

केवल सरकारी उपयोग हेतु

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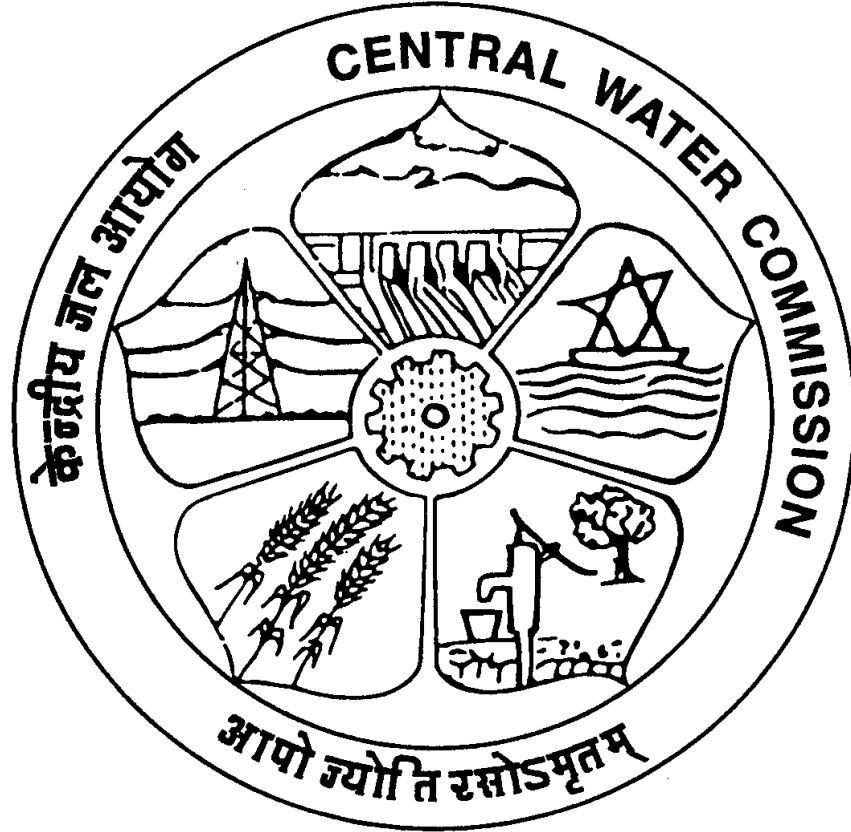
SEDIMENT DATA BOOK

नर्मदा बेसिन

Narmada Basin

जून 2015- मई 2016

June 2015 – May 2016



केन्द्रीय जल आयोग  
नर्मदा बेसिन संगठन  
अप्रैल 2017

CENTRAL WATER COMMISSION  
Narmada Basin Organisation  
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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 <sup>3</sup> /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 <sup>2</sup> /sq.km	:	Square kilo metre
m <sup>2</sup>	:	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 2015-16 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 12<sup>th</sup> 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	NCA SITE
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 2015-16, 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.
<b>Narmada Division, Bhopal</b>		
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
<b>Tapi Division, Surat</b>		
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<sup>o</sup> 32' to 81<sup>o</sup> 45' and North Latitudes 21<sup>o</sup> 20' to 23<sup>o</sup> 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 km<sup>2</sup> 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
	<b>Total</b>	<b>98,796</b>	<b>100.0</b>

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<sup>0</sup>C to 49<sup>0</sup>C in the month of May when the land gets heated up. The temperature drops to a minimum range of 1<sup>0</sup> C to 9<sup>0</sup> 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  $+ / - 10\%$  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 1<sup>st</sup> 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 0.008 g/l recorded on 26.07.2015. The annual sediment load works out to 1101 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 0.033 g/l, on 29.07.2015. The annual sediment load work out to 58431 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 0.607 g/l, which was observed on 05.08.2015. The total annual sediment load 1636219 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 1.109 g/l, which was observed on 21.01.2016. The total annual sediment load is 5020260 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 2.000 g/l, which was observed on 20.07.2015. The total annual sediment load is 5207803 metric tonnes. The monsoon sediment load work out to 99.3% of the total load of the year.

#### **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 0.822 g/l, which was observed on 10.07.2015. The total annual sediment load is 624785 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 1.774 g/l, which was observed on 14.08.2015. The total annual sediment load is 632929 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 1.873 g/l which was observed on 04.08.2015. The total annual sediment load is 924562 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 0.361 g/l, which was recorded on 30.08.2015. The annual sediment load works out to 74771 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 4.173 g/l, which was observed on 23.06.2015. The total annual sediment load is 1098559 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 0.912 g/l, which was observed on 23.06.2015. The total annual sediment load is 617465 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.

<b>Sr.</b>	<b>Name of Station</b>	<b>Code No.</b>
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

		<b>Water Year</b>	<b>: 2015-2016</b>
<b>Site</b>	<b>: Orsang at Chandwada</b>	<b>Code</b>	<b>: 01 02 15 032</b>
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"
<b>Zero of Gauge (m)</b>	<b>: 18 .000(M.S.L.)</b>	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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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

Division : Tapi Division, Surat

Local River : Orsang

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						3.308	0.000	0.000	0.001	0.001	0	156.6	0.000	0.000	0.005	0.005	66
2	0.000						2.751	0.000	0.000	0.001	0.001	0	58.51	0.000	0.000	0.002	0.002	9
3	0.000						2.301	0.000	0.000	0.000	0.000	0	47.37	0.000	0.000	0.002	0.002	9
4	0.000						1.902	0.000	0.000	0.000	0.000	0	46.13	0.000	0.000	0.002	0.002	8
5	0.000						1.534	0.000	0.000	0.000	0.000	0	38.79	0.000	0.000	0.002	0.002	6
6	0.000						0.000	0.000	0.000	0.000	0.000	0	50.74	0.000	0.000	0.007	0.007	32
7	0.000						0.000	0.000	0.000	0.000	0.000	0	49.30	0.000	0.000	0.006	0.006	26
8	0.000						0.000	0.000	0.000	0.000	0.000	0	48.12	0.000	0.000	0.001	0.001	5
9	0.000						0.000	0.000	0.000	0.000	0.000	0	52.98	0.000	0.000	0.001	0.001	6
10	0.000						0.000	0.000	0.000	0.000	0.000	0	47.39	0.000	0.000	0.001	0.001	4
11	0.000						0.000	0.000	0.000	0.000	0.000	0	23.29	0.000	0.000	0.001	0.001	2
12	0.000						0.000	0.000	0.000	0.000	0.000	0	22.12	0.000	0.000	0.002	0.002	3
13	0.000						0.000	0.000	0.000	0.000	0.000	0	21.21	0.000	0.000	0.002	0.002	3
14	27.56						0.000	0.000	0.000	0.000	0.000	0	46.17	0.000	0.000	0.001	0.001	4
15	2.914	0.000	0.000	0.002	0.002	1	0.000	0.000	0.000	0.000	0.000	0	40.10	0.000	0.000	0.001	0.001	3
16	2.895	0.000	0.000	0.002	0.002	1	0.000	0.000	0.000	0.000	0.000	0	40.10	0.000	0.000	0.001	0.001	3
17	3.699	0.000	0.000	0.002	0.002	1	0.000	0.000	0.000	0.000	0.000	0	46.19	0.000	0.000	0.001	0.001	3
18	1.902	0.000	0.000	0.001	0.001	0	0.000	0.000	0.000	0.000	0.000	0	48.67	0.000	0.000	0.001	0.001	5
19	1.902	0.000	0.000	0.001	0.001	0	0.000	0.000	0.000	0.000	0.000	0	47.10	0.000	0.000	0.001	0.001	3
20	3.715	0.000	0.000	0.002	0.002	1	157.6	0.000	0.000	0.005	0.005	67	49.15	0.000	0.000	0.001	0.001	6
21	2.727	0.000	0.000	0.002	0.002	0	3.906	0.000	0.000	0.002	0.002	1	47.98	0.000	0.000	0.001	0.001	5
22	1.534	0.000	0.000	0.001	0.001	0	2.990	0.000	0.000	0.001	0.001	0	46.99	0.000	0.000	0.001	0.001	3
23	0.000	0.000	0.000	0.000	0.000	0	2.916	0.000	0.000	0.000	0.000	0	34.18	0.000	0.000	0.001	0.001	2
24	0.000	0.000	0.000	0.000	0.000	0	2.734	0.000	0.000	0.000	0.000	0	11.25	0.000	0.000	0.000	0.000	0
25	1.902	0.000	0.000	0.000	0.000	0	157.5	0.000	0.000	0.005	0.005	65	11.43	0.000	0.000	0.000	0.000	0
26	1.534	0.000	0.000	0.000	0.000	0	267.3	0.000	0.000	0.008	0.008	188	10.92	0.000	0.000	0.000	0.000	0
27	32.52	0.000	0.000	0.003	0.003	8	314.3	0.000	0.000	0.003	0.003	87	10.26	0.000	0.000	0.000	0.000	0
28	28.63	0.000	0.000	0.003	0.003	6	470.6	0.000	0.000	0.004	0.004	167	10.11	0.000	0.000	0.000	0.000	0
29	3.738	0.000	0.000	0.001	0.001	0	252.6	0.000	0.000	0.004	0.004	94	9.788	0.000	0.000	0.000	0.000	0
30	3.377	0.000	0.000	0.001	0.001	0	162.8	0.000	0.000	0.005	0.005	68	4.163	0.000	0.000	0.000	0.000	0
31							146.9	0.000	0.000	0.004	0.004	46	3.521	0.000	0.000	0.000	0.000	0
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	0.000						1.180	0.000	0.000	0.000	0.000	0	59.60	0.000	0.000	0.003	0.003	17
<b>Ten Daily II</b>	4.459	0.000	0.000	0.002	0.002	0	15.76	0.000	0.000	0.000	0.000	7	38.41	0.000	0.000	0.001	0.001	3
<b>Ten Daily III</b>	7.596	0.000	0.000	0.001	0.001	2	162.2	0.000	0.000	0.003	0.003	65	18.24	0.000	0.000	0.000	0.000	1
<b>Monthly Total</b>						19						782						214

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	3.198	0.000	0.000	0.000	0.000	0	5.870	0.000	0.000	0.000	0.000	0						
2	2.825	0.000	0.000	0.000	0.000	0	2.301	0.000	0.000	0.000	0.000	0						
3	21.49	0.000	0.000	0.002	0.002	4	3.591	0.000	0.000	0.000	0.000	0						
4	12.93	0.000	0.000	0.001	0.001	1	0.000	0.000	0.000	0.000	0.000	0						
5	11.89	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
6	7.034	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0						
7	6.014	0.000	0.000	0.000	0.000	0												
8	5.644	0.000	0.000	0.000	0.000	0												
9	3.645	0.000	0.000	0.000	0.000	0												
10	2.924	0.000	0.000	0.000	0.000	0												
11	2.173	0.000	0.000	0.000	0.000	0												
12	2.022	0.000	0.000	0.000	0.000	0												
13	1.980	0.000	0.000	0.000	0.000	0												
14	11.05	0.000	0.000	0.000	0.000	0												
15	43.93	0.000	0.000	0.001	0.001	2												
16	22.83	0.000	0.000	0.002	0.002	4												
17	9.721	0.000	0.000	0.001	0.001	1												
18	13.46	0.000	0.000	0.000	0.000	0												
19	128.7	0.000	0.000	0.005	0.005	54												
20	51.63	0.000	0.000	0.002	0.002	9												
21	40.22	0.000	0.000	0.002	0.002	6												
22	27.87	0.000	0.000	0.002	0.002	4												
23	22.35	0.000	0.000	0.001	0.001	2												
24	20.67	0.000	0.000	0.000	0.000	0												
25	11.18	0.000	0.000	0.000	0.000	0												
26	20.20	0.000	0.000	0.000	0.000	0												
27	9.019	0.000	0.000	0.000	0.000	0												
28	10.17	0.000	0.000	0.000	0.000	0												
29	9.661	0.000	0.000	0.000	0.000	0												
30	6.351	0.000	0.000	0.000	0.000	0												
31																		
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	7.760	0.000	0.000	0.000	0.000	0	1.960	0.000	0.000	0.000	0.000	0						
<b>Ten Daily II</b>	28.75	0.000	0.000	0.001	0.001	7		0.000	0.000	0.000	0.000							
<b>Ten Daily III</b>	17.77	0.000	0.000	0.000	0.000	1		0.000	0.000	0.000	0.000							
<b>Monthly Total</b>						87						0						

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	0.000						0.000						0.000					
2	0.000						0.000						0.000					
3	0.000						0.000						0.000					
4	0.000						0.000						0.000					
5	0.000						0.000						0.000					
6	0.000						0.000						0.000					
7	0.000						0.000						0.000					
8	0.000						0.000						0.000					
9	0.000						0.000						0.000					
10	0.000						0.000						0.000					
11	0.000						0.000						0.000					
12	0.000						0.000						0.000					
13	0.000						0.000						0.000					
14	0.000						0.000						0.000					
15	0.000						0.000						0.000					
16	0.000						0.000						0.000					
17	0.000						0.000						0.000					
18	0.000						0.000						0.000					
19	0.000						0.000						0.000					
20	0.000						0.000						0.000					
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23	0.000						0.000						0.000					
24	0.000						0.000						0.000					
25	0.000						0.000						0.000					
26	0.000						0.000						0.000					
27	0.000						0.000						0.000					
28	0.000						0.000						0.000					
29	0.000						0.000						0.000					
30	0.000						0.000						0.000					
31	0.000						0.000											
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	0.000						0.000						0.000					
<b>Ten Daily II</b>	0.000						0.000						0.000					
<b>Ten Daily III</b>	0.000						0.000						0.000					
<b>Monthly Total</b>																		

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	0.000						0.000						0.000					
2	0.000						0.000						0.000					
3	0.000						0.000						0.000					
4	0.000						0.000						0.000					
5	0.000						0.000						0.000					
6	0.000						0.000						0.000					
7	0.000						0.000						0.000					
8	0.000						0.000						0.000					
9	0.000						0.000						0.000					
10	0.000						0.000						0.000					
11	0.000						0.000						0.000					
12	0.000						0.000						0.000					
13	0.000						0.000						0.000					
14	0.000						0.000						0.000					
15	0.000						0.000						0.000					
16	0.000						0.000						0.000					
17	0.000						0.000						0.000					
18	0.000						0.000						0.000					
19	0.000						0.000						0.000					
20	0.000						0.000						0.000					
21	0.000						0.000						0.000					
22	0.000						0.000						0.000					
23	0.000						0.000						0.000					
24	0.000						0.000						0.000					
25	0.000						0.000						0.000					
26	0.000						0.000						0.000					
27	0.000						0.000						0.000					
28	0.000						0.000						0.000					
29	0.000						0.000						0.000					
30	0.000						0.000						0.000					
31	0.000						0.000						0.000					
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	0.000						0.000						0.000					
<b>Ten Daily II</b>	0.000						0.000						0.000					
<b>Ten Daily III</b>	0.000						0.000						0.000					
<b>Monthly Total</b>																		

Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1989-2016**

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

Sediment Data Year Book 2015-16

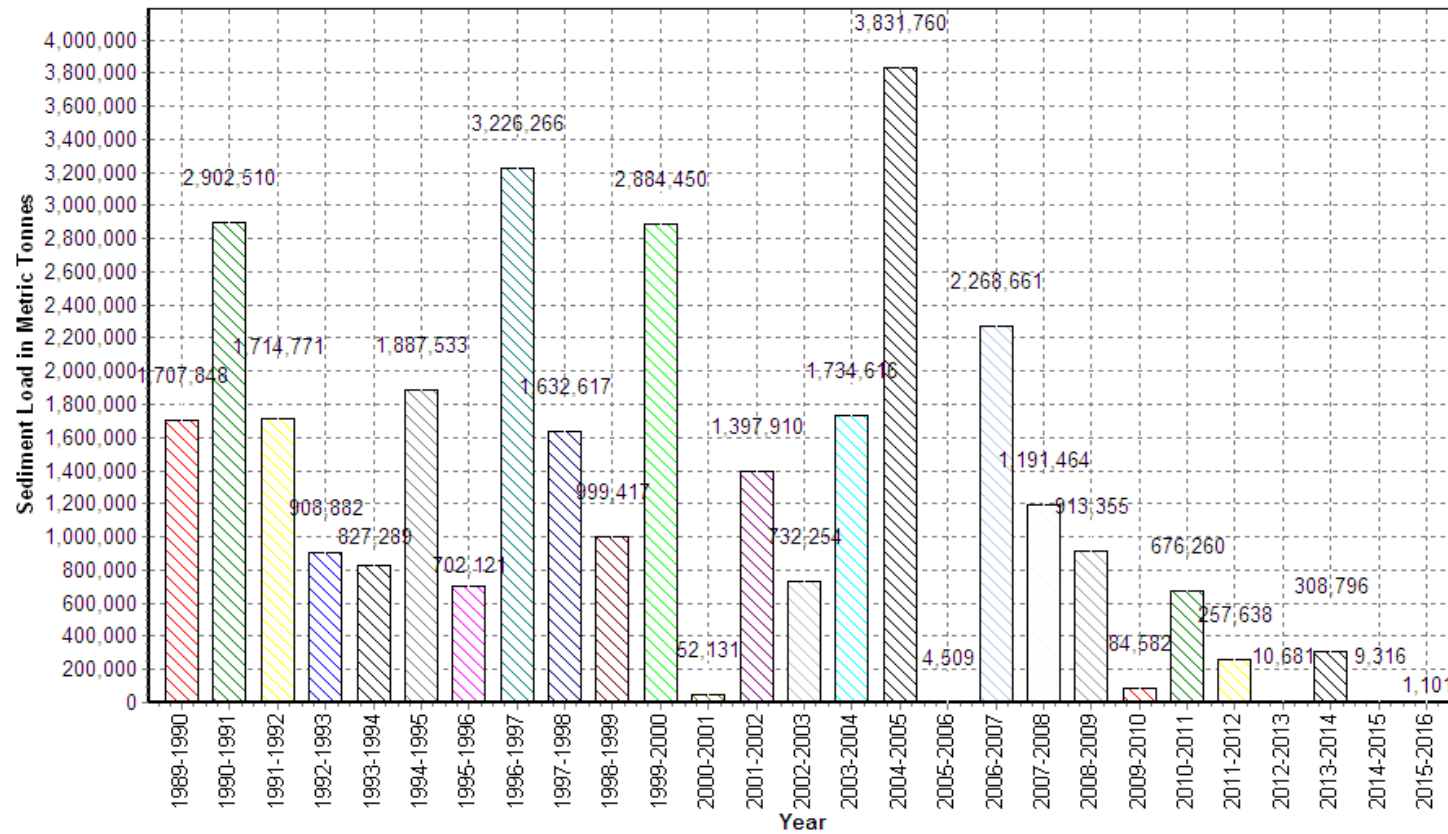
**Annual Sediment Load for the period: 1989-2016**

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

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch



Sediment Data Year Book 2015-16

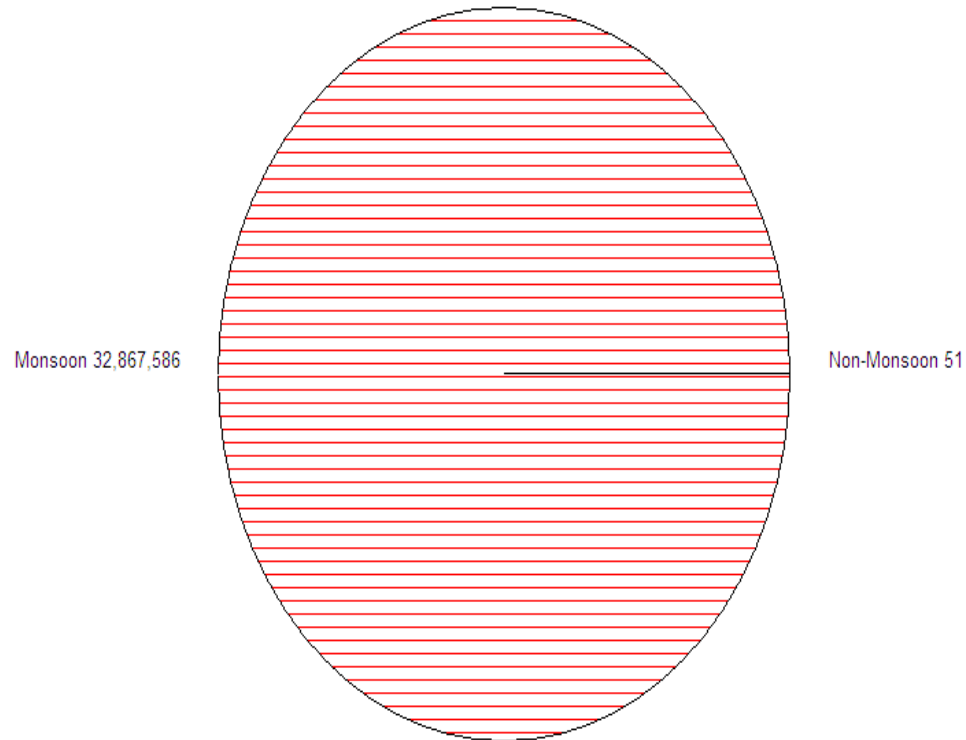
**Seasonal Sediment Load for the period : 1989-2016**

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

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD, Bharuch



Sediment Data Year Book 2015-16

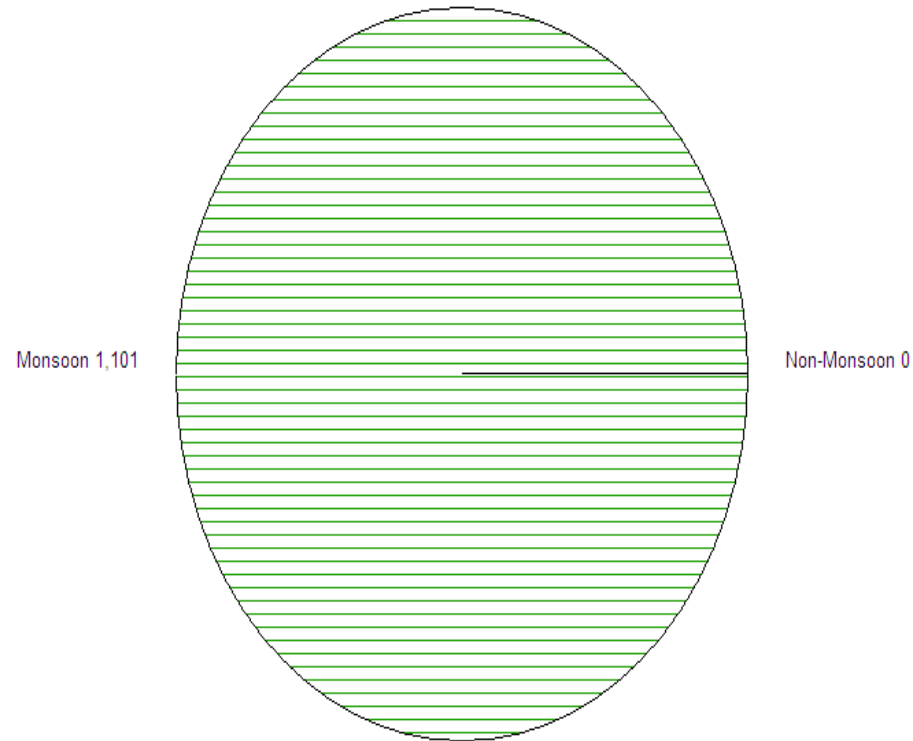
**Seasonal Sediment Load for the Year: 2015-2016**

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**

		<b>Water Year</b>	<b>: 2015-2016</b>
<b>Site</b>	<b>: Narmada at Garudeshwar</b>	<b>Code</b>	<b>: 01 02 15 030</b>
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"
<b>Zero of Gauge (m)</b>	<b>: 10 .000(M.S.L.)</b>	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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	25.92	0.000	0.000	0.002	0.002	4	18.72	0.000	0.000	0.000	0.000	0	1523	0.000	0.000	0.032	0.032	4144
2	28.46	0.000	0.000	0.000	0.000	0	19.22	0.000	0.000	0.000	0.000	0	413.6	0.000	0.000	0.009	0.009	306
3	26.21	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0	682.6	0.000	0.000	0.028	0.028	1651
4	18.37	0.000	0.000	0.000	0.000	0	19.20	0.000	0.000	0.000	0.000	0	486.2	0.000	0.000	0.018	0.018	743
5	18.71	0.000	0.000	0.000	0.000	0	19.10	0.000	0.000	0.000	0.000	0	1453	0.000	0.000	0.018	0.018	2260
6	18.27	0.000	0.000	0.000	0.000	0	18.19	0.000	0.000	0.000	0.000	0	4678	0.000	0.000	0.009	0.009	3638
7	15.25	0.000	0.000	0.000	0.000	0	17.93	0.000	0.000	0.000	0.000	0	4805	0.000	0.000	0.011	0.011	4359
8	18.74	0.000	0.000	0.000	0.000	0	19.34	0.000	0.000	0.000	0.000	0	2920	0.000	0.000	0.011	0.011	2649
9	19.33	0.000	0.000	0.000	0.000	0	19.23	0.000	0.000	0.000	0.000	0	1596	0.000	0.000	0.006	0.006	791
10	18.90	0.000	0.000	0.000	0.000	0	19.46	0.000	0.000	0.000	0.000	0	1538	0.000	0.000	0.013	0.013	1661
11	19.83	0.000	0.000	0.000	0.000	0	18.01	0.000	0.000	0.002	0.002	3	1520	0.000	0.000	0.013	0.013	1642
12	19.07	0.000	0.000	0.000	0.000	0	19.00	0.000	0.000	0.002	0.002	4	557.3	0.000	0.000	0.012	0.012	554
13	20.68	0.000	0.000	0.000	0.000	0	19.57	0.000	0.000	0.000	0.000	0	1514	0.000	0.000	0.012	0.012	1570
14	385.6	0.000	0.000	0.000	0.000	0	19.21	0.000	0.000	0.000	0.000	0	1589	0.000	0.000	0.008	0.008	1030
15	30.40	0.000	0.000	0.000	0.000	0	19.17	0.000	0.000	0.000	0.000	0	1515	0.000	0.000	0.007	0.007	936
16	29.95	0.000	0.000	0.000	0.000	0	19.04	0.000	0.000	0.000	0.000	0	1719	0.000	0.000	0.008	0.008	1205
17	33.36	0.000	0.000	0.000	0.000	0	18.69	0.000	0.000	0.000	0.000	0	1710	0.000	0.000	0.008	0.008	1152
18	32.29	0.000	0.000	0.004	0.004	12	18.65	0.000	0.000	0.000	0.000	0	1646	0.000	0.000	0.008	0.008	1067
19	42.36	0.000	0.000	0.004	0.004	15	21.23	0.000	0.000	0.000	0.000	0	1603	0.000	0.000	0.008	0.008	1039
20	37.82	0.000	0.000	0.003	0.003	9	19.67	0.000	0.000	0.000	0.000	0	1595	0.000	0.000	0.010	0.010	1378
21	67.96	0.000	0.000	0.005	0.005	28	20.46	0.000	0.000	0.000	0.000	1	1584	0.000	0.000	0.010	0.010	1368
22	41.97	0.000	0.000	0.002	0.002	8	21.08	0.000	0.000	0.000	0.000	0	1576	0.000	0.000	0.015	0.015	2043
23	38.31	0.000	0.000	0.002	0.002	8	236.3	0.000	0.000	0.000	0.000	6	1408	0.000	0.000	0.013	0.013	1630
24	42.21	0.000	0.000	0.005	0.005	18	29.75	0.000	0.000	0.000	0.000	1	1513	0.000	0.000	0.010	0.010	1307
25	41.96	0.000	0.000	0.005	0.005	18	278.0	0.000	0.000	0.000	0.000	2	1454	0.000	0.000	0.003	0.003	377
26	38.39	0.000	0.000	0.018	0.018	61	172.8	0.000	0.000	0.000	0.000	1	1401	0.000	0.000	0.003	0.003	339
27	1333	0.000	0.000	0.004	0.004	403	504.6	0.000	0.000	0.021	0.021	916	1393	0.000	0.000	0.000	0.000	36
28	102.4	0.000	0.000	0.000	0.000	2	1612	0.000	0.000	0.029	0.029	4038	1482	0.000	0.000	0.000	0.000	38
29	42.03	0.000	0.000	0.000	0.000	0	1529	0.000	0.000	0.033	0.033	4360	1176	0.000	0.000	0.000	0.000	30
30	20.26	0.000	0.000	0.000	0.000	0	1570	0.000	0.000	0.030	0.030	4028	102.4	0.000	0.000	0.000	0.000	0
31							1609	0.000	0.000	0.025	0.025	3475	32.00	0.000	0.000	0.002	0.002	6
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	20.82	0.000	0.000	0.000	0.000	0	17.04	0.000	0.000	0.000	0.000	0	2010	0.000	0.000	0.015	0.015	2220
<b>Ten Daily II</b>	65.13	0.000	0.000	0.001	0.001	4	19.22	0.000	0.000	0.001	0.001	1	1497	0.000	0.000	0.009	0.009	1157
<b>Ten Daily III</b>	176.9	0.000	0.000	0.004	0.004	55	689.3	0.000	0.000	0.013	0.013	1530	1193	0.000	0.000	0.005	0.005	652
<b>Monthly Total</b>						587						16837						40951

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	24.25	0.000	0.000	0.002	0.002	3	200.1	0.000	0.000	0.000	0.000	0	29.93	0.000	0.000	0.000	0.000	0
2	24.34	0.000	0.000	0.001	0.001	2	84.44	0.000	0.000	0.000	0.000	0	27.35	0.000	0.000	0.000	0.000	0
3	24.36	0.000	0.000	0.000	0.000	0	20.21	0.000	0.000	0.000	0.000	0	29.37	0.000	0.000	0.000	0.000	0
4	22.59	0.000	0.000	0.001	0.001	2	24.63	0.000	0.000	0.000	0.000	0	29.36	0.000	0.000	0.000	0.000	0
5	23.66	0.000	0.000	0.000	0.000	1	33.43	0.000	0.000	0.000	0.000	0	28.54	0.000	0.000	0.000	0.000	0
6	23.66	0.000	0.000	0.000	0.000	1	33.32	0.000	0.000	0.000	0.000	0	28.57	0.000	0.000	0.000	0.000	0
7	228.1	0.000	0.000	0.000	0.000	6	33.42	0.000	0.000	0.000	0.000	0	28.28	0.000	0.000	0.000	0.000	0
8	28.65	0.000	0.000	0.000	0.000	1	34.15	0.000	0.000	0.000	0.000	0	31.80	0.000	0.000	0.000	0.000	0
9	28.05	0.000	0.000	0.001	0.001	3	34.25	0.000	0.000	0.000	0.000	0	28.21	0.000	0.000	0.000	0.000	0
10	225.5	0.000	0.000	0.000	0.000	4	33.76	0.000	0.000	0.000	0.000	0	27.22	0.000	0.000	0.000	0.000	0
11	25.73	0.000	0.000	0.000	0.000	0	26.35	0.000	0.000	0.000	0.000	0	26.35	0.000	0.000	0.000	0.000	0
12	24.45	0.000	0.000	0.000	0.000	1	33.45	0.000	0.000	0.000	0.000	0	26.99	0.000	0.000	0.000	0.000	0
13	25.00	0.000	0.000	0.000	0.000	1	35.89	0.000	0.000	0.000	0.000	0	26.74	0.000	0.000	0.000	0.000	0
14	25.55	0.000	0.000	0.000	0.000	0	34.83	0.000	0.000	0.000	0.000	0	25.97	0.000	0.000	0.000	0.000	0
15	34.55	0.000	0.000	0.000	0.000	1	34.66	0.000	0.000	0.000	0.000	0	21.35	0.000	0.000	0.000	0.000	0
16	33.17	0.000	0.000	0.000	0.000	1	35.67	0.000	0.000	0.000	0.000	0	25.39	0.000	0.000	0.000	0.000	0
17	15.39	0.000	0.000	0.000	0.000	0	36.81	0.000	0.000	0.000	0.000	0	24.14	0.000	0.000	0.000	0.000	0
18	267.4	0.000	0.000	0.000	0.000	0	33.71	0.000	0.000	0.000	0.000	0	25.28	0.000	0.000	0.000	0.000	0
19	1516	0.000	0.000	0.000	0.000	13	35.95	0.000	0.000	0.000	0.000	0	24.13	0.000	0.000	0.000	0.000	0
20	1360	0.000	0.000	0.000	0.000	11	36.37	0.000	0.000	0.000	0.000	0	24.24	0.000	0.000	0.000	0.000	0
21	1454	0.000	0.000	0.000	0.000	0	35.12	0.000	0.000	0.000	0.000	0	24.42	0.000	0.000	0.000	0.000	0
22	245.4	0.000	0.000	0.000	0.000	6	33.71	0.000	0.000	0.000	0.000	0	28.12	0.000	0.000	0.000	0.000	0
23	46.62	0.000	0.000	0.000	0.000	1	36.85	0.000	0.000	0.000	0.000	0	25.47	0.000	0.000	0.000	0.000	0
24	34.23	0.000	0.000	0.000	0.000	0	29.93	0.000	0.000	0.000	0.000	0	28.31	0.000	0.000	0.000	0.000	0
25	22.96	0.000	0.000	0.000	0.000	0	28.12	0.000	0.000	0.000	0.000	0	28.12	0.000	0.000	0.000	0.000	0
26	33.97	0.000	0.000	0.000	0.000	1	35.41	0.000	0.000	0.000	0.000	0	28.38	0.000	0.000	0.000	0.000	0
27	21.35	0.000	0.000	0.000	0.000	0	36.81	0.000	0.000	0.000	0.000	0	27.72	0.000	0.000	0.000	0.000	0
28	32.93	0.000	0.000	0.000	0.000	0	221.4	0.000	0.000	0.000	0.000	0	27.82	0.000	0.000	0.000	0.000	0
29	34.73	0.000	0.000	0.000	0.000	0	47.03	0.000	0.000	0.000	0.000	0	29.93	0.000	0.000	0.000	0.000	0
30	35.16	0.000	0.000	0.000	0.000	0	35.33	0.000	0.000	0.000	0.000	0	27.75	0.000	0.000	0.000	0.000	0
31							34.97	0.000	0.000	0.000	0.000	0						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	65.31	0.000	0.000	0.001	0.001	2	53.17	0.000	0.000	0.000	0.000	0	28.86	0.000	0.000	0.000	0.000	0
<b>Ten Daily II</b>	332.7	0.000	0.000	0.000	0.000	3	34.37	0.000	0.000	0.000	0.000	0	25.06	0.000	0.000	0.000	0.000	0
<b>Ten Daily III</b>	196.2	0.000	0.000	0.000	0.000	1	52.25	0.000	0.000	0.000	0.000	0	27.61	0.000	0.000	0.000	0.000	0
<b>Monthly Total</b>						57						0						0

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	27.86	0.000	0.000	0.000	0.000	0	23.67	0.000	0.000	0.000	0.000	0	25.12	0.000	0.000	0.000	0.000	0
2	27.80	0.000	0.000	0.000	0.000	0	23.60	0.000	0.000	0.000	0.000	0	30.64	0.000	0.000	0.000	0.000	0
3	27.53	0.000	0.000	0.000	0.000	0	24.63	0.000	0.000	0.000	0.000	0	26.83	0.000	0.000	0.000	0.000	0
4	27.79	0.000	0.000	0.000	0.000	0	27.59	0.000	0.000	0.000	0.000	0	42.15	0.000	0.000	0.000	0.000	0
5	28.03	0.000	0.000	0.000	0.000	0	27.09	0.000	0.000	0.000	0.000	0	39.55	0.000	0.000	0.000	0.000	0
6	29.93	0.000	0.000	0.000	0.000	0	27.17	0.000	0.000	0.000	0.000	0	26.66	0.000	0.000	0.000	0.000	0
7	27.78	0.000	0.000	0.000	0.000	0	27.20	0.000	0.000	0.000	0.000	0	26.35	0.000	0.000	0.000	0.000	0
8	27.73	0.000	0.000	0.000	0.000	0	26.36	0.000	0.000	0.000	0.000	0	25.36	0.000	0.000	0.000	0.000	0
9	27.36	0.000	0.000	0.000	0.000	0	26.38	0.000	0.000	0.000	0.000	0	36.05	0.000	0.000	0.000	0.000	0
10	27.68	0.000	0.000	0.000	0.000	0	26.35	0.000	0.000	0.000	0.000	0	26.68	0.000	0.000	0.000	0.000	0
11	27.53	0.000	0.000	0.000	0.000	0	28.07	0.000	0.000	0.000	0.000	0	26.51	0.000	0.000	0.000	0.000	0
12	27.20	0.000	0.000	0.000	0.000	0	24.85	0.000	0.000	0.000	0.000	0	25.04	0.000	0.000	0.000	0.000	0
13	19.78	0.000	0.000	0.000	0.000	0	24.95	0.000	0.000	0.000	0.000	0	45.44	0.000	0.000	0.000	0.000	0
14	23.59	0.000	0.000	0.000	0.000	0	28.12	0.000	0.000	0.000	0.000	0	96.27	0.000	0.000	0.000	0.000	0
15	23.09	0.000	0.000	0.000	0.000	0	23.32	0.000	0.000	0.000	0.000	0	25.70	0.000	0.000	0.000	0.000	0
16	23.74	0.000	0.000	0.000	0.000	0	25.61	0.000	0.000	0.000	0.000	0	26.10	0.000	0.000	0.000	0.000	0
17	23.90	0.000	0.000	0.000	0.000	0	29.93	0.000	0.000	0.000	0.000	0	25.33	0.000	0.000	0.000	0.000	0
18	23.46	0.000	0.000	0.000	0.000	0	26.66	0.000	0.000	0.000	0.000	0	26.41	0.000	0.000	0.000	0.000	0
19	22.56	0.000	0.000	0.000	0.000	0	24.50	0.000	0.000	0.000	0.000	0	26.65	0.000	0.000	0.000	0.000	0
20	16.80	0.000	0.000	0.000	0.000	0	27.13	0.000	0.000	0.000	0.000	0	41.93	0.000	0.000	0.000	0.000	0
21	22.73	0.000	0.000	0.000	0.000	0	26.83	0.000	0.000	0.000	0.000	0	43.99	0.000	0.000	0.000	0.000	0
22	23.58	0.000	0.000	0.000	0.000	0	25.28	0.000	0.000	0.000	0.000	0	40.98	0.000	0.000	0.000	0.000	0
23	27.42	0.000	0.000	0.000	0.000	0	25.05	0.000	0.000	0.000	0.000	0	26.79	0.000	0.000	0.000	0.000	0
24	26.26	0.000	0.000	0.000	0.000	0	26.35	0.000	0.000	0.000	0.000	0	41.01	0.000	0.000	0.000	0.000	0
25	24.63	0.000	0.000	0.000	0.000	0	24.46	0.000	0.000	0.000	0.000	0	40.90	0.000	0.000	0.000	0.000	0
26	23.59	0.000	0.000	0.000	0.000	0	22.96	0.000	0.000	0.000	0.000	0	41.97	0.000	0.000	0.000	0.000	0
27	28.12	0.000	0.000	0.000	0.000	0	26.46	0.000	0.000	0.000	0.000	0	41.56	0.000	0.000	0.000	0.000	0
28	23.58	0.000	0.000	0.000	0.000	0	25.21	0.000	0.000	0.000	0.000	0	39.74	0.000	0.000	0.000	0.000	0
29	27.43	0.000	0.000	0.000	0.000	0	25.17	0.000	0.000	0.000	0.000	0	41.54	0.000	0.000	0.000	0.000	0
30	27.07	0.000	0.000	0.000	0.000	0	25.14	0.000	0.000	0.000	0.000	0						
31	23.64	0.000	0.000	0.000	0.000	0	26.35	0.000	0.000	0.000	0.000	0						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	27.95	0.000	0.000	0.000	0.000	0	26.00	0.000	0.000	0.000	0.000	0	30.54	0.000	0.000	0.000	0.000	0
<b>Ten Daily II</b>	23.16	0.000	0.000	0.000	0.000	0	26.32	0.000	0.000	0.000	0.000	0	36.54	0.000	0.000	0.000	0.000	0
<b>Ten Daily III</b>	25.28	0.000	0.000	0.000	0.000	0	25.39	0.000	0.000	0.000	0.000	0	39.83	0.000	0.000	0.000	0.000	0
<b>Monthly Total</b>						0						0						0

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	42.58	0.000	0.000	0.000	0.000	0	40.10	0.000	0.000	0.000	0.000	0	29.93	0.000	0.000	0.000	0.000	0	
2	41.95	0.000	0.000	0.000	0.000	0	41.74	0.000	0.000	0.000	0.000	0	25.67	0.000	0.000	0.000	0.000	0	
3	42.78	0.000	0.000	0.000	0.000	0	33.71	0.000	0.000	0.000	0.000	0	26.59	0.000	0.000	0.000	0.000	0	
4	41.78	0.000	0.000	0.000	0.000	0	26.90	0.000	0.000	0.000	0.000	0	25.83	0.000	0.000	0.000	0.000	0	
5	41.65	0.000	0.000	0.000	0.000	0	26.47	0.000	0.000	0.000	0.000	0	25.58	0.000	0.000	0.000	0.000	0	
6	37.68	0.000	0.000	0.000	0.000	0	39.44	0.000	0.000	0.000	0.000	0	26.78	0.000	0.000	0.000	0.000	0	
7	40.36	0.000	0.000	0.000	0.000	0	26.20	0.000	0.000	0.000	0.000	0	26.41	0.000	0.000	0.000	0.000	0	
8	40.87	0.000	0.000	0.000	0.000	0	38.88	0.000	0.000	0.000	0.000	0	33.71	0.000	0.000	0.000	0.000	0	
9	40.45	0.000	0.000	0.000	0.000	0	26.10	0.000	0.000	0.000	0.000	0	26.89	0.000	0.000	0.000	0.000	0	
10	41.09	0.000	0.000	0.000	0.000	0	48.43	0.000	0.000	0.000	0.000	0	24.16	0.000	0.000	0.000	0.000	0	
11	40.01	0.000	0.000	0.000	0.000	0	38.34	0.000	0.000	0.000	0.000	0	26.84	0.000	0.000	0.000	0.000	0	
12	40.28	0.000	0.000	0.000	0.000	0	38.94	0.000	0.000	0.000	0.000	0	26.03	0.000	0.000	0.000	0.000	0	
13	37.68	0.000	0.000	0.000	0.000	0	26.77	0.000	0.000	0.000	0.000	0	25.49	0.000	0.000	0.000	0.000	0	
14	26.95	0.000	0.000	0.000	0.000	0	39.74	0.000	0.000	0.000	0.000	0	26.85	0.000	0.000	0.000	0.000	0	
15	40.69	0.000	0.000	0.000	0.000	0	27.02	0.000	0.000	0.000	0.000	0	29.93	0.000	0.000	0.000	0.000	0	
16	26.53	0.000	0.000	0.000	0.000	0	25.78	0.000	0.000	0.000	0.000	0	25.50	0.000	0.000	0.000	0.000	0	
17	26.53	0.000	0.000	0.000	0.000	0	41.84	0.000	0.000	0.000	0.000	0	26.35	0.000	0.000	0.000	0.000	0	
18	26.95	0.000	0.000	0.000	0.000	0	37.94	0.000	0.000	0.000	0.000	0	26.80	0.000	0.000	0.000	0.000	0	
19	26.67	0.000	0.000	0.000	0.000	0	25.78	0.000	0.000	0.000	0.000	0	25.54	0.000	0.000	0.000	0.000	0	
20	46.19	0.000	0.000	0.000	0.000	0	37.68	0.000	0.000	0.000	0.000	0	25.34	0.000	0.000	0.000	0.000	0	
21	26.80	0.000	0.000	0.000	0.000	0	26.09	0.000	0.000	0.000	0.000	0	29.93	0.000	0.000	0.000	0.000	0	
22	26.51	0.000	0.000	0.000	0.000	0	185.7	0.000	0.000	0.000	0.000	0	31.80	0.000	0.000	0.000	0.000	0	
23	39.24	0.000	0.000	0.000	0.000	0	25.91	0.000	0.000	0.000	0.000	0	25.23	0.000	0.000	0.000	0.000	0	
24	35.67	0.000	0.000	0.000	0.000	0	31.80	0.000	0.000	0.000	0.000	0	25.35	0.000	0.000	0.000	0.000	0	
25	21.35	0.000	0.000	0.000	0.000	0	24.01	0.000	0.000	0.000	0.000	0	40.29	0.000	0.000	0.000	0.000	0	
26	26.78	0.000	0.000	0.000	0.000	0	24.97	0.000	0.000	0.000	0.000	0	42.55	0.000	0.000	0.000	0.000	0	
27	39.74	0.000	0.000	0.000	0.000	0	25.84	0.000	0.000	0.000	0.000	0	40.30	0.000	0.000	0.000	0.000	0	
28	26.59	0.000	0.000	0.000	0.000	0	25.62	0.000	0.000	0.000	0.000	0	47.19	0.000	0.000	0.000	0.000	0	
29	40.77	0.000	0.000	0.000	0.000	0	27.56	0.000	0.000	0.000	0.000	0	31.80	0.000	0.000	0.000	0.000	0	
30	41.10	0.000	0.000	0.000	0.000	0	26.80	0.000	0.000	0.000	0.000	0	26.38	0.000	0.000	0.000	0.000	0	
31	41.61	0.000	0.000	0.000	0.000	0							40.34	0.000	0.000	0.000	0.000	0	
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	41.12	0.000	0.000	0.000	0.000	0	34.80	0.000	0.000	0.000	0.000	0	27.15	0.000	0.000	0.000	0.000	0	
<b>Ten Daily II</b>	33.85	0.000	0.000	0.000	0.000	0	33.98	0.000	0.000	0.000	0.000	0	26.47	0.000	0.000	0.000	0.000	0	
<b>Ten Daily III</b>	33.29	0.000	0.000	0.000	0.000	0	42.43	0.000	0.000	0.000	0.000	0	34.65	0.000	0.000	0.000	0.000	0	
<b>Monthly Total</b>						0						0							0

Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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

Sediment Data Year Book 2015-16

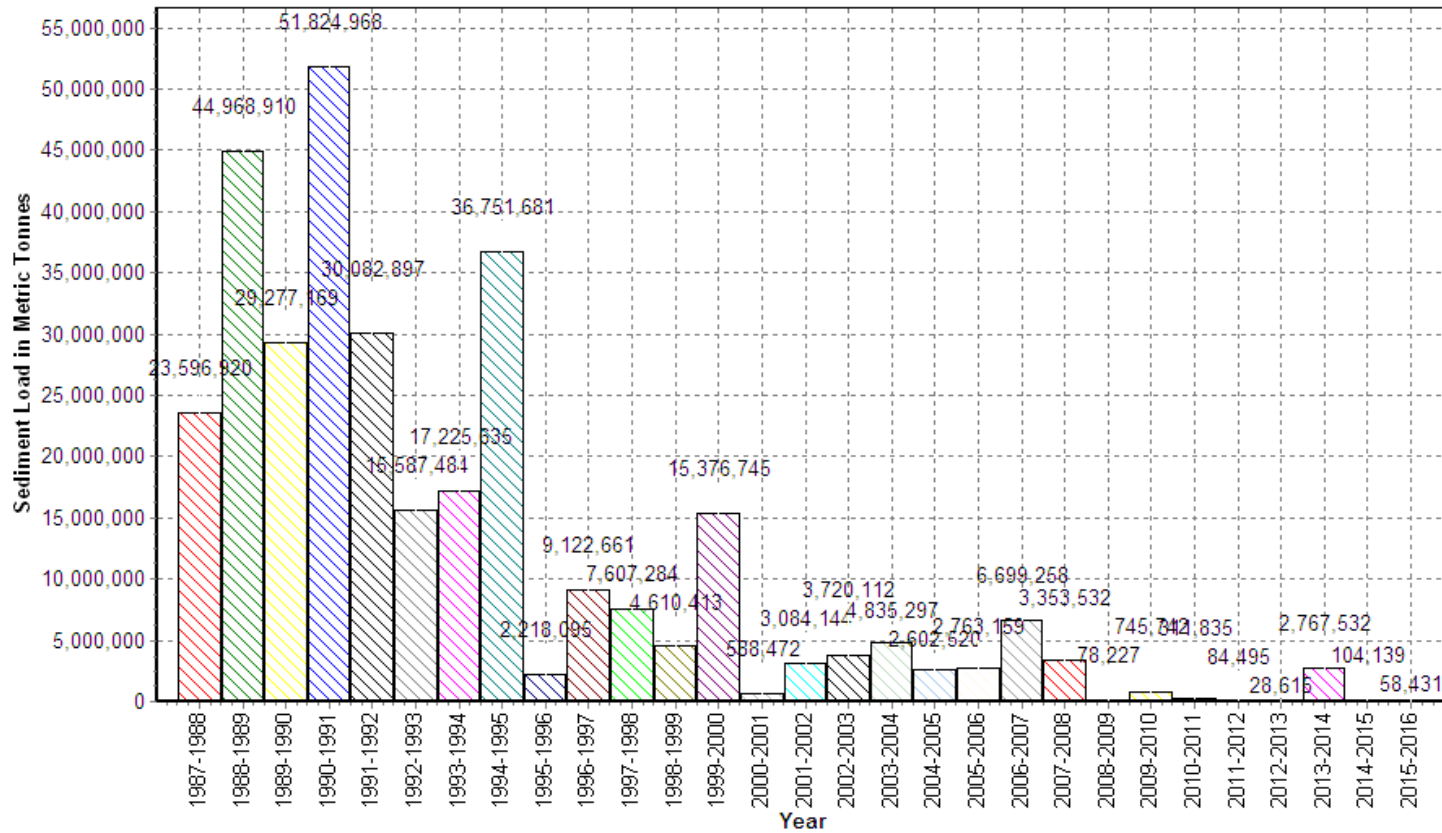
**Annual Sediment Load for period : 1987-2016**

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

Division : Tapi Division, Surat

Local River : Narmada

Sub-Division : LNSD, Bharuch



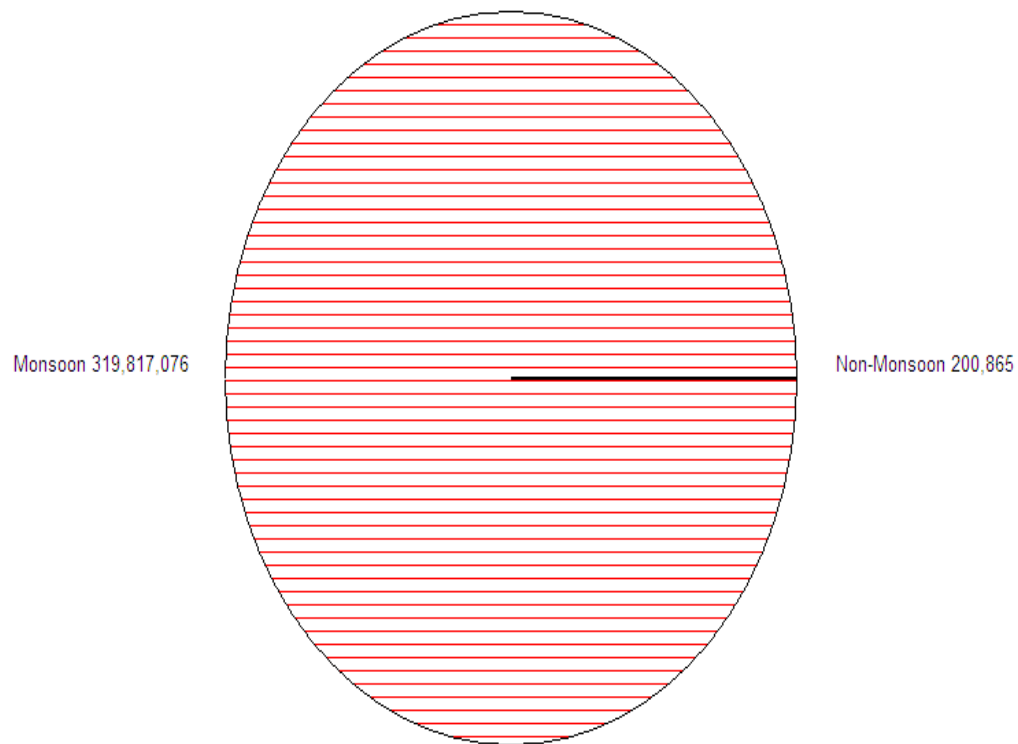
**Seasonal Sediment Load for the period : 1987-2016**

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

Local River : Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD, Bharuch



Sediment Data Year Book 2015-16

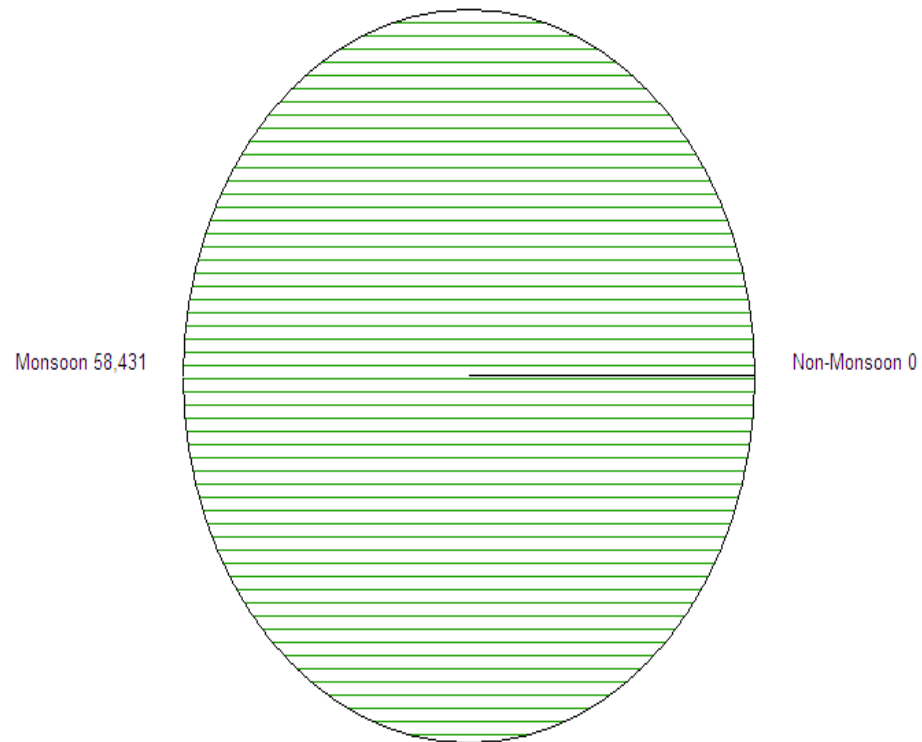
**Seasonal Sediment Load for the period : 2015-2016**

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**

		<b>Water Year</b>	<b>: 2015-2016</b>
<b>Site</b>	<b>: Narmada at Mandleshwar</b>	<b>Code</b>	<b>: 010215026</b>
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"
<b>Zero of Gauge (m)</b>	<b>: 138 .000(M.S.L.)</b>	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 2015-16

## Daily Observed Sediment Datasheet for period : 2015-2016

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	215.8	0.000	0.000	0.012	0.012	214	685.6	0.000	0.000	0.021	0.021	1262	823.9	0.000	0.000	0.034	0.034	2399
2	210.6	0.000	0.000	0.012	0.012	213	493.1	0.000	0.000	0.018	0.018	767	620.2	0.000	0.000	0.025	0.025	1359
3	204.9	0.000	0.000	0.010	0.010	177	434.0	0.000	0.000	0.020	0.020	757	1107	0.000	0.000	0.048	0.048	4542
4	261.1	0.000	0.000	0.009	0.009	210	746.0	0.000	0.000	0.024	0.024	1547	835.9	0.000	0.000	0.030	0.030	2167
5	365.3	0.000	0.000	0.013	0.013	410	493.8	0.000	0.000	0.016	0.016	678	16922	0.000	0.000	0.607	0.607	887928
6	227.8	0.000	0.000	0.010	0.010	197	616.2	0.000	0.000	0.019	0.019	1001	7122	0.000	0.000	0.256	0.256	157292
7	259.5	0.000	0.000	0.011	0.011	255	302.3	0.000	0.000	0.015	0.015	392	1300	0.000	0.000	0.060	0.060	6739
8	214.6	0.000	0.000	0.012	0.012	222	814.5	0.000	0.000	0.021	0.021	1443	709.2	0.000	0.000	0.028	0.028	1716
9	511.7	0.000	0.000	0.024	0.024	1052	397.2	0.000	0.000	0.010	0.010	343	1137	0.000	0.000	0.045	0.045	4410
10	215.5	0.000	0.000	0.010	0.010	186	215.8	0.000	0.000	0.018	0.018	336	1212	0.000	0.000	0.044	0.044	4555
11	240.0	0.000	0.000	0.018	0.018	379	193.0	0.000	0.000	0.023	0.023	375	1306	0.000	0.000	0.048	0.048	5361
12	325.9	0.000	0.000	0.025	0.025	698	169.2	0.000	0.000	0.020	0.020	288	2103	0.000	0.000	0.051	0.051	9211
13	235.7	0.000	0.000	0.019	0.019	387	510.5	0.000	0.000	0.025	0.025	1103	2300	0.000	0.000	0.100	0.100	19810
14	347.6	0.000	0.000	0.028	0.028	842	1155	0.000	0.000	0.026	0.026	2625	2259	0.000	0.000	0.093	0.093	18056
15	439.3	0.000	0.000	0.016	0.016	588	1209	0.000	0.000	0.027	0.027	2820	3019	0.000	0.000	0.124	0.124	32242
16	380.9	0.000	0.000	0.012	0.012	388	1277	0.000	0.000	0.025	0.025	2759	2840	0.000	0.000	0.116	0.116	28539
17	335.2	0.000	0.000	0.012	0.012	333	1250	0.000	0.000	0.022	0.022	2375	2311	0.000	0.000	0.067	0.067	13378
18	389.8	0.000	0.000	0.020	0.020	657	772.1	0.000	0.000	0.014	0.014	907	2230	0.000	0.000	0.037	0.037	7188
19	286.7	0.000	0.000	0.014	0.014	334	200.4	0.000	0.000	0.004	0.004	61	2235	0.000	0.000	0.050	0.050	9657
20	690.6	0.000	0.000	0.034	0.034	2011	1042	0.000	0.000	0.033	0.033	2970	2224	0.000	0.000	0.044	0.044	8454
21	294.7	0.000	0.000	0.014	0.014	366	1126	0.000	0.000	0.032	0.032	3083	2215	0.000	0.000	0.033	0.033	6374
22	369.3	0.000	0.000	0.013	0.013	421	1206	0.000	0.000	0.031	0.031	3262	2224	0.000	0.000	0.038	0.038	7244
23	1255	0.000	0.000	0.061	0.061	6615	1360	0.000	0.000	0.035	0.035	4147	2191	0.000	0.000	0.037	0.037	7030
24	375.6	0.000	0.000	0.040	0.040	1298	772.0	0.000	0.000	0.069	0.069	4616	1559	0.000	0.000	0.033	0.033	4379
25	204.0	0.000	0.000	0.035	0.035	612	930.1	0.000	0.000	0.057	0.057	4597	1691	0.000	0.000	0.037	0.037	5361
26	689.8	0.000	0.000	0.065	0.065	3874	475.3	0.000	0.000	0.029	0.029	1200	1285	0.000	0.000	0.031	0.031	3476
27	270.8	0.000	0.000	0.034	0.034	800	996.9	0.000	0.000	0.066	0.066	5685	1287	0.000	0.000	0.030	0.030	3359
28	585.3	0.000	0.000	0.074	0.074	3738	1025	0.000	0.000	0.050	0.050	4411	690.5	0.000	0.000	0.028	0.028	1670
29	515.0	0.000	0.000	0.021	0.021	934	759.2	0.000	0.000	0.039	0.039	2525	1126	0.000	0.000	0.032	0.032	3093
30	355.2	0.000	0.000	0.020	0.020	605	534.3	0.000	0.000	0.040	0.040	1847	962.5	0.000	0.000	0.027	0.027	2261
31							909.9	0.000	0.000	0.043	0.043	3380	1220	0.000	0.000	0.033	0.033	3426
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	268.7	0.000	0.000	0.012	0.012	314	519.9	0.000	0.000	0.018	0.018	852	3179	0.000	0.000	0.118	0.118	107311
<b>Ten Daily II</b>	367.2	0.000	0.000	0.020	0.020	662	777.8	0.000	0.000	0.022	0.022	1628	2283	0.000	0.000	0.073	0.073	15190
<b>Ten Daily III</b>	491.5	0.000	0.000	0.038	0.038	1926	917.7	0.000	0.000	0.045	0.045	3523	1496	0.000	0.000	0.033	0.033	4334
<b>Monthly Total</b>						29018						63560						1272677

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	920.2	0.000	0.000	0.033	0.033	2584	209.7	0.000	0.000	0.025	0.025	453	656.4	0.000	0.000	0.018	0.018	996
2	730.4	0.000	0.000	0.024	0.024	1502	141.1	0.000	0.000	0.017	0.017	205	405.3	0.000	0.000	0.023	0.023	805
3	920.9	0.000	0.000	0.025	0.025	1965	455.7	0.000	0.000	0.026	0.026	1024	665.4	0.000	0.000	0.025	0.025	1420
4	1135	0.000	0.000	0.027	0.027	2648	285.7	0.000	0.000	0.016	0.016	402	772.1	0.000	0.000	0.029	0.029	1912
5	1240	0.000	0.000	0.028	0.028	3000	699.4	0.000	0.000	0.029	0.029	1722	878.7	0.000	0.000	0.033	0.033	2476
6	1821	0.000	0.000	0.041	0.041	6469	630.5	0.000	0.000	0.021	0.021	1144	237.4	0.000	0.000	0.016	0.016	318
7	1079	0.000	0.000	0.026	0.026	2424	580.8	0.000	0.000	0.026	0.026	1305	212.1	0.000	0.000	0.021	0.021	388
8	860.7	0.000	0.000	0.025	0.025	1822	701.5	0.000	0.000	0.027	0.027	1637	276.8	0.000	0.000	0.028	0.028	662
9	419.2	0.000	0.000	0.023	0.023	815	345.7	0.000	0.000	0.020	0.020	582	273.4	0.000	0.000	0.018	0.018	430
10	790.8	0.000	0.000	0.023	0.023	1571	220.2	0.000	0.000	0.018	0.018	333	382.7	0.000	0.000	0.022	0.022	727
11	242.4	0.000	0.000	0.025	0.025	524	200.4	0.000	0.000	0.016	0.016	276	304.0	0.000	0.000	0.017	0.017	459
12	635.3	0.000	0.000	0.027	0.027	1455	490.3	0.000	0.000	0.022	0.022	932	216.8	0.000	0.000	0.019	0.019	352
13	606.1	0.000	0.000	0.025	0.025	1324	550.1	0.000	0.000	0.022	0.022	1055	242.1	0.000	0.000	0.022	0.022	456
14	285.2	0.000	0.000	0.026	0.026	628	1197	0.000	0.000	0.019	0.019	1913	251.8	0.000	0.000	0.018	0.018	381
15	280.8	0.000	0.000	0.027	0.027	655	1263	0.000	0.000	0.023	0.023	2478	313.4	0.000	0.000	0.022	0.022	590
16	656.7	0.000	0.000	0.028	0.028	1560	1192	0.000	0.000	0.023	0.023	2317	328.7	0.000	0.000	0.016	0.016	460
17	551.5	0.000	0.000	0.023	0.023	1101	434.2	0.000	0.000	0.019	0.019	724	420.7	0.000	0.000	0.021	0.021	763
18	1551	0.000	0.000	0.034	0.034	4583	1137	0.000	0.000	0.051	0.051	4965	318.9	0.000	0.000	0.020	0.020	557
19	865.4	0.000	0.000	0.036	0.036	2654	764.2	0.000	0.000	0.018	0.018	1175	588.4	0.000	0.000	0.020	0.020	1032
20	656.4	0.000	0.000	0.027	0.027	1527	665.5	0.000	0.000	0.020	0.020	1150	426.5	0.000	0.000	0.022	0.022	792
21	245.6	0.000	0.000	0.035	0.035	743	585.3	0.000	0.000	0.019	0.019	936	674.0	0.000	0.000	0.024	0.024	1398
22	210.2	0.000	0.000	0.034	0.034	617	394.8	0.000	0.000	0.012	0.012	426	519.0	0.000	0.000	0.018	0.018	829
23	470.8	0.000	0.000	0.036	0.036	1452	494.3	0.000	0.000	0.018	0.018	769	882.5	0.000	0.000	0.025	0.025	1891
24	738.9	0.000	0.000	0.037	0.037	2330	457.3	0.000	0.000	0.017	0.017	658	516.5	0.000	0.000	0.022	0.022	973
25	519.0	0.000	0.000	0.026	0.026	1150	693.7	0.000	0.000	0.025	0.025	1514	830.0	0.000	0.000	0.035	0.035	2512
26	335.4	0.000	0.000	0.034	0.034	985	460.6	0.000	0.000	0.016	0.016	649	879.9	0.000	0.000	0.021	0.021	1558
27	347.6	0.000	0.000	0.035	0.035	1058	280.9	0.000	0.000	0.014	0.014	347	649.0	0.000	0.000	0.015	0.015	848
28	669.3	0.000	0.000	0.028	0.028	1619	225.4	0.000	0.000	0.011	0.011	223	224.3	0.000	0.000	0.020	0.020	391
29	527.9	0.000	0.000	0.029	0.029	1332	199.3	0.000	0.000	0.014	0.014	241	605.5	0.000	0.000	0.055	0.055	2853
30	476.6	0.000	0.000	0.028	0.028	1132	300.6	0.000	0.000	0.017	0.017	449	241.6	0.000	0.000	0.020	0.020	407
31							777.4	0.000	0.000	0.021	0.021	1397						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	991.7	0.000	0.000	0.027	0.027	2480	427.0	0.000	0.000	0.022	0.022	881	476.0	0.000	0.000	0.023	0.023	1013
<b>Ten Daily II</b>	633.1	0.000	0.000	0.028	0.028	1601	789.4	0.000	0.000	0.023	0.023	1699	341.1	0.000	0.000	0.020	0.020	584
<b>Ten Daily III</b>	454.1	0.000	0.000	0.032	0.032	1242	442.7	0.000	0.000	0.017	0.017	692	602.2	0.000	0.000	0.025	0.025	1366
<b>Monthly Total</b>						53230						33401						29636

## Sediment Data Year Book 2015-16

## Daily Observed Sediment Datasheet for period : 2015-2016

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	281.1	0.000	0.000	0.023	0.023	551	530.1	0.000	0.000	0.027	0.027	1217	290.5	0.000	0.000	0.018	0.018	439	
2	499.1	0.000	0.000	0.040	0.040	1737	550.8	0.000	0.000	0.028	0.028	1314	423.3	0.000	0.000	0.026	0.026	933	
3	454.4	0.000	0.000	0.037	0.037	1440	493.8	0.000	0.000	0.025	0.025	1056	381.0	0.000	0.000	0.023	0.023	756	
4	530.4	0.000	0.000	0.043	0.043	1962	380.4	0.000	0.000	0.020	0.020	648	345.1	0.000	0.000	0.021	0.021	620	
5	530.0	0.000	0.000	0.019	0.019	847	340.7	0.000	0.000	0.018	0.018	519	331.9	0.000	0.000	0.020	0.020	573	
6	634.5	0.000	0.000	0.022	0.022	1214	525.3	0.000	0.000	0.027	0.027	1235	403.4	0.000	0.000	0.024	0.024	847	
7	637.1	0.000	0.000	0.018	0.018	980	400.2	0.000	0.000	0.021	0.021	717	416.9	0.000	0.000	0.025	0.025	905	
8	515.3	0.000	0.000	0.014	0.014	641	359.6	0.000	0.000	0.019	0.019	579	339.5	0.000	0.000	0.015	0.015	440	
9	685.8	0.000	0.000	0.019	0.019	1135	316.6	0.000	0.000	0.016	0.016	448	355.0	0.000	0.000	0.016	0.016	481	
10	640.4	0.000	0.000	0.018	0.018	990	362.9	0.000	0.000	0.019	0.019	589	353.4	0.000	0.000	0.016	0.016	477	
11	595.5	0.000	0.000	0.017	0.017	856	341.2	0.000	0.000	0.014	0.014	407	345.8	0.000	0.000	0.015	0.015	456	
12	544.8	0.000	0.000	0.015	0.015	716	243.9	0.000	0.000	0.010	0.010	208	356.1	0.000	0.000	0.016	0.016	484	
13	525.4	0.000	0.000	0.015	0.015	666	253.4	0.000	0.000	0.010	0.010	224	971.6	0.000	0.000	0.043	0.043	3604	
14	353.0	0.000	0.000	0.017	0.017	518	319.1	0.000	0.000	0.013	0.013	356	890.4	0.000	0.000	0.039	0.039	3026	
15	339.0	0.000	0.000	0.016	0.016	478	340.7	0.000	0.000	0.014	0.014	406	954.5	0.000	0.000	0.018	0.018	1443	
16	383.8	0.000	0.000	0.018	0.018	613	334.9	0.000	0.000	0.014	0.014	392	519.1	0.000	0.000	0.010	0.010	427	
17	454.0	0.000	0.000	0.022	0.022	858	215.3	0.000	0.000	0.009	0.009	162	252.7	0.000	0.000	0.005	0.005	101	
18	468.3	0.000	0.000	0.023	0.023	912	288.0	0.000	0.000	0.014	0.014	356	417.3	0.000	0.000	0.008	0.008	276	
19	475.9	0.000	0.000	0.023	0.023	942	215.5	0.000	0.000	0.011	0.011	199	562.5	0.000	0.000	0.010	0.010	501	
20	384.0	0.000	0.000	0.018	0.018	614	280.2	0.000	0.000	0.014	0.014	337	554.5	0.000	0.000	0.010	0.010	487	
21	421.6	0.000	0.000	0.020	0.020	718	613.9	0.000	0.000	0.030	0.030	1617	439.7	0.000	0.000	0.008	0.008	306	
22	418.3	0.000	0.000	0.020	0.020	706	342.8	0.000	0.000	0.017	0.017	504	466.7	0.000	0.000	0.016	0.016	645	
23	434.7	0.000	0.000	0.020	0.020	763	525.3	0.000	0.000	0.026	0.026	1184	673.6	0.000	0.000	0.023	0.023	1344	
24	400.2	0.000	0.000	0.019	0.019	647	641.8	0.000	0.000	0.032	0.032	1767	530.7	0.000	0.000	0.018	0.018	834	
25	439.7	0.000	0.000	0.021	0.021	781	721.4	0.000	0.000	0.012	0.012	748	394.3	0.000	0.000	0.014	0.014	461	
26	470.4	0.000	0.000	0.022	0.022	893	899.2	0.000	0.000	0.015	0.015	1162	253.9	0.000	0.000	0.009	0.009	191	
27	422.5	0.000	0.000	0.020	0.020	721	672.4	0.000	0.000	0.011	0.011	650	221.5	0.000	0.000	0.008	0.008	145	
28	353.0	0.000	0.000	0.018	0.018	540	620.4	0.000	0.000	0.010	0.010	553	272.4	0.000	0.000	0.009	0.009	220	
29	395.9	0.000	0.000	0.020	0.020	679	449.7	0.000	0.000	0.007	0.007	291	444.1	0.000	0.000	0.017	0.017	652	
30	555.7	0.000	0.000	0.028	0.028	1338	515.2	0.000	0.000	0.009	0.009	381							
31	653.9	0.000	0.000	0.033	0.033	1853	411.3	0.000	0.000	0.007	0.007	243							
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	540.8	0.000	0.000	0.025	0.025	1150	426.0	0.000	0.000	0.022	0.022	832	364.0	0.000	0.000	0.020	0.020	647	
<b>Ten Daily II</b>	452.4	0.000	0.000	0.018	0.018	717	283.2	0.000	0.000	0.012	0.012	305	582.5	0.000	0.000	0.017	0.017	1081	
<b>Ten Daily III</b>	451.5	0.000	0.000	0.022	0.022	876	583.0	0.000	0.000	0.016	0.016	827	410.8	0.000	0.000	0.014	0.014	533	
<b>Monthly Total</b>						28309						20469						22075	

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	400.6	0.000	0.000	0.015	0.015	531	545.2	0.000	0.000	0.030	0.030	1390	571.6	0.000	0.000	0.014	0.014	697
2	295.0	0.000	0.000	0.011	0.011	288	672.7	0.000	0.000	0.036	0.036	2116	554.8	0.000	0.000	0.018	0.018	863
3	414.9	0.000	0.000	0.016	0.016	569	304.0	0.000	0.000	0.016	0.016	432	555.1	0.000	0.000	0.018	0.018	864
4	430.6	0.000	0.000	0.016	0.016	613	262.7	0.000	0.000	0.018	0.018	397	555.4	0.000	0.000	0.018	0.018	865
5	328.2	0.000	0.000	0.013	0.013	356	681.1	0.000	0.000	0.045	0.045	2670	557.1	0.000	0.000	0.018	0.018	870
6	890.4	0.000	0.000	0.034	0.034	2622	428.6	0.000	0.000	0.029	0.029	1057	554.2	0.000	0.000	0.018	0.018	861
7	944.6	0.000	0.000	0.021	0.021	1730	422.5	0.000	0.000	0.028	0.028	1028	554.2	0.000	0.000	0.018	0.018	861
8	944.0	0.000	0.000	0.021	0.021	1728	559.0	0.000	0.000	0.037	0.037	1798	578.4	0.000	0.000	0.019	0.019	938
9	940.8	0.000	0.000	0.021	0.021	1716	342.1	0.000	0.000	0.023	0.023	674	570.1	0.000	0.000	0.017	0.017	847
10	854.2	0.000	0.000	0.019	0.019	1415	337.6	0.000	0.000	0.022	0.022	656	568.5	0.000	0.000	0.017	0.017	843
11	835.0	0.000	0.000	0.019	0.019	1352	327.6	0.000	0.000	0.019	0.019	532	567.4	0.000	0.000	0.017	0.017	839
12	568.0	0.000	0.000	0.013	0.013	626	622.8	0.000	0.000	0.036	0.036	1923	569.4	0.000	0.000	0.017	0.017	845
13	400.2	0.000	0.000	0.009	0.009	311	485.1	0.000	0.000	0.028	0.028	1167	568.9	0.000	0.000	0.017	0.017	844
14	225.7	0.000	0.000	0.019	0.019	361	342.6	0.000	0.000	0.020	0.020	582	568.2	0.000	0.000	0.017	0.017	842
15	328.8	0.000	0.000	0.027	0.027	766	678.6	0.000	0.000	0.039	0.039	2283	578.4	0.000	0.000	0.017	0.017	872
16	202.4	0.000	0.000	0.017	0.017	290	554.6	0.000	0.000	0.032	0.032	1525	578.0	0.000	0.000	0.016	0.016	799
17	234.9	0.000	0.000	0.019	0.019	391	571.6	0.000	0.000	0.033	0.033	1620	579.4	0.000	0.000	0.016	0.016	803
18	343.5	0.000	0.000	0.028	0.028	836	563.9	0.000	0.000	0.015	0.015	731	577.8	0.000	0.000	0.016	0.016	798
19	346.0	0.000	0.000	0.028	0.028	848	555.0	0.000	0.000	0.015	0.015	708	577.8	0.000	0.000	0.016	0.016	798
20	487.6	0.000	0.000	0.040	0.040	1684	571.6	0.000	0.000	0.015	0.015	751	578.7	0.000	0.000	0.016	0.016	801
21	342.6	0.000	0.000	0.017	0.017	509	208.7	0.000	0.000	0.006	0.006	100	592.2	0.000	0.000	0.016	0.016	839
22	554.3	0.000	0.000	0.028	0.028	1333	191.7	0.000	0.000	0.005	0.005	84	592.2	0.000	0.000	0.016	0.016	839
23	420.8	0.000	0.000	0.021	0.021	768	555.1	0.000	0.000	0.015	0.015	708	588.8	0.000	0.000	0.018	0.018	916
24	462.1	0.000	0.000	0.023	0.023	926	571.6	0.000	0.000	0.015	0.015	751	537.0	0.000	0.000	0.016	0.016	762
25	215.3	0.000	0.000	0.011	0.011	201	554.5	0.000	0.000	0.014	0.014	656	578.3	0.000	0.000	0.018	0.018	883
26	245.1	0.000	0.000	0.012	0.012	261	553.0	0.000	0.000	0.014	0.014	653	361.9	0.000	0.000	0.011	0.011	346
27	255.2	0.000	0.000	0.013	0.013	283	553.5	0.000	0.000	0.014	0.014	654	199.9	0.000	0.000	0.006	0.006	106
28	354.8	0.000	0.000	0.019	0.019	589	554.6	0.000	0.000	0.014	0.014	657	166.4	0.000	0.000	0.005	0.005	73
29	255.5	0.000	0.000	0.014	0.014	305	554.2	0.000	0.000	0.014	0.014	656	53.50	0.000	0.000	0.002	0.002	8
30	538.1	0.000	0.000	0.029	0.029	1354	554.6	0.000	0.000	0.014	0.014	657	138.9	0.000	0.000	0.018	0.018	216
31	535.1	0.000	0.000	0.029	0.029	1339							706.8	0.000	0.000	0.092	0.092	5594
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	644.3	0.000	0.000	0.019	0.019	1157	455.6	0.000	0.000	0.028	0.028	1222	562.0	0.000	0.000	0.018	0.018	851
<b>Ten Daily II</b>	397.2	0.000	0.000	0.022	0.022	746	527.3	0.000	0.000	0.025	0.025	1182	574.4	0.000	0.000	0.017	0.017	824
<b>Ten Daily III</b>	379.9	0.000	0.000	0.020	0.020	715	485.2	0.000	0.000	0.012	0.012	558	410.5	0.000	0.000	0.020	0.020	962
<b>Monthly Total</b>						26898						29615						27330

## Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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

Sediment Data Year Book 2015-16

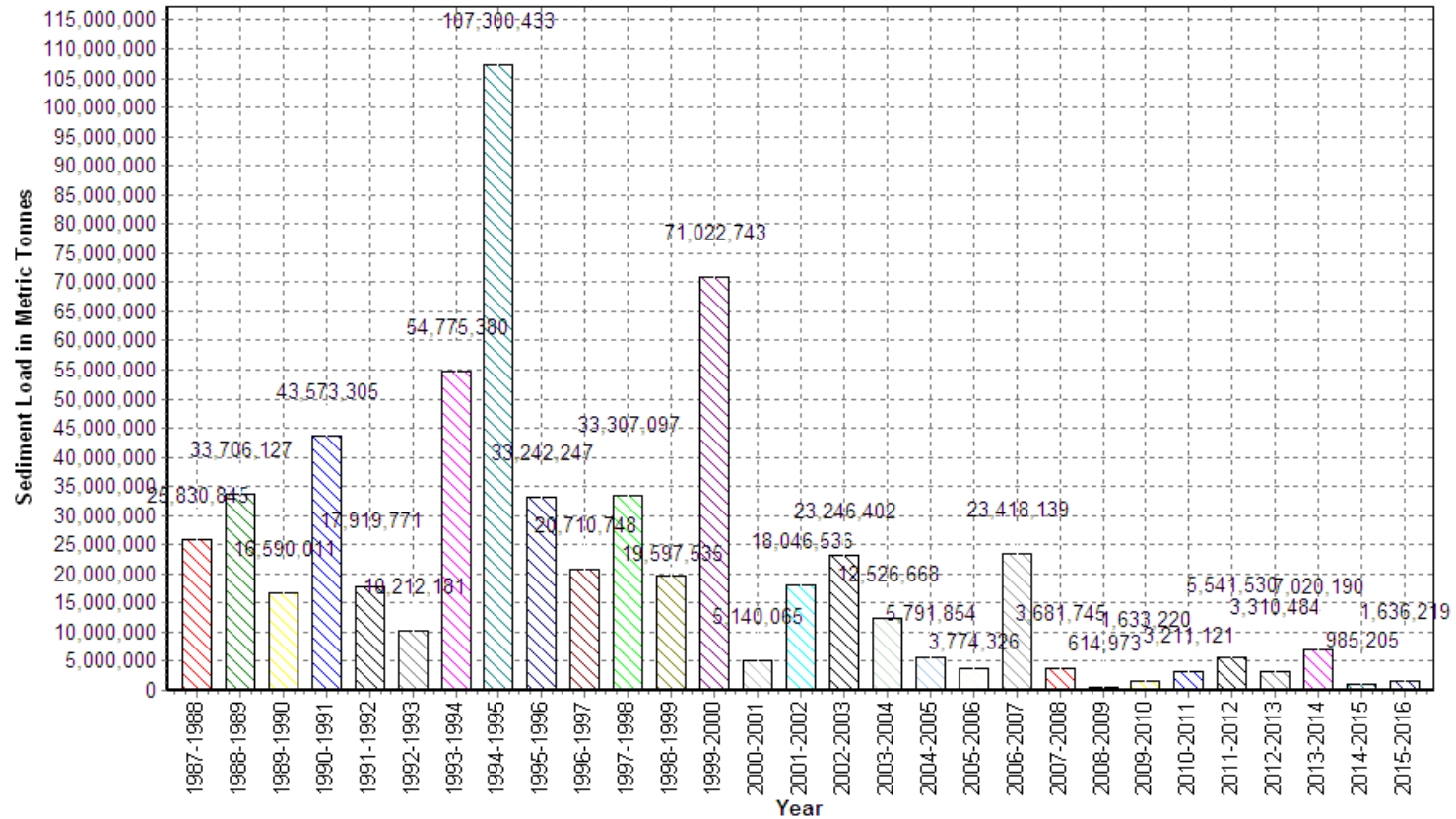
**Annual Sediment Load for period : 1987-2016**

Station Name : Narmada at Mandleshwar ( 010215026)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-III, Indore



Sediment Data Year Book 2015-16

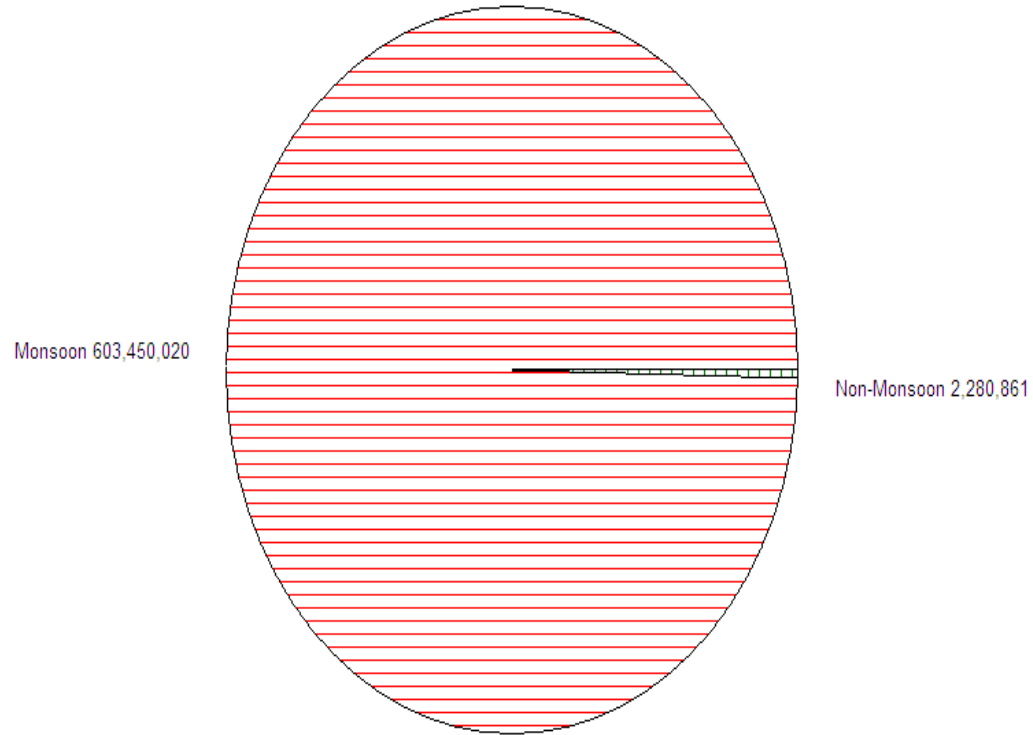
**Seasonal Sediment Load for the period : 1987-2016**

Station Name : Narmada at Mandleshwar ( 010215026)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore



Sediment Data Year Book 2015-16

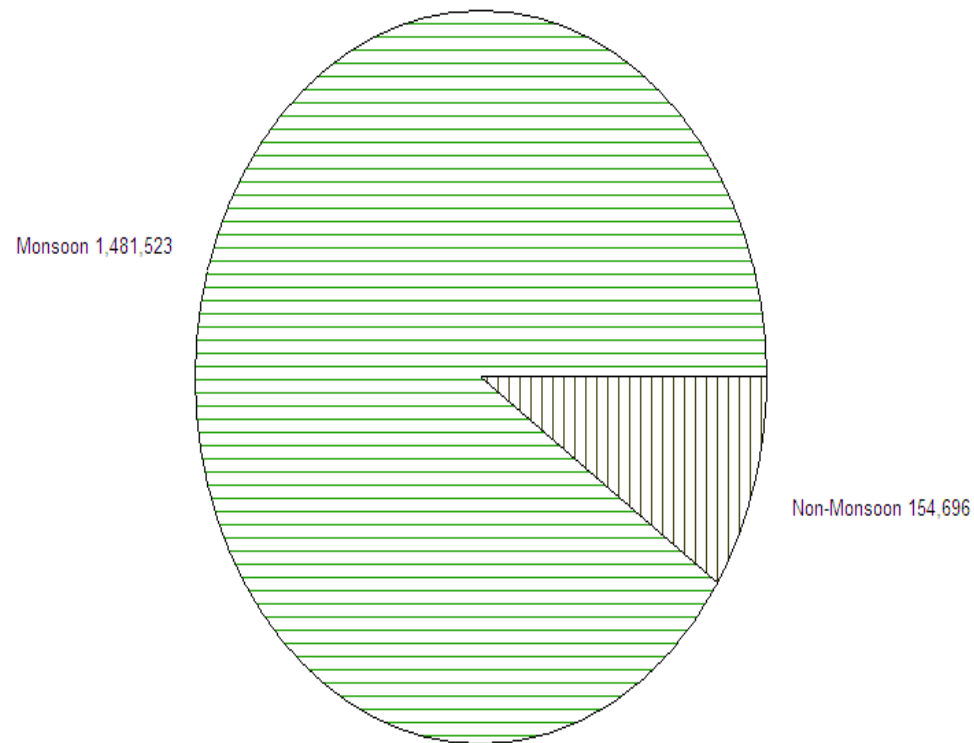
**Seasonal Sediment Load for the period : 2015-2016**

Station Name : Narmada at Mandleshwar ( 010215026)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore





**6.4 Narmada at Handia****History Sheet**

		<b>Water Year</b>	: 2015-2016
<b>Site</b>	: Narmada at Handia	<b>Code</b>	: 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	: MNSD-II, Bhopal
Drainage Area	: 54027 Sq. Km.	Bank	: Left
Latitude	: 22°29'25"	Longitude	: 76°59'37"
<b>Zero of Gauge (m)</b>	: 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 2015-16

## Daily Observed Sediment Datasheet for period : 2015-2016

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	162.0	0.000	0.000	0.030	0.030	420	98.10	0.000	0.000	0.036	0.036	307	478.0	0.003	0.008	0.148	0.159	6546	
2	172.0	0.000	0.000	0.032	0.032	473	111.0	0.000	0.000	0.035	0.035	336	381.5	0.002	0.006	0.118	0.127	4169	
3	180.0	0.000	0.000	0.033	0.033	518	121.0	0.000	0.000	0.036	0.036	371	279.0	0.002	0.005	0.086	0.093	2230	
4	189.0	0.000	0.000	0.035	0.035	572	124.8	0.000	0.000	0.037	0.037	395	372.0	0.002	0.008	0.149	0.159	5101	
5	180.0	0.000	0.000	0.033	0.033	518	122.3	0.000	0.000	0.036	0.036	379	485.2	0.007	0.110	0.493	0.610	255521	
6	172.0	0.000	0.000	0.032	0.032	473	119.0	0.000	0.000	0.039	0.039	399	3821	0.007	0.011	0.491	0.510	168186	
7	256.8	0.000	0.000	0.048	0.048	1055	122.3	0.000	0.000	0.040	0.040	421	2588	0.007	0.012	0.491	0.510	114053	
8	170.0	0.000	0.000	0.075	0.075	1102	112.0	0.000	0.000	0.035	0.035	339	1932	0.005	0.009	0.367	0.381	63567	
9	170.0	0.000	0.000	0.075	0.075	1102	111.0	0.000	0.000	0.038	0.038	360	1700	0.005	0.008	0.323	0.335	49192	
10	180.0	0.000	0.000	0.079	0.079	1235	122.0	0.000	0.000	0.045	0.045	474	3342	0.007	0.013	0.495	0.515	148685	
11	187.0	0.000	0.000	0.083	0.083	1333	124.8	0.000	0.000	0.046	0.046	496	2077	0.006	0.013	0.505	0.524	93990	
12	183.0	0.000	0.000	0.081	0.081	1277	1853	0.006	0.008	0.255	0.269	43096	3067	0.008	0.013	0.505	0.526	139452	
13	180.0	0.000	0.000	0.079	0.079	1235	2141	0.007	0.009	0.295	0.311	57537	3854	0.010	0.016	0.508	0.534	177628	
14	256.8	0.000	0.000	0.113	0.113	2514	1060	0.006	0.012	0.160	0.178	16302	2279	0.008	0.013	0.503	0.524	103141	
15	167.0	0.000	0.000	0.030	0.030	433	723.5	0.004	0.008	0.109	0.121	7595	3363	0.012	0.020	0.742	0.773	224594	
16	132.0	0.000	0.000	0.035	0.035	399	560.0	0.003	0.009	0.150	0.162	7838	3758	0.013	0.022	0.829	0.864	280467	
17	106.0	0.000	0.000	0.035	0.035	321	362.0	0.002	0.008	0.148	0.158	4926	2916	0.007	0.013	0.510	0.530	133392	
18	93.80	0.000	0.000	0.034	0.034	276	294.3	0.002	0.007	0.120	0.128	3256	1942	0.005	0.008	0.340	0.353	59183	
19	93.60	0.000	0.000	0.034	0.034	275	306.1	0.002	0.007	0.125	0.133	3522	2478	0.007	0.012	0.496	0.516	110370	
20	92.90	0.000	0.000	0.035	0.035	281	4678	0.006	0.010	0.491	0.507	204979	1767	0.008	0.013	0.493	0.514	78430	
21	211.9	0.000	0.000	0.080	0.080	1462	5371	0.007	0.010	0.492	0.509	236222	1277	0.008	0.015	0.490	0.513	56550	
22	132.0	0.000	0.000	0.040	0.040	456	2269	0.006	0.012	0.467	0.485	94986	766.9	0.005	0.009	0.294	0.308	20394	
23	171.0	0.000	0.000	0.045	0.045	665	884.3	0.002	0.004	0.182	0.189	14427	623.5	0.004	0.007	0.239	0.250	13480	
24	420.0	0.000	0.000	0.053	0.053	1905	2928	0.008	0.015	0.603	0.625	158161	546.7	0.003	0.006	0.210	0.219	10365	
25	385.0	0.000	0.000	0.049	0.049	1620	2376	0.006	0.012	0.489	0.507	104165	475.1	0.003	0.005	0.182	0.191	7826	
26	271.5	0.000	0.000	0.034	0.034	806	1993	0.005	0.010	0.410	0.426	73282	450.7	0.003	0.005	0.173	0.181	7044	
27	108.0	0.000	0.000	0.032	0.032	299	2043	0.007	0.003	0.051	0.061	10800	422.3	0.003	0.005	0.162	0.169	6184	
28	127.4	0.000	0.000	0.030	0.030	330	1597	0.005	0.003	0.049	0.057	7822	371.0	0.003	0.009	0.175	0.187	5994	
29	112.0	0.000	0.000	0.026	0.026	255	816.2	0.005	0.035	0.048	0.088	6171	390.4	0.003	0.009	0.184	0.197	6637	
30	105.0	0.000	0.000	0.028	0.028	249	754.4	0.005	0.032	0.044	0.081	5271	557.4	0.005	0.014	0.263	0.281	13531	
31							551.0	0.004	0.002	0.046	0.052	2485	818.1	0.007	0.020	0.386	0.412	29146	
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	183.2	0.000	0.000	0.047	0.047	747	116.4	0.000	0.000	0.038	0.038	378	1975	0.005	0.019	0.316	0.340	81725	
<b>Ten Daily II</b>	149.2	0.000	0.000	0.056	0.056	834	1210	0.004	0.008	0.190	0.201	34955	2750	0.008	0.014	0.543	0.566	140065	
<b>Ten Daily III</b>	204.4	0.000	0.000	0.042	0.042	805	1962	0.005	0.013	0.262	0.280	64890	609.0	0.004	0.009	0.251	0.264	16105	
<b>Monthly Total</b>						23857						1067121						2395047	

## Sediment Data Year Book 2015-16

## Daily Observed Sediment Datasheet for period : 2015-2016

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	773.2	0.006	0.019	0.365	0.390	26036	275.2	0.001	0.002	0.162	0.164	3903	135.1	0.001	0.001	0.013	0.015	180
2	711.4	0.006	0.017	0.336	0.359	22040	271.5	0.001	0.002	0.159	0.162	3798	127.0	0.000	0.000	0.028	0.028	302
3	837.7	0.007	0.020	0.395	0.422	30559	267.8	0.001	0.002	0.157	0.160	3695	89.95	0.000	0.000	0.019	0.019	151
4	734.0	0.004	0.002	0.488	0.493	31290	260.4	0.001	0.002	0.153	0.155	3494	119.9	0.000	0.000	0.026	0.026	269
5	617.9	0.003	0.002	0.410	0.415	22173	284.0	0.001	0.002	0.170	0.173	4240	132.5	0.000	0.000	0.029	0.029	328
6	557.4	0.003	0.001	0.370	0.375	18045	270.0	0.001	0.002	0.170	0.173	4031	145.8	0.000	0.000	0.032	0.032	398
7	510.0	0.003	0.006	0.481	0.490	21600	196.0	0.001	0.002	0.180	0.183	3096	140.4	0.000	0.000	0.030	0.030	369
8	498.0	0.003	0.005	0.047	0.055	2366	221.9	0.001	0.002	0.204	0.207	3967	129.9	0.000	0.000	0.028	0.028	316
9	493.0	0.002	0.005	0.450	0.457	19466	172.0	0.001	0.002	0.018	0.020	300	146.0	0.000	0.000	0.025	0.025	315
10	403.9	0.002	0.004	0.369	0.374	13066	185.0	0.001	0.002	0.018	0.021	328	144.0	0.000	0.000	0.025	0.025	307
11	338.5	0.001	0.003	0.309	0.314	9178	267.8	0.001	0.003	0.025	0.030	687	127.4	0.000	0.000	0.022	0.022	240
12	362.0	0.002	0.004	0.438	0.444	13871	260.4	0.001	0.003	0.025	0.029	649	140.0	0.000	0.000	0.024	0.024	290
13	275.2	0.002	0.003	0.333	0.337	8018	225.3	0.001	0.002	0.021	0.025	486	145.0	0.000	0.000	0.025	0.025	311
14	284.0	0.002	0.004	0.433	0.439	10760	202.2	0.001	0.002	0.019	0.022	391	147.0	0.000	0.000	0.025	0.025	320
15	267.8	0.002	0.004	0.408	0.413	9567	168.0	0.001	0.002	0.018	0.020	296	117.4	0.000	0.000	0.020	0.020	204
16	267.8	0.002	0.004	0.408	0.413	9567	213.0	0.001	0.002	0.175	0.178	3276	142.0	0.000	0.000	0.023	0.023	276
17	267.8	0.002	0.004	0.408	0.413	9567	225.3	0.001	0.002	0.185	0.188	3664	147.0	0.000	0.000	0.023	0.023	296
18	510.0	0.001	0.004	0.435	0.440	19388	235.5	0.001	0.002	0.193	0.197	4005	117.0	0.000	0.000	0.019	0.019	187
19	381.5	0.001	0.003	0.325	0.329	10848	278.0	0.001	0.002	0.019	0.022	524	117.0	0.000	0.000	0.019	0.019	187
20	359.7	0.001	0.003	0.307	0.310	9644	246.1	0.001	0.002	0.017	0.019	410	124.8	0.000	0.000	0.020	0.020	213
21	378.0	0.002	0.004	0.434	0.440	14360	180.0	0.001	0.002	0.175	0.178	2768	129.9	0.000	0.000	0.021	0.021	231
22	344.0	0.002	0.004	0.434	0.440	13069	177.3	0.001	0.002	0.172	0.175	2686	132.5	0.000	0.000	0.021	0.021	240
23	288.0	0.001	0.003	0.433	0.437	10862	173.0	0.001	0.002	0.018	0.021	306	124.8	0.000	0.000	0.020	0.020	213
24	310.0	0.001	0.002	0.177	0.179	4805	156.9	0.001	0.002	0.016	0.019	252	143.1	0.000	0.000	0.023	0.023	280
25	294.3	0.001	0.002	0.168	0.170	4331	159.7	0.001	0.002	0.016	0.019	261	165.5	0.000	0.000	0.026	0.026	375
26	302.0	0.001	0.003	0.175	0.179	4663	140.0	0.002	0.002	0.019	0.023	275	173.0	0.000	0.000	0.026	0.026	392
27	302.1	0.001	0.003	0.175	0.179	4666	115.0	0.001	0.001	0.020	0.022	219	180.0	0.000	0.000	0.027	0.027	424
28	294.0	0.001	0.003	0.178	0.181	4603	174.3	0.002	0.002	0.030	0.033	502	166.0	0.000	0.000	0.025	0.025	361
29	298.0	0.001	0.002	0.175	0.178	4575	178.0	0.002	0.002	0.021	0.025	388	162.6	0.000	0.000	0.025	0.025	346
30	290.4	0.001	0.002	0.171	0.173	4346	210.0	0.002	0.002	0.020	0.024	435	196.0	0.000	0.000	0.028	0.028	466
31							143.1	0.001	0.001	0.014	0.016	202						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	613.6	0.004	0.008	0.371	0.383	20664	240.4	0.001	0.002	0.139	0.142	3085	131.1	0.000	0.000	0.025	0.026	294
<b>Ten Daily II</b>	331.4	0.002	0.004	0.380	0.385	11041	232.1	0.001	0.002	0.070	0.073	1439	132.5	0.000	0.000	0.022	0.022	252
<b>Ten Daily III</b>	310.1	0.001	0.003	0.252	0.256	7028	164.3	0.001	0.002	0.047	0.050	754	157.3	0.000	0.000	0.024	0.024	333
<b>Monthly Total</b>						387329						53534						8787

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	205.0	0.000	0.000	0.029	0.029	509	122.0	0.000	0.000	0.026	0.026	276	155.0	0.000	0.000	0.033	0.033	435	
2	164.0	0.000	0.000	0.023	0.023	326	120.0	0.000	0.000	0.026	0.026	267	168.4	0.000	0.000	0.035	0.035	514	
3	128.0	0.000	0.000	0.018	0.018	199	140.4	0.000	0.000	0.030	0.030	366	154.1	0.000	0.000	0.032	0.032	430	
4	168.4	0.000	0.000	0.024	0.024	344	140.4	0.000	0.000	0.030	0.030	366	150.0	0.000	0.000	0.031	0.031	408	
5	135.1	0.000	0.000	0.019	0.019	221	140.4	0.000	0.000	0.030	0.030	366	151.3	0.000	0.000	0.032	0.032	415	
6	127.4	0.000	0.000	0.018	0.018	197	154.1	0.000	0.000	0.033	0.033	441	148.5	0.000	0.000	0.031	0.031	400	
7	124.0	0.000	0.000	0.026	0.026	281	180.3	0.000	0.000	0.039	0.039	603	151.3	0.000	0.000	0.032	0.032	415	
8	151.3	0.000	0.000	0.032	0.032	418	186.4	0.000	0.000	0.040	0.040	645	152.0	0.000	0.000	0.030	0.030	394	
9	133.0	0.000	0.000	0.028	0.028	323	177.3	0.000	0.000	0.038	0.038	583	151.3	0.000	0.000	0.030	0.030	390	
10	131.0	0.000	0.000	0.028	0.028	313	168.4	0.000	0.000	0.036	0.036	526	144.0	0.000	0.000	0.028	0.028	354	
11	135.0	0.000	0.000	0.029	0.029	333	139.0	0.000	0.000	0.029	0.029	345	141.0	0.000	0.000	0.028	0.028	339	
12	132.0	0.000	0.000	0.028	0.028	318	165.5	0.000	0.000	0.034	0.034	489	140.0	0.000	0.000	0.028	0.028	334	
13	145.8	0.000	0.000	0.031	0.031	388	2141	0.000	0.000	0.442	0.442	81785	154.1	0.000	0.000	0.030	0.030	405	
14	130.0	0.000	0.000	0.028	0.028	309	152.0	0.000	0.000	0.031	0.031	412	154.1	0.000	0.000	0.030	0.030	405	
15	140.0	0.000	0.000	0.030	0.030	358	162.6	0.000	0.000	0.034	0.034	472	154.1	0.000	0.000	0.030	0.030	405	
16	146.0	0.000	0.000	0.031	0.031	390	174.3	0.000	0.000	0.036	0.036	542	151.3	0.000	0.000	0.030	0.030	390	
17	127.0	0.000	0.000	0.027	0.027	295	165.5	0.000	0.000	0.034	0.034	489	151.3	0.000	0.000	0.030	0.030	390	
18	122.0	0.000	0.000	0.026	0.026	272	154.1	0.000	0.000	0.032	0.032	424	154.0	0.000	0.000	0.030	0.030	399	
19	124.0	0.000	0.000	0.026	0.026	281	145.8	0.000	0.000	0.030	0.030	379	160.0	0.000	0.000	0.031	0.031	431	
20	137.7	0.000	0.000	0.029	0.029	347	4537	0.000	0.000	0.937	0.937	367224	162.0	0.000	0.000	0.032	0.032	442	
21	109.0	0.000	0.000	0.026	0.026	247	5371	0.000	0.000	1.109	1.109	514666	174.3	0.000	0.000	0.034	0.034	511	
22	124.8	0.000	0.000	0.030	0.030	324	195.8	0.000	0.000	0.040	0.040	684	185.0	0.000	0.000	0.032	0.032	511	
23	122.3	0.000	0.000	0.029	0.029	311	186.4	0.000	0.000	0.038	0.038	620	189.5	0.000	0.000	0.033	0.033	537	
24	119.9	0.000	0.000	0.029	0.029	298	177.3	0.000	0.000	0.037	0.037	561	162.0	0.000	0.000	0.028	0.028	392	
25	119.9	0.000	0.000	0.029	0.029	298	169.0	0.000	0.000	0.033	0.033	482	170.0	0.000	0.000	0.029	0.029	432	
26	115.0	0.000	0.000	0.028	0.028	275	165.5	0.000	0.000	0.032	0.032	462	162.0	0.000	0.000	0.028	0.028	392	
27	127.4	0.000	0.000	0.031	0.031	337	146.0	0.000	0.000	0.029	0.029	360	156.0	0.000	0.000	0.027	0.027	364	
28	127.4	0.000	0.000	0.031	0.031	337	1597	0.000	0.000	0.312	0.312	43021	162.6	0.000	0.000	0.028	0.028	395	
29	122.3	0.000	0.000	0.029	0.029	311	816.2	0.000	0.000	0.159	0.159	11240	142.0	0.000	0.000	0.030	0.030	368	
30	122.3	0.000	0.000	0.029	0.029	311	154.0	0.000	0.000	0.030	0.030	400							
31	127.4	0.000	0.000	0.031	0.031	337	171.3	0.000	0.000	0.033	0.033	495							
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	146.7	0.000	0.000	0.024	0.024	313	153.0	0.000	0.000	0.033	0.033	444	152.6	0.000	0.000	0.031	0.031	415	
<b>Ten Daily II</b>	134.0	0.000	0.000	0.028	0.028	329	793.7	0.000	0.000	0.164	0.164	45256	152.2	0.000	0.000	0.030	0.030	394	
<b>Ten Daily III</b>	121.6	0.000	0.000	0.029	0.029	308	831.8	0.000	0.000	0.168	0.168	52090	167.0	0.000	0.000	0.030	0.030	434	
<b>Monthly Total</b>						9806						1029987							11997

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

Station Name : Narmada at Handia ( 010215022)  
Bhopal Local River : Narmada

Division : Narmada Division,  
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	139.0	0.000	0.000	0.029	0.029	353	79.59	0.000	0.000	0.020	0.020	139	137.7	0.000	0.000	0.026	0.026	310
2	130.0	0.000	0.000	0.027	0.027	308	75.63	0.000	0.000	0.019	0.019	125	135.0	0.000	0.000	0.035	0.035	408
3	127.0	0.000	0.000	0.027	0.027	294	69.88	0.000	0.000	0.018	0.018	107	138.0	0.000	0.000	0.036	0.036	427
4	120.0	0.000	0.000	0.025	0.025	263	72.80	0.000	0.000	0.030	0.030	189	130.0	0.000	0.000	0.034	0.034	379
5	109.0	0.000	0.000	0.023	0.023	217	75.10	0.000	0.000	0.031	0.031	201	132.0	0.000	0.000	0.034	0.034	390
6	77.60	0.000	0.000	0.016	0.016	110	122.0	0.000	0.000	0.050	0.050	530	140.0	0.000	0.000	0.036	0.036	439
7	98.00	0.000	0.000	0.030	0.030	254	137.7	0.000	0.000	0.057	0.057	675	133.0	0.000	0.000	0.034	0.034	396
8	90.00	0.000	0.000	0.028	0.028	214	120.0	0.000	0.000	0.049	0.049	513	127.4	0.000	0.000	0.033	0.033	363
9	89.00	0.000	0.000	0.027	0.027	210	107.8	0.000	0.000	0.044	0.044	414	143.1	0.000	0.000	0.037	0.037	459
10	44.56	0.000	0.000	0.014	0.014	53	122.3	0.000	0.000	0.050	0.050	533	140.4	0.000	0.000	0.036	0.036	442
11	59.06	0.000	0.000	0.018	0.018	92	141.0	0.000	0.000	0.034	0.034	411	140.4	0.000	0.000	0.036	0.036	442
12	81.61	0.000	0.000	0.025	0.025	176	160.0	0.000	0.000	0.038	0.038	529	145.8	0.000	0.000	0.038	0.038	476
13	115.0	0.000	0.000	0.035	0.035	350	164.0	0.000	0.000	0.039	0.039	555	143.1	0.000	0.000	0.037	0.037	459
14	143.1	0.000	0.000	0.044	0.044	542	145.8	0.000	0.000	0.035	0.035	439	137.7	0.000	0.000	0.036	0.036	425
15	143.1	0.000	0.000	0.044	0.044	542	119.9	0.000	0.000	0.029	0.029	297	137.7	0.000	0.000	0.036	0.036	425
16	135.1	0.000	0.000	0.041	0.041	483	117.0	0.000	0.000	0.028	0.028	283	135.0	0.000	0.000	0.034	0.034	398
17	127.4	0.000	0.000	0.039	0.039	429	103.2	0.000	0.000	0.025	0.025	220	134.0	0.000	0.000	0.034	0.034	392
18	115.0	0.000	0.000	0.035	0.035	350	85.73	0.000	0.000	0.020	0.020	152	132.0	0.000	0.000	0.033	0.033	380
19	107.8	0.000	0.000	0.033	0.033	307	75.63	0.000	0.000	0.018	0.018	118	130.0	0.000	0.000	0.033	0.033	369
20	85.73	0.000	0.000	0.026	0.026	194	87.82	0.000	0.000	0.021	0.021	159	130.0	0.000	0.000	0.033	0.033	369
21	102.0	0.000	0.000	0.031	0.031	273	132.5	0.000	0.000	0.032	0.032	363	122.3	0.000	0.000	0.031	0.031	326
22	108.0	0.000	0.000	0.033	0.033	306	174.3	0.000	0.000	0.042	0.042	627	122.3	0.000	0.000	0.031	0.031	326
23	98.00	0.000	0.000	0.030	0.030	252	180.3	0.000	0.000	0.043	0.043	671	124.8	0.000	0.000	0.032	0.032	340
24	71.77	0.000	0.000	0.022	0.022	135	180.3	0.000	0.000	0.043	0.043	671	124.8	0.000	0.000	0.032	0.032	340
25	77.60	0.000	0.000	0.024	0.024	158	185.0	0.000	0.000	0.035	0.035	559	124.8	0.000	0.000	0.032	0.032	340
26	120.0	0.000	0.000	0.036	0.036	378	188.0	0.000	0.000	0.036	0.036	578	133.0	0.000	0.000	0.034	0.034	386
27	107.8	0.000	0.000	0.033	0.033	305	186.0	0.000	0.000	0.035	0.035	566	133.0	0.000	0.000	0.034	0.034	386
28	128.0	0.000	0.000	0.033	0.033	359	180.0	0.000	0.000	0.034	0.034	530	142.0	0.000	0.000	0.036	0.036	440
29	126.0	0.000	0.000	0.032	0.032	348	174.0	0.000	0.000	0.033	0.033	495	127.4	0.000	0.000	0.032	0.032	354
30	103.2	0.000	0.000	0.026	0.026	234	140.4	0.000	0.000	0.027	0.027	322	134.0	0.000	0.000	0.035	0.035	405
31	87.82	0.000	0.000	0.022	0.022	169							129.0	0.000	0.000	0.034	0.034	376
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	102.4	0.000	0.000	0.025	0.025	228	98.29	0.000	0.000	0.037	0.037	343	135.7	0.000	0.000	0.034	0.034	401
<b>Ten Daily II</b>	111.3	0.000	0.000	0.034	0.034	346	120.0	0.000	0.000	0.029	0.029	316	136.6	0.000	0.000	0.035	0.035	413
<b>Ten Daily III</b>	102.7	0.000	0.000	0.029	0.029	265	172.1	0.000	0.000	0.036	0.036	538	128.9	0.000	0.000	0.033	0.033	365
<b>Monthly Total</b>						8659						11970						12166

## Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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

Sediment Data Year Book 2015-16

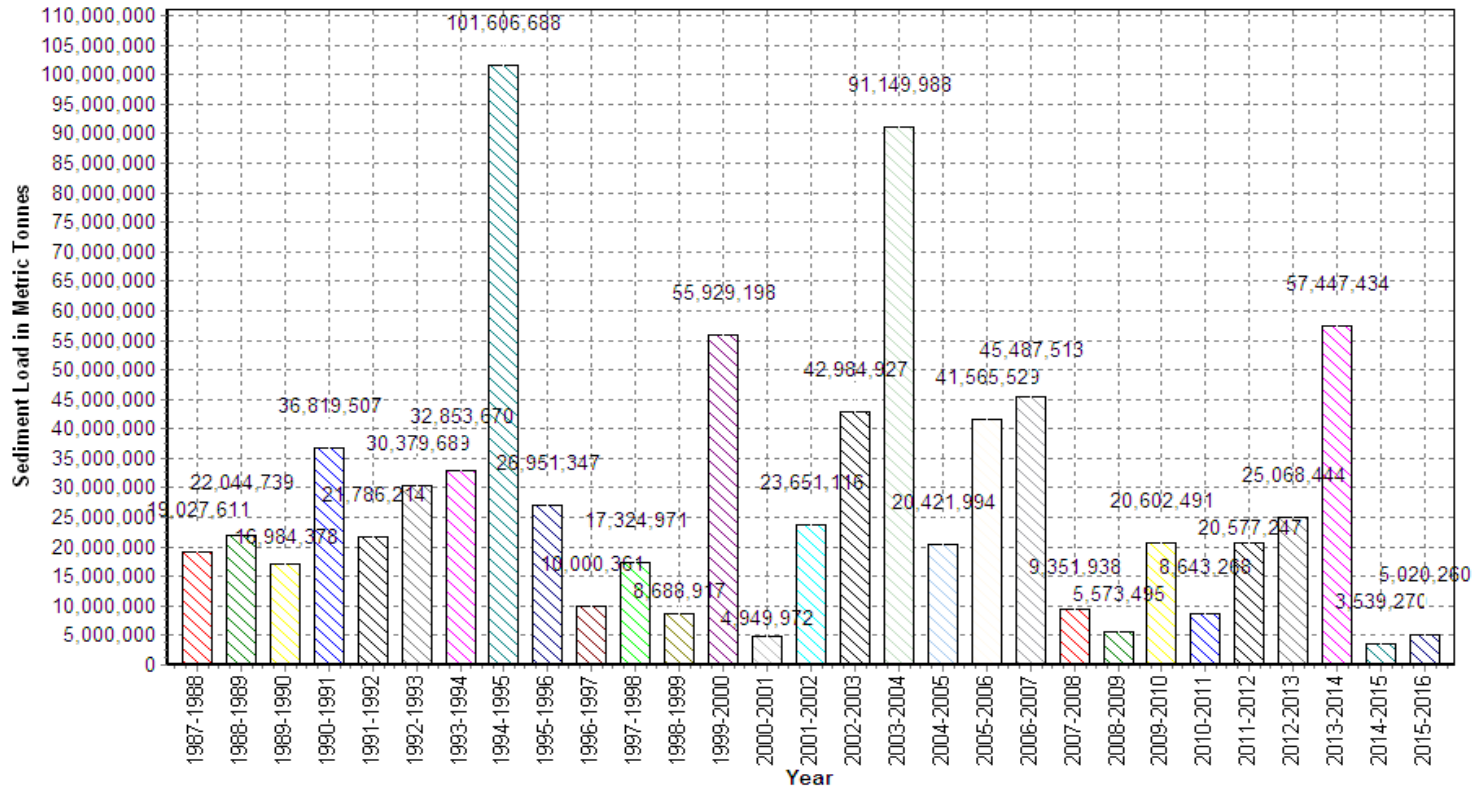
**Annual Sediment Load for period : 1987-2016**

Station Name : Narmada at Handia ( 010215022)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD II, Bhopal



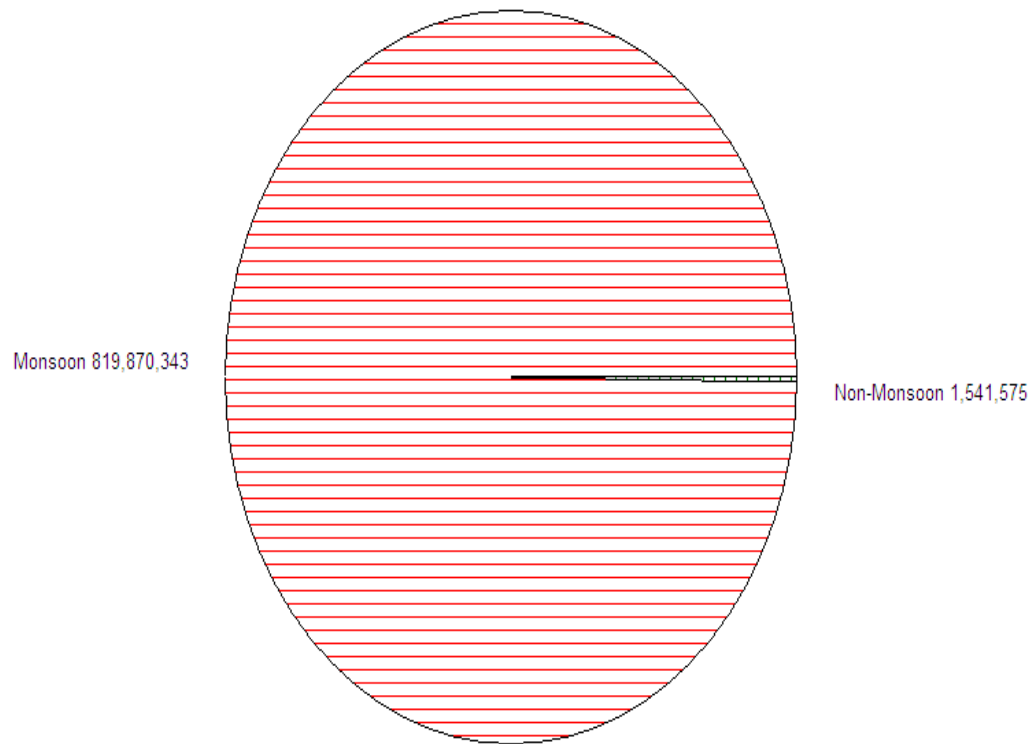
**Seasonal Sediment Load for the period : 1987-2016**

Station Name : Narmada at Handia ( 010215022)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-II, Bhopal



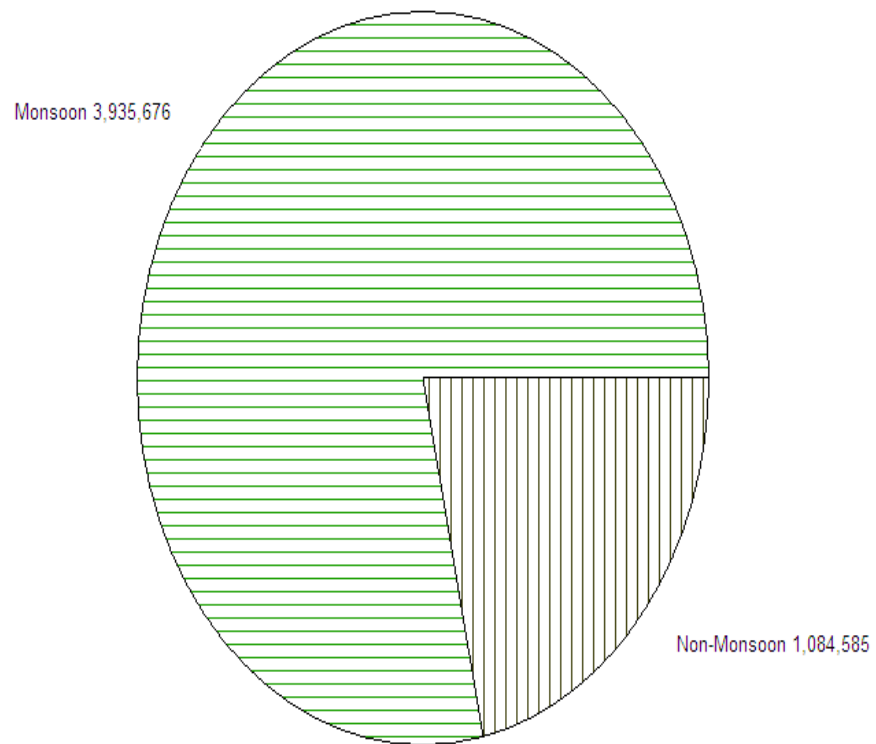
**Seasonal Sediment Load for the period : 2015-2016**

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**

		<b>Water Year</b>	<b>: 2015-2016</b>
<b>Site</b>	<b>: Narmada at Hoshangabad</b>	<b>Code</b>	<b>: 010215019</b>
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"
<b>Zero of Gauge (m)</b>	<b>: 282 .000(M.S.L.)</b>	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 2015-16

## Daily Observed Sediment Datasheet for period : 2015-2016

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	202.1	0.000	0.000	0.045	0.045	786	132.4	0.000	0.000	0.040	0.040	458	1265	0.000	0.000	0.461	0.461	50426
2	207.3	0.000	0.000	0.050	0.050	895	142.2	0.000	0.000	0.040	0.040	491	1413	0.000	0.000	0.515	0.515	62901
3	186.7	0.000	0.000	0.033	0.033	532	137.0	0.000	0.000	0.041	0.041	480	1401	0.000	0.000	0.295	0.295	35717
4	168.3	0.000	0.000	0.025	0.025	363	145.1	0.000	0.000	0.040	0.040	501	1417	0.000	0.000	0.270	0.270	33064
5	148.3	0.000	0.000	0.033	0.033	416	140.0	0.000	0.000	0.039	0.039	467	1590	0.000	0.000	1.218	1.218	167277
6	144.7	0.000	0.000	0.030	0.030	375	131.5	0.000	0.000	0.039	0.039	441	1644	0.000	0.000	0.953	0.953	135267
7	145.8	0.000	0.000	0.030	0.030	381	125.6	0.000	0.000	0.038	0.038	407	1541	0.000	0.000	0.588	0.588	78210
8	169.5	0.000	0.000	0.025	0.025	366	139.3	0.000	0.000	0.050	0.050	602	2247	0.000	0.000	0.625	0.625	121364
9	167.8	0.000	0.000	0.030	0.030	435	125.9	0.000	0.000	0.040	0.040	435	5794	0.000	0.000	1.612	1.612	806781
10	160.0	0.000	0.000	0.028	0.028	380	169.0	0.000	0.000	0.048	0.048	693	5640	0.000	0.000	0.475	0.475	231453
11	158.2	0.000	0.000	0.038	0.038	513	1782	0.000	0.000	0.525	0.525	80836	4468	0.000	0.000	0.468	0.468	180467
12	145.7	0.000	0.000	0.025	0.025	315	1754	0.000	0.000	0.517	0.517	78331	3036	0.000	0.000	0.713	0.713	186901
13	142.1	0.000	0.000	0.024	0.024	299	1209	0.000	0.000	0.525	0.525	54858	2534	0.000	0.000	0.480	0.480	105072
14	145.8	0.000	0.000	0.025	0.025	315	628.7	0.000	0.000	0.425	0.425	23085	2884	0.000	0.000	0.700	0.700	174408
15	112.4	0.000	0.000	0.030	0.030	291	451.5	0.000	0.000	0.538	0.538	20966	4132	0.000	0.000	1.003	1.003	358055
16	111.3	0.000	0.000	0.033	0.033	313	346.5	0.000	0.000	0.435	0.435	13025	3273	0.000	0.000	0.794	0.794	224671
17	113.3	0.000	0.000	0.033	0.033	318	368.6	0.000	0.000	0.438	0.438	13935	3187	0.000	0.000	0.460	0.460	126675
18	114.9	0.000	0.000	0.049	0.049	484	317.0	0.000	0.000	0.376	0.376	10305	2999	0.000	0.000	0.463	0.463	119823
19	135.0	0.000	0.000	0.045	0.045	525	366.3	0.000	0.000	0.435	0.435	13760	2360	0.000	0.000	0.425	0.425	86652
20	141.2	0.000	0.000	0.035	0.035	427	1685	0.000	0.000	2.000	2.000	291158	1584	0.000	0.000	0.360	0.360	49254
21	134.3	0.000	0.000	0.033	0.033	386	1270	0.000	0.000	0.588	0.588	64471	622.4	0.000	0.000	0.225	0.225	12100
22	128.4	0.000	0.000	0.030	0.030	333	497.7	0.000	0.000	0.460	0.460	19779	513.1	0.000	0.000	0.193	0.193	8534
23	140.2	0.000	0.000	0.045	0.045	545	450.2	0.000	0.000	0.445	0.445	17311	3013	0.000	0.000	1.130	1.130	294254
24	134.8	0.000	0.000	0.038	0.038	437	799.0	0.000	0.000	0.430	0.430	29685	1924	0.000	0.000	0.215	0.215	35731
25	153.2	0.000	0.000	0.028	0.028	371	1408	0.000	0.000	0.620	0.620	75432	1387	0.000	0.000	0.215	0.215	25770
26	130.5	0.000	0.000	0.035	0.035	395	1531	0.000	0.000	0.674	0.674	89200	1146	0.000	0.000	0.170	0.170	16836
27	129.5	0.000	0.000	0.038	0.038	419	1166	0.000	0.000	0.750	0.750	75588	1341	0.000	0.000	0.200	0.200	23170
28	123.2	0.000	0.000	0.036	0.036	380	632.6	0.000	0.000	0.593	0.593	32384	339.0	0.000	0.000	0.210	0.210	6150
29	118.3	0.000	0.000	0.038	0.038	383	512.6	0.000	0.000	0.593	0.593	26240	3805	0.000	0.000	0.200	0.200	65751
30	111.5	0.000	0.000	0.026	0.026	253	447.0	0.000	0.000	0.593	0.593	22882	3501	0.000	0.000	0.184	0.184	55663
31							342.0	0.000	0.000	0.465	0.465	13738	575.1	0.000	0.000	0.250	0.250	12423
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	170.0	0.000	0.000	0.033	0.033	493	138.8	0.000	0.000	0.041	0.041	497	2395	0.000	0.000	0.701	0.701	172246
<b>Ten Daily II</b>	132.0	0.000	0.000	0.034	0.034	380	891.0	0.000	0.000	0.621	0.621	60026	3046	0.000	0.000	0.586	0.586	161198
<b>Ten Daily III</b>	130.4	0.000	0.000	0.035	0.035	390	823.4	0.000	0.000	0.564	0.564	42428	1651	0.000	0.000	0.290	0.290	50580
<b>Monthly Total</b>						12631						1071942						3890820

## Sediment Data Year Book 2015-16

## Daily Observed Sediment Datasheet for period : 2015-2016

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	533.3	0.000	0.000	0.253	0.253	11635	186.6	0.000	0.000	0.093	0.093	1491	95.03	0.000	0.000	0.015	0.015	127
2	786.2	0.000	0.000	0.255	0.255	17322	190.1	0.000	0.000	0.094	0.094	1548	125.7	0.000	0.000	0.016	0.016	176
3	722.8	0.000	0.000	0.250	0.250	15613	174.4	0.000	0.000	0.090	0.090	1356	149.5	0.000	0.000	0.030	0.030	388
4	567.2	0.000	0.000	0.250	0.250	12252	186.7	0.000	0.000	0.096	0.096	1554	156.6	0.000	0.000	0.030	0.030	406
5	521.7	0.000	0.000	0.225	0.225	10142	166.9	0.000	0.000	0.138	0.138	1983	146.6	0.000	0.000	0.028	0.028	348
6	518.6	0.000	0.000	0.224	0.224	10022	156.3	0.000	0.000	0.088	0.088	1182	141.2	0.000	0.000	0.025	0.025	305
7	483.2	0.000	0.000	0.150	0.150	6262	161.4	0.000	0.000	0.089	0.089	1238	140.9	0.000	0.000	0.028	0.028	335
8	463.2	0.000	0.000	0.115	0.115	4602	174.9	0.000	0.000	0.090	0.090	1360	137.1	0.000	0.000	0.027	0.027	317
9	402.0	0.000	0.000	0.125	0.125	4341	210.1	0.000	0.000	0.128	0.128	2314	137.4	0.000	0.000	0.025	0.025	297
10	353.2	0.000	0.000	0.123	0.123	3754	296.2	0.000	0.000	0.103	0.103	2623	133.5	0.000	0.000	0.020	0.020	231
11	332.5	0.000	0.000	0.125	0.125	3591	200.3	0.000	0.000	0.069	0.069	1200	115.1	0.000	0.000	0.017	0.017	172
12	298.0	0.000	0.000	0.098	0.098	2510	160.2	0.000	0.000	0.088	0.088	1211	117.4	0.000	0.000	0.015	0.015	152
13	275.2	0.000	0.000	0.090	0.090	2141	165.5	0.000	0.000	0.085	0.085	1215	115.0	0.000	0.000	0.015	0.015	149
14	260.4	0.000	0.000	0.125	0.125	2813	172.4	0.000	0.000	0.100	0.100	1489	112.1	0.000	0.000	0.015	0.015	145
15	301.2	0.000	0.000	0.150	0.150	3903	197.1	0.000	0.000	0.083	0.083	1405	102.3	0.000	0.000	0.014	0.014	121
16	261.4	0.000	0.000	0.135	0.135	3049	209.0	0.000	0.000	0.110	0.110	1986	117.6	0.000	0.000	0.016	0.016	166
17	232.6	0.000	0.000	0.120	0.120	2414	216.9	0.000	0.000	0.123	0.123	2296	114.6	0.000	0.000	0.015	0.015	149
18	208.5	0.000	0.000	0.135	0.135	2433	251.5	0.000	0.000	0.142	0.142	3087	112.0	0.000	0.000	0.014	0.014	133
19	305.3	0.000	0.000	0.198	0.198	5214	211.6	0.000	0.000	0.095	0.095	1737	120.0	0.000	0.000	0.012	0.012	1244
20	279.2	0.000	0.000	0.181	0.181	4362	169.7	0.000	0.000	0.060	0.060	880	86.01	0.000	0.000	0.086	0.086	639
21	277.1	0.000	0.000	0.128	0.128	3053	145.7	0.000	0.000	0.028	0.028	346	112.8	0.000	0.000	0.018	0.018	170
22	218.9	0.000	0.000	0.120	0.120	2269	134.3	0.000	0.000	0.025	0.025	294	109.9	0.000	0.000	0.017	0.017	162
23	221.4	0.000	0.000	0.120	0.120	2296	135.4	0.000	0.000	0.018	0.018	205	145.5	0.000	0.000	0.025	0.025	314
24	255.5	0.000	0.000	0.143	0.143	3146	123.2	0.000	0.000	0.016	0.016	169	139.7	0.000	0.000	0.023	0.023	272
25	236.3	0.000	0.000	0.132	0.132	2691	117.8	0.000	0.000	0.015	0.015	155	137.1	0.000	0.000	0.022	0.022	262
26	221.7	0.000	0.000	0.125	0.125	2394	123.9	0.000	0.000	0.015	0.015	161	147.3	0.000	0.000	0.013	0.013	168
27	228.9	0.000	0.000	0.129	0.129	2552	111.1	0.000	0.000	0.018	0.018	168	140.0	0.000	0.000	0.015	0.015	181
28	211.3	0.000	0.000	0.100	0.100	1826	108.7	0.000	0.000	0.018	0.018	164	144.9	0.000	0.000	0.015	0.015	188
29	197.5	0.000	0.000	0.095	0.095	1621	122.6	0.000	0.000	0.018	0.018	185	161.0	0.000	0.000	0.017	0.017	232
30	194.0	0.000	0.000	0.090	0.090	1508	122.1	0.000	0.000	0.018	0.018	185	151.6	0.000	0.000	0.013	0.013	164
31							107.5	0.000	0.000	0.018	0.018	163						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	535.1	0.000	0.000	0.197	0.197	9594	190.4	0.000	0.000	0.101	0.101	1665	136.4	0.000	0.000	0.024	0.024	293
<b>Ten Daily II</b>	275.4	0.000	0.000	0.136	0.136	3243	195.4	0.000	0.000	0.095	0.095	1651	111.2	0.000	0.000	0.033	0.033	307
<b>Ten Daily III</b>	226.2	0.000	0.000	0.118	0.118	2335	122.9	0.000	0.000	0.019	0.019	200	139.0	0.000	0.000	0.018	0.018	211
<b>Monthly Total</b>						151728						35350						8111

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	145.0	0.000	0.000	0.012	0.012	150	121.9	0.000	0.000	0.019	0.019	196	168.6	0.000	0.000	0.019	0.019	281	
2	117.1	0.000	0.000	0.010	0.010	98	125.0	0.000	0.000	0.019	0.019	206	169.2	0.000	0.000	0.019	0.019	283	
3	111.2	0.000	0.000	0.009	0.009	88	109.9	0.000	0.000	0.017	0.017	159	169.1	0.000	0.000	0.019	0.019	283	
4	97.57	0.000	0.000	0.010	0.010	84	127.2	0.000	0.000	0.010	0.010	110	168.7	0.000	0.000	0.019	0.019	282	
5	110.2	0.000	0.000	0.011	0.011	108	154.4	0.000	0.000	0.012	0.012	162	168.6	0.000	0.000	0.019	0.019	281	
6	128.7	0.000	0.000	0.013	0.013	147	154.9	0.000	0.000	0.012	0.012	163	166.6	0.000	0.000	0.019	0.019	275	
7	126.6	0.000	0.000	0.016	0.016	178	137.4	0.000	0.000	0.011	0.011	128	173.6	0.000	0.000	0.020	0.020	298	
8	120.3	0.000	0.000	0.015	0.015	161	130.8	0.000	0.000	0.010	0.010	116	166.4	0.000	0.000	0.018	0.018	259	
9	128.0	0.000	0.000	0.016	0.016	182	126.9	0.000	0.000	0.010	0.010	109	161.7	0.000	0.000	0.017	0.017	244	
10	129.7	0.000	0.000	0.017	0.017	187	128.7	0.000	0.000	0.010	0.010	112	159.3	0.000	0.000	0.017	0.017	237	
11	121.4	0.000	0.000	0.016	0.016	164	143.2	0.000	0.000	0.010	0.010	127	162.1	0.000	0.000	0.018	0.018	246	
12	115.9	0.000	0.000	0.015	0.015	149	152.2	0.000	0.000	0.011	0.011	144	162.0	0.000	0.000	0.018	0.018	245	
13	120.4	0.000	0.000	0.016	0.016	161	135.7	0.000	0.000	0.010	0.010	114	166.5	0.000	0.000	0.018	0.018	259	
14	129.2	0.000	0.000	0.021	0.021	231	141.0	0.000	0.000	0.010	0.010	124	173.6	0.000	0.000	0.019	0.019	282	
15	125.8	0.000	0.000	0.020	0.020	219	133.2	0.000	0.000	0.010	0.010	110	166.1	0.000	0.000	0.017	0.017	244	
16	119.8	0.000	0.000	0.019	0.019	199	137.7	0.000	0.000	0.010	0.010	118	166.2	0.000	0.000	0.017	0.017	244	
17	115.5	0.000	0.000	0.019	0.019	185	112.5	0.000	0.000	0.008	0.008	79	174.4	0.000	0.000	0.018	0.018	269	
18	115.0	0.000	0.000	0.018	0.018	183	145.4	0.000	0.000	0.011	0.011	138	176.5	0.000	0.000	0.018	0.018	275	
19	109.6	0.000	0.000	0.018	0.018	166	169.8	0.000	0.000	0.013	0.013	188	174.7	0.000	0.000	0.018	0.018	270	
20	95.03	0.000	0.000	0.015	0.015	125	184.7	0.000	0.000	0.014	0.014	223	178.3	0.000	0.000	0.018	0.018	281	
21	120.1	0.000	0.000	0.018	0.018	190	182.9	0.000	0.000	0.014	0.014	219	193.5	0.000	0.000	0.020	0.020	331	
22	126.6	0.000	0.000	0.019	0.019	211	168.6	0.000	0.000	0.013	0.013	186	197.9	0.000	0.000	0.018	0.018	299	
23	127.7	0.000	0.000	0.019	0.019	215	164.9	0.000	0.000	0.012	0.012	178	183.7	0.000	0.000	0.016	0.016	258	
24	102.3	0.000	0.000	0.016	0.016	138	167.2	0.000	0.000	0.013	0.013	183	180.7	0.000	0.000	0.016	0.016	249	
25	97.44	0.000	0.000	0.015	0.015	125	161.5	0.000	0.000	0.015	0.015	202	166.4	0.000	0.000	0.015	0.015	212	
26	115.3	0.000	0.000	0.018	0.018	175	167.2	0.000	0.000	0.015	0.015	217	164.6	0.000	0.000	0.015	0.015	207	
27	115.1	0.000	0.000	0.018	0.018	174	164.7	0.000	0.000	0.015	0.015	210	164.8	0.000	0.000	0.015	0.015	207	
28	119.5	0.000	0.000	0.018	0.018	188	169.8	0.000	0.000	0.015	0.015	224	170.4	0.000	0.000	0.015	0.015	222	
29	104.7	0.000	0.000	0.016	0.016	144	171.9	0.000	0.000	0.015	0.015	229	162.9	0.000	0.000	0.013	0.013	176	
30	104.8	0.000	0.000	0.016	0.016	145	174.1	0.000	0.000	0.016	0.016	235							
31	113.6	0.000	0.000	0.017	0.017	170	183.4	0.000	0.000	0.016	0.016	261							
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	121.4	0.000	0.000	0.013	0.013	138	131.7	0.000	0.000	0.013	0.013	146	167.2	0.000	0.000	0.019	0.019	272	
<b>Ten Daily II</b>	116.8	0.000	0.000	0.018	0.018	178	145.5	0.000	0.000	0.011	0.011	137	170.1	0.000	0.000	0.018	0.018	262	
<b>Ten Daily III</b>	113.4	0.000	0.000	0.017	0.017	170	170.6	0.000	0.000	0.014	0.014	213	176.1	0.000	0.000	0.016	0.016	240	
<b>Monthly Total</b>						5040						5171						7500	

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	158.5	0.000	0.000	0.012	0.012	167	134.6	0.000	0.000	0.011	0.011	131	183.4	0.000	0.000	0.018	0.018	293
2	142.2	0.000	0.000	0.011	0.011	134	134.8	0.000	0.000	0.011	0.011	131	178.3	0.000	0.000	0.015	0.015	231
3	137.7	0.000	0.000	0.011	0.011	126	131.4	0.000	0.000	0.011	0.011	125	175.6	0.000	0.000	0.015	0.015	224
4	135.0	0.000	0.000	0.010	0.010	121	156.4	0.000	0.000	0.014	0.014	182	178.5	0.000	0.000	0.015	0.015	232
5	130.2	0.000	0.000	0.010	0.010	112	173.9	0.000	0.000	0.015	0.015	226	175.2	0.000	0.000	0.015	0.015	223
6	125.9	0.000	0.000	0.010	0.010	105	168.5	0.000	0.000	0.015	0.015	212	175.3	0.000	0.000	0.015	0.015	223
7	130.4	0.000	0.000	0.011	0.011	118	164.7	0.000	0.000	0.014	0.014	202	172.5	0.000	0.000	0.015	0.015	216
8	138.2	0.000	0.000	0.011	0.011	133	159.9	0.000	0.000	0.014	0.014	191	183.4	0.000	0.000	0.015	0.015	244
9	164.4	0.000	0.000	0.013	0.013	188	160.1	0.000	0.000	0.014	0.014	191	178.7	0.000	0.000	0.016	0.016	239
10	185.5	0.000	0.000	0.015	0.015	239	164.1	0.000	0.000	0.014	0.014	201	180.0	0.000	0.000	0.016	0.016	243
11	208.4	0.000	0.000	0.017	0.017	302	180.8	0.000	0.000	0.022	0.022	336	186.8	0.000	0.000	0.016	0.016	262
12	211.3	0.000	0.000	0.017	0.017	311	175.9	0.000	0.000	0.021	0.021	318	178.2	0.000	0.000	0.015	0.015	238
13	225.2	0.000	0.000	0.018	0.018	353	168.5	0.000	0.000	0.020	0.020	292	175.5	0.000	0.000	0.015	0.015	231
14	188.6	0.000	0.000	0.020	0.020	326	176.9	0.000	0.000	0.021	0.021	321	173.0	0.000	0.000	0.015	0.015	224
15	183.6	0.000	0.000	0.019	0.019	309	157.9	0.000	0.000	0.019	0.019	256	183.4	0.000	0.000	0.016	0.016	252
16	174.3	0.000	0.000	0.018	0.018	278	112.1	0.000	0.000	0.013	0.013	129	175.8	0.000	0.000	0.014	0.014	213
17	169.0	0.000	0.000	0.018	0.018	262	107.4	0.000	0.000	0.013	0.013	118	173.0	0.000	0.000	0.014	0.014	206
18	143.1	0.000	0.000	0.015	0.015	188	164.9	0.000	0.000	0.012	0.012	168	175.3	0.000	0.000	0.014	0.014	211
19	141.1	0.000	0.000	0.015	0.015	182	172.0	0.000	0.000	0.012	0.012	183	178.5	0.000	0.000	0.014	0.014	219
20	140.0	0.000	0.000	0.015	0.015	180	183.4	0.000	0.000	0.013	0.013	208	178.3	0.000	0.000	0.014	0.014	219
21	140.9	0.000	0.000	0.014	0.014	170	174.9	0.000	0.000	0.013	0.013	189	190.1	0.000	0.000	0.015	0.015	249
22	131.8	0.000	0.000	0.013	0.013	149	180.4	0.000	0.000	0.013	0.013	201	190.1	0.000	0.000	0.015	0.015	249
23	160.3	0.000	0.000	0.016	0.016	221	180.2	0.000	0.000	0.013	0.013	201	172.4	0.000	0.000	0.013	0.013	194
24	164.1	0.000	0.000	0.016	0.016	231	193.5	0.000	0.000	0.014	0.014	231	170.8	0.000	0.000	0.013	0.013	190
25	145.8	0.000	0.000	0.014	0.014	183	188.6	0.000	0.000	0.019	0.019	310	180.3	0.000	0.000	0.014	0.014	212
26	136.6	0.000	0.000	0.014	0.014	160	180.4	0.000	0.000	0.018	0.018	283	175.5	0.000	0.000	0.013	0.013	201
27	134.3	0.000	0.000	0.013	0.013	155	175.4	0.000	0.000	0.018	0.018	268	175.3	0.000	0.000	0.013	0.013	200
28	131.6	0.000	0.000	0.011	0.011	125	175.9	0.000	0.000	0.018	0.018	269	172.5	0.000	0.000	0.013	0.013	194
29	131.6	0.000	0.000	0.011	0.011	125	176.2	0.000	0.000	0.018	0.018	270	183.4	0.000	0.000	0.014	0.014	219
30	129.3	0.000	0.000	0.011	0.011	121	172.5	0.000	0.000	0.017	0.017	259	178.2	0.000	0.000	0.015	0.015	231
31	130.3	0.000	0.000	0.011	0.011	123							178.4	0.000	0.000	0.015	0.015	231
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	144.8	0.000	0.000	0.011	0.011	144	154.8	0.000	0.000	0.013	0.013	179	178.1	0.000	0.000	0.015	0.015	237
<b>Ten Daily II</b>	178.4	0.000	0.000	0.017	0.017	269	160.0	0.000	0.000	0.017	0.017	233	177.8	0.000	0.000	0.015	0.015	227
<b>Ten Daily III</b>	139.7	0.000	0.000	0.013	0.013	160	179.8	0.000	0.000	0.016	0.016	248	178.8	0.000	0.000	0.014	0.014	215
<b>Monthly Total</b>						5895						6603						7013

Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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

Sediment Data Year Book 2015-16

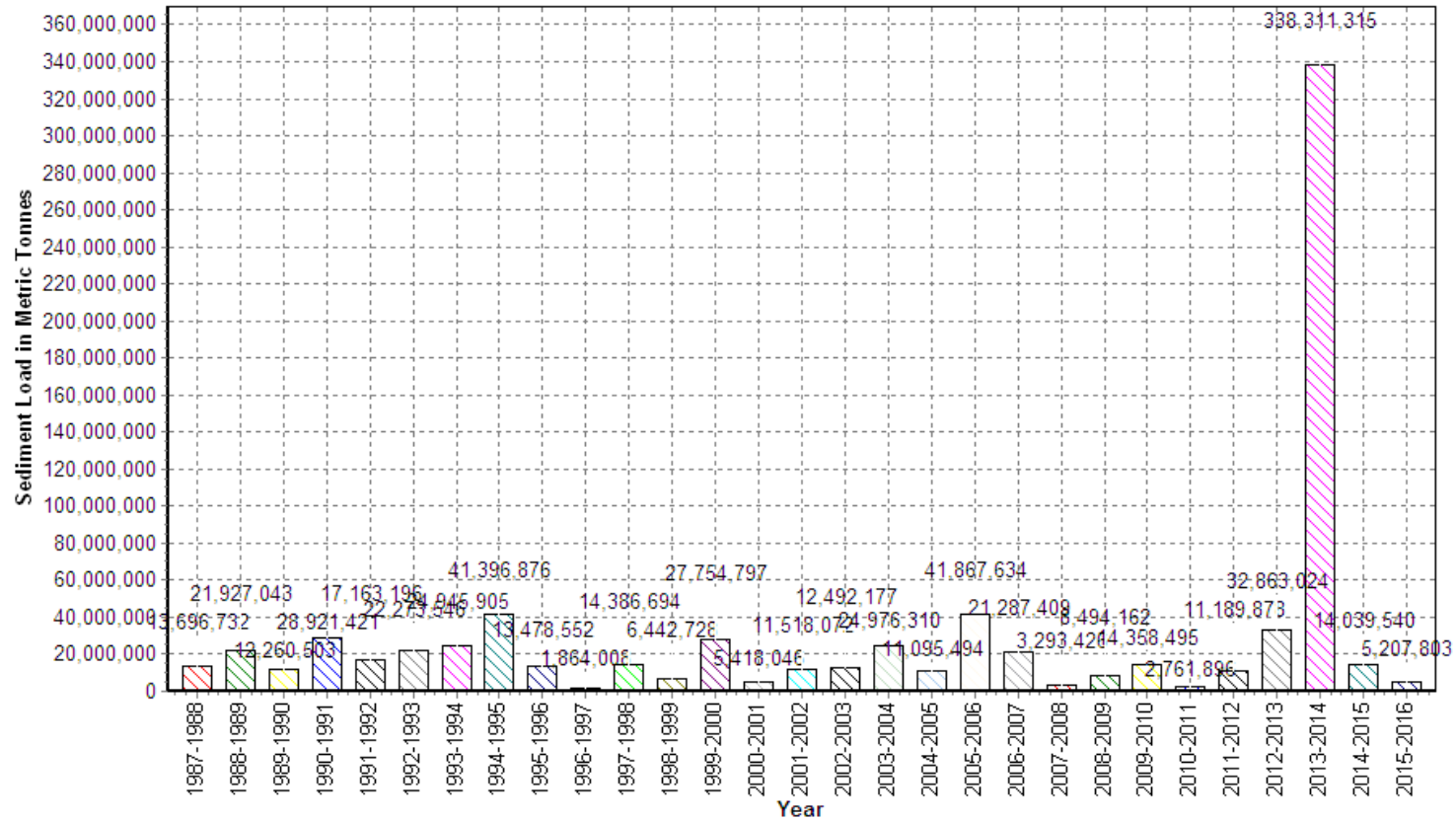
**Annual Sediment Load for period : 1987-2016**

Station Name : Narmada at Hoshangabad ( 010215019)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad





Sediment Data Year Book 2015-16

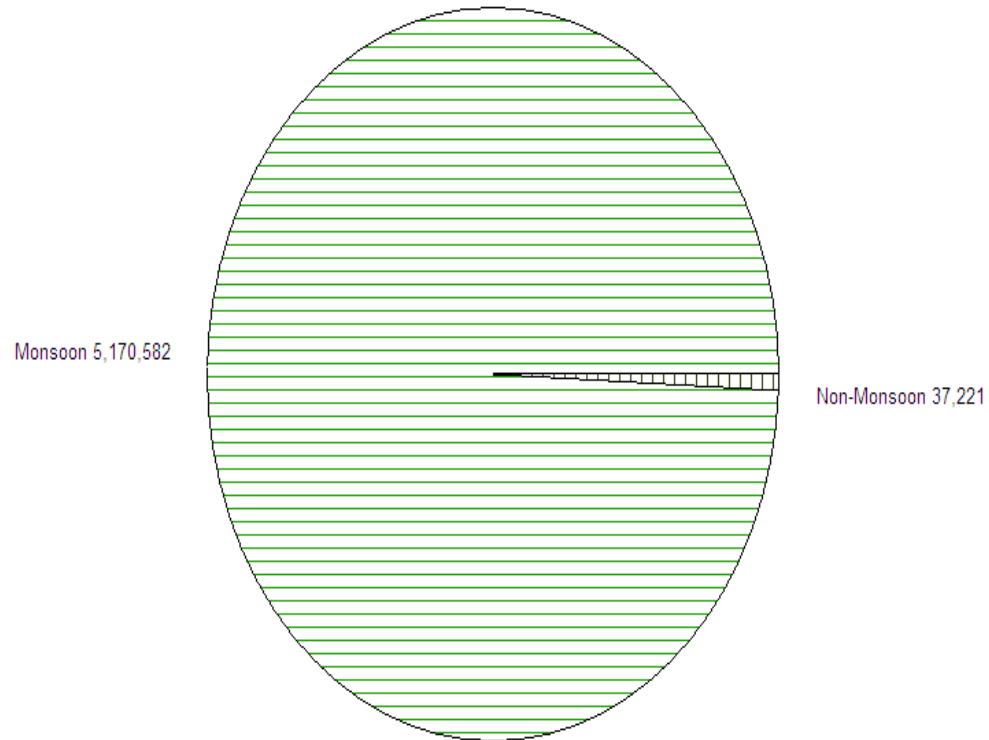
**Seasonal Sediment Load for the period : 2015-2016**

Station Name : Narmada at Hoshangabad ( 010215019)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Hoshangabad





**6.6 Narmada at Sandia****History sheet**

		<b>Water Year</b>	: <b>2015-2016</b>
<b>Site</b>	: <b>Narmada at Sandia</b>	<b>Code</b>	: <b>010215013</b>
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"
<b>Zero of Gauge (m)</b>	: 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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	187.5	0.000	0.000	0.025	0.025	405	116.5	0.000	0.000	0.048	0.048	478	191.0	0.000	0.000	0.024	0.024	396
2	169.9	0.000	0.000	0.025	0.025	367	107.2	0.000	0.000	0.043	0.043	394	165.9	0.000	0.000	0.021	0.021	299
3	141.0	0.000	0.000	0.023	0.023	274	132.0	0.000	0.000	0.045	0.045	513	187.8	0.000	0.000	0.023	0.023	365
4	105.7	0.000	0.000	0.023	0.023	206	115.6	0.000	0.000	0.045	0.045	450	620.1	0.000	0.000	0.050	0.050	2679
5	101.8	0.000	0.000	0.020	0.020	176	87.89	0.000	0.000	0.034	0.034	260	2982	0.000	0.000	0.088	0.088	22546
6	111.8	0.000	0.000	0.020	0.020	193	100.1	0.000	0.000	0.043	0.043	368	1745	0.000	0.000	0.048	0.048	7160
7	132.5	0.000	0.000	0.024	0.024	271	126.4	0.000	0.000	0.048	0.048	519	902.9	0.000	0.000	0.045	0.045	3510
8	137.9	0.000	0.000	0.023	0.023	268	107.8	0.000	0.000	0.040	0.040	372	790.8	0.000	0.000	0.050	0.050	3416
9	141.0	0.000	0.000	0.008	0.008	91	108.4	0.000	0.000	0.050	0.050	468	625.8	0.000	0.000	0.040	0.040	2139
10	138.8	0.000	0.000	0.023	0.023	270	1782	0.000	0.000	0.822	0.822	126551	685.1	0.000	0.000	0.050	0.050	2930
11	113.7	0.000	0.000	0.020	0.020	196	1200	0.000	0.000	0.554	0.554	57371	596.0	0.000	0.000	0.045	0.045	2317
12	102.1	0.000	0.000	0.020	0.020	176	1259	0.000	0.000	0.581	0.581	63182	710.5	0.000	0.000	0.090	0.090	5525
13	98.24	0.000	0.000	0.020	0.020	170	669.2	0.000	0.000	0.309	0.309	17848	957.4	0.000	0.000	0.100	0.100	8272
14	70.96	0.000	0.000	0.014	0.014	89	330.2	0.000	0.000	0.073	0.073	2068	1031	0.000	0.000	0.120	0.120	10685
15	97.56	0.000	0.000	0.020	0.020	169	261.1	0.000	0.000	0.025	0.025	564	1736	0.000	0.000	0.202	0.202	30301
16	96.65	0.000	0.000	0.020	0.020	167	268.5	0.000	0.000	0.063	0.063	1450	696.8	0.000	0.000	0.081	0.081	4883
17	102.5	0.000	0.000	0.023	0.023	199	265.4	0.000	0.000	0.058	0.058	1318	726.5	0.000	0.000	0.113	0.113	7062
18	115.6	0.000	0.000	0.023	0.023	225	240.7	0.000	0.000	0.052	0.052	1085	660.3	0.000	0.000	0.105	0.105	5990
19	105.2	0.000	0.000	0.023	0.023	209	188.8	0.000	0.000	0.041	0.041	667	656.8	0.000	0.000	0.048	0.048	2696
20	95.50	0.000	0.000	0.020	0.020	165	202.4	0.000	0.000	0.053	0.053	918	532.4	0.000	0.000	0.043	0.043	1955
21	62.15	0.000	0.000	0.013	0.013	70	222.7	0.000	0.000	0.070	0.070	1347	407.1	0.000	0.000	0.038	0.038	1319
22	80.35	0.000	0.000	0.020	0.020	139	248.1	0.000	0.000	0.073	0.073	1554	317.2	0.000	0.000	0.045	0.045	1233
23	79.67	0.000	0.000	0.027	0.027	182	328.8	0.000	0.000	0.100	0.100	2841	345.1	0.000	0.000	0.049	0.049	1460
24	102.7	0.000	0.000	0.025	0.025	222	761.5	0.000	0.000	0.232	0.232	15238	316.4	0.000	0.000	0.045	0.045	1230
25	95.64	0.000	0.000	0.025	0.025	207	765.3	0.000	0.000	0.233	0.233	15391	297.9	0.000	0.000	0.038	0.038	965
26	93.92	0.000	0.000	0.033	0.033	264	775.1	0.000	0.000	0.236	0.236	15787	227.2	0.000	0.000	0.038	0.038	736
27	100.7	0.000	0.000	0.040	0.040	348	638.0	0.000	0.000	0.194	0.194	10696	210.8	0.000	0.000	0.048	0.048	865
28	78.32	0.000	0.000	0.031	0.031	211	230.4	0.000	0.000	0.070	0.070	1395	344.0	0.000	0.000	0.078	0.078	2304
29	90.39	0.000	0.000	0.038	0.038	293	238.3	0.000	0.000	0.072	0.072	1492	584.2	0.000	0.000	0.054	0.054	2715
30	106.8	0.000	0.000	0.045	0.045	415	258.3	0.000	0.000	0.025	0.025	558	542.1	0.000	0.000	0.050	0.050	2338
31							223.4	0.000	0.000	0.025	0.025	483	584.2	0.000	0.000	0.050	0.050	2524
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	136.8	0.000	0.000	0.021	0.021	252	278.4	0.000	0.000	0.122	0.122	13037	889.6	0.000	0.000	0.044	0.044	4544
<b>Ten Daily II</b>	99.80	0.000	0.000	0.020	0.020	176	488.5	0.000	0.000	0.181	0.181	14647	830.3	0.000	0.000	0.095	0.095	7969
<b>Ten Daily III</b>	89.06	0.000	0.000	0.030	0.030	235	426.4	0.000	0.000	0.121	0.121	6071	379.6	0.000	0.000	0.048	0.048	1608
<b>Monthly Total</b>						6636						343627						142816

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	735.8	0.000	0.000	0.122	0.122	7724	177.7	0.000	0.000	0.009	0.009	134	134.8	0.000	0.000	0.048	0.048	560
2	652.2	0.000	0.000	0.180	0.180	10142	175.9	0.000	0.000	0.009	0.009	131	137.4	0.000	0.000	0.031	0.031	372
3	549.9	0.000	0.000	0.133	0.133	6329	172.4	0.000	0.000	0.008	0.008	126	131.2	0.000	0.000	0.030	0.030	339
4	547.3	0.000	0.000	0.125	0.125	5910	156.0	0.000	0.000	0.008	0.008	103	126.6	0.000	0.000	0.029	0.029	315
5	526.4	0.000	0.000	0.090	0.090	4093	144.8	0.000	0.000	0.006	0.006	73	127.2	0.000	0.000	0.029	0.029	318
6	402.4	0.000	0.000	0.069	0.069	2392	139.9	0.000	0.000	0.002	0.002	27	117.4	0.000	0.000	0.027	0.027	271
7	349.6	0.000	0.000	0.094	0.094	2846	161.1	0.000	0.000	0.008	0.008	104	116.2	0.000	0.000	0.026	0.026	266
8	289.7	0.000	0.000	0.050	0.050	1257	215.6	0.000	0.000	0.013	0.013	233	116.9	0.000	0.000	0.027	0.027	269
9	263.8	0.000	0.000	0.076	0.076	1726	236.4	0.000	0.000	0.040	0.040	817	100.9	0.000	0.000	0.014	0.014	125
10	273.3	0.000	0.000	0.025	0.025	590	194.4	0.000	0.000	0.016	0.016	272	101.5	0.000	0.000	0.014	0.014	126
11	231.1	0.000	0.000	0.040	0.040	799	148.8	0.000	0.000	0.012	0.012	159	95.85	0.000	0.000	0.014	0.014	112
12	229.2	0.000	0.000	0.068	0.068	1337	146.0	0.000	0.000	0.026	0.026	332	92.83	0.000	0.000	0.013	0.013	106
13	240.7	0.000	0.000	0.071	0.071	1474	149.7	0.000	0.000	0.024	0.024	304	101.9	0.000	0.000	0.014	0.014	127
14	219.6	0.000	0.000	0.083	0.083	1565	171.3	0.000	0.000	0.023	0.023	333	97.83	0.000	0.000	0.014	0.014	117
15	211.4	0.000	0.000	0.023	0.023	411	214.9	0.000	0.000	0.028	0.028	524	99.92	0.000	0.000	0.014	0.014	122
16	203.7	0.000	0.000	0.073	0.073	1276	221.2	0.000	0.000	0.026	0.026	487	93.86	0.000	0.000	0.016	0.016	126
17	178.5	0.000	0.000	0.064	0.064	980	222.5	0.000	0.000	0.025	0.025	481	97.85	0.000	0.000	0.016	0.016	137
18	205.0	0.000	0.000	0.030	0.030	531	218.3	0.000	0.000	0.025	0.025	463	103.2	0.000	0.000	0.017	0.017	152
19	219.0	0.000	0.000	0.043	0.043	804	168.4	0.000	0.000	0.037	0.037	543	90.60	0.000	0.000	0.015	0.015	117
20	218.3	0.000	0.000	0.042	0.042	799	123.6	0.000	0.000	0.033	0.033	347	81.67	0.000	0.000	0.013	0.013	95
21	199.7	0.000	0.000	0.040	0.040	690	115.9	0.000	0.000	0.031	0.031	313	111.8	0.000	0.000	0.060	0.060	577
22	207.7	0.000	0.000	0.033	0.033	583	104.1	0.000	0.000	0.028	0.028	253	125.7	0.000	0.000	0.067	0.067	729
23	221.3	0.000	0.000	0.045	0.045	851	110.2	0.000	0.000	0.033	0.033	309	98.12	0.000	0.000	0.008	0.008	64
24	214.4	0.000	0.000	0.020	0.020	370	102.0	0.000	0.000	0.030	0.030	265	119.6	0.000	0.000	0.009	0.009	94
25	218.3	0.000	0.000	0.020	0.020	384	99.92	0.000	0.000	0.029	0.029	254	119.0	0.000	0.000	0.009	0.009	94
26	234.4	0.000	0.000	0.022	0.022	443	86.92	0.000	0.000	0.032	0.032	242	102.5	0.000	0.000	0.008	0.008	69
27	226.6	0.000	0.000	0.021	0.021	414	90.97	0.000	0.000	0.060	0.060	473	129.7	0.000	0.000	0.010	0.010	111
28	211.3	0.000	0.000	0.020	0.020	360	111.3	0.000	0.000	0.038	0.038	366	130.7	0.000	0.000	0.010	0.010	113
29	192.4	0.000	0.000	0.018	0.018	298	108.7	0.000	0.000	0.026	0.026	244	114.7	0.000	0.000	0.009	0.009	87
30	190.3	0.000	0.000	0.038	0.038	617	90.77	0.000	0.000	0.027	0.027	213	92.66	0.000	0.000	0.003	0.003	24
31							83.17	0.000	0.000	0.030	0.030	213						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	459.0	0.000	0.000	0.096	0.096	4301	177.4	0.000	0.000	0.012	0.012	202	121.0	0.000	0.000	0.028	0.028	296
<b>Ten Daily II</b>	215.6	0.000	0.000	0.053	0.053	998	178.5	0.000	0.000	0.026	0.026	397	95.55	0.000	0.000	0.015	0.015	121
<b>Ten Daily III</b>	211.6	0.000	0.000	0.028	0.028	501	100.4	0.000	0.000	0.033	0.033	286	114.4	0.000	0.000	0.019	0.019	196
<b>Monthly Total</b>						57995						9138						6134

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

Station Name : Narmada at Sandia ( 010215013)

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	78.28	0.000	0.000	0.003	0.003	17	81.89	0.000	0.000	0.038	0.038	269	109.8	0.000	0.000	0.025	0.025	237	
2	70.08	0.000	0.000	0.002	0.002	14	91.94	0.000	0.000	0.043	0.043	339	110.6	0.000	0.000	0.025	0.025	241	
3	86.95	0.000	0.000	0.003	0.003	21	114.7	0.000	0.000	0.053	0.053	528	108.6	0.000	0.000	0.025	0.025	232	
4	100.5	0.000	0.000	0.003	0.003	28	137.8	0.000	0.000	0.043	0.043	514	102.0	0.000	0.000	0.023	0.023	205	
5	102.7	0.000	0.000	0.003	0.003	30	110.0	0.000	0.000	0.034	0.034	328	101.8	0.000	0.000	0.023	0.023	204	
6	93.84	0.000	0.000	0.003	0.003	25	98.09	0.000	0.000	0.031	0.031	261	102.5	0.000	0.000	0.023	0.023	207	
7	93.40	0.000	0.000	0.030	0.030	238	93.83	0.000	0.000	0.029	0.029	238	110.4	0.000	0.000	0.025	0.025	240	
8	96.70	0.000	0.000	0.031	0.031	255	92.43	0.000	0.000	0.029	0.029	231	96.34	0.000	0.000	0.054	0.054	452	
9	92.76	0.000	0.000	0.029	0.029	235	103.7	0.000	0.000	0.033	0.033	291	99.48	0.000	0.000	0.056	0.056	482	
10	82.12	0.000	0.000	0.026	0.026	184	125.7	0.000	0.000	0.039	0.039	428	97.17	0.000	0.000	0.055	0.055	460	
11	88.29	0.000	0.000	0.028	0.028	213	123.3	0.000	0.000	0.033	0.033	349	103.1	0.000	0.000	0.058	0.058	518	
12	105.4	0.000	0.000	0.033	0.033	303	111.8	0.000	0.000	0.030	0.030	287	104.7	0.000	0.000	0.059	0.059	534	
13	93.84	0.000	0.000	0.030	0.030	240	96.90	0.000	0.000	0.026	0.026	216	101.3	0.000	0.000	0.057	0.057	500	
14	82.60	0.000	0.000	0.038	0.038	268	95.39	0.000	0.000	0.025	0.025	209	108.3	0.000	0.000	0.061	0.061	571	
15	88.89	0.000	0.000	0.040	0.040	310	84.46	0.000	0.000	0.022	0.022	164	110.4	0.000	0.000	0.046	0.046	439	
16	84.44	0.000	0.000	0.038	0.038	280	83.71	0.000	0.000	0.022	0.022	161	110.0	0.000	0.000	0.046	0.046	436	
17	80.80	0.000	0.000	0.037	0.037	256	125.7	0.000	0.000	0.033	0.033	363	111.9	0.000	0.000	0.047	0.047	451	
18	74.96	0.000	0.000	0.034	0.034	220	125.7	0.000	0.000	0.041	0.041	443	112.7	0.000	0.000	0.047	0.047	457	
19	80.95	0.000	0.000	0.037	0.037	257	125.2	0.000	0.000	0.041	0.041	439	120.9	0.000	0.000	0.050	0.050	526	
20	104.1	0.000	0.000	0.047	0.047	425	116.4	0.000	0.000	0.038	0.038	380	129.4	0.000	0.000	0.054	0.054	603	
21	96.44	0.000	0.000	0.044	0.044	365	118.0	0.000	0.000	0.038	0.038	391	141.7	0.000	0.000	0.059	0.059	723	
22	80.78	0.000	0.000	0.037	0.037	256	113.1	0.000	0.000	0.037	0.037	359	117.8	0.000	0.000	0.031	0.031	318	
23	74.64	0.000	0.000	0.034	0.034	219	109.4	0.000	0.000	0.036	0.036	336	112.6	0.000	0.000	0.030	0.030	291	
24	82.10	0.000	0.000	0.037	0.037	264	114.7	0.000	0.000	0.037	0.037	369	108.8	0.000	0.000	0.029	0.029	272	
25	93.84	0.000	0.000	0.043	0.043	345	107.3	0.000	0.000	0.055	0.055	510	108.3	0.000	0.000	0.029	0.029	269	
26	81.99	0.000	0.000	0.037	0.037	264	119.0	0.000	0.000	0.061	0.061	627	108.9	0.000	0.000	0.029	0.029	272	
27	76.45	0.000	0.000	0.035	0.035	229	112.3	0.000	0.000	0.058	0.058	559	102.8	0.000	0.000	0.027	0.027	242	
28	68.91	0.000	0.000	0.032	0.032	191	114.2	0.000	0.000	0.059	0.059	577	84.01	0.000	0.000	0.022	0.022	162	
29	84.28	0.000	0.000	0.039	0.039	285	114.5	0.000	0.000	0.059	0.059	581	71.12	0.000	0.000	0.055	0.055	338	
30	88.33	0.000	0.000	0.041	0.041	313	111.6	0.000	0.000	0.057	0.057	551							
31	83.39	0.000	0.000	0.039	0.039	279	114.7	0.000	0.000	0.059	0.059	583							
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	89.74	0.000	0.000	0.013	0.013	105	105.0	0.000	0.000	0.037	0.037	343	103.9	0.000	0.000	0.033	0.033	296	
<b>Ten Daily II</b>	88.42	0.000	0.000	0.036	0.036	277	108.9	0.000	0.000	0.031	0.031	301	111.3	0.000	0.000	0.052	0.052	503	
<b>Ten Daily III</b>	82.83	0.000	0.000	0.038	0.038	274	113.5	0.000	0.000	0.050	0.050	495	106.2	0.000	0.000	0.035	0.035	321	
<b>Monthly Total</b>						6828						11882							10880

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	61.12	0.000	0.000	0.047	0.047	250	75.02	0.000	0.000	0.054	0.054	351	121.2	0.000	0.000	0.021	0.021	217
2	44.39	0.000	0.000	0.034	0.034	132	126.5	0.000	0.000	0.091	0.091	998	134.4	0.000	0.000	0.033	0.033	383
3	40.26	0.000	0.000	0.031	0.031	108	125.7	0.000	0.000	0.091	0.091	985	131.5	0.000	0.000	0.032	0.032	367
4	49.05	0.000	0.000	0.038	0.038	161	116.0	0.000	0.000	0.016	0.016	162	134.3	0.000	0.000	0.033	0.033	383
5	47.83	0.000	0.000	0.037	0.037	153	88.96	0.000	0.000	0.012	0.012	95	134.8	0.000	0.000	0.033	0.033	386
6	57.07	0.000	0.000	0.044	0.044	218	101.5	0.000	0.000	0.014	0.014	124	136.0	0.000	0.000	0.033	0.033	393
7	102.1	0.000	0.000	0.095	0.095	834	120.3	0.000	0.000	0.017	0.017	175	132.3	0.000	0.000	0.032	0.032	371
8	121.3	0.000	0.000	0.112	0.112	1177	124.0	0.000	0.000	0.017	0.017	186	130.2	0.000	0.000	0.032	0.032	360
9	129.5	0.000	0.000	0.120	0.120	1341	129.0	0.000	0.000	0.018	0.018	201	141.7	0.000	0.000	0.014	0.014	175
10	136.9	0.000	0.000	0.127	0.127	1499	130.2	0.000	0.000	0.018	0.018	205	134.1	0.000	0.000	0.014	0.014	157
11	132.4	0.000	0.000	0.123	0.123	1402	110.1	0.000	0.000	0.016	0.016	149	127.0	0.000	0.000	0.013	0.013	141
12	125.6	0.000	0.000	0.116	0.116	1261	85.87	0.000	0.000	0.012	0.012	91	127.5	0.000	0.000	0.013	0.013	142
13	139.4	0.000	0.000	0.129	0.129	1554	67.13	0.000	0.000	0.010	0.010	56	127.8	0.000	0.000	0.013	0.013	142
14	121.3	0.000	0.000	0.043	0.043	453	60.44	0.000	0.000	0.009	0.009	45	131.3	0.000	0.000	0.013	0.013	150
15	101.1	0.000	0.000	0.036	0.036	315	47.43	0.000	0.000	0.007	0.007	28	130.2	0.000	0.000	0.013	0.013	148
16	79.50	0.000	0.000	0.028	0.028	194	92.86	0.000	0.000	0.013	0.013	106	130.4	0.000	0.000	0.016	0.016	175
17	72.40	0.000	0.000	0.026	0.026	161	74.60	0.000	0.000	0.011	0.011	69	129.5	0.000	0.000	0.015	0.015	172
18	83.40	0.000	0.000	0.030	0.030	214	127.6	0.000	0.000	0.017	0.017	187	128.0	0.000	0.000	0.015	0.015	168
19	76.99	0.000	0.000	0.027	0.027	182	126.3	0.000	0.000	0.017	0.017	184	134.4	0.000	0.000	0.016	0.016	186
20	69.16	0.000	0.000	0.025	0.025	147	125.7	0.000	0.000	0.017	0.017	182	125.7	0.000	0.000	0.015	0.015	162
21	96.87	0.000	0.000	0.022	0.022	182	129.8	0.000	0.000	0.017	0.017	194	123.5	0.000	0.000	0.015	0.015	157
22	96.42	0.000	0.000	0.022	0.022	181	132.8	0.000	0.000	0.018	0.018	203	123.5	0.000	0.000	0.015	0.015	157
23	97.31	0.000	0.000	0.022	0.022	184	139.8	0.000	0.000	0.019	0.019	225	130.3	0.000	0.000	0.025	0.025	282
24	97.88	0.000	0.000	0.022	0.022	186	146.4	0.000	0.000	0.020	0.020	247	129.5	0.000	0.000	0.025	0.025	278
25	84.01	0.000	0.000	0.019	0.019	137	130.6	0.000	0.000	0.022	0.022	252	127.2	0.000	0.000	0.024	0.024	268
26	94.51	0.000	0.000	0.021	0.021	174	130.3	0.000	0.000	0.022	0.022	251	128.2	0.000	0.000	0.025	0.025	272
27	93.84	0.000	0.000	0.021	0.021	171	124.8	0.000	0.000	0.021	0.021	230	130.5	0.000	0.000	0.025	0.025	282
28	52.65	0.000	0.000	0.038	0.038	173	131.0	0.000	0.000	0.022	0.022	253	134.2	0.000	0.000	0.026	0.026	299
29	55.47	0.000	0.000	0.040	0.040	192	128.6	0.000	0.000	0.022	0.022	244	134.8	0.000	0.000	0.026	0.026	301
30	79.83	0.000	0.000	0.058	0.058	397	123.8	0.000	0.000	0.021	0.021	226	131.9	0.000	0.000	0.042	0.042	477
31	55.47	0.000	0.000	0.040	0.040	192							131.4	0.000	0.000	0.042	0.042	473
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	78.96	0.000	0.000	0.069	0.069	587	113.7	0.000	0.000	0.035	0.035	348	133.1	0.000	0.000	0.028	0.028	319
<b>Ten Daily II</b>	100.1	0.000	0.000	0.058	0.058	588	91.80	0.000	0.000	0.013	0.013	110	129.2	0.000	0.000	0.014	0.014	159
<b>Ten Daily III</b>	82.20	0.000	0.000	0.029	0.029	197	131.8	0.000	0.000	0.020	0.020	232	129.5	0.000	0.000	0.026	0.026	295
<b>Monthly Total</b>						13925						6902						8021

## Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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

Sediment Data Year Book 2015-16

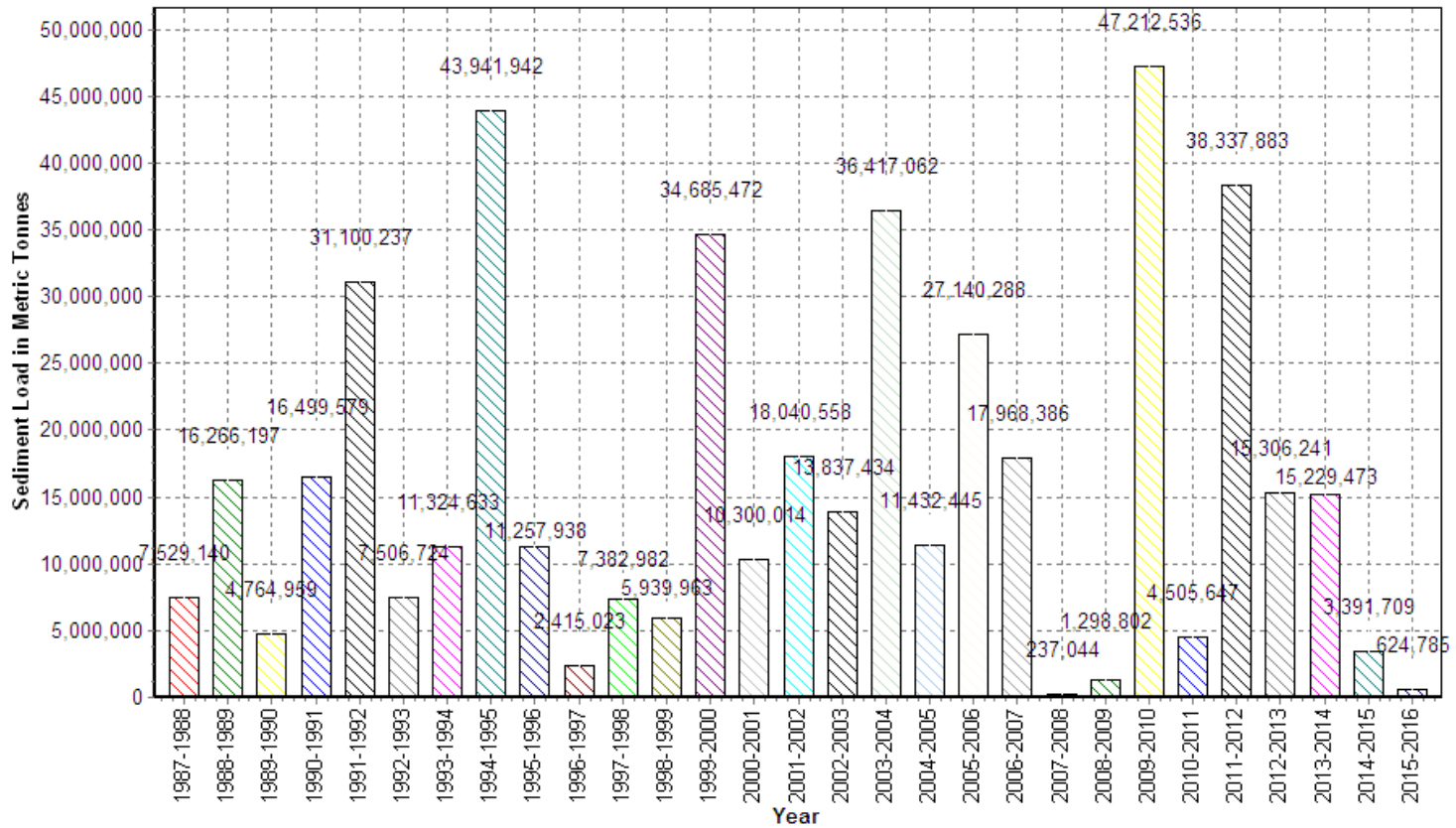
**Annual Sediment Load for period : 1987-2016**

Station Name : Narmada at Sandia ( 010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



Sediment Data Year Book 2015-16

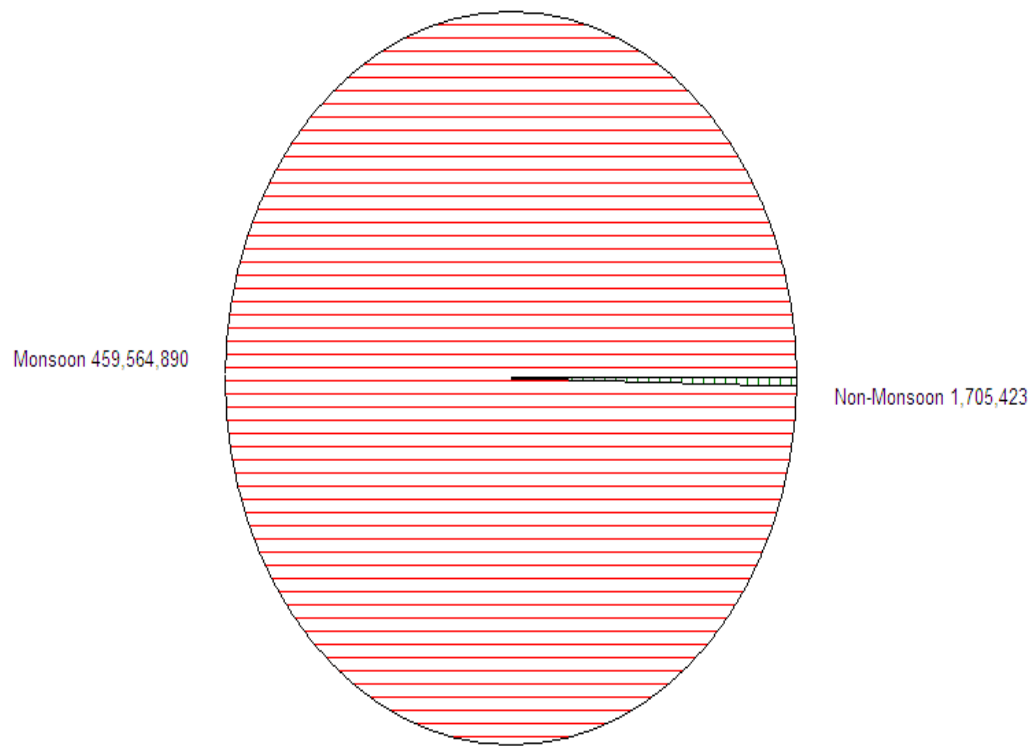
**Seasonal Sediment Load for period : 1987-2016**

Station Name : Narmada at Sandia ( 010215013)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



Sediment Data Year Book 2015-16

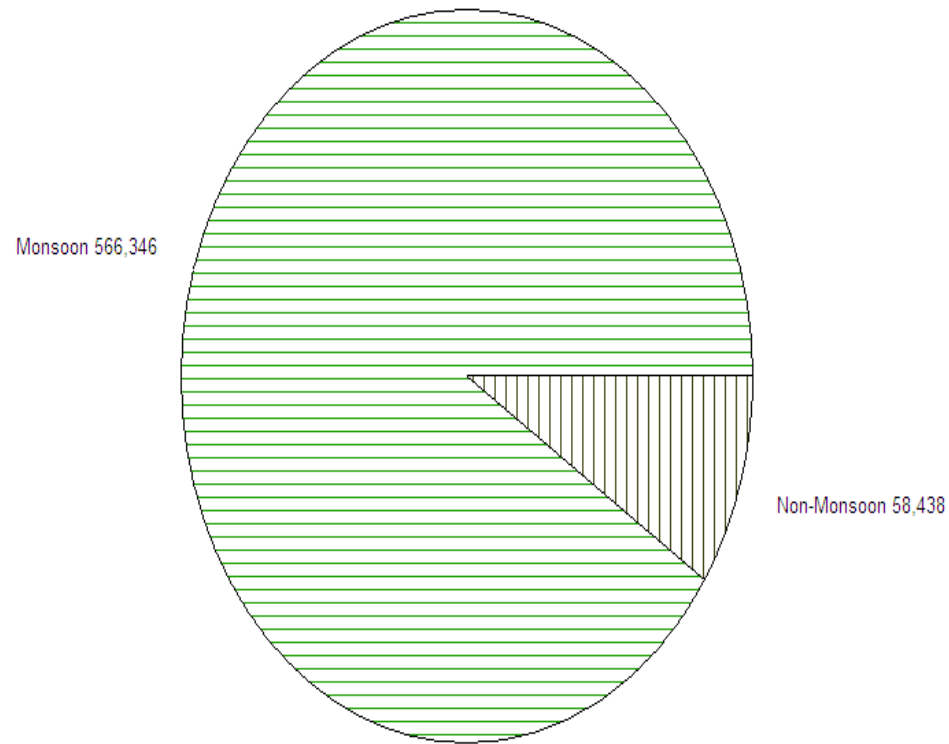
**Seasonal Sediment Load for period : 2015-2016**

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**

		<b>Water Year</b>	<b>: 2015-2016</b>
<b>Site</b>	<b>: Shakkar at Gadarwara</b>	<b>Code</b>	<b>: 010215012</b>
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"
<b>Zero of Gauge (m)</b>	<b>: 321 .000(M.S.L.)</b>	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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	0.264						1.075						155.6	0.000	0.000	0.060	0.060	806	
2	0.232						1.090						144.3	0.000	0.000	0.056	0.056	694	
3	0.229						0.989						150.7	0.000	0.000	0.050	0.050	651	
4	0.178						0.894						254.3	0.003	0.004	0.700	0.706	15518	
5	0.150						0.804						488.3	0.004	0.006	1.368	1.378	58111	
6	0.152						0.898						374.7	0.004	0.004	1.078	1.085	35134	
7	0.195						0.994						374.9	0.003	0.005	0.998	1.005	32565	
8	0.123						1.220						365.2	0.003	0.004	0.993	1.001	31575	
9	0.095						1.780						335.1	0.003	0.004	0.911	0.918	26584	
10	0.075						7.333	0.000	0.000	0.004	0.004	3	363.9	0.003	0.004	0.990	0.996	31332	
11	0.058						277.8	0.000	0.002	0.295	0.297	7136	375.7	0.003	0.005	1.110	1.117	36274	
12	0.056						245.7	0.000	0.002	0.261	0.263	5583	384.6	0.003	0.005	1.313	1.321	43885	
13	0.073						171.4	0.000	0.000	0.180	0.180	2666	402.6	0.004	0.006	1.695	1.705	59290	
14	0.165						124.0	0.000	0.000	0.173	0.173	1848	493.8	0.005	0.007	1.763	1.774	75695	
15	0.096						102.3	0.000	0.000	0.055	0.055	486	360.5	0.003	0.005	1.287	1.295	40338	
16	0.163						100.7	0.000	0.000	0.030	0.030	261	345.1	0.003	0.005	1.232	1.240	36969	
17	0.185						96.21	0.000	0.000	0.035	0.035	291	198.2	0.002	0.004	1.041	1.046	17917	
18	0.183						99.65	0.000	0.000	0.036	0.036	312	148.9	0.002	0.002	0.670	0.674	8669	
19	0.240						97.49	0.000	0.000	0.035	0.035	299	171.4	0.001	0.002	0.620	0.622	9215	
20	0.952						100.7	0.000	0.000	0.041	0.041	352	109.2	0.000	0.001	0.350	0.351	3310	
21	0.983						101.9	0.000	0.000	0.051	0.051	445	97.60	0.000	0.000	0.200	0.200	1687	
22	0.892						114.2	0.000	0.000	0.071	0.071	701	89.90	0.000	0.000	0.143	0.143	1111	
23	1.729						255.4	0.003	0.004	0.750	0.757	16710	99.65	0.000	0.000	0.159	0.159	1365	
24	0.935						161.5	0.000	0.002	0.161	0.162	2262	79.03	0.000	0.000	0.062	0.062	420	
25	1.541						169.8	0.000	0.002	0.171	0.173	2538	76.12	0.000	0.000	0.068	0.068	444	
26	0.969						177.3	0.000	0.002	0.179	0.181	2767	76.69	0.000	0.000	0.048	0.048	315	
27	1.074						166.4	0.000	0.002	0.155	0.157	2251	73.06	0.000	0.000	0.033	0.033	207	
28	1.081						158.1	0.000	0.001	0.120	0.121	1654	89.83	0.000	0.000	0.130	0.130	1009	
29	1.739						157.6	0.000	0.001	0.112	0.113	1536	78.78	0.000	0.000	0.091	0.091	616	
30	1.559						167.1	0.000	0.000	0.085	0.085	1227	93.27	0.000	0.000	0.107	0.107	863	
31							146.9	0.000	0.000	0.071	0.071	901	78.80	0.000	0.000	0.075	0.075	511	
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	0.169						1.708	0.000	0.000	0.004	0.004	3	300.7	0.002	0.003	0.720	0.726	23297	
<b>Ten Daily II</b>	0.217						141.6	0.000	0.000	0.114	0.114	1923	299.0	0.003	0.004	1.108	1.114	33156	
<b>Ten Daily III</b>	1.250						161.5	0.000	0.001	0.175	0.176	2999	84.79	0.000	0.000	0.101	0.101	777	
<b>Monthly Total</b>												52227							573079

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	77.58	0.000	0.000	0.068	0.068	452	10.94	0.000	0.000	0.031	0.031	29	3.236	0.000	0.000	0.023	0.023	6
2	90.17	0.000	0.000	0.068	0.068	530	10.17	0.000	0.000	0.029	0.029	25	4.379	0.000	0.000	0.030	0.030	11
3	78.87	0.000	0.000	0.053	0.053	361	10.23	0.000	0.000	0.032	0.032	28	4.397	0.000	0.000	0.031	0.031	12
4	72.96	0.000	0.000	0.042	0.042	262	8.025	0.000	0.000	0.025	0.025	17	4.211	0.000	0.000	0.030	0.030	11
5	69.00	0.000	0.000	0.040	0.040	238	9.969	0.000	0.000	0.014	0.014	12	4.163	0.000	0.000	0.029	0.029	10
6	85.20	0.000	0.000	0.049	0.049	364	9.415	0.000	0.000	0.028	0.028	22	4.112	0.000	0.000	0.008	0.008	3
7	64.05	0.000	0.000	0.033	0.033	180	9.262	0.000	0.000	0.029	0.029	23	3.665	0.000	0.000	0.028	0.028	9
8	61.66	0.000	0.000	0.030	0.030	160	8.957	0.000	0.000	0.027	0.027	21	2.827	0.000	0.000	0.021	0.021	5
9	97.76	0.000	0.000	0.053	0.053	448	8.876	0.000	0.000	0.028	0.028	21	3.598	0.000	0.000	0.025	0.025	8
10	88.50	0.000	0.000	0.046	0.046	352	8.568	0.000	0.000	0.027	0.027	20	3.211	0.000	0.000	0.030	0.030	8
11	87.28	0.000	0.000	0.035	0.035	264	5.570	0.000	0.000	0.017	0.017	8	2.638	0.000	0.000	0.025	0.025	6
12	69.70	0.000	0.000	0.034	0.034	205	8.199	0.000	0.000	0.028	0.028	19	3.177	0.000	0.000	0.028	0.028	8
13	85.20	0.000	0.000	0.042	0.042	306	8.193	0.000	0.000	0.026	0.026	18	3.249	0.000	0.000	0.029	0.029	8
14	61.84	0.000	0.000	0.032	0.032	168	7.788	0.000	0.000	0.025	0.025	17	3.014	0.000	0.000	0.027	0.027	7
15	58.49	0.000	0.000	0.028	0.028	141	7.395	0.000	0.000	0.027	0.027	17	2.456	0.000	0.000	0.022	0.022	5
16	51.19	0.000	0.000	0.028	0.028	122	7.171	0.000	0.000	0.025	0.025	15	3.032	0.000	0.000	0.027	0.027	7
17	72.24	0.000	0.000	0.039	0.039	242	5.260	0.000	0.000	0.024	0.024	11	3.318	0.000	0.000	0.029	0.029	8
18	56.30	0.000	0.000	0.034	0.034	165	3.682	0.000	0.000	0.016	0.016	5	2.858	0.000	0.000	0.025	0.025	6
19	71.70	0.000	0.000	0.038	0.038	232	5.034	0.000	0.000	0.025	0.025	11	2.802	0.000	0.000	0.025	0.025	6
20	95.36	0.000	0.000	0.050	0.050	411	4.585	0.000	0.000	0.024	0.024	9	2.904	0.000	0.000	0.023	0.023	6
21	76.72	0.000	0.000	0.040	0.040	266	4.619	0.000	0.000	0.027	0.027	11	2.888	0.000	0.000	0.027	0.027	7
22	63.49	0.000	0.000	0.038	0.038	208	3.236	0.000	0.000	0.019	0.019	5	2.119	0.000	0.000	0.019	0.019	4
23	58.23	0.000	0.000	0.035	0.035	176	4.179	0.000	0.000	0.024	0.024	8	2.615	0.000	0.000	0.028	0.028	6
24	56.10	0.000	0.000	0.034	0.034	165	3.027	0.000	0.000	0.017	0.017	4	2.507	0.000	0.000	0.025	0.025	5
25	72.24	0.000	0.000	0.044	0.044	273	3.027	0.000	0.000	0.017	0.017	4	1.814	0.000	0.000	0.018	0.018	3
26	52.78	0.000	0.000	0.033	0.033	148	3.472	0.000	0.000	0.024	0.024	7	2.181	0.000	0.000	0.022	0.022	4
27	35.73	0.000	0.000	0.022	0.022	68	3.411	0.000	0.000	0.025	0.025	7	2.176	0.000	0.000	0.022	0.022	4
28	11.55	0.000	0.000	0.030	0.030	30	3.219	0.000	0.000	0.030	0.030	8	2.154	0.000	0.000	0.021	0.021	4
29	10.97	0.000	0.000	0.031	0.031	29	3.151	0.000	0.000	0.026	0.026	7	1.674	0.000	0.000	0.017	0.017	2
30	10.61	0.000	0.000	0.030	0.030	28	4.165	0.000	0.000	0.031	0.031	11	1.986	0.000	0.000	0.020	0.020	3
31							4.639	0.000	0.000	0.033	0.033	13						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	78.57	0.000	0.000	0.048	0.048	335	9.442	0.000	0.000	0.027	0.027	22	3.780	0.000	0.000	0.025	0.025	8
<b>Ten Daily II</b>	70.93	0.000	0.000	0.036	0.036	226	6.288	0.000	0.000	0.024	0.024	13	2.945	0.000	0.000	0.026	0.026	7
<b>Ten Daily III</b>	44.84	0.000	0.000	0.034	0.034	139	3.649	0.000	0.000	0.025	0.025	8	2.211	0.000	0.000	0.022	0.022	4
<b>Monthly Total</b>						6994						437						192

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	1.583						0.666						0.535					
2	1.513						0.594						0.469					
3	1.414						0.580						0.464					
4	1.355						0.574						0.471					
5	1.347						0.556						0.466					
6	0.983						0.530						0.390					
7	1.274						0.545						0.403					
8	1.282						0.464						0.401					
9	0.890						0.469						0.384					
10	0.873						0.457						0.290					
11	0.840						0.467						0.290					
12	0.840						0.547						0.201					
13	0.804						0.543						0.197					
14	0.763						0.468						0.308					
15	0.739						0.464						0.182					
16	0.735						0.462						0.128					
17	0.645						0.457						0.125					
18	0.635						0.388						0.132					
19	0.650						0.585						0.087					
20	0.650						0.550						0.079					
21	1.009						0.642						0.195					
22	0.892						0.946						0.036					
23	0.886						0.641						0.052					
24	0.804						0.580						0.052					
25	0.724						0.615						0.044					
26	0.793						0.580						0.042					
27	0.724						0.613						0.039					
28	0.788						0.562						0.038					
29	0.696						0.555						0.030					
30	0.690						0.567											
31	0.690						0.516											
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	1.251						0.544						0.427					
<b>Ten Daily II</b>	0.730						0.493						0.173					
<b>Ten Daily III</b>	0.791						0.620						0.059					
<b>Monthly Total</b>																		

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	0.018						0.000						0.000					
2	0.017						0.000						0.000					
3	0.015						0.000						0.000					
4	0.000						0.000						0.000					
5	0.000						0.000						0.000					
6	0.000						0.000						0.000					
7	0.000						0.000						0.000					
8	0.000						0.000						0.000					
9	0.000						0.000						0.000					
10	0.000						0.000						0.000					
11	0.000						0.000						0.000					
12	0.000						0.000						0.000					
13	0.000						0.000						0.000					
14	0.000						0.000						0.000					
15	0.000						0.000						0.000					
16	0.000						0.000						0.000					
17	0.000						0.000						0.000					
18	0.000						0.000						0.000					
19	0.000						0.000						0.000					
20	0.000						0.000						0.000					
21	0.000						0.000						0.000					
22	0.000						0.000						0.000					
23	0.000						0.000						0.000					
24	0.000						0.000						0.000					
25	0.000						0.000						0.000					
26	0.000						0.000						0.000					
27	0.000						0.000						0.000					
28	0.000						0.000						0.000					
29	0.000						0.000						0.000					
30	0.000						0.000						0.000					
31	0.000						0.000						0.000					
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	0.005						0.000						0.000					
<b>Ten Daily II</b>	0.000						0.000						0.000					
<b>Ten Daily III</b>	0.000						0.000						0.000					
<b>Monthly Total</b>																		

Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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

Sediment Data Year Book 2015-16

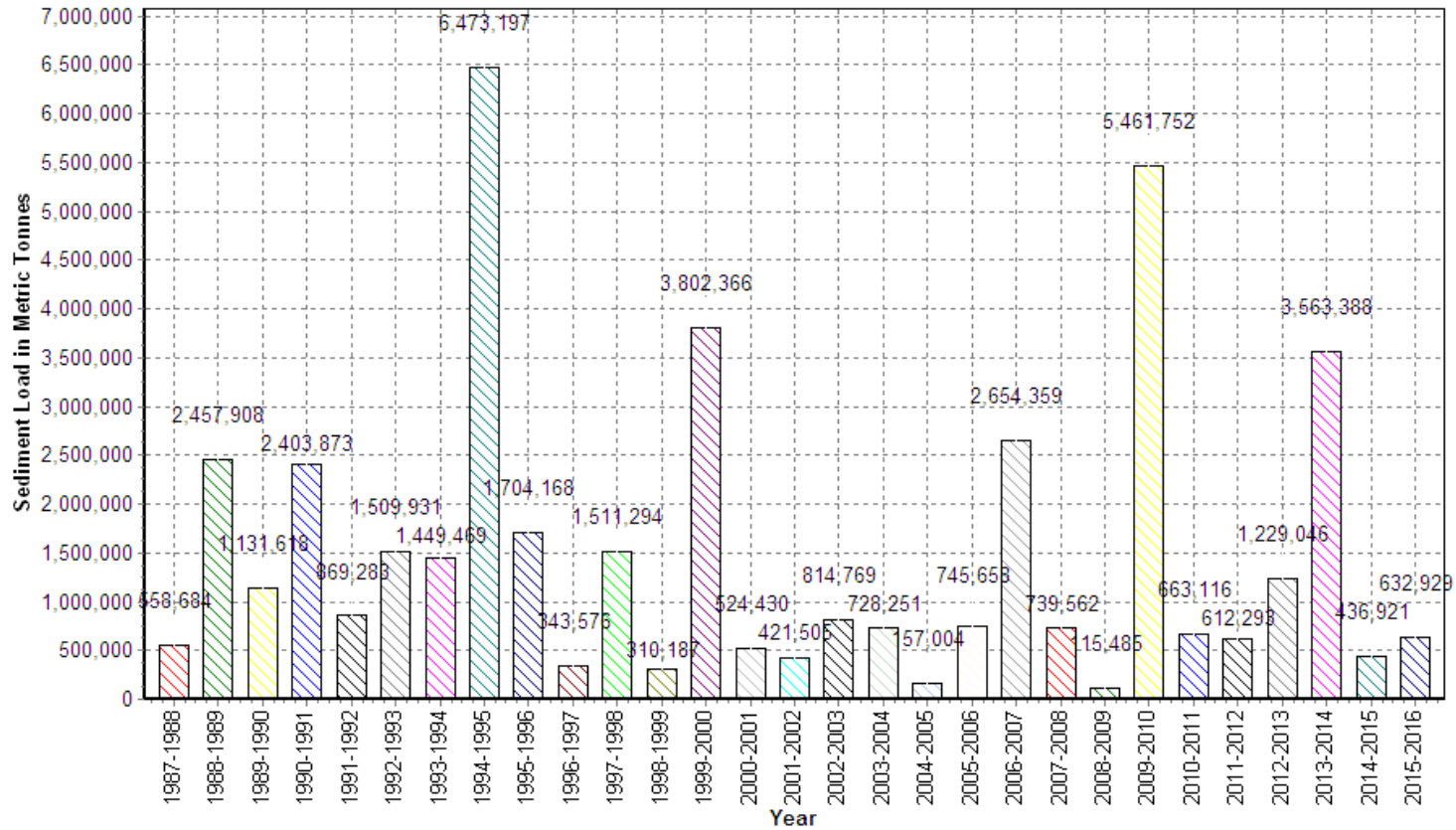
**Annual Sediment Load for period : 1987-2016**

Station Name : Shakkar at Gadarwara ( 010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Div : MNSD-I, Hoshangabad



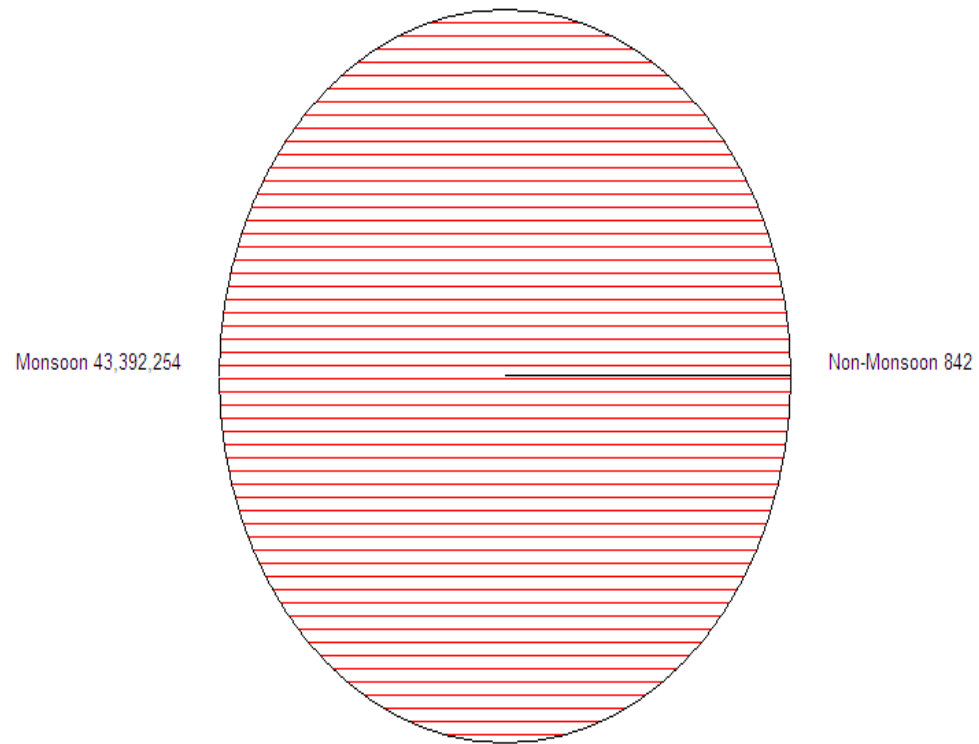
**Seasonal Sediment Load for the period : 1987-2016**

Station Name : Shakkar at Gadarwara ( 010215012)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Div : MNSD-I, Hoshangabad



Sediment Data Year Book 2015-16

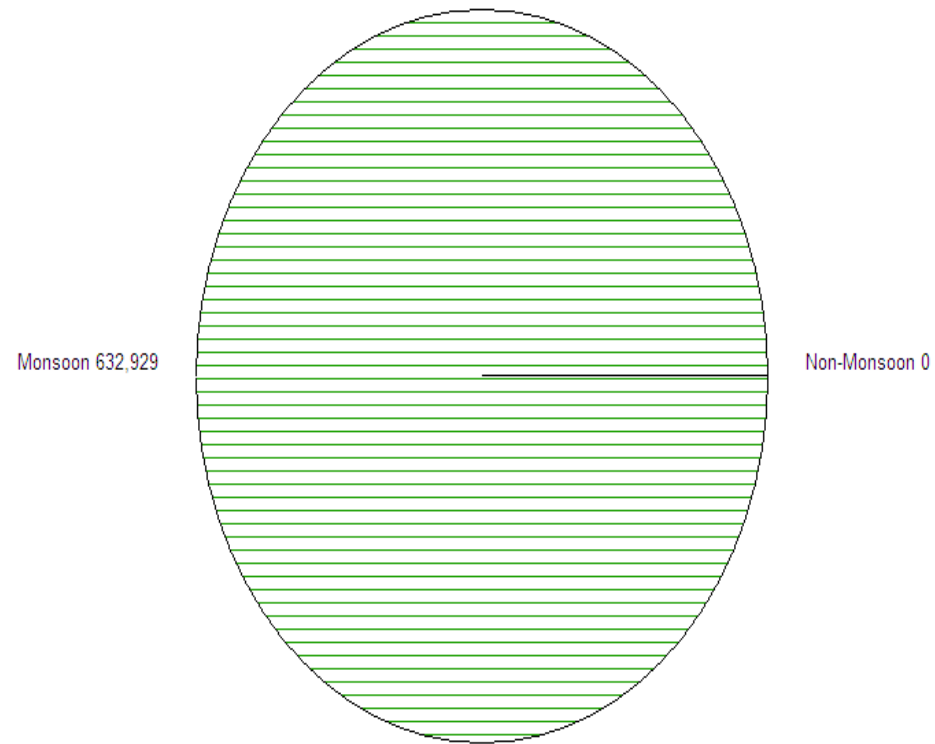
**Seasonal Sediment Load for the period : 2015-2016**

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**

		<b>Water Year</b>	<b>: 2015-2016</b>
<b>Site</b>	<b>: Narmada at Barman</b>	<b>Code</b>	<b>: 010215011</b>
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"
<b>Zero of Gauge (m)</b>	<b>: 306 .000(M.S.L.)</b>	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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	127.0	0.000	0.000	0.013	0.013	143	91.90	0.000	0.000	0.020	0.020	159	144.0	0.000	0.000	0.030	0.030	373
2	115.0	0.000	0.000	0.013	0.013	129	99.60	0.000	0.000	0.036	0.036	310	122.4	0.000	0.000	0.026	0.026	270
3	101.0	0.000	0.000	0.120	0.120	1047	84.10	0.000	0.000	0.059	0.059	429	164.0	0.000	0.000	0.062	0.062	879
4	96.30	0.000	0.000	0.130	0.130	1082	58.60	0.000	0.000	0.042	0.042	213	539.8	0.000	0.000	1.873	1.873	87354
5	129.0	0.000	0.000	0.014	0.014	156	83.53	0.000	0.000	0.060	0.060	432	1881	0.000	0.000	1.520	1.520	247056
6	149.0	0.000	0.000	0.130	0.130	1674	83.30	0.000	0.000	0.075	0.075	540	835.4	0.000	0.000	0.790	0.790	57019
7	106.7	0.000	0.000	0.093	0.093	858	79.00	0.000	0.000	0.046	0.046	314	448.6	0.000	0.000	0.835	0.835	32363
8	129.0	0.000	0.000	0.120	0.120	1337	112.0	0.000	0.000	0.201	0.201	1945	348.2	0.000	0.000	0.269	0.269	8094
9	103.0	0.000	0.000	0.140	0.140	1246	264.0	0.000	0.000	0.562	0.562	12818	336.8	0.000	0.000	0.260	0.260	7572
10	114.0	0.000	0.000	0.013	0.013	128	304.8	0.000	0.000	0.448	0.448	11796	252.0	0.000	0.000	0.238	0.238	5182
11	56.80	0.000	0.000	0.130	0.130	638	494.9	0.000	0.000	0.333	0.333	14238	245.0	0.000	0.000	0.345	0.345	7303
12	32.00	0.000	0.000	0.015	0.015	41	426.0	0.000	0.000	0.287	0.287	10550	267.0	0.000	0.000	0.322	0.322	7428
13	66.50	0.000	0.000	0.150	0.150	862	267.0	0.000	0.000	0.115	0.115	2653	353.2	0.000	0.000	0.432	0.432	13181
14	73.51	0.000	0.000	0.166	0.166	1053	219.0	0.000	0.000	0.098	0.098	1854	294.3	0.000	0.000	0.361	0.361	9178
15	69.50	0.000	0.000	0.013	0.013	78	260.0	0.000	0.000	0.064	0.064	1438	353.8	0.000	0.000	0.434	0.434	13266
16	74.20	0.000	0.000	0.130	0.130	833	237.0	0.000	0.000	0.043	0.043	881	362.4	0.000	0.000	0.445	0.445	13921
17	99.60	0.000	0.000	0.013	0.013	112	140.0	0.000	0.000	0.037	0.037	448	352.0	0.000	0.000	0.402	0.402	12227
18	77.90	0.000	0.000	0.013	0.013	87	116.2	0.000	0.000	0.031	0.031	308	311.7	0.000	0.000	0.635	0.635	17103
19	27.70	0.000	0.000	0.021	0.021	50	138.0	0.000	0.000	0.036	0.036	435	292.1	0.000	0.000	0.720	0.720	18171
20	63.20	0.000	0.000	0.022	0.022	118	96.70	0.000	0.000	0.026	0.026	214	241.0	0.000	0.000	0.299	0.299	6226
21	57.12	0.000	0.000	0.020	0.020	97	74.80	0.000	0.000	0.029	0.029	187	196.0	0.000	0.000	0.296	0.296	5013
22	34.40	0.000	0.000	0.016	0.016	48	177.0	0.000	0.000	0.033	0.033	505	215.0	0.000	0.000	0.283	0.283	5257
23	43.50	0.000	0.000	0.015	0.015	56	141.0	0.000	0.000	0.306	0.306	3728	217.8	0.000	0.000	0.287	0.287	5395
24	34.70	0.000	0.000	0.013	0.013	39	438.6	0.000	0.000	0.412	0.412	15612	171.8	0.000	0.000	0.132	0.132	1960
25	68.70	0.000	0.000	0.120	0.120	712	431.9	0.000	0.000	0.837	0.837	31237	127.0	0.000	0.000	0.107	0.107	1174
26	66.90	0.000	0.000	0.015	0.015	87	362.4	0.000	0.000	0.702	0.702	21993	135.0	0.000	0.000	0.117	0.117	1365
27	47.10	0.000	0.000	0.013	0.013	53	272.0	0.000	0.000	0.153	0.153	3596	117.0	0.000	0.000	0.106	0.106	1072
28	73.51	0.000	0.000	0.020	0.020	129	233.0	0.000	0.000	0.177	0.177	3563	281.7	0.000	0.000	0.384	0.384	9345
29	89.60	0.000	0.000	0.012	0.012	93	186.0	0.000	0.000	0.107	0.107	1720	343.7	0.000	0.000	0.440	0.440	13065
30	77.70	0.000	0.000	0.013	0.013	87	119.0	0.000	0.000	0.146	0.146	1501	258.2	0.000	0.000	0.331	0.331	7375
31							101.0	0.000	0.000	0.086	0.086	750	447.0	0.000	0.000	0.375	0.375	14482
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	117.0	0.000	0.000	0.079	0.079	780	126.1	0.000	0.000	0.155	0.155	2896	507.2	0.000	0.000	0.590	0.590	44616
<b>Ten Daily II</b>	64.09	0.000	0.000	0.067	0.067	387	239.5	0.000	0.000	0.107	0.107	3302	307.3	0.000	0.000	0.439	0.439	11800
<b>Ten Daily III</b>	59.32	0.000	0.000	0.026	0.026	140	230.6	0.000	0.000	0.272	0.272	7672	228.2	0.000	0.000	0.260	0.260	5955
<b>Monthly Total</b>						13074						146364						629666

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	436.5	0.000	0.000	0.473	0.473	17838	147.0	0.000	0.000	0.017	0.017	216	117.5	0.000	0.000	0.019	0.019	196
2	327.2	0.000	0.000	0.549	0.549	15519	119.9	0.000	0.000	0.014	0.014	144	101.0	0.000	0.000	0.017	0.017	145
3	350.1	0.000	0.000	0.079	0.079	2390	109.0	0.000	0.000	0.020	0.020	188	87.20	0.000	0.000	0.016	0.016	121
4	344.6	0.000	0.000	0.065	0.065	1935	105.5	0.000	0.000	0.019	0.019	176	102.0	0.000	0.000	0.016	0.016	141
5	309.7	0.000	0.000	0.055	0.055	1472	137.0	0.000	0.000	0.020	0.020	237	80.00	0.000	0.000	0.019	0.019	131
6	294.2	0.000	0.000	0.052	0.052	1328	144.0	0.000	0.000	0.019	0.019	236	87.40	0.000	0.000	0.018	0.018	136
7	250.0	0.000	0.000	0.056	0.056	1210	195.0	0.000	0.000	0.018	0.018	303	68.90	0.000	0.000	0.018	0.018	107
8	200.0	0.000	0.000	0.050	0.050	864	196.0	0.000	0.000	0.019	0.019	322	77.44	0.000	0.000	0.020	0.020	135
9	157.0	0.000	0.000	0.064	0.064	868	118.0	0.000	0.000	0.018	0.018	184	63.20	0.000	0.000	0.016	0.016	87
10	165.0	0.000	0.000	0.061	0.061	870	97.60	0.000	0.000	0.017	0.017	143	56.10	0.000	0.000	0.015	0.015	73
11	182.0	0.000	0.000	0.023	0.023	362	99.76	0.000	0.000	0.017	0.017	150	58.84	0.000	0.000	0.016	0.016	80
12	154.0	0.000	0.000	0.037	0.037	492	143.0	0.000	0.000	0.015	0.015	185	67.50	0.000	0.000	0.015	0.015	87
13	140.6	0.000	0.000	0.034	0.034	410	164.0	0.000	0.000	0.015	0.015	213	58.00	0.000	0.000	0.015	0.015	75
14	138.0	0.000	0.000	0.023	0.023	274	177.0	0.000	0.000	0.020	0.020	306	66.40	0.000	0.000	0.014	0.014	80
15	118.0	0.000	0.000	0.019	0.019	194	164.0	0.000	0.000	0.018	0.018	255	67.82	0.000	0.000	0.014	0.014	84
16	101.0	0.000	0.000	0.018	0.018	157	219.0	0.000	0.000	0.019	0.019	360	71.30	0.000	0.000	0.014	0.014	86
17	103.2	0.000	0.000	0.018	0.018	164	134.0	0.000	0.000	0.019	0.019	220	64.80	0.000	0.000	0.015	0.015	84
18	132.0	0.000	0.000	0.021	0.021	240	95.29	0.000	0.000	0.014	0.014	111	49.40	0.000	0.000	0.015	0.015	64
19	126.0	0.000	0.000	0.020	0.020	218	77.80	0.000	0.000	0.018	0.018	121	65.90	0.000	0.000	0.015	0.015	85
20	110.2	0.000	0.000	0.017	0.017	167	79.90	0.000	0.000	0.019	0.019	131	117.0	0.000	0.000	0.014	0.014	142
21	165.0	0.000	0.000	0.025	0.025	356	74.60	0.000	0.000	0.015	0.015	97	96.70	0.000	0.000	0.015	0.015	125
22	150.0	0.000	0.000	0.025	0.025	324	74.49	0.000	0.000	0.015	0.015	96	83.53	0.000	0.000	0.013	0.013	94
23	155.0	0.000	0.000	0.029	0.029	388	62.40	0.000	0.000	0.014	0.014	75	127.0	0.000	0.000	0.015	0.015	165
24	165.0	0.000	0.000	0.026	0.026	371	67.82	0.000	0.000	0.015	0.015	89	119.0	0.000	0.000	0.014	0.014	144
25	187.1	0.000	0.000	0.029	0.029	477	67.82	0.000	0.000	0.015	0.015	89	99.76	0.000	0.000	0.012	0.012	101
26	144.0	0.000	0.000	0.025	0.025	311	74.80	0.000	0.000	0.016	0.016	103	122.0	0.000	0.000	0.014	0.014	148
27	132.7	0.000	0.000	0.023	0.023	264	73.50	0.000	0.000	0.016	0.016	102	124.0	0.000	0.000	0.014	0.014	150
28	149.0	0.000	0.000	0.025	0.025	322	53.50	0.000	0.000	0.015	0.015	69	76.20	0.000	0.000	0.013	0.013	86
29	117.0	0.000	0.000	0.023	0.023	233	40.60	0.000	0.000	0.016	0.016	56	72.55	0.000	0.000	0.012	0.012	78
30	119.0	0.000	0.000	0.024	0.024	247	63.70	0.000	0.000	0.015	0.015	83	47.36	0.000	0.000	0.013	0.013	53
31							97.30	0.000	0.000	0.016	0.016	135						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	283.4	0.000	0.000	0.150	0.150	4429	136.9	0.000	0.000	0.018	0.018	215	84.07	0.000	0.000	0.017	0.017	127
<b>Ten Daily II</b>	130.5	0.000	0.000	0.023	0.023	268	135.4	0.000	0.000	0.017	0.017	205	68.70	0.000	0.000	0.015	0.015	87
<b>Ten Daily III</b>	148.4	0.000	0.000	0.025	0.025	329	68.23	0.000	0.000	0.015	0.015	90	96.81	0.000	0.000	0.014	0.014	114
<b>Monthly Total</b>						50262						5195						3283

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	44.70	0.000	0.000	0.012	0.012	47	73.70	0.000	0.000	0.014	0.014	90	97.20	0.000	0.000	0.014	0.014	118	
2	68.30	0.000	0.000	0.019	0.019	111	87.40	0.000	0.000	0.017	0.017	127	97.60	0.000	0.000	0.014	0.014	119	
3	107.0	0.000	0.000	0.029	0.029	272	119.9	0.000	0.000	0.023	0.023	240	93.60	0.000	0.000	0.013	0.013	109	
4	68.10	0.000	0.000	0.019	0.019	110	75.40	0.000	0.000	0.013	0.013	85	91.90	0.000	0.000	0.013	0.013	105	
5	63.20	0.000	0.000	0.017	0.017	95	72.10	0.000	0.000	0.012	0.012	77	95.10	0.000	0.000	0.014	0.014	113	
6	77.44	0.000	0.000	0.021	0.021	142	69.60	0.000	0.000	0.012	0.012	72	89.60	0.000	0.000	0.013	0.013	100	
7	74.80	0.000	0.000	0.014	0.014	90	75.40	0.000	0.000	0.013	0.013	85	85.60	0.000	0.000	0.012	0.012	91	
8	69.60	0.000	0.000	0.013	0.013	78	89.60	0.000	0.000	0.015	0.015	120	89.30	0.000	0.000	0.930	0.930	7175	
9	58.00	0.000	0.000	0.011	0.011	54	87.20	0.000	0.000	0.015	0.015	113	90.40	0.000	0.000	0.941	0.941	7353	
10	76.90	0.000	0.000	0.014	0.014	96	98.64	0.000	0.000	0.017	0.017	145	98.00	0.000	0.000	1.021	1.021	8642	
11	85.40	0.000	0.000	0.016	0.016	118	80.70	0.000	0.000	0.013	0.013	91	95.90	0.000	0.000	0.999	0.999	8275	
12	57.70	0.000	0.000	0.011	0.011	54	72.00	0.000	0.000	0.012	0.012	72	99.80	0.000	0.000	1.039	1.039	8962	
13	58.84	0.000	0.000	0.011	0.011	56	66.70	0.000	0.000	0.011	0.011	62	95.10	0.000	0.000	0.990	0.990	8138	
14	63.30	0.000	0.000	0.014	0.014	77	48.70	0.000	0.000	0.008	0.008	33	90.92	0.000	0.000	0.947	0.947	7438	
15	51.00	0.000	0.000	0.011	0.011	50	85.40	0.000	0.000	0.014	0.014	102	105.0	0.000	0.000	0.014	0.014	127	
16	48.50	0.000	0.000	0.011	0.011	45	114.0	0.000	0.000	0.018	0.018	181	100.0	0.000	0.000	0.013	0.013	115	
17	48.10	0.000	0.000	0.011	0.011	44	106.7	0.000	0.000	0.017	0.017	158	108.0	0.000	0.000	0.014	0.014	134	
18	66.60	0.000	0.000	0.015	0.015	85	118.0	0.000	0.000	0.014	0.014	143	106.0	0.000	0.000	0.014	0.014	129	
19	79.90	0.000	0.000	0.018	0.018	122	106.0	0.000	0.000	0.013	0.013	115	128.0	0.000	0.000	0.017	0.017	189	
20	75.47	0.000	0.000	0.017	0.017	109	101.0	0.000	0.000	0.012	0.012	105	117.0	0.000	0.000	0.016	0.016	158	
21	49.20	0.000	0.000	0.014	0.014	60	96.70	0.000	0.000	0.011	0.011	96	106.7	0.000	0.000	0.014	0.014	131	
22	48.00	0.000	0.000	0.014	0.014	57	94.30	0.000	0.000	0.011	0.011	91	96.90	0.000	0.000	0.015	0.015	126	
23	62.30	0.000	0.000	0.018	0.018	95	93.80	0.000	0.000	0.011	0.011	90	98.20	0.000	0.000	0.015	0.015	129	
24	69.69	0.000	0.000	0.020	0.020	119	92.00	0.000	0.000	0.011	0.011	87	99.80	0.000	0.000	0.015	0.015	133	
25	78.44	0.000	0.000	0.022	0.022	151	98.70	0.000	0.000	0.014	0.014	119	102.0	0.000	0.000	0.016	0.016	139	
26	43.50	0.000	0.000	0.012	0.012	47	96.40	0.000	0.000	0.014	0.014	114	75.20	0.000	0.000	0.012	0.012	76	
27	55.43	0.000	0.000	0.016	0.016	76	97.50	0.000	0.000	0.014	0.014	117	49.40	0.000	0.000	0.008	0.008	33	
28	72.60	0.000	0.000	0.014	0.014	88	99.50	0.000	0.000	0.014	0.014	121	52.12	0.000	0.000	0.008	0.008	36	
29	68.10	0.000	0.000	0.013	0.013	77	95.10	0.000	0.000	0.013	0.013	111	29.40	0.000	0.000	0.013	0.013	33	
30	58.00	0.000	0.000	0.011	0.011	56	93.90	0.000	0.000	0.013	0.013	108							
31	67.60	0.000	0.000	0.013	0.013	76	87.71	0.000	0.000	0.012	0.012	94							
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	70.80	0.000	0.000	0.017	0.017	110	84.90	0.000	0.000	0.015	0.015	115	92.83	0.000	0.000	0.299	0.299	2392	
<b>Ten Daily II</b>	63.48	0.000	0.000	0.013	0.013	76	89.92	0.000	0.000	0.013	0.013	106	104.6	0.000	0.000	0.406	0.406	3367	
<b>Ten Daily III</b>	61.17	0.000	0.000	0.015	0.015	82	95.06	0.000	0.000	0.013	0.013	104	78.85	0.000	0.000	0.013	0.013	93	
<b>Monthly Total</b>						2756						3363							58426

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	35.00	0.000	0.000	0.015	0.015	47	136.0	0.000	0.000	0.033	0.033	392	112.6	0.000	0.000	0.015	0.015	148
2	34.30	0.000	0.000	0.015	0.015	45	118.0	0.000	0.000	0.029	0.029	295	109.0	0.000	0.000	0.013	0.013	122
3	40.20	0.000	0.000	0.018	0.018	62	94.19	0.000	0.000	0.023	0.023	188	112.0	0.000	0.000	0.013	0.013	129
4	40.30	0.000	0.000	0.018	0.018	62	64.30	0.000	0.000	0.015	0.015	83	113.0	0.000	0.000	0.013	0.013	132
5	56.40	0.000	0.000	0.025	0.025	122	108.0	0.000	0.000	0.025	0.025	235	115.0	0.000	0.000	0.014	0.014	136
6	67.82	0.000	0.000	0.030	0.030	176	111.0	0.000	0.000	0.026	0.026	248	118.0	0.000	0.000	0.014	0.014	143
7	120.0	0.000	0.000	0.019	0.019	197	115.0	0.000	0.000	0.027	0.027	267	111.0	0.000	0.000	0.013	0.013	127
8	127.0	0.000	0.000	0.020	0.020	221	119.0	0.000	0.000	0.028	0.028	285	109.0	0.000	0.000	0.013	0.013	122
9	136.0	0.000	0.000	0.022	0.022	253	118.0	0.000	0.000	0.028	0.028	281	109.0	0.000	0.000	0.013	0.013	122
10	129.0	0.000	0.000	0.020	0.020	228	79.44	0.000	0.000	0.019	0.019	127	112.0	0.000	0.000	0.013	0.013	129
11	119.0	0.000	0.000	0.019	0.019	194	58.10	0.000	0.000	0.014	0.014	70	122.0	0.000	0.000	0.015	0.015	153
12	102.0	0.000	0.000	0.016	0.016	142	38.00	0.000	0.000	0.009	0.009	30	117.0	0.000	0.000	0.014	0.014	141
13	94.19	0.000	0.000	0.015	0.015	121	24.80	0.000	0.000	0.006	0.006	13	119.0	0.000	0.000	0.014	0.014	146
14	61.50	0.000	0.000	0.017	0.017	90	32.50	0.000	0.000	0.008	0.008	22	124.0	0.000	0.000	0.015	0.015	158
15	35.00	0.000	0.000	0.010	0.010	29	37.13	0.000	0.000	0.009	0.009	29	112.6	0.000	0.000	0.013	0.013	131
16	58.10	0.000	0.000	0.016	0.016	81	108.0	0.000	0.000	0.026	0.026	243	109.0	0.000	0.000	0.013	0.013	122
17	60.60	0.000	0.000	0.017	0.017	88	96.40	0.000	0.000	0.023	0.023	193	113.0	0.000	0.000	0.013	0.013	132
18	38.00	0.000	0.000	0.011	0.011	34	112.0	0.000	0.000	0.014	0.014	135	117.0	0.000	0.000	0.014	0.014	141
19	35.00	0.000	0.000	0.010	0.010	29	111.0	0.000	0.000	0.014	0.014	133	127.0	0.000	0.000	0.015	0.015	166
20	56.27	0.000	0.000	0.016	0.016	76	112.6	0.000	0.000	0.014	0.014	137	117.0	0.000	0.000	0.014	0.014	141
21	88.30	0.000	0.000	0.016	0.016	122	117.0	0.000	0.000	0.015	0.015	148	110.2	0.000	0.000	0.013	0.013	125
22	73.90	0.000	0.000	0.013	0.013	85	119.0	0.000	0.000	0.015	0.015	153	107.8	0.000	0.000	0.013	0.013	120
23	83.30	0.000	0.000	0.015	0.015	109	115.0	0.000	0.000	0.014	0.014	143	105.0	0.000	0.000	0.013	0.013	114
24	94.19	0.000	0.000	0.017	0.017	139	106.7	0.000	0.000	0.013	0.013	123	107.0	0.000	0.000	0.013	0.013	118
25	87.71	0.000	0.000	0.016	0.016	120	111.0	0.000	0.000	0.015	0.015	144	108.0	0.000	0.000	0.013	0.013	120
26	83.30	0.000	0.000	0.015	0.015	109	111.0	0.000	0.000	0.015	0.015	144	117.0	0.000	0.000	0.014	0.014	141
27	52.12	0.000	0.000	0.009	0.009	43	109.0	0.000	0.000	0.015	0.015	139	116.0	0.000	0.000	0.014	0.014	139
28	65.20	0.000	0.000	0.016	0.016	90	109.0	0.000	0.000	0.015	0.015	139	110.0	0.000	0.000	0.013	0.013	125
29	48.60	0.000	0.000	0.012	0.012	50	110.0	0.000	0.000	0.015	0.015	141	117.5	0.000	0.000	0.014	0.014	142
30	37.20	0.000	0.000	0.009	0.009	29	112.0	0.000	0.000	0.015	0.015	146	110.0	0.000	0.000	0.013	0.013	124
31	62.50	0.000	0.000	0.015	0.015	83							76.20	0.000	0.000	0.009	0.009	59
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	78.60	0.000	0.000	0.020	0.020	141	106.3	0.000	0.000	0.025	0.025	240	112.1	0.000	0.000	0.014	0.014	131
<b>Ten Daily II</b>	65.97	0.000	0.000	0.015	0.015	88	73.05	0.000	0.000	0.014	0.014	101	117.8	0.000	0.000	0.014	0.014	143
<b>Ten Daily III</b>	70.57	0.000	0.000	0.014	0.014	89	112.0	0.000	0.000	0.015	0.015	142	107.7	0.000	0.000	0.013	0.013	121
<b>Monthly Total</b>						3275						4827						4070

Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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	4381713	0	4381713	7564
1988-1989	8267376	0	8267376	12872
1989-1990	1419707	0	1419707	4832
1990-1991	20391794	0	20391794	18200
1991-1992	16865569	0	16865569	13869
1992-1993	9827990	0	9827990	9791
1993-1994	7409792	0	7409792	11032
1994-1995	60655649	0	60655649	28471
1995-1996	13038554	0	13038554	13283
1996-1997	733590	0	733590	6450
1997-1998	6005111	0	6005111	13382
1998-1999	1253537	0	1253537	9392
1999-2000	12801169	0	12801169	23109
2000-2001	1591162	0	1591162	7140
2001-2002	2438050	0	2438050	12682
2002-2003	8769326	0	8769326	9000
2003-2004	9592152	0	9592152	17975
2004-2005	2583378	0	2583378	11171
2005-2006	15179015	79830	15258845	21038
2006-2007	3190311	40541	3230853	9268
2007-2008	1070164	77035	1147199	6154
2008-2009	2081124	58625	2139749	8569
2009-2010	18820922	78878	18899800	5718
2010-2011	1663068	160332	1823400	7788
2011-2012	3014422	29146	3043568	17848
2012-2013	1576091	35015	1611106	10313
2013-2014	20335632	77300	20412932	22328
2014-2015	4226014	60963	4286977	8875
2015-2016	847845	76717	924562	4057

Sediment Data Year Book 2015-16

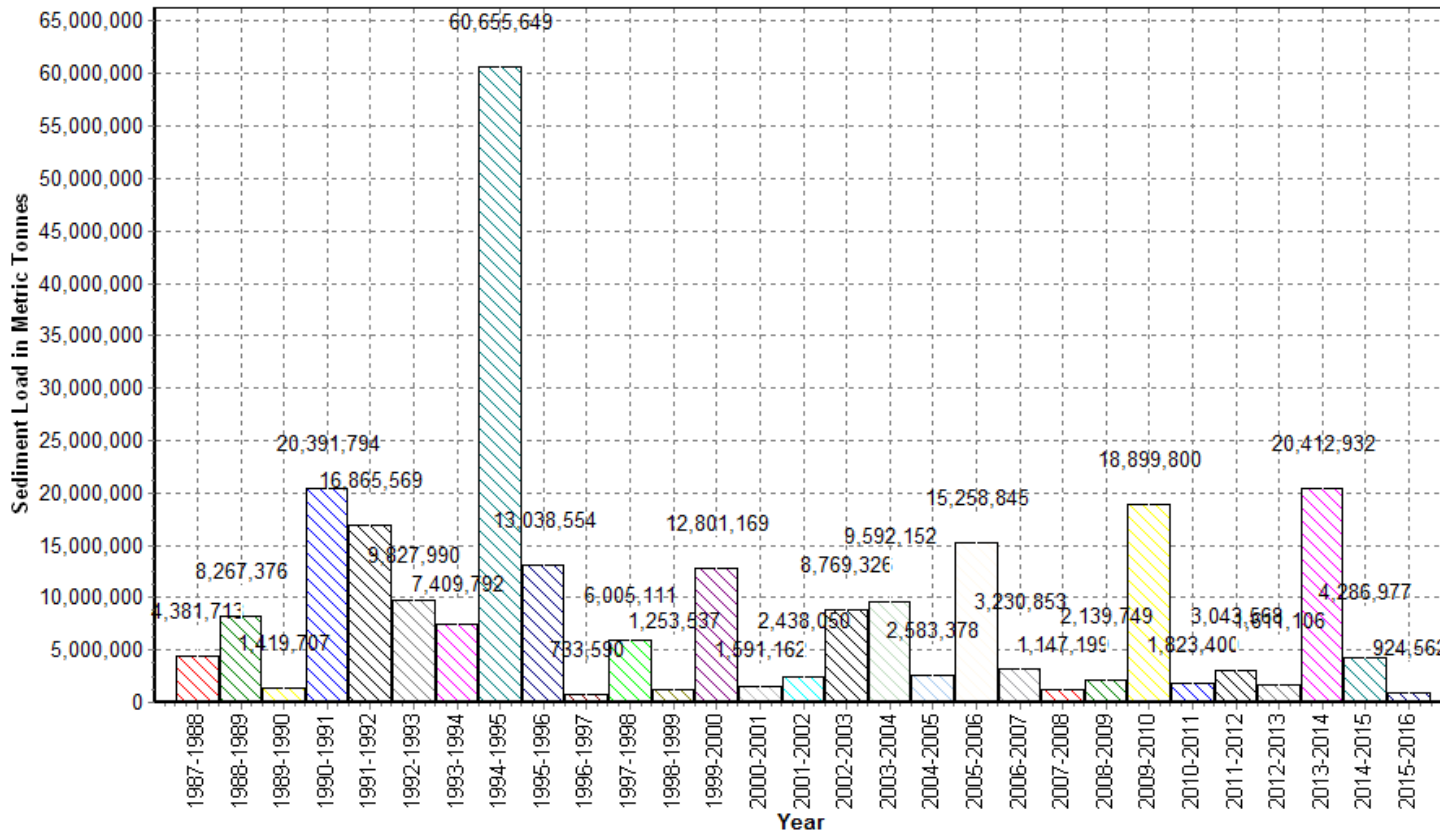
**Annual Sediment Load for period : 1987-2016**

Station Name : Narmada at Barman ( 010215011)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Hoshangabad



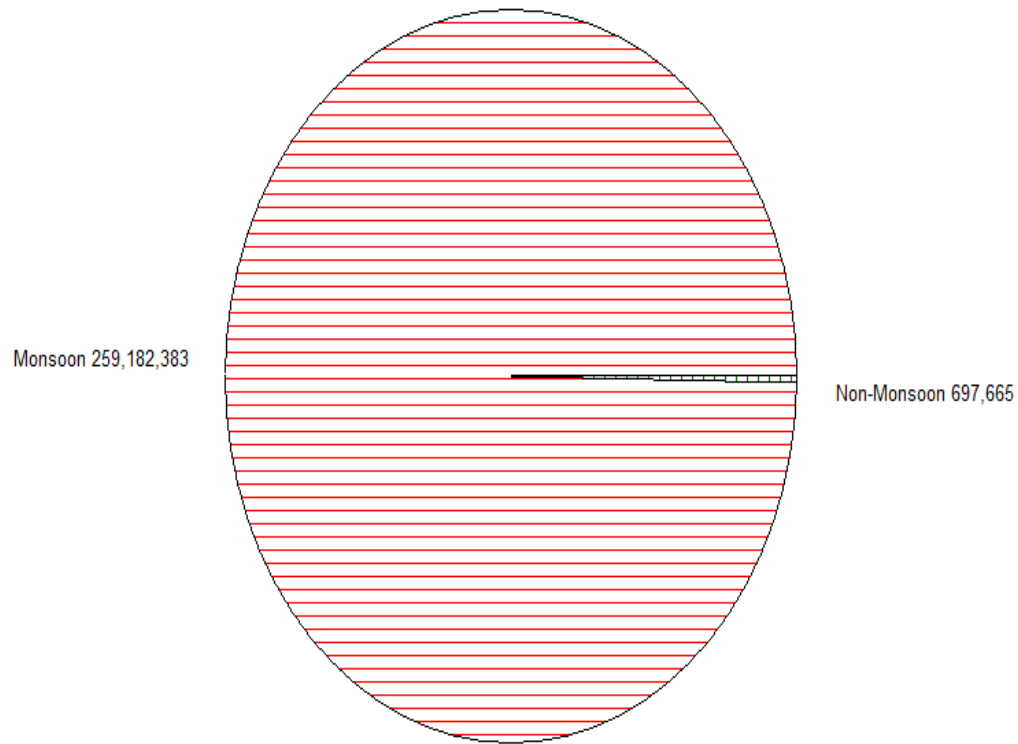
**Seasonal Sediment Load for period : 1987-2016**

Station Name : Narmada at Barman ( 010215011)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Hoshangabad



Sediment Data Year Book 2015-16

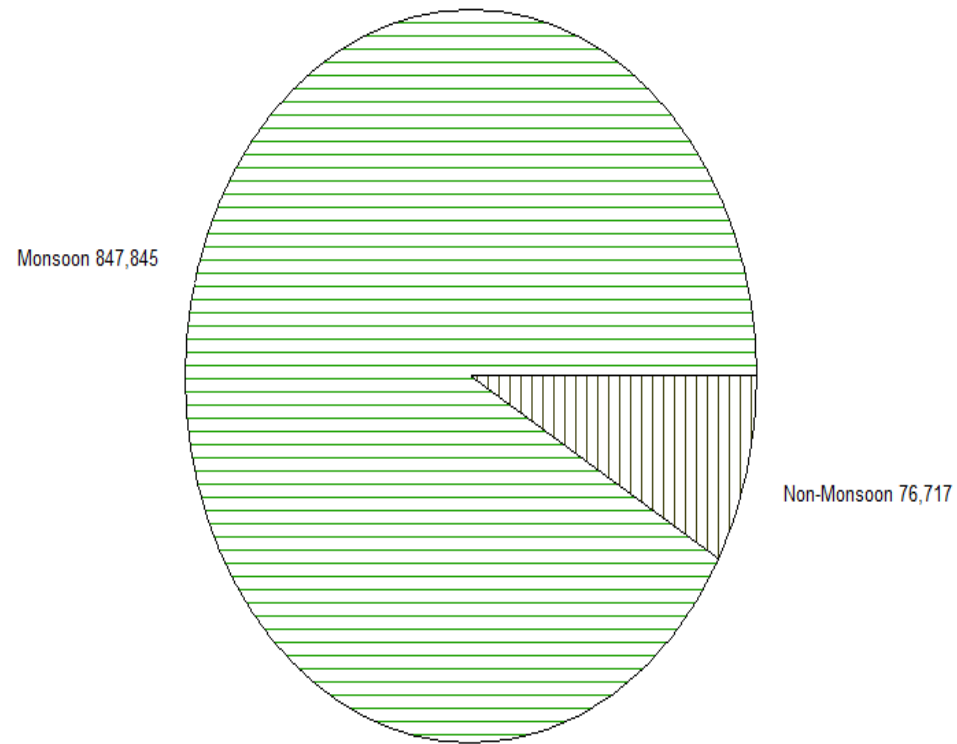
**Seasonal Sediment Load for period : 2015-2016**

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**

		<b>Water Year</b>	: <b>2015-2016</b>
<b>Site</b>	: <b>Banjar at Bamni</b>	<b>Code</b>	: <b>CWC SITE</b>
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"
<b>Zero of Gauge (m)</b>	: 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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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						43.88	0.000	0.000	0.115	0.115	436
2	0.000						1.276						39.43	0.000	0.000	0.103	0.103	352
3	0.000						0.000						47.21	0.000	0.000	0.125	0.125	510
4	0.000						0.577						72.65	0.000	0.000	0.134	0.134	841
5	0.000						0.000						301.2	0.021	0.020	0.172	0.213	5543
6	0.000						0.000						153.1	0.016	0.015	0.102	0.133	1759
7	0.000						0.000						81.52	0.000	0.000	0.137	0.137	965
8	0.000						0.000						69.75	0.000	0.000	0.133	0.133	802
9	0.000						0.000						64.18	0.000	0.000	0.122	0.122	679
10	0.000						1.276						50.37	0.000	0.000	0.129	0.129	561
11	0.000						80.64	0.000	0.000	0.136	0.136	944	47.52	0.000	0.000	0.125	0.125	513
12	0.000						204.5	0.000	0.000	0.344	0.344	6071	61.81	0.000	0.000	0.132	0.132	705
13	0.000						75.33	0.000	0.000	0.145	0.145	944	62.42	0.000	0.000	0.132	0.132	712
14	0.000						75.40	0.000	0.000	0.135	0.135	878	74.05	0.000	0.000	0.134	0.134	857
15	0.000						47.67	0.000	0.000	0.124	0.124	511	82.97	0.000	0.000	0.150	0.150	1076
16	0.000						44.65	0.000	0.000	0.116	0.116	447	130.8	0.000	0.000	0.237	0.237	2675
17	0.000						41.29	0.000	0.000	0.110	0.110	392	88.03	0.000	0.000	0.148	0.148	1126
18	0.000						28.71	0.000	0.000	0.076	0.076	190	83.99	0.000	0.000	0.147	0.147	1067
19	0.000						32.95	0.000	0.000	0.088	0.088	250	83.59	0.000	0.000	0.146	0.146	1054
20	0.000						42.21	0.000	0.000	0.113	0.113	412	74.85	0.000	0.000	0.135	0.135	873
21	0.000						43.34	0.000	0.000	0.115	0.115	431	75.13	0.000	0.000	0.136	0.136	883
22	0.000						39.88	0.000	0.000	0.109	0.109	376	61.24	0.000	0.000	0.131	0.131	693
23	0.000						36.73	0.000	0.000	0.108	0.108	343	52.76	0.000	0.000	0.113	0.113	514
24	0.000						35.92	0.000	0.000	0.107	0.107	332	48.72	0.000	0.000	0.126	0.126	530
25	0.000						42.68	0.000	0.000	0.114	0.114	420	45.87	0.000	0.000	0.119	0.119	472
26	1.276						44.93	0.000	0.000	0.120	0.120	466	43.04	0.000	0.000	0.115	0.115	428
27	0.000						52.00	0.000	0.000	0.132	0.132	593	42.48	0.000	0.000	0.114	0.114	418
28	0.000						48.28	0.000	0.000	0.126	0.126	526	45.07	0.000	0.000	0.117	0.117	456
29	0.000						41.32	0.000	0.000	0.112	0.112	400	47.90	0.000	0.000	0.125	0.125	517
30	0.000						36.41	0.000	0.000	0.108	0.108	340	138.3	0.000	0.000	0.361	0.361	4314
31							29.27	0.000	0.000	0.104	0.104	263	85.14	0.000	0.000	0.147	0.147	1081
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	0.000						0.313						92.33	0.004	0.004	0.127	0.134	1245
<b>Ten Daily II</b>	0.000						67.33	0.000	0.000	0.139	0.139	1104	79.00	0.000	0.000	0.149	0.149	1066
<b>Ten Daily III</b>	0.128						40.98	0.000	0.000	0.114	0.114	408	62.34	0.000	0.000	0.146	0.146	937
<b>Monthly Total</b>												15527						33412

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	77.10	0.000	0.000	0.135	0.135	899	29.10	0.000	0.000	0.117	0.117	294	14.52	0.000	0.000	0.157	0.157	197
2	75.22	0.000	0.000	0.134	0.134	871	19.46	0.000	0.000	0.078	0.078	132	11.01	0.000	0.000	0.106	0.106	101
3	75.01	0.000	0.000	0.133	0.133	862	28.97	0.000	0.000	0.116	0.116	290	10.34	0.000	0.000	0.105	0.105	94
4	74.46	0.000	0.000	0.131	0.131	843	19.46	0.000	0.000	0.078	0.078	131	9.731	0.000	0.000	0.102	0.102	86
5	64.40	0.000	0.000	0.130	0.130	723	28.91	0.000	0.000	0.115	0.115	287	9.562	0.000	0.000	0.102	0.102	84
6	53.89	0.000	0.000	0.109	0.109	507	28.37	0.000	0.000	0.114	0.114	279	9.144	0.000	0.000	0.101	0.101	80
7	47.12	0.000	0.000	0.128	0.128	521	28.15	0.000	0.000	0.113	0.113	275	9.049	0.000	0.000	0.101	0.101	79
8	45.51	0.000	0.000	0.127	0.127	499	27.60	0.000	0.000	0.112	0.112	267	10.71	0.000	0.000	0.120	0.120	111
9	47.31	0.000	0.000	0.129	0.129	527	27.46	0.000	0.000	0.110	0.110	261	8.647	0.000	0.000	0.100	0.100	75
10	57.43	0.000	0.000	0.130	0.130	645	27.29	0.000	0.000	0.110	0.110	259	9.780	0.000	0.000	0.113	0.113	96
11	49.61	0.000	0.000	0.129	0.129	553	17.46	0.000	0.000	0.070	0.070	106	9.780	0.000	0.000	0.113	0.113	96
12	42.55	0.000	0.000	0.125	0.125	460	26.59	0.000	0.000	0.110	0.110	253	8.475	0.000	0.000	0.100	0.100	73
13	32.95	0.000	0.000	0.097	0.097	276	26.17	0.000	0.000	0.100	0.100	226	7.937	0.000	0.000	0.099	0.099	68
14	37.97	0.000	0.000	0.123	0.123	403	16.48	0.000	0.000	0.063	0.063	90	7.800	0.000	0.000	0.098	0.098	66
15	36.06	0.000	0.000	0.122	0.122	380	25.61	0.000	0.000	0.109	0.109	241	8.862	0.000	0.000	0.111	0.111	85
16	48.91	0.000	0.000	0.128	0.128	541	11.35	0.000	0.000	0.109	0.109	107	7.652	0.000	0.000	0.098	0.098	65
17	34.02	0.000	0.000	0.089	0.089	262	11.22	0.000	0.000	0.108	0.108	105	7.511	0.000	0.000	0.097	0.097	63
18	50.88	0.000	0.000	0.130	0.130	572	13.56	0.000	0.000	0.131	0.131	153	8.862	0.000	0.000	0.114	0.114	88
19	84.50	0.000	0.000	0.148	0.148	1080	11.11	0.000	0.000	0.107	0.107	103	7.118	0.000	0.000	0.096	0.096	59
20	73.51	0.000	0.000	0.129	0.129	818	10.93	0.000	0.000	0.107	0.107	101	6.998	0.000	0.000	0.096	0.096	58
21	64.23	0.000	0.000	0.129	0.129	716	10.74	0.000	0.000	0.106	0.106	98	6.908	0.000	0.000	0.095	0.095	57
22	81.07	0.000	0.000	0.146	0.146	1023	12.60	0.000	0.000	0.124	0.124	135	8.862	0.000	0.000	0.122	0.122	93
23	73.87	0.000	0.000	0.130	0.130	830	10.40	0.000	0.000	0.105	0.105	94	7.055	0.000	0.000	0.097	0.097	59
24	56.93	0.000	0.000	0.129	0.129	635	12.60	0.000	0.000	0.127	0.127	139	7.055	0.000	0.000	0.097	0.097	59
25	47.15	0.000	0.000	0.107	0.107	435	12.60	0.000	0.000	0.127	0.127	139	7.055	0.000	0.000	0.097	0.097	59
26	46.88	0.000	0.000	0.127	0.127	514	9.982	0.000	0.000	0.105	0.105	91	7.055	0.000	0.000	0.097	0.097	59
27	32.95	0.000	0.000	0.089	0.089	254	9.927	0.000	0.000	0.104	0.104	89	6.289	0.000	0.000	0.094	0.094	51
28	33.59	0.000	0.000	0.121	0.121	351	9.778	0.000	0.000	0.103	0.103	87	6.172	0.000	0.000	0.093	0.093	50
29	30.65	0.000	0.000	0.119	0.119	315	9.702	0.000	0.000	0.102	0.102	86	6.173	0.000	0.000	0.093	0.093	50
30	29.83	0.000	0.000	0.118	0.118	304	9.578	0.000	0.000	0.102	0.102	84	6.038	0.000	0.000	0.093	0.093	49
31							9.321	0.000	0.000	0.101	0.101	81						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	61.74	0.000	0.000	0.129	0.129	690	26.48	0.000	0.000	0.106	0.106	248	10.25	0.000	0.000	0.111	0.111	100
<b>Ten Daily II</b>	49.10	0.000	0.000	0.122	0.122	534	17.05	0.000	0.000	0.101	0.101	148	8.099	0.000	0.000	0.102	0.102	72
<b>Ten Daily III</b>	49.72	0.000	0.000	0.122	0.122	538	10.66	0.000	0.000	0.110	0.110	102	6.866	0.000	0.000	0.098	0.098	59
<b>Monthly Total</b>						17619						5083						2308

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	5.639	0.000	0.000	0.091	0.091	44	1.281						0.682					
2	5.526	0.000	0.000	0.089	0.089	43	2.023						0.665					
3	5.408	0.000	0.000	0.087	0.087	41	2.023						0.648					
4	5.309	0.000	0.000	0.086	0.086	39	1.175						0.632					
5	5.201	0.000	0.000	0.084	0.084	38	1.184						0.590					
6	5.304	0.000	0.000	0.086	0.086	39	1.047						0.604					
7	5.080	0.000	0.000	0.091	0.091	40	1.000						0.600					
8	4.695	0.000	0.000	0.084	0.084	34	0.977						0.566					
9	4.592	0.000	0.000	0.082	0.082	33	0.952						0.551					
10	4.489	0.000	0.000	0.080	0.080	31	1.276						0.542					
11	4.386	0.000	0.000	0.089	0.089	34	0.926						0.531					
12	4.295	0.000	0.000	0.087	0.087	32	0.902						0.520					
13	4.451	0.000	0.000	0.090	0.090	35	0.837						0.514					
14	4.172	0.000	0.000	0.088	0.088	32	0.800						0.620					
15	4.081	0.000	0.000	0.086	0.086	30	0.780						0.482					
16	3.767	0.000	0.000	0.079	0.079	26	0.762						0.471					
17	3.620	0.000	0.000	0.076	0.076	24	0.577						0.461					
18	3.620	0.000	0.000	0.076	0.076	24	0.741						0.450					
19	3.620	0.000	0.000	0.076	0.076	24	1.166						0.440					
20	3.620	0.000	0.000	0.076	0.076	24	1.149						0.429					
21	3.543	0.000	0.000	0.087	0.087	27	1.019						0.350					
22	2.808	0.000	0.000	0.069	0.069	17	0.889						0.382					
23	2.808	0.000	0.000	0.069	0.069	17	0.843						0.375					
24	2.808	0.000	0.000	0.069	0.069	17	0.577						0.368					
25	2.808	0.000	0.000	0.069	0.069	17	0.816						0.360					
26	2.808	0.000	0.000	0.069	0.069	17	0.577						0.353					
27	2.808	0.000	0.000	0.069	0.069	17	0.779						0.347					
28	2.808	0.000	0.000	0.069	0.069	17	0.759						0.330					
29	1.388	0.000	0.000	0.034	0.034	4	0.739						0.336					
30	1.348	0.000	0.000	0.033	0.033	4	0.718											
31	1.314	0.000	0.000	0.032	0.032	4	0.577											
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	5.124	0.000	0.000	0.086	0.086	38	1.294						0.608					
<b>Ten Daily II</b>	3.963	0.000	0.000	0.083	0.083	28	0.864						0.492					
<b>Ten Daily III</b>	2.477	0.000	0.000	0.061	0.061	14	0.754						0.356					
<b>Monthly Total</b>						821												

## Sediment Data Year Book 2015-16

## Daily Observed Sediment Datasheet for period : 2015-2016

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	0.332												0.000					
2	0.330												0.000					
3	0.309												0.000					
4	0.303												0.000					
5	0.282												0.000					
6	0.180												0.000					
7	0.431												0.000					
8	0.506												0.000					
9	0.502												0.000					
10	0.422												0.000					
11	0.324												0.000					
12	0.284												0.000					
13	0.000												0.000					
14	0.000												0.000					
15	0.000												0.000					
16	0.000												0.000					
17	0.000												0.000					
18	0.000												0.000					
19	0.000												0.000					
20	0.000												0.000					
21	0.000												0.000					
22	0.000												0.000					
23	0.000												0.000					
24	0.000												0.000					
25	0.000												0.000					
26	0.000												0.000					
27	0.000												0.000					
28	0.000												0.000					
29	0.000												0.000					
30	0.000												0.000					
31	0.000												0.000					
<b>Ten Daily Mean</b>																		
Ten Daily I	0.360												0.000					
Ten Daily II	0.061												0.000					
Ten Daily III	0.000												0.000					
<b>Monthly Total</b>																		

Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 2002-2016**

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

Sediment Data Year Book 2015-16

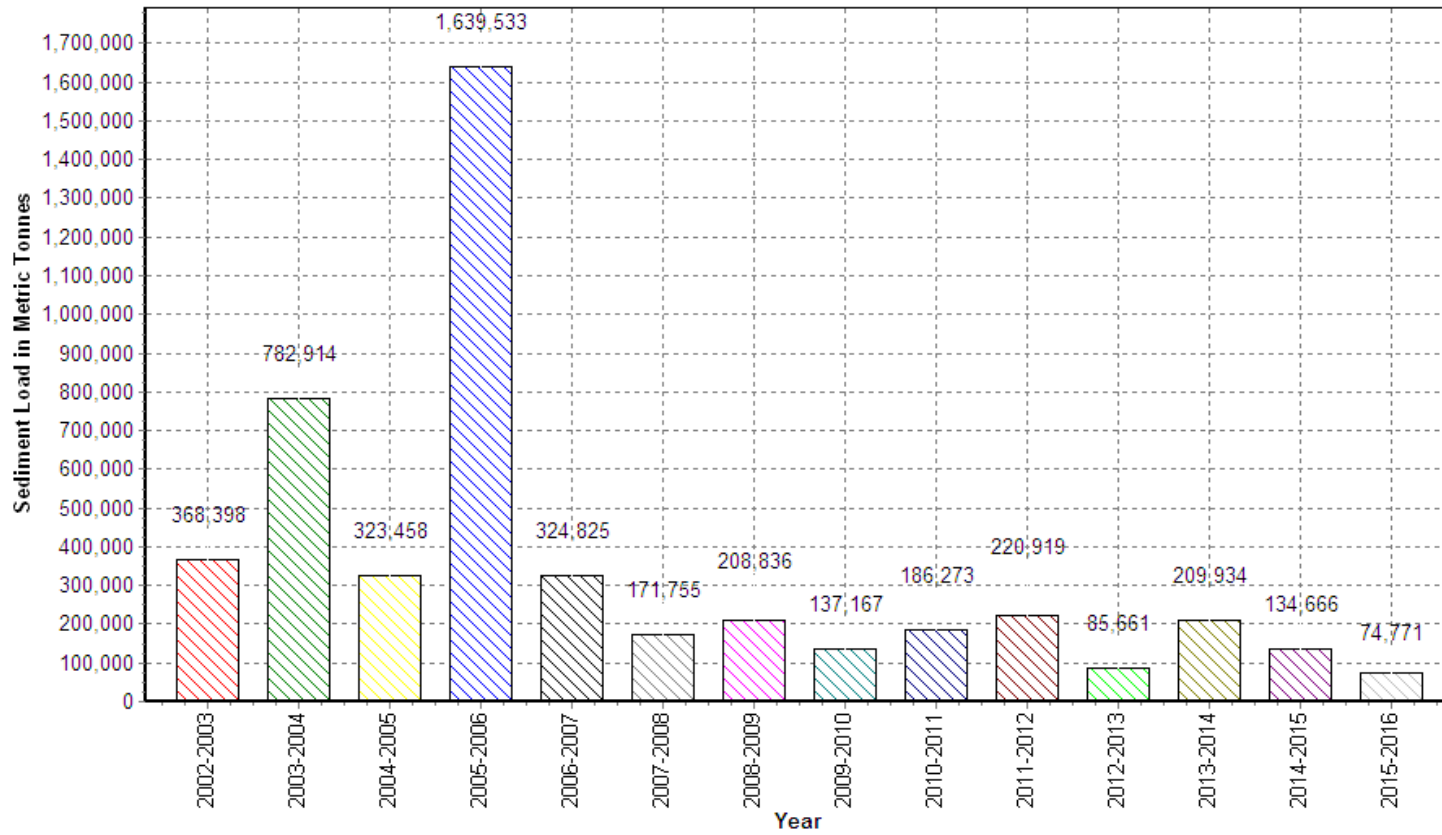
**Annual Sediment Load for period : 2002-2016**

Station Name : Banjar at Bamni

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur



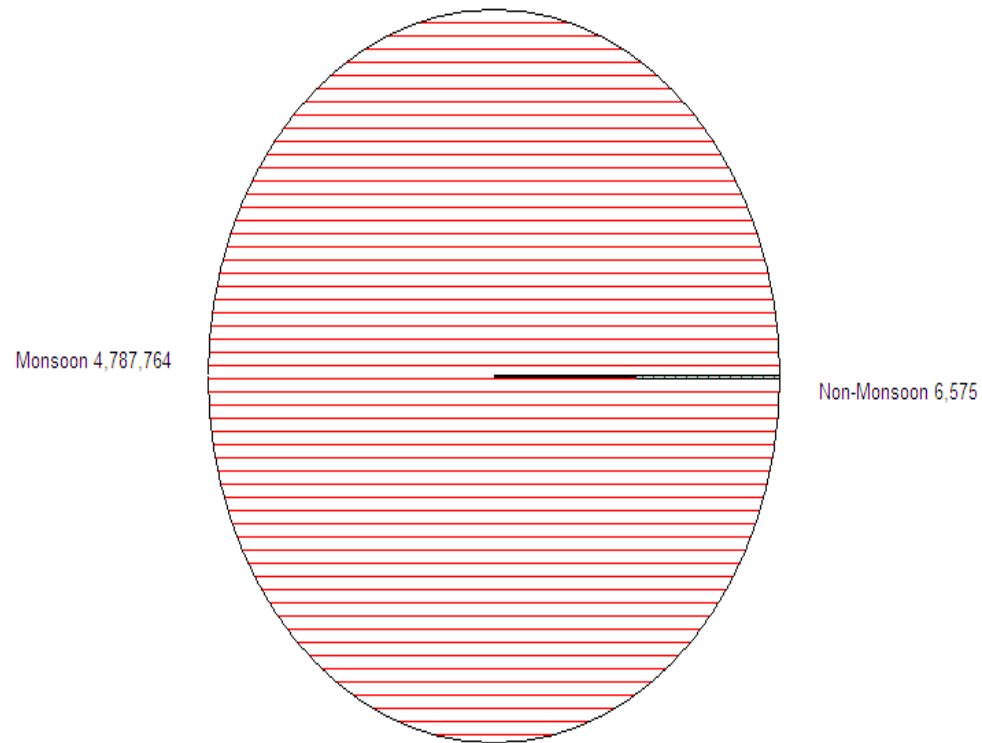
**Seasonal Sediment Load for period : 2002-2016**

Station Name : Banjar at Bamni

Local River : Banjar

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur



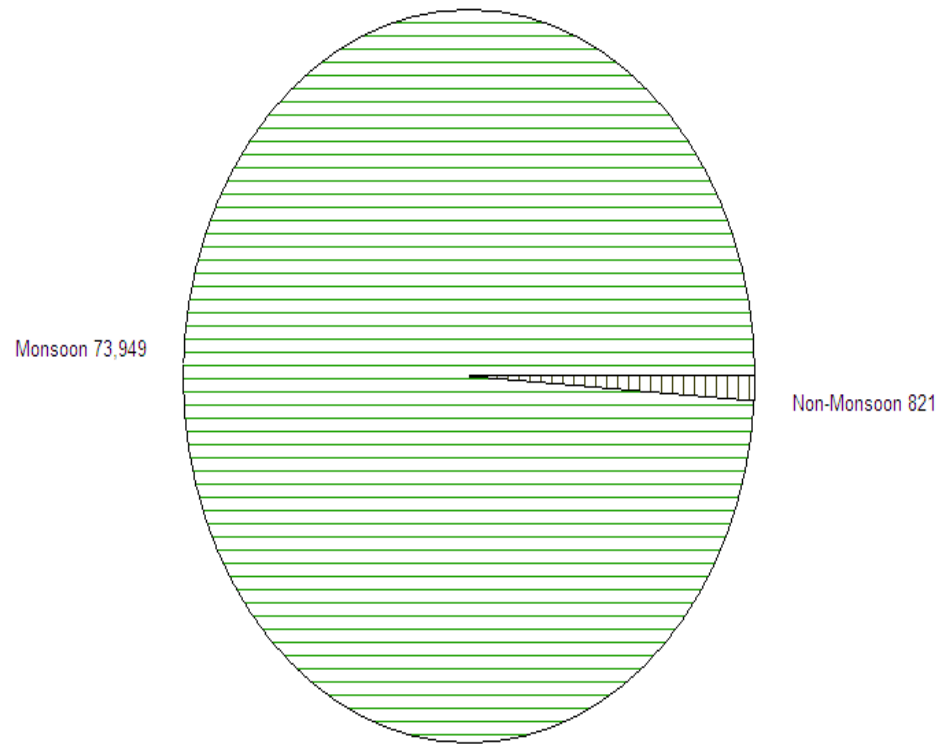
**Seasonal Sediment Load for period : 2015-2016**

Station Name : Banjar at Bamni

Local River : Banjar

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur





**6.10 Burhner at Mohgaon****History Sheet**

		<b>Water Year</b>	: <b>2015-2016</b>
<b>Site</b>	: <b>Burhner at Mohgaon</b>	<b>Code</b>	: <b>010215004</b>
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"
<b>Zero of Gauge (m)</b>	: 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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	0.526						22.03	0.000	0.000	0.285	0.285	542	21.90	0.000	0.000	0.060	0.060	114
2	0.492						99.75	0.000	0.000	0.452	0.452	3898	19.95	0.000	0.000	0.055	0.055	94
3	0.467						106.4	0.000	0.000	1.217	1.217	11187	24.87	0.000	0.000	0.073	0.073	158
4	0.442						124.9	0.000	0.000	0.703	0.703	7579	1564	0.000	0.000	1.598	1.598	215939
5	0.444						52.82	0.000	0.000	0.297	0.297	1356	436.1	0.000	0.000	0.655	0.655	24669
6	0.418						36.13	0.000	0.000	0.434	0.434	1353	217.9	0.000	0.000	0.327	0.327	6159
7	0.820						20.68	0.000	0.000	0.261	0.261	466	225.0	0.000	0.000	0.038	0.038	739
8	0.593						13.03	0.000	0.000	0.242	0.242	273	167.2	0.000	0.000	0.100	0.100	1449
9	0.566						27.99	0.000	0.000	0.515	0.515	1246	104.6	0.000	0.000	0.063	0.063	567
10	0.520						568.0	0.000	0.000	0.878	0.878	43086	89.97	0.000	0.000	0.075	0.075	583
11	0.493						535.9	0.000	0.000	0.920	0.920	42571	152.9	0.000	0.000	0.056	0.056	740
12	1.208						269.5	0.000	0.000	0.462	0.462	10765	169.6	0.000	0.000	0.542	0.542	7940
13	1.781						162.6	0.000	0.000	0.369	0.369	5189	202.9	0.000	0.000	0.577	0.577	10117
14	2.494						100.0	0.000	0.000	0.269	0.269	2325	184.6	0.000	0.000	0.510	0.510	8136
15	1.733						62.69	0.000	0.000	0.169	0.169	913	144.9	0.000	0.000	0.400	0.400	5014
16	7.154	0.000	0.000	0.043	0.043	26	50.31	0.000	0.000	0.150	0.150	651	207.9	0.000	0.000	0.575	0.575	10320
17	9.639	0.000	0.000	0.057	0.057	48	32.99	0.000	0.000	0.088	0.088	249	206.4	0.000	0.000	0.551	0.551	9823
18	11.11	0.000	0.000	0.033	0.033	32	55.68	0.000	0.000	0.148	0.148	710	261.3	0.000	0.000	0.306	0.306	6907
19	18.09	0.000	0.000	0.059	0.059	91	78.07	0.000	0.000	0.207	0.207	1397	222.9	0.000	0.000	0.283	0.283	5455
20	10.79	0.000	0.000	0.226	0.226	211	68.99	0.000	0.000	0.243	0.243	1447	172.9	0.000	0.000	0.150	0.150	2237
21	8.607	0.000	0.000	0.180	0.180	134	70.70	0.000	0.000	0.249	0.249	1518	122.2	0.000	0.000	0.106	0.106	1123
22	10.50	0.000	0.000	0.151	0.151	137	103.7	0.000	0.000	0.314	0.314	2811	104.6	0.000	0.000	0.047	0.047	420
23	1160	0.000	0.000	4.173	4.173	418176	126.1	0.000	0.000	0.607	0.607	6616	75.76	0.000	0.000	0.034	0.034	220
24	142.0	0.000	0.000	1.804	1.804	22129	143.0	0.000	0.000	0.507	0.507	6266	69.59	0.000	0.000	0.074	0.074	445
25	66.81	0.000	0.000	0.701	0.701	4043	130.2	0.000	0.000	0.532	0.532	5978	65.44	0.000	0.000	0.086	0.086	483
26	36.41	0.000	0.000	0.313	0.313	983	84.00	0.000	0.000	0.343	0.343	2489	50.93	0.000	0.000	0.036	0.036	158
27	23.83	0.000	0.000	0.228	0.228	470	81.33	0.000	0.000	0.217	0.217	1525	132.9	0.000	0.000	0.202	0.202	2313
28	20.52	0.000	0.000	0.197	0.197	348	62.08	0.000	0.000	0.148	0.148	795	268.0	0.000	0.000	0.403	0.403	9338
29	25.47	0.000	0.000	0.175	0.175	384	38.96	0.000	0.000	0.082	0.082	277	346.2	0.000	0.000	0.539	0.539	16113
30	26.47	0.000	0.000	0.186	0.186	425	29.98	0.000	0.000	0.145	0.145	376	514.0	0.000	0.000	0.800	0.800	35519
31							130.7	0.000	0.000	0.633	0.633	7147	362.3	0.000	0.000	0.674	0.674	21105
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	0.529						107.2	0.000	0.000	0.528	0.528	7099	287.2	0.000	0.000	0.304	0.304	25047
<b>Ten Daily II</b>	6.449	0.000	0.000	0.084	0.084	82	141.7	0.000	0.000	0.302	0.302	6622	192.6	0.000	0.000	0.395	0.395	6669
<b>Ten Daily III</b>	152.0	0.000	0.000	0.811	0.811	44723	90.98	0.000	0.000	0.343	0.343	3254	192.0	0.000	0.000	0.273	0.273	7931
<b>Monthly Total</b>						447637						173000						404395

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	221.1	0.000	0.000	0.170	0.170	3242	40.52	0.000	0.000	0.041	0.041	142	54.72	0.000	0.000	0.109	0.109	514	
2	230.5	0.000	0.000	0.177	0.177	3524	31.35	0.000	0.000	0.031	0.031	85	24.57	0.000	0.000	0.041	0.041	86	
3	175.6	0.000	0.000	0.565	0.565	8567	37.08	0.000	0.000	0.040	0.040	128	21.62	0.000	0.000	0.040	0.040	75	
4	139.5	0.000	0.000	0.138	0.138	1658	29.26	0.000	0.000	0.032	0.032	80	23.29	0.000	0.000	0.151	0.151	303	
5	119.3	0.000	0.000	0.073	0.073	747	33.38	0.000	0.000	0.012	0.012	33	21.51	0.000	0.000	0.040	0.040	74	
6	84.00	0.000	0.000	0.051	0.051	370	30.38	0.000	0.000	0.040	0.040	105	20.76	0.000	0.000	0.040	0.040	72	
7	69.52	0.000	0.000	0.059	0.059	354	29.41	0.000	0.000	0.040	0.040	101	19.18	0.000	0.000	0.040	0.040	65	
8	75.70	0.000	0.000	0.048	0.048	314	27.81	0.000	0.000	0.040	0.040	95	15.28	0.000	0.000	0.031	0.031	42	
9	75.25	0.000	0.000	0.048	0.048	314	26.69	0.000	0.000	0.039	0.039	91	15.73	0.000	0.000	0.118	0.118	161	
10	68.50	0.000	0.000	0.044	0.044	260	25.47	0.000	0.000	0.039	0.039	86	15.02	0.000	0.000	0.113	0.113	147	
11	62.94	0.000	0.000	0.159	0.159	862	21.66	0.000	0.000	0.033	0.033	62	12.54	0.000	0.000	0.094	0.094	102	
12	56.43	0.000	0.000	0.142	0.142	693	23.43	0.000	0.000	0.038	0.038	77	14.58	0.000	0.000	0.038	0.038	48	
13	38.90	0.000	0.000	0.098	0.098	329	22.38	0.000	0.000	0.039	0.039	75	14.26	0.000	0.000	0.031	0.031	38	
14	47.52	0.000	0.000	0.065	0.065	266	21.23	0.000	0.000	0.039	0.039	71	13.21	0.000	0.000	0.043	0.043	49	
15	77.94	0.000	0.000	0.052	0.052	350	20.76	0.000	0.000	0.039	0.039	69	10.67	0.000	0.000	0.034	0.034	32	
16	68.31	0.000	0.000	0.073	0.073	428	20.31	0.000	0.000	0.039	0.039	68	12.83	0.000	0.000	0.038	0.038	42	
17	49.12	0.000	0.000	0.052	0.052	221	19.14	0.000	0.000	0.036	0.036	60	12.54	0.000	0.000	0.038	0.038	41	
18	120.9	0.000	0.000	0.097	0.097	1010	16.26	0.000	0.000	0.031	0.031	44	12.18	0.000	0.000	0.038	0.038	40	
19	142.7	0.000	0.000	0.337	0.337	4159	18.63	0.000	0.000	0.039	0.039	62	11.76	0.000	0.000	0.037	0.037	38	
20	92.71	0.000	0.000	0.219	0.219	1755	18.15	0.000	0.000	0.039	0.039	60	11.71	0.000	0.000	0.038	0.038	38	
21	133.5	0.000	0.000	0.190	0.190	2191	17.87	0.000	0.000	0.038	0.038	59	11.80	0.000	0.000	0.038	0.038	39	
22	352.3	0.000	0.000	0.924	0.924	28124	14.80	0.000	0.000	0.032	0.032	41	8.965	0.000	0.000	0.029	0.029	22	
23	158.3	0.000	0.000	0.374	0.374	5108	17.11	0.000	0.000	0.038	0.038	55	10.88	0.000	0.000	0.040	0.040	37	
24	113.7	0.000	0.000	0.117	0.117	1151	13.87	0.000	0.000	0.030	0.030	36	8.607	0.000	0.000	0.031	0.031	23	
25	67.97	0.000	0.000	0.070	0.070	411	13.42	0.000	0.000	0.029	0.029	34	8.257	0.000	0.000	0.030	0.030	21	
26	68.69	0.000	0.000	0.049	0.049	288	15.89	0.000	0.000	0.038	0.038	52	10.05	0.000	0.000	0.037	0.037	32	
27	50.03	0.000	0.000	0.035	0.035	153	15.19	0.000	0.000	0.038	0.038	50	9.242	0.000	0.000	0.037	0.037	29	
28	51.81	0.000	0.000	0.045	0.045	201	15.23	0.000	0.000	0.039	0.039	51	9.117	0.000	0.000	0.037	0.037	29	
29	44.81	0.000	0.000	0.044	0.044	168	26.10	0.000	0.000	0.041	0.041	92	7.582	0.000	0.000	0.031	0.031	20	
30	42.47	0.000	0.000	0.041	0.041	152	17.79	0.000	0.000	0.083	0.083	127	8.377	0.000	0.000	0.037	0.037	26	
31							20.37	0.000	0.000	0.041	0.041	71							
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	125.9	0.000	0.000	0.137	0.137	1935	31.14	0.000	0.000	0.035	0.035	95	23.17	0.000	0.000	0.072	0.072	154	
<b>Ten Daily II</b>	75.75	0.000	0.000	0.129	0.129	1007	20.20	0.000	0.000	0.037	0.037	65	12.63	0.000	0.000	0.043	0.043	47	
<b>Ten Daily III</b>	108.4	0.000	0.000	0.189	0.189	3795	17.06	0.000	0.000	0.041	0.041	61	9.288	0.000	0.000	0.035	0.035	28	
<b>Monthly Total</b>						67372						2264						2286	

Sediment Data Year Book 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	7.973	0.000	0.000	0.035	0.035	24	4.652	0.000	0.000	0.033	0.033	13	4.829	0.000	0.000	0.035	0.035	15
2	7.903	0.000	0.000	0.034	0.034	24	4.667	0.000	0.000	0.034	0.034	14	4.801	0.000	0.000	0.035	0.035	14
3	7.397	0.000	0.000	0.032	0.032	21	4.416	0.000	0.000	0.032	0.032	12	4.738	0.000	0.000	0.034	0.034	14
4	6.875	0.000	0.000	0.030	0.030	18	5.201	0.000	0.000	0.034	0.034	15	4.624	0.000	0.000	0.034	0.034	13
5	6.435	0.000	0.000	0.028	0.028	16	5.177	0.000	0.000	0.034	0.034	15	4.408	0.000	0.000	0.032	0.032	12
6	6.029	0.000	0.000	0.026	0.026	14	5.189	0.000	0.000	0.034	0.034	15	4.424	0.000	0.000	0.032	0.032	12
7	6.065	0.000	0.000	0.036	0.036	19	5.008	0.000	0.000	0.033	0.033	14	5.460	0.000	0.000	0.040	0.040	19
8	5.864	0.000	0.000	0.035	0.035	18	5.009	0.000	0.000	0.033	0.033	14	4.226	0.000	0.000	0.035	0.035	13
9	5.713	0.000	0.000	0.034	0.034	17	4.965	0.000	0.000	0.033	0.033	14	4.209	0.000	0.000	0.034	0.034	12
10	5.539	0.000	0.000	0.033	0.033	16	4.416	0.000	0.000	0.029	0.029	11	4.195	0.000	0.000	0.034	0.034	12
11	5.518	0.000	0.000	0.033	0.033	16	4.703	0.000	0.000	0.034	0.034	14	4.163	0.000	0.000	0.034	0.034	12
12	5.416	0.000	0.000	0.032	0.032	15	4.545	0.000	0.000	0.033	0.033	13	3.917	0.000	0.000	0.032	0.032	11
13	4.665	0.000	0.000	0.028	0.028	11	4.503	0.000	0.000	0.032	0.032	13	3.887	0.000	0.000	0.032	0.032	11
14	5.317	0.000	0.000	0.036	0.036	16	4.326	0.000	0.000	0.031	0.031	12	4.923	0.000	0.000	0.040	0.040	17
15	5.210	0.000	0.000	0.035	0.035	16	4.312	0.000	0.000	0.031	0.031	12	3.855	0.000	0.000	0.034	0.034	11
16	5.175	0.000	0.000	0.035	0.035	15	4.306	0.000	0.000	0.031	0.031	12	3.822	0.000	0.000	0.034	0.034	11
17	5.029	0.000	0.000	0.034	0.034	15	3.937	0.000	0.000	0.028	0.028	10	3.786	0.000	0.000	0.034	0.034	11
18	5.029	0.000	0.000	0.034	0.034	15	5.116	0.000	0.000	0.034	0.034	15	3.720	0.000	0.000	0.033	0.033	11
19	4.998	0.000	0.000	0.033	0.033	14	5.116	0.000	0.000	0.034	0.034	15	3.631	0.000	0.000	0.032	0.032	10
20	4.416	0.000	0.000	0.029	0.029	11	5.103	0.000	0.000	0.034	0.034	15	4.665	0.000	0.000	0.042	0.042	17
21	5.023	0.000	0.000	0.035	0.035	15	5.875	0.000	0.000	0.035	0.035	18	4.665	0.000	0.000	0.042	0.042	17
22	4.951	0.000	0.000	0.034	0.034	15	5.680	0.000	0.000	0.034	0.034	17	3.525	0.000	0.000	0.033	0.033	10
23	4.879	0.000	0.000	0.034	0.034	14	5.537	0.000	0.000	0.033	0.033	16	3.365	0.000	0.000	0.032	0.032	9
24	4.173	0.000	0.000	0.029	0.029	10	5.188	0.000	0.000	0.031	0.031	14	3.206	0.000	0.000	0.030	0.030	8
25	4.173	0.000	0.000	0.029	0.029	10	5.326	0.000	0.000	0.035	0.035	16	3.104	0.000	0.000	0.029	0.029	8
26	4.842	0.000	0.000	0.034	0.034	14	4.923	0.000	0.000	0.032	0.032	14	2.941	0.000	0.000	0.028	0.028	7
27	4.173	0.000	0.000	0.029	0.029	10	5.310	0.000	0.000	0.034	0.034	16	2.911	0.000	0.000	0.027	0.027	7
28	4.803	0.000	0.000	0.035	0.035	14	5.154	0.000	0.000	0.033	0.033	15	3.937	0.000	0.000	0.037	0.037	13
29	4.824	0.000	0.000	0.035	0.035	14	5.109	0.000	0.000	0.033	0.033	15	2.475	0.000	0.000	0.033	0.033	7
30	4.682	0.000	0.000	0.034	0.034	14	5.070	0.000	0.000	0.033	0.033	14						
31	4.642	0.000	0.000	0.033	0.033	13	6.029	0.000	0.000	0.039	0.039	20						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	6.579	0.000	0.000	0.032	0.032	18	4.870	0.000	0.000	0.033	0.033	14	4.591	0.000	0.000	0.034	0.034	14
<b>Ten Daily II</b>	5.077	0.000	0.000	0.033	0.033	14	4.597	0.000	0.000	0.032	0.032	13	4.037	0.000	0.000	0.035	0.035	12
<b>Ten Daily III</b>	4.651	0.000	0.000	0.033	0.033	13	5.382	0.000	0.000	0.034	0.034	16	3.348	0.000	0.000	0.032	0.032	10
<b>Monthly Total</b>						475						441						345

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	2.460	0.000	0.000	0.032	0.032	7	1.708						0.339					
2	2.437	0.000	0.000	0.032	0.032	7	1.609						0.331					
3	2.171	0.000	0.000	0.029	0.029	5	2.317						0.316					
4	2.132	0.000	0.000	0.028	0.028	5	1.530						0.265					
5	2.119	0.000	0.000	0.028	0.028	5	1.420						0.237					
6	3.489	0.000	0.000	0.046	0.046	14	1.074						0.225					
7	1.869	0.000	0.000	0.032	0.032	5	0.997						0.217					
8	1.862	0.000	0.000	0.031	0.031	5	0.948						0.281					
9	1.856	0.000	0.000	0.031	0.031	5	0.891						0.339					
10	1.662	0.000	0.000	0.028	0.028	4	1.535						0.333					
11	3.635	0.000	0.000	0.061	0.061	19	0.861						0.289					
12	4.399	0.000	0.000	0.074	0.074	28	0.815						0.252					
13	6.029	0.000	0.000	0.102	0.102	53	0.762						0.242					
14	3.979	0.000	0.000	0.033	0.033	11	1.147						0.207					
15	3.792	0.000	0.000	0.031	0.031	10	1.032						0.140					
16	3.720	0.000	0.000	0.031	0.031	10	0.700						0.205					
17	3.727	0.000	0.000	0.031	0.031	10	0.923						0.185					
18	3.613	0.000	0.000	0.030	0.030	9	0.666						0.132					
19	3.603	0.000	0.000	0.030	0.030	9	0.620						0.168					
20	4.923	0.000	0.000	0.041	0.041	17	0.820						0.156					
21	3.446	0.000	0.000	0.032	0.032	10	0.583						0.050					
22	3.413	0.000	0.000	0.032	0.032	9	0.606						0.031					
23	3.360	0.000	0.000	0.031	0.031	9	0.568						0.098					
24	4.416	0.000	0.000	0.041	0.041	16	0.552						0.094					
25	4.416	0.000	0.000	0.041	0.041	16	0.511						0.110					
26	3.140	0.000	0.000	0.029	0.029	8	0.486						0.109					
27	4.173	0.000	0.000	0.039	0.039	14	0.456						0.140					
28	2.975	0.000	0.000	0.032	0.032	8	0.446						0.075					
29	2.570	0.000	0.000	0.027	0.027	6	0.440						0.075					
30	2.247	0.000	0.000	0.024	0.024	5	0.388						0.148					
31	1.837	0.000	0.000	0.019	0.019	3							0.181					
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	2.206	0.000	0.000	0.032	0.032	6	1.403						0.288					
<b>Ten Daily II</b>	4.142	0.000	0.000	0.046	0.046	18	0.835						0.198					
<b>Ten Daily III</b>	3.272	0.000	0.000	0.032	0.032	9	0.503						0.101					
<b>Monthly Total</b>						343												

Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1993-2016**

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

Sediment Data Year Book 2015-16

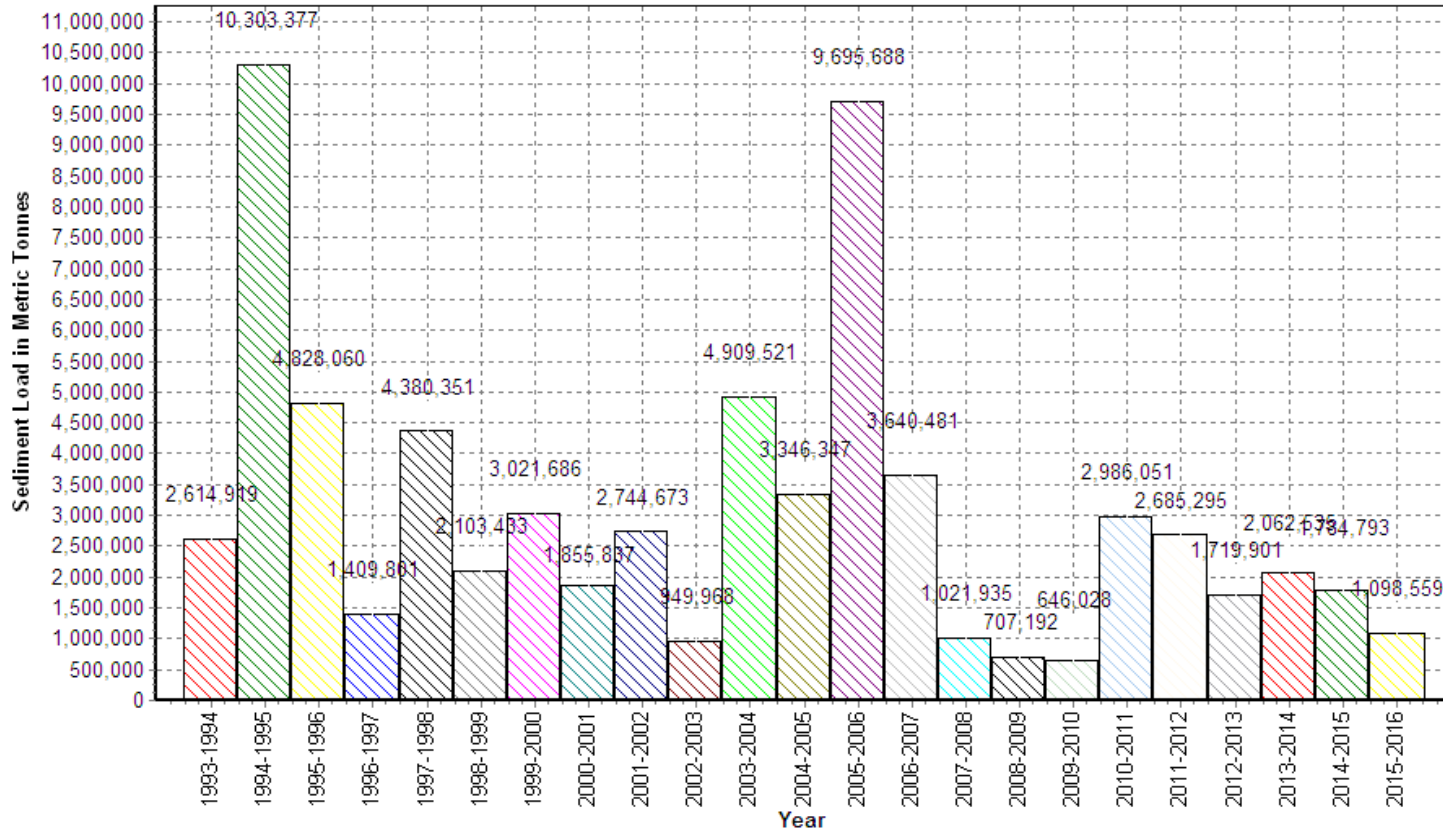
**Annual Sediment Load for period : 1993-2016**

Station Name : Burhner at Mohgaon ( 010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2015-16

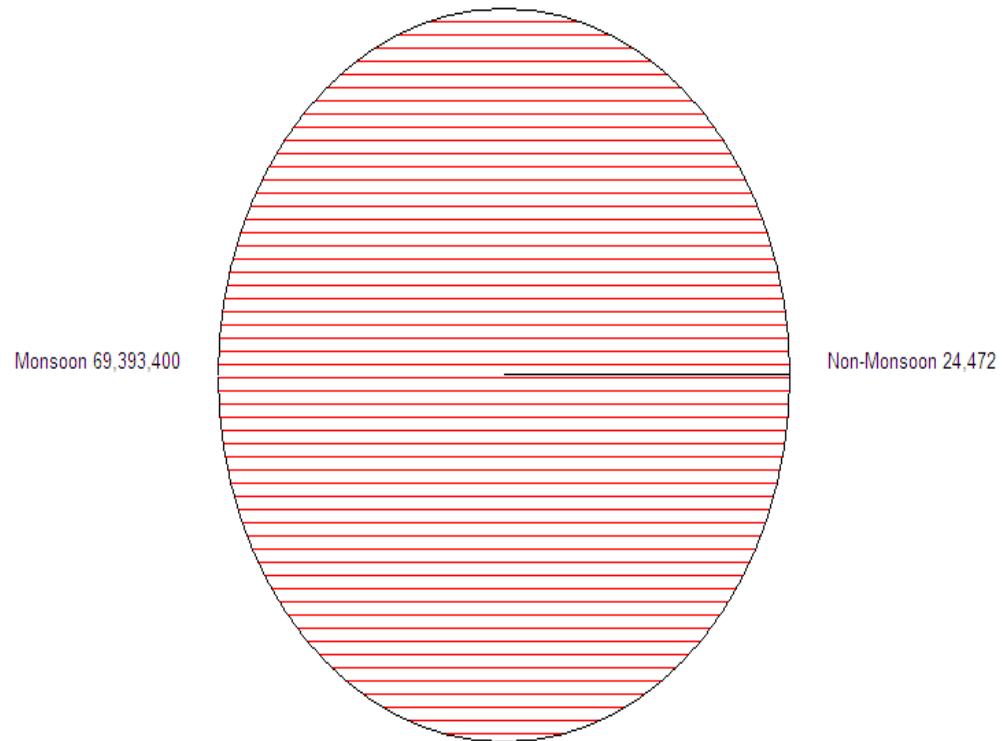
**Seasonal Sediment Load for period : 1993-2016**

Station Name : Burhner at Mohgaon ( 010215004)

Local River : Burhner

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2015-16

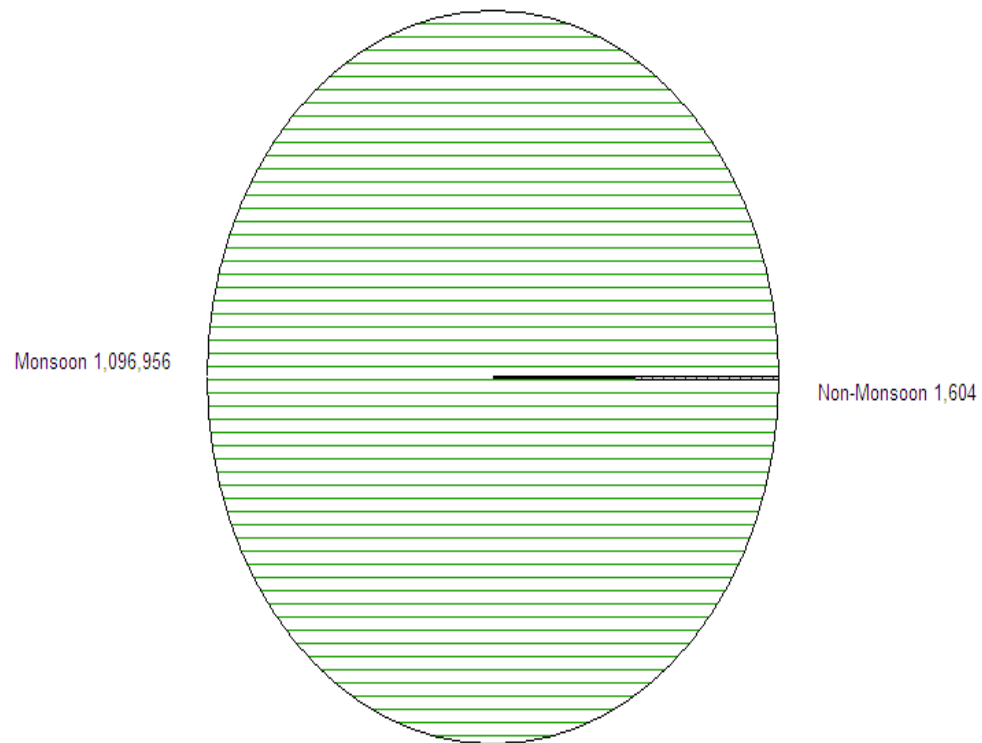
**Seasonal Sediment Load for period : 2015-2016**

Station Name : Burhner at Mohgaon ( 010215004)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur





**6.11 Narmada at Manot****History Sheet**

		<b>Water Year</b>	: <b>2015-2016</b>
<b>Site</b>	: <b>Narmada at Manot</b>	<b>Code</b>	: <b>010215002</b>
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"
<b>Zero of Gauge (m)</b>	: 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 2015-16

Daily Observed Sediment Datasheet for period : 2015-2016

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	1.793	0.000	0.000	0.003	0.003	0	50.31	0.000	0.000	0.356	0.356	1548	40.66	0.000	0.000	0.049	0.049	171
2	1.705	0.000	0.000	0.002	0.002	0	90.05	0.000	0.000	0.601	0.601	4678	41.65	0.000	0.000	0.050	0.050	180
3	1.490	0.000	0.000	0.002	0.002	0	94.37	0.000	0.000	0.630	0.630	5138	45.25	0.000	0.000	0.043	0.043	169
4	1.401	0.000	0.000	0.002	0.002	0	172.6	0.000	0.000	0.620	0.620	9240	1178	0.000	0.000	0.848	0.848	86290
5	1.256	0.000	0.000	0.002	0.002	0	96.79	0.000	0.000	0.348	0.348	2906	328.5	0.000	0.000	0.743	0.743	21072
6	1.153	0.000	0.000	0.002	0.002	0	53.28	0.000	0.000	0.593	0.593	2731	173.6	0.000	0.000	0.876	0.876	13145
7	1.200	0.000	0.000	0.002	0.002	0	46.41	0.000	0.000	0.235	0.235	943	155.5	0.000	0.000	0.623	0.623	8370
8	0.963	0.000	0.000	0.002	0.002	0	39.87	0.000	0.000	0.194	0.194	667	140.9	0.000	0.000	0.409	0.409	4981
9	0.890	0.000	0.000	0.002	0.002	0	65.59	0.000	0.000	0.318	0.318	1804	105.8	0.000	0.000	0.307	0.307	2807
10	0.818	0.000	0.000	0.002	0.002	0	285.0	0.000	0.000	0.602	0.602	14816	114.3	0.000	0.000	0.564	0.564	5569
11	1.217	0.000	0.000	0.002	0.002	0	280.2	0.000	0.000	0.598	0.598	14471	290.8	0.000	0.000	0.721	0.721	18117
12	1.474	0.000	0.000	0.003	0.003	0	195.2	0.000	0.000	0.416	0.416	7021	270.8	0.000	0.000	0.453	0.453	10599
13	1.806	0.000	0.000	0.003	0.003	1	142.4	0.000	0.000	0.597	0.597	7344	230.0	0.000	0.000	0.528	0.528	10485
14	0.419	0.000	0.000	0.001	0.001	0	105.6	0.000	0.000	0.598	0.598	5451	239.8	0.000	0.000	0.505	0.505	10461
15	27.59	0.000	0.000	0.005	0.005	13	93.56	0.000	0.000	0.538	0.538	4345	163.7	0.000	0.000	0.345	0.345	4876
16	27.76	0.000	0.000	0.006	0.006	14	56.79	0.000	0.000	0.331	0.331	1625	163.7	0.000	0.000	0.345	0.345	4876
17	25.08	0.000	0.000	0.005	0.005	11	46.99	0.000	0.000	0.319	0.319	1295	151.7	0.000	0.000	0.468	0.468	6140
18	18.62	0.000	0.000	0.005	0.005	8	46.05	0.000	0.000	0.313	0.313	1244	153.9	0.000	0.000	0.457	0.457	6078
19	16.25	0.000	0.000	0.004	0.004	6	88.18	0.000	0.000	0.599	0.599	4561	160.9	0.000	0.000	0.233	0.233	3238
20	15.38	0.000	0.000	0.004	0.004	5	140.9	0.000	0.000	0.598	0.598	7282	157.9	0.000	0.000	0.179	0.179	2440
21	30.41	0.000	0.000	0.008	0.008	21	106.8	0.000	0.000	0.591	0.591	5454	140.9	0.000	0.000	0.179	0.179	2182
22	20.23	0.000	0.000	0.013	0.013	23	94.25	0.000	0.000	0.364	0.364	2960	107.0	0.000	0.000	0.152	0.152	1406
23	860.3	0.000	0.000	0.912	0.912	67814	97.02	0.000	0.000	0.384	0.384	3215	76.51	0.000	0.000	0.109	0.109	718
24	268.3	0.000	0.000	0.853	0.853	19775	296.3	0.000	0.000	0.598	0.598	15310	93.84	0.000	0.000	0.154	0.154	1249
25	103.0	0.000	0.000	0.737	0.737	6556	230.7	0.000	0.000	0.591	0.591	11773	82.47	0.000	0.000	0.279	0.279	1990
26	76.53	0.000	0.000	0.815	0.815	5386	121.9	0.000	0.000	0.312	0.312	3289	78.77	0.000	0.000	0.152	0.152	1031
27	46.51	0.000	0.000	0.561	0.561	2253	121.7	0.000	0.000	0.374	0.374	3932	92.41	0.000	0.000	0.152	0.152	1210
28	46.95	0.000	0.000	0.566	0.566	2295	102.4	0.000	0.000	0.367	0.367	3246	134.1	0.000	0.000	0.168	0.168	1946
29	46.09	0.000	0.000	0.545	0.545	2170	78.26	0.000	0.000	0.351	0.351	2375	142.5	0.000	0.000	0.172	0.172	2121
30	58.24	0.000	0.000	0.558	0.558	2805	51.60	0.000	0.000	0.345	0.345	1538	699.3	0.000	0.000	0.846	0.846	51087
31							41.72	0.000	0.000	0.338	0.338	1217	293.3	0.000	0.000	0.598	0.598	15140
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	1.267	0.000	0.000	0.002	0.002	0	99.42	0.000	0.000	0.450	0.450	4447	232.4	0.000	0.000	0.451	0.451	14275
<b>Ten Daily II</b>	13.56	0.000	0.000	0.004	0.004	6	119.6	0.000	0.000	0.491	0.491	5464	198.3	0.000	0.000	0.423	0.423	7731
<b>Ten Daily III</b>	155.7	0.000	0.000	0.557	0.557	10910	122.1	0.000	0.000	0.419	0.419	4937	176.5	0.000	0.000	0.269	0.269	7280
<b>Monthly Total</b>						109158						153420						300145

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	156.5	0.000	0.000	0.105	0.105	1420	48.25	0.000	0.000	0.102	0.102	423	28.21	0.000	0.000	0.023	0.023	56	
2	144.1	0.000	0.000	0.179	0.179	2232	49.71	0.000	0.000	0.105	0.105	449	20.34	0.000	0.000	0.016	0.016	28	
3	156.3	0.000	0.000	0.180	0.180	2433	46.03	0.000	0.000	0.099	0.099	392	17.86	0.000	0.000	0.016	0.016	25	
4	130.6	0.000	0.000	0.179	0.179	2020	50.64	0.000	0.000	0.108	0.108	474	17.38	0.000	0.000	0.015	0.015	23	
5	104.8	0.000	0.000	0.152	0.152	1376	45.93	0.000	0.000	0.098	0.098	390	16.59	0.000	0.000	0.014	0.014	20	
6	95.54	0.000	0.000	0.139	0.139	1144	44.32	0.000	0.000	0.073	0.073	280	16.35	0.000	0.000	0.011	0.011	16	
7	94.80	0.000	0.000	0.154	0.154	1263	40.83	0.000	0.000	0.062	0.062	217	15.76	0.000	0.000	0.009	0.009	12	
8	97.32	0.000	0.000	0.155	0.155	1299	39.55	0.000	0.000	0.064	0.064	219	22.70	0.000	0.000	0.013	0.013	25	
9	104.6	0.000	0.000	0.153	0.153	1382	37.45	0.000	0.000	0.062	0.062	202	22.05	0.000	0.000	0.013	0.013	24	
10	79.77	0.000	0.000	0.152	0.152	1044	36.07	0.000	0.000	0.054	0.054	169	21.41	0.000	0.000	0.012	0.012	23	
11	56.25	0.000	0.000	0.079	0.079	384	39.95	0.000	0.000	0.060	0.060	207	20.78	0.000	0.000	0.012	0.012	21	
12	50.52	0.000	0.000	0.047	0.047	204	31.66	0.000	0.000	0.054	0.054	146	20.15	0.000	0.000	0.012	0.012	20	
13	54.46	0.000	0.000	0.050	0.050	237	29.88	0.000	0.000	0.043	0.043	112	19.54	0.000	0.000	0.011	0.011	19	
14	48.55	0.000	0.000	0.346	0.346	1451	29.16	0.000	0.000	0.050	0.050	125	19.54	0.000	0.000	0.011	0.011	19	
15	46.00	0.000	0.000	0.130	0.130	515	26.76	0.000	0.000	0.031	0.031	71	18.93	0.000	0.000	0.011	0.011	18	
16	51.25	0.000	0.000	0.344	0.344	1525	23.97	0.000	0.000	0.026	0.026	54	18.93	0.000	0.000	0.011	0.011	18	
17	56.41	0.000	0.000	0.379	0.379	1847	20.14	0.000	0.000	0.024	0.024	42	18.33	0.000	0.000	0.010	0.010	17	
18	49.31	0.000	0.000	0.343	0.343	1461	26.78	0.000	0.000	0.032	0.032	74	17.74	0.000	0.000	0.010	0.010	16	
19	104.1	0.000	0.000	0.311	0.311	2792	18.29	0.000	0.000	0.023	0.023	36	17.74	0.000	0.000	0.010	0.010	16	
20	78.78	0.000	0.000	0.235	0.235	1599	17.59	0.000	0.000	0.019	0.019	29	17.16	0.000	0.000	0.010	0.010	15	
21	98.37	0.000	0.000	0.065	0.065	552	16.76	0.000	0.000	0.019	0.019	28	17.16	0.000	0.000	0.010	0.010	15	
22	278.9	0.000	0.000	0.340	0.340	8200	22.70	0.000	0.000	0.026	0.026	50	16.59	0.000	0.000	0.009	0.009	14	
23	160.2	0.000	0.000	0.323	0.323	4464	15.78	0.000	0.000	0.019	0.019	26	11.76	0.000	0.000	0.009	0.009	9	
24	115.2	0.000	0.000	0.298	0.298	2970	21.41	0.000	0.000	0.026	0.026	48	11.67	0.000	0.000	0.009	0.009	9	
25	79.93	0.000	0.000	0.207	0.207	1429	20.78	0.000	0.000	0.025	0.025	45	16.02	0.000	0.000	0.012	0.012	17	
26	95.09	0.000	0.000	0.237	0.237	1950	14.54	0.000	0.000	0.017	0.017	22	16.02	0.000	0.000	0.012	0.012	17	
27	64.54	0.000	0.000	0.161	0.161	898	13.89	0.000	0.000	0.016	0.016	19	16.02	0.000	0.000	0.012	0.012	17	
28	55.69	0.000	0.000	0.110	0.110	527	18.33	0.000	0.000	0.021	0.021	33	15.74	0.000	0.000	0.012	0.012	17	
29	51.09	0.000	0.000	0.080	0.080	353	17.74	0.000	0.000	0.020	0.020	31	15.74	0.000	0.000	0.012	0.012	17	
30	50.06	0.000	0.000	0.100	0.100	430	23.36	0.000	0.000	0.026	0.026	53	15.47	0.000	0.000	0.012	0.012	16	
31							17.05	0.000	0.000	0.014	0.014	21							
<b>Ten Daily Mean</b>																			
<b>Ten Daily I</b>	116.4	0.000	0.000	0.155	0.155	1561	43.88	0.000	0.000	0.083	0.083	321	19.87	0.000	0.000	0.014	0.014	25	
<b>Ten Daily II</b>	59.56	0.000	0.000	0.226	0.226	1202	26.42	0.000	0.000	0.036	0.036	90	18.88	0.000	0.000	0.011	0.011	18	
<b>Ten Daily III</b>	104.9	0.000	0.000	0.192	0.192	2177	18.40	0.000	0.000	0.021	0.021	34	15.22	0.000	0.000	0.011	0.011	15	
<b>Monthly Total</b>						49402						4484							575

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	15.47	0.000	0.000	0.012	0.012	16	7.764	0.000	0.000	0.004	0.004	3	7.465	0.000	0.000	0.002	0.002	1
2	15.47	0.000	0.000	0.012	0.012	16	7.675	0.000	0.000	0.004	0.004	3	7.183	0.000	0.000	0.002	0.002	1
3	10.96	0.000	0.000	0.008	0.008	8	8.217	0.000	0.000	0.004	0.004	3	7.115	0.000	0.000	0.002	0.002	1
4	10.88	0.000	0.000	0.008	0.008	7	7.516	0.000	0.000	0.004	0.004	3	7.032	0.000	0.000	0.002	0.002	1
5	10.66	0.000	0.000	0.008	0.008	7	7.435	0.000	0.000	0.004	0.004	3	6.911	0.000	0.000	0.002	0.002	1
6	13.85	0.000	0.000	0.010	0.010	12	7.310	0.000	0.000	0.004	0.004	2	6.828	0.000	0.000	0.002	0.002	1
7	10.30	0.000	0.000	0.007	0.007	6	7.162	0.000	0.000	0.004	0.004	2	6.634	0.000	0.000	0.002	0.002	1
8	10.18	0.000	0.000	0.007	0.007	6	7.074	0.000	0.000	0.004	0.004	2	6.697	0.000	0.000	0.002	0.002	1
9	9.899	0.000	0.000	0.007	0.007	6	6.903	0.000	0.000	0.004	0.004	2	6.604	0.000	0.000	0.001	0.001	1
10	9.850	0.000	0.000	0.007	0.007	6	7.016	0.000	0.000	0.004	0.004	2	6.376	0.000	0.000	0.002	0.002	1
11	9.827	0.000	0.000	0.006	0.006	5	6.738	0.000	0.000	0.004	0.004	2	6.332	0.000	0.000	0.002	0.002	1
12	9.696	0.000	0.000	0.006	0.006	5	6.652	0.000	0.000	0.004	0.004	2	6.085	0.000	0.000	0.002	0.002	1
13	11.83	0.000	0.000	0.007	0.007	7	6.583	0.000	0.000	0.004	0.004	2	5.992	0.000	0.000	0.002	0.002	1
14	9.590	0.000	0.000	0.006	0.006	5	6.391	0.000	0.000	0.004	0.004	2	5.900	0.000	0.000	0.002	0.002	1
15	9.451	0.000	0.000	0.006	0.006	5	6.321	0.000	0.000	0.003	0.003	2	5.759	0.000	0.000	0.002	0.002	1
16	9.297	0.000	0.000	0.006	0.006	5	6.212	0.000	0.000	0.003	0.003	2	5.660	0.000	0.000	0.002	0.002	1
17	9.198	0.000	0.000	0.006	0.006	5	5.900	0.000	0.000	0.003	0.003	1	5.421	0.000	0.000	0.002	0.002	1
18	9.021	0.000	0.000	0.006	0.006	4	6.075	0.000	0.000	0.003	0.003	2	5.338	0.000	0.000	0.002	0.002	1
19	8.938	0.000	0.000	0.006	0.006	4	5.993	0.000	0.000	0.003	0.003	2	5.152	0.000	0.000	0.002	0.002	1
20	9.948	0.000	0.000	0.006	0.006	5	7.162	0.000	0.000	0.004	0.004	2	4.839	0.000	0.000	0.002	0.002	1
21	8.852	0.000	0.000	0.005	0.005	4	8.599	0.000	0.000	0.003	0.003	2	3.933	0.000	0.000	0.001	0.001	0
22	8.756	0.000	0.000	0.005	0.005	4	9.224	0.000	0.000	0.003	0.003	3	4.063	0.000	0.000	0.001	0.001	0
23	8.578	0.000	0.000	0.005	0.005	4	8.526	0.000	0.000	0.003	0.003	2	3.979	0.000	0.000	0.001	0.001	0
24	9.502	0.000	0.000	0.005	0.005	4	9.064	0.000	0.000	0.003	0.003	2	4.609	0.000	0.000	0.001	0.001	0
25	9.064	0.000	0.000	0.005	0.005	4	8.174	0.000	0.000	0.003	0.003	2	4.514	0.000	0.000	0.001	0.001	0
26	8.413	0.000	0.000	0.005	0.005	3	8.635	0.000	0.000	0.003	0.003	2	4.293	0.000	0.000	0.001	0.001	0
27	9.064	0.000	0.000	0.005	0.005	4	7.863	0.000	0.000	0.003	0.003	2	4.231	0.000	0.000	0.001	0.001	0
28	8.354	0.000	0.000	0.004	0.004	3	7.787	0.000	0.000	0.003	0.003	2	3.933	0.000	0.000	0.001	0.001	0
29	8.048	0.000	0.000	0.004	0.004	3	7.708	0.000	0.000	0.003	0.003	2	4.117	0.000	0.000	0.001	0.001	0
30	7.997	0.000	0.000	0.004	0.004	3	7.535	0.000	0.000	0.003	0.003	2						
31	7.836	0.000	0.000	0.004	0.004	3	7.806	0.000	0.000	0.003	0.003	2						
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	11.75	0.000	0.000	0.009	0.009	9	7.407	0.000	0.000	0.004	0.004	3	6.885	0.000	0.000	0.002	0.002	1
<b>Ten Daily II</b>	9.679	0.000	0.000	0.006	0.006	5	6.403	0.000	0.000	0.003	0.003	2	5.648	0.000	0.000	0.002	0.002	1
<b>Ten Daily III</b>	8.588	0.000	0.000	0.005	0.005	3	8.266	0.000	0.000	0.003	0.003	2	4.186	0.000	0.000	0.001	0.001	0
<b>Monthly Total</b>						179						67						23

Sediment Data Year Book 2015-16

**Daily Observed Sediment Datasheet for period : 2015-2016**

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	4.018	0.000	0.000	0.001	0.001	0	3.511						0.780					
2	3.937	0.000	0.000	0.001	0.001	0	3.430						0.650					
3	3.721	0.000	0.000	0.001	0.001	0	3.086						0.845					
4	3.638	0.000	0.000	0.001	0.001	0	3.170						0.614					
5	3.563	0.000	0.000	0.001	0.001	0	3.101						0.547					
6	3.359	0.000	0.000	0.001	0.001	0	2.934						0.512					
7	3.371	0.000	0.000	0.001	0.001	0	2.875						0.452					
8	3.311	0.000	0.000	0.001	0.001	0	2.864						0.450					
9	3.220	0.000	0.000	0.001	0.001	0	2.621						0.389					
10	3.145	0.000	0.000	0.001	0.001	0	2.332						0.334					
11	4.224	0.000	0.000	0.001	0.001	0	2.940						0.296					
12	4.811	0.000	0.000	0.001	0.001	0	2.375						0.293					
13	4.550	0.000	0.000	0.001	0.001	0	2.189						0.283					
14	5.138	0.000	0.000	0.001	0.001	0	1.883						0.239					
15	6.242	0.000	0.000	0.001	0.001	1	1.883						0.230					
16	6.871	0.000	0.000	0.001	0.001	1	2.004						0.184					
17	6.779	0.000	0.000	0.001	0.001	1	1.675						0.124					
18	5.528	0.000	0.000	0.001	0.001	0	1.875						0.082					
19	5.074	0.000	0.000	0.001	0.001	0	1.713						0.058					
20	4.872	0.000	0.000	0.001	0.001	0	1.478						0.051					
21	4.830	0.000	0.000	0.001	0.001	0	1.691						0.045					
22	4.764	0.000	0.000	0.001	0.001	0	1.671						0.040					
23	4.543	0.000	0.000	0.001	0.001	0	1.284						0.028					
24	4.237	0.000	0.000	0.001	0.001	0	0.954						0.034					
25	4.237	0.000	0.000	0.001	0.001	0	1.379						0.071					
26	4.318	0.000	0.000	0.001	0.001	0	0.662						0.012					
27	3.933	0.000	0.000	0.001	0.001	0	0.535						0.010					
28	4.084	0.000	0.000	0.001	0.001	0	0.419						0.010					
29	4.003	0.000	0.000	0.001	0.001	0	0.317						0.010					
30	3.756	0.000	0.000	0.001	0.001	0	0.110						0.010					
31	3.680	0.000	0.000	0.001	0.001	0							0.010					
<b>Ten Daily Mean</b>																		
<b>Ten Daily I</b>	3.528	0.000	0.000	0.001	0.001	0	2.992						0.557					
<b>Ten Daily II</b>	5.409	0.000	0.000	0.001	0.001	0	2.001						0.184					
<b>Ten Daily III</b>	4.217	0.000	0.000	0.001	0.001	0	0.902						0.025					
<b>Monthly Total</b>						11												

## Sediment Data Year Book 2015-16

**Annual Sediment Load for period : 1987-2016**

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

Sediment Data Year Book 2015-16

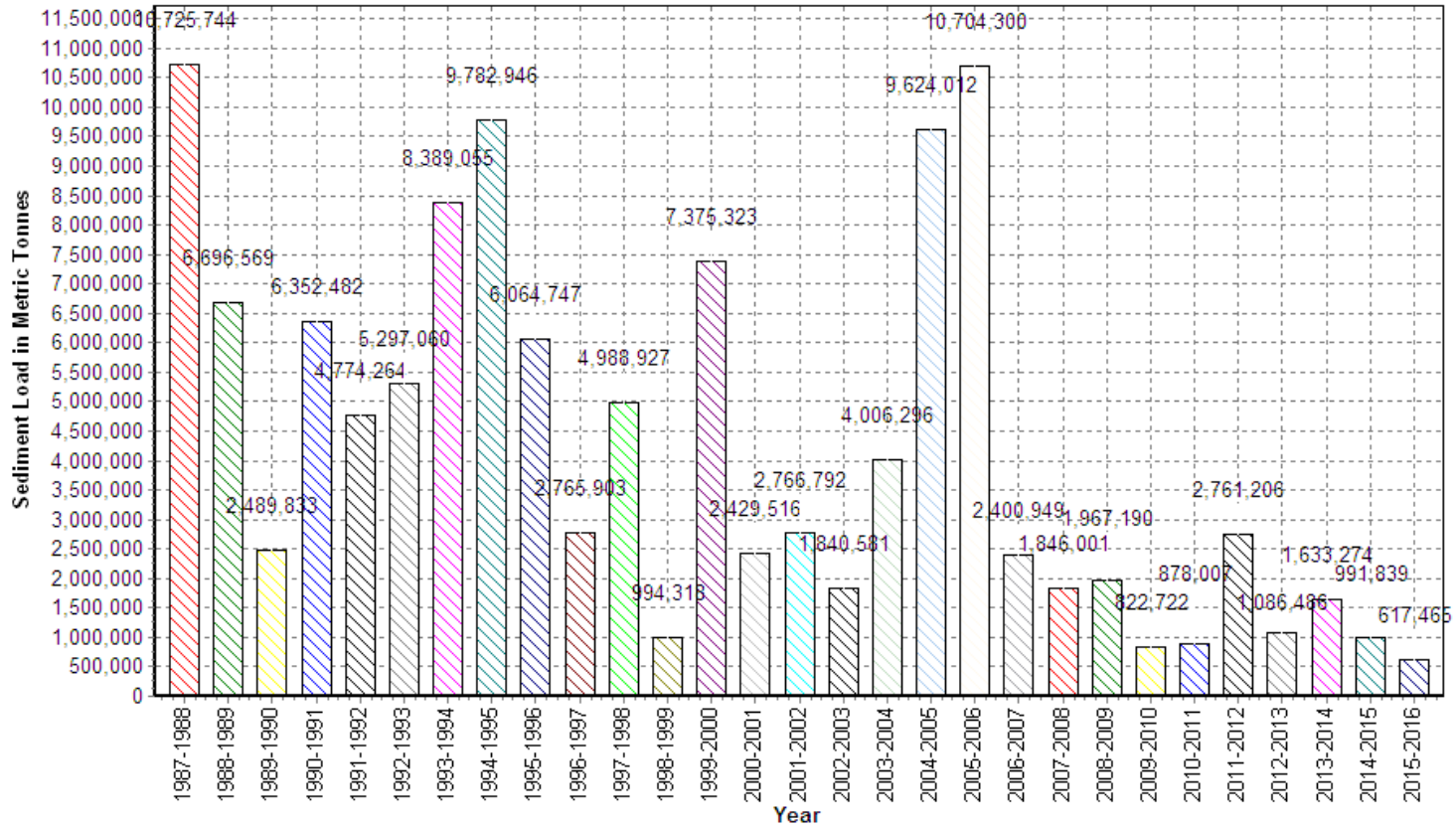
**Annual Sediment Load for period : 1987-2016**

Station Name : Narmada at Manot ( 010215002)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2015-16

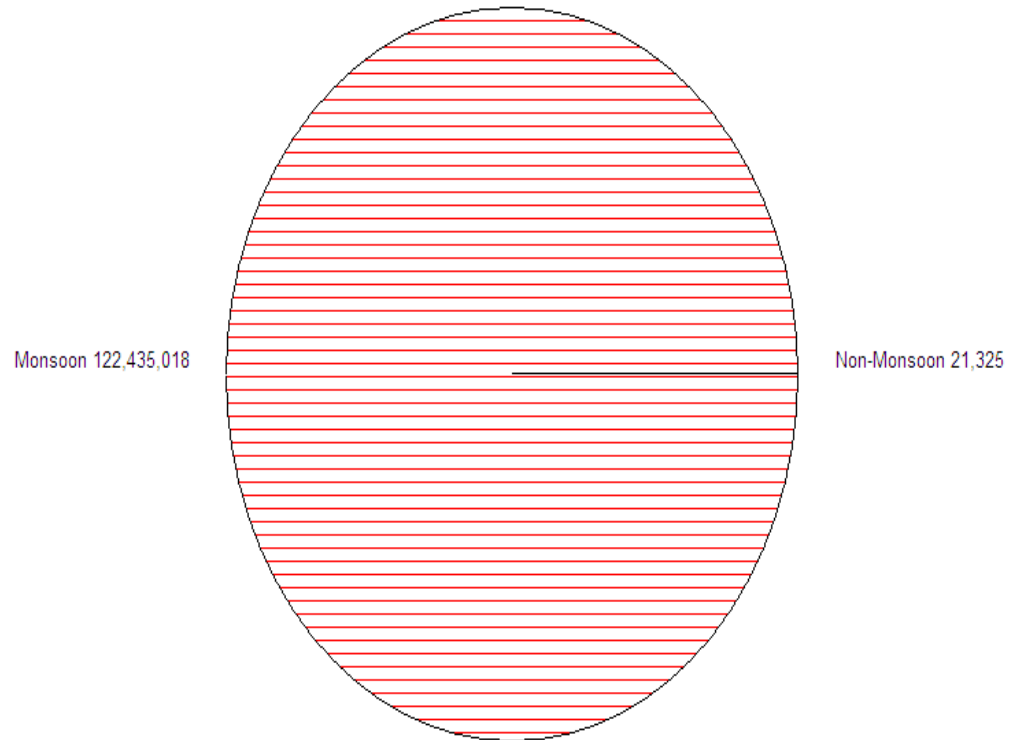
**Seasonal Sediment Load for period : 1987-2016**

Station Name : Narmada at Manot ( 010215002)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur



Sediment Data Year Book 2015-16

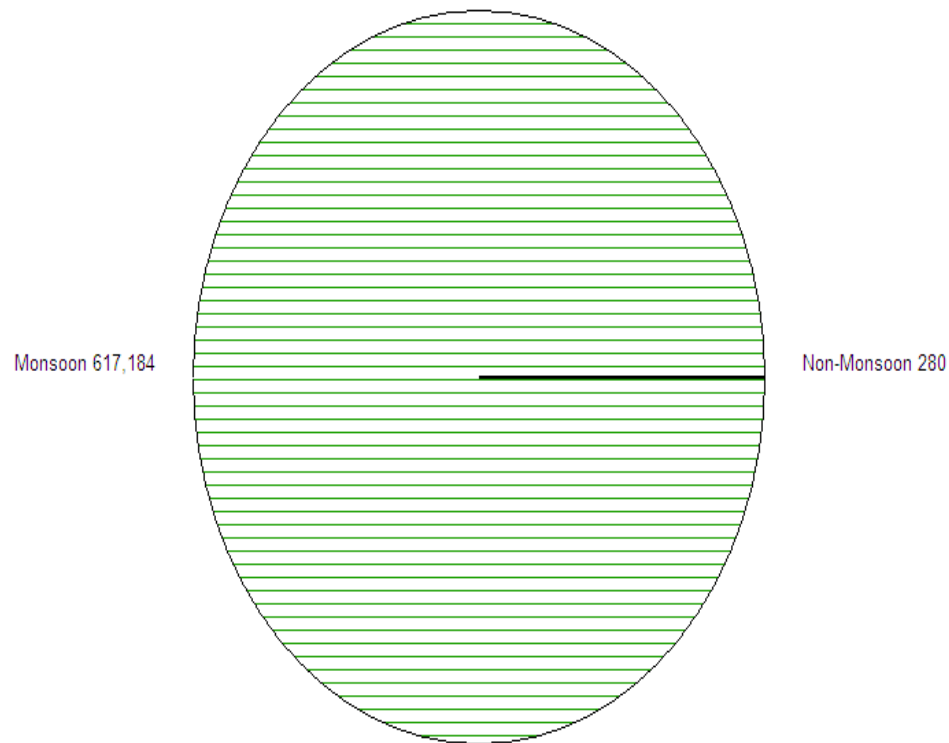
**Seasonal Sediment Load for period : 2015-2016**

Station Name : Narmada at Manot ( 010215002)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur





## 7 Part – II Bed material Data

### 7.1 Orsang at Chandwada

#### BED MATERIAL DATA FOR THE YEAR 2015-2016

**SITE : ORSANG AT CHANDWADA**

CODE : 010215032

MEASURING AUTHORITY : TAPI DIVISION

W.YEAR : 2015-16

#### PRE MONSOON SURVEY ( DATE 21.04.2015 )

Discharge 'Q' : Nil - DRY m<sup>3</sup>/sec

Water edge: L.B m R.B m

Area of Section 'A' : m<sup>2</sup>

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	0	30.620	1.58	RIVER DRY
2	80	28.200	1.87	Av . Mean Dia "d"= 1.82 mm
3	165	18.900	2.32	
4	240	18.185	3.04	Av .Silt Factor " f " = 2.37
5	360	18.535	1.21	
6	420	25.300	1.17	
7	480	26.610	1.92	
8	570	31.210	1.41	

#### MONSOON SURVEY ( DATE )

Discharge 'Q' : m<sup>3</sup>/sec

Water edge: L.B m R.B m

Area of Section 'A' : m<sup>2</sup>

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
				Av . Mean Dia "d" = mm

SURVEY NOT DONE

Av .Silt Factor " f " =

#### POST MONSOON SURVEY ( DATE 21.12.2015 )

Discharge 'Q' : Nil,-Dry m<sup>3</sup>/sec

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

Area of Section 'A' : m<sup>2</sup>

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	0	30.580	1.89	
2	80	28.215	13.5	Av . Mean Dia "d" = 5.76 mm
3	165	19.310	4.35	
4	240	17.860	3.5	Av .Silt Factor " f " = 4.22
5	360	18.485	2.26	
6	420	25.600	14.19	
7	480	26.120	3.97	
8	570	31.360	2.39	

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

## 7.2 Narmada at Garudeshwar

**BED MATERIAL DATA FOR THE YEAR 2015-2016****SITE : NARMADA AT GARUDESHWAR**

CODE : 010215030

MEASURING AUTHORITY : TAPI DIVISION

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 13.04.2015 )**Discharge 'Q' :26.88M<sup>3</sup>/sec

Water edge: L.B.:30.00m, R.B.:170.00 m

Area of Section 'A' :334.03 m<sup>2</sup>

Mean Velocity' V ' :0.080 m/ sec

Wetted Perimeter 'P' :328.78 m

Hydraulic Mean Depth 'R' :1.106 m

Sample. No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	0.00	42.100	1.25	
2	240.00	11.070	9.49	Av . Mean Dia "d"=9.15 mm
3	270.00	11.870	12.04	
4	300.00	11.970	12.22	Av .Silt Factor " f " = 5.32
5	360.00	12.020	10.54	
6	390.00	12.370	11.69	
7	420.00	12.170	11.27	
8	450.00	12.270	10.34	
9	570.00	18.100	11.03	
10	650.00	39.950	1.35	

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

**MONSOON SURVEY ( DATE )**Discharge 'Q' : m<sup>3</sup>/sec

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

Area of Section 'A' : m<sup>2</sup>

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
				Av . Mean Dia "d" = mm

SURVEY NOT TAKEN

Av .Silt Factor " f " =

**POST MONSOON SURVEY ( DATE 07.12.2015 )**Discharge 'Q' :27.78 m<sup>3</sup>/sec

Water edge: L.B.:20.00m, R.B.:170.00 m

Area of Section 'A' : 561.70 m<sup>2</sup>

Mean Velocity' V ' :0.049 m/ sec

Wetted Perimeter 'P':323.52 m

Hydraulic Mean Depth'R': 1.736 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	0.00	42.100	1.10	
2	240.00	11.025	11.30	Av . Mean Dia "d" = 8.81 mm
3	270.00	11.805	11.50	
4	300.00	11.905	11.10	Av .Silt Factor " f " = 5.22
5	360.00	11.975	9.90	
6	390.00	12.305	13.57	
7	420.00	12.115	9.34	
8	450.00	12.205	9.34	
9	570.00	18.050	9.76	
10	645.00	39.950	1.14	

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

**7.3 Narmada at Mandleshwar****BED MATERIAL DATA FOR THE YEAR 2015-2016****SITE : NARMADA AT MANDLESHWER**

CODE : 010215026

MEASURING AUTHORITY : NDN

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 22.05.2015 )**

Discharge 'Q' : 445.43

m<sup>3</sup>/sec

Water edge: L.B.:194.30m, R.B: 762.0m

Area of Section 'A':850.82 m<sup>2</sup>

Mean Velocity' V ' : 0.524 m/ sec

Wetted Perimeter 'P':578.06 m

Hydraulic Mean Depth'R': 1.472 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	146.250	3.05	
2	100	138.980	0.67	Av . Mean Dia "d"= 2.92 mm
3	200	139.100	6.09	
4	300	138.210	1.92	Av .Silt Factor " f " = 3.01
5	400	139.420	1.74	
6	500	138.390	1.60	
7	600	139.520	4.14	
8	700	141.570	4.16	

**MONSOON SURVEY ( DATE )**

Discharge 'Q' :

m<sup>3</sup>/sec

Water edge: L.B. m R.B

Area of Section 'A' m<sup>2</sup>

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 " =

**POST MONSOON SURVEY ( DATE )**Discharge 'Q' : m<sup>3</sup>/sec

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

Area of Section 'A' : m<sup>2</sup>

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	200			
4	300	NOT COLLECTED		Av .Silt Factor " f " =
5	400			
6	500			
7	600			
8	700			

**7.4 Narmada at Handia****BED MATERIAL DATA FOR THE YEAR 2015-2016****SITE :NARMADA AT HANDIA**

CODE :010215022

MEASURING AUTHORITY : DN

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 10.06.2015)**Discharge 'Q' : 180.0 m<sup>3</sup>/sec

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

Area of Section 'A' :370.30 m<sup>2</sup>

Mean Velocity' V ' : 0.486 m/ sec

Wetted Perimeter 'P': 191.70 m

Hydraulic Mean Depth'R' :1.932m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	60	260.180	0.74	
2	180	258.150	1.00	Av . Mean Dia "d"= 1.52mm
3	300	260.810	0.9	
4	420	260.140	1.00	Av .Silt Factor " f " = 2.17
5	540	260.880	1.05	
6	660	263.220	4.41	

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

**MONSOON SURVEY ( DATE 14.09.2015)**Discharge 'Q' :284.0 m<sup>3</sup>/sec

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

Area of Section 'A' :690.40 m<sup>2</sup>

Mean Velocity' V ' :0.411 m/ sec

Wetted Perimeter 'P':408.90 m

Hydraulic Mean Depth'R' :1.688 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	60	261.900	1.28	
2	180	258.150	1.05	Av . Mean Dia "d"= 1.65 mm
3	300	260.800	0.97	
4	420	260.130	1.04	Av .Silt Factor " f " = 2.26
5	540	260.870	1.17	
6	660	263.260	4.38	

**POST MONSOON SURVEY ( DATE 11.01.2016 )**Discharge 'Q' : 139.0 m<sup>3</sup>/sec

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

Area of Section 'A' :366.60 m<sup>2</sup>

Mean Velocity' V ' : 0.379 m/ sec

Wetted Perimeter 'P':228.50 m

Hydraulic Mean Depth'R' :1.604 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	60	260.200	1.11	
2	180	258.390	0.94	Av . Mean Dia "d"= 1.06 mm
3	300	260.910	0.93	
4	420	260.440	1.05	Av .Silt Factor " f " = 1.81
5	540	260.980	1.11	
6	660	263.400	1.21	

**7.5 Narmada at Hoshangabad****BED MATERIAL DATA FOR THE YEAR 2015-16****SITE:NARMADA AT HOSHANGABAD**

CODE : 010215019

MEASURING AUTHORITY : NDN

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 13.05.2015 )**Discharge 'Q' :187.25m<sup>3</sup>/sec

Water edge: L.B 48.00m,R.B.:465.00m

Area of Section 'A' :557.38m<sup>2</sup>

Mean Velocity' V ':0.336m/sec

Wetted Perimeter 'P':417.10m

Hydraulic Mean Depth'R' :1.336 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	100	283.990	5.77	
2	200	282.840	0.93	Av . Mean Dia "d" = 2.19 mm
3	300	282.980	0.85	
4	400	283.730	0.92	Av .Silt Factor " f " = 2.60
5	500	284.900	2.87	
6	600	286.610	2.88	
7	700	286.900	1.08	

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

**MONSOON SURVEY ( DATE 07.10.2015 )**Discharge 'Q':161.4m<sup>3</sup>/sec

Water edge:L.B:48.40m,R.B:452.00m

Area of Section 'A':536.34m<sup>2</sup>

Mean Velocity' V ':0.301m/sec

Wetted Perimeter 'P':403.7m

Hydraulic Mean Depth'R':1.328 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	100	283.990	2.18	
2	200	282.850	0.74	Av . Mean Dia "d"= 1.05 mm
3	300	282.750	0.85	
4	400	283.670	0.61	Av .Silt Factor " f " = 1.80
5	500	284.900	0.53	
6	600	286.608	0.60	
7	700	286.900	1.85	

**POST MONSOON SURVEY ( DATE 17.12.2015 )**Discharge 'Q' :115.48m<sup>3</sup>/sec

Water edge:L.B.:49.90m,R.B.:439.80m

Area of Section 'A':439.11m<sup>2</sup>

Mean Velocity' V ':0.263m/sec

Wetted Perimeter 'P' :390.02 m

Hydraulic Mean Depth'R':1.126m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	100	283.850	0.47	
2	200	282.100	1.04	Av . Mean Dia "d"= 1.36 mm
3	300	282.100	0.71	
4	400	283.870	0.73	Av .Silt Factor " f " = 2.05
5	500	284.910	0.5	
6	600	286.600	3.37	
7	700	286.905	2.69	

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

**7.6 Narmada at Sandia****BED MATERIAL DATA FOR THE YEAR 2015-2016**

**SITE :NARMADA AT SANDIA**  
 MEASURING AUTHORITY : NDN

CODE : 010215013  
 W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 21.05.2015 )**

Discharge 'Q' : 123.95 m<sup>3</sup>/sec

Water edge: L.B.:166.40m, R.B.:442.70 m

Area of Section 'A' :241.65 m<sup>2</sup>

Mean Velocity' V ' : 0.513 m/ sec

Wetted Perimeter 'P': 276.46m

Hydraulic Mean Depth'R' : 0.874 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	100	306.630	3.90	
2	200	298.530	0.55	Av . Mean Dia "d"= 1.63 mm
3	300	298.250	0.9	
4	400	299.150	1.31	Av .Silt Factor " f " = 2.25
5	500	301.950	1.20	
6	600	301.940	0.90	
7	700	309.450	2.67	

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

**MONSOON SURVEY ( DATE 27.10.2015 )**

Discharge 'Q' : 90.97 m<sup>3</sup>/sec

Water edge: L.B.:195.80m, R.B.:450.00 m

Area of Section 'A' :139.64 m<sup>2</sup>

Mean Velocity' V ' : 0.652 m/ sec

Wetted Perimeter 'P':254.30 m

Hydraulic Mean Depth'R' : 0.549m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	100	306.650	4.83	
2	200	298.720	0.84	Av . Mean Dia "d"= 2.06 mm
3	300	299.030	0.84	
4	400	299.180	0.93	Av .Silt Factor " f " = 2.53
5	500	301.890	0.80	
6	600	301.850	1.01	
7	700	309.680	5.2	

**POST MONSOON SURVEY ( DATE 25.01.2016 )**

Discharge 'Q' : 107.26 m<sup>3</sup>/sec

Water edge: L.B.:194.00 m,  
R.B.:445.20m

Area of Section 'A' :179.63 m<sup>2</sup>

Mean Velocity' V ' : 0.597 m/ sec

Wetted Perimeter 'P': 251.30 m

Hydraulic Mean Depth'R' : 0.715 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	100	306.630	0.70	
2	200	298.670	0.82	Av . Mean Dia "d"= 0.74 mm
3	300	298.970	0.63	
4	400	298.860	0.80	Av .Silt Factor " f " = 1.51
5	500	301.930	0.74	
6	600	301.980	0.73	
7	700	309.730	0.77	

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

## 7.7 Shakkar at Gadarwara

**BED MATERIAL DATA FOR THE YEAR 2015-2016**

SITE :SHAKKAR AT GADARWARA

CODE : 010215012

MEASURING AUTHORITY : NDN

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 29.05.2015)**Discharge 'Q' : 0.293 m<sup>3</sup>/sec

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

Area of Section 'A':15.06 m<sup>2</sup>

Mean Velocity' V ' :0.019 m/ sec

Wetted Perimeter 'P':48.89 m

Hydraulic Mean Depth'R':.0.308 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	30	322.560	2.76	
2	60	323.240	2.94	Av . Mean Dia "d"= 2.16 mm
3	90	323.490	2.82	
4	120	323.350	2.77	Av .Silt Factor " f " = 2.59
5	150	322.820	2.31	
6	180	322.010	1.03	
7	210	323.050	0.47	

**MONSOON SURVEY ( DATE 16.10.2015 )**Discharge 'Q' : 7.17m<sup>3</sup>/sec

Water edge: L.B.:116.00 m, R.B.:197.00 m

Area of Section 'A' :24.72 m<sup>2</sup>

Mean Velocity' V ' : 0.290 m/ sec

Wetted Perimeter 'P': 81.08m

Hydraulic Mean Depth'R' : 0.305 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	30	322.590	1.79	
2	60	323.290	4.04	Av . Mean Dia "d"= 1.91 mm
3	90	323.530	2.05	
4	120	322.600	3.44	Av .Silt Factor " f " = 2.43
5	150	322.300	0.91	
6	180	322.320	0.66	
7	210	322.980	0.45	

**POST MONSOON SURVEY ( DATE 19.01.2016)**Discharge 'Q' : .585 m<sup>3</sup>/sec

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

Area of Section 'A' :14.23 m<sup>2</sup>

Mean Velocity' V ' : .041 m/ sec

Wetted Perimeter 'P' : 40.65 m

Hydraulic Mean Depth'R' : 0.348m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	30	322.610	4.07	
2	60	323.310	3.33	Av . Mean Dia "d"= 3.19 mm
3	90	323.540	3.13	
4	120	323.720	4.59	Av .Silt Factor " f " = 3.14
5	150	322.320	2.57	
6	180	322.330	1.42	
7	210	323.890	3.25	

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

**7.8 Narmada at Barman****BED MATERIAL DATA FOR THE YEAR 2015-2016****SITE :NARMADA AT BARMAN**

CODE : 010215011

MEASURING AUTHORITY : NDN

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 26.05.2015 )**Discharge 'Q' :122.00 m<sup>3</sup>/sec

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

Area of Section 'A' :228.70 m<sup>2</sup>

Mean Velocity 'V' : 0.533m/ sec

Wetted Perimeter 'P':138.10m

Hydraulic Mean Depth'R':1.656 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	60	312.011	0.27	
2	120	310.705	2.42	Av . Mean Dia "d" = 1.26 mm
3	180	307.770	1.29	
4	240	306.450	1.18	Av .Silt Factor " f " = 1.98
5	300	307.910	1.65	
6	350	322.420	0.34	
7	400	327.860	1.69	

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

**MONSOON SURVEY ( DATE )**Discharge 'Q' : m<sup>3</sup>/sec

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

Area of Section 'A' : m<sup>2</sup>

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				
2				Av . Mean Dia "d" = mm
3				
4				Av .Silt Factor " f " =
5		NOT COLLECTED		
6				
7				

**POST MONSOON SURVEY ( DATE 25.01.2016 )**Discharge 'Q' 98.70 m<sup>3</sup>/sec

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

Area of Section 'A' :172.90 m<sup>2</sup>

Mean Velocity' V ' : 0.571 m/ sec

Wetted Perimeter 'P':

Hydraulic Mean Depth'R' : 1.286

134.40m

m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	60.00	312.015	1.32	
2	120.00	310.800	4.07	Av . Mean Dia "d" = 1.94 mm
3	180.00	307.570	1.90	
4	240.00	306.770	1.87	Av .Silt Factor " f " = 2.45
5	300.00	307.830	1.20	
6	350.00	322.420	1.13	
7	400.00	327.860	2.10	

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

**7.9 Banjar at Bamni****BED MATERIAL DATA FOR THE YEAR 2015-2016****SITE :BANJAR AT BAMNI**

CODE : 010215006

MEASURING AUTHORITY : NDN

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 15.05.2015 )**Discharge 'Q' : 0.0 m<sup>3</sup>/sec

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

Area of Section 'A' : m<sup>2</sup>

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	441.250	0.90	
2	100	441.330	0.78 Av . Mean Dia "d" = 0.89 mm	
3	150	441.690	0.81	
4	200	441.180	1.07 Av .Silt Factor " f " = 1.66	

Note : River Dry

**MONSOON SURVEY ( DATE 28.10.2015 )**Discharge 'Q' :9.765 m<sup>3</sup>/sec

Water edge: L.B.:31.90m, R.B.:197.50m

Area of Section 'A' :30.51 m<sup>2</sup>

Mean Velocity' V ' : 0.320m/ sec

Wetted Perimeter 'P':91.97 m

Hydraulic Mean Depth'R' : 0.332 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	440.130	1.51	
2	100	441.320	0.73 Av .Mean Dia"d" = 1.17 mm	
3	150	440.900	1.24	
4	200	440.590	1.2 Av .Silt Factor " f " = 1.90	

**POST MONSOON SURVEY ( DATE 03.02.2016 )**Discharge 'Q' :0.648 m<sup>3</sup>/sec

Water edge: L.B.:169.55 m, R.B.:195.55m

Area of Section 'A' :5.37 m<sup>2</sup>

Mean Velocity' V ' :0.121 m/ sec

Wetted Perimeter 'P' : 91.77 m

Hydraulic Mean Depth'R' :0.21 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	440.100	0.74	
2	100	440.300	1.05 Av . Mean Dia "d" = 1.10 mm	
3	150	440.230	1.14	
4	200	440.130	1.45 Av .Silt Factor " f " = 1.85	

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

**7.10 Burhner at Mohgaon****BED MATERIAL DATA FOR THE YEAR 2015-2016****SITE :BURHNER AT MOHGAON**

CODE : 010215004

MEASURING AUTHORITY : NDN

W.YEAR :2015-16

**PRE MONSOON SURVEY (DATE 05.05.2015)**Discharge 'Q' :1.886 m<sup>3</sup>/sec

Water edge: L.B.:103.00m, R.B.:123.50m

Area of Section 'A' :5.18 m<sup>2</sup>

Mean Velocity' V ' :0.364 m/ sec

Wetted Perimeter'P' :20.54 m

Hydraulic Mean Depth'R' :0.252 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	450.620	3.49	
2	100	449.110	3.16	Av . Mean Dia "d" = 2.60 mm
3	150	452.400	1.99	
4	200	462.200	1.77	Av .Silt Factor " f " = 2.84

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

**MONSOON SURVEY ( DATE 28.11.2015 )**Discharge 'Q' :9.117 m<sup>3</sup>/sec

Water edge: L.B.:60.00 m, R.B.:125.00m

Area of Section 'A' :24.10 m<sup>2</sup>

Mean Velocity' V ' : 0.378 m/ sec

Wetted Perimeter 'P':27.91 m

Hydraulic Mean Depth'R' : 0.086m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	450.610	6.10	
2	100	449.070	0.53	Av . Mean Dia "d" =2.15 mm
3	150	452.460	0.79	
4	200	462.210	1.18	Av .Silt Factor " f " = 2.59

**POST MONSOON SURVEY ( DATE 27.02.2016)**Discharge 'Q' :2.911 m<sup>3</sup>/sec

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

Area of Section 'A' :18.79 m<sup>2</sup>

Mean Velocity' V ' :0.155 m/ sec

Wetted Perimeter 'P' :26.00 m

Hydraulic Mean Depth'R' :0.722 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	450.390	7.67	
2	100	448.960	4.60	Av . Mean Dia "d" =3.51mm
3	150	452.000	0.77	
4	200	462.010	1.01	Av .Silt Factor " f " = 3.30

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

**7.11 Narmada at Manot****BED MATERIAL DATA FOR THE YEAR 2015-2016****SITE :NARMADA AT MANOT**

CODE : 010215002

MEASURING AUTHORITY : NDN

W.YEAR :2015-16

**PRE MONSOON SURVEY ( DATE 08.05.2015 )**Discharge 'Q' :4.550 m<sup>3</sup>/sec

Water edge: L.B.:64.00m,

Area of Section 'A' :21.78 m<sup>2</sup>

R.B.:106.40m

Wetted Perimeter 'P': 54.72 m

Mean Velocity' V ' : 0.209m/ sec

Hydraulic Mean Depth 'R' :0.396 m

Sample. No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	444.180	5.95	
2	100	443.550	0.83 Av .	Mean Dia "d"= 2.19mm
3	150			ROCKY BED
4	200	453.000	0.83 Av .	Silt Factor " f " = 2.60
5	250	459.500	1.14	

**MONSOON SURVEY ( DATE 23.11.2015 )**Discharge 'Q' : 11.76 m<sup>3</sup>/sec

Water edge: L.B.:54.00 m,

Area of Section 'A' :30.22 m<sup>2</sup>

R.B.:108.00m

Wetted Perimeter 'P':58.03 m

Mean Velocity' V ' :0.389 m/ sec

Hydraulic Mean Depth'R' :0.521 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	444.260	2.56	
2	100	443.540	1.12 Av .	Mean Dia "d" = 1.56 mm
3	150			ROCKY BED
4	200	442.610	1.61 Av .	Silt Factor " f " = 2.20
5	250	459.500	0.93	

**POST MONSOON SURVEY ( DATE 23.02.2016 )**Discharge 'Q' : 3.979m<sup>3</sup>/sec

Water edge: L.B.:64.00m,

Area of Section 'A' :10.37 m<sup>2</sup>

R.B.:105.40m

Wetted Perimeter 'P': 29.88m

Mean Velocity' V ' : 0.154 m/ sec

Hydraulic Mean Depth'R' : 0.347 m

Sample No	R.D. sampling point ( m )	R.L.of Bed ( m )	Mean Diameter ( mm )	Remarks
1	50	443.290	4.02	
2	100	444.980	0.57 Av .	Mean Dia "d" = 1.44mm
3	150			ROCKY BED
4	200	446.545	0.62 Av .	Silt Factor " f " = 2.11
5	250	449.970	0.53	

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**

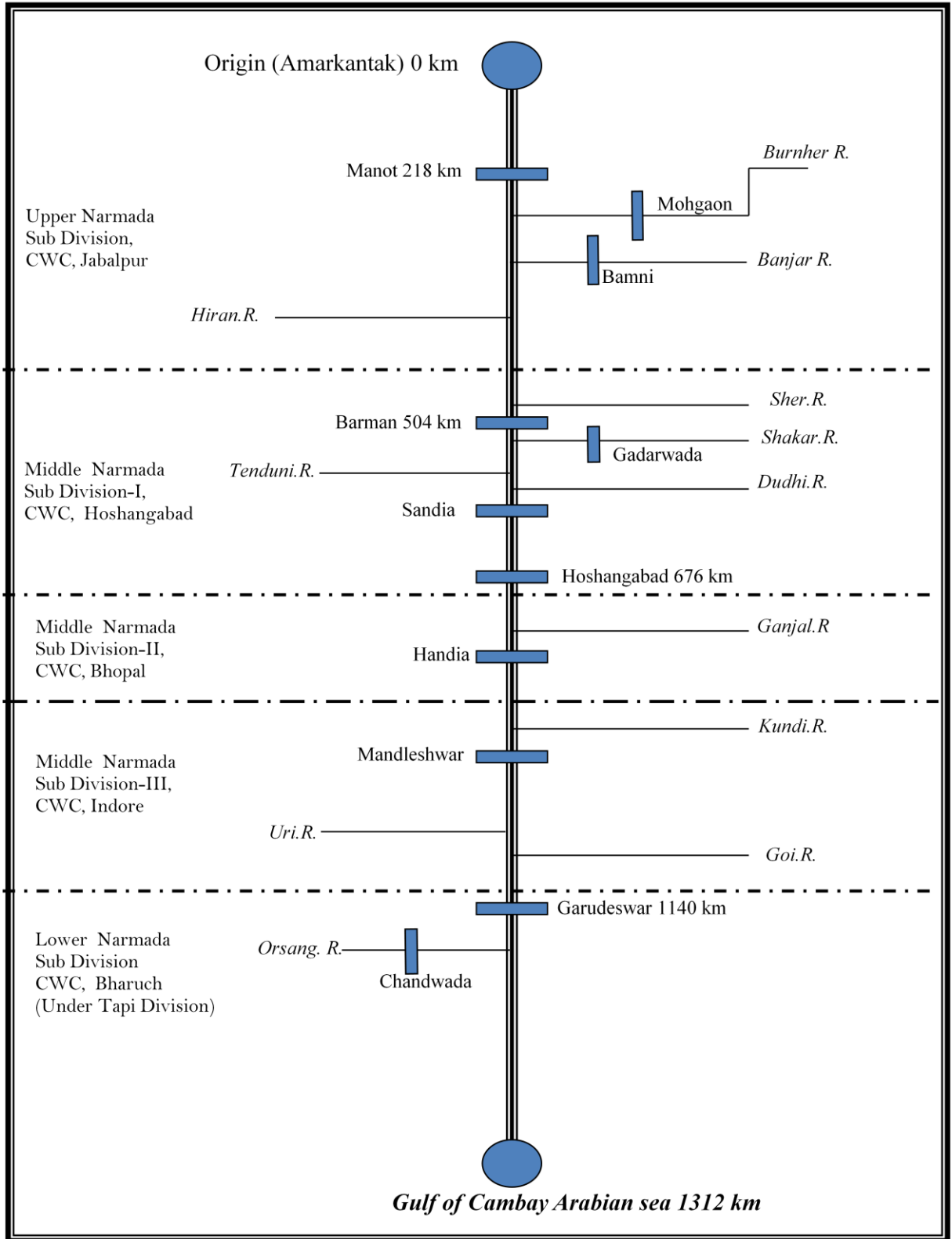


Plate 2: Index Map of Narmada Basin

