	0.022	8	3.898	0.000	0.000	0.024	0.024	8	5.700	0.000	0.000	0.035	0.035	17
10	4.150	0.000	0.000	0.021	0.021	8	3.867	0.000	0.000	0.024	0.024	8	4.600	0.000	0.000	0.028	0.028	11
11	4.150	0.000	0.000	0.300	0.300	108	3.800	0.000	0.000	0.023	0.023	8	3.300	0.000	0.000	0.020	0.020	6
12	4.003	0.000	0.000	0.025	0.025	9	3.800	0.000	0.000	0.023	0.023	8	2.400	0.000	0.000	0.030	0.030	6
13	4.678	0.000	0.000	0.029	0.029	12	3.800	0.000	0.000	0.023	0.023	8	2.100	0.000	0.000	0.026	0.026	5
14	4.565	0.000	0.000	0.029	0.029	11	3.777	0.000	0.000	0.025	0.025	8	2.100	0.000	0.000	0.026	0.026	5
15	7.000	0.000	0.000	0.044	0.044	27	3.700	0.000	0.000	0.030	0.030	10	2.700	0.000	0.000	0.034	0.034	8
16	7.000	0.000	0.000	0.044	0.044	27	3.530	0.000	0.000	0.029	0.029	9	2.700	0.000	0.000	0.034	0.034	8
17	6.671	0.000	0.000	0.025	0.025	14	3.370	0.000	0.000	0.027	0.027	8	2.700	0.000	0.000	0.034	0.034	8
18	6.137	0.000	0.000	0.023	0.023	12	3.330	0.000	0.000	0.027	0.027	8	2.400	0.000	0.000	0.030	0.030	6
19	6.295	0.000	0.000	0.024	0.024	13	3.300	0.000	0.000	0.027	0.027	8	2.400	0.000	0.000	0.030	0.030	6
20	8.000	0.000	0.000	0.030	0.030	21	3.300	0.000	0.000	0.027	0.027	8	2.400	0.000	0.000	0.030	0.030	6
21	7.000	0.000	0.000	0.026	0.026	16	3.060	0.000	0.000	0.025	0.025	7	2.100	0.000	0.000	0.030	0.030	5
22	6.300	0.000	0.000	0.010	0.010	5	2.980	0.000	0.000	0.030	0.030	8	4.900	0.000	0.000	0.070	0.070	30
23	6.300	0.000	0.000	0.010	0.010	5	2.950	0.000	0.000	0.030	0.030	8	4.200	0.000	0.000	0.066	0.066	24
24	6.300	0.000	0.000	0.010	0.010	5	2.700	0.000	0.000	0.027	0.027	6	3.740	0.000	0.000	0.060	0.060	19
25	5.700	0.000	0.000	0.009	0.009	4	2.700	0.000	0.000	0.027	0.027	6	3.010	0.000	0.000	0.053	0.053	14
26	5.700	0.000	0.000	0.009	0.009	4	2.950	0.000	0.000	0.030	0.030	8	2.760	0.000	0.000	0.043	0.043	10
27	5.400	0.000	0.000	0.009	0.009	4	3.600	0.000	0.000	0.036	0.036	11	2.620	0.000	0.000	0.039	0.039	9
28	5.400	0.000	0.000	0.009	0.009	4	3.800	0.000	0.000	0.038	0.038	12	2.620	0.000	0.000	0.037	0.037	8
29	4.900	0.000	0.000	0.008	0.008	3	6.300	0.000	0.000	0.030	0.030	16						
30	4.900	0.000	0.000	0.008	0.008	3	7.400	0.000	0.000	0.035	0.035	22						
31	4.840	0.000	0.000	0.025	0.025	10	7.450	0.000	0.000	0.035	0.035	23						
Ten Daily Mean																		
Ten Daily I	4.541	0.000	0.000	0.023	0.023	9	4.116	0.000	0.000	0.024	0.024	8	5.452	0.000	0.000	0.027	0.027	13
Ten Daily II	5.850	0.000	0.000	0.057	0.057	25	3.571	0.000	0.000	0.026	0.026	8	2.520	0.000	0.000	0.029	0.029	6
Ten Daily III	5.704	0.000	0.000	0.012	0.012	6	4.172	0.000	0.000	0.031	0.031	12	3.244	0.000	0.000	0.050	0.050	15
Monthly																		
Total						411						291						313

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	2.473	0.000	0.000	0.025	0.025	5	1.680	0.000	0.000	0.017	0.017	2	0.300	0.000	0.000	0.006	0.006	0
2	2.400	0.000	0.000	0.024	0.024	5	1.570	0.000	0.000	0.030	0.030	4	0.300	0.000	0.000	0.006	0.006	0
3	2.400	0.000	0.000	0.024	0.024	5	1.600	0.000	0.000	0.031	0.031	4	0.300	0.000	0.000	0.006	0.006	0
4	2.400	0.000	0.000	0.024	0.024	5	1.500	0.000	0.000	0.029	0.029	4	0.270	0.000	0.000	0.005	0.005	0
5	2.431	0.000	0.000	0.025	0.025	5	1.480	0.000	0.000	0.028	0.028	4	0.270	0.000	0.000	0.005	0.005	0
6	2.220	0.000	0.000	0.023	0.023	4	1.400	0.000	0.000	0.027	0.027	3	0.240	0.000	0.000	0.005	0.005	0
7	2.030	0.000	0.000	0.021	0.021	4	1.250	0.000	0.000	0.024	0.024	3	0.240	0.000	0.000	0.004	0.004	0
8	1.710	0.000	0.000	0.018	0.018	3	1.080	0.000	0.000	0.021	0.021	2	0.220	0.000	0.000	0.004	0.004	0
9	1.600	0.000	0.000	0.016	0.016	2	1.020	0.000	0.000	0.019	0.019	2	0.220	0.000	0.000	0.004	0.004	0
10	1.500	0.000	0.000	0.015	0.015	2	0.970	0.000	0.000	0.019	0.019	2	0.200	0.000	0.000	0.003	0.003	0
11	1.427	0.000	0.000	0.015	0.015	2	0.900	0.000	0.000	0.017	0.017	1	0.180	0.000	0.000	0.003	0.003	0
12	1.330	0.000	0.000	0.030	0.030	3	0.860	0.000	0.000	0.016	0.016	1	0.180	0.000	0.000	0.003	0.003	0
13	1.240	0.000	0.000	0.028	0.028	3	0.850	0.000	0.000	0.016	0.016	1	0.160	0.000	0.000	0.003	0.003	0
14	1.220	0.000	0.000	0.028	0.028	3	0.800	0.000	0.000	0.015	0.015	1	0.150	0.000	0.000	0.002	0.002	0
15	1.180	0.000	0.000	0.027	0.027	3	0.800	0.000	0.000	0.015	0.015	1	0.080	0.000	0.000	0.002	0.002	0
16	1.700	0.000	0.000	0.038	0.038	6	0.750	0.000	0.000	0.014	0.014	1	0.050	0.000	0.000	0.001	0.001	0
17	1.600	0.000	0.000	0.036	0.036	5	0.750	0.000	0.000	0.014	0.014	1	0.000	0.000	0.000	0.000	0.000	0
18	1.500	0.000	0.000	0.034	0.034	4	0.750	0.000	0.000	0.014	0.014	1	0.000	0.000	0.000	0.000	0.000	0
19	1.500	0.000	0.000	0.030	0.030	4	0.700	0.000	0.000	0.013	0.013	1	0.000	0.000	0.000	0.000	0.000	0
20	1.500	0.000	0.000	0.030	0.030	4	0.700	0.000	0.000	0.013	0.013	1	0.000	0.000	0.000	0.000	0.000	0
21	1.400	0.000	0.000	0.030	0.030	4	0.700	0.000	0.000	0.013	0.013	1	0.000	0.000	0.000	0.000	0.000	0
22	1.400	0.000	0.000	0.030	0.030	4	0.630	0.000	0.000	0.012	0.012	1	0.000	0.000	0.000	0.000	0.000	0
23	1.400	0.000	0.000	0.030	0.030	4	0.610	0.000	0.000	0.012	0.012	1	0.000	0.000	0.000	0.000	0.000	0
24	1.500	0.000	0.000	0.032	0.032	4	0.610	0.000	0.000	0.012	0.012	1	0.000	0.000	0.000	0.000	0.000	0
25	3.500	0.000	0.000	0.075	0.075	23	0.570	0.000	0.000	0.011	0.011	1	0.000	0.000	0.000	0.000	0.000	0
26	3.000	0.000	0.000	0.030	0.030	8	0.540	0.000	0.000	0.010	0.010	0	0.000	0.000	0.000	0.000	0.000	0
27	2.400	0.000	0.000	0.024	0.024	5	0.480	0.000	0.000	0.009	0.009	0	0.000	0.000	0.000	0.000	0.000	0
28	2.200	0.000	0.000	0.022	0.022	4	0.480	0.000	0.000	0.009	0.009	0	0.000	0.000	0.000	0.000	0.000	0
29	2.000	0.000	0.000	0.020	0.020	3	0.400	0.000	0.000	0.008	0.008	0	0.000	0.000	0.000	0.000	0.000	0
30	1.850	0.000	0.000	0.019	0.019	3	0.400	0.000	0.000	0.008	0.008	0	0.000	0.000	0.000	0.000	0.000	0
31	1.700	0.000	0.000	0.017	0.017	2							0.000	0.000	0.000	0.000	0.000	0
Ten Daily Mean																		
Ten Daily I	2.116	0.000	0.000	0.022	0.022	4	1.355	0.000	0.000	0.025	0.025	3	0.256	0.000	0.000	0.005	0.005	0
Ten Daily II	1.420	0.000	0.000	0.030	0.030	4	0.786	0.000	0.000	0.015	0.015	1	0.080	0.000	0.000	0.001	0.001	0
Ten Daily III	2.032	0.000	0.000	0.030	0.030	6	0.542	0.000	0.000	0.010	0.010	1	0.000	0.000	0.000	0.000	0.000	0
Monthly																		

Total

141

44

1

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1993-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1993-1994	2614919	0	2614919	2054
1994-1995	10303377	0	10303377	4502
1995-1996	4828060	0	4828060	2574
1996-1997	1409801	0	1409801	1371
1997-1998	4380351	0	4380351	2632
1998-1999	2103433	0	2103433	2197
1999-2000	3021686	0	3021686	3179
2000-2001	1855837	0	1855837	1583
2001-2002	2744673	0	2744673	2847
2002-2003	949968	0	949968	1329
2003-2004	4909521	0	4909521	3558
2004-2005	3346347	0	3346347	3033
2005-2006	9693524	2164	9695688	3699
2006-2007	3637425	3056	3640481	2305
2007-2008	1020925	1010	1021935	1532
2008-2009	705272	1920	707192	1325
2009-2010	645910	118	646028	638
2010-2011	2985568	483	2986051	2014
2011-2012	2679812	5483	2685295	3386
2012-2013	1718997	903	1719901	2126
2013-2014	2060996	1539	2062535	3161
2014-2015	1776997	7796	1784793	2169
2015-2016	1096956	1604	1098559	1453
2016-2017	2319029.07	571.6	2319600.67	2504.24
2017-2018	1459628.16	1000.54	1460628.7	1338.53
2018-2019	1688779	1202	1689981	1746

Sediment Data Year Book 2018-19

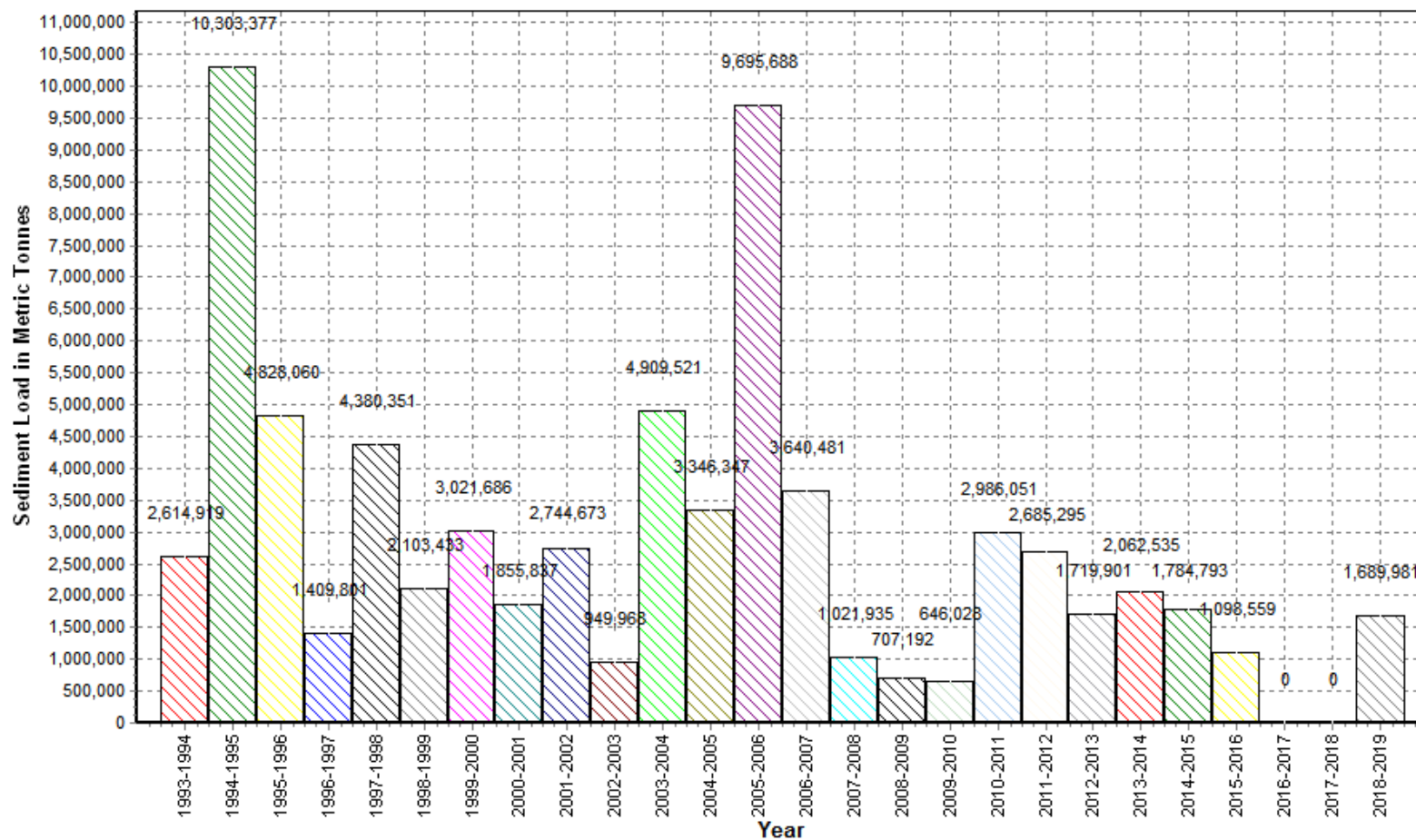
Annual Sediment Load for period : 1993-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2018-19

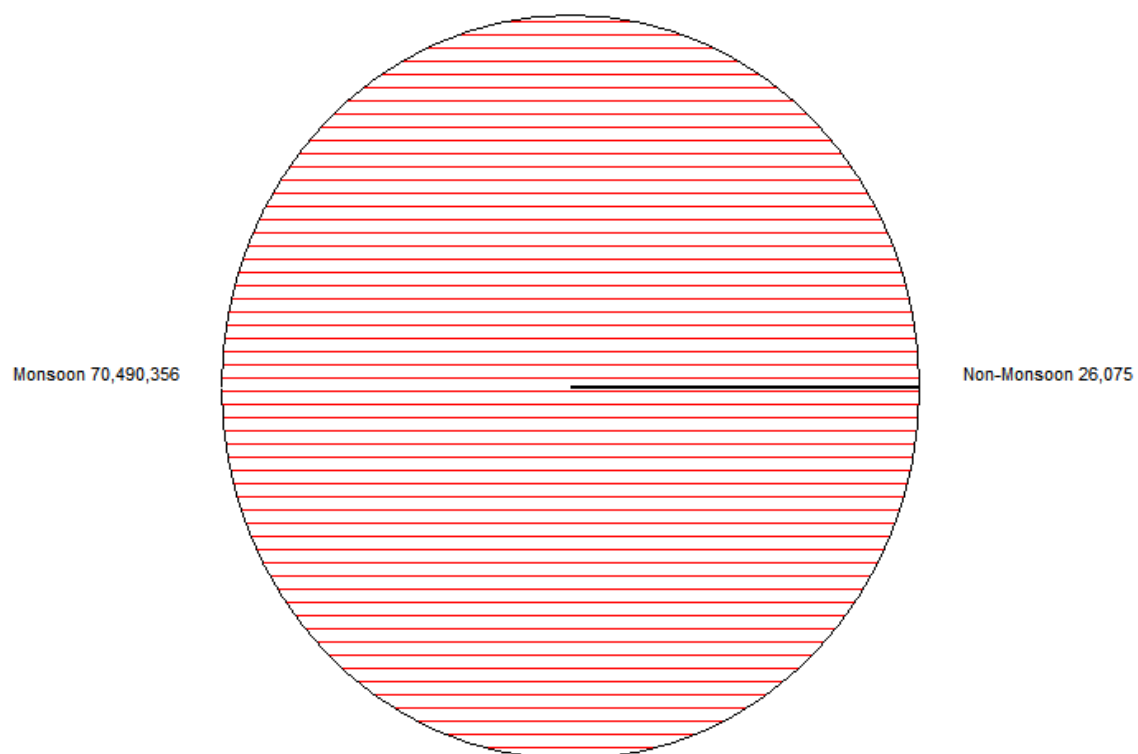
Seasonal Sediment Load for period : 1993-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2018-19

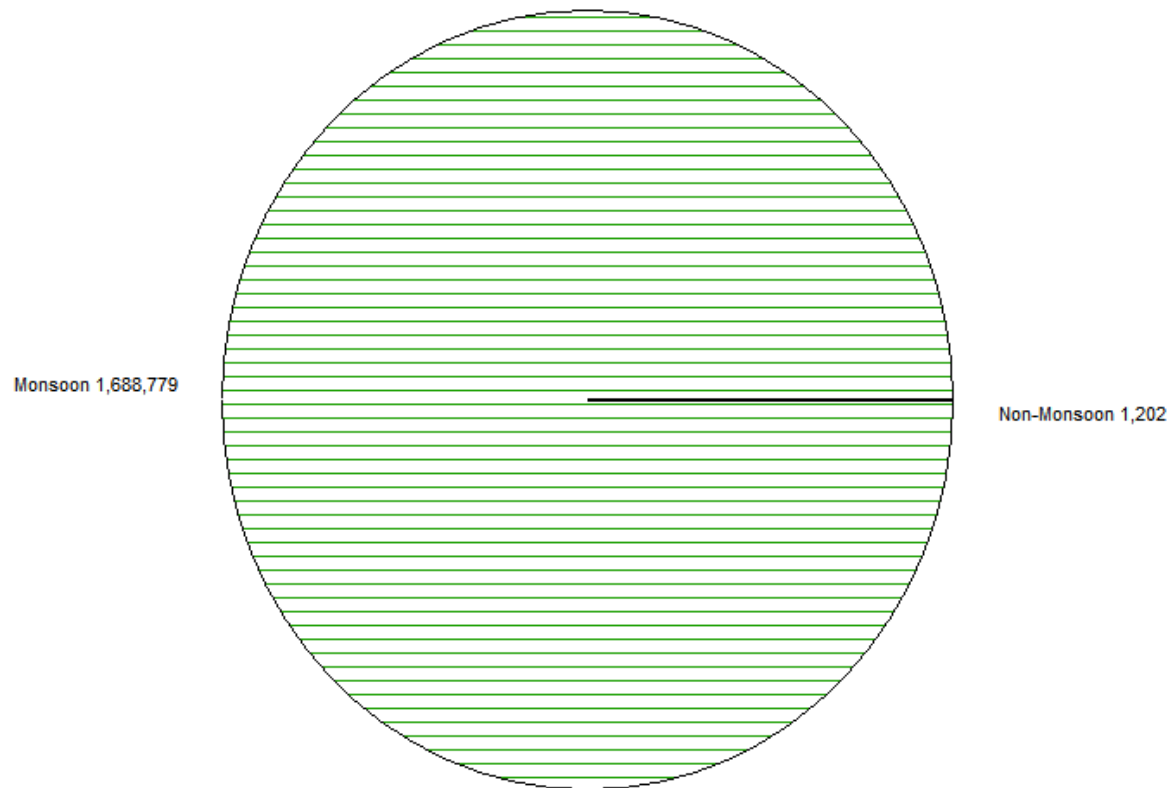
Seasonal Sediment Load for period : 2018-2019

Station Name : Burhner at Mohgaon (010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur



6.11 Narmada at Manot**History Sheet**

		Water Year	: 2018-2019
Site	: Narmada at Manot	Code	: 010215002
State	: Madhya Pradesh	District	Mandla
Basin	: Narmada	Independent River	: Narmada
Tributary	:	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Narmada
Division	: Narmada Division, Bhopal	Sub-Division	: UNSD, Jabalpur
Drainage Area	: 4667 Sq. Km.	Bank	: Right
Latitude	: 22°44'08"	Longitude	: 80°30'44"
Zero of Gauge (m)	: 442 .000(M.S.L.)	16/12/1976	
	Opening Date	Closing Date	
Gauge	: 16/12/1976		
Discharge	: 16/12/1976		
Sediment	: 09/11/1979		
Water Quality	: 01/01/1980		

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Manot (010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Day	Jun						Jul						Aug					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	6.720	0.000	0.000	0.004	0.004	2	14.50	0.000	0.000	0.111	0.111	139	189.6	0.000	0.000	0.107	0.107	1753
2	6.280	0.000	0.000	0.004	0.004	2	19.65	0.000	0.000	0.207	0.207	351	185.5	0.000	0.000	0.107	0.107	1707
3	5.450	0.000	0.000	0.004	0.004	1	159.0	0.000	0.000	0.676	0.676	9288	203.8	0.000	0.000	0.110	0.110	1937
4	4.070	0.000	0.000	0.004	0.004	1	99.40	0.000	0.000	0.666	0.666	5720	195.5	0.000	0.000	0.109	0.109	1846
5	3.656	0.000	0.000	0.004	0.004	1	61.49	0.000	0.000	0.322	0.322	1711	185.0	0.000	0.000	0.103	0.103	1646
6	3.244	0.000	0.000	0.003	0.003	1	58.53	0.000	0.000	0.345	0.345	1745	172.6	0.000	0.000	0.106	0.106	1585
7	3.203	0.000	0.000	0.003	0.003	1	53.85	0.000	0.000	0.303	0.303	1410	166.7	0.000	0.000	0.102	0.102	1462
8	3.050	0.000	0.000	0.003	0.003	1	35.50	0.000	0.000	0.200	0.200	613	177.8	0.000	0.000	0.107	0.107	1641
9	4.582	0.000	0.000	0.004	0.004	2	75.38	0.000	0.000	0.329	0.329	2143	319.0	0.000	0.000	0.112	0.112	3087
10	13.30	0.000	0.000	0.011	0.011	13	33.00	0.000	0.000	0.280	0.280	798	196.6	0.000	0.000	0.109	0.109	1857
11	12.68	0.000	0.000	0.010	0.010	11	44.80	0.000	0.000	0.593	0.593	2295	209.6	0.000	0.000	0.110	0.110	1988
12	15.39	0.000	0.000	0.013	0.013	17	54.01	0.000	0.000	0.592	0.592	2762	205.0	0.000	0.000	0.107	0.107	1895
13	16.03	0.000	0.000	0.014	0.014	19	280.0	0.000	0.000	0.715	0.715	17305	323.8	0.000	0.000	0.116	0.116	3245
14	14.68	0.000	0.000	0.011	0.011	14	164.7	0.000	0.000	0.737	0.737	10485	219.3	0.000	0.000	0.110	0.110	2075
15	11.92	0.000	0.000	0.010	0.010	10	240.0	0.000	0.000	1.074	1.074	22270	212.0	0.000	0.000	0.106	0.106	1942
16	10.40	0.000	0.000	0.009	0.009	8	247.4	0.000	0.000	0.732	0.732	15636	309.6	0.000	0.000	0.118	0.118	3151
17	10.10	0.000	0.000	0.008	0.008	7	223.9	0.000	0.000	1.034	1.034	19993	287.4	0.000	0.000	0.108	0.108	2682
18	10.55	0.000	0.000	0.009	0.009	8	243.3	0.000	0.000	1.040	1.040	21851	208.1	0.000	0.000	0.110	0.110	1974
19	9.074	0.000	0.000	0.007	0.007	5	229.2	0.000	0.000	0.887	0.887	17571	205.0	0.000	0.000	0.108	0.108	1913
20	7.992	0.000	0.000	0.006	0.006	4	202.6	0.000	0.000	0.996	0.996	17426	287.9	0.000	0.000	0.114	0.114	2831
21	7.460	0.000	0.000	0.007	0.007	5	189.7	0.000	0.000	0.189	0.189	3098	284.7	0.000	0.000	0.426	0.426	10479
22	7.150	0.000	0.000	0.007	0.007	4	150.0	0.000	0.000	0.149	0.149	1931	240.0	0.000	0.000	0.359	0.359	7444
23	9.550	0.000	0.000	0.009	0.009	7	401.5	0.000	0.000	1.540	1.540	53432	203.5	0.000	0.000	0.362	0.362	6365
24	8.950	0.000	0.000	0.008	0.008	6	358.0	0.000	0.000	1.248	1.248	38596	189.4	0.000	0.000	0.362	0.362	5927
25	9.100	0.000	0.000	0.008	0.008	6	165.9	0.000	0.000	0.700	0.700	10031	188.1	0.000	0.000	0.361	0.361	5867
26	8.500	0.000	0.000	0.008	0.008	6	162.3	0.000	0.000	0.680	0.680	9528	184.6	0.000	0.000	0.354	0.354	5646
27	17.02	0.000	0.000	0.122	0.122	179	312.3	0.000	0.000	0.681	0.681	18362	184.6	0.000	0.000	0.355	0.355	5662
28	14.47	0.000	0.000	0.129	0.129	161	251.3	0.000	0.000	0.646	0.646	14022	192.0	0.000	0.000	0.359	0.359	5955
29	19.26	0.000	0.000	0.134	0.134	223	202.8	0.000	0.000	0.521	0.521	9129	296.0	0.000	0.000	0.374	0.374	9572
30	17.21	0.000	0.000	0.132	0.132	196	197.3	0.000	0.000	0.429	0.429	7310	482.7	0.000	0.000	0.427	0.427	17787
31							182.1	0.000	0.000	0.423	0.423	6655	261.5	0.000	0.000	0.429	0.429	9693
Ten Daily Mean																		
Ten Daily I	5.356	0.000	0.000	0.004	0.004	2	61.03	0.000	0.000	0.344	0.344	2392	199.2	0.000	0.000	0.107	0.107	1852
Ten Daily II	11.88	0.000	0.000	0.010	0.010	10	193.0	0.000	0.000	0.840	0.840	14759	246.8	0.000	0.000	0.111	0.111	2370
Ten Daily III	11.87	0.000	0.000	0.056	0.056	79	233.9	0.000	0.000	0.655	0.655	15645	246.1	0.000	0.000	0.379	0.379	8218
Monthly																		

Total

923

343606

132614

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Manot (010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Day	Sep						Oct						Nov					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	305.7	0.000	0.000	0.681	0.681	17995	79.56	0.000	0.000	0.037	0.037	254	11.39	0.000	0.000	0.028	0.028	28
2	235.0	0.000	0.000	0.524	0.524	10639	60.00	0.000	0.000	0.028	0.028	145	11.36	0.000	0.000	0.028	0.028	27
3	218.3	0.000	0.000	0.666	0.666	12562	45.21	0.000	0.000	0.037	0.037	143	11.24	0.000	0.000	0.028	0.028	27
4	200.7	0.000	0.000	0.661	0.661	11467	41.86	0.000	0.000	0.035	0.035	126	11.15	0.000	0.000	0.028	0.028	27
5	186.1	0.000	0.000	0.642	0.642	10315	38.90	0.000	0.000	0.033	0.033	112	11.05	0.000	0.000	0.028	0.028	27
6	180.4	0.000	0.000	0.638	0.638	9936	33.84	0.000	0.000	0.033	0.033	96	11.00	0.000	0.000	0.020	0.020	19
7	296.8	0.000	0.000	0.642	0.642	16471	30.00	0.000	0.000	0.029	0.029	75	10.95	0.000	0.000	0.020	0.020	19
8	676.9	0.000	0.000	0.837	0.837	48922	33.35	0.000	0.000	0.032	0.032	92	10.90	0.000	0.000	0.020	0.020	19
9	320.0	0.000	0.000	0.395	0.395	10921	27.96	0.000	0.000	0.032	0.032	77	10.90	0.000	0.000	0.010	0.010	9
10	259.8	0.000	0.000	0.639	0.639	14343	23.30	0.000	0.000	0.032	0.032	64	10.85	0.000	0.000	0.020	0.020	19
11	210.8	0.000	0.000	0.762	0.762	13878	20.35	0.000	0.000	0.032	0.032	55	10.85	0.000	0.000	0.020	0.020	19
12	196.5	0.000	0.000	0.636	0.636	10789	18.63	0.000	0.000	0.031	0.031	50	10.80	0.000	0.000	0.020	0.020	19
13	188.0	0.000	0.000	0.608	0.608	9876	19.93	0.000	0.000	0.031	0.031	53	10.80	0.000	0.000	0.020	0.020	19
14	173.0	0.000	0.000	0.505	0.505	7548	18.50	0.000	0.000	0.029	0.029	46	10.80	0.000	0.000	0.020	0.020	19
15	164.5	0.000	0.000	0.332	0.332	4723	17.82	0.000	0.000	0.031	0.031	47	10.75	0.000	0.000	0.020	0.020	19
16	150.0	0.000	0.000	0.303	0.303	3927	16.94	0.000	0.000	0.031	0.031	45	10.75	0.000	0.000	0.020	0.020	19
17	148.1	0.000	0.000	0.331	0.331	4233	16.13	0.000	0.000	0.031	0.031	43	10.70	0.000	0.000	0.020	0.020	18
18	136.1	0.000	0.000	0.311	0.311	3657	15.37	0.000	0.000	0.030	0.030	40	10.70	0.000	0.000	0.020	0.020	18
19	129.9	0.000	0.000	0.283	0.283	3180	14.60	0.000	0.000	0.029	0.029	37	10.65	0.000	0.000	0.020	0.020	18
20	128.2	0.000	0.000	0.253	0.253	2800	13.80	0.000	0.000	0.030	0.030	36	10.65	0.000	0.000	0.020	0.020	18
21	119.5	0.000	0.000	0.236	0.236	2437	13.40	0.000	0.000	0.029	0.029	34	10.60	0.000	0.000	0.020	0.020	18
22	120.4	0.000	0.000	0.034	0.034	354	12.97	0.000	0.000	0.030	0.030	34	10.60	0.000	0.000	0.010	0.010	9
23	135.0	0.000	0.000	0.038	0.038	443	12.65	0.000	0.000	0.030	0.030	33	10.55	0.000	0.000	0.010	0.010	9
24	140.2	0.000	0.000	0.035	0.035	428	12.59	0.000	0.000	0.030	0.030	33	10.50	0.000	0.000	0.010	0.010	9
25	133.3	0.000	0.000	0.035	0.035	397	12.39	0.000	0.000	0.030	0.030	32	10.50	0.000	0.000	0.010	0.010	9
26	117.0	0.000	0.000	0.032	0.032	327	12.24	0.000	0.000	0.030	0.030	32	10.45	0.000	0.000	0.010	0.010	9
27	111.9	0.000	0.000	0.030	0.030	290	12.06	0.000	0.000	0.030	0.030	31	10.45	0.000	0.000	0.010	0.010	9
28	100.7	0.000	0.000	0.031	0.031	268	11.95	0.000	0.000	0.029	0.029	30	10.40	0.000	0.000	0.010	0.010	9
29	91.92	0.000	0.000	0.032	0.032	254	11.80	0.000	0.000	0.029	0.029	30	10.40	0.000	0.000	0.010	0.010	9
30	85.50	0.000	0.000	0.030	0.030	222	11.65	0.000	0.000	0.029	0.029	29	10.35	0.000	0.000	0.010	0.010	9
31							11.49	0.000	0.000	0.029	0.029	29						
Ten Daily Mean																		
Ten Daily I	288.0	0.000	0.000	0.632	0.632	16357	41.40	0.000	0.000	0.033	0.033	118	11.08	0.000	0.000	0.023	0.023	22
Ten Daily II	162.5	0.000	0.000	0.432	0.432	6461	17.21	0.000	0.000	0.030	0.030	45	10.75	0.000	0.000	0.020	0.020	19
Ten Daily III	115.5	0.000	0.000	0.053	0.053	542	12.29	0.000	0.000	0.030	0.030	31	10.48	0.000	0.000	0.011	0.011	10
Monthly																		
Total						233601						1982						506

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Manot (010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Day	Dec						Jan						Feb					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	10.25	0.000	0.000	0.010	0.010	9	10.92	0.000	0.000	0.028	0.028	26	9.951	0.000	0.000	0.027	0.027	23
2	10.25	0.000	0.000	0.010	0.010	9	10.92	0.000	0.000	0.028	0.028	26	11.02	0.000	0.000	0.030	0.030	29
3	9.332	0.000	0.000	0.028	0.028	23	10.63	0.000	0.000	0.027	0.027	25	11.00	0.000	0.000	0.030	0.030	29
4	9.300	0.000	0.000	0.028	0.028	22	10.47	0.000	0.000	0.027	0.027	24	11.10	0.000	0.000	0.030	0.030	29
5	9.020	0.000	0.000	0.027	0.027	21	10.18	0.000	0.000	0.026	0.026	23	11.10	0.000	0.000	0.010	0.010	10
6	8.930	0.000	0.000	0.027	0.027	21	10.15	0.000	0.000	0.026	0.026	23	11.00	0.000	0.000	0.010	0.010	10
7	8.809	0.000	0.000	0.026	0.026	20	9.883	0.000	0.000	0.027	0.027	23	10.90	0.000	0.000	0.010	0.010	9
8	8.800	0.000	0.000	0.026	0.026	20	9.789	0.000	0.000	0.027	0.027	23	10.75	0.000	0.000	0.010	0.010	9
9	8.750	0.000	0.000	0.026	0.026	20	9.356	0.000	0.000	0.026	0.026	21	10.75	0.000	0.000	0.010	0.010	9
10	8.575	0.000	0.000	0.027	0.027	20	9.236	0.000	0.000	0.026	0.026	21	10.60	0.000	0.000	0.010	0.010	9
11	8.402	0.000	0.000	0.026	0.026	19	9.137	0.000	0.000	0.027	0.027	22	10.60	0.000	0.000	0.010	0.010	9
12	10.24	0.000	0.000	0.032	0.032	28	9.139	0.000	0.000	0.027	0.027	21	10.40	0.000	0.000	0.090	0.090	81
13	10.16	0.000	0.000	0.031	0.031	27	9.137	0.000	0.000	0.027	0.027	21	10.40	0.000	0.000	0.010	0.010	9
14	10.16	0.000	0.000	0.031	0.031	27	9.000	0.000	0.000	0.027	0.027	21	10.20	0.000	0.000	0.010	0.010	9
15	10.16	0.000	0.000	0.031	0.031	27	8.752	0.000	0.000	0.027	0.027	20	10.20	0.000	0.000	0.010	0.010	9
16	10.80	0.000	0.000	0.033	0.033	31	8.642	0.000	0.000	0.026	0.026	19	10.00	0.000	0.000	0.010	0.010	9
17	11.00	0.000	0.000	0.034	0.034	32	8.585	0.000	0.000	0.026	0.026	19	10.00	0.000	0.000	0.010	0.010	9
18	11.30	0.000	0.000	0.010	0.010	10	8.542	0.000	0.000	0.026	0.026	19	9.299	0.000	0.000	0.026	0.026	21
19	11.40	0.000	0.000	0.010	0.010	10	8.470	0.000	0.000	0.026	0.026	19	9.282	0.000	0.000	0.026	0.026	21
20	11.33	0.000	0.000	0.028	0.028	28	8.350	0.000	0.000	0.025	0.025	18	9.200	0.000	0.000	0.026	0.026	21
21	11.02	0.000	0.000	0.030	0.030	29	8.231	0.000	0.000	0.027	0.027	19	9.200	0.000	0.000	0.026	0.026	21
22	10.94	0.000	0.000	0.030	0.030	28	8.158	0.000	0.000	0.027	0.027	19	9.662	0.000	0.000	0.026	0.026	22
23	11.10	0.000	0.000	0.030	0.030	29	8.058	0.000	0.000	0.027	0.027	19	9.646	0.000	0.000	0.026	0.026	22
24	11.46	0.000	0.000	0.030	0.030	30	7.900	0.000	0.000	0.026	0.026	18	9.500	0.000	0.000	0.026	0.026	21
25	11.46	0.000	0.000	0.030	0.030	30	7.813	0.000	0.000	0.026	0.026	18	9.302	0.000	0.000	0.026	0.026	21
26	11.46	0.000	0.000	0.010	0.010	10	9.130	0.000	0.000	0.030	0.030	24	9.109	0.000	0.000	0.025	0.025	20
27	11.46	0.000	0.000	0.010	0.010	10	9.200	0.000	0.000	0.031	0.031	25	8.931	0.000	0.000	0.024	0.024	19
28	11.20	0.000	0.000	0.010	0.010	10	9.299	0.000	0.000	0.031	0.031	25	8.155	0.000	0.000	0.022	0.022	16
29	11.13	0.000	0.000	0.010	0.010	10	9.886	0.000	0.000	0.033	0.033	28						
30	11.13	0.000	0.000	0.010	0.010	10	10.07	0.000	0.000	0.033	0.033	29						
31	10.95	0.000	0.000	0.028	0.028	26	10.02	0.000	0.000	0.033	0.033	29						
Ten Daily Mean																		
Ten Daily I	9.202	0.000	0.000	0.024	0.024	18	10.15	0.000	0.000	0.027	0.027	24	10.82	0.000	0.000	0.018	0.018	17
Ten Daily II	10.50	0.000	0.000	0.027	0.027	24	8.775	0.000	0.000	0.026	0.026	20	9.958	0.000	0.000	0.023	0.023	20
Ten Daily III	11.21	0.000	0.000	0.021	0.021	20	8.888	0.000	0.000	0.029	0.029	23	9.188	0.000	0.000	0.025	0.025	20
Monthly																		
Total						643						687						521

Sediment Data Year Book 2018-19

Daily Observed Sediment Datasheet for period : 2018-2019

Station Name : Narmada at Manot (010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Day	Mar						Apr						May					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	8.126	0.000	0.000	0.025	0.025	18	7.022	0.000	0.000	0.022	0.022	13	2.800	0.000	0.000	0.009	0.009	2
2	7.812	0.000	0.000	0.024	0.024	16	6.571	0.000	0.000	0.020	0.020	11	2.400	0.000	0.000	0.007	0.007	1
3	7.800	0.000	0.000	0.024	0.024	16	6.175	0.000	0.000	0.019	0.019	10	2.200	0.000	0.000	0.007	0.007	1
4	7.600	0.000	0.000	0.024	0.024	16	5.881	0.000	0.000	0.018	0.018	9	2.200	0.000	0.000	0.007	0.007	1
5	7.424	0.000	0.000	0.025	0.025	16	5.828	0.000	0.000	0.018	0.018	9	1.700	0.000	0.000	0.005	0.005	1
6	7.400	0.000	0.000	0.025	0.025	16	5.591	0.000	0.000	0.017	0.017	8	1.500	0.000	0.000	0.005	0.005	1
7	6.873	0.000	0.000	0.023	0.023	14	5.590	0.000	0.000	0.017	0.017	8	1.100	0.000	0.000	0.003	0.003	0
8	6.788	0.000	0.000	0.023	0.023	13	5.335	0.000	0.000	0.021	0.021	10	0.900	0.000	0.000	0.003	0.003	0
9	6.780	0.000	0.000	0.023	0.023	13	5.300	0.000	0.000	0.021	0.021	10	0.500	0.000	0.000	0.002	0.002	0
10	6.350	0.000	0.000	0.021	0.021	12	4.958	0.000	0.000	0.020	0.020	9	0.500	0.000	0.000	0.002	0.002	0
11	6.169	0.000	0.000	0.025	0.025	13	4.736	0.000	0.000	0.020	0.020	8	0.150	0.000	0.000	0.000	0.000	0
12	6.120	0.000	0.000	0.024	0.024	13	4.535	0.000	0.000	0.019	0.019	7	0.150	0.000	0.000	0.000	0.000	0
13	5.901	0.000	0.000	0.023	0.023	12	4.535	0.000	0.000	0.019	0.019	7	0.000	0.000	0.000	0.000	0.000	0
14	5.775	0.000	0.000	0.023	0.023	11	4.300	0.000	0.000	0.018	0.018	7	0.000	0.000	0.000	0.000	0.000	0
15	5.524	0.000	0.000	0.024	0.024	11	4.032	0.000	0.000	0.020	0.020	7	0.000	0.000	0.000	0.000	0.000	0
16	5.461	0.000	0.000	0.024	0.024	11	3.766	0.000	0.000	0.018	0.018	6	0.000	0.000	0.000	0.000	0.000	0
17	5.800	0.000	0.000	0.025	0.025	13	3.764	0.000	0.000	0.018	0.018	6	0.000	0.000	0.000	0.000	0.000	0
18	6.137	0.000	0.000	0.024	0.024	13	3.763	0.000	0.000	0.018	0.018	6	0.000	0.000	0.000	0.000	0.000	0
19	6.760	0.000	0.000	0.027	0.027	16	3.650	0.000	0.000	0.018	0.018	6	0.000	0.000	0.000	0.000	0.000	0
20	7.315	0.000	0.000	0.029	0.029	18	3.528	0.000	0.000	0.017	0.017	5	0.000	0.000	0.000	0.000	0.000	0
21	7.515	0.000	0.000	0.030	0.030	19	3.520	0.000	0.000	0.020	0.020	6	0.000	0.000	0.000	0.000	0.000	0
22	7.420	0.000	0.000	0.029	0.029	0	3.500	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
23	7.420	0.000	0.000	0.029	0.029	0	3.480	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
24	7.550	0.000	0.000	0.030	0.030	0	3.450	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
25	7.700	0.000	0.000	0.030	0.030	0	3.420	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
26	8.118	0.000	0.000	0.024	0.024	17	3.410	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
27	7.835	0.000	0.000	0.023	0.023	16	3.400	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
28	7.702	0.000	0.000	0.023	0.023	15	3.380	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
29	7.508	0.000	0.000	0.022	0.022	14	3.350	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
30	7.265	0.000	0.000	0.022	0.022	14	3.280	0.000	0.000	0.010	0.010	3	0.000	0.000	0.000	0.000	0.000	0
31	7.250	0.000	0.000	0.022	0.022	14							0.000	0.000	0.000	0.000	0.000	0
Ten Daily Mean																		
Ten Daily I	7.295	0.000	0.000	0.024	0.024	15	5.825	0.000	0.000	0.019	0.019	10	1.580	0.000	0.000	0.005	0.005	1
Ten Daily II	6.096	0.000	0.000	0.025	0.025	13	4.061	0.000	0.000	0.019	0.019	7	0.030	0.000	0.000	0.000	0.000	0
Ten Daily III	4.836	0.000	0.000	0.026	0.026	10	3.419	0.000	0.000	0.011	0.011	3	0.000	0.000	0.000	0.000	0.000	0
Monthly																		
Total						390						195						8

Sediment Data Year Book 2018-19

Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Manot (010215002) Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	10725744	0	10725744	3916
1988-1989	6696569	0	6696569	3252
1989-1990	2489833	0	2489833	1423
1990-1991	6352482	0	6352482	4327
1991-1992	4774264	0	4774264	3270
1992-1993	5297060	0	5297060	2563
1993-1994	8389055	0	8389055	2849
1994-1995	9782946	0	9782946	5549
1995-1996	6064747	0	6064747	3479
1996-1997	2765903	0	2765903	2211
1997-1998	4988927	0	4988927	3859
1998-1999	994318	0	994318	2291
1999-2000	7375323	0	7375323	4115
2000-2001	2429516	0	2429516	2043
2001-2002	2766792	0	2766792	3725
2002-2003	1840581	0	1840581	2000
2003-2004	4006296	0	4006296	4442
2004-2005	9624012	0	9624012	3474
2005-2006	10701534	2767	10704300	4890
2006-2007	2398636	2313	2400949	2902
2007-2008	1844237	1764	1846001	1425
2008-2009	1966444	746	1967190	2225
2009-2010	820714	2009	822722	1223
2010-2011	876002	2005	878007	2023
2011-2012	2758553	2653	2761206	3878
2012-2013	1085095	1391	1086486	2178
2013-2014	1628948	4325	1633274	2874
2014-2015	990486	1352	991839	2158
2015-2016	617184	280	617465	1438
2016-2017	1025923.802	722.404	1026646.206	2070.746
2017-2018	311546.95	1022.79	312569.74	1217.46
2018-2019	713233	2445	715678	1771

Sediment Data Year Book 2018-19

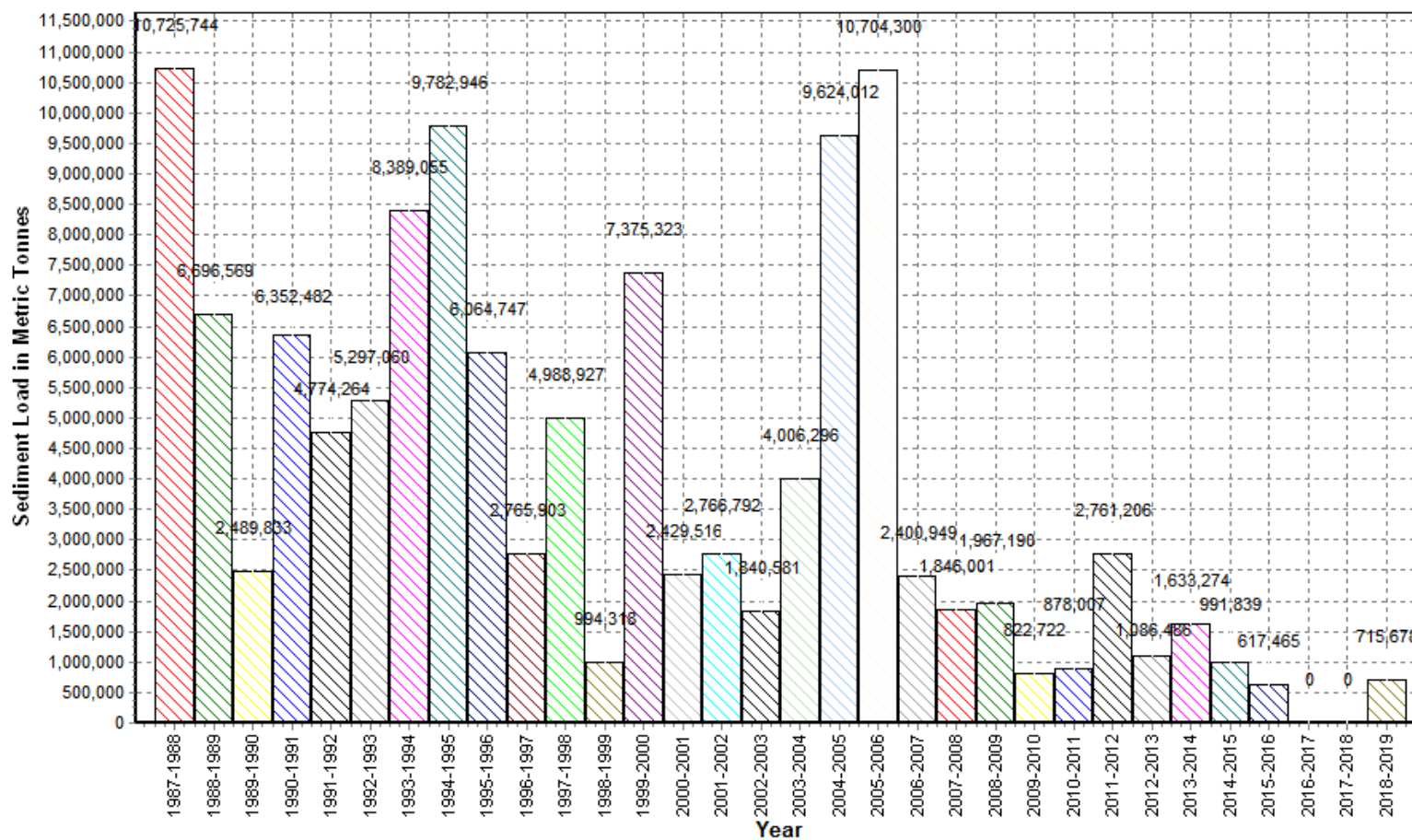
Annual Sediment Load for period : 1987-2019

Station Name : Narmada at Manot (010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2018-19

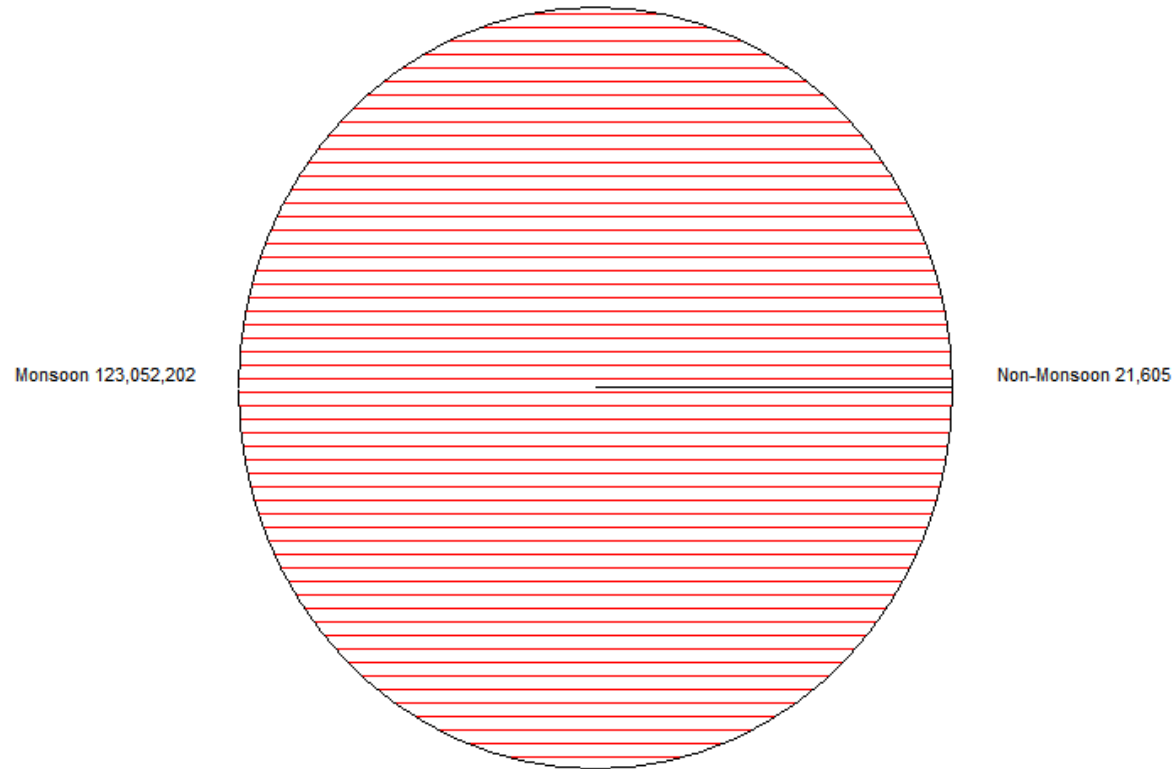
Seasonal Sediment Load for period : 1987-2019

Station Name : Narmada at Manot (010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2018-19

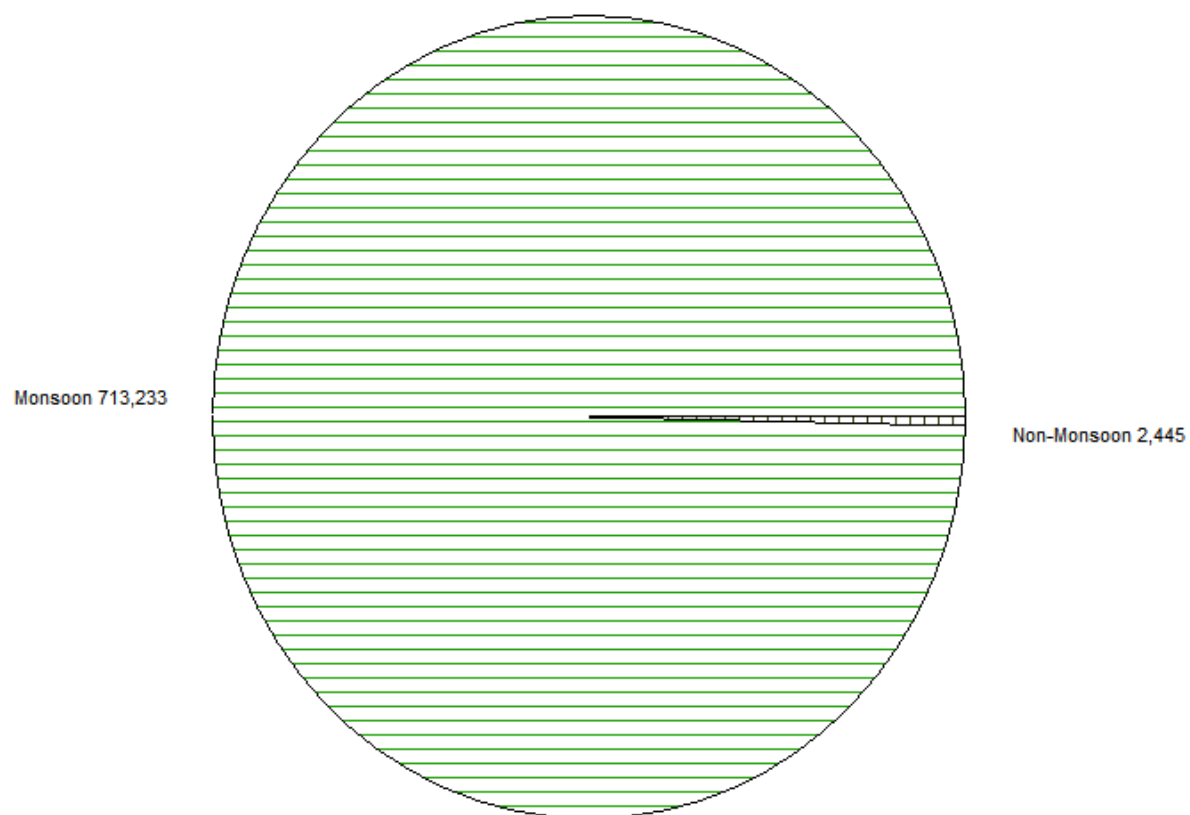
Seasonal Sediment Load for period : 2018-2019

Station Name : Narmada at Manot (010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur



7 Part – II Bed material Data

7.1 Narmada at Mandleshwar

BED MATERIAL DATA FOR THE YEAR 2018-19

SITE : NARMADA AT MANDLESHWER

CODE : 010215026

MEASURING AUTHORITY : NDN

W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 23/05/2018)

Discharge 'Q' : m³/sec

Water edge: L.B.:m, R.B: m

Area of Section 'A' : m²

Mean Velocity 'V' : m/ sec

Wetted Perimeter 'P': m

Hydraulic Mean Depth'R': m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	138.680	0.14	
2	100	138.680	0.36	Av . Mean Dia "d"= 2.652mm
3	200	138.680	3.71	
4	300	138.370	2.46	Av .Silt Factor " f " =2.851
5	400	139.150	2.23	
6	500	138.110	2.36	
7	600	139.070	6.4	
8	700	141.080	3.56	

MONSOON SURVEY (DATE)

Discharge 'Q' :

Water edge: L.B. m R.B

m³/sec

m

Area of Section 'A' m²

Mean Velocity 'V' : m/ sec

Wetted Perimeter 'P' m

Hydraulic Mean Depth'R' m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50			
2	100			
3	200			Av . Mean Dia "d"= mm
4	300	NOT COLLECTED		
5	400			Av .Silt Factor " f " =
6	500			
7	600			
8	700			

POST MONSOON SURVEY (DATE 22/02/2019)

Discharge 'Q' : m³/sec

Water edge: L.B. m R.B. M

Area of Section 'A' : m²

Mean Velocity 'V' : m/ sec

Wetted Perimeter 'P' : m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	146.215	3.05	
2	100	139.080	0.67	Av . Mean Dia "d"= 2.921 mm
3	200	138.590	6.09	
4	300	138.300	1.92	Av .Silt Factor " f " = 3.01
5	400	138.890	1.74	
6	500	138.380	1.60	
7	600	139.115	4.14	
8	700	141.510	4.16	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.2 Narmada at Handia

BED MATERIAL DATA FOR THE YEAR 2018-2019

SITE :NARMADA AT HANDIA

MEASURING AUTHORITY :

NDN

CODE

:010215022

W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 23.05.2018)

Discharge 'Q' : m^3/sec

Water edge: L.B.:m, R.B: m

Area of Section 'A' : m^2

Mean Velocity' V ' : m/ sec

Wetted Perimeter 'P': m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	104	259.850	0.920	Av . Mean Dia "d"= 1.010mm
2	208	259.300	1.170	
3	312	260.100	1.350	
4	416	260.200	1.240	Av .Silt Factor " f " = 1.768
5	520	260.500	1.160	
6	624	260.300	0.220	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

MONSOON SURVEY (DATE 13.08.2018)

Discharge 'Q' : m^3/sec

Water edge: L.B.: m, R.B:m

Area of Section 'A' : m^2

Mean Velocity' V ' :m/ sec

Wetted Perimeter 'P':m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	60			Av . Mean Dia "d"= mm
2	120			
3	312			
4	416			Av .Silt Factor " f " =
5	520			
6	629			

POST MONSOON SURVEY (DATE 30.01.2019)

Discharge 'Q' : m^3/sec

Water edge: L.B.: m, R.B: m

Area of Section 'A' : m^2

Mean Velocity' V ' : m/ sec

Wetted Perimeter 'P': m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	104			Av . Mean Dia "d"= mm
2	208			
3	312			
4	416			Av .Silt Factor " f " =
5	520			
6	624			

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.3 Narmada at Hoshangabad**BED MATERIAL DATA FOR THE YEAR 2018-19****SITE:NARMADA AT HOSHANGABAD**CODE :
010215019

MEASURING AUTHORITY :

NDN

W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 30.05.2018)Discharge 'Q' :43.20 m³/sec

Water edge: L.B m,R.B.:m

Area of Section 'A':404.2 m²

Mean Velocity' V ':0.107 m/sec

Wetted Perimeter 'P':346.1 m

Hydraulic Mean Depth'R':1.17 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	100	383.160	0.320	Av . Mean Dia "d" = 1.230 mm
2	200	281.620	0.820	
3	300	283.600	1.010	
4	400	284.300	1.520	Av .Silt Factor " f " = 1.95
5	500	284.580	1.880	
6	600	286.520	1.750	
7	700	286.950	1.310	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

MONSOON SURVEY (DATE 01.11.2018)Discharge 'Q':164.1 m³/sec

Water edge:L.B:m,R.B.:m

Area of Section 'A':497.1 m²

Mean Velocity' V ':0.343m/sec

Wetted Perimeter 'P':380.1 m

Hydraulic Mean Depth'R':1.30 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	100	283.530	1.150	Av . Mean Dia "d"= 6.247 mm
2	200	282.030	1.110	
3	300	283.930	0.790	
4	400	283.930	0.920	Av .Silt Factor " f " = 4.398
5	500	286.580	11.290	
6	600	286.500	16.420	
7	700	286.960	12.050	

POST MONSOON SURVEY (DATE 22.2.2019)Discharge 'Q' :101.2 m³/sec

Water edge:L.B.:m,R.B.:m

Area of Section 'A':470.4 m²

Mean Velocity' V ':0.216 m/sec

Wetted Perimeter 'P' :373.6 m

Hydraulic Mean Depth'R':1.29 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	100	283.430	0.26	Av . Mean Dia "d"= 0.94 mm
2	200	281.860	0.66	
3	300	283.970	0.94	
4	400	284.050	0.88	Av .Silt Factor " f " = 1.706
5	500	284.590	1.45	
6	600	286.500	1.28	
7	700	286.950	1.13	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.4 Narmada at Sandia

BED MATERIAL DATA FOR THE YEAR 2018-2019

SITE :NARMADA AT SANDIA

CODE : 010215013

MEASURING AUTHORITY : NDN

W.YEAR : 2018-2019

PRE MONSOON SURVEY (DATE 28.05.2018)

Discharge 'Q' : m³/sec

Water edge: L.B.:m, R.B.:m

Area of Section 'A' :m²

Mean Velocity 'V' : m/ sec

Wetted Perimeter 'P': 254.6m : m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	100	306.630	0.37	7.54
2	200	306.630	13.14	Av . Mean Dia "d"= mm
3	300	306.630	9.99	
4	400	306.630	11.93	Av .Silt Factor " f " =4.832
5	500	301.970	6.48	
6	600	310.900	10.55	
7	700	309.820	0.30	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

MONSOON SURVEY (DATE 10.10.2018)

Discharge 'Q' : 260.6

Water edge: L.B.:195.80m,

m³/sec Q':97.3

R.B.:450.00 m

Area of Section 'A' : m²

Mean Velocity 'V' : 0.573 m/ sec

Wetted Perimeter 'P':216.1 m

Hydraulic Mean Depth'R' : 0.79m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	100			
2	200			Av . Mean Dia "d"= mm
3	300			Sample Not Collected
4	400			Av .Silt Factor " f " =
5	500			
6	600			
7	700			

POST MONSOON SURVEY (DATE 04.1.2019)

Discharge 'Q' : 0 m³/sec

Water edge: L.B.: m, R.B.:m

Area of Section 'A' :m²

Mean Velocity 'V' : m/ sec

Wetted Perimeter 'P': m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	100			
2	200			Av . Mean Dia "d"= mm
3	300			Sample Not Collected
4	400			Av .Silt Factor " f " =
5	500			
6	600			
7	700			

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.5 Shakkar at Gadarwara

BED MATERIAL DATA FOR THE YEAR 2018-2019**SITE :SHAKKAR AT GADARWARA**

CODE : 010215026

MEASURING AUTHORITY : NDN

W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 08.05.2018)

Discharge 'Q' : m/ sec

RIVER DRY

Water edge: L.B.: m, R.B.: m

Area of Section 'A': m²

Mean Velocity' V ' :River Dry m/ sec

Wetted Perimeter 'P':River Dry m

Hydraulic Mean Depth'R': m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	30	322.560	2.29	
2	60	323.310	3.69	Av . Mean Dia "d"= 2.422 mm
3	90	323.550	2.67	
4	120	323.400	2.85	Av .Silt Factor " f " = 2.739
5	150	322.680	2.10	
6	180	322.040	2.56	
7	210	322.820	0.80	

MONSOON SURVEY (DATE 23.10.2018)Discharge 'Q' : 6.307m³/sec

Water edge: L.B.:m, R.B.: m

Area of Section 'A' : m²

Mean Velocity' V ' : 0.201 m/ sec

Wetted Perimeter 'P': 52.06 m

Hydraulic Mean Depth'R' : 0.60 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	30	322.585	2.10	
2	60	323.370	2.06	Av . Mean Dia "d"= 1.62 mm
3	90	323.430	2.91	
4	120	323.130	1.56	Av .Silt Factor " f " = 2.348
5	150	321.880	1.23	
6	180	322.020	1.03	
7	210	322.850	0.48	

POST MONSOON SURVEY (DATE 11.1.2019)Discharge 'Q' : m³/sec

Water edge: L.B.: m, R.B.:m

Area of Section 'A' : m²

RIVER DRY

Mean Velocity' V ' : m/ sec

Wetted Perimeter 'P' : m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	30	322.585	1.45	
2	60	323.370	3.67	Av . Mean Dia "d"= 1.96 mm
3	90	323.430	2.00	
4	120	323.130	3.13	Av .Silt Factor " f " = 2.464
5	150	322.640	1.60	
6	180	322.020	1.45	
7	210	322.850	0.42	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.6 Narmada at Barman

BED MATERIAL DATA FOR THE YEAR 2018-19

SITE :NARMADA AT BARMAN

CODE : 010215011

MEASURING AUTHORITY : NDN

W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 10.05.2018)

Discharge 'Q' :48.10 m³/sec

Water edge: L.B. m R.B. m

Area of Section 'A' :m²

Mean Velocity' V ' : m/ sec

Wetted Perimeter 'P':m

Hydraulic Mean Depth'R': m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	60	312.080	1.24	
2	120	310.015	4.11	Av . Mean Dia "d" = 1.27 mm
3	180	307.640	0.36	
4	240	306.770	0.78	Av .Silt Factor " f " = 1.98
5	300	307.920	1.29	
6	360	322.420	0.32	
7	400	327.870	0.78	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

MONSOON SURVEY (DATE- 20.10.2018)

Discharge 'Q' :76.10 m³/sec

Water edge: L.B m R.B.m

Area of Section 'A' : m²

Mean Velocity' V ' : 0.408 m/ sec

Wetted Perimeter 'P' 137.1 m

Hydraulic Mean Depth'R':1.36 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	60	312.095	0.7	
2	120	310.000	3.82	Av . Mean Dia "d" = 2.078 mm
3	180	307.940	2.24	
4	240	306.240	2.61	Av .Silt Factor " f " =2.54
5	300	307.940	1.91	
6	360	322.450	1.49	
7	400	327.890	1.78	

POST MONSOON SURVEY (DATE 9.1.2019)

Discharge 'Q':63.70 m³/sec

Water edge: L.B. m R.B m

Area of Section 'A' : m²

Mean Velocity' V ' : 0.438 m/ sec

Wetted Perimeter 'P': 125.9m

Hydraulic Mean Depth'R' : 1.16 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	60.00	311.350	0.73	
2	120.00	310.315	3.15	Av . Mean Dia "d" = 1.505 mm
3	180.00	308.060	1.62	
4	240.00	306.210	2.24	Av .Silt Factor " f " = 2.159
5	300.00	307.975	0.91	
6	350.00	322.440	1.06	
7	400.00	327.890	0.83	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.7 Banjar at Bamni

BED MATERIAL DATA FOR THE YEAR 2018-19

SITE :BANJAR AT BAMNI

CODE : 010215006

MEASURING AUTHORITY : NDN

W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 1.05.2018)

Discharge 'Q' : 0.0 m³/sec

Water edge: L.B.: m , R.B : m

Area of Section 'A' : m²

Mean Velocity' V ' : 0.0 m/ sec

Wetted Perimeter 'P':0.0 m

Hydraulic Mean Depth'R' : 0.0 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	439.050	1.02	
2	100	440.110	0.91	Av . Mean Dia "d"= 0.9325mm
3	150	439.060	0.85	
4	200	439.070	0.95	Av .Silt Factor " f " = 1.699

Note : River Dry

MONSOON SURVEY (DATE 15.10.2018)

Discharge 'Q' : m³/sec

Water edge: L.B.: m, R.B.: m

Area of Section 'A' : m²

Mean Velocity' V ' : m/ sec

Wetted Perimeter 'P': m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50			
2	100			Av .Mean Dia"d" = mm
3	150	NOT COLLECTED		
4	200			Av .Silt Factor " f " =

POST MONSOON SURVEY (DATE 7.02.2019)

Discharge 'Q' :0 m³/sec

Water edge: L.B.: m, R.B.:m

Area of Section 'A' :m²

Mean Velocity' V ' :0. m/ sec

Wetted Perimeter 'P' : m

Hydraulic Mean Depth'R' :0 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	439.340	0.85	
2	100	439.450	0.97	Av . Mean Dia "d"= 0.9625 mm
3	150	439.390	0.96	
4	200	439.380	1.07	Av .Silt Factor " f " = 1.7266

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.8 Burhner at Mohgaon**BED MATERIAL DATA FOR THE YEAR 2018-2019****SITE :BURHNER AT MOHGAON**

CODE : 010215004

MEASURING AUTHORITY : NDN

W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 25.05.2018)Discharge 'Q' : m³/sec

Water edge: L.B.:m, R.B.:m

Area of Section 'A' :m²

Mean Velocity' V ' : m/ sec

Wetted Perimeter'P' : m

Hydraulic Mean Depth'R' :m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	450.620	0.97	
2	100	449.210	1.87	Av . Mean Dia "d"= 1 mm
3	150	453.280	0.68	
4	200	462.210	0.48	Av .Silt Factor " f " = 1.76

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

MONSOON SURVEY (DATE 31.10.2018)Discharge 'Q' : m³/sec

Water edge: L.B.: m, R.B.:m

Area of Section 'A' :m²

Mean Velocity' V ' : m/ sec

Wetted Perimeter 'P':m

Hydraulic Mean Depth'R' : m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	450.620	0.75	
2	100	449.030	3.21	Av . Mean Dia "d" =1.142 mm
3	150	455.110	0.28	
4	200	466.210	0.33	Av .Silt Factor " f " = 1.880

POST MONSOON SURVEY (DATE 26.02.2019)Discharge 'Q' :3.006 m³/sec

Water edge: L.B.:103.50 m, R.B.:124.50 m

Area of Section 'A' : m²

Mean Velocity' V ' :0.142 m/ sec

Wetted Perimeter 'P' :26.19 m

Hydraulic Mean Depth'R' :0.810 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	450.620	5.55	
2	100	449.210	0.28	Av . Mean Dia "d" =1.65 mm
3	150	453.310	0.71	
4	200	462.230	0.06	Av .Silt Factor " f " = 2.260

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

7.9 Narmada at Manot**BED MATERIAL DATA FOR THE YEAR 2018-2019**

SITE :NARMADA AT MANOT
MEASURING AUTHORITY : NDN

CODE : 010215002
W.YEAR :2018-19

PRE MONSOON SURVEY (DATE 25.05.2018)Discharge 'Q' : Nil Flow m³/sec

Water edge: L.B.:m, R.B.:m

Area of Section 'A' : m²

Mean Velocity' V ' : Nil m/ sec

Wetted Perimeter 'P':18.8 m

Hydraulic Mean Depth 'R' :0.12 m

Sample. No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	444.260	2.29	
2	100	443.710	1.07	Av . Mean Dia "d"= 1.367mm
3	200	449.290	1.52	
4	250	459.750	0.59	Av .Silt Factor " f " = 2.057

MONSOON SURVEY (DATE 27.10.2018)Discharge 'Q' : m³/sec

Water edge: L.B.:m, R.B.:m

Area of Section 'A' :m²

Mean Velocity' V ' :m/ sec

Wetted Perimeter 'P':m

Hydraulic Mean Depth'R' :m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	444.150	3.30	
2	100	443.730	0.70	Av . Mean Dia "d" = 1.30 mm
3	200	442.240	0.71	
4	250	449.720	0.48	Av .Silt Factor " f " = 2.006

POST MONSOON SURVEY (DATE 27.02.2019)Discharge 'Q' : 8.931m³/sec

Water edge: L.B.:64.00m, R.B.:105.40m

Area of Section 'A' : m²

Mean Velocity' V ' : 0.486 m/ sec

Wetted Perimeter 'P': 59.05 m

Hydraulic Mean Depth'R' : 0.31 m

Sample No	R.D. sampling point (m)	R.L.of Bed (m)	Mean Diameter (mm)	Remarks
1	50	444.260	2.50	
2	100	443.710	0.32	Av . Mean Dia "d" = 1.14 mm
3	150	442.540	0	
4	200	449.280	1.73	Av .Silt Factor " f " = 1.879
5	250	459.720	1.17	

Note ; 1) Discharge was observed at S / G section 2) Single Channel Flow

Plate 1: Line Diagram of Narmada Basin

Silt observation stations under Narmada Basin Organisation, Bhopal

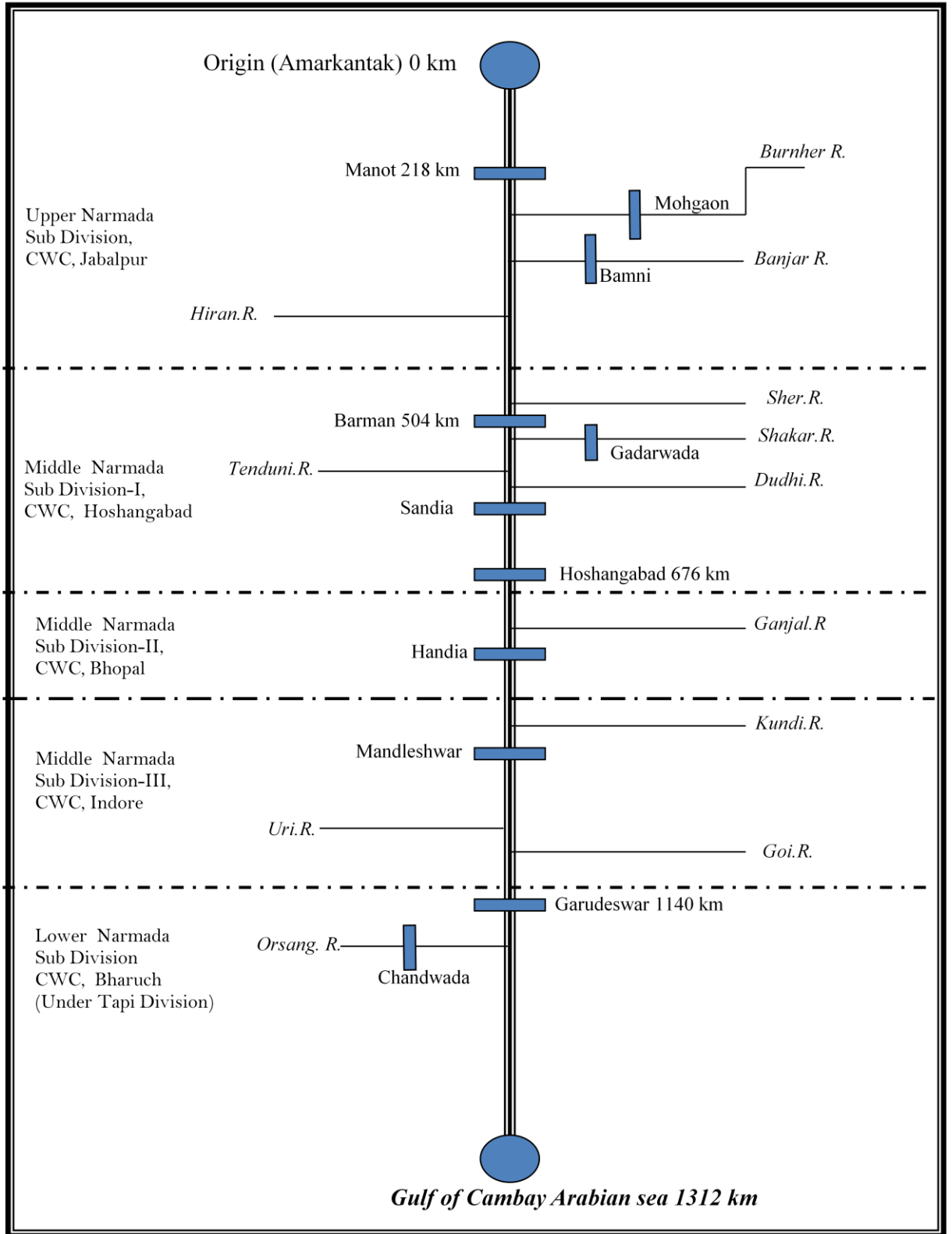


Plate 2: Index Map of Narmada Basin

