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केवल कार्यालय उपयोग हेतु

भारत सरकार



गाद आंकड़े पुस्तिका  
नर्मदा बेसिन  
जून 2023-मई 2024

SEDIMENT DATA BOOK  
Narmada Basin  
June 2023–May 2024



Photo-Omkarshwar (M.P)

केन्द्रीय जल आयोग  
नर्मदा बेसिन संगठन  
भोपाल

CENTRAL WATER COMMISSION  
Narmada Basin Organisation  
Bhopal

फरवरी 2025 / February 2025



## प्रस्तावना

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

जल ग्रहण क्षेत्र की मिटटी तीव्र वर्षा से बहकर नदी में आती है तथा निलंबित गाद के रूप में बहती है। जल की गति के मंद पड़ने, गाद के संगठन एवं नदी के आकार में परिवर्तन आदि कारणों से यह प्रवाह मार्ग में विभिन्न स्थलों पर निश्चेपित हो जाती है। अतः गाद भार के साथ गाद पदार्थ के संगठन का आंकलन करना भी अत्यंत महत्वपूर्ण है।

इस पुस्तक में वर्ष 2023-24 में नर्मदा मंडल, भोपाल द्वारा नर्मदा नदी पर मध्यप्रदेश में स्थित 9 स्थलों तथा तापी मंडल, सूरत द्वारा गुजरात में स्थित 2 स्थलों पर एकत्रित किये गये गाद भार तथा तलछट पदार्थ संबंधी आंकड़ों का संकलन किया गया है।

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

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

स्थान- भोपाल  
फरवरी 2025

(नीलम नारोलिया)  
अधीक्षण अभियंता (समन्वय)



## **PREFACE**

Water resources, a precious gift of nature is decisive factor in the growth and development of human civilisation. Its availability varies widely in time and space. Central water commission, as a premier and nodal organisation in this sector, has been conducting hydrological observation through a network of gauge and discharge observation stations. Apart from assessment of surface flows, water quality monitoring and sediment load evaluation are integral part of hydrological planning and development of water resources projects.

The soil of the catchment area gets washed away by heavy rains and flows in the form of suspended silt. Due to slowing down of movement of water, organization of silt and change in the shape of the river, etc., it gets deposited at different places in the flow path. Therefore, it is also very important to assess the composition of the sedimentary material along with the silt mass.

This volume presents the suspended sediment load data for the year 2023-24, of 11 sites, out of which observation at 9 sites is done by Narmada Division, Bhopal (M.P.) and at 2 sites it is done by Tapi Division, Surat (Gujrat)

It is hoped that the data compiled herein will be useful for planners of water resource projects of this region in assessing the effect of sediment transported down the rivers. Comments and suggestions for improvement in data presentation in future publications are most welcome. The effort put in by concerned staff of Central Water Commission and the Co-operation extended by all are gratefully acknowledged.



Place-Bhopal  
Date- February 2025

(Neelam Narolia)  
Superintending Engineer (C)



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## List of Abbreviation and Symbols

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

## 1 प्रस्तावना

### 1.1 दायरा

केंद्रीय जल आयोग गाद भार अवलोकन और तलछट सामग्री अवलोकन के साथ-साथ निस्सारण अवलोकन आदि का संचालन कर रहा है। रिपोर्टिंग वर्ष 2023-24 के दौरान नर्मदा बेसिन में गाद भार और तलछट सामग्री अवलोकन नर्मदा डिवीजन, भोपाल और तापी प्रभाग, सूरत के अधिकार क्षेत्र के तहत 11 स्टेशनों पर किए गए थे। इनमें से नौ स्टेशन मध्य प्रदेश राज्य में और दो स्टेशन गुजरात राज्य में स्थित हैं। ये स्टेशन योजना परियोजना के तहत कार्य कर रहे हैं। 12वीं पंचवर्षीय योजना के दौरान "जल संसाधन सूचना प्रणाली का विकास"। उन स्टेशनों के नाम जहां निलंबित गाद भार और तलछट सामग्री का अवलोकन किया गया, तालिका 1-1 में दिए गए हैं।

तालिका 1-1: नर्मदा नदी पर गाद तथा तलछट पदार्थ अवलोकन स्थल

क्रम संख्या	स्टेशन का नाम	कोड नंबर
1.	ओरसंग, चांदवाड़ा में	CW1NAL000513
2.	नर्मदा, गरुड़ेश्वर में	CW1NAL000434
3.	नर्मदा, मंडलेश्वर में	CW1NAM000189
4.	नर्मदा, हंडिया में	CW1NAM000392
5.	नर्मदा, नर्मदापुरम (होशंगाबाद) में	CW1NAM000278
6.	नर्मदा, सांदिया में	CW1NAU000450
7.	शक्कर, गाडरवारा में	CW1NAU000391
8.	नर्मदा, बरमानघाट में	CW1NAU000188
9.	बंजर, बमनी में	CW1NAU000781
10.	बुड़नेर, मोहगांव में	CW1NAU000390
11.	नर्मदा, मनोट में	CW1NAU000378

### 1.2 सूचना के स्रोत

इन 11 स्टेशनों का प्रशासनिक नियंत्रण दो डिवीजनों, अर्थात् नर्मदा डिवीजन, भोपाल (नौ स्टेशन) और तापी डिवीजन, सूरत (दो स्टेशन) के तहत वितरित किया गया था। वर्ष 2023-24 के दौरान मंडलवार स्टेशन एवं उनके कोड तालिका 1-2 में दिये गये हैं।

तालिका 1-2: मंडलवार जीडीएसक्यू स्टेशन और उनके कोड

क्र. संखा	स्टेशन का नाम	कोड नंबर
<b>नर्मदा मंडल, भोपाल</b>		
1.	नर्मदा, मंडलेश्वर में	CW1NAM000189
2.	नर्मदा, हंडिया में	CW1NAM000392
3.	नर्मदा, नर्मदापुरम (होशंगाबाद) में	CW1NAM000278
4.	नर्मदा, सांदिया में	CW1NAU000450
5.	शक्कर, गाडरवारा में	CW1NAU000391
6.	नर्मदा, बर्मनघाट में	CW1NAU000188
7.	बंजर, बमनी में	CW1NAU000781
8.	बुड्नेर, मोहगांव में	CW1NAU000390
9.	नर्मदा, मनोट में	CW1NAU000378
<b>तापी मंडल, सूरत</b>		
1.	नर्मदा, गरुडेश्वर में	CW1NAL000513
2.	नर्मदा, चाँदवाडा में	CW1NAL000434

### 1.3 कछार विवरण

नर्मदा पश्चिम की ओर बहने वाली सबसे बड़ी और भारत की पांचवीं सबसे बड़ी नदी है। यह महाराष्ट्र और गुजरात राज्यों के कुछ क्षेत्र के अलावा मध्य प्रदेश के एक बड़े क्षेत्र में जल प्रवाहित करती है। नर्मदा बेसिन पूर्वी देशांतर  $72^{\circ} 32'$  से  $81^{\circ} 45'$  और उत्तरी अक्षांश  $21^{\circ} 20'$  से  $23^{\circ} 45'$  के बीच स्थित है। यह अरब सागर में खंभात की खाड़ी में गिरने से पहले विंध्य और सतपुड़ा पर्वत शृंखलाओं के बीच डेक्कन ट्रैप से होकर बहती है। नर्मदा 98,796 किमी<sup>2</sup> क्षेत्र में जल प्रवाहित करती है, जिसमें से लगभग 87% मध्य प्रदेश में स्थित है। जल निकासी क्षेत्र का राज्यवार वितरण तालिका 1-3 में दिखाया गया है।

तालिका 1-3: जल निकासी क्षेत्र का राज्यवार वितरण

Sl. No.	Name of State	Drainage Area (sq. km.)	Percentage
1.	मध्य प्रदेश	85,859	86.9
2.	महाराष्ट्र	1,538	1.5
3.	गुजरात	11,399	11.6
	कुल	<b>98,796</b>	<b>100.0</b>

नर्मदा मध्य प्रदेश के शहडोल जिले में मैकल पहाड़ियों में अमरकंटक में 1,057 मीटर की ऊंचाई पर एक 'कुंड' (झरने) से निकलती है और कैम्बे की खाड़ी में गिरने से पहले विंध्य और सतपुड़ा पहाड़ी शृंखलाओं के बीच मध्य प्रदेश, महाराष्ट्र और गुजरात से होकर बहती है। अरब सागर भरूच से लगभग 10 किमी उत्तर में है। पश्चिम की ओर बहने वाली इस नदी की कुल लम्बाई उद्धम से लेकर समुद्र में गिरने तक की दूरी 1,312 कि.मी. है। पहले 1,079 किमी तक

यह मध्य प्रदेश में चलती है और उसके बाद 35 किमी और 39 किमी तक मध्य प्रदेश और महाराष्ट्र के बीच आम सीमा बनाती है। महाराष्ट्र और गुजरात सीमा में गुजरात में यह 159 किमी तक फैला है। बेसिन का आकार लम्बा है, जिसकी अधिकतम लंबाई पूर्व से पश्चिम तक 953 किमी और अधिकतम चौड़ाई उत्तर से दक्षिण तक 234 किमी है।

नदी के प्रमुख क्षेत्रों में कई झारने हैं। उद्धम से 8 किमी दूर, कपिलधारा जलप्रपात पर नदी 24 मीटर नीचे गिरती है। 0.4 किमी आगे बहाव में, दूधधारा झारने पर नदी फिर से 4.6 मीटर नीचे गिरती है। बुरहनेर, नर्मदा की पहली प्रमुख सहायक नदी है, जो अपने उद्धम से 248 किमी दूर बाईं ओर से नदी में मिलती है। संकरी और गहरी घाटी में आम तौर पर दक्षिण-पश्चिम दिशा में बहती हुई, नदी में कुछ स्थानों पर हेयरपिन मोड़ हैं। अपने स्रोत से 286 किमी दूर, नदी उत्तर की ओर मुड़ जाती है और लगभग 1 किमी आगे नीचे की ओर बंजार की सहायक नदी इसमें मिल जाती है। मंडला शहर से होकर सहस्र-धारा नामक कई चैनलों में बहने के बाद, नदी उद्धम से 404 किमी की दूरी पर जबलपुर के करीब धुआंधार झारने पर लगभग 15 किमी गिरती है। आगे नीचे, नदी प्रसिद्ध संगमरमर चट्टानों के माध्यम से एक चैनल के माध्यम से बहती है।

संगमरमर की चट्टानों से निकलकर नर्मदा ऊपरी उपजाऊ मैदानों में प्रवेश करती है। उद्धम से 464 किमी की दूरी पर, दाहिने किनारे की एक प्रमुख सहायक नदी हिरन नदी में मिलती है। ऊपरी मैदानों से होते हुए पश्चिमी दिशा में बहती हुई, नदी को बाईं ओर से शेर, शक्कर, दूधी, तवा और गंजाल और दाईं ओर से तेंदोनी, बरना और कोलार जैसी कई सहायक नदियाँ मिलती हैं। पश्चिम की ओर बहती हुई यह पूर्वी निमाड़ जिले में पनघट के निकट मध्य मैदान में मिल जाती है। उद्धम से 806 किमी दूर नंधर में यह 12 मीटर गिरती है, उद्धम से 853 किमी दूर धारडी में यह फिर 12 मीटर गिरती है। उद्धम से 966 किमी दूर और महेश्वर से लगभग 6.4 किमी नीचे की ओर, सहस्र-धारा झारने पर नर्मदा फिर से लगभग 6.7 मीटर नीचे गिर जाती है। मध्य मैदानों से होकर यात्रा के इस भाग के दौरान, बाईं ओर से छोटा तवा और कुंडी और दाईं ओर से मान इसमें शामिल होते हैं।

आगे पश्चिम की ओर बहते हुए, नदी निचले पहाड़ी क्षेत्रों में प्रवेश करती है और एक घाटी से होकर बहती है जहाँ गोई बाईं ओर से और उरी और हटनी दाईं ओर से प्रवेश करती है। 113 किमी लंबी घाटी उत्तर से विंध्य पर्वतमाला और दक्षिण में सतपुड़ा पर्वतमाला के अभिसरण से बनती है। कण्ठ से निकलकर, नदी निचले मैदानों में प्रवेश करती है और भरूच पहुँचने तक चौड़े मोड़ों में धूमती रहती है। इस सीमा पर बायीं ओर से कर्जन और दाहिनी ओर से ओरसांग नर्मदा में मिलती हैं। भरूच से आगे, नदी घाटी चौड़ी हो जाती है और नदी कैम्बे की खाड़ी में प्रवेश करती है। नदी की 41 सहायक नदियाँ हैं जिनमें से 22 बाएँ किनारे पर और 19 दाएँ किनारे पर हैं, जिनका जलग्रहण क्षेत्र 500 वर्ग किमी से अधिक है, इनमें से बुरहनेर, बंजर, हिरन, तवा, ओरसांग और कुंडी जैसी कुछ प्रमुख सहायक नदियाँ जलग्रहण क्षेत्र में हैं। क्षेत्रफल 3,550 वर्ग किमी से अधिक।

आगे पश्चिम की ओर बहते हुए, नदी निचले पहाड़ी क्षेत्रों में प्रवेश करती है और एक घाटी से होकर बहती है जहाँ गोई बाईं ओर से और उरी और हटनी दाईं ओर से प्रवेश करती है। 113 किमी लंबी घाटी उत्तर से विंध्य पर्वतमाला और दक्षिण में सतपुड़ा पर्वतमाला के अभिसरण से बनती है। कण्ठ से निकलकर, नदी निचले मैदानों में प्रवेश करती है और भरूच पहुँचने तक चौड़े मोड़ों में धूमती रहती है। इस सीमा पर बायीं ओर से कर्जन और दाहिनी ओर से ओरसांग नर्मदा में मिलती हैं। भरूच से आगे, नदी घाटी

चौड़ी हो जाती है और नदी कैम्बे की खाड़ी में प्रवेश करती है। नदी की 41 सहायक नदियाँ हैं जिनमें से 22 बाएँ किनारे पर और 19 दाएँ किनारे पर हैं, जिनका जलग्रहण क्षेत्र 500 वर्ग किमी से अधिक है, इनमें से बुरहनेर, बंजर, हिरन, तवा, ओरसांग और कुंडी जैसी कुछ प्रमुख सहायक नदियाँ जलग्रहण क्षेत्र में हैं। क्षेत्रफल 3,550 वर्ग किमी से अधिक। नर्मदा बेसिन में औसत वर्षा 1,250 मिमी है। मई के महीने में जब भूमि गर्म हो जाती है अधिकतम तापमान  $40^{\circ}\text{C}$  से  $49^{\circ}\text{C}$  के बीच रहता है। दिसंबर/जनवरी में शुष्क/ठंडे मौसम के दौरान तापमान न्यूनतम  $1^{\circ}$  डिग्री सेल्सियस से  $9^{\circ}$  डिग्री सेल्सियस तक गिर जाता है।

वर्तमान में, 30 प्रमुख जलविद्युत सह सिंचाई परियोजनाएँ प्रस्तावित/चालू/पूर्ण हैं। मुख्य नर्मदा नदी पर चार प्रमुख जलविद्युत सह सिंचाई परियोजनाएँ अर्थात् बरगी, इंदिरा सागर, औंकारेश्वर और सरदार सरोकर परियोजनाएँ हैं जो लगभग पूरी हो चुकी हैं और विभिन्न सहायक नदियों अर्थात् मटियारी, बारना, तवा, कोलार, सुक्ता, मान, जोबट और कर्जन पर आठ पूर्ण परियोजनाएँ हैं। .

नर्मदा बेसिन में 11 गाद -निगरानी स्टेशन हैं। ग्यारह में से 7 स्टेशन मुख्य नदी पर स्थित हैं और शेष 4 प्रमुख सहायक नदियों पर स्थित हैं। जो कि ओरसांग, शक्कर, बंजर और बूढ़नेर हैं।

## 2 निलंबित गाद अवलोकन

### 2.1 अवलोकन तकनीक

#### 2.1.1 गाद नमूनों का संग्रहण

रविवार और छुट्टियों को छोड़कर, दिन में एक बार 08:00 बजे से शुरू होने वाले निर्वहन अवलोकन के साथ-साथ निलंबित गाद अवलोकन भी आयोजित किए जाते हैं। अवलोकन सामान्य स्थिति में स्टेशन गेज लाइन पर किए जाते हैं। हालाँकि, जब परिस्थितियाँ अवलोकन के लिए अनुपयुक्त हो जाती हैं, जैसे कि पूलिंग, उथली गहराई, मल्टी-चैनल निर्माण आदि के कारण, तो अवलोकन ख्यल को स्टेशन गेज लाइन के अप-स्ट्रीम या डाउन-स्ट्रीम पर एक अस्थायी खंड में स्थानांतरित कर दिया जाता

गाद के नमूने प्रत्येक ऊर्ध्वाधर से 0.6 गहराई पर एकत्र किए जाते हैं, जहां निर्वहन की गणना के लिए वेग अवलोकन किया जाता है, बशर्ते प्रवाह की गहराई 0.3 मीटर से ऊपर हो। इस प्रकार प्रत्येक ऊर्ध्वाधर से एकत्र किए गए नमूनों को नदी की चौड़ाई के आधार पर 1, 2, 3, 4 या 5 समग्र समूहों में इस तरह से वर्गीकृत किया जाता है कि प्रत्येक समग्र समूह औसत खंड निर्वहन का +/- 10% निर्वहन करता है। पंजाब बोतल प्रकार का नमूना आमतौर पर विश्लेषण के लिए निलंबित गाद नमूना एकत्र करने के लिए उपयोग किया जाता है। बोतल को ऊर्ध्वाधर स्थिति में पकड़ने की एक समान प्रथा अपनाई जा रही है। इस प्रकार सतह से उथली गहराई (0.3 मीटर से कम) से नमूने एकत्र किए जाते हैं। उथली गहराई पर इन सतह के नमूनों को 0.6 गहराई के नमूने के रूप में माना जाता है। एकत्र किए गए पानी के नमूनों को पिछले दिन देखे गए आंकड़ों के आधार पर मिश्रित समूहों में रखा जाता है और विश्लेषण के लिए साइट प्रयोगशाला में ले जाया जाता है।

#### 2.1.2 निलंबित गाद नमूनों का विश्लेषण

निलंबित गाद नमूने का विश्लेषण इन विभिन्न ग्रेडों के लिए किया जाता है, अर्थात् 0.2 मिमी से अधिक कण व्यास वाली मोटी गाद, 0.075 मिमी से 0.2 मिमी व्यास वाली मध्यम गाद और 0.075 मिमी से कम व्यास वाली महीन गाद। प्रत्येक समूह से गाद के नमूने (जैसा कि पैरा 2.1.1 में बताया गया है) 212 माइक्रोन जाल छलनी से गुजारे जाते हैं। छलनी पर बचे अवशेष को कई बार साफ पानी से धोया जाता है, पहले से भारित कूसिबल में स्थानांतरित किया जाता है और उसका ओवन में सुखाया गया वजन निर्धारित किया जाता है। इससे मोटे गाद मिलते हैं जिनसे समूह के लिए मोटे गाद g/l की सांद्रता निकाली जाती है।

मोटे गाद को हटाने के बाद, छानने और धोने से जिसमें अब मध्यम और महीन गाद होती है, उसे इसी तरह 75 माइक्रोन जाल छलनी के माध्यम से पारित किया जाता है। छलनी पर बचे अवशेष को कई बार साफ पानी से धोया जाता है, पहले से भारित कूसिबल में स्थानांतरित किया जाता है और उसके ओवन में सुखाए गए वजन का निर्धारण किया जाता है। यह मध्यम गाद देता है जिससे समूह के लिए जी/एल में गाद सांद्रता निर्धारित की जाती है।

मोटे और मध्यम ग्रेड को अलग करने के बाद छानने और धोने में अब केवल बारीक गाद होती है। बारीक गाद विश्लेषण के लिए, उपरोक्त सभी समूहों (मोटे और महीन गाद को हटाने के बाद) को एक बड़ी बाल्टी में एक सजातीय तरल बनाने के लिए एक बड़े नमूने में संयोजित किया जाता है। संपूर्ण मात्रा का गाद विश्लेषण मध्यम गाद सांद्रता के साथ 10-12 लीटर तक किया जाता है। यदि मध्यम गाद अधिक है या नमूने की मात्रा 12 लीटर से अधिक है, तो पानी को एक साफ लकड़ी की छड़ी से

हिलाया जाता है, ताकि बाल्टी में जमा कोई भी गाद पूरे नमूने के साथ अच्छी तरह से मिल जाए। समय गाद भार के विश्लेषण के लिए तुरंत कम से कम चार लीटर सजातीय नमूने अलग बाल्टी में ले लिए जाते हैं। इस सजातीय नमूने को जमने के लिए रात भर रखा जाता है। कोलाइडल गाद के जमाव को तेज करने के लिए लगभग 5 से 10 मिलीलीटर 10% फिटकरी का घोल मिलाया जाता है। निपटान पूरा होने के बाद, सतह पर तैरने वाले तरल को सावधानी से हटा दिया जाता है और निलंबन की शेष मात्रा को पूर्व-वजन वाले फिल्टर पेपर (हाटमैन ग्रेड I) में फ़िल्टर किया जाता है और साफ पानी के साथ पूरे बसे अतिरिक्त धुलाई को स्थानांतरित करने से गाद सुनिश्चित होती है। पूरे क्रॉस सेक्शन के लिए जी/एल में बारीक गाद की सांद्रता निर्धारित करने के लिए गाद के साथ फिल्टर पेपर को सुखाया जाता है और वजन किया जाता है।

खंड के साथ नदी के कुल निलंबित गाद भार की गणना सांद्रता से की जाती है, इस प्रकार पूरे खंड के लिए मोटे, मध्यम और महीन गाद को समूह-वार शामिल किया जाता है।

### 2.1.3 व्याख्यात्मक टिप्पणियां

यहां नीचे वर्णित व्याख्यात्मक नोट्स प्रस्तुत आंकड़ों में निहित हाइड्रोलॉजिकल मापदंडों की व्याख्या में सहायता के लिए दिए गए हैं। इसलिए, जहां तक इस पुस्तक में प्रस्तुत आंकड़ों का संबंध है, यह नोट लागू है।

- i. जल वर्ष कैलेंडर वर्ष के 1 जून से अगले कैलेंडर वर्ष के 31 मई तक की अवधि को कवर करता है और इसमें पूरा एक जल विज्ञान चक्र शामिल होता है। जल वर्ष को आगे इस प्रकार उपविभाजित किया गया है:
  - जून से अक्टूबर तक मानसून अवधि तथा
  - नवम्बर से मई गैर-मानसून
- ii. गेजिंग स्टेशन कोड संख्या एक अद्वितीय नौ-स्तंभ संख्यात्मक संदर्भ संख्या है, जो डेटा बैंकों में गाद डेटा के भंडारण और पुनर्प्राप्ति की सुविधा प्रदान करती है। पहले दो कॉलम माप प्राधिकारी के पहचानकर्ता हैं। तीसरा और चौथा कॉलम जोन/बेसिन के लिए है, पांचवां और छठा कॉलम स्वतंत्र नदी के लिए है और अंतिम तीन यानी सातवां, आठवां और नौवां कॉलम स्टेशन नंबरों के लिए है।
- iii. जैसा कि नीचे दर्शाया गया है, गाद को व्यास के अनुसार मोटे, मध्यम और महीन के रूप में वर्गीकृत किया गया है:
  - मोटे: 0.2 मिमी व्यास से ऊपर गाद,
  - मध्यम: 0.2 और 0.075 मिमी व्यास के बीच गाद,
  - बारीक: 0.075 मिमी व्यास से कम गाद।

### 2.1.4 प्रस्तुति की विधि

निलंबित गाद डेटा पुस्तक के भाग - I में प्रस्तुत किया गया है, जिसमें इतिहास पत्रक और निलंबित गाद प्रवाह तालिकाएँ शामिल हैं। निलंबित गाद अवलोकन स्टेशन का कालक्रम नदी के मुहाने से नदी के ऊपरी भाग तक व्यवस्थित किया गया है। सहायक नदियाँ इसी प्रकार व्यवस्थित हैं।

इतिहास पत्र में निलंबित गाद अवलोकन स्टेशन का संक्षिप्त विवरण दिया गया है। निलंबित गाद तालिका में निम्नलिखित शामिल हैं:

- जून से नवंबर तक की अवधि के लिए दैनिक रूप से गाद प्रवाह तालिकाओं का अवलोकन किया जाता है, क्योंकि इस अवधि के दौरान वार्षिक गाद भार का बड़ा हिस्सा नदियों द्वारा ले जाया जाता है।

- पूरे वर्ष के लिए मोटे, मध्यम और महीन गाद के दस दैनिक सारांश।
- गाद भार का मासिक और मौसमी सारांश।

## 2.2 साईट वार डेटा पर टिप्पणियां

### 2.2.1 ओरसांग, चाँदवाड़ा में

गुजरात राज्य के मैदानी इलाके में नर्मदा की एक प्रमुख दाहिने किनारे की सहायक नदी ओरसांग की कुल लंबाई 101 किमी है। मॉनिटरिंग स्टेशन चाँदवाड़ा इस नदी के नर्मदा के संगम स्थल से 9 किमी ऊपर की ओर स्थित है। इसका जल निकासी क्षेत्र 3,846 वर्ग किमी है। गाद सांद्रता का अधिकतम मान 0.013 ग्राम/लीटर 29/07/2023 को दर्ज किया गया। वार्षिक गाद भार 1928.93 मीट्रिक टन बैठता है।

### 2.2.2 नर्मदा, गरुडेश्वर में

इस स्टेशन तक नदी का जल निकासी क्षेत्र 87,892 वर्ग किमी है। इस स्टेशन तक नदी 1,169 किमी की लंबाई में बहती है। 18.09.2024 को अधिकतम गाद सांद्रता 0.0720 ग्राम/लीटर दर्ज की गई। वार्षिक गाद भार 304064.88 मीट्रिक टन है।

### 2.2.3 नर्मदा, मंडलेश्वर में

नर्मदा नदी का जल निकासी क्षेत्र 72,809 वर्ग किमी और उद्धम से इस स्टेशन तक लंबाई 852 किमी है। अधिकतम गाद सांद्रता 0.16 ग्राम/लीटर है, जो 17.09.2023 18.09.2023 को देखी गई और कुल वार्षिक गाद भार 2170169.54 मीट्रिक टन है।

### 2.2.4 नर्मदा, हंडिया में

यह स्टेशन मुख्य नर्मदा पर है जिसका जल निकासी क्षेत्र 54,027 वर्ग किमी है। उद्धम से इस स्टेशन तक नदी 774 किमी की लंबाई तक बहती है।

### 2.2.5 नर्मदा, नर्मदापुरम में (होशंगाबाद)

नर्मदा नदी का जल निकासी क्षेत्र 44,548 वर्ग किमी है और उद्धम से इस स्टेशन तक इसकी लंबाई 521 किमी है। अधिकतम गाद सांद्रता 1.18 ग्राम/लीटर है, जो 29.06.2023 को देखी गई। कुल वार्षिक गाद भार 5709182.11 मीट्रिक टन है।

### 2.2.6 नर्मदा, सांडिया में

यह स्टेशन नर्मदा के उद्धम से 584 किमी दूर है और इसका जल निकासी क्षेत्र 33,954 वर्ग किमी है और उद्धम से इस स्टेशन तक की लंबाई 852 किमी है। अधिकतम गाद सांद्रता .21 ग्राम/लीटर है, जो 19.09.2023 को देखी गई थी। कुल वार्षिक गाद भार 2472207.39 मीट्रिक टन है।

### 2.2.7 शक्कर, गाडरवाड़ा में

यह स्टेशन नर्मदा के बाएं तट पर सहायक नदी शक्कर पर है और इसका जल निकासी क्षेत्र 2,270 वर्ग किमी है। इस स्टेशन तक शक्कर की लम्बाई 140 कि.मी. है। अधिकतम गाद सांद्रता 2.08 ग्राम/लीटर है, जो 29.06.2023 को देखी गई। कुल वार्षिक गाद भार 4302689.85 मीट्रिक टन है।

### 2.2.8 नर्मदा, बरमानघाट में

इस स्टेशन तक नर्मदा 504 किमी की लंबाई तय करती है और जल निकासी क्षेत्र 26,453 वर्ग किमी है। अधिकतम गाद सांद्रता 1.41 ग्राम/लीटर है जो 07.07.2023 को देखी गई। कुल वार्षिक गाद भार 2831877.45 मीट्रिक टन है।

## 2.2.9 बंजर, बामनी में

यह स्टेशन नर्मदा के बाएं किनारे पर सहायक नदी बंजार पर है और इसका जल निकासी क्षेत्र 1864 वर्ग किमी है। गाद सांद्रता का अधिकतम मान 1.02 ग्राम/लीटर है, जो 04.08.2023 को दर्ज किया गया था। वार्षिक गाद भार 260455.10 मीट्रिक टन बैठता है।

## 2.2.10 बुढनेर, मोहगांव में

यह स्टेशन नर्मदा के बाएं तट पर सहायक नदी बुढनेर पर है और इसका जल निकासी क्षेत्र 3919 वर्ग किमी है। इस स्थल तक बुरहनेर नदी की लंबाई 177 किमी है। अधिकतम गाद सांद्रता 1.52 ग्राम/लीटर है, जो 04.08.2023 को देखी गई। कुल वार्षिक गाद भार 604995.66 मीट्रिक टन है।

## 2.2.11 नर्मदा, मानोट में

इस स्टेशन पर नर्मदा की लंबाई और जल निकासी क्षेत्र क्रमशः 218 किमी और 4,667 वर्ग किमी है। अधिकतम गाद सांद्रता 1.13 ग्राम/लीटर है, जो 06.08.2023 को देखी गई। कुल वार्षिक गाद भार 861988.04 मीट्रिक टन है।

# 3 तलछट पदार्थ अवलोकन

## 3.1 अवलोकन तकनीक

### 3.1.1 नमूनों का संग्रहण

नदी की चौड़ाई के आधार पर, स्टेशन गेज लाइन के साथ साइट से 3 से 10 नमूने एकत्र किए जाते हैं। चैनल के बहने वाले हिस्से से नमूना एकत्र करने के लिए एक स्कूप प्रकार के बेड मटेरियल सैंपलर का उपयोग किया जाता है और जहां नदी तल सूखा होता है, स्थानीय सतह संदूषण से बचने के लिए तल पर ऊपरी परत को खुरचने के बाद नमूने मैग्न्युअल रूप से एकत्र किए जाते हैं। नमूना सूखने के बाद कोनिंग एवं कार्टरिंग प्रक्रिया द्वारा लगभग 1 किलोग्राम नमूना लिया जाता है।

### 3.1.2 नमूनों की पैकिंग

इस प्रकार एकत्र किए गए तल सामग्री के नमूनों को पॉलिथीन बैग में भर दिया जाता है और सुरक्षा के लिए एक मोटे कपड़े के बैग के अंदर रखा जाता है। नमूनों का विवरण पॉलिथीन बैग में डाला जाता है और उसे विश्लेषण के लिए संभागीय प्रयोगशाला में भेजा जाता है।

### 3.1.3 नमूनों का विश्लेषण

प्रयोगशाला में, नमूनों का विश्लेषण या तो 0.6 मिमी आकार से ऊपर के बेड मटेरियल कणों के लिए छलनी द्वारा किया जाता है या 0.6 मिमी आकार से नीचे के कणों के लिए पुरी के सिल्टोमीटर का उपयोग करके गीली प्रक्रिया द्वारा किया जाता है।

**छलनी द्वारा विश्लेषण:** छलनी को उनके जाल के आकार के अनुसार एक के ऊपर एक व्यवस्थित किया जाता है, शीर्ष पर सबसे बड़ी और नीचे सबसे छोटी (0.6 मिमी) एपर्चर वाली छलनी होती है। प्रत्येक प्रतिनिधि नमूने को तौला जाता है और फिर शीर्ष धातु पर रखा जाता है। 0.6 मिमी छलनी से गुजरने वाली सामग्री का हिस्सा छलनी के सेट के नीचे रखे धातु के कंटेनर में एकत्र किया जाता है। छलनी को हल्के से क्षैतिज घुमाकर या यांत्रिक शेकर द्वारा लगभग 15 से 20 मिनट तक हिलाया जाता

है। प्रत्येक छलनी पर रखी सामग्री को एक धातु के कंटेनर में अलग से एकत्र किया जाता है और तौला जाता है। 0.6 मिमी छलनी से गुजरने वाली सामग्री को भी तौला और दर्ज किया जाता है।

**पुरी के सिल्टोमीटर द्वारा विश्लेषण:** 0.6 मिमी से कम आकार के कणों के लिए, पुरी के सिल्टोमीटर का उपयोग करके गीली प्रक्रिया द्वारा विश्लेषण किया जाता है। तलछट सामग्री का लगभग 10 ग्राम नमूना 0.6 मिमी छलनी से गुजरते हुए सिल्टोमीटर के शीर्ष से निकल जाता है। रेत, गाद के कण अपने व्यास और पानी के तापमान के आधार पर अलग-अलग वेग से नीचे की ओर बढ़ते हैं। अंशों को एकत्र करने के लिए सिल्टोमीटर के गर्त को पूर्व-निर्धारित दर पर घुमाया जाता है। इस प्रकार एक नमूने के विभिन्न अंश एक गर्त में 20 पात्रों में पुनः जमा हो जाते हैं। इनमें से प्रत्येक अंश को गाद मापने वाली व्यूब में एकत्र किया जाता है और रबर पैड पर टैप करके कॉम्पैक्ट किया जाता है। प्रत्येक अंश का आयतन नोट किया जाता है।

उपरोक्त विश्लेषण के परिणाम से, योग वक्र आलेखित किए जाते हैं और मानक प्रक्रिया के अनुसार नमूनों का औसत व्यास निकाला जाता है। माध्य व्यास निकालने के लिए सांख्यिकीय विधि का भी उपयोग किया जाता है। गाद कारक सूत्र से प्राप्त किया जाता है:

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

जहाँ 'd' कणों का मिमी में माध्य व्यास है।

### 3.2 डाटा का प्रस्तुतिकरण

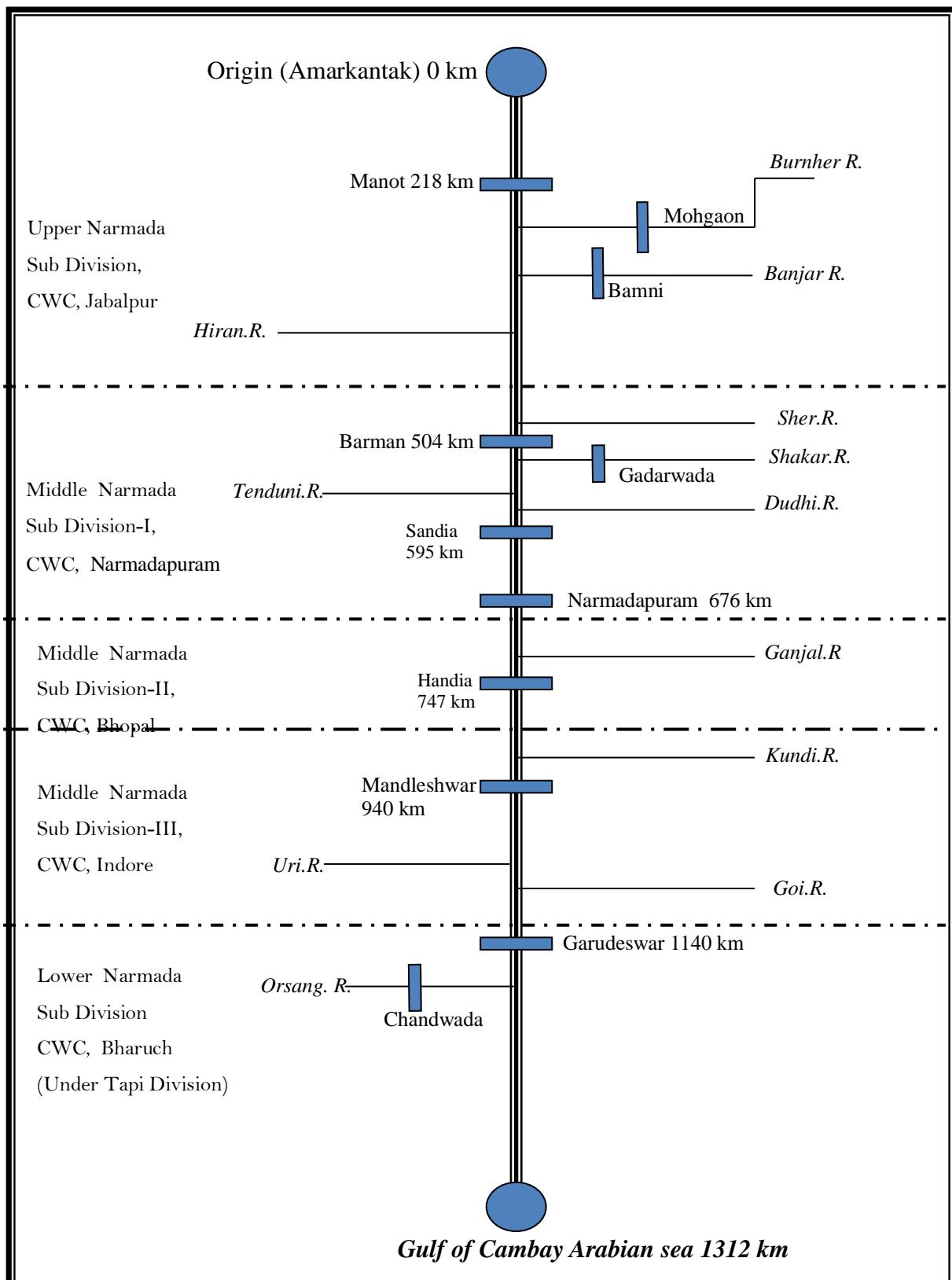
इस पुस्तक में जिन स्टेशनों के लिए विश्लेषण डेटा प्रस्तुत किया गया है उनका क्रम पुस्तक के भाग - II में डाउनस्ट्रीम से अपस्ट्रीम है।

क्र. संख्या	स्टेशन का नाम	कोड नंबर
<b>क</b>	<b>तापी मंडल, सूरत</b>	
1.	नर्मदा, गरुडेश्वर में	CW1NAL000513
2.	नर्मदा, चाँदवाडा में	CW1NAL000434
<b>ख</b>	<b>नर्मदा मंडल, भोपाल</b>	
3.	नर्मदा, मंडलेश्वर में	CW1NAM000189
4.	नर्मदा, हंडिया में	CW1NAM000392
5.	नर्मदा, नर्मदापुरम (होशंगाबाद) में	CW1NAM000278
6.	नर्मदा, सांदिया में	CW1NAU000450
7.	शक्कर, गाडरवारा में	CW1NAU000391
8.	नर्मदा, बरमानघाट में	CW1NAU000188
9.	बंजर, बमनी में	CW1NAU000781
10.	बुढनेर, मोहगांव में	CW1NAU000390
11.	नर्मदा, मनोट में	CW1NAU000378

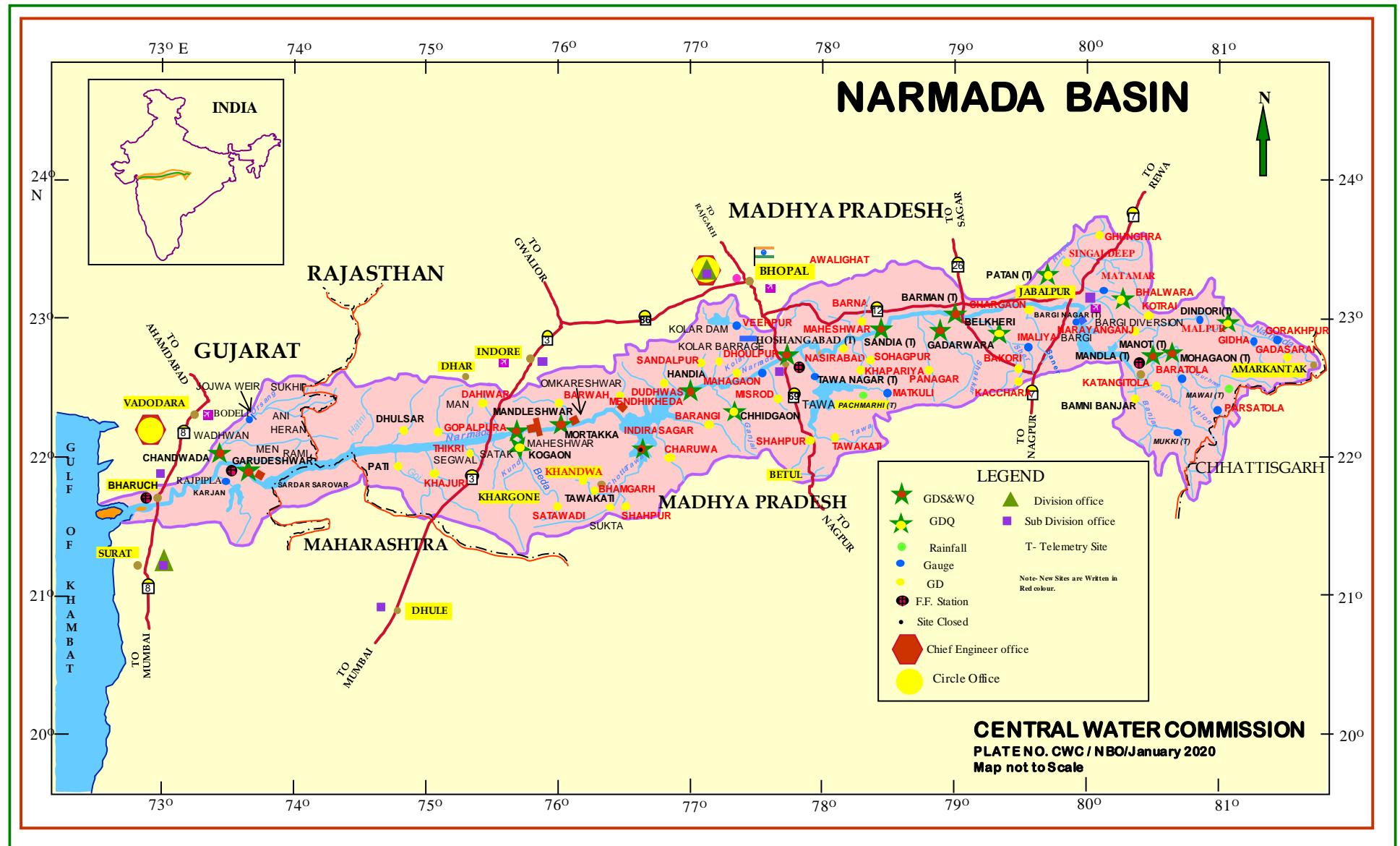
Sediment Data Year Book 2023-24

प्लेट 1: नर्मदा बेसिन रेखा आरेख

### Silt observation stations under Narmada Basin Organisation, Bhopal

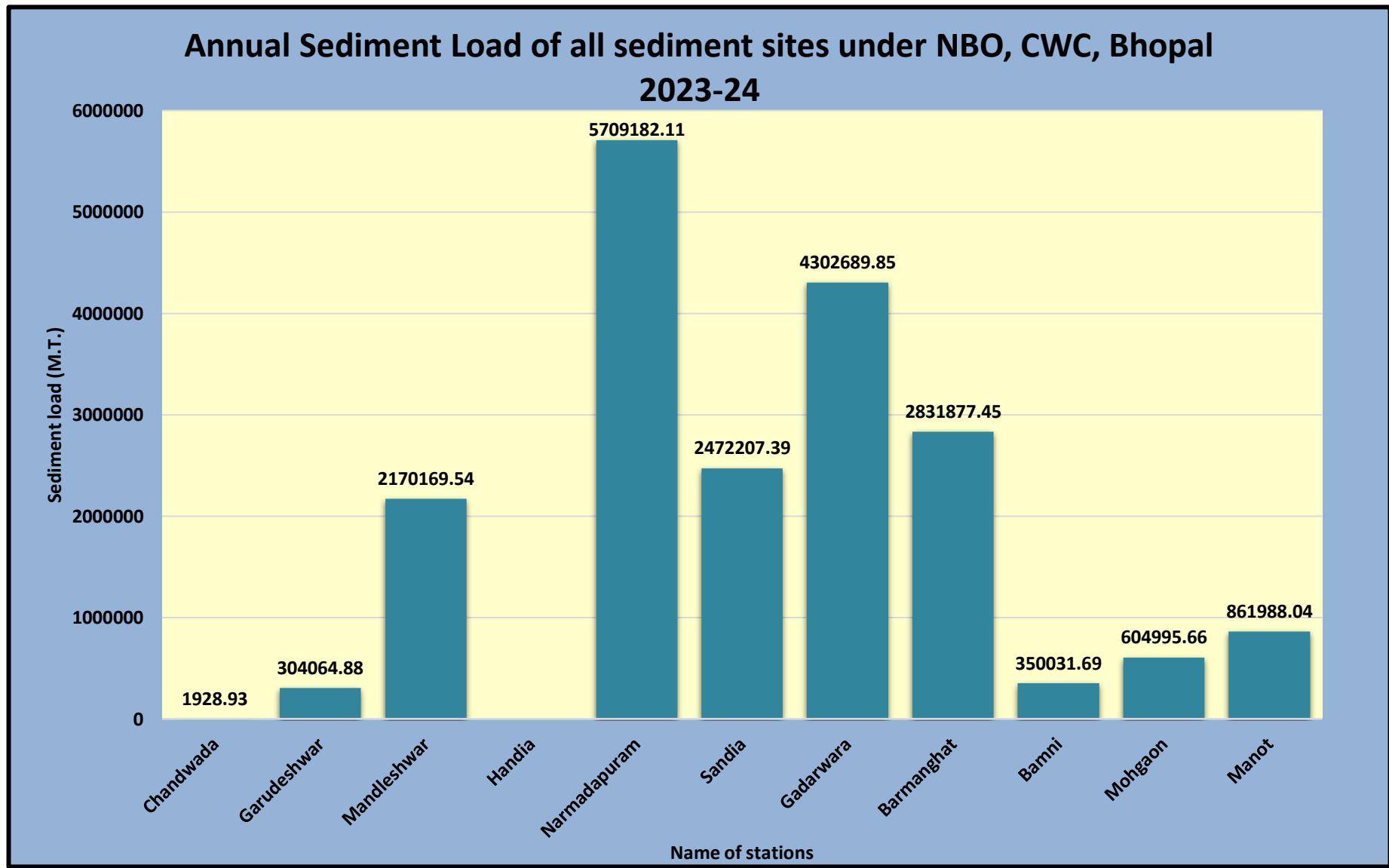


## प्लेट 2: नर्मदा बेसिन का मानचित्र



For International / State boundaries and Coast Line refer to Survey of India Maps

प्लेट 3: 2023-24 के लिए सभी गाद स्थलों का वार्षिक गाद भर (MT में)





## 4 भाग – | गाद आँकडे

### 4.1 ओरसांग चाँदवाडा में

**History Sheet**

<b>HISTORY SHEET</b>			
		<b>Water Year</b>	: 2023-2024
<b>Site</b>	: Orsang at Chandwada	<b>Code</b>	: CW1NAL000513
<b>State</b>	: Gujarat	<b>District</b>	: Vadodara
<b>Basin</b>	: Narmada	<b>Independent River</b>	: Narmada
<b>Tributary</b>	: Orsang	<b>Sub Tributary</b>	:
<b>Sub-Sub Tributary</b>		<b>Local River</b>	: Orsang
<b>Division</b>	: Tapi Division, Surat	<b>Sub-Division</b>	: LNSD Bharuch
<b>Drainage Area</b>	: 3846 Sq. Km.	<b>Bank</b>	: Right
<b>Latitude</b>	: 22°30'00"	<b>Longitude</b>	: 73°27'55.0"
<b>Zero of Gauge (m)</b>	: 18 (m.s.l)		: 11/01/1979
		<b>Opening Date</b>	<b>Closing Date</b>
<b>Gauge</b>	: 11/09/1979		
<b>Discharge</b>	: 01/11/1979		
<b>Sediment</b>	: 01/08/1988		
<b>Water Quality</b>	: 15/03/1980		

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Orsang at Chandwada ( CW1NAL000513)

Local River : Orsang

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Days	June-23					July-23					August-23							
	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	NO FLOW						NO FLOW						106.60	0.000	0.000	0.0010	0.0010	9.21
2	NO FLOW						NO FLOW						105.61	0.000	0.000	0.0010	0.0010	9.13
3	NO FLOW						NO FLOW						96.50	0.000	0.000	0.0008	0.0008	6.56
4	NO FLOW						NO FLOW						47.21	0.000	0.000	0.0006	0.0006	2.48
5	NO FLOW						NO FLOW						45.82	0.000	0.000	0.0006	0.0006	2.38
6	NO FLOW						NO FLOW						42.50	0.000	0.000	0.0006	0.0006	2.15
7	NO FLOW						NO FLOW						40.89	0.000	0.000	0.0006	0.0006	2.04
8	NO FLOW						NO FLOW						40.05	0.000	0.000	0.0006	0.0006	1.98
9	NO FLOW						NO FLOW						32.05	0.000	0.000	0.0005	0.0005	1.46
10	NO FLOW						NO FLOW						32.40	0.000	0.000	0.0005	0.0005	1.48
11	NO FLOW					108.91	0.000	0.000	0.000	0.000	7.73	32.16	0.000	0.000	0.0005	0.0005	1.47	
12	NO FLOW					143.02	0.000	0.000	0.000	0.000	11.21	41.20	0.000	0.000	0.0006	0.0006	2.06	
13	NO FLOW					124.63	0.000	0.000	0.000	0.000	9.29	35.00	0.000	0.000	0.0005	0.0005	1.65	
14	NO FLOW					107.96	0.000	0.000	0.000	0.000	7.64	43.09	0.000	0.000	0.0006	0.0006	2.19	
15	NO FLOW					87.16	0.000	0.000	0.000	0.000	5.71	45.00	0.000	0.000	0.0006	0.0006	2.32	
16	NO FLOW					110.00	0.000	0.000	0.000	0.000	7.84	32.51	0.000	0.000	0.0005	0.0005	1.49	
17	NO FLOW					411.77	0.000	0.000	0.000	0.000	35.58	31.74	0.000	0.000	0.0005	0.0005	1.44	
18	NO FLOW					454.19	0.000	0.000	0.000	0.000	39.24	30.22	0.000	0.000	0.0005	0.0005	1.35	
19	NO FLOW					377.08	0.000	0.000	0.000	0.000	32.58	30.71	0.000	0.000	0.0005	0.0005	1.38	
20	NO FLOW					464.79	0.000	0.000	0.000	0.000	40.16	30.70	0.000	0.000	0.0005	0.0005	1.38	
21	NO FLOW					317.47	0.000	0.000	0.000	0.000	27.43	30.73	0.000	0.000	0.0005	0.0005	1.38	
22	NO FLOW					225.73	0.000	0.000	0.000	0.000	19.50	30.56	0.000	0.000	0.0005	0.0005	1.37	
23	NO FLOW					308.00	0.000	0.000	0.000	0.000	31.87	29.23	0.000	0.000	0.0005	0.0005	1.29	
24	NO FLOW					248.19	0.000	0.000	0.000	0.000	21.44	27.40	0.000	0.000	0.0005	0.0005	1.18	
25	NO FLOW					249.04	0.000	0.000	0.000	0.000	21.52	29.21	0.000	0.000	0.0005	0.0005	1.29	
26	NO FLOW					189.95	0.000	0.000	0.000	0.000	16.41	28.72	0.000	0.000	0.0005	0.0005	1.26	
27	NO FLOW					153.59	0.000	0.000	0.000	0.000	13.27	28.70	0.000	0.000	0.0005	0.0005	1.26	
28	NO FLOW					135.85	0.000	0.000	0.000	0.000	11.74	26.87	0.000	0.000	0.0005	0.0005	1.15	
29	NO FLOW					355.00	0.000	0.000	0.000	0.000	38.67	24.79	0.000	0.000	0.0005	0.0005	1.03	
30	NO FLOW					124.00	0.000	0.000	0.000	0.000	9.23	24.73	0.000	0.000	0.0005	0.0005	1.03	
31			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.78	23.75	0.000	0.000	0.0005	0.0005	0.97	
TenDaily I		NO FLOW				0	0	0	0	0	58.9629	0	0	0.0002	0.0002	3.88		
TenDaily II		NO FLOW				238.951	0	0	0.001	4E-04	19.69	35.2339	0	0	0	0	1.67	
TenDaily III		NO FLOW				221.049	0	0	0.001	0.001	20.16	27.6988	0	0	0	0	1.2	
Total	June					0	July					418.84	August					68.786

Annual Sediment Load (M.T.) -1928.93

## Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Orsang at Chandwada (CW1NAL000513)

Local River : Orsang

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Days	September-23					October-23					November-23							
	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	22.58	0	0	0.0005	0.0005	0.91	105.00	0	0	0.0008	0.0008	7.36	14.69	0	0	0.0004	0.0004	0.51
2	21.58	0	0	0.0005	0.0005	0.85	96.50	0	0	0.0008	0.0008	6.56	14.68	0	0	0.0004	0.0004	0.50
3	20.00	0	0	0.0004	0.0004	0.77	67.52	0	0	0.0007	0.0007	4.03	13.92	0	0	0.0004	0.0004	0.47
4	12.64	0	0	0.0004	0.0004	0.41	62.45	0	0	0.0007	0.0007	3.63	14.68	0	0	0.0004	0.0004	0.50
5	10.23	0	0	0.0003	0.0003	0.31	59.08	0	0	0.0007	0.0007	3.36	13.00	0	0	0.0004	0.0004	0.43
6	10.00	0	0	0.0003	0.0003	0.30	54.93	0	0	0.0006	0.0006	3.04	11.14	0	0	0.0004	0.0004	0.35
7	10.00	0	0	0.0003	0.0003	0.30	51.14	0	0	0.0006	0.0006	2.76	10.08	0	0	0.0003	0.0003	0.30
8	22.08	0	0	0.0005	0.0005	0.88	42.50	0	0	0.0006	0.0006	2.15	9.20	0	0	0.0003	0.0003	0.27
9	45.95	0	0	0.0006	0.0006	2.39	37.97	0	0	0.0006	0.0006	1.84	5.55	0	0	0.0003	0.0003	0.13
10	50.55	0	0	0.0006	0.0006	2.72	34.44	0	0	0.0005	0.0005	1.61	6.54	0	0	0.0003	0.0003	0.17
11	63.23	0	0	0.0007	0.0007	3.69	30.28	0	0	0.0005	0.0005	1.35	6.49	0	0	0.0003	0.0003	0.17
12	45.62	0	0	0.0006	0.0006	2.36	27.13	0	0	0.0005	0.0005	1.16	NO FLOW					
13	36.62	0	0	0.0006	0.0006	1.75	28.02	0	0	0.0005	0.0005	1.22	NO FLOW					
14	30.92	0	0	0.0005	0.0005	1.39	23.83	0	0	0.0005	0.0005	0.98	NO FLOW					
15	29.74	0	0	0.0005	0.0005	1.32	21.00	0	0	0.0005	0.0005	0.82	NO FLOW					
16	30.55	0	0	0.0005	0.0005	1.37	22.82	0	0	0.0005	0.0005	0.92	NO FLOW					
17	2532.00	0	0	0.0026	0.0026	561.64	22.66	0	0	0.0005	0.0005	0.91	NO FLOW					
18	1731.51	0	0	0.0040	0.0040	598.41	20.77	0	0	0.0005	0.0005	0.81	NO FLOW					
19	322.25	0	0	0.0020	0.0020	55.68	18.53	0	0	0.0004	0.0004	0.69	NO FLOW					
20	269.76	0	0	0.0011	0.0011	26.60	16.99	0	0	0.0004	0.0004	0.62	NO FLOW					
21	219.86	0	0	0.0011	0.0011	20.13	16.51	0	0	0.0004	0.0004	0.59	NO FLOW					
22	180.89	0	0	0.0010	0.0010	15.44	16.00	0	0	0.0004	0.0004	0.57	NO FLOW					
23	165.39	0	0	0.0010	0.0010	13.66	15.61	0	0	0.0004	0.0004	0.55	NO FLOW					
24	165.00	0	0	0.0010	0.0010	13.62	16.00	0	0	0.0004	0.0004	0.57	NO FLOW					
25	151.68	0	0	0.0009	0.0009	12.14	15.37	0	0	0.0004	0.0004	0.54	NO FLOW					
26	126.95	0	0	0.0009	0.0009	9.53	15.58	0	0	0.0004	0.0004	0.55	NO FLOW					
27	140.73	0	0	0.0009	0.0009	10.97	14.20	0	0	0.0004	0.0004	0.48	NO FLOW					
28	114.00	0	0	0.0008	0.0008	8.23	15.63	0	0	0.0004	0.0004	0.55	NO FLOW					
29	114.45	0	0	0.0008	0.0008	8.28	15.00	0	0	0.0004	0.0004	0.52	NO FLOW					
30	130.67	0	0	0.0009	0.0009	9.91	13.75	0	0	0.0004	0.0004	0.46	NO FLOW					
31							11.18	0	0	0.0004	0.0004	0.35						
TenDaily I	22.5601	0	0	0	0	0.98	61.153	0	0	0	0	3.63	11.3471	0	0	0	0	0.34
TenDaily II	509.219	0	0	0.0007	7E-04	125.4	23.2024	0	0	0	0	0.94	6.493	0	0	0	0	0
TenDaily III	150.963	0	0	0	0	12.19	14.9835	0	0	0	0	0.52	0	0	0	0	0	0
<b>Total</b>	September					1385.97	October					51.55	November					3.79

Annual Sediment Load (M.T.) – 1928.93

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Orsang at Chandwada (CW1NAL000513)

Local River : Orsang

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Days	December-23					January-24					February-24							
	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	NO FLOW						NO FLOW						NO FLOW					
2	NO FLOW						NO FLOW						NO FLOW					
3	NO FLOW						NO FLOW						NO FLOW					
4	NO FLOW						NO FLOW						NO FLOW					
5	NO FLOW						NO FLOW						NO FLOW					
6	NO FLOW						NO FLOW						NO FLOW					
7	NO FLOW						NO FLOW						NO FLOW					
8	NO FLOW						NO FLOW						NO FLOW					
9	NO FLOW						NO FLOW						NO FLOW					
10	NO FLOW						NO FLOW						NO FLOW					
11	NO FLOW						NO FLOW						NO FLOW					
12	NO FLOW						NO FLOW						NO FLOW					
13	NO FLOW						NO FLOW						NO FLOW					
14	NO FLOW						NO FLOW						NO FLOW					
15	NO FLOW						NO FLOW						NO FLOW					
16	NO FLOW						NO FLOW						NO FLOW					
17	NO FLOW						NO FLOW						NO FLOW					
18	NO FLOW						NO FLOW						NO FLOW					
19	NO FLOW						NO FLOW						NO FLOW					
20	NO FLOW						NO FLOW						NO FLOW					
21	NO FLOW						NO FLOW						NO FLOW					
22	NO FLOW						NO FLOW						NO FLOW					
23	NO FLOW						NO FLOW						NO FLOW					
24	NO FLOW						NO FLOW						NO FLOW					
25	NO FLOW						NO FLOW						NO FLOW					
26	NO FLOW						NO FLOW						NO FLOW					
27	NO FLOW						NO FLOW						NO FLOW					
28	NO FLOW						NO FLOW						NO FLOW					
29	NO FLOW						NO FLOW						NO FLOW					
30	NO FLOW						NO FLOW						NO FLOW					
31	NO FLOW						NO FLOW											
TenDaily I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TenDaily II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TenDaily III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	December					0	January					0	February					0

Annual Sediment Load (M.T.) – 1928.93

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Orsang at Chandwada ( 006-TDSURAT)

Local River : Orsang

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Days	March-24						April-24						May-24					
	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	NO FLOW						NO FLOW						NO FLOW					
2	NO FLOW						NO FLOW						NO FLOW					
3	NO FLOW						NO FLOW						NO FLOW					
4	NO FLOW						NO FLOW						NO FLOW					
5	NO FLOW						NO FLOW						NO FLOW					
6	NO FLOW						NO FLOW						NO FLOW					
7	NO FLOW						NO FLOW						NO FLOW					
8	NO FLOW						NO FLOW						NO FLOW					
9	NO FLOW						NO FLOW						NO FLOW					
10	NO FLOW						NO FLOW						NO FLOW					
11	NO FLOW						NO FLOW						NO FLOW					
12	NO FLOW						NO FLOW						NO FLOW					
13	NO FLOW						NO FLOW						NO FLOW					
14	NO FLOW						NO FLOW						NO FLOW					
15	NO FLOW						NO FLOW						NO FLOW					
16	NO FLOW						NO FLOW						NO FLOW					
17	NO FLOW						NO FLOW						NO FLOW					
18	NO FLOW						NO FLOW						NO FLOW					
19	NO FLOW						NO FLOW						NO FLOW					
20	NO FLOW						NO FLOW						NO FLOW					
21	NO FLOW						NO FLOW						NO FLOW					
22	NO FLOW						NO FLOW						NO FLOW					
23	NO FLOW						NO FLOW						NO FLOW					
24	NO FLOW						NO FLOW						NO FLOW					
25	NO FLOW						NO FLOW						NO FLOW					
26	NO FLOW						NO FLOW						NO FLOW					
27	NO FLOW						NO FLOW						NO FLOW					
28	NO FLOW						NO FLOW						NO FLOW					
29	NO FLOW						NO FLOW						NO FLOW					
30	NO FLOW						NO FLOW						NO FLOW					
31	NO FLOW												NO FLOW					
TenDaily I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TenDaily II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TenDaily III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>March</b>					<b>0</b>	<b>April</b>					<b>0</b>	<b>May</b>					<b>0</b>

Annual Sediment Load (M.T.) – 1928.93

## **Annual Sediment Load for period : 1989-2024**

Station Name : Orsang at Chandwada ( 006-TDSURAT) Division : Tapi Division, Surat  
Local River : Orsang Sub-Division : LNSD,Bharuch

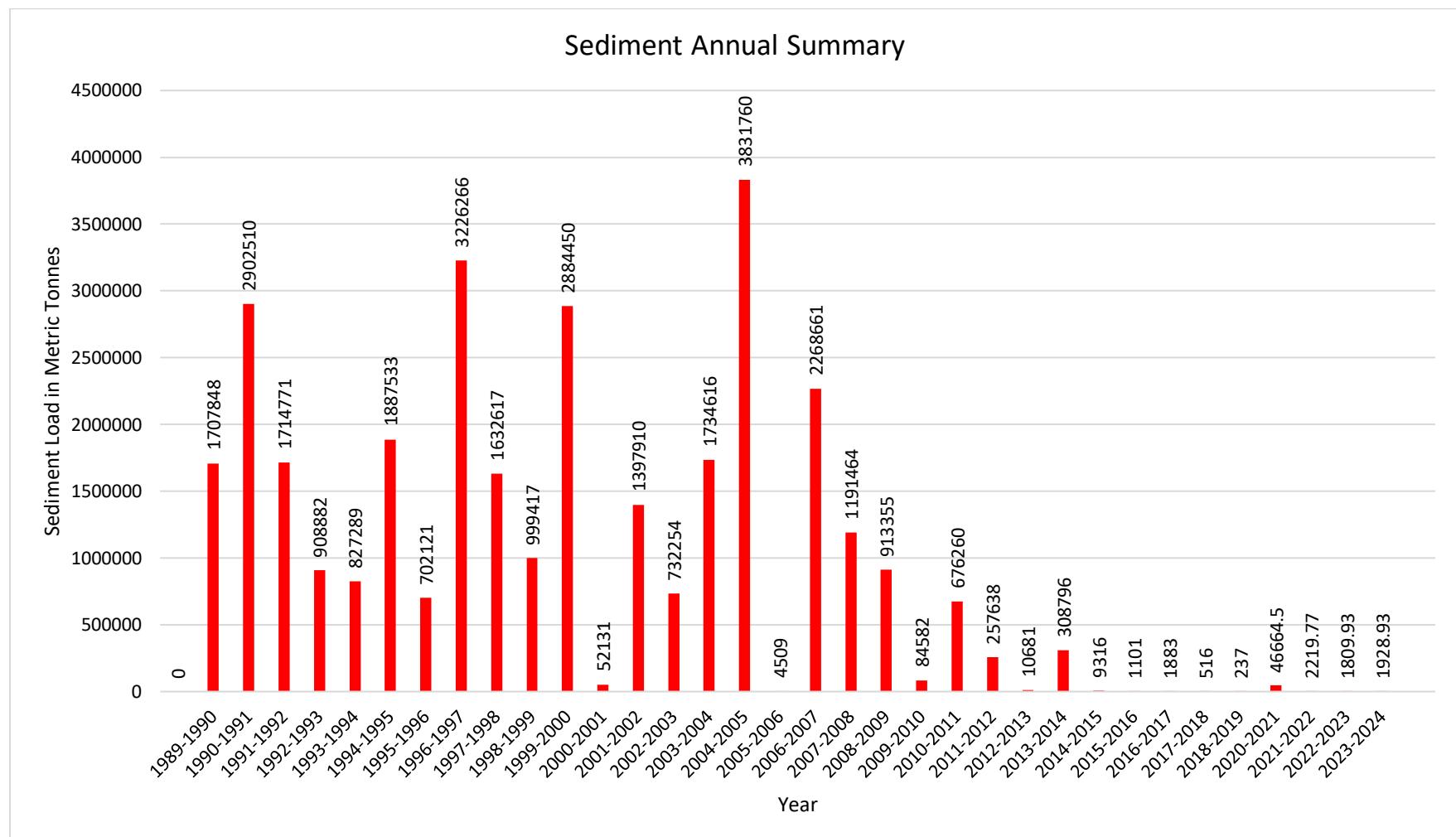
Year	Monsoon	Non-Monsoon	Annual Load	Annual Run Off
	(M.T.)	(M.T.)	(M.T.)	(MCM)
1989-1990	1707848	0	1707848	1097
1990-1991	2902510	0	2902510	2782
1991-1992	1714771	0	1714771	858
1992-1993	908882	0	908882	589
1993-1994	827289	0	827289	974
1994-1995	1887533	0	1887533	4035
1995-1996	702121	0	702121	579
1996-1997	3226266	0	3226266	2348
1997-1998	1632617	0	1632617	1999
1998-1999	999417	0	999417	1389
1999-2000	2884450	0	2884450	1070
2000-2001	52131	0	52131	43
2001-2002	1397910	0	1397910	1009
2002-2003	732254	0	732254	447
2003-2004	1734616	0	1734616	1706
2004-2005	3831760	0	3831760	2297
2005-2006	4509	0	4509	953
2006-2007	2268661	0	2268661	2812
2007-2008	1191464	0	1191464	2229
2008-2009	913355	0	913355	947
2009-2010	84582	0	84582	323
2010-2011	676260	0	676260	808
2011-2012	257612	26	257638	1104
2012-2013	10657	24	10681	1439
2013-2014	308796	0	308796	4306
2014-2015	9316	0	9316	720
2015-2016	1101	0	1101	329
2016-2017	1883	0	1883	549
2017-2018	516	0	516	340
2018-2019	237	0	237	261
2020-2021	46664.50	0	46664.5	1591.7
2021-2022	2219.77	0	2219.77	1031.22
2022-2023	1809.93	0	1809.93	875.371
2023-2024	<b>1928.93</b>	<b>0</b>	<b>1928.93</b>	<b>1211.63</b>

### Annual Sediment Load for the period: 1989-2024

Station Name : Orsang at Chandwada ( 006-TDSURAT)

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch



### **Seasonal Sediment Load for the period : 1989-2024**

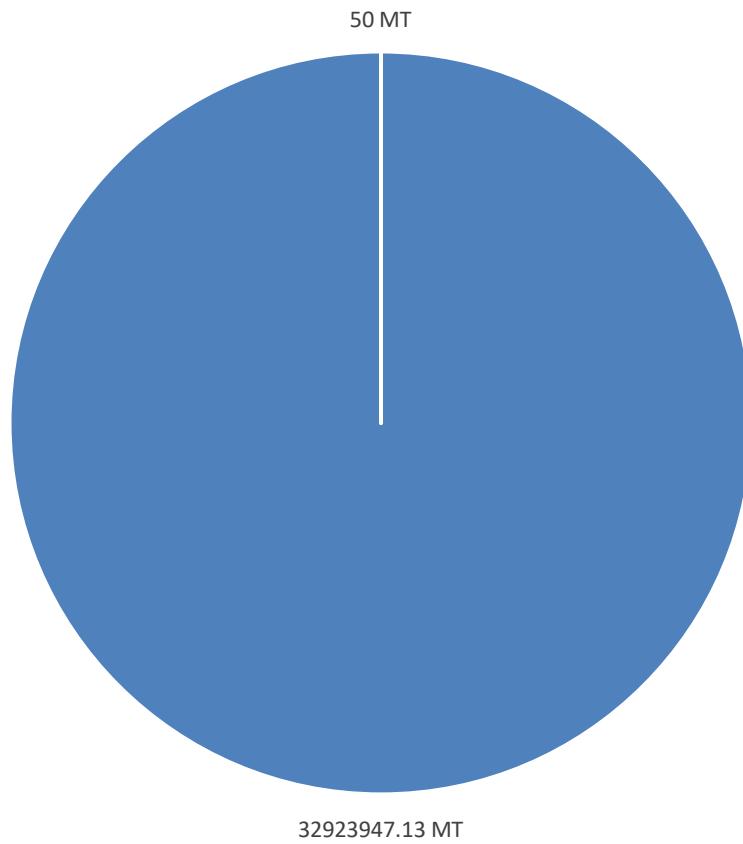
Station Name : Orsang at Chandwada ( 006-TDSURAT)

Division : Tapi Division, Surat

Local River : Orsang

Sub-Division : LNSD,Bharuch

Sediment Historical Data.

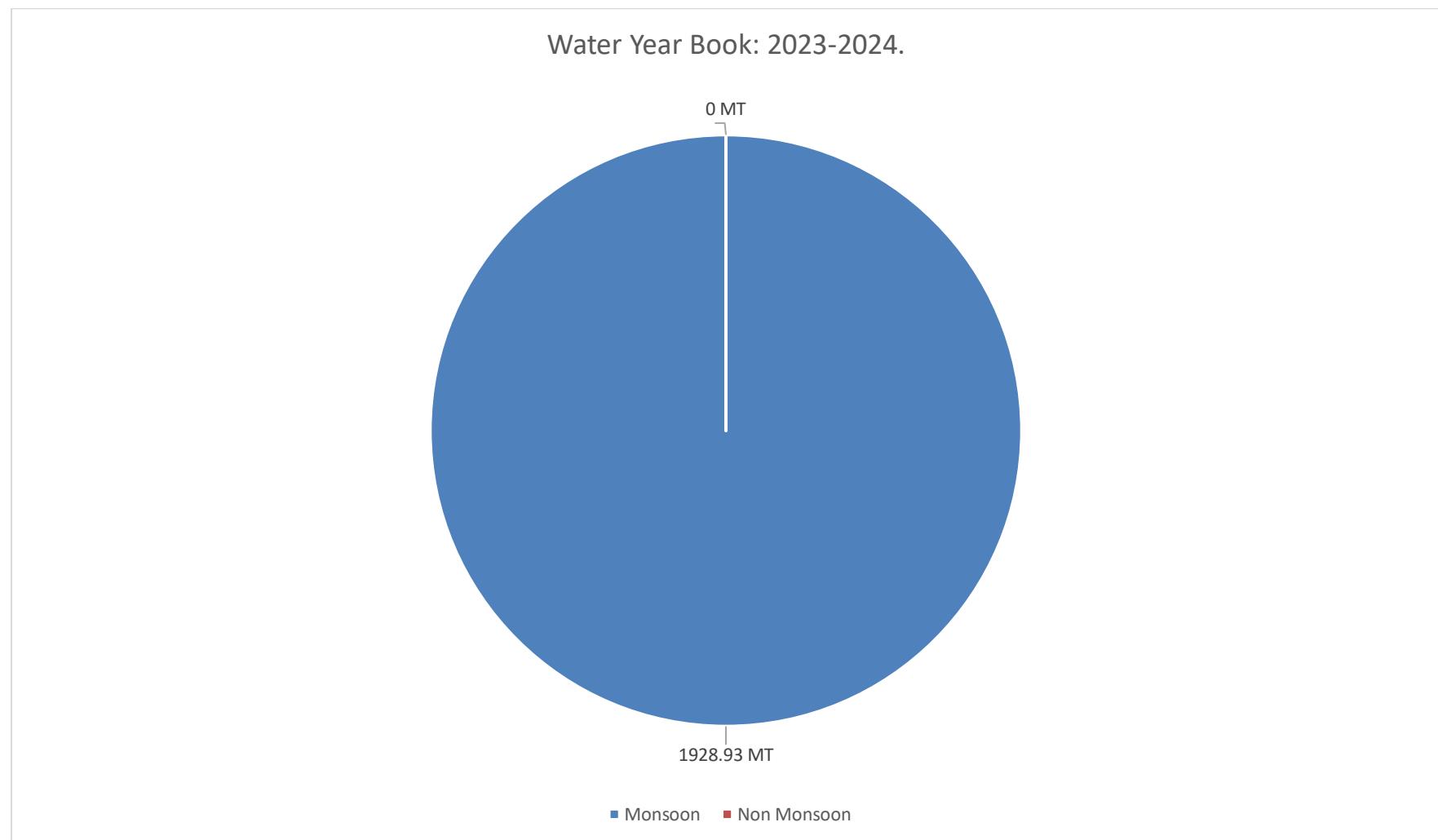


### **Seasonal Sediment Load for the Year: 2023-24**

Station Name : Orsang at Chandwada ( 006-TDSURAT)

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch





## 4.2 गरुडेश्वर में नर्मदा

<b>HISTORY SHEET (SEDIMENT)</b>				
			<b>Water Year</b>	: 2023-24
<b>Site</b>	: Narmada at Garudeshwar		<b>Code</b>	: CW1NAL000434
<b>State</b>	: Gujarat		<b>District</b>	Bharuch
<b>Basin</b>	: Narmada		<b>Independent River</b>	: Narmada
<b>Tributary</b>	:		<b>Sub Tributary</b>	:
<b>Sub-Sub Tributary</b>	:		<b>Local River</b>	: Narmada
<b>Division</b>	: Tapi Division, Surat		<b>Sub-Division</b>	: LNSD Bharuch
<b>Drainage Area</b>	: 87892 Sq. Km.		<b>Bank</b>	: Right
<b>Latitude</b>	: 21°53'11"		<b>Longitude</b>	: 73°39'16"
<b>Zero of Gauge (m)</b>	: 10 (m.s.l)		22/12/1971	
		<b>Opening Date</b>	<b>Closing Date</b>	
<b>Gauge</b>	: 22/11/1971			
<b>Discharge</b>	: 23/03/1972			
<b>Sediment</b>	: 21/03/1973			
<b>Water Quality</b>	: 15/06/1977			

### Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Narmada at Garudeshwar ( CW1NAL000434)

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Local River : Narmada

Days	June-23						July-23						August-23					
	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	28.07	0.000	0.000	0.0003	0.0003	0.64	119.715	0.000	0.000	0.0020	0.0020	20.69	700.745	0.000	0.000	0.0010	0.0010	60.54
2	29.50	0.000	0.000	0.0003	0.0003	0.69	131.407	0.000	0.000	0.0006	0.0006	6.71	669.561	0.000	0.000	0.0010	0.0010	57.85
3	27.40	0.000	0.000	0.0003	0.0003	0.62	171.745	0.000	0.000	0.0020	0.0020	29.68	1112.53	0.000	0.000	0.0010	0.0010	96.12
4	27.01	0.000	0.000	0.0003	0.0003	0.60	120.363	0.000	0.000	0.0010	0.0010	10.40	1190.92	0.000	0.000	0.0010	0.0010	102.90
5	27.93	0.000	0.000	0.0003	0.0003	0.64	119.212	0.000	0.000	0.0010	0.0010	10.30	1212.9	0.000	0.000	0.0010	0.0010	104.79
6	28.64	0.000	0.000	0.0003	0.0003	0.66	117.068	0.000	0.000	0.0010	0.0010	10.11	1250	0.000	0.000	0.0019	0.0019	206.80
7	29.14	0.000	0.000	0.0003	0.0003	0.68	113.767	0.000	0.000	0.0010	0.0010	9.83	1254.3	0.000	0.000	0.0010	0.0010	108.37
8	29.19	0.000	0.000	0.0003	0.0003	0.68	112.04	0.000	0.000	0.0010	0.0010	9.68	1238.32	0.000	0.000	0.0010	0.0010	106.99
9	29.32	0.000	0.000	0.0003	0.0003	0.68	112.9	0.000	0.000	0.0005	0.0005	5.32	1252.41	0.000	0.000	0.0010	0.0010	108.21
10	29.62	0.000	0.000	0.0003	0.0003	0.69	115.73	0.000	0.000	0.0010	0.0010	10.00	1239.42	0.000	0.000	0.0010	0.0010	107.09
11	29.94	0.000	0.000	0.0003	0.0003	0.71	116.715	0.000	0.000	0.0010	0.0010	10.08	1233.11	0.000	0.000	0.0010	0.0010	106.54
12	31.57	0.000	0.000	0.0003	0.0003	0.77	513.172	0.000	0.000	0.0020	0.0020	88.68	1122.15	0.000	0.000	0.0010	0.0010	96.95
13	32.35	0.000	0.000	0.0003	0.0003	0.79	362.688	0.000	0.000	0.0010	0.0010	31.34	1252	0.000	0.000	0.0019	0.0019	207.31
14	35.83	0.000	0.000	0.0003	0.0003	0.93	454.118	0.000	0.000	0.0010	0.0010	39.24	1275.44	0.000	0.000	0.0010	0.0010	110.20
15	31.21	0.000	0.000	0.0003	0.0003	0.75	375.224	0.000	0.000	0.0010	0.0010	32.42	1257	0.000	0.000	0.0019	0.0019	208.57
16	35.74	0.000	0.000	0.0003	0.0003	0.92	170	0.000	0.000	0.0007	0.0007	9.93	1250.84	0.000	0.000	0.0010	0.0010	108.07
17	28.66	0.000	0.000	0.0003	0.0003	0.66	167.84	0.000	0.000	0.0007	0.0007	9.74	1275.41	0.000	0.000	0.0010	0.0010	110.20
18	27.52	0.000	0.000	0.0003	0.0003	0.62	155.374	0.000	0.000	0.0007	0.0007	13.42	1284.99	0.000	0.000	0.0010	0.0010	111.02
19	28.08	0.000	0.000	0.0003	0.0003	0.64	160.81	0.000	0.000	0.0010	0.0010	9.12	1267.91	0.000	0.000	0.0010	0.0010	109.55
20	28.75	0.000	0.000	0.0003	0.0003	0.66	381.035	0.000	0.000	0.0010	0.0010	32.92	1253	0.000	0.000	0.0019	0.0019	207.56
21	28.035	0.000	0.000	0.0003	0.0003	0.64	280.95	0.000	0.000	0.0009	0.0009	21.32	1253.18	0.000	0.000	0.0010	0.0010	108.28
22	123.879	0.000	0.000	0.0020	0.0020	21.41	660.584	0.000	0.000	0.0010	0.0010	57.07	1264.39	0.000	0.000	0.0010	0.0010	109.24
23	127.106	0.000	0.000	0.0010	0.0010	10.98	650	0.000	0.000	0.0014	0.0014	76.44	1273.38	0.000	0.000	0.0010	0.0010	110.02
24	119.591	0.000	0.000	0.0020	0.0020	20.67	568.058	0.000	0.000	0.0010	0.0010	49.08	1260.34	0.000	0.000	0.0010	0.0010	108.89
25	123.35	0.000	0.000	0.0006	0.0006	6.09	737.124	0.000	0.000	0.0020	0.0020	127.38	1236.19	0.000	0.000	0.0010	0.0010	106.81
26	130.091	0.000	0.000	0.0010	0.0010	11.24	700.249	0.000	0.000	0.0020	0.0020	121.00	1297.58	0.000	0.000	0.0010	0.0010	112.11
27	110.033	0.000	0.000	0.0010	0.0010	9.51	763.12	0.000	0.000	0.0020	0.0020	131.87	1264.67	0.000	0.000	0.0019	0.0019	210.51
28	104.383	0.000	0.000	0.0010	0.0010	9.02	754.465	0.000	0.000	0.0010	0.0010	65.19	1312.17	0.000	0.000	0.0010	0.0010	113.37
29	123.03	0.000	0.000	0.0010	0.0010	6.07	780.43	0.000	0.000	0.0015	0.0015	100.97	1328.15	0.000	0.000	0.0010	0.0010	114.75
30	116.792	0.000	0.000	0.0020	0.0020	20.18	650	0.000	0.000	0.0014	0.0014	76.44	561.971	0.000	0.000	0.0013	0.0013	61.25
31							725.21	0.000	0.000			62.66	698.366	0.000	0.000	0.0010	0.0010	60.34
TenDaily I	28.5818	0	0	0	0	0.66	123.395	0	0	0.0013	0.0013	12.27	1112.11	0	0	0.001	0.001	105.97
TenDaily II	30.9665	0	0	0	0	0.75	285.698	0	0	0.0009	0.0009	27.69	1247.18	0	0	0.001	0.001	137.6
TenDaily III	110.629	0	0	0.0013	0.001	11.58	660.926	0	0	0.0014	0.0014	80.86	1159.13	0	0	0.0009	0.001	110.51
Total		June				129.84		July				1289.02		August				3651.2

Annual Sediment Load (M.T.) – 304064.88

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Garudeshwar ( CW1NAL000434)

Local River : Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Days	September-23						October-23						November-23					
	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	48.40	0.000	0.000	0.0004	0.0004	1.47	960	0.000	0.000	0.0020	0.0020	138.38	19.25	0.000	0.000	0.0002	0.0002	0.36
2	629.3	0.000	0.000	0.0010	0.0010	54.37	950	0.000	0.000	0.0020	0.0020	136.19	19.27	0.000	0.000	0.0002	0.0002	0.36
3	650.0	0.000	0.000	0.0014	0.0014	76.44	481.271	0.000	0.000	0.0090	0.0090	374.24	25.78	0.000	0.000	0.0003	0.0003	0.56
4	604.1	0.000	0.000	0.0010	0.0010	52.20	302.409	0.000	0.000	0.0050	0.0050	130.64	21.10	0.000	0.000	0.0002	0.0002	0.41
5	419.1	0.000	0.000	0.0010	0.0010	36.21	696.434	0.000	0.000	0.0060	0.0060	361.03	21.00	0.000	0.000	0.0002	0.0002	0.41
6	37.02	0.000	0.000	0.0003	0.0003	0.98	1192.28	0.000	0.000	0.0030	0.0030	309.04	21.20	0.000	0.000	0.0002	0.0002	0.42
7	30.00	0.000	0.000	0.0003	0.0003	0.71	940.926	0.000	0.000	0.0030	0.0030	243.89	21.01	0.000	0.000	0.0002	0.0002	0.41
8	31.72	0.000	0.000	0.0003	0.0003	0.77	700	0.000	0.000	0.0010	0.0010	85.57	22.08	0.000	0.000	0.0002	0.0002	0.44
9	19.19	0.000	0.000	0.0002	0.0002	0.36	358.074	0.000	0.000	0.0010	0.0010	30.94	22.14	0.000	0.000	0.0002	0.0002	0.45
10	30.00	0.000	0.000	0.0003	0.0003	0.71	365.885	0.000	0.000	0.0010	0.0010	31.61	21.00	0.000	0.000	0.0002	0.0002	0.41
11	19.05	0.000	0.000	0.0002	0.0002	0.35	553.803	0.000	0.000	0.0010	0.0010	47.85	21.00	0.000	0.000	0.0002	0.0002	0.41
12	17.72	0.000	0.000	0.0002	0.0002	0.32	399.479	0.000	0.000	0.0010	0.0010	34.52	21.00	0.000	0.000	0.0002	0.0002	0.41
13	16.89	0.000	0.000	0.0002	0.0002	0.30	929.885	0.000	0.000	0.0020	0.0020	160.68	21.00	0.000	0.000	0.0002	0.0002	0.41
14	17.605	0.000	0.000	0.0002	0.0002	0.31	810.745	0.000	0.000	0.0010	0.0010	70.05	21.00	0.000	0.000	0.0002	0.0002	0.41
15	17.432	0.000	0.000	0.0002	0.0002	0.31	900	0.000	0.000	0.0020	0.0020	125.43	21.00	0.000	0.000	0.0002	0.0002	0.41
16	19.825	0.000	0.000	0.0010	0.0010	1.71	951.347	0.000	0.000	0.0020	0.0020	164.39	105.0	0.000	0.000	0.0005	0.0005	4.77
17	52283	0.000	0.000	0.0134	0.0134	60730.19	906.549	0.000	0.000	0.0040	0.0040	313.30	32.81	0.000	0.000	0.0003	0.0003	0.81
18	19750	0.000	0.000	0.0720	0.0720	122860.80	18.988	0.000	0.000	0.0002	0.0002	0.35	97.296	0.000	0.000	0.0005	0.0005	4.25
19	8482.32	0.000	0.000	0.0800	0.0800	58629.80	17.243	0.000	0.000	0.0002	0.0002	0.30	200.0	0.000	0.000	0.0007	0.0007	12.71
20	3961.54	0.000	0.000	0.0450	0.0450	15402.47	205.945	0.000	0.000	0.0007	0.0007	13.29	17.77	0.000	0.000	0.0002	0.0002	0.32
21	711.09	0.000	0.000	0.0520	0.0520	3194.79	106.074	0.000	0.000	0.0005	0.0005	4.84	18.172	0.000	0.000	0.0002	0.0002	0.33
22	1367	0.000	0.000	0.0630	0.0630	7440.85	18	0.000	0.000	0.0002	0.0002	0.33	18.046	0.000	0.000	0.0002	0.0002	0.33
23	2550.7	0.000	0.000	0.0360	0.0360	7933.71	17.615	0.000	0.000	0.0002	0.0002	0.31	18.152	0.000	0.000	0.0002	0.0002	0.33
24	2743.4	0.000	0.000	0.0030	0.0030	684.13	17.5	0.000	0.000	0.0002	0.0002	0.31	17.612	0.000	0.000	0.0002	0.0002	0.31
25	1618.25	0.000	0.000	0.0270	0.0270	3775.04	21.283	0.000	0.000	0.0002	0.0002	0.42	25.487	0.000	0.000	0.0003	0.0003	0.55
26	4768.57	0.000	0.000	0.0170	0.0170	7004.08	22.119	0.000	0.000	0.0002	0.0002	0.45	25.5	0.000	0.000	0.0003	0.0003	0.55
27	1452.08	0.000	0.000	0.0280	0.0280	3512.88	23.134	0.000	0.000	0.0002	0.0002	0.48	20.777	0.000	0.000	0.0002	0.0002	0.40
28	950	0.000	0.000	0.0020	0.0020	136.19	17.092	0.000	0.000	0.0002	0.0002	0.30	20.349	0.000	0.000	0.0002	0.0002	0.39
29	978.853	0.000	0.000	0.0120	0.0120	1014.87	274	0.000	0.000	0.0009	0.0009	20.53	21.084	0.000	0.000	0.0002	0.0002	0.41
30	941.266	0.000	0.000	0.0030	0.0030	243.98	17.288	0.000	0.000	0.0002	0.0002	0.31	20.64	0.000	0.000	0.0002	0.0002	0.40
31						25.706	0.000	0.000	0.0003	0.0003	0.56							
TenDaily I	249.889	0	0	0.0004	4E-04	22.42	694.728	0	0	0.004	0.004	184.15	21.3828	0	0	0	0.0002	0.42
TenDaily II	8458.54	0	0	0.022	0.022	25762.66	569.398	0	0	0.0012	0.0012	93.02	55.7876	0	0	0	0.0003	2.49
TenDaily III	1808.12	0	0	0.0298	0.024	3494.05	50.8919	0	0	0.0003	0.0003	2.62	20.5819	0	0	0	0.0002	0.40
Total	September					292791.3	October					2800.53	November					33.18

## Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Garudeshwar ( CW1NAL000434)

Local River : Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Days	December-23						January-24						February-24					
	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	26.915	0.000	0.000	0.0003	0.0003	0.60	547.98	0.000	0.000	0.0012	0.0012	58.95	597.136	0.000	0.000	0.0010	0.0010	51.59
2	17.939	0.000	0.000	0.0002	0.0002	0.32	557.18	0.000	0.000	0.0010	0.0010	48.14	608.979	0.000	0.000	0.0010	0.0010	52.62
3	17.5	0.000	0.000	0.0002	0.0002	0.31	564.53	0.000	0.000	0.0010	0.0010	48.78	603.558	0.000	0.000	0.0010	0.0010	52.15
4	17.831	0.000	0.000	0.0002	0.0002	0.32	562.82	0.000	0.000	0.0010	0.0010	48.63	590	0.000	0.000	0.0013	0.0013	65.96
5	17.429	0.000	0.000	0.0002	0.0002	0.31	556.63	0.000	0.000	0.0010	0.0010	48.09	769.141	0.000	0.000	0.0010	0.0010	66.45
6	17.192	0.000	0.000	0.0002	0.0002	0.30	572.26	0.000	0.000	0.0010	0.0010	49.44	780.552	0.000	0.000	0.0010	0.0010	67.44
7	17.209	0.000	0.000	0.0002	0.0002	0.30	540.00	0.000	0.000	0.0012	0.0012	57.65	418.693	0.000	0.000	0.0010	0.0010	36.18
8	17.239	0.000	0.000	0.0002	0.0002	0.30	20.93	0.000	0.000	0.0002	0.0002	0.41	402.99	0.000	0.000	0.0011	0.0011	36.92
9	17.451	0.000	0.000	0.0002	0.0002	0.31	18.36	0.000	0.000	0.0002	0.0002	0.34	19.095	0.000	0.000	0.0002	0.0002	0.36
10	17.3	0.000	0.000	0.0002	0.0002	0.31	18.05	0.000	0.000	0.0002	0.0002	0.33	578.218	0.000	0.000	0.0010	0.0010	49.96
11	17.279	0.000	0.000	0.0002	0.0002	0.31	18.28	0.000	0.000	0.0002	0.0002	0.33	590	0.000	0.000	0.0013	0.0013	65.96
12	17.27	0.000	0.000	0.0002	0.0002	0.31	18.16	0.000	0.000	0.0002	0.0002	0.33	587.541	0.000	0.000	0.0010	0.0010	50.76
13	17.226	0.000	0.000	0.0002	0.0002	0.30	18.33	0.000	0.000	0.0002	0.0002	0.33	481.519	0.000	0.000	0.0010	0.0010	41.60
14	17.364	0.000	0.000	0.0002	0.0002	0.31	18.00	0.000	0.000	0.0002	0.0002	0.33	525.281	0.000	0.000	0.0010	0.0010	45.38
15	17.171	0.000	0.000	0.0002	0.0002	0.30	18.46	0.000	0.000	0.0002	0.0002	0.34	558.154	0.000	0.000	0.0010	0.0010	48.22
16	17.246	0.000	0.000	0.0002	0.0002	0.30	18.23	0.000	0.000	0.0002	0.0002	0.33	585.578	0.000	0.000	0.0010	0.0010	50.59
17	17.2	0.000	0.000	0.0002	0.0002	0.30	17.27	0.000	0.000	0.0002	0.0002	0.31	583.687	0.000	0.000	0.0010	0.0010	50.43
18	17.214	0.000	0.000	0.0002	0.0002	0.30	456.05	0.000	0.000	0.0011	0.0011	44.57	580.0	0.000	0.000	0.0013	0.0013	64.27
19	19.875	0.000	0.000	0.0002	0.0002	0.38	596.72	0.000	0.000	0.0010	0.0010	51.56	574.645	0.000	0.000	0.0010	0.0010	49.65
20	17.21	0.000	0.000	0.0002	0.0002	0.30	587.29	0.000	0.000	0.0010	0.0010	50.74	82.363	0.000	0.000	0.0005	0.0005	3.29
21	17.281	0.000	0.000	0.0002	0.0002	0.31	450.00	0.000	0.000	0.0011	0.0011	43.68	18.079	0.000	0.000	0.0002	0.0002	0.33
22	17.147	0.000	0.000	0.0002	0.0002	0.30	550.00	0.000	0.000	0.0012	0.0012	59.28	18.02	0.000	0.000	0.0002	0.0002	0.33
23	17.206	0.000	0.000	0.0002	0.0002	0.30	593.96	0.000	0.000	0.0010	0.0010	51.32	18.563	0.000	0.000	0.0002	0.0002	0.34
24	550	0.000	0.000	0.0012	0.0012	59.28	597.10	0.000	0.000	0.0010	0.0010	51.59	18.147	0.000	0.000	0.0002	0.0002	0.33
25	600	0.000	0.000	0.0013	0.0013	67.67	590.16	0.000	0.000	0.0010	0.0010	50.99	18.00	0.000	0.000	0.0002	0.0002	0.33
26	570.383	0.000	0.000	0.0013	0.0013	62.65	580.0	0.000	0.000	0.0013	0.0013	64.27	17.34	0.000	0.000	0.0002	0.0002	0.31
27	576.562	0.000	0.000	0.0013	0.0013	63.69	585.83	0.000	0.000	0.0010	0.0010	50.62	17.011	0.000	0.000	0.0002	0.0002	0.30
28	558.68	0.000	0.000	0.0013	0.0013	60.71	580.0	0.000	0.000	0.0013	0.0013	64.27	18.075	0.000	0.000	0.0002	0.0002	0.33
29	546.455	0.000	0.000	0.0012	0.0012	58.70	635.28	0.000	0.000	0.0010	0.0010	54.89	17.988	0.000	0.000	0.0002	0.0002	0.33
30	540.209	0.000	0.000	0.0012	0.0012	57.68	662.13	0.000	0.000	0.0010	0.0010	57.21						
31	543.332	0.000	0.000	0.0012	0.0012	58.19	609.77	0.000	0.000	0.0010	0.0010	52.68						
TenDaily I	18.4005	0	0	0	0.0002	0.34	395.87	0	0	0.0008	0.0008	36.07	536.836	0	0	0.001	0.001	47.96
TenDaily II	17.5055	0	0	0	0.0002	0.31	176.681	0	0	0.0005	0.0005	14.92	514.877	0	0	0.001	0.001	47.02
TenDaily III	412.478	0	0	0	0.001	44.5	584.929	0	0	0.001	0.001	54.62	17.9137	0	0	0.0002	0.0002	10.01
Total	December					495.99	January					1110.7	February					952.71

Annual Sediment Load (M.T.) - 304064.88

**Daily Observed Sediment Datasheet for period : 2023-24**

Station Name : Narmada at Garudeshwar ( CW1NAL000434)

Local River : Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch

Days	March-24						April-24						May-24					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	19.294	0.000	0.000	0.0002	0.0002	0.36	17.252	0.000	0.000	0.0002	0.0002	0.31	221.857	0.000	0.000	0.00010	0.00010	19.17
2	19.013	0.000	0.000	0.0002	0.0002	0.35	17.036	0.000	0.000	0.0002	0.0002	0.30	199.778	0.000	0.000	0.00007	0.00007	12.69
3	18	0.000	0.000	0.0002	0.0002	0.33	19.62	0.000	0.000	0.0002	0.0002	0.37	221.474	0.000	0.000	0.00008	0.00008	14.85
4	17.778	0.000	0.000	0.0002	0.0002	0.32	233.447	0.000	0.000	0.0008	0.0008	16.09	215.306	0.000	0.000	0.00008	0.00008	14.22
5	17.051	0.000	0.000	0.0002	0.0002	0.30	225.653	0.000	0.000	0.0008	0.0008	15.28	220	0.000	0.000	0.00008	0.00008	14.70
6	17.073	0.000	0.000	0.0002	0.0002	0.30	229.933	0.000	0.000	0.0008	0.0008	15.72	275.871	0.000	0.000	0.00009	0.00009	20.74
7	17.332	0.000	0.000	0.0002	0.0002	0.31	220	0.000	0.000	0.0008	0.0008	14.70	220	0.000	0.000	0.00008	0.00008	14.70
8	17.178	0.000	0.000	0.0002	0.0002	0.30	223.686	0.000	0.000	0.0008	0.0008	15.07	17.247	0.000	0.000	0.00002	0.00002	0.31
9	17.01	0.000	0.000	0.0002	0.0002	0.30	17.354	0.000	0.000	0.0002	0.0002	0.31	213.367	0.000	0.000	0.00010	0.00010	18.43
10	17	0.000	0.000	0.0002	0.0002	0.30	17.33	0.000	0.000	0.0002	0.0002	0.31	251.021	0.000	0.000	0.00010	0.00010	21.69
11	17.023	0.000	0.000	0.0002	0.0002	0.30	17.00	0.000	0.000	0.0002	0.0002	0.30	231.646	0.000	0.000	0.00010	0.00010	20.01
12	17.038	0.000	0.000	0.0002	0.0002	0.30	17.139	0.000	0.000	0.0002	0.0002	0.30	220	0.000	0.000	0.00008	0.00008	14.70
13	17.021	0.000	0.000	0.0002	0.0002	0.30	17.218	0.000	0.000	0.0002	0.0002	0.30	261.705	0.000	0.000	0.00008	0.00008	19.14
14	17.031	0.000	0.000	0.0002	0.0002	0.30	17.105	0.000	0.000	0.0002	0.0002	0.30	325.062	0.000	0.000	0.00010	0.00010	28.09
15	17.027	0.000	0.000	0.0002	0.0002	0.30	17.119	0.000	0.000	0.0002	0.0002	0.30	287.779	0.000	0.000	0.00009	0.00009	22.12
16	17.03	0.000	0.000	0.0002	0.0002	0.30	10.885	0.000	0.000	0.0002	0.0002	0.15	285.888	0.000	0.000	0.00009	0.00009	21.90
17	17	0.000	0.000	0.0002	0.0002	0.30	19.671	0.000	0.000	0.0002	0.0002	0.37	321.062	0.000	0.000	0.00010	0.00010	27.74
18	17.02	0.000	0.000	0.0002	0.0002	0.30	18.771	0.000	0.000	0.0002	0.0002	0.35	18.12	0.000	0.000	0.00002	0.00002	0.33
19	4.129	0.000	0.000	0.0001	0.0001	0.03	19.11	0.000	0.000	0.0002	0.0002	0.36	400	0.000	0.000	0.00011	0.00011	36.51
20	8.385	0.000	0.000	0.0001	0.0001	0.10	24.232	0.000	0.000	0.0002	0.0002	0.51	314.315	0.000	0.000	0.00010	0.00010	27.16
21	17.011	0.000	0.000	0.0002	0.0002	0.30	24	0.000	0.000	0.0002	0.0002	0.50	260.269	0.000	0.000	0.00008	0.00008	18.98
22	17.811	0.000	0.000	0.0002	0.0002	0.32	25.138	0.000	0.000	0.0002	0.0002	0.54	264.496	0.000	0.000	0.00009	0.00009	19.45
23	18.352	0.000	0.000	0.0002	0.0002	0.34	26.938	0.000	0.000	0.0003	0.0003	0.60	400	0.000	0.000	0.00011	0.00011	36.51
24	17.1	0.000	0.000	0.0002	0.0002	0.30	30.643	0.000	0.000	0.0003	0.0003	0.73	392.595	0.000	0.000	0.00010	0.00010	33.92
25	17	0.000	0.000	0.0002	0.0002	0.30	25.52	0.000	0.000	0.0003	0.0003	0.55	367.064	0.000	0.000	0.00010	0.00010	31.71
26	17.271	0.000	0.000	0.0002	0.0002	0.31	26.156	0.000	0.000	0.0003	0.0003	0.57	350	0.000	0.000	0.00010	0.00010	29.79
27	17.008	0.000	0.000	0.0002	0.0002	0.30	26.767	0.000	0.000	0.0003	0.0003	0.60	375.515	0.000	0.000	0.00010	0.00010	32.44
28	18.346	0.000	0.000	0.0002	0.0002	0.34	17	0.000	0.000	0.0002	0.0002	0.30	382.443	0.000	0.000	0.00010	0.00010	33.04
29	17.3	0.000	0.000	0.0002	0.0002	0.31	27.696	0.000	0.000	0.0003	0.0003	0.63	335.095	0.000	0.000	0.00010	0.00010	28.95
30	17.336	0.000	0.000	0.0002	0.0002	0.31	280.128	0.000	0.000	0.0010	0.0010	24.20	328.668	0.000	0.000	0.00010	0.00010	28.40
31	17.2	0.000	0.000	0.0002	0.0002	0.30						323.964	0.000	0.000	0.00010	0.00010	27.99	
TenDaily I	17.6729	0	0	0.0002	0.0002	0.32	122.131	0	0	0.0005	0.0005	7.84	205.592	0	0	0.0008	0.0008	15.15
TenDaily II	14.8704	0	0	0.0002	0.0002	0.25	17.825	0	0	0.0002	0.0002	0.32	266.558	0	0	0.0009	0.0009	21.77
TenDaily III	17.4305	0	0	0.0002	0.0002	0.31	50.9986	0	0	0.0003	0.0003	2.7	343.646	0	0	0.001	0.001	29.2
Total	March					9.11	April					110.92						690.38

Annual Sediment Load (M.T.) - 304064.88

### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Garudeshwar ( CW1NAL000434) Division : Tapi Division, Surat  
 Local River : Narmada Sub-Division : LNSD,Bharuch

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
1987-1988	23596920	0	23596920	15058
1988-1989	44968910	0	44968910	33262
1989-1990	29277169	0	29277169	23454
1990-1991	51824968	0	51824968	51213
1991-1992	30082897	0	30082897	26138
1992-1993	15587484	0	15587484	20886
1993-1994	17225635	0	17225635	35989
1994-1995	36751681	0	36751681	74061
1995-1996	2218095	0	2218095	23290
1996-1997	9122661	0	9122661	27246
1997-1998	7607284	0	7607284	33802
1998-1999	4610413	0	4610413	23109
1999-2000	15376745	0	15376745	49029
2000-2001	588472	0	588472	11486
2001-2002	3084144	0	3084144	23284
2002-2003	3720112	0	3720112	21023
2003-2004	4835297	0	4835297	30308
2004-2005	2602520	0	2602520	17505
2005-2006	2678060	85099	2763159	25676
2006-2007	6639002	60256	6699258	32524
2007-2008	3310012	43520	3353532	18427
2008-2009	75144	3083	78227	4492
2009-2010	737914	7828	745742	6744
2010-2011	311630	205	311835	8295
2011-2012	84072	423	84495	21732
2012-2013	28164	451	28615	21901
2013-2014	2767532	0	2767532	49130
2014-2015	104139	0	104139	8980
2015-2016	58431	0	58431	6284
2016-2017	340982	58	341040	16018
2017-2018	1444	0	1444	1440
2018-2019	1005	0	1005	699
2019-2020	3460319	0	3460319	51194
2020-2021*	3270006.41*	0	3270006.41*	19843.9
2021-2022	14447.42	771.16	15218.58	4208.51
2022-2023	964288.445	3507.598	967796.043	27066.187
2023-2024	300695.07	3369.81	304064.88	17920

Note:- \* Revised Annual Sediment load (M.T.)

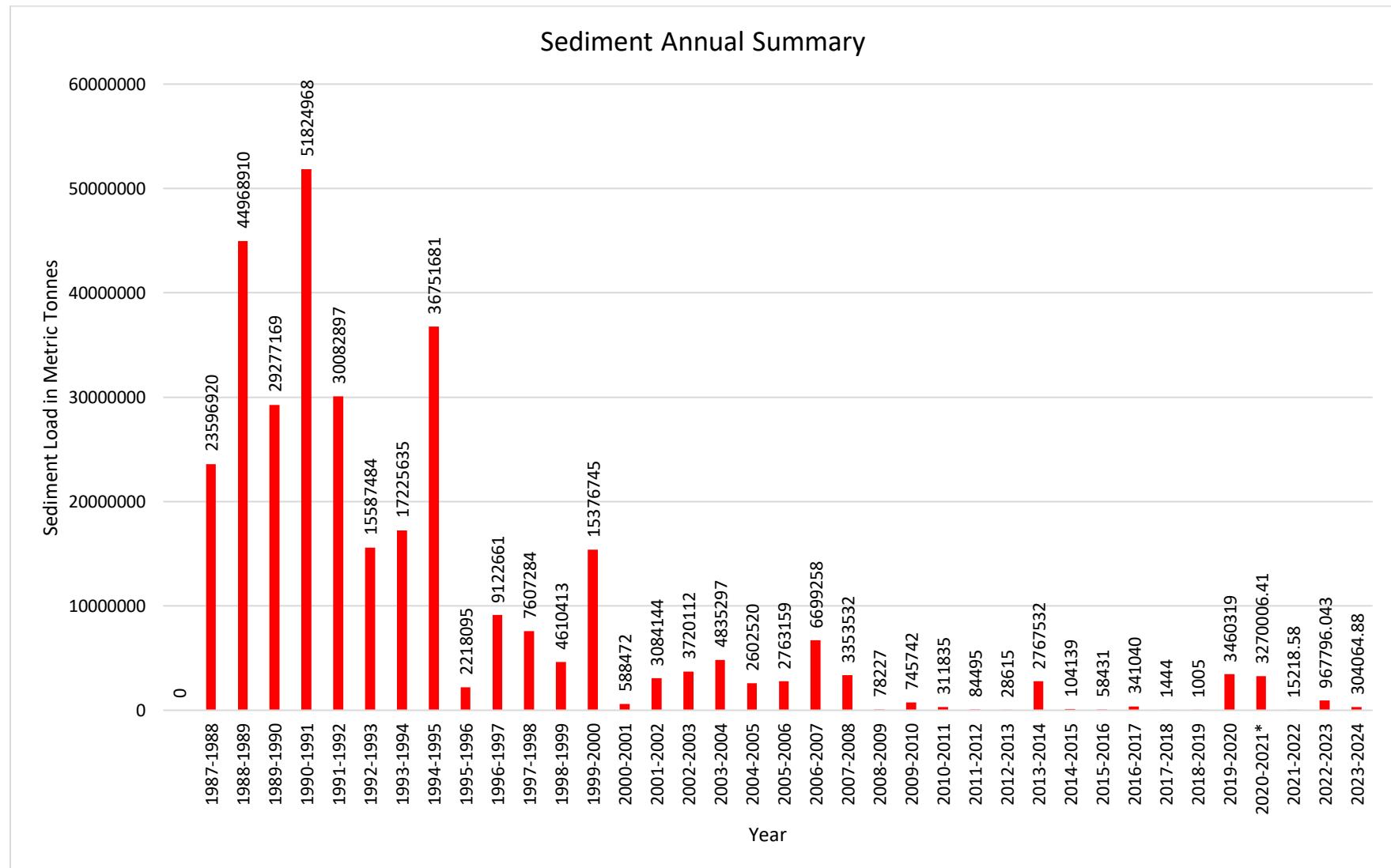
### Annual Sediment Load for period: 1987-2024

Station Name : Narmada at Garudeshwar ( CW1NAL000434)

Local River : Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch



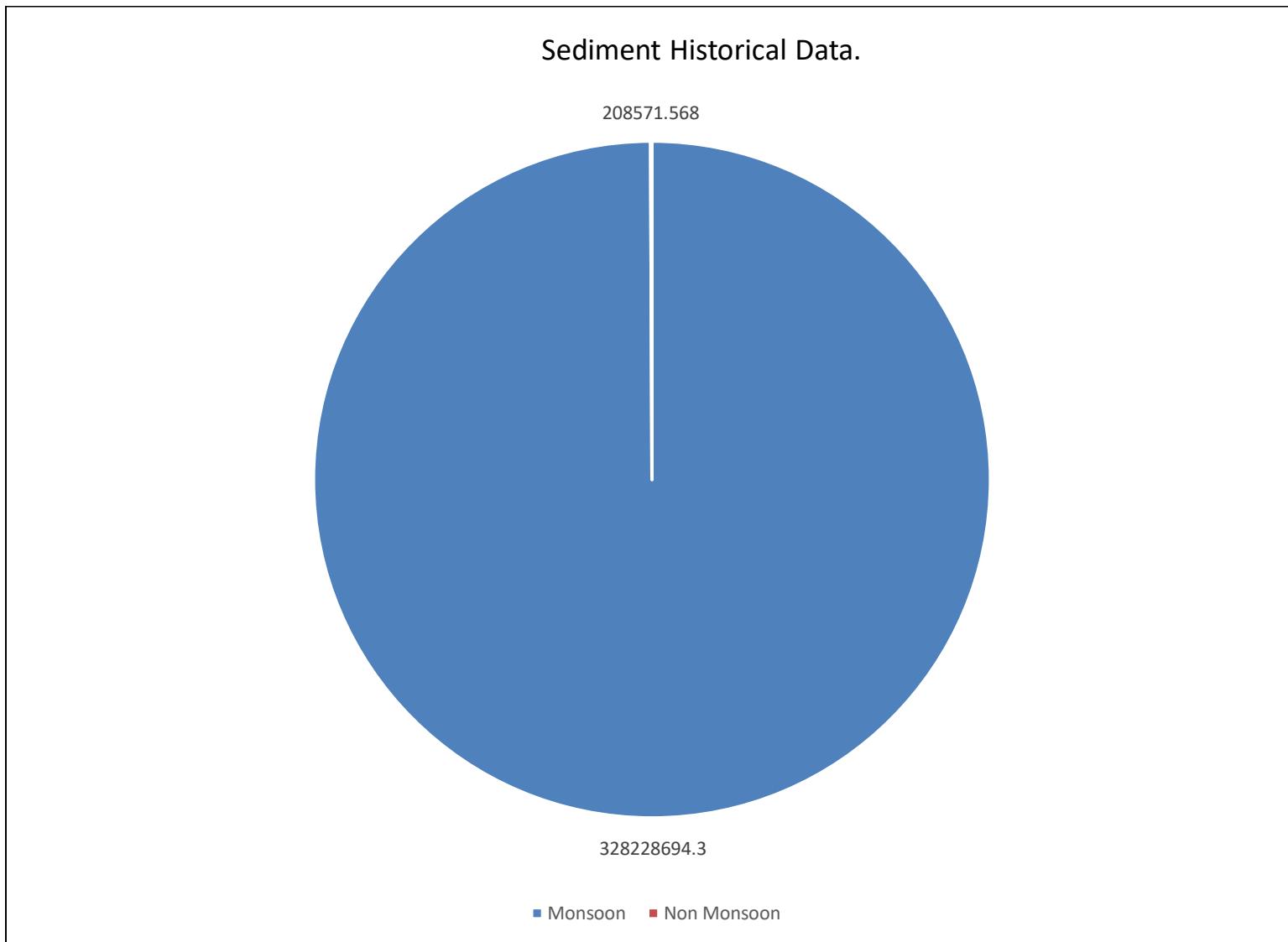
### **Annual Sediment Load for period: 1987-2024**

Station Name: Narmada at Garudeshwar (CW1NAL000434)

Division : Tapi Division, Surat

Local River: Narmada

Sub-Division : LNSD,Bharuch



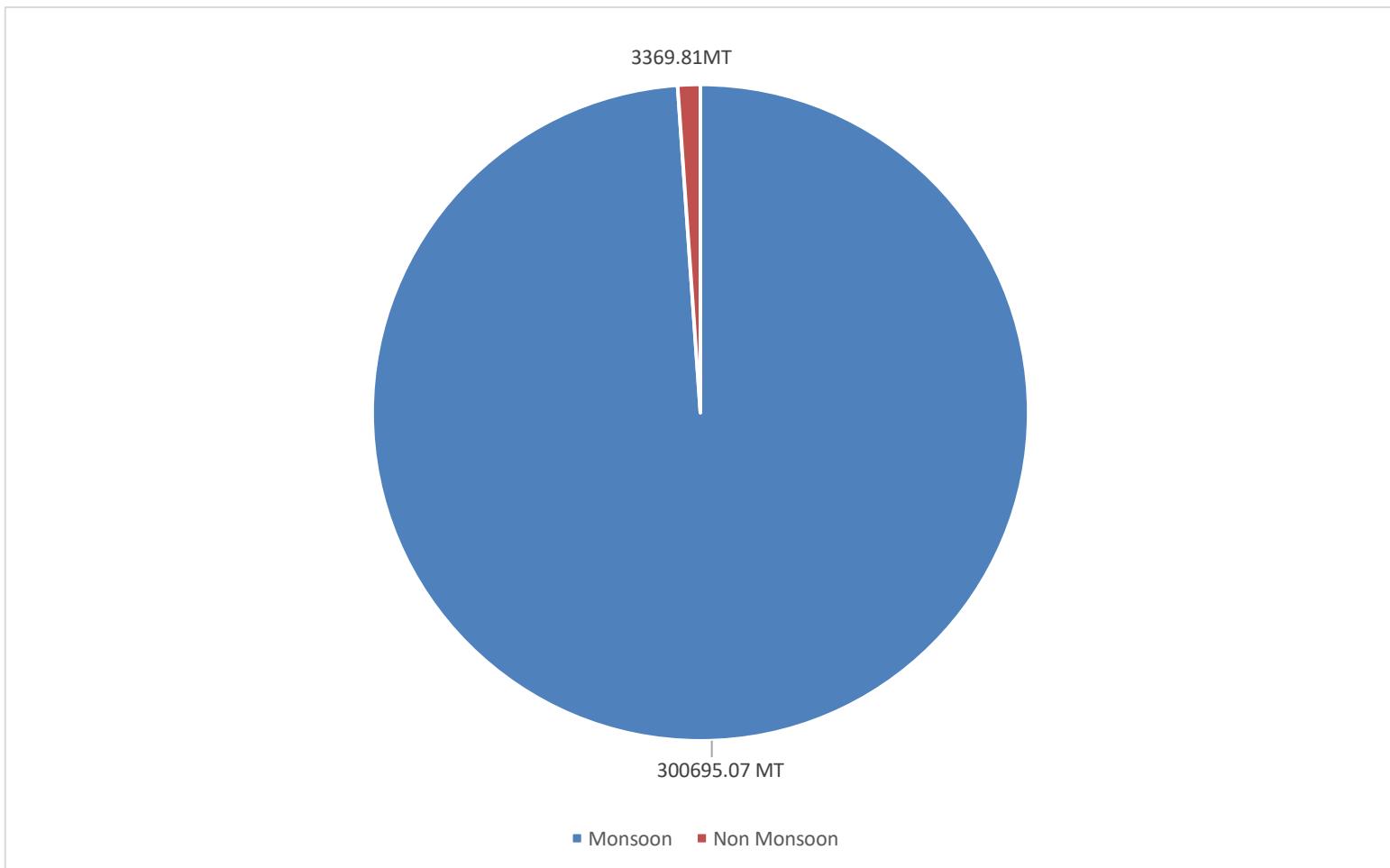
### **Seasonal Sediment Load for the period: 2023-24**

Station Name: Narmada at Garudeshwar (CW1NAL000434)

Local River: Narmada

Division : Tapi Division, Surat

Sub-Division : LNSD,Bharuch





### 4.3 मंडलेश्वर में नर्मदा

#### History Sheet

HISTORY SHEET (SEDIMENT)				
		Water Year	:	2023-2024
<b>Site</b>	:	Mandleshwar	<b>Code</b>	CW1NAM000189
<b>State</b>	:	Madhya Pradesh	<b>District</b>	KHARGONE
<b>Basin</b>	:	Narmada	<b>Independent River</b>	Narmada
<b>Tributary</b>	:	-	<b>Sub Tributary</b>	-
<b>Sub-Sub Tributary</b>	:	-	<b>Local River</b>	Narmada
<b>Division</b>	:	Narmada Division (ND), Bhopal	<b>Sub-Division</b>	Middle Narmada Sub-Division-III, Indore
<b>Drainage Area</b>	:	72809.0 Sq. Km.	<b>Bank</b>	Right
<b>Latitude</b>	:	22°10'18"	<b>Longitude</b>	75°39'39"
<b>Current Zero of Gauge (m)</b>	:	138		
CATEGORY		Opening Date		Closing Date
<b>Gauge</b>	:	16/12/1970		
<b>Discharge</b>	:	28/08/1971		
<b>Sediment</b>	:	14/04/1972		
<b>Water Quality</b>	:	18/06/1979		
Reduced Level		Opening Date		Closing Date
138.0		16/12/1970		

### Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Narmada at Mandleshwar ( CW1NAM000189)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD- III, Indore

Days	June--2023						July--2023						August--2023					
	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	132.0	0.000	0.000	0.015	0.015	171.1	762.0	0.000	0.000	0.019	0.019	1250.9	1150	0.000	0.000	0.046	0.046	4571
2	109.0	0.000	0.000	0.014	0.014	131.8	834.0	0.000	0.000	0.019	0.019	1369.1	1610	0.000	0.000	0.047	0.047	6538
3	466.0	0.000	0.000	0.017	0.017	684.5	510.0	0.000	0.000	0.018	0.018	793.2	1850	0.000	0.000	0.047	0.047	7512
4	266.0	0.000	0.000	0.016	0.016	367.7	1050	0.000	0.000	0.022	0.022	1995.8	1990	0.000	0.000	0.046	0.046	7909
5	204.0	0.000	0.000	0.015	0.015	264.4	1190	0.000	0.000	0.022	0.022	2262.0	1930	0.000	0.000	0.045	0.045	7504
6	532.0	0.000	0.000	0.018	0.018	827.4	1080	0.000	0.000	0.022	0.022	2052.9	1940	0.000	0.000	0.044	0.044	7375
7	102.0	0.000	0.000	0.016	0.016	141.0	462.0	0.000	0.000	0.018	0.018	718.50	1320	0.000	0.000	0.044	0.044	5018
8	424.0	0.000	0.000	0.017	0.017	622.8	479.0	0.000	0.000	0.018	0.018	744.94	1950	0.000	0.000	0.043	0.043	7245
9	987.0	0.000	0.000	0.019	0.019	1620	1200	0.000	0.000	0.023	0.023	2384.6	1920	0.000	0.000	0.043	0.043	7133
10	1260.0	0.000	0.000	0.021	0.021	2286	358.0	0.000	0.000	0.024	0.024	742.35	1980	0.000	0.000	0.040	0.040	6843
11	715.0	0.000	0.000	0.018	0.018	1112	989.0	0.000	0.000	0.024	0.024	2050.8	1800	0.000	0.000	0.040	0.040	6221
12	351.0	0.000	0.000	0.016	0.016	485.2	1930	0.000	0.000	0.030	0.030	5002.6	2030	0.000	0.000	0.040	0.040	7016
13	387.0	0.000	0.000	0.016	0.016	535.0	1970	0.000	0.000	0.034	0.034	5787.1	2020	0.000	0.000	0.040	0.040	6981
14	188.0	0.000	0.000	0.015	0.015	243.6	1980	0.000	0.000	0.036	0.036	6158.6	1990	0.000	0.000	0.039	0.039	6706
15	746.0	0.000	0.000	0.017	0.017	1096	1620	0.000	0.000	0.032	0.032	4479.0	1850	0.000	0.000	0.036	0.036	5754
16	1400.0	0.000	0.000	0.021	0.021	2540	1150	0.000	0.000	0.028	0.028	2782.1	1980	0.000	0.000	0.039	0.039	6672
17	950.0	0.000	0.000	0.020	0.020	1642	982.0	0.000	0.000	0.027	0.027	2290.8	934	0.000	0.000	0.038	0.038	3067
18	460.0	0.000	0.000	0.017	0.017	675.6	1140	0.000	0.000	0.027	0.027	2659.4	1040	0.000	0.000	0.038	0.038	3415
19	307.0	0.000	0.000	0.016	0.016	424.4	1310	0.000	0.000	0.030	0.030	3395.5	961	0.000	0.000	0.037	0.037	3072
20	694.0	0.000	0.000	0.018	0.018	1079	2020	0.000	0.000	0.053	0.053	9250.0	1990	0.000	0.000	0.040	0.040	6877
21	966.0	0.000	0.000	0.020	0.020	1669	1330	0.000	0.000	0.038	0.038	4366.7	1970	0.000	0.000	0.040	0.040	6808
22	854.0	0.000	0.000	0.018	0.018	1328	2060	0.000	0.000	0.043	0.043	7653.3	1990	0.000	0.000	0.040	0.040	6877
23	1310	0.000	0.000	0.022	0.022	2490	2770	0.000	0.000	0.063	0.063	15078	2050	0.000	0.000	0.039	0.039	6908
24	919.0	0.000	0.000	0.020	0.020	1588	2040	0.000	0.000	0.060	0.060	10575	2040	0.000	0.000	0.039	0.039	6874
25	886.0	0.000	0.000	0.019	0.019	1454	1310	0.000	0.000	0.056	0.056	6338	2040	0.000	0.000	0.038	0.038	6698
26	674.0	0.000	0.000	0.018	0.018	1048	2100	0.000	0.000	0.053	0.053	9616	2040	0.000	0.000	0.038	0.038	6698
27	926.0	0.000	0.000	0.020	0.020	1600	1310	0.000	0.000	0.048	0.048	5433	2020	0.000	0.000	0.037	0.037	6458
28	1180	0.000	0.000	0.022	0.022	2243	1980	0.000	0.000	0.058	0.058	9922	1900	0.000	0.000	0.036	0.036	5910
29	995.0	0.000	0.000	0.020	0.020	1719	1420	0.000	0.000	0.055	0.055	6748	1560	0.000	0.000	0.035	0.035	4717
30	657.0	0.000	0.000	0.018	0.018	1022	1370	0.000	0.000	0.050	0.050	5918	1730	0.000	0.000	0.035	0.035	5232
31						1400	0.000	0.000	0.050	0.050	6048	1970	0.000	0.000	0.034	0.034	5787	
TenDaily I	448.2	0	0	0.017	0.017	711.703	792.5	0	0	0.02	0.02	1431.423	1764	0	0	0.044	0.044	6764.774
TenDaily II	619.8	0	0	0.017	0.017	983.267	1509.1	0	0	0.032	0.032	4385.578	1659.5	0	0	0.039	0.039	5577.975
TenDaily III	936.7	0	0	0.02	0.02	1616.233	1735.46	0	0	0.052	0.052	7972.442	1937.27	0	0	0.037	0.037	6269.655
Total	June					33112.02	July					145866.9	August					192393.7

Annual Sediment Load (M.T.) - 2170169.54

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Mandleshwar ( CW1NAM000189)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore

Days	September--2023						October--2023						November--2023					
	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	2000.0	0.000	0.000	0.033	0.033	5702.4	1050.00	0.000	0.000	0.050	0.050	4536.0	684.0	0.000	0.000	0.014	0.014	827.4
2	1050.0	0.000	0.000	0.032	0.032	2903.04	940.00	0.000	0.000	0.046	0.046	3735.9	326.0	0.000	0.000	0.013	0.013	366.2
3	1960.0	0.000	0.000	0.032	0.032	5419.008	668.00	0.000	0.000	0.041	0.041	2366.3	518.0	0.000	0.000	0.013	0.013	581.8
4	1720.0	0.000	0.000	0.031	0.031	4606.848	2030.0	0.000	0.000	0.039	0.039	6840.3	537.0	0.000	0.000	0.013	0.013	603.2
5	1940.0	0.000	0.000	0.030	0.030	5028.48	2050.0	0.000	0.000	0.037	0.037	6553.4	635.0	0.000	0.000	0.021	0.021	1152
6	555.00	0.000	0.000	0.029	0.029	1390.608	1560.0	0.000	0.000	0.036	0.036	4852.2	337.0	0.000	0.000	0.012	0.012	349.4
7	278.00	0.000	0.000	0.028	0.028	672.538	664.0	0.000	0.000	0.030	0.030	1721.1	398.0	0.000	0.000	0.012	0.012	412.6
8	559.00	0.000	0.000	0.029	0.029	1400.63	1260.0	0.000	0.000	0.028	0.028	3048.2	639.0	0.000	0.000	0.011	0.011	607.3
9	421.00	0.000	0.000	0.030	0.030	1091.232	774.00	0.000	0.000	0.027	0.027	1805.6	482.0	0.000	0.000	0.011	0.011	458.1
10	1400.0	0.000	0.000	0.032	0.032	3870.72	812.00	0.000	0.000	0.024	0.024	1683.8	417.0	0.000	0.000	0.011	0.011	396.3
11	387.00	0.000	0.000	0.031	0.031	1036.541	1400.00	0.000	0.000	0.022	0.022	2661.1	304.0	0.000	0.000	0.011	0.011	288.9
12	541.00	0.000	0.000	0.029	0.029	1355.53	1480.00	0.000	0.000	0.021	0.021	2685.3	300.0	0.000	0.000	0.014	0.014	362.9
13	468.00	0.000	0.000	0.029	0.029	1172.621	1450.00	0.000	0.000	0.021	0.021	2630.9	139.0	0.000	0.000	0.010	0.010	120.1
14	643.00	0.000	0.000	0.029	0.029	1611.101	1030.00	0.000	0.000	0.020	0.020	1779.8	147.0	0.000	0.000	0.010	0.010	127.0
15	1500.0	0.000	0.000	0.028	0.028	3628.8	1150.00	0.000	0.000	0.019	0.019	1887.8	163.0	0.000	0.000	0.010	0.010	140.8
16	16350	0.000	0.000	0.102	0.102	144089.3	1570.00	0.000	0.000	0.020	0.020	2713.0	173.0	0.000	0.000	0.010	0.010	149.5
17	52000	0.000	0.000	0.157	0.157	705369.6	661.00	0.000	0.000	0.019	0.019	1085.1	300.0	0.000	0.000	0.011	0.011	285.1
18	16050	0.000	0.000	0.155	0.155	214941.6	493.00	0.000	0.000	0.018	0.018	766.7	147.0	0.000	0.000	0.010	0.010	127.0
19	16050	0.000	0.000	0.154	0.154	213554.9	1300.00	0.000	0.000	0.017	0.017	1909.4	510.0	0.000	0.000	0.018	0.018	793.2
20	4500.0	0.000	0.000	0.110	0.110	42768	811.00	0.000	0.000	0.016	0.016	1121.1	384.0	0.000	0.000	0.011	0.011	365.0
21	1140.0	0.000	0.000	0.097	0.097	9554.112	685.00	0.000	0.000	0.015	0.015	887.8	341.0	0.000	0.000	0.011	0.011	324.1
22	2270.0	0.000	0.000	0.090	0.090	17651.52	545.00	0.000	0.000	0.015	0.015	706.3	333.0	0.000	0.000	0.010	0.010	287.7
23	2500.0	0.000	0.000	0.087	0.087	18792	368.00	0.000	0.000	0.014	0.014	445.1	507.0	0.000	0.000	0.010	0.010	438.0
24	4400.0	0.000	0.000	0.086	0.086	32693.76	500.00	0.000	0.000	0.014	0.014	604.8	537.0	0.000	0.000	0.011	0.011	510.4
25	6100.0	0.000	0.000	0.081	0.081	42690.24	329.00	0.000	0.000	0.013	0.013	369.5	461.0	0.000	0.000	0.011	0.011	438.1
26	5650.0	0.000	0.000	0.077	0.077	37588.32	257.00	0.000	0.000	0.013	0.013	288.7	410.0	0.000	0.000	0.016	0.016	566.8
27	3410.0	0.000	0.000	0.072	0.072	21212.93	480.00	0.000	0.000	0.013	0.013	539.1	465.0	0.000	0.000	0.018	0.018	723.2
28	1760.0	0.000	0.000	0.063	0.063	9580.032	569.00	0.000	0.000	0.013	0.013	639.1	470.0	0.000	0.000	0.011	0.011	446.7
29	1420.0	0.000	0.000	0.055	0.055	6747.84	651.00	0.000	0.000	0.014	0.014	787.5	108.0	0.000	0.000	0.010	0.010	93.31
30	1280.0	0.000	0.000	0.054	0.054	5971.968	192.00	0.000	0.000	0.014	0.014	232.2	61.60	0.000	0.000	0.009	0.009	47.90
31						242.00	0.000	0.000	0.012	0.012	250.9							
TenDaily I	1188.3	0	0	0.031	0.031	3208.55	1180.8	0	0	0.036	0.036	3714.284	497.3	0	0	0.013	0.013	575.441
TenDaily II	10848.9	0	0	0.082	0.082	132952.8	1134.5	0	0	0.019	0.019	1924.033	256.7	0	0	0.012	0.012	275.944
TenDaily III	2993	0	0	0.076	0.076	20248.27	438	0	0	0.014	0.014	522.822	369.36	0	0	0.012	0.012	387.62
Total	September					1564096	October					62134.21	November					12390.05

Annual Sediment Load (M.T.) - 2170169.54

### Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Narmada at Mandleshwar ( CW1NAM000189)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore

Days	December--2023					January--2024					February--2024							
	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	57.60	0.000	0.000	0.006	0.006	29.86	316.0	0.000	0.000	0.014	0.014	382.2	699.6	0.000	0.000	0.022	0.022	1329.8
2	48.00	0.000	0.000	0.005	0.005	20.74	289.0	0.000	0.000	0.014	0.014	349.6	505.5	0.000	0.000	0.018	0.018	786.10
3	40.00	0.000	0.000	0.005	0.005	17.28	207.0	0.000	0.000	0.011	0.011	196.7	534.5	0.000	0.000	0.019	0.019	877.39
4	55.10	0.000	0.000	0.010	0.010	47.61	378.0	0.000	0.000	0.016	0.016	522.5	440.0	0.000	0.000	0.017	0.017	646.27
5	61.90	0.000	0.000	0.006	0.006	32.09	393.0	0.000	0.000	0.016	0.016	543.3	507.9	0.000	0.000	0.013	0.013	570.42
6	51.90	0.000	0.000	0.005	0.005	22.42	323.0	0.000	0.000	0.014	0.014	390.7	468.4	0.000	0.000	0.018	0.018	728.41
7	54.90	0.000	0.000	0.006	0.006	28.46	204.0	0.000	0.000	0.011	0.011	193.9	833.4	0.000	0.000	0.024	0.024	1728.1
8	140.0	0.000	0.000	0.009	0.009	108.86	132.0	0.000	0.000	0.013	0.013	148.3	982.5	0.000	0.000	0.026	0.026	2207.1
9	175.0	0.000	0.000	0.010	0.010	151.20	266.0	0.000	0.000	0.013	0.013	298.8	1057	0.000	0.000	0.027	0.027	2465.1
10	120.0	0.000	0.000	0.009	0.009	93.31	135.0	0.000	0.000	0.009	0.009	105.0	1127	0.000	0.000	0.028	0.028	2725.8
11	42.40	0.000	0.000	0.010	0.010	36.63	209.0	0.000	0.000	0.011	0.011	198.6	460.0	0.000	0.000	0.017	0.017	675.65
12	128.0	0.000	0.000	0.009	0.009	99.53	187.0	0.000	0.000	0.011	0.011	177.7	423.1	0.000	0.000	0.012	0.012	438.69
13	66.96	0.000	0.000	0.006	0.006	34.71	219.0	0.000	0.000	0.012	0.012	227.1	687.8	0.000	0.000	0.022	0.022	1307.3
14	69.20	0.000	0.000	0.006	0.006	35.87	305.0	0.000	0.000	0.014	0.014	368.9	702.8	0.000	0.000	0.022	0.022	1335.9
15	123.0	0.000	0.000	0.009	0.009	95.65	205.0	0.000	0.000	0.014	0.014	248.0	627.3	0.000	0.000	0.021	0.021	1138.1
16	210.0	0.000	0.000	0.011	0.011	199.6	229.0	0.000	0.000	0.012	0.012	237.4	570.2	0.000	0.000	0.020	0.020	985.23
17	339.0	0.000	0.000	0.015	0.015	439.3	411.0	0.000	0.000	0.016	0.016	568.2	623.2	0.000	0.000	0.020	0.020	1076.9
18	169.0	0.000	0.000	0.012	0.012	175.2	482.0	0.000	0.000	0.018	0.018	749.6	472.0	0.000	0.000	0.018	0.018	734.05
19	185.0	0.000	0.000	0.011	0.011	175.8	366.0	0.000	0.000	0.015	0.015	474.3	380.9	0.000	0.000	0.011	0.011	362.03
20	202.0	0.000	0.000	0.011	0.011	192.0	437.0	0.000	0.000	0.017	0.017	641.9	385.1	0.000	0.000	0.016	0.016	532.35
21	249.0	0.000	0.000	0.013	0.013	279.7	650.0	0.000	0.000	0.021	0.021	1179	388.8	0.000	0.000	0.016	0.016	537.49
22	416.0	0.000	0.000	0.017	0.017	611.0	1340	0.000	0.000	0.016	0.016	1852	428.7	0.000	0.000	0.017	0.017	629.72
23	568.0	0.000	0.000	0.019	0.019	932.4	382.0	0.000	0.000	0.016	0.016	528.1	680.3	0.000	0.000	0.021	0.021	1234.3
24	335.0	0.000	0.000	0.015	0.015	434.2	407.8	0.000	0.000	0.016	0.016	563.8	625.0	0.000	0.000	0.020	0.020	1080.0
25	240.0	0.000	0.000	0.012	0.012	248.8	541.7	0.000	0.000	0.019	0.019	889.2	670.0	0.000	0.000	0.025	0.025	1447.2
26	222.0	0.000	0.000	0.012	0.012	230.2	580.0	0.000	0.000	0.020	0.020	1002	501.8	0.000	0.000	0.012	0.012	520.26
27	387.0	0.000	0.000	0.016	0.016	535.0	407.8	0.000	0.000	0.016	0.016	563.8	435.6	0.000	0.000	0.017	0.017	639.77
28	296.0	0.000	0.000	0.014	0.014	358.0	472.0	0.000	0.000	0.018	0.018	734.1	228.4	0.000	0.000	0.012	0.012	236.84
29	383.0	0.000	0.000	0.016	0.016	529.5	242.7	0.000	0.000	0.014	0.014	293.5	172.0	0.000	0.000	0.010	0.010	148.65
30	340.0	0.000	0.000	0.015	0.015	440.6	305.1	0.000	0.000	0.014	0.014	369.0						
31	221.0	0.000	0.000	0.012	0.012	229.1	440.4	0.000	0.000	0.017	0.017	646.8						
TenDaily I	80.44	0	0	0.007	0.007	55.183	264.3	0	0	0.013	0.013	313.096	715.51	0	0	0.021	0.021	1406.449
TenDaily II	153.456	0	0	0.01	0.01	148.435	305	0	0	0.014	0.014	389.172	533.234	0	0	0.018	0.018	858.623
TenDaily III	332.455	0	0	0.015	0.015	438.959	524.492	0	0	0.017	0.017	783.84	458.964	0	0	0.017	0.017	719.36
Total	December					6864.727	January					15644.92	February					29124.96

Annual Sediment Load (M.T.) - 2170169.54

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Mandleshwar ( CW1NAM000189)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore

Days	March--2024						April--2024						May--2024								
	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	289.0	0.000	0.000	0.014	0.014	349.63	260.3	0.000	0.000	0.009	0.009	202.43	1186	0.000	0.000	0.029	0.029	2972.8			
2	263.4	0.000	0.000	0.013	0.013	295.80	101.9	0.000	0.000	0.008	0.008	70.448	977.2	0.000	0.000	0.026	0.026	2195.1			
3	256.0	0.000	0.000	0.013	0.013	287.54	98.08	0.000	0.000	0.011	0.011	93.217	1017	0.000	0.000	0.027	0.027	2373.6			
4	178.4	0.000	0.000	0.010	0.010	154.12	203.8	0.000	0.000	0.020	0.020	352.13	1023	0.000	0.000	0.027	0.027	2387.0			
5	192.2	0.000	0.000	0.011	0.011	182.64	595.5	0.000	0.000	0.013	0.013	668.92	990.0	0.000	0.000	0.026	0.026	2223.9			
6	195.6	0.000	0.000	0.011	0.011	185.92	279.4	0.000	0.000	0.013	0.013	313.83	1014	0.000	0.000	0.015	0.015	1314.7			
7	228.9	0.000	0.000	0.012	0.012	237.34	555.0	0.000	0.000	0.019	0.019	911.09	755.2	0.000	0.000	0.023	0.023	1500.7			
8	502.0	0.000	0.000	0.018	0.018	780.71	398.2	0.000	0.000	0.010	0.010	344.07	685.4	0.000	0.000	0.022	0.022	1302.8			
9	626.2	0.000	0.000	0.021	0.021	1136.1	422.7	0.000	0.000	0.017	0.017	620.92	284.0	0.000	0.000	0.013	0.013	318.98			
10	470.0	0.000	0.000	0.018	0.018	730.94	397.3	0.000	0.000	0.016	0.016	549.25	680.3	0.000	0.000	0.021	0.021	1234.3			
11	126.3	0.000	0.000	0.010	0.010	109.13	208.0	0.000	0.000	0.011	0.011	197.68	762.3	0.000	0.000	0.023	0.023	1514.9			
12	304.5	0.000	0.000	0.014	0.014	368.27	366.0	0.000	0.000	0.015	0.015	474.31	995.0	0.000	0.000	0.026	0.026	2235.2			
13	320.9	0.000	0.000	0.014	0.014	388.19	366.3	0.000	0.000	0.015	0.015	474.74	860.0	0.000	0.000	0.024	0.024	1783.3			
14	348.5	0.000	0.000	0.015	0.015	451.68	250.0	0.000	0.000	0.013	0.013	280.80	831.0	0.000	0.000	0.024	0.024	1723.2			
15	379.4	0.000	0.000	0.016	0.016	524.45	157.4	0.000	0.000	0.009	0.009	122.40	836.5	0.000	0.000	0.024	0.024	1734.5			
16	316.8	0.000	0.000	0.014	0.014	383.23	603.8	0.000	0.000	0.020	0.020	1043.34	842.3	0.000	0.000	0.024	0.024	1746.6			
17	295.0	0.000	0.000	0.014	0.014	356.83	239.4	0.000	0.000	0.012	0.012	248.20	819.6	0.000	0.000	0.024	0.024	1699.4			
18	65.33	0.000	0.000	0.009	0.009	50.803	276.4	0.000	0.000	0.013	0.013	310.41	816.5	0.000	0.000	0.024	0.024	1693.1			
19	204.7	0.000	0.000	0.011	0.011	194.57	707.2	0.000	0.000	0.022	0.022	1344.3	860.0	0.000	0.000	0.024	0.024	1783.3			
20	220.8	0.000	0.000	0.012	0.012	228.96	764.2	0.000	0.000	0.023	0.023	1518.5	833.4	0.000	0.000	0.014	0.014	1008.0			
21	64.24	0.000	0.000	0.006	0.006	33.303	850.0	0.000	0.000	0.024	0.024	1762.6	838.8	0.000	0.000	0.024	0.024	1739.3			
22	275.5	0.000	0.000	0.013	0.013	309.39	761.8	0.000	0.000	0.023	0.023	1513.8	881.4	0.000	0.000	0.025	0.025	1903.9			
23	241.0	0.000	0.000	0.012	0.012	249.88	757.4	0.000	0.000	0.023	0.023	1505.1	1251	0.000	0.000	0.030	0.030	3242.6			
24	380.0	0.000	0.000	0.016	0.016	525.31	767.7	0.000	0.000	0.023	0.023	1525.6	926.9	0.000	0.000	0.025	0.025	2002.2			
25	300.0	0.000	0.000	0.014	0.014	362.88	761.7	0.000	0.000	0.023	0.023	1513.7	1702	0.000	0.000	0.025	0.025	3676.4			
26	418.4	0.000	0.000	0.017	0.017	614.57	770.8	0.000	0.000	0.023	0.023	1531.8	1405	0.000	0.000	0.032	0.032	3884.5			
27	209.8	0.000	0.000	0.011	0.011	199.37	816.2	0.000	0.000	0.024	0.024	1692.5	841.9	0.000	0.000	0.012	0.012	872.92			
28	269.0	0.000	0.000	0.013	0.013	302.10	890.0	0.000	0.000	0.025	0.025	1922.4	813.7	0.000	0.000	0.024	0.024	1687.2			
29	625.0	0.000	0.000	0.020	0.020	1080.0	1007	0.000	0.000	0.014	0.014	1218.5	1676	0.000	0.000	0.035	0.035	5068.2			
30	287.5	0.000	0.000	0.014	0.014	347.79	988.9	0.000	0.000	0.026	0.026	2221.5	1755	0.000	0.000	0.035	0.035	5307.7			
31	472.0	0.000	0.000	0.018	0.018	734.05						1835	0.000	0.000	0.036	0.036	5707.4				
TenDaily I	320.164	0	0	0.014	0.014	434.074	331.234	0	0	0.014	0.014	412.63	861.366	0	0	0.023	0.023	1782.395			
TenDaily II	258.229	0	0	0.013	0.013	305.61	393.863	0	0	0.015	0.015	601.473	845.65	0	0	0.023	0.023	1692.145			
TenDaily III	322.033	0	0	0.014	0.014	432.603	837.201	0	0	0.023	0.023	1640.76	1266.09	0	0	0.028	0.028	3190.217			
Total	March						12155.47	April						26548.63							69837.79

Annual Sediment Load (M.T.) - 2170169.54

### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Mandleshwar

Division: Narmada Division, Bhopal

Local River : Narmada

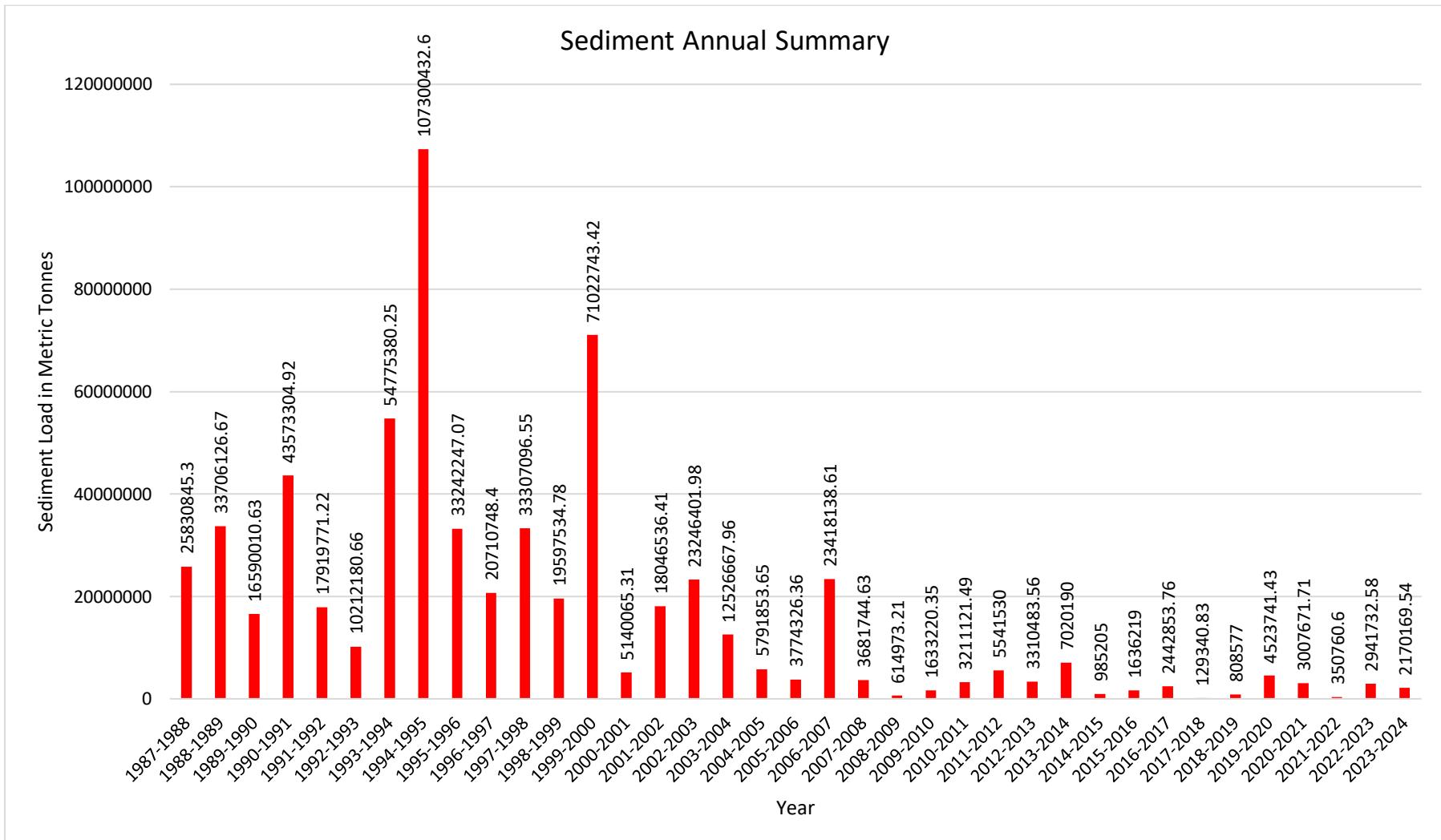
Sub-Division : MNSD-III, Indore

Year	Monsoon (M.T.)	Non-Monsoon (M.T.)	Annual Load (M.T.)	Annual Run Off (MCM)
<b>1987-1988</b>	25830845.3	0	25830845.3	14409.67
<b>1988-1989</b>	33706126.67	0	33706126.67	30075.84
<b>1989-1990</b>	16590010.63	0	16590010.63	17493.47
<b>1990-1991</b>	43573304.92	0	43573304.92	44940.12
<b>1991-1992</b>	17919771.22	0	17919771.22	23174.76
<b>1992-1993</b>	10212180.66	0	10212180.66	16597.46
<b>1993-1994</b>	54775380.25	0	54775380.25	30818.43
<b>1994-1995</b>	107300432.6	0	107300432.6	67156.44
<b>1995-1996</b>	33242247.07	0	33242247.07	21176.67
<b>1996-1997</b>	20710748.4	0	20710748.4	20291.08
<b>1997-1998</b>	33307096.55	0	33307096.55	25333.12
<b>1998-1999</b>	19597534.78	0	19597534.78	24211.83
<b>1999-2000</b>	71022743.42	0	71022743.42	52394.48
<b>2000-2001</b>	5140065.31	0	5140065.31	11173.53
<b>2001-2002</b>	18046536.41	0	18046536.41	19604.46
<b>2002-2003</b>	23246401.98	0	23246401.98	19314.77
<b>2003-2004</b>	12526667.96	0	12526667.96	31450.66
<b>2004-2005</b>	5791853.65	0	5791853.65	16428.18
<b>2005-2006</b>	3756112.88	18213.48	3774326.36	33882.83
<b>2006-2007</b>	23348119.18	70019.42	23418138.61	33299.23
<b>2007-2008</b>	3619870.62	61874.01	3681744.63	24539.35
<b>2008-2009</b>	357341.28	257631.93	614973.21	16209.55
<b>2009-2010</b>	1250505.76	382714.59	1633220.35	28066.07
<b>2010-2011</b>	2824844.03	386277.46	3211121.49	28697.37
<b>2011-2012</b>	5268557	272974	5541530	44924
<b>2012-2013</b>	3053619	256864.56	3310483.56	45507.08
<b>2013-2014</b>	6692576	327613	7020190	65013
<b>2014-2015</b>	738527	246678	985205	25134
<b>2015-2016</b>	1481523	154696	1636219	21095
<b>2016-2017</b>	2294790.88	148062.88	2442853.76	33674.57
<b>2017-2018</b>	121946.92	7393.91	129340.83	5954.39
<b>2018-2019</b>	654450	154126	808577	16621
<b>2019-2020</b>	4366487.71	157253.72	4523741.43	48788.18
<b>2020-2021</b>	2771729.03	235942.68	3007671.71	34889.29
<b>2021-2022</b>	199857.03	150903.58	350760.6	17269.97
<b>2022-2023</b>	2816738.22	124994.36	2941732.58	41471.36
<b>2023-2024</b>	<b>200993.05</b>	<b>160176.49</b>	<b>2170169.54</b>	<b>34320.45</b>

### Annual Sediment Load for period: 1987-2024

Station Name: Narmada at Mandleshwar (CW1NAM000189)  
 Bhopal Local River : Narmada

Division : Narmada Division,  
 Sub-Division : MNSD-III, Indore



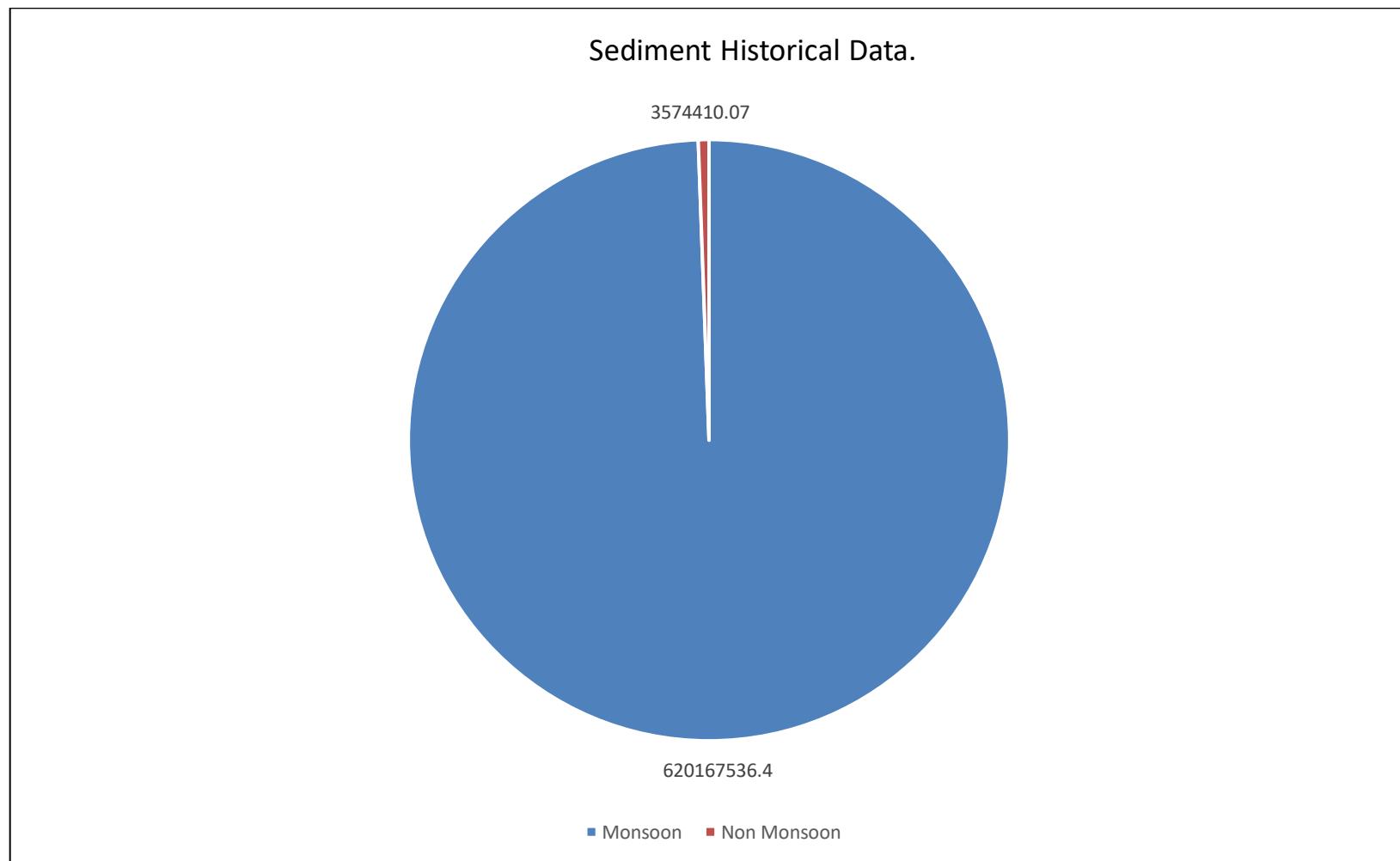
### **Seasonal Sediment Load for the period : 1987-2024**

Station Name : Narmada at Mandleshwar ( CW1NAM000189)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore



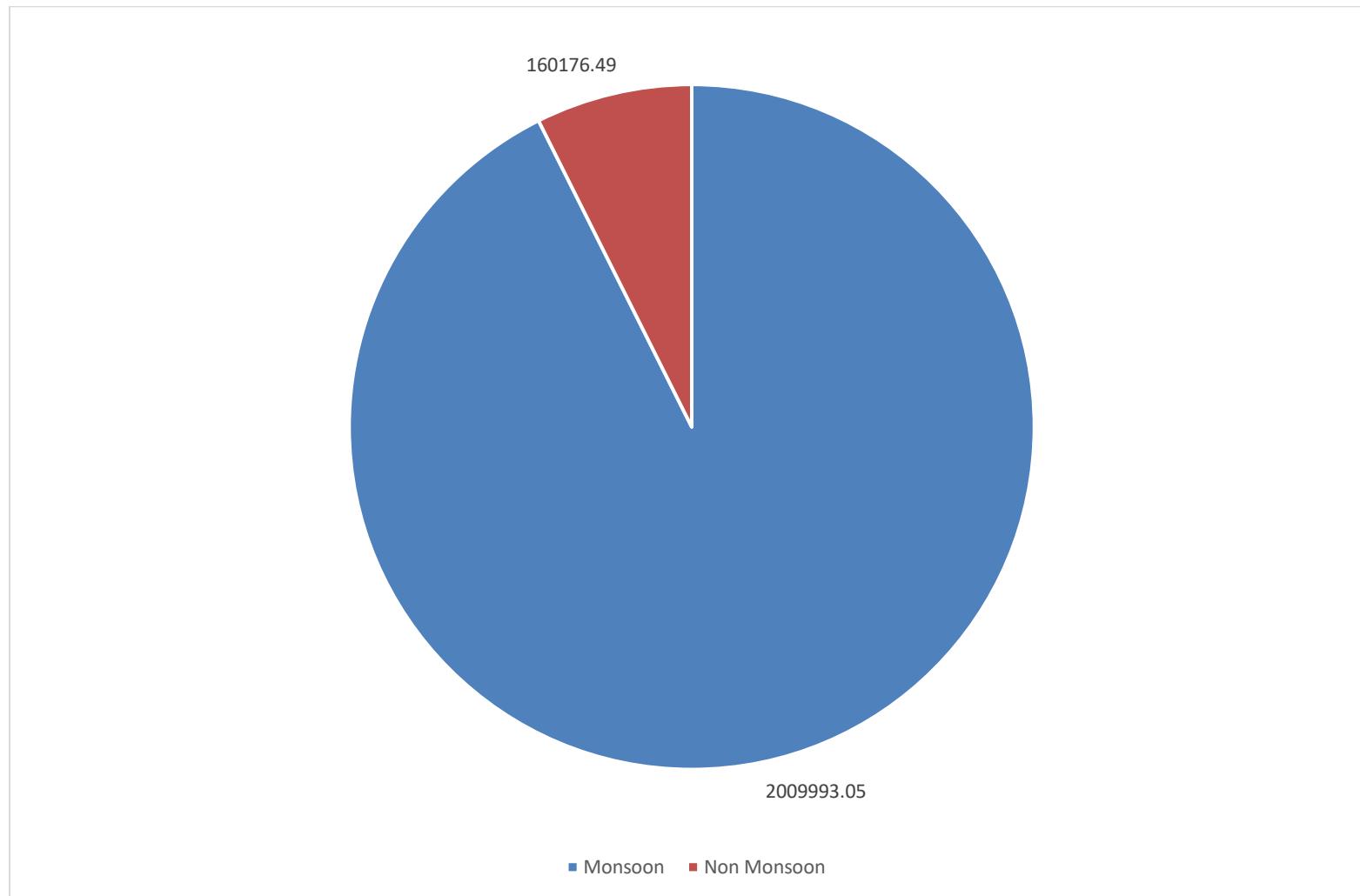
### **Seasonal Sediment Load for the period: 2023-24**

Station Name : Narmada at Mandleshwar ( CW1NAM000189)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-III, Indore





## 4.4 हांडिया में नर्मदा

### History Sheet

HISTORY SHEET (SEDIMENT)					
				Water Year	: 2023- 2024
Site	:	Handia		Code	: CW1NAM000392
State	:	Madhya Pradesh		District	: HARDA
Basin	:	Narmada		Independent River	: Narmada
Tributary	:	-		Sub Tributary	: -
Sub-Sub Tributary	:	-		Local River	: Narmada
Division	:	Narmada Division(ND), Bhopal		Sub-Division	: Middle Narmada Sub-Division-II, Bhopal
Drainage Area	:	54027.0 Sq. Km.		Bank	: Left
Latitude	:	22°29'30"		Longitude	: 76°59'38"
Current Zero of Gauge (m)	:	258.000 (M.S.L.)			
CATEGORY	Opening Date		Closing Date		
Gauge	09/02/1977				
Discharge	26/04/1977				
Sediment	11/12/1977				
Water Quality	01/08/1979				
Reduced Level	Opening Date		Closing Date		
258.0	09/02/1977				

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Handia ( CW1NAM000392)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Days	Jun-23						Jul-23						Aug-23					
	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	150					2710							1050					
2	135					2000							972					
3	124					1180							1060					
4	140					951							957					
5	135					794							9350					
6	120					643							11400					
7	123					591							10400					
8	155					612							6280					
9	150					800							4250					
10	140					1080							3010					
11	145					896							2390					
12	167					1680							1940					
13	151					3010							1500					
14	133					1990							1270					
15	129					1770							1050					
16	119					1500							913					
17	113					2040							872					
18	115					2570							831					
19	119					4910							880					
20	133					3110							3530					
21	146					2780							6120					
22	116					4710							5320					
23	130					3000							3850					
24	134					2600							2490					
25	135					2280							1740					
26	137					2040							1420					
27	297					1930							1250					
28	294					3150							1120					
29	1250					2800							1040					
30	5420					1900							1001					
31						1460							845					
TenDaily I	137.2					1136.1							4872.9					
TenDaily II	132.4					2347.6							1517.6					
TenDaily III	805.9					2604.55							2381.45					
Total																		

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Handia ( CW1NAM000392)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Days	Sep-23						Oct-23						Nov-23					
	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	783						900						327					
2	760						920						321					
3	700						890						299					
4	560						890						287					
5	578						1050						285					
6	541						1070						315					
7	540						1090						315					
8	612						847						290					
9	1440						712						257					
10	1550						640						286					
11	1670						599						297					
12	1970						484						295					
13	1550						541						286					
14	1460						514						282					
15	1630						516						267					
16	12800						429						263					
17	12500						527						270					
18	7040						481						212					
19	5050						482						210					
20	3020						440						195					
21	2130						445						189					
22	2180						445						181					
23	2320						368						151					
24	2790						335						169					
25	4780						335						172					
26	2940						367						170					
27	1780						337						220					
28	1600						322						284					
29	1200						277						311					
30	1000						302						301					
31							329											
TenDaily I	806.4						900.9						298.2					
TenDaily II	4869						501.3						257.7					
TenDaily III	2272						351.09						214.8					
Total																		

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Handia ( CW1NAM000392)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Days	Dec-23						Jan-24						Feb-24					
	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	259						205						224.75					
2	241						200						223.52					
3	270						193						228.75					
4	206						183						228.58					
5	256						180						228.7					
6	255						184						230.0					
7	239						195						224.73					
8	236						189						227.22					
9	217						201						228.69					
10	205						201						229.04					
11	202						184						228.34					
12	201						171						228.44					
13	201						161						227.51					
14	190						160						227.95					
15	175						135						227.66					
16	161						139						224.55					
17	160						210						222.05					
18	179						209						220.54					
19	180						198						220.88					
20	180						196						221.56					
21	223						195						223.6					
22	222						157						223.5					
23	203						155						224.6					
24	200						155						226.1					
25	200						160						226.4					
26	212						160						226.53					
27	237						200						225.33					
28	228						200						226.91					
29	223						201						228.62					
30	196						201											
31	200						201											
TenDaily I	238.4						193.1						227.4					
TenDaily II	182.9						176.3						224.95					
TenDaily III	213.09						180.45						225.73					
Total																		

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Handia ( CW1NAM000392)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

Days	Mar-24					Apr-24					May-24							
	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	226.42					219.01							188.65					
2	226.39					223.71							181.53					
3	225.25					216.18							173.33					
4	224.54					210.21							163.49					
5	223.81					209.02							155					
6	223.97					208.99							148.38					
7	224.66					220							145					
8	217.49					220.05							140.44					
9	223.57					219.9							140.35					
10	224.13					218.86							141.48					
11	224.33					220							142.52					
12	224.13					218.22							145					
13	225.48					217.15							141.83					
14	225.51					215							143.13					
15	227.59					213.16							143.03					
16	226.67					213.88							141.96					
17	225.15					212.39							140.92					
18	225.11					211.64							140.38					
19	226.56					207.47							140					
20	225.21					202.98							138.38					
21	224.65					200							137.48					
22	223.87					198.85							142.9					
23	223.87					197.11							150					
24	223.02					196.94							155.86					
25	222.97					195.9							163.96					
26	224.05					195.76							170					
27	224.05					194.68							182.71					
28	224.26					190							186.27					
29	223.64					193.99							191.88					
30	223.57					192.26							197.67					
31	221.56												200					
TenDaily I	224.02					216.59							157.77					
TenDaily II	225.57					213.19							141.72					
TenDaily III	223.59					195.55							170.79					
Total																		

### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Handia ( CW1NAM000392) 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)
<b>1987-1988</b>	19027611.41	0	19027611.41	11265.19
<b>1988-1989</b>	22044739.41	0	22044739.41	19304.17
<b>1989-1990</b>	16984378.34	0	16984378.34	12359.86
<b>1990-1991</b>	36819507.23	0	36819507.23	31513.91
<b>1991-1992</b>	21786214.04	0	21786214.04	19856.16
<b>1992-1993</b>	30379689.36	0	30379689.36	16123.49
<b>1993-1994</b>	32853670.17	0	32853670.17	21599.5
<b>1994-1995</b>	101606688.5	0	101606688.5	55829.04
<b>1995-1996</b>	26951346.79	0	26951346.79	18223.32
<b>1996-1997</b>	10000361.42	0	10000361.42	10982.67
<b>1997-1998</b>	17324970.73	0	17324970.73	19017.07
<b>1998-1999</b>	8688916.91	0	8688916.91	16825.69
<b>1999-2000</b>	55929197.65	0	55929197.65	45126.42
<b>2000-2001</b>	4949972.04	0	4949972.04	9610.6
<b>2001-2002</b>	23651115.7	0	23651115.7	14956.12
<b>2002-2003</b>	42984926.55	0	42984926.55	17154.69
<b>2003-2004</b>	91149988.2	0	91149988.2	30918.61
<b>2004-2005</b>	20421994.13	0	20421994.13	15926.84
<b>2005-2006</b>	41467075.14	98453.37	41565528.51	31744.09
<b>2006-2007</b>	45194539.9	292973.12	45487513.02	25638.43
<b>2007-2008</b>	8965974.34	385963.73	9351938.06	16540.04
<b>2008-2009</b>	5445970.33	127525.09	5573495.42	14835.28
<b>2009-2010</b>	20454333.84	148157.52	20602491.36	18686.79
<b>2010-2011</b>	8459170.23	184097.28	8643267.51	16813.83
<b>2011-2012</b>	20529932	47316	20577247	28368
<b>2012-2013</b>	25035666.95	32777.43	25068444.38	26488.89
<b>2013-2014</b>	57330546	116888	57447434	44001
<b>2014-2015</b>	3431846	107423	3539270	15060
<b>2015-2016</b>	3935676	1084585	5020260	13485
<b>2016-2017</b>	20463864.06	53209.22	20517073.29	27522.35
<b>2017-2018</b>	1948044.49	283197.82	2231242.31	6370.2
<b>2018-2019</b>	6460619	672539	7133158	14245
<b>2019-2020</b>	77443276.33	788336.84	78231613.17	39299.06
<b>2020-2021</b>	26365017.41	0	26365017.41	22930.73
<b>2021-2022</b>	Observation Not Done due to non-working of equipment			
<b>2022-2023</b>	Observation Not Done due to non-working of equipment			
<b>2023-2024</b>	Observation Not Done			

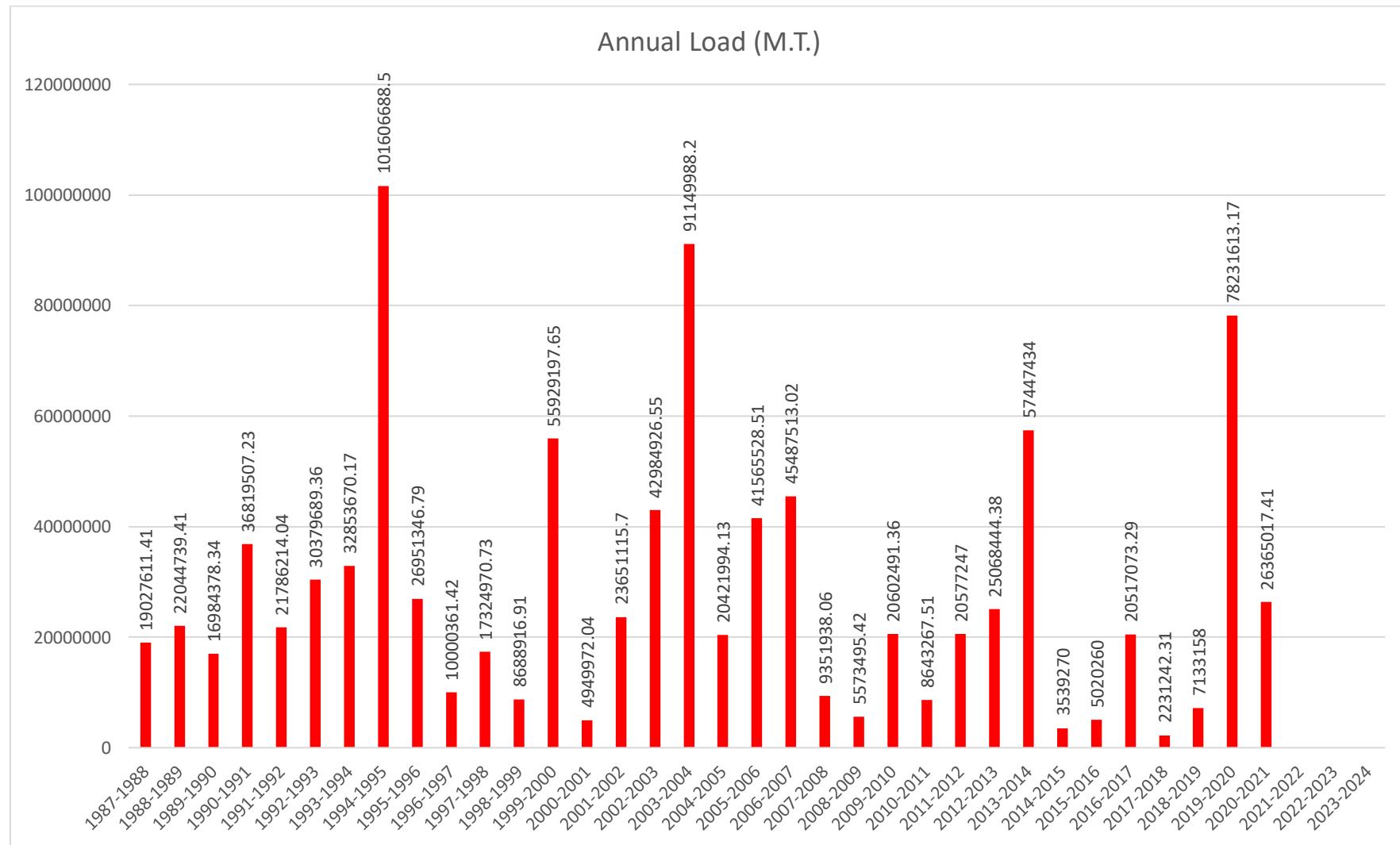
### Annual Sediment Load for period: 1987-2024

Station Name : Narmada at Handia ( CW1NAM000392 )

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD II, Bhopal



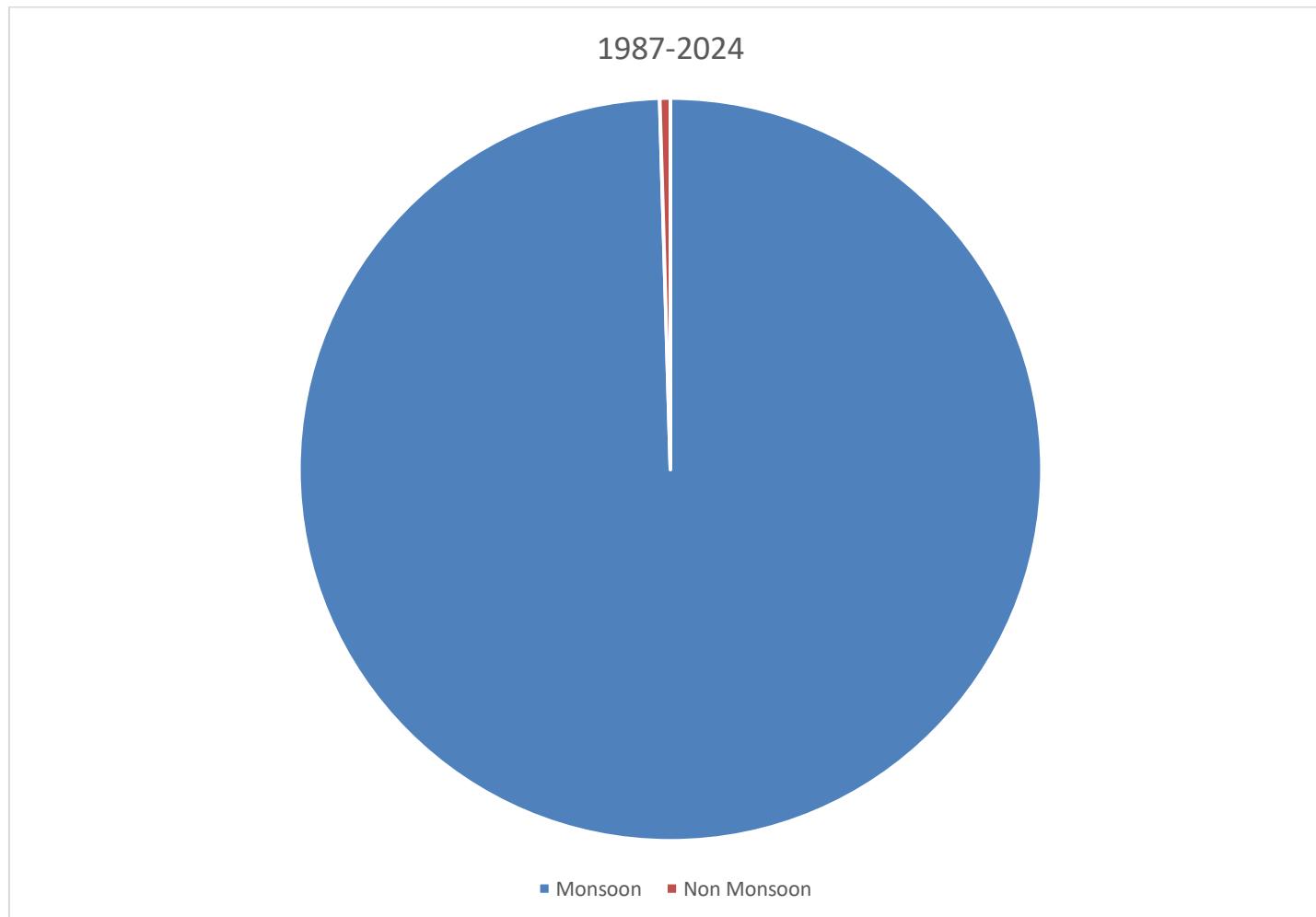
### **Seasonal Sediment Load for the period : 1987-2024**

Station Name : Narmada at Handia ( CW1NAM000392)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal



**Seasonal Sediment Load for the period : 2023-24**

Station Name : Narmada at Handia ( CW1NAM000392)

Division : Narmada Division Bhopal

Local River : Narmada

Sub-Division : MNSD-II, Bhopal

**Observation Not Done**



## 4.5 नर्मदापुरम में नर्मदा

### History sheet

HISTORY SHEET (SEDIMENT)				
		Water Year	:	2023 - 2024
<b>Site</b>	: Narmadapuram	<b>Code</b>	:	CW1NAM000278
<b>State</b>	: Madhya Pradesh	<b>District</b>	:	Narmadapuram
<b>Basin</b>	: Narmada	<b>Independent River</b>	:	Narmada
<b>Tributary</b>	: -	<b>Sub Tributary</b>	:	-
<b>Sub-Sub Tributary</b>	: -	<b>Local River</b>	:	Narmada
<b>Division</b>	: Narmada Division(ND), Bhopal	<b>Sub-Division</b>	:	Middle Narmada Sub-Division-I, Narmadapuram
<b>Drainage Area</b>	: 44548.0 Sq. Km.	<b>Bank</b>	:	Left
<b>Latitude</b>	: 22°45'22"	<b>Longitude</b>	:	77°43'58"
<b>Current Zero of Gauge (m)</b>	: 282			
CATEGORY	Opening Date		Closing Date	
Gauge	: 21/05/1972			
Discharge	: 16/09/1972			
Sediment	: 29/12/1972			
Water Quality	: 15/07/1979			
Reduced Level	Opening Date		Closing Date	
282.0	: 21/05/1972			

## Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Narmada at Narmadapuram (Hoshangabad) ( CW1NAM000278)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

Days	June--2023						July--2023						August--2023						
	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	115.0	0.000	0.000	0.031	0.031	308.02	1670	0.000	0.000	0.894	0.894	128993	596.0	0.000	0.000	0.157	0.157	8085	
2	119.0	0.000	0.000	0.025	0.025	257.04	1350	0.000	0.000	0.964	0.964	112441	590.0	0.000	0.000	0.255	0.255	12999	
3	123.0	0.000	0.000	0.049	0.049	520.73	837.0	0.000	0.000	0.885	0.885	64000	510.0	0.000	0.000	0.334	0.334	14717	
4	120.0	0.000	0.000	0.040	0.040	414.72	800.0	0.000	0.000	0.785	0.785	54259	3510.0	0.000	0.000	0.175	0.175	53071	
5	98.70	0.000	0.000	0.043	0.043	366.69	782.0	0.000	0.000	0.374	0.374	25269	10930	0.000	0.000	0.283	0.283	267252	
6	145.0	0.000	0.000	0.060	0.060	751.68	461.0	0.000	0.000	0.337	0.337	13423	12416	0.000	0.000	0.309	0.309	331464	
7	150.0	0.000	0.000	0.061	0.061	790.56	465.0	0.000	0.000	0.209	0.209	8396.8	9136	0.000	0.000	0.173	0.173	136558	
8	123.0	0.000	0.000	0.046	0.046	488.85	784.0	0.000	0.000	0.129	0.129	8738.2	4630	0.000	0.000	0.182	0.182	72806	
9	126.0	0.000	0.000	0.032	0.032	348.37	1005	0.000	0.000	0.709	0.709	61564	3546	0.000	0.000	0.318	0.318	97416	
10	180.0	0.000	0.000	0.068	0.068	1057.54	757.0	0.000	0.000	0.792	0.792	51801	2155	0.000	0.000	0.351	0.351	65356	
11	142.0	0.000	0.000	0.093	0.093	1141.00	830.0	0.000	0.000	0.696	0.696	49912	1800	0.000	0.000	0.308	0.308	47900	
12	125.0	0.000	0.000	0.094	0.094	1015.20	1380	0.000	0.000	0.434	0.434	51747	1360	0.000	0.000	0.140	0.140	16451	
13	124.0	0.000	0.000	0.099	0.099	1060.65	1000	0.000	0.000	0.700	0.700	60480	1180	0.000	0.000	0.169	0.169	17230	
14	122.0	0.000	0.000	0.058	0.058	611.37	840.0	0.000	0.000	0.271	0.271	19668	901.0	0.000	0.000	0.249	0.249	19384	
15	124.0	0.000	0.000	0.108	0.108	1157.07	785.0	0.000	0.000	0.253	0.253	17159	780.0	0.000	0.000	0.060	0.060	4044	
16	123.0	0.000	0.000	0.038	0.038	403.83	780.0	0.000	0.000	0.216	0.216	14557	660.0	0.000	0.000	0.076	0.076	4334	
17	125.0	0.000	0.000	0.051	0.051	550.80	1460	0.000	0.000	0.467	0.467	58909	620.0	0.000	0.000	0.031	0.031	1661	
18	127.0	0.000	0.000	0.018	0.018	197.51	2900	0.000	0.000	0.670	0.670	167875	511.0	0.000	0.000	0.047	0.047	2075	
19	118.0	0.000	0.000	0.033	0.033	336.44	3050	0.000	0.000	0.899	0.899	236904	651.0	0.000	0.000	0.058	0.058	3262	
20	119.0	0.000	0.000	0.017	0.017	174.79	1790	0.000	0.000	1.407	1.407	217601	5740	0.000	0.000	0.037	0.037	18351	
21	112.0	0.000	0.000	0.050	0.050	483.84	1640	0.000	0.000	0.562	0.562	79633	5947	0.000	0.000	0.067	0.067	34426	
22	108.0	0.000	0.000	0.048	0.048	447.90	1730	0.000	0.000	0.723	0.723	108068	4766	0.000	0.000	0.072	0.072	29647	
23	110.0	0.000	0.000	0.046	0.046	437.18	1600	0.000	0.000	0.652	0.652	90132	2856	0.000	0.000	0.149	0.149	36767	
24	121.0	0.000	0.000	0.053	0.053	554.08	1700	0.000	0.000	0.734	0.734	107810	1660	0.000	0.000	0.185	0.185	26533	
25	117.0	0.000	0.000	0.048	0.048	485.22	1510	0.000	0.000	0.424	0.424	55317	1230	0.000	0.000	0.217	0.217	23061	
26	322.0	0.000	0.000	0.060	0.060	1669.25	1290	0.000	0.000	0.644	0.644	71778	1100	0.000	0.000	0.311	0.311	29557	
27	290.0	0.000	0.000	0.094	0.094	2355.26	1770	0.000	0.000	0.447	0.447	68359	1010	0.000	0.000	0.068	0.068	5934	
28	501.0	0.000	0.000	0.141	0.141	6103.38	1760	0.000	0.000	0.441	0.441	67060	893.0	0.000	0.000	0.113	0.113	8719	
29	4938	0.000	0.000	1.812	1.812	773077	1650	0.000	0.000	0.709	0.709	101075	799.0	0.000	0.000	0.062	0.062	4280	
30	4360	0.000	0.000	0.929	0.929	349958	1150	0.000	0.000	0.660	0.660	65578	698.0	0.000	0.000	0.075	0.075	4523	
31						750.0	0.000	0.000	0.413	0.413	26762	665.0	0.000	0.000	0.036	0.036	2068		
TenDaily I	129.97	0	0	0.046	0.046	530.419	891.1	0	0	0.608	0.608	52888.55	4801.82	0	0	0.254	0.254	105972.4	
TenDaily II	124.9	0	0	0.061	0.061	664.865	1481.5	0	0	0.601	0.601	89481.24	1420.33	0	0	0.117	0.117	13469.03	
TenDaily III	1097.9	0	0	0.328	0.328	113557.2	1504.55	0	0	0.583	0.583	76506.57	1965.8	0	0	0.123	0.123	18683.27	
Total	June						July						August						1399930

Annual Sediment Load (M.T.) - 5709182.11

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Narmadapuram (Hoshangabad) ( CW1NAM000278)

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Narmadapuram

Local River : Narmada

Days	September--2023					October--2023					November--2023							
	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	626.0	0.000	0.000	0.039	0.039	2109.4	793.0	0.000	0.000	0.066	0.066	4522.0	256.0	0.000	0.000	0.022	0.022	486.61
2	600.0	0.000	0.000	0.026	0.026	1347.8	685.0	0.000	0.000	0.090	0.090	5326.6	249.0	0.000	0.000	0.016	0.016	344.22
3	466.0	0.000	0.000	0.041	0.041	1650.8	749.0	0.000	0.000	0.108	0.108	6989.1	283.0	0.000	0.000	0.016	0.016	391.22
4	444.0	0.000	0.000	0.057	0.057	2186.6	911.0	0.000	0.000	0.136	0.136	10704.6	273.0	0.000	0.000	0.017	0.017	400.98
5	430.0	0.000	0.000	0.093	0.093	3455.1	992.0	0.000	0.000	0.138	0.138	11827.8	269.0	0.000	0.000	0.040	0.040	929.66
6	382.0	0.000	0.000	0.063	0.063	2079.3	950.0	0.000	0.000	0.110	0.110	9028.8	265.0	0.000	0.000	0.005	0.005	114.48
7	400.0	0.000	0.000	0.057	0.057	1969.9	731.0	0.000	0.000	0.072	0.072	4547.4	255.0	0.000	0.000	0.010	0.010	220.32
8	620.0	0.000	0.000	0.120	0.120	6428.2	610.0	0.000	0.000	0.076	0.076	4005.5	250.0	0.000	0.000	0.012	0.012	259.20
9	782.0	0.000	0.000	0.076	0.076	5134.9	590.0	0.000	0.000	0.006	0.006	305.9	230.0	0.000	0.000	0.025	0.025	496.80
10	1160	0.000	0.000	0.108	0.108	10824.2	437.0	0.000	0.000	0.069	0.069	2605.2	245.0	0.000	0.000	0.022	0.022	465.70
11	1770	0.000	0.000	0.109	0.109	16669.2	434.0	0.000	0.000	0.032	0.032	1199.9	239.0	0.000	0.000	0.018	0.018	371.69
12	1290	0.000	0.000	0.233	0.233	25969.2	420.0	0.000	0.000	0.025	0.025	907.2	230.0	0.000	0.000	0.040	0.040	794.88
13	1230	0.000	0.000	0.068	0.068	7226.5	436.0	0.000	0.000	0.059	0.059	2222.6	222.0	0.000	0.000	0.079	0.079	1515.28
14	1610	0.000	0.000	0.027	0.027	3755.8	580.0	0.000	0.000	0.022	0.022	1102.5	214.0	0.000	0.000	0.007	0.007	129.43
15	847.0	0.000	0.000	0.030	0.030	2195.4	582.0	0.000	0.000	0.019	0.019	955.4	210.0	0.000	0.000	0.018	0.018	326.59
16	14706	0.000	0.000	0.115	0.115	146118.8	437.0	0.000	0.000	0.027	0.027	1019.4	204.0	0.000	0.000	0.024	0.024	423.01
17	8955	0.000	0.000	0.181	0.181	140040.3	418.0	0.000	0.000	0.017	0.017	614.0	195.0	0.000	0.000	0.040	0.040	673.92
18	5653	0.000	0.000	0.203	0.203	99140.3	410.0	0.000	0.000	0.046	0.046	1629.5	165.0	0.000	0.000	0.014	0.014	199.58
19	3701	0.000	0.000	0.123	0.123	39334.5	310.0	0.000	0.000	0.045	0.045	1205.3	150.0	0.000	0.000	0.030	0.030	388.80
20	1893	0.000	0.000	0.092	0.092	15043.1	300.0	0.000	0.000	0.033	0.033	855.36	156.0	0.000	0.000	0.030	0.030	404.35
21	1450	0.000	0.000	0.085	0.085	10648.8	295.0	0.000	0.000	0.015	0.015	382.32	146.0	0.000	0.000	0.006	0.006	75.686
22	1430	0.000	0.000	0.164	0.164	20262.5	290.0	0.000	0.000	0.038	0.038	952.13	134.0	0.000	0.000	0.001	0.001	11.578
23	1790	0.000	0.000	0.147	0.147	22734.4	280.0	0.000	0.000	0.030	0.030	725.76	188.0	0.000	0.000	0.005	0.005	81.216
24	2382	0.000	0.000	0.060	0.060	12348.3	300.0	0.000	0.000	0.050	0.050	1296.00	195.0	0.000	0.000	0.015	0.015	252.72
25	3679	0.000	0.000	0.279	0.279	88677.3	290.0	0.000	0.000	0.027	0.027	676.51	186.0	0.000	0.000	0.013	0.013	208.92
26	1650	0.000	0.000	0.111	0.111	15824.2	280.0	0.000	0.000	0.020	0.020	483.84	198.0	0.000	0.000	0.040	0.040	684.29
27	1090	0.000	0.000	0.119	0.119	11206.9	275.0	0.000	0.000	0.016	0.016	380.16	236.0	0.000	0.000	0.011	0.011	224.29
28	873.0	0.000	0.000	0.148	0.148	11163.2	270.0	0.000	0.000	0.024	0.024	559.87	247.0	0.000	0.000	0.005	0.005	106.70
29	842.0	0.000	0.000	0.096	0.096	6983.9	265.0	0.000	0.000	0.026	0.026	595.30	236.0	0.000	0.000	0.006	0.006	122.34
30	790.0	0.000	0.000	0.155	0.155	10579.7	285.0	0.000	0.000	0.032	0.032	787.97	201.0	0.000	0.000	0.006	0.006	104.20
31							261.0	0.000	0.000	0.075	0.075	1691.3						
TenDaily I	591	0	0	0.068	0.068	3718.621	744.8	0	0	0.087	0.087	5986.284	257.5	0	0	0.019	0.019	410.918
TenDaily II	4165.42	0	0	0.118	0.118	49549.31	432.7	0	0	0.032	0.032	1171.109	198.5	0	0	0.03	0.03	522.755
TenDaily III	1597.57	0	0	0.136	0.136	21042.92	281	0	0	0.032	0.032	775.558	196.7	0	0	0.011	0.011	187.194
Total	September					743108.6	October					80105.07	November					11208.67

Annual Sediment Load (M.T.) - 5709182.11

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Narmadapuram (Hoshangabad) ( CW1NAM000278)

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Narmadapuram

Local River : Narmada

Days	December					January					February							
	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	191	0.000	0.000	0.03	0.03	495.07	144	0.000	0.000	0.03	0.03	423.01	122.1	0.000	0.000	0.03	0.03	316.48
2	198	0.000	0.000	0.04	0.04	684.29	151	0.000	0.000	0.03	0.03	391.39	122.4	0.000	0.000	0.03	0.03	317.26
3	203	0.000	0.000	0.04	0.04	701.57	142	0.000	0.000	0.03	0.03	368.06	123	0.000	0.000	0.03	0.03	318.82
4	208	0.000	0.000	0.01	0.01	233.63	134	0.000	0.000	0.03	0.03	347.33	124	0.000	0.000	0.03	0.03	321.41
5	212	0.000	0.000	0.04	0.04	732.67	159	0.000	0.000	0.03	0.03	412.13	124.1	0.000	0.000	0.02	0.02	246.61
6	193	0.000	0.000	0.04	0.04	667.01	154	0.000	0.000	0.03	0.03	399.17	124.4	0.000	0.000	0.03	0.03	322.44
7	187	0.000	0.000	0.03	0.03	484.7	148	0.000	0.000	0.03	0.03	383.62	122.6	0.000	0.000	0.03	0.03	317.78
8	182	0.000	0.000	0.03	0.03	471.74	168	0.000	0.000	0.03	0.03	362.88	123.7	0.000	0.000	0.03	0.03	320.63
9	168	0.000	0.000	0.03	0.03	435.46	162	0.000	0.000	0.03	0.03	419.9	121.9	0.000	0.000	0.06	0.06	631.93
10	164	0.000	0.000	0.03	0.03	425.09	153	0.000	0.000	0.03	0.03	396.58	122.1	0.000	0.000	0.03	0.03	316.48
11	161	0.000	0.000	0.01	0.01	125.19	137	0.000	0.000	0.03	0.03	355.1	120	0.000	0.000	0.02	0.02	207.36
12	170	0.000	0.000	0.03	0.03	440.64	113	0.000	0.000	0.02	0.02	195.26	117.2	0.000	0.000	0.03	0.03	273.4
13	162	0.000	0.000	0.03	0.03	419.9	120	0.000	0.000	0.02	0.02	207.36	115.8	0.000	0.000	0.02	0.02	200.1
14	145	0.000	0.000	0.03	0.03	375.84	140	0.000	0.000	0.03	0.03	362.88	116.1	0.000	0.000	0.02	0.02	200.62
15	135	0.000	0.000	0.03	0.03	349.92	152	0.000	0.000	0.02	0.02	275.79	116.5	0.000	0.000	0.02	0.02	201.31
16	144	0.000	0.000	0.03	0.03	373.25	156	0.000	0.000	0.03	0.03	404.35	117.2	0.000	0.000	0.02	0.02	202.52
17	153	0.000	0.000	0.03	0.03	396.58	142	0.000	0.000	0.03	0.03	368.06	123.5	0.000	0.000	0.02	0.02	213.41
18	163	0.000	0.000	0.04	0.04	521.08	131	0.000	0.000	0.03	0.03	339.55	124	0.000	0.000	0.03	0.03	321.41
19	172	0.000	0.000	0.03	0.03	445.82	125	0.000	0.000	0.03	0.03	324	125	0.000	0.000	0.04	0.04	410.4
20	190	0.000	0.000	0.03	0.03	492.48	123	0.000	0.000	0.03	0.03	318.82	125.7	0.000	0.000	0.03	0.03	325.81
21	170	0.000	0.000	0.03	0.03	440.64	121	0.000	0.000	0.03	0.03	313.63	122.1	0.000	0.000	0.03	0.03	316.48
22	162	0.000	0.000	0.03	0.03	419.9	128.2	0.000	0.000	0.02	0.02	188.3	121.8	0.000	0.000	0.03	0.03	315.71
23	156	0.000	0.000	0.03	0.03	404.35	118.7	0.000	0.000	0.02	0.02	205.11	120.3	0.000	0.000	0.02	0.02	207.88
24	151	0.000	0.000	0.03	0.03	391.39	119.1	0.000	0.000	0.02	0.02	205.8	122.4	0.000	0.000	0.03	0.03	317.26
25	180	0.000	0.000	0.03	0.03	466.56	119.2	0.000	0.000	0.02	0.02	205.98	121	0.000	0.000	0.03	0.03	313.63
26	196	0.000	0.000	0.02	0.02	355.62	120	0.000	0.000	0.02	0.02	207.36	124.1	0.000	0.000	0.03	0.03	321.67
27	183	0.000	0.000	0.03	0.03	474.34	122.1	0.000	0.000	0.03	0.03	316.48	124.9	0.000	0.000	0.03	0.03	323.74
28	160	0.000	0.000	0.03	0.03	414.72	122	0.000	0.000	0.03	0.03	316.22	119.4	0.000	0.000	0.02	0.02	206.32
29	149	0.000	0.000	0.03	0.03	386.21	124.4	0.000	0.000	0.03	0.03	268.7	117.4	0.000	0.000	0.02	0.02	202.87
30	141	0.000	0.000	0.03	0.03	365.47	123.1	0.000	0.000	0.03	0.03	319.08						
31	150	0.000	0.000	0.03	0.03	388.8	112.6	0.000	0.000	0.02	0.02	194.57						
TenDaily I	190.6	0	0	0.03	0.03	533.12	151.5	0	0	0.03	0.03	390.41	123.03	0	0	0.03	0.03	342.98
TenDaily II	159.5	0	0	0.03	0.03	394.07	133.9	0	0	0.03	0.03	315.12	120.1	0	0	0.02	0.02	255.64
TenDaily III	163.45	0	0	0.03	0.03	409.82	120.95	0	0	0.02	0.02	249.2	121.49	0	0	0.03	0.03	280.62
Total		December				13779.94		January				9796.5		February				8511.76

Annual Sediment Load (M.T.) - 5709182.11

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Narmadapuram (Hoshangabad) ( CW1NAM000278)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

Days	March					April					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	114.9	0.000	0.000	0.02	0.02	198.55	90.1	0.000	0.000	0.01	0.01	54.49	153.1	0.000	0.000	0.03	0.03	396.84
2	114.2	0.000	0.000	0.02	0.02	197.34	124.1	0.000	0.000	0.03	0.03	321.67	151.6	0.000	0.000	0.03	0.03	392.95
3	113	0.000	0.000	0.02	0.02	195.26	125.6	0.000	0.000	0.03	0.03	325.56	147.2	0.000	0.000	0.03	0.03	381.54
4	100	0.000	0.000	0.01	0.01	86.4	129	0.000	0.000	0.03	0.03	334.37	145.9	0.000	0.000	0.03	0.03	378.17
5	99.4	0.000	0.000	0.02	0.02	171.76	122.5	0.000	0.000	0.03	0.03	317.52	225	0.000	0.000	0.04	0.04	777.6
6	100	0.000	0.000	0.02	0.02	172.8	110.4	0.000	0.000	0.02	0.02	190.77	143.9	0.000	0.000	0.04	0.04	472.45
7	101.3	0.000	0.000	0.02	0.02	175.05	105	0.000	0.000	0.02	0.02	181.44	153.1	0.000	0.000	0.03	0.03	396.84
8	98.4	0.000	0.000	0.02	0.02	170.04	122.5	0.000	0.000	0.01	0.01	116.42	163.7	0.000	0.000	0.03	0.03	424.31
9	97.7	0.000	0.000	0.02	0.02	168.83	118.3	0.000	0.000	0.02	0.02	204.42	143.9	0.000	0.000	0.03	0.03	372.99
10	98	0.000	0.000	0.02	0.02	169.34	123	0.000	0.000	0.03	0.03	318.82	134.2	0.000	0.000	0.03	0.03	347.85
11	96.5	0.000	0.000	0.01	0.01	91.71	132	0.000	0.000	0.03	0.03	342.14	127.2	0.000	0.000	0.03	0.03	329.7
12	99.4	0.000	0.000	0.02	0.02	171.76	125.5	0.000	0.000	0.03	0.03	325.3	218	0.000	0.000	0.04	0.04	753.41
13	103.5	0.000	0.000	0.02	0.02	178.85	123.8	0.000	0.000	0.03	0.03	320.89	146.3	0.000	0.000	0.16	0.16	1971.89
14	105.8	0.000	0.000	0.02	0.02	182.82	120	0.000	0.000	0.02	0.02	207.36	163.2	0.000	0.000	0.03	0.03	423.01
15	102.5	0.000	0.000	0.02	0.02	177.12	119.9	0.000	0.000	0.02	0.02	165.75	169.2	0.000	0.000	0.03	0.03	438.57
16	100.7	0.000	0.000	0.02	0.02	174.01	117.7	0.000	0.000	0.02	0.02	203.39	169.4	0.000	0.000	0.03	0.03	439.08
17	103	0.000	0.000	0.02	0.02	177.98	107.6	0.000	0.000	0.02	0.02	185.93	169.6	0.000	0.000	0.03	0.03	439.6
18	89.1	0.000	0.000	0.02	0.02	123.17	104.1	0.000	0.000	0.02	0.02	179.88	168.3	0.000	0.000	0.06	0.06	872.47
19	92.4	0.000	0.000	0.02	0.02	159.67	106.3	0.000	0.000	0.02	0.02	183.69	215	0.000	0.000	0.04	0.04	743.04
20	91.9	0.000	0.000	0.02	0.02	158.8	120.5	0.000	0.000	0.02	0.02	208.22	166	0.000	0.000	0.04	0.04	559.35
21	90.7	0.000	0.000	0.02	0.02	156.73	121	0.000	0.000	0.03	0.03	313.63	165.5	0.000	0.000	0.03	0.03	428.98
22	100.8	0.000	0.000	0.02	0.02	174.18	117.6	0.000	0.000	0.02	0.02	193.05	165.8	0.000	0.000	0.03	0.03	429.75
23	111.1	0.000	0.000	0.02	0.02	191.98	120	0.000	0.000	0.02	0.02	207.36	210	0.000	0.000	0.04	0.04	725.76
24	113	0.000	0.000	0.02	0.02	195.26	125	0.000	0.000	0.03	0.03	324	164.1	0.000	0.000	0.03	0.03	425.35
25	117	0.000	0.000	0.02	0.02	202.18	126.3	0.000	0.000	0.03	0.03	327.37	163.2	0.000	0.000	0.03	0.03	423.01
26	116.3	0.000	0.000	0.02	0.02	241.16	133	0.000	0.000	0.03	0.03	344.74	220	0.000	0.000	0.04	0.04	760.32
27	112.4	0.000	0.000	0.02	0.02	194.23	135.1	0.000	0.000	0.03	0.03	350.18	163.3	0.000	0.000	0.02	0.02	324.51
28	111.7	0.000	0.000	0.02	0.02	193.02	137	0.000	0.000	0.03	0.03	355.1	165.9	0.000	0.000	0.03	0.03	430.01
29	100.2	0.000	0.000	0.02	0.02	173.15	141.7	0.000	0.000	0.02	0.02	220.37	166	0.000	0.000	0.03	0.03	430.27
30	99.5	0.000	0.000	0.02	0.02	171.94	142.7	0.000	0.000	0.03	0.03	369.88	166.2	0.000	0.000	0.03	0.03	430.79
31	98	0.000	0.000	0.06	0.06	508.03							165.8	0.000	0.000	0.03	0.03	429.75
TenDaily I	103.69	0	0	0.02	0.02	170.54	117.05	0	0	0.02	0.02	236.55	156.16	0	0	0.03	0.03	434.15
TenDaily II	98.48	0	0	0.02	0.02	159.59	117.74	0	0	0.02	0.02	232.26	171.22	0	0	0.05	0.05	697.01
TenDaily III	106.43	0	0	0.02	0.02	218.35	129.94	0	0	0.03	0.03	300.57	174.16	0	0	0.03	0.03	476.23
Total	March					5703.12	April					7693.71						16550.17

Annual Sediment Load (M.T.) - 5709182.11

### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Narmadapuram  
 Local River : Narmada

Division : Narmada Division, Bhopal  
 SubDivision :MNSD-I, Narmadapuram

<b>Year</b>	<b>Monsoon (M.T.)</b>	<b>Non-Monsoon (M.T.)</b>	<b>Annual Load (M.T.)</b>	<b>Annual Run Off (MCM)</b>
<b>1987-1988</b>	13696732.18	0	13696732.18	11561.86
<b>1988-1989</b>	21927042.52	0	21927042.52	19316.57
<b>1989-1990</b>	12260502.83	0	12260502.83	10573.59
<b>1990-1991</b>	28921420.73	0	28921420.73	29218.27
<b>1991-1992</b>	17163195.9	0	17163195.9	19324.19
<b>1992-1993</b>	22273545.69	0	22273545.69	14560.38
<b>1993-1994</b>	24945904.79	0	24945904.79	17995.51
<b>1994-1995</b>	41396876.18	0	41396876.18	49621.55
<b>1995-1996</b>	13478551.68	0	13478551.68	15540.35
<b>1996-1997</b>	1864008.25	0	1864008.25	7541.49
<b>1997-1998</b>	14386693.7	0	14386693.7	16226.7
<b>1998-1999</b>	6442728.38	0	6442728.38	13430.35
<b>1999-2000</b>	27754796.99	0	27754796.99	40494.91
<b>2000-2001</b>	5418045.97	0	5418045.97	9462.58
<b>2001-2002</b>	11518072	0	11518072	13981.29
<b>2002-2003</b>	12492177.07	0	12492177.07	13759.02
<b>2003-2004</b>	24976309.71	0	24976309.71	25704.97
<b>2004-2005</b>	11095494.45	0	11095494.45	12307.41
<b>2005-2006</b>	41754968.22	112665.92	41867634.13	29700.15
<b>2006-2007</b>	21223787.14	63622.41	21287409.54	20517.11
<b>2007-2008</b>	3245231.01	48195.04	3293426.05	12584.91
<b>2008-2009</b>	8450880.75	43281.39	8494162.14	12343.45
<b>2009-2010</b>	14345893.18	12601.91	14358495.09	13831.1
<b>2010-2011</b>	2677514.25	84382.13	2761896.38	12858.8
<b>2011-2012</b>	6143300	19536.58	6162836.58	15668.8
<b>2012-2013</b>	32740070.13	122953.65	32863023.78	21076.02
<b>2013-2014</b>	338236903	74412	338311315	38710
<b>2014-2015</b>	13947824	91716	14039540	12492
<b>2015-2016</b>	5170582	37221	5207803	12457
<b>2016-2017</b>	9466715.49	76137.97	9542853.46	19521.88
<b>2017-2018</b>	132371.6	11654.47	144026.07	5797.33
<b>2018-2019</b>	197199.4	17362.14	214561.54	8636.52
<b>2019-2020</b>	841602.38	58367.88	899970.26	36892.38
<b>2020-2021</b>	12621408.32	30824.41	12652232.73	23310.39
<b>2021-2022</b>	1012565.7	125573.54	1138139.23	9408.88
<b>2022-2023</b>	10282365.54	61798.5	10344164.04	28862.98
<b>2023-2024</b>	5647146.92	62035.19	5709182.11	21394.31

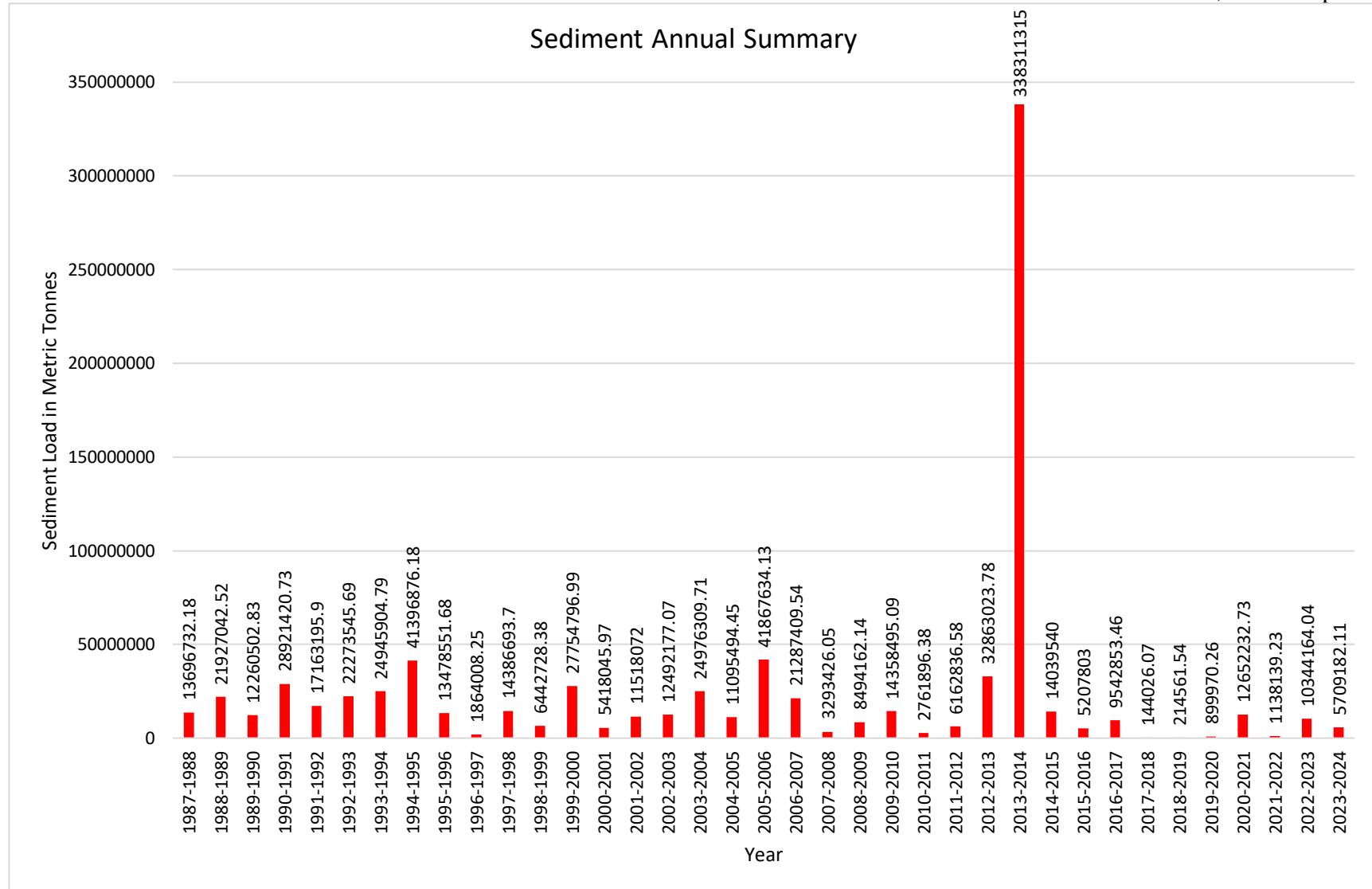
### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Narmadapuram (Hoshangabad) ( CW1NAM000278)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram



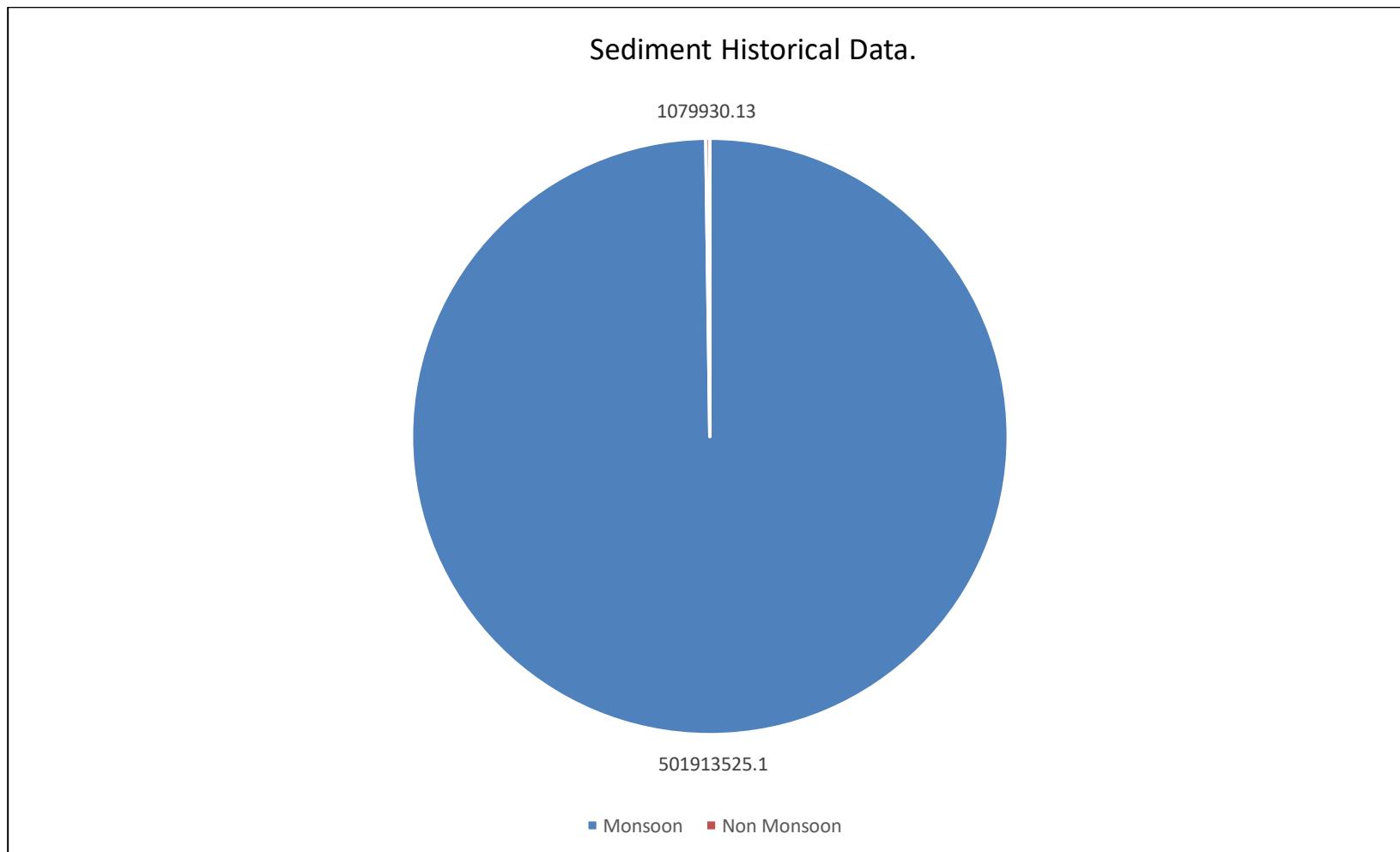
### **Seasonal Sediment Load for the period : 1987-2024**

Station Name : Narmada at Narmadapuram (Hoshangabad) ( CW1NAM000278)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram



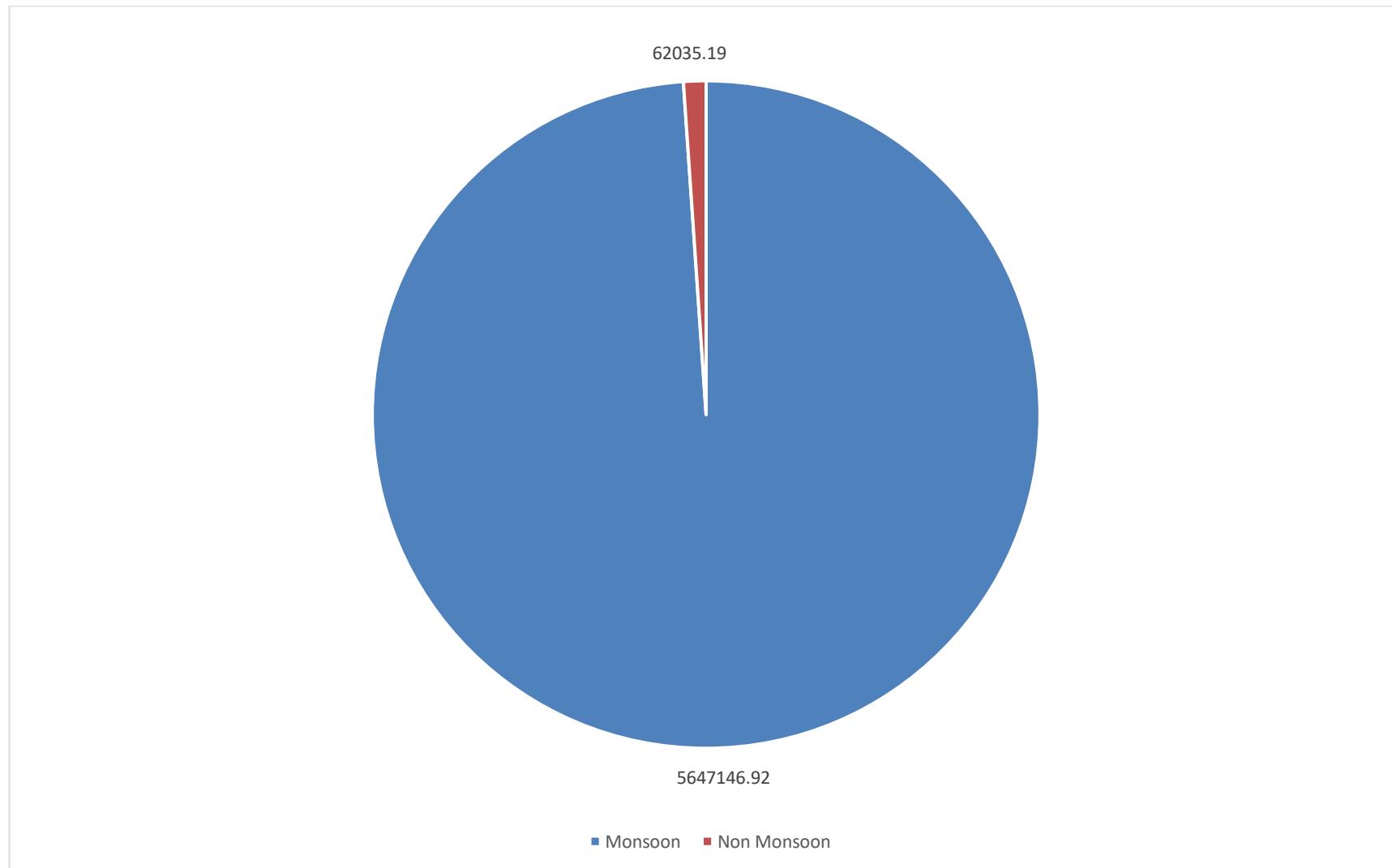
### **Seasonal Sediment Load for the period: 2023-24**

Station Name : Narmada at Narmadapuram (Hoshangabad) ( CW1NAM000278)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram





## 4.6 सांडिया में नर्मदा

### History sheet

HISTORY SHEET (SEDIMENT)					
				Water Year	: 2023 - 2024
Site	: Sandia			Code	: CW1NAU000450
State	: Madhya Pradesh			District	Narmadapuram
Basin	: Narmada			Independent River	: Narmada
Tributary	: -			Sub Tributary	: -
Sub-Sub Tributary	: -			Local River	: Narmada
Division	: Narmada Division(ND), Bhopal			Sub-Division	: Middle Narmada Sub-Division-I, Narmadapuram
Drainage Area	: 33953.5 Sq. Km.			Bank	: Left
Latitude	: 22°54'57"			Longitude	: 78°20'51"
Current Zero of Gauge (m)	: 297				
CATEGORY	Opening Date		Closing Date		
Gauge	: 01/03/1978				
Discharge	: 18/04/1978				
Sediment	: 09/08/1978				
Water Quality	: 15/09/1979				
Reduced Level	Opening Date		Closing Date		
297.0	: 01/03/1978				

### Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Narmada at Sandia ( CW1NAU000450)

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Narmadapuram

Local River : Narmada

Days	June--2023					July--2023					August--2023							
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	112.4	0.000	0.000	0.071	0.071	689.5	1012	0.000	0.000	0.162	0.162	14165	380.1	0.000	0.000	0.121	0.121	3973.7
2	108.5	0.000	0.000	0.045	0.045	421.8	750.4	0.000	0.000	0.132	0.132	8558.2	381.2	0.000	0.000	0.126	0.126	4149.9
3	98.19	0.000	0.000	0.060	0.060	509.0	507.4	0.000	0.000	0.132	0.132	5786.8	385.4	0.000	0.000	0.123	0.123	4095.7
4	96.03	0.000	0.000	0.045	0.045	373.4	390.1	0.000	0.000	0.125	0.125	4213.1	7504.0	0.000	0.000	0.203	0.203	131614
5	99.15	0.000	0.000	0.040	0.040	342.7	370.5	0.000	0.000	0.133	0.133	4257.5	10446	0.000	0.000	0.210	0.210	189532
6	163.4	0.000	0.000	0.045	0.045	635.3	309.7	0.000	0.000	0.123	0.123	3291.2	10816	0.000	0.000	0.205	0.205	191573
7	139.4	0.000	0.000	0.050	0.050	602.2	410.7	0.000	0.000	0.130	0.130	4613.0	5364.0	0.000	0.000	0.195	0.195	90373
8	115.3	0.000	0.000	0.050	0.050	498.1	857.4	0.000	0.000	0.132	0.132	9778.5	3379.0	0.000	0.000	0.198	0.198	57805
9	153.7	0.000	0.000	0.045	0.045	597.6	602.5	0.000	0.000	0.130	0.130	6767.3	2120.0	0.000	0.000	0.195	0.195	35718
10	120.8	0.000	0.000	0.050	0.050	521.9	535.8	0.000	0.000	0.145	0.145	6712.5	1675.0	0.000	0.000	0.185	0.185	26773
11	106.9	0.000	0.000	0.040	0.040	369.4	1230	0.000	0.000	0.172	0.172	18283.2	1627.0	0.000	0.000	0.173	0.173	24319
12	104.7	0.000	0.000	0.038	0.038	343.8	821.5	0.000	0.000	0.152	0.152	10788.6	810.3	0.000	0.000	0.165	0.165	11552
13	99.86	0.000	0.000	0.047	0.047	405.5	734.6	0.000	0.000	0.147	0.147	9330.0	711.80	0.000	0.000	0.157	0.157	9655.4
14	97.68	0.000	0.000	0.040	0.040	337.6	687.1	0.000	0.000	0.147	0.147	8726.7	445.80	0.000	0.000	0.168	0.168	6470.9
15	96.54	0.000	0.000	0.045	0.045	375.3	600.4	0.000	0.000	0.158	0.158	8196.2	407.00	0.000	0.000	0.110	0.110	3868.1
16	101.2	0.000	0.000	0.037	0.037	323.5	608.4	0.000	0.000	0.180	0.180	9461.8	435.00	0.000	0.000	0.150	0.150	5637.6
17	107.1	0.000	0.000	0.045	0.045	416.4	1020	0.000	0.000	0.185	0.185	16304	421.50	0.000	0.000	0.145	0.145	5280.6
18	110.6	0.000	0.000	0.067	0.067	640.2	1078	0.000	0.000	0.185	0.185	17231	408.40	0.000	0.000	0.140	0.140	4940.0
19	109.8	0.000	0.000	0.057	0.057	540.7	1293	0.000	0.000	0.185	0.185	20667	1904.0	0.000	0.000	0.150	0.150	24676
20	109.1	0.000	0.000	0.045	0.045	424.2	998.7	0.000	0.000	0.185	0.185	15963	3206.0	0.000	0.000	0.180	0.180	49860
21	108.9	0.000	0.000	0.050	0.050	470.4	1180	0.000	0.000	0.195	0.195	19881	4547.0	0.000	0.000	0.195	0.195	76608
22	108.6	0.000	0.000	0.042	0.042	394.1	952.0	0.000	0.000	0.175	0.175	14394	2843.0	0.000	0.000	0.175	0.175	42986
23	111.4	0.000	0.000	0.042	0.042	404.2	1256	0.000	0.000	0.158	0.158	17146	1713.0	0.000	0.000	0.170	0.170	25161
24	106.9	0.000	0.000	0.045	0.045	415.6	1169	0.000	0.000	0.170	0.170	17170	915.20	0.000	0.000	0.158	0.158	12494
25	396.7	0.000	0.000	0.071	0.071	2433.5	959.5	0.000	0.000	0.143	0.143	11855	770.40	0.000	0.000	0.153	0.153	10184
26	231.4	0.000	0.000	0.081	0.081	1619.4	990.7	0.000	0.000	0.140	0.140	11984	693.70	0.000	0.000	0.160	0.160	9589.7
27	246.9	0.000	0.000	0.103	0.103	2197.2	1336	0.000	0.000	0.179	0.179	20662	641.50	0.000	0.000	0.150	0.150	8313.8
28	2432	0.000	0.000	0.180	0.180	37822	1010	0.000	0.000	0.183	0.183	15969	605.80	0.000	0.000	0.153	0.153	8008.2
29	6100	0.000	0.000	0.204	0.204	107516	610.5	0.000	0.000	0.158	0.158	8334.1	501.20	0.000	0.000	0.157	0.157	6798.7
30	1362	0.000	0.000	0.153	0.153	18005	540.0	0.000	0.000	0.150	0.150	6998.4	389.70	0.000	0.000	0.150	0.150	5050.5
31						385.4	0.000	0.000	0.135	0.135	4495.3	378.60	0.000	0.000	0.152	0.152	4972.1	
TenDaily I	120.687	0	0	0.05	0.05	519.144	574.65	0	0	0.134	0.134	6814.277	4245.07	0	0	0.176	0.176	73560.76
TenDaily II	104.348	0	0	0.046	0.046	417.672	907.2	0	0	0.17	0.17	13495.16	1037.68	0	0	0.154	0.154	14625.89
TenDaily III	1120.48	0	0	0.097	0.097	17127.77	944.464	0	0	0.162	0.162	13535.32	1272.65	0	0	0.161	0.161	19105.93
Total		June				180645.9		July				351982.8		August				1092032

Annual Sediment Load (M.T.) - 2472207.39

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Sandia ( CW1NAU000450)

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Narmadapuram

Local River : Narmada

Days	September--2023						October--2023						November--2023					
	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	365.50	0.000	0.000	0.145	0.145	4579.0	503.6	0.000	0.000	0.142	0.142	6178.6	216.0	0.000	0.000	0.110	0.110	2052.9
2	361.20	0.000	0.000	0.145	0.145	4525.1	496.0	0.000	0.000	0.119	0.119	5099.7	230.5	0.000	0.000	0.108	0.108	2150.8
3	360.90	0.000	0.000	0.150	0.150	4677.3	493.7	0.000	0.000	0.142	0.142	6057.1	239.6	0.000	0.000	0.117	0.117	2422.1
4	360.10	0.000	0.000	0.150	0.150	4666.9	576.2	0.000	0.000	0.152	0.152	7567.1	241.2	0.000	0.000	0.118	0.118	2459.1
5	350.40	0.000	0.000	0.145	0.145	4389.8	617.4	0.000	0.000	0.148	0.148	7894.8	238.0	0.000	0.000	0.090	0.090	1850.7
6	336.20	0.000	0.000	0.148	0.148	4299.1	530.0	0.000	0.000	0.138	0.138	6319.3	226.2	0.000	0.000	0.107	0.107	2091.2
7	385.40	0.000	0.000	0.143	0.143	4761.7	259.3	0.000	0.000	0.140	0.140	3136.5	219.2	0.000	0.000	0.110	0.110	2083.3
8	447.80	0.000	0.000	0.153	0.153	5919.6	280.0	0.000	0.000	0.130	0.130	3145.0	222.4	0.000	0.000	0.110	0.110	2113.7
9	411.60	0.000	0.000	0.152	0.152	5405.5	275.3	0.000	0.000	0.132	0.132	3139.7	227.5	0.000	0.000	0.110	0.110	2162.2
10	954.70	0.000	0.000	0.145	0.145	11960	285.1	0.000	0.000	0.133	0.133	3276.1	216.0	0.000	0.000	0.115	0.115	2146.2
11	1056.00	0.000	0.000	0.165	0.165	15054	295.8	0.000	0.000	0.125	0.125	3194.6	214.0	0.000	0.000	0.115	0.115	2126.3
12	731.50	0.000	0.000	0.145	0.145	9164.2	298.6	0.000	0.000	0.132	0.132	3405.5	216.0	0.000	0.000	0.087	0.087	1623.6
13	928.60	0.000	0.000	0.150	0.150	12035	297.3	0.000	0.000	0.135	0.135	3467.7	205.0	0.000	0.000	0.118	0.118	2090.0
14	593.70	0.000	0.000	0.130	0.130	6668.4	296.1	0.000	0.000	0.132	0.132	3377.0	201.5	0.000	0.000	0.113	0.113	1967.3
15	468.50	0.000	0.000	0.123	0.123	4978.8	296.9	0.000	0.000	0.140	0.140	3591.3	198.5	0.000	0.000	0.115	0.115	1972.3
16	5595.00	0.000	0.000	0.178	0.178	86047	301.2	0.000	0.000	0.132	0.132	3435.1	182.5	0.000	0.000	0.105	0.105	1655.6
17	5097.00	0.000	0.000	0.180	0.180	79269	310.2	0.000	0.000	0.132	0.132	3537.8	165.0	0.000	0.000	0.040	0.040	570.24
18	3987.00	0.000	0.000	0.180	0.180	62006	302.1	0.000	0.000	0.130	0.130	3393.2	151.2	0.000	0.000	0.105	0.105	1371.7
19	2149.00	0.000	0.000	0.208	0.208	38620	300.5	0.000	0.000	0.120	0.120	3115.6	148.0	0.000	0.000	0.075	0.075	959.04
20	1012.00	0.000	0.000	0.163	0.163	14252	286.4	0.000	0.000	0.118	0.118	2919.9	155.2	0.000	0.000	0.030	0.030	402.28
21	824.30	0.000	0.000	0.162	0.162	11538	279.3	0.000	0.000	0.118	0.118	2847.5	120.2	0.000	0.000	0.080	0.080	830.82
22	1108.00	0.000	0.000	0.180	0.180	17232	260.9	0.000	0.000	0.115	0.115	2592.3	181.2	0.000	0.000	0.030	0.030	469.67
23	1503.00	0.000	0.000	0.175	0.175	22725	265.6	0.000	0.000	0.112	0.112	2570.2	183.7	0.000	0.000	0.077	0.077	1222.1
24	2517.00	0.000	0.000	0.168	0.168	36535	264.3	0.000	0.000	0.105	0.105	2397.7	180.8	0.000	0.000	0.078	0.078	1218.4
25	1552.00	0.000	0.000	0.158	0.158	21187	259.7	0.000	0.000	0.105	0.105	2356.0	184.0	0.000	0.000	0.075	0.075	1192.3
26	864.90	0.000	0.000	0.150	0.150	11209	241.4	0.000	0.000	0.117	0.117	2440.3	198.0	0.000	0.000	0.084	0.084	1437.0
27	694.80	0.000	0.000	0.150	0.150	9004.6	219.8	0.000	0.000	0.120	0.120	2278.9	220.0	0.000	0.000	0.087	0.087	1653.7
28	572.60	0.000	0.000	0.143	0.143	7074.6	209.1	0.000	0.000	0.093	0.093	1680.2	214.0	0.000	0.000	0.088	0.088	1627.1
29	535.60	0.000	0.000	0.145	0.145	6710.0	227.6	0.000	0.000	0.112	0.112	2202.4	205.0	0.000	0.000	0.075	0.075	1328.4
30	505.00	0.000	0.000	0.130	0.130	5672.2	240.8	0.000	0.000	0.120	0.120	2496.6	179.0	0.000	0.000	0.075	0.075	1159.9
31							231.6	0.000	0.000	0.125	0.125	2501.3						
TenDaily I	433.38	0	0	0.148	0.148	5518.432	431.66	0	0	0.138	0.138	5181.392	227.66	0	0	0.11	0.11	2153.202
TenDaily II	2161.83	0	0	0.162	0.162	32809.38	298.51	0	0	0.13	0.13	3343.766	183.69	0	0	0.09	0.09	1473.841
TenDaily III	1067.72	0	0	0.156	0.156	14888.64	245.464	0	0	0.113	0.113	2396.668	186.59	0	0	0.075	0.075	1213.949
Total		September				532164.5		October				111614.9		November				48409.92

Annual Sediment Load (M.T.) - 2472207.39

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Sandia ( CW1NAU000450)

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Narmadapuram

Local River : Narmada

Days	December--2023					January--2024					February--2024							
	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	176.20	0.000	0.000	0.080	0.080	1217.9	105.80	0.000	0.000	0.053	0.053	484.48	121.40	0.000	0.000	0.070	0.070	734.23
2	179.40	0.000	0.000	0.081	0.081	1255.5	106.60	0.000	0.000	0.066	0.066	607.88	120.80	0.000	0.000	0.070	0.070	730.60
3	181.00	0.000	0.000	0.081	0.081	1266.7	119.80	0.000	0.000	0.069	0.069	714.20	119.00	0.000	0.000	0.069	0.069	709.43
4	185.40	0.000	0.000	0.930	0.930	14897	125.40	0.000	0.000	0.071	0.071	769.25	119.00	0.000	0.000	0.069	0.069	709.43
5	187.00	0.000	0.000	0.082	0.082	1324.9	124.90	0.000	0.000	0.071	0.071	766.19	120.20	0.000	0.000	0.048	0.048	498.49
6	178.60	0.000	0.000	0.081	0.081	1249.9	136.40	0.000	0.000	0.073	0.073	860.30	118.60	0.000	0.000	0.069	0.069	707.05
7	176.40	0.000	0.000	0.080	0.080	1219.3	129.00	0.000	0.000	0.071	0.071	791.34	120.20	0.000	0.000	0.069	0.069	716.58
8	146.00	0.000	0.000	0.075	0.075	946.08	138.60	0.000	0.000	0.055	0.055	658.63	122.10	0.000	0.000	0.070	0.070	738.46
9	139.00	0.000	0.000	0.073	0.073	876.70	132.10	0.000	0.000	0.072	0.072	821.77	123.20	0.000	0.000	0.070	0.070	745.11
10	137.00	0.000	0.000	0.073	0.073	864.09	110.80	0.000	0.000	0.067	0.067	641.40	118.60	0.000	0.000	0.069	0.069	707.05
11	136.80	0.000	0.000	0.090	0.090	1063.8	114.60	0.000	0.000	0.068	0.068	673.30	110.00	0.000	0.000	0.067	0.067	636.77
12	135.60	0.000	0.000	0.073	0.073	855.26	129.60	0.000	0.000	0.072	0.072	806.22	107.00	0.000	0.000	0.045	0.045	416.02
13	129.60	0.000	0.000	0.072	0.072	806.22	142.50	0.000	0.000	0.074	0.074	911.09	103.80	0.000	0.000	0.066	0.066	591.91
14	112.00	0.000	0.000	0.068	0.068	658.02	139.00	0.000	0.000	0.073	0.073	876.70	100.70	0.000	0.000	0.065	0.065	565.53
15	102.40	0.000	0.000	0.065	0.065	575.08	143.40	0.000	0.000	0.052	0.052	644.27	103.80	0.000	0.000	0.066	0.066	591.91
16	101.90	0.000	0.000	0.065	0.065	572.27	131.40	0.000	0.000	0.072	0.072	817.41	118.60	0.000	0.000	0.069	0.069	707.05
17	130.00	0.000	0.000	0.072	0.072	808.70	129.20	0.000	0.000	0.071	0.071	792.56	130.70	0.000	0.000	0.072	0.072	813.06
18	156.10	0.000	0.000	0.080	0.080	1079.0	124.60	0.000	0.000	0.070	0.070	753.58	129.00	0.000	0.000	0.071	0.071	791.34
19	160.40	0.000	0.000	0.078	0.078	1081.0	123.80	0.000	0.000	0.070	0.070	748.74	128.70	0.000	0.000	0.030	0.030	333.59
20	144.60	0.000	0.000	0.075	0.075	937.01	122.40	0.000	0.000	0.070	0.070	740.28	126.90	0.000	0.000	0.071	0.071	778.46
21	142.20	0.000	0.000	0.074	0.074	909.17	120.00	0.000	0.000	0.069	0.069	715.39	126.80	0.000	0.000	0.071	0.071	777.84
22	136.40	0.000	0.000	0.073	0.073	860.30	121.70	0.000	0.000	0.069	0.069	725.53	120.20	0.000	0.000	0.069	0.069	716.58
23	142.20	0.000	0.000	0.074	0.074	909.17	119.03	0.000	0.000	0.069	0.069	709.61	118.50	0.000	0.000	0.069	0.069	706.45
24	148.00	0.000	0.000	0.075	0.075	959.04	117.50	0.000	0.000	0.069	0.069	700.49	122.10	0.000	0.000	0.070	0.070	738.46
25	166.00	0.000	0.000	0.079	0.079	1133.1	118.30	0.000	0.000	0.069	0.069	705.26	120.00	0.000	0.000	0.069	0.069	715.39
26	155.00	0.000	0.000	0.070	0.070	937.44	120.00	0.000	0.000	0.069	0.069	715.39	123.80	0.000	0.000	0.033	0.033	352.98
27	142.00	0.000	0.000	0.074	0.074	907.89	122.80	0.000	0.000	0.070	0.070	742.69	124.70	0.000	0.000	0.070	0.070	754.19
28	136.40	0.000	0.000	0.073	0.073	860.30	123.00	0.000	0.000	0.070	0.070	743.90	116.90	0.000	0.000	0.069	0.069	696.91
29	124.00	0.000	0.000	0.070	0.070	749.95	119.00	0.000	0.000	0.053	0.053	544.93	110.20	0.000	0.000	0.067	0.067	637.93
30	117.00	0.000	0.000	0.069	0.069	697.51	121.00	0.000	0.000	0.070	0.070	731.81						
31	118.00	0.000	0.000	0.069	0.069	703.47	121.70	0.000	0.000	0.070	0.070	736.04						
TenDaily I	168.6	0	0	0.164	0.164	2511.829	122.94	0	0	0.067	0.067	711.543	120.31	0	0	0.067	0.067	699.643
TenDaily II	130.94	0	0	0.074	0.074	843.624	130.05	0	0	0.069	0.069	776.415	115.92	0	0	0.062	0.062	622.562
TenDaily III	138.836	0	0	0.073	0.073	875.208	120.366	0	0	0.068	0.068	706.458	120.356	0	0	0.065	0.065	677.414
Total	December					43181.83	January					22650.61	February					19318.78

Annual Sediment Load (M.T.) - 2472207.39

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Sandia ( CW1NAU000450)

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Narmadapuram

Local River : Narmada

Days	March--2024						April--2024						May--2024					
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	106.9	0.000	0.000	0.066	0.066	609.59	118.1	0.000	0.000	0.030	0.030	306.12	183.30	0.000	0.000	0.082	0.082	1298.6
2	102.2	0.000	0.000	0.065	0.065	573.96	134.4	0.000	0.000	0.073	0.073	847.69	154.10	0.000	0.000	0.076	0.076	1011.9
3	100.0	0.000	0.000	0.065	0.065	561.60	135.1	0.000	0.000	0.073	0.073	852.10	145.80	0.000	0.000	0.075	0.075	944.78
4	94.20	0.000	0.000	0.033	0.033	268.58	116.9	0.000	0.000	0.069	0.069	696.91	121.70	0.000	0.000	0.070	0.070	736.04
5	95.70	0.000	0.000	0.064	0.064	529.18	95.69	0.000	0.000	0.064	0.064	529.13	140.00	0.000	0.000	0.074	0.074	895.10
6	95.70	0.000	0.000	0.064	0.064	529.18	97.15	0.000	0.000	0.064	0.064	537.20	187.30	0.000	0.000	0.056	0.056	906.23
7	94.30	0.000	0.000	0.063	0.063	513.29	96.00	0.000	0.000	0.064	0.064	530.84	166.20	0.000	0.000	0.079	0.079	1134.4
8	92.80	0.000	0.000	0.063	0.063	505.13	103.8	0.000	0.000	0.025	0.025	224.21	141.80	0.000	0.000	0.074	0.074	906.61
9	92.90	0.000	0.000	0.063	0.063	505.67	110.2	0.000	0.000	0.067	0.067	637.93	138.40	0.000	0.000	0.073	0.073	872.92
10	92.00	0.000	0.000	0.063	0.063	500.77	126.9	0.000	0.000	0.071	0.071	778.46	125.10	0.000	0.000	0.071	0.071	767.41
11	98.60	0.000	0.000	0.038	0.038	323.72	112.0	0.000	0.000	0.068	0.068	658.02	144.90	0.000	0.000	0.075	0.075	938.95
12	101.6	0.000	0.000	0.065	0.065	570.59	103.8	0.000	0.000	0.066	0.066	591.91	125.00	0.000	0.000	0.071	0.071	766.80
13	100.1	0.000	0.000	0.065	0.065	562.16	102.2	0.000	0.000	0.065	0.065	573.96	187.40	0.000	0.000	0.053	0.053	858.14
14	97.10	0.000	0.000	0.064	0.064	536.92	85.00	0.000	0.000	0.061	0.061	447.98	195.40	0.000	0.000	0.084	0.084	1418.1
15	89.77	0.000	0.000	0.062	0.062	480.88	81.83	0.000	0.000	0.023	0.023	162.61	181.90	0.000	0.000	0.081	0.081	1273.0
16	87.03	0.000	0.000	0.061	0.061	458.68	77.87	0.000	0.000	0.059	0.059	396.95	187.40	0.000	0.000	0.082	0.082	1327.7
17	86.00	0.000	0.000	0.061	0.061	453.25	82.96	0.000	0.000	0.060	0.060	430.07	187.70	0.000	0.000	0.082	0.082	1329.8
18	89.77	0.000	0.000	0.030	0.030	232.68	83.02	0.000	0.000	0.060	0.060	430.38	187.70	0.000	0.000	0.082	0.082	1329.8
19	87.04	0.000	0.000	0.061	0.061	458.74	103.0	0.000	0.000	0.066	0.066	587.35	145.00	0.000	0.000	0.075	0.075	939.60
20	79.29	0.000	0.000	0.059	0.059	404.19	103.4	0.000	0.000	0.066	0.066	589.63	181.90	0.000	0.000	0.053	0.053	832.96
21	87.01	0.000	0.000	0.061	0.061	458.58	99.67	0.000	0.000	0.065	0.065	559.75	187.40	0.000	0.000	0.082	0.082	1327.7
22	87.94	0.000	0.000	0.062	0.062	471.08	117.2	0.000	0.000	0.038	0.038	384.79	181.40	0.000	0.000	0.081	0.081	1269.5
23	92.54	0.000	0.000	0.063	0.063	503.71	121.0	0.000	0.000	0.070	0.070	731.81	179.20	0.000	0.000	0.081	0.081	1254.1
24	110.0	0.000	0.000	0.067	0.067	636.77	120.7	0.000	0.000	0.070	0.070	729.99	167.80	0.000	0.000	0.079	0.079	1145.3
25	115.0	0.000	0.000	0.068	0.068	675.65	129.6	0.000	0.000	0.072	0.072	806.22	157.80	0.000	0.000	0.077	0.077	1049.8
26	92.54	0.000	0.000	0.250	0.250	1998.9	135.2	0.000	0.000	0.073	0.073	852.73	167.20	0.000	0.000	0.079	0.079	1141.2
27	94.28	0.000	0.000	0.063	0.063	513.19	178.6	0.000	0.000	0.081	0.081	1249.9	179.20	0.000	0.000	0.057	0.057	882.52
28	91.44	0.000	0.000	0.063	0.063	497.73	190.0	0.000	0.000	0.083	0.083	1362.53	181.40	0.000	0.000	0.081	0.081	1269.5
29	92.88	0.000	0.000	0.063	0.063	505.56	186.4	0.000	0.000	0.041	0.041	665.14	181.40	0.000	0.000	0.081	0.081	1269.5
30	95.69	0.000	0.000	0.064	0.064	529.13	188.5	0.000	0.000	0.082	0.082	1335.5	185.10	0.000	0.000	0.082	0.082	1311.4
31	114.0	0.000	0.000	0.068	0.068	669.77							181.50	0.000	0.000	0.081	0.081	1270.2
TenDaily I	96.67	0	0	0.061	0.061	509.696	113.424	0	0	0.06	0.06	594.058	150.37	0	0	0.073	0.073	947.405
TenDaily II	91.63	0	0	0.057	0.057	448.182	93.508	0	0	0.059	0.059	486.885	172.43	0	0	0.074	0.074	1101.492
TenDaily III	97.575	0	0	0.081	0.081	678.184	146.687	0	0	0.068	0.068	867.835	177.218	0	0	0.078	0.078	1199.168
Total	March					17038.81	April					19487.78						33679.82

Annual Sediment Load (M.T.) – 2472207.39

### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Sandia

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

<b>Year</b>	<b>Monsoon (M.T.)</b>	<b>Non-Monsoon (M.T.)</b>	<b>Annual Load (M.T.)</b>	<b>Annual Run Off (MCM)</b>
<b>1987-1988</b>	7529140.18	0	7529140.18	6886.96
<b>1988-1989</b>	16266196.89	0	16266196.89	14519.18
<b>1989-1990</b>	4764959.28	0	4764959.28	6212.52
<b>1990-1991</b>	16499578.83	0	16499578.83	20837.87
<b>1991-1992</b>	31100237.29	0	31100237.29	14450.2
<b>1992-1993</b>	7506724.17	0	7506724.17	10887.27
<b>1993-1994</b>	11324633.03	0	11324633.03	12061.07
<b>1994-1995</b>	43941942.28	0	43941942.28	34413.84
<b>1995-1996</b>	11257938.33	0	11257938.33	13275.06
<b>1996-1997</b>	2415022.75	0	2415022.75	5763.67
<b>1997-1998</b>	7382982.42	0	7382982.42	11395.81
<b>1998-1999</b>	5939963.36	0	5939963.36	9874.67
<b>1999-2000</b>	34685472.31	0	34685472.31	28910.32
<b>2000-2001</b>	10300013.96	0	10300013.96	7673.68
<b>2001-2002</b>	18040558.08	0	18040558.08	11842.63
<b>2002-2003</b>	13837434.36	0	13837434.36	9241.7
<b>2003-2004</b>	36417061.91	0	36417061.91	19362.19
<b>2004-2005</b>	11432445.12	0	11432445.12	10323.99
<b>2005-2006</b>	26940023.78	200264.78	27140288.56	24422.53
<b>2006-2007</b>	17843015.67	125369.91	17968385.58	13936.42
<b>2007-2008</b>	225891.69	11152.44	237044.13	9304.6
<b>2008-2009</b>	1249337.48	49464.41	1298801.9	9913.65
<b>2009-2010</b>	47170094.29	42441.39	47212535.68	11271.35
<b>2010-2011</b>	4083187.3	422459.49	4505646.79	9112.39
<b>2011-2012</b>	28905207.84	0	28905207.84	14916
<b>2012-2013</b>	15153224.05	153016.8	15306240.85	13589.21
<b>2013-2014</b>	15096652	132822	15229473	28654
<b>2014-2015</b>	3320615	71095	3391709	10500
<b>2015-2016</b>	566346	58438	624785	6318
<b>2016-2017</b>	5051534.42	58304.64	5109839.06	15068.69
<b>2017-2018</b>	390036.11	0	390036.11	2852.59
<b>2018-2019</b>	2359487	115780	2475267	9395
<b>2019-2020</b>	6272189	206471.48	6478660.48	23809.49
<b>2020-2021</b>	3275799.78	201312.2	3477111.98	17882.96
<b>2021-2022</b>	1570398.72	159635.19	1730033.91	6979.34
<b>2022-2023</b>	2890223.1	104856.68	2995079.78	18245.21
<b>2023-2024</b>	<b>2316849.77</b>	<b>155357.62</b>	<b>2472207.39</b>	<b>15689.53</b>

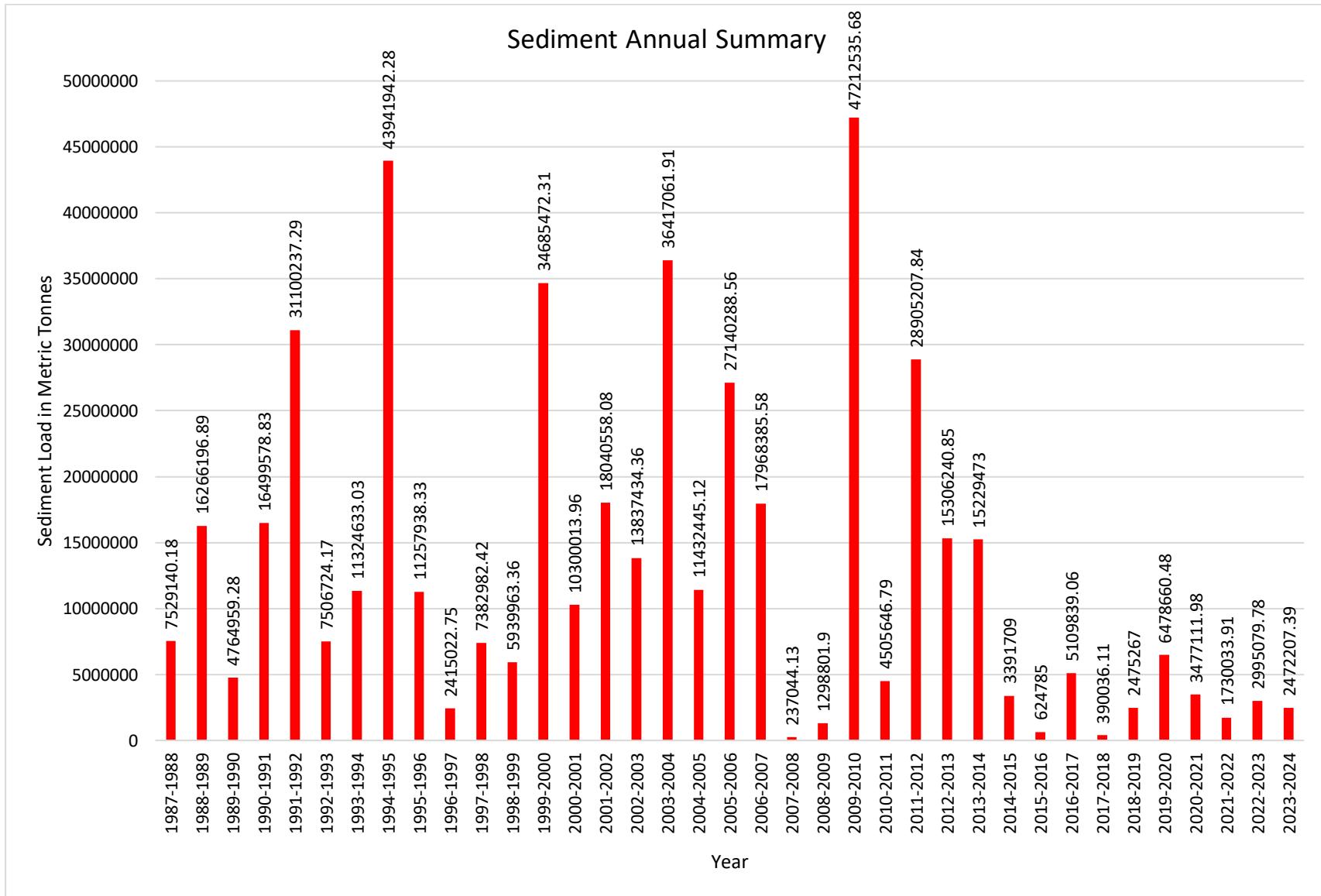
### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Sandia ( CW1NAU000450)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division : MNSD-I, Narmadapuram



**Seasonal Sediment Load for period : 1987-2024**

Station Name : Narmada at Sandia ( CW1NAU000450)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

Sediment Historical Data.

2268242.03

475322417.6

■ Monsoon ■ Non Monsoon

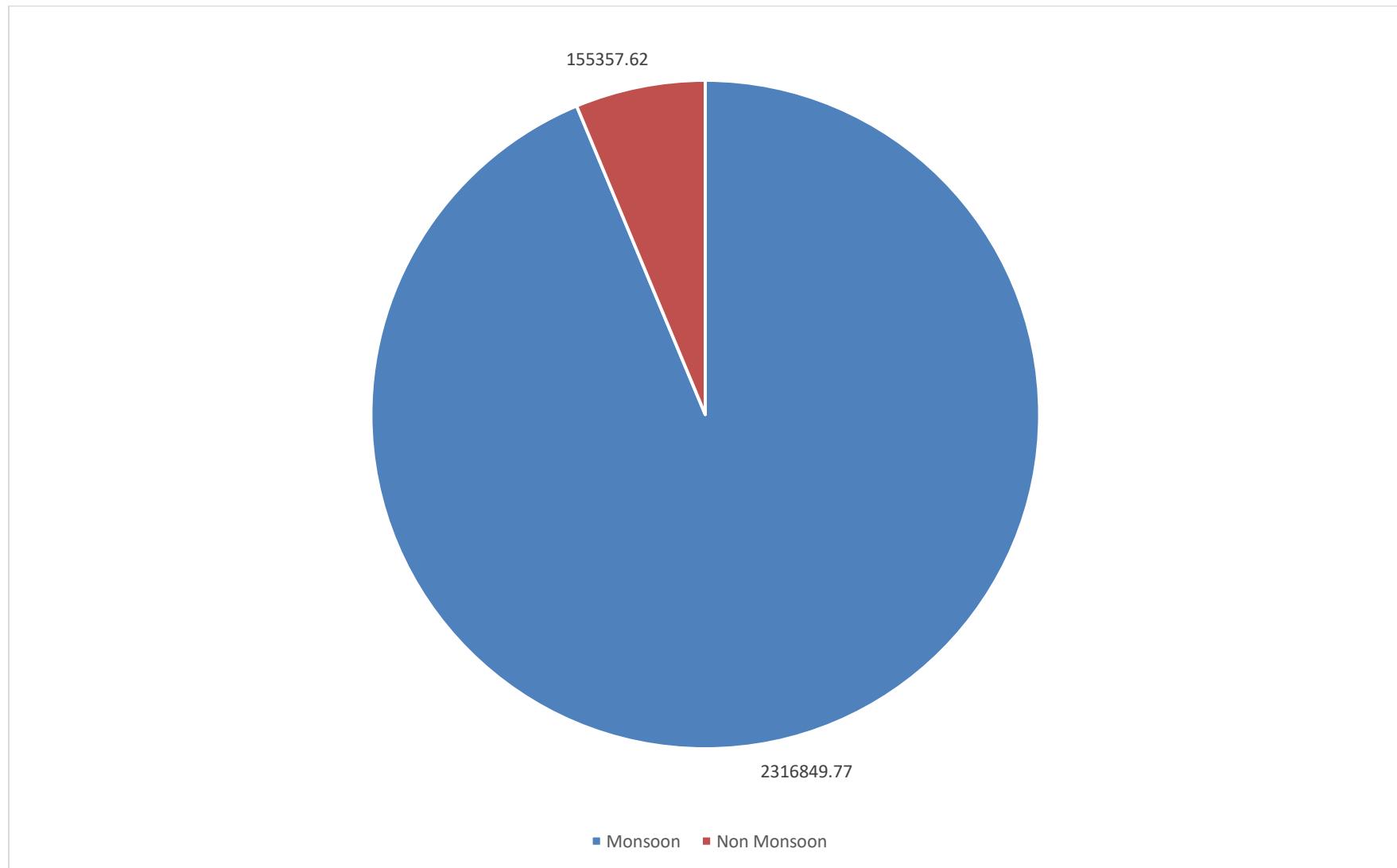
**Seasonal Sediment Load for period : 2023-2024**

Station Name : Narmada at Sandia ( CW1NAU000450)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram





**4.7 गाडरवाडा में शक्कर**

<b>HISTORY SHEET (SEDIMENT)</b>					
				<b>Water Year</b>	: 2023-2024
<b>Site</b>	:	Gadarwara		<b>Code</b>	: CW1NAU000391
<b>State</b>	:	Madhya Pradesh		<b>District</b>	NARSINGHPUR
<b>Basin</b>	:	Narmada		<b>Independent River</b>	: Narmada
<b>Tributary</b>	:	-		<b>Sub Tributary</b>	: -
<b>Sub-Sub Tributary</b>	:	-		<b>Local River</b>	: Shakkar
<b>Division</b>	:	Narmada Division(ND), Bhopal		<b>Sub-Division</b>	: Middle Narmada Sub-Division-I, Narmadapuram
<b>Drainage Area</b>	:	2270.0 Sq. Km.		<b>Bank</b>	: Left
<b>Latitude</b>	:	22°55'26"		<b>Longitude</b>	: 78°47'30"
<b>Current Zero of Gauge (m)</b>	:	321			
<b>CATEGORY</b>		<b>Opening Date</b>		<b>Closing Date</b>	
<b>Gauge</b>	:	01/02/1977			
<b>Discharge</b>	:	01/02/1977			
<b>Sediment</b>	:	15/06/1978			
<b>Water Quality</b>	:	16/06/1979			
<b>Reduced Level</b>		<b>Opening Date</b>		<b>Closing Date</b>	
321.0		01/02/1977			

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Shakkar at Gadarwara ( CW1NAU000391)  
 Local River : Shakkar

Division : Narmada Division, Bhopal  
 Sub-Division :MNSD-I, Narmadapuram

Days	June--2023					July--2023					August--2023							
	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	No Flow					417.9	0.004	0.005	1.150	1.159	41850	392.9	0.004	0.005	1.060	1.069	36293
2	0						194.4	0.004	0.006	1.060	1.070	17973	382.4	0.003	0.004	1.040	1.047	34594
3	0						165.6	0.004	0.006	1.040	1.050	15025	376.8	0.004	0.005	1.020	1.029	33501
4	0						161.2	0.004	0.007	1.040	1.051	14642	930.0	0.009	0.014	1.165	1.188	95458
5	0						155.4	0.003	0.006	1.030	1.039	13952	636.0	0.008	0.012	1.150	1.170	64289
6	0						193.3	0.004	0.005	1.070	1.079	18017	578.6	0.007	0.011	1.125	1.143	57142
7	0						200.2	0.004	0.006	1.070	1.080	18685	558.1	0.005	0.008	1.121	1.134	54683
8	0						359.2	0.004	0.006	1.090	1.100	34138	513.7	0.004	0.008	1.109	1.121	49759
9	0						323.4	0.004	0.005	1.090	1.099	30709	498.5	0.004	0.007	1.103	1.114	47976
10	0						246.1	0.004	0.006	1.090	1.100	23385	466.5	0.004	0.006	1.100	1.110	44739
11	0						322.7	0.004	0.007	1.100	1.111	30972	456.0	0.004	0.006	1.100	1.110	43729
12	0						207.3	0.004	0.006	1.090	1.100	19700	404.9	0.004	0.005	1.090	1.099	38446
13	0						192.3	0.003	0.005	1.080	1.088	18073	391.3	0.004	0.005	1.050	1.059	35807
14	0						166.2	0.004	0.006	1.080	1.090	15654	380.0	0.004	0.005	1.040	1.049	34441
15	0						161.3	0.003	0.005	1.080	1.088	15163	373.0	0.010	0.010	1.051	1.071	34515
16	0						163.7	0.004	0.006	1.080	1.090	15414	364.3	0.003	0.004	1.020	1.027	32322
17	0						562.0	0.007	0.008	1.090	1.105	53651	321.7	0.003	0.004	1.010	1.017	28265
18	0						505.6	0.006	0.007	1.090	1.103	48184	273.4	0.003	0.004	0.988	0.995	23501
19	0						479.6	0.006	0.007	1.080	1.093	45293	750.0	0.009	0.012	1.160	1.181	76529
20	0						646.6	0.006	0.008	1.108	1.122	62684	710.0	0.008	0.011	1.150	1.169	71711
21	0						558.9	0.005	0.007	1.100	1.112	53695	609.4	0.008	0.011	1.130	1.149	60501
22	0						580.0	0.006	0.007	1.100	1.113	55773	583.6	0.008	0.011	1.120	1.139	57433
23	0						563.5	0.006	0.007	1.100	1.113	54186	581.1	0.007	0.010	1.110	1.127	56584
24	0						515.7	0.005	0.006	1.100	1.111	49506	562.8	0.007	0.010	1.110	1.127	54801
25	0						496.4	0.004	0.006	1.090	1.100	47177	519.2	0.006	0.010	1.100	1.116	50067
26	11.99	0.000	0.000	0.106	0.106	109.8	478.8	0.004	0.005	1.090	1.099	45465	494.6	0.006	0.010	1.100	1.116	47688
27	75.98	0.010	0.009	0.282	0.301	1976	510.2	0.004	0.005	1.110	1.119	49325	485.4	0.006	0.010	1.090	1.106	46383
28	384.3	0.010	0.010	1.077	1.097	36421	495.3	0.004	0.005	1.110	1.119	47883	460.3	0.006	0.010	1.080	1.096	43590
29	850.0	0.010	0.010	2.077	2.097	154004	467.4	0.004	0.005	1.110	1.119	45189	440.7	0.006	0.010	1.080	1.096	41730
30	558.5	0.010	0.010	1.051	1.071	51682	454.3	0.004	0.005	1.090	1.099	43140	390.3	0.006	0.010	1.070	1.086	36623
31							417.1	0.003	0.006	1.070	1.079	38885	381.8	0.006	0.010	1.060	1.076	35496
TenDaily I	0	0	0	0	0	0	241.678	0.004	0.006	1.073	1.083	22837.51	533.359	0.005	0.008	1.099	1.113	51843.35
TenDaily II	0	0	0	0	0	0	340.72	0.005	0.007	1.088	1.099	32478.81	442.452	0.005	0.007	1.066	1.078	41926.74
TenDaily III	188.074	0.008	0.008	0.919	0.934	48838.38	503.414	0.004	0.006	1.097	1.108	48202.15	500.845	0.007	0.01	1.095	1.112	48263.3
Total	June					244191.9	July					1083387	August					1468597

Annual Sediment Load (M.T.) – 4302689.85

## Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Shakkar at Gadarwara ( CW1NAU000391)

Local River : Shakkar

Division : Narmada Division, Bhopal

Sub-Division: MNSD-I, Narmadapuram

Days	September--2023					October--2023					November--2023							
	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	375.2	0.006	0.010	1.033	1.049	34003	231.6	0.004	0.005	0.993	1.002	20052	14.71	0.000	0.000	0.110	0.110	139.84
2	359.5	0.006	0.009	1.000	1.015	31527	183.6	0.000	0.000	0.998	0.998	15834	14.47	0.000	0.000	0.080	0.080	100.04
3	277.9	0.005	0.010	0.970	0.985	23652	176.8	0.000	0.000	0.985	0.985	15050	13.19	0.000	0.000	0.080	0.080	91.155
4	236.0	0.005	0.010	0.950	0.965	19675	170.7	0.000	0.000	0.975	0.975	14376	13.43	0.000	0.000	0.070	0.070	81.219
5	185.7	0.006	0.009	0.920	0.935	15000	154.6	0.000	0.000	0.955	0.955	12757	13.40	0.010	0.008	0.067	0.085	98.410
6	241.1	0.005	0.010	0.930	0.945	19689	144.0	0.000	0.000	0.963	0.963	11984	13.38	0.000	0.000	0.060	0.060	69.336
7	670.0	0.008	0.009	1.120	1.137	65819	142.0	0.000	0.000	0.948	0.948	11629	13.24	0.000	0.000	0.060	0.060	68.636
8	450.7	0.005	0.009	1.090	1.104	42990	129.6	0.000	0.000	0.950	0.950	10638	13.19	0.000	0.000	0.050	0.050	56.998
9	465.1	0.006	0.010	1.110	1.126	45252	117.7	0.000	0.000	0.920	0.920	9352.2	13.09	0.000	0.000	0.050	0.050	56.549
10	646.9	0.008	0.009	1.120	1.137	63551	100.2	0.000	0.000	0.910	0.910	7877.8	13.00	0.000	0.000	0.050	0.050	56.173
11	582.7	0.007	0.009	1.100	1.116	56184	41.23	0.000	0.000	0.895	0.895	3188.0	12.99	0.000	0.000	0.040	0.040	44.887
12	559.8	0.007	0.008	1.080	1.095	52966	30.95	0.000	0.000	0.893	0.893	2387.7	12.90	0.010	0.008	0.065	0.083	92.508
13	513.3	0.006	0.009	1.065	1.080	47901	21.95	0.000	0.000	0.883	0.883	1674.4	12.86	0.000	0.000	0.040	0.040	44.437
14	498.8	0.007	0.008	1.040	1.055	45466	21.40	0.000	0.000	0.820	0.820	1515.9	12.49	0.000	0.000	0.040	0.040	43.179
15	485.7	0.005	0.008	1.030	1.043	43772	20.58	0.000	0.000	0.708	0.708	1258.7	12.26	0.000	0.000	0.033	0.033	34.959
16	1070	0.013	0.015	1.290	1.318	121846	19.89	0.000	0.000	0.061	0.061	104.81	12.19	0.000	0.000	0.028	0.028	29.483
17	700.0	0.007	0.009	1.150	1.166	70520	19.37	0.000	0.000	0.480	0.480	803.48	12.10	0.010	0.008	0.062	0.080	83.635
18	612.7	0.007	0.009	1.130	1.146	60665	19.10	0.000	0.000	0.340	0.340	560.99	12.05	0.000	0.000	0.025	0.025	26.037
19	581.2	0.007	0.008	1.100	1.115	55990	18.99	0.000	0.000	0.290	0.290	475.86	12.00	0.010	0.008	0.061	0.079	81.907
20	518.2	0.007	0.008	1.090	1.105	49476	18.48	0.000	0.000	0.220	0.220	351.25	11.89	0.000	0.000	0.023	0.023	23.622
21	467.2	0.006	0.008	1.080	1.094	44158	18.21	0.000	0.000	0.185	0.185	291.13	11.63	0.000	0.000	0.020	0.020	20.090
22	441.9	0.006	0.008	1.070	1.084	41389	18.06	0.000	0.000	0.170	0.170	265.27	11.49	0.000	0.000	0.018	0.018	17.869
23	462.1	0.005	0.007	1.070	1.082	43201	17.57	0.000	0.000	0.170	0.170	258.07	11.31	0.000	0.000	0.015	0.015	14.662
24	439.7	0.005	0.007	1.070	1.082	41108	17.11	0.000	0.000	0.170	0.170	251.37	11.16	0.000	0.000	0.020	0.020	19.281
25	386.2	0.006	0.007	1.090	1.103	36808	16.72	0.000	0.000	0.170	0.170	245.54	11.02	0.000	0.000	0.010	0.010	9.5170
26	381.4	0.006	0.007	1.090	1.103	36350	16.57	0.000	0.000	0.160	0.160	229.08	10.90	0.010	0.008	0.057	0.075	70.632
27	370.3	0.005	0.006	1.070	1.081	34585	16.11	0.000	0.000	0.160	0.160	222.65	10.60	0.000	0.000	0.008	0.008	7.3290
28	358.8	0.005	0.006	1.045	1.056	32738	15.89	0.000	0.000	0.160	0.160	219.72	10.54	0.000	0.000	0.010	0.010	9.1030
29	315.7	0.005	0.007	1.020	1.032	28152	15.15	0.000	0.000	0.150	0.150	196.32	10.96	0.000	0.000	0.013	0.013	12.314
30	245.4	0.005	0.007	1.000	1.012	21457	15.02	0.000	0.000	0.130	0.130	168.74	11.08	0.000	0.000	0.020	0.020	19.139
31							14.87	0.000	0.000	0.120	0.120	154.21						
TenDaily I	390.814	0.006	0.009	1.024	1.04	36115.69	155.081	0	0.001	0.96	0.961	12954.89	13.511	0.001	0.001	0.068	0.07	81.835
TenDaily II	612.252	0.007	0.009	1.108	1.124	60478.67	23.192	0	0	0.559	0.559	1232.106	12.373	0.003	0.002	0.042	0.047	50.465
TenDaily III	386.885	0.005	0.007	1.061	1.073	35994.64	16.481	0	0	0.159	0.159	227.463	11.068	0.001	0.001	0.019	0.021	19.994
Total						1325890						144372						1522.944

Annual Sediment Load (M.T.) - 4302689.85

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Shakkar at Gadarwara ( CW1NAU000391)  
 Bhopal Local River : Shakkar

Division : Narmada Division,  
 Sub-Division : MNSD-I, Narmadapuram

Days	December--2023						January--2024						February--2024					
	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	11.78	0.010	0.008	0.060	0.078	79.408	8.830	0.01	0.008	0.048	0.066	50.352	6.540	0.010	0.008	0.037	0.055	31.078
2	13.06	0.010	0.008	0.066	0.084	94.777	8.720	0.01	0.008	0.047	0.065	48.972	6.320	0.010	0.008	0.036	0.054	29.487
3	12.50	0.000	0.008	0.063	0.071	76.680	7.940	0.01	0.008	0.044	0.062	42.533	6.250	0.010	0.008	0.036	0.054	29.160
4	11.41	0.000	0.000	0.023	0.023	22.666	7.880	0.01	0.008	0.043	0.061	41.531	6.220	0.010	0.008	0.036	0.054	29.020
5	11.05	0.010	0.008	0.057	0.075	71.630	7.850	0.01	0.008	0.043	0.061	41.373	6.180	0.010	0.008	0.035	0.053	28.299
6	10.86	0.010	0.008	0.056	0.074	69.428	7.820	0.01	0.008	0.043	0.061	41.215	6.120	0.010	0.008	0.035	0.053	28.025
7	10.49	0.010	0.008	0.055	0.073	66.188	7.800	0.01	0.008	0.043	0.061	41.109	6.030	0.010	0.008	0.035	0.053	27.613
8	10.45	0.010	0.008	0.056	0.074	66.813	7.780	0.01	0.008	0.043	0.061	41.004	5.960	0.010	0.008	0.034	0.052	26.777
9	10.07	0.010	0.008	0.053	0.071	61.773	7.720	0.01	0.008	0.043	0.061	40.687	5.900	0.010	0.008	0.034	0.052	26.508
10	10.00	0.010	0.008	0.053	0.071	61.344	7.670	0.01	0.008	0.042	0.06	39.761	5.860	0.010	0.008	0.034	0.052	26.328
11	9.890	0.000	0.000	0.020	0.020	17.090	7.600	0.01	0.008	0.042	0.06	39.398	5.800	0.010	0.008	0.034	0.052	26.058
12	9.840	0.010	0.008	0.052	0.070	59.512	7.550	0.01	0.008	0.042	0.06	39.139	5.770	0.010	0.008	0.033	0.051	25.425
13	9.780	0.010	0.008	0.052	0.070	59.149	7.520	0.01	0.008	0.042	0.06	38.984	5.680	0.010	0.008	0.033	0.051	25.028
14	9.730	0.010	0.008	0.052	0.070	58.847	7.500	0.01	0.008	0.042	0.06	38.880	5.600	0.010	0.008	0.033	0.051	24.676
15	9.690	0.010	0.008	0.051	0.069	57.768	7.450	0.01	0.008	0.041	0.059	37.977	5.520	0.010	0.008	0.032	0.050	23.846
16	9.600	0.010	0.008	0.051	0.069	57.231	7.430	0.01	0.008	0.041	0.059	37.875	5.380	0.010	0.008	0.032	0.050	23.242
17	9.570	0.010	0.008	0.051	0.069	57.053	7.410	0.01	0.008	0.041	0.059	37.773	5.200	0.010	0.008	0.031	0.049	22.015
18	9.530	0.000	0.000	0.015	0.015	12.351	7.340	0.01	0.008	0.041	0.059	37.416	5.120	0.010	0.008	0.030	0.048	21.234
19	9.450	0.010	0.008	0.050	0.068	55.521	7.310	0.01	0.008	0.041	0.059	37.263	5.070	0.010	0.008	0.030	0.048	21.026
20	9.390	0.010	0.008	0.050	0.068	55.168	7.160	0.01	0.008	0.04	0.058	35.880	4.880	0.010	0.008	0.029	0.047	19.817
21	9.330	0.010	0.008	0.050	0.068	54.816	7.150	0.01	0.008	0.04	0.058	35.830	4.710	0.010	0.008	0.028	0.046	18.719
22	9.240	0.010	0.008	0.049	0.067	53.489	7.130	0.01	0.008	0.04	0.058	35.730	4.610	0.010	0.008	0.028	0.046	18.322
23	9.210	0.010	0.008	0.049	0.067	53.315	7.080	0.01	0.008	0.04	0.058	35.479	4.500	0.010	0.008	0.027	0.045	17.496
24	9.200	0.010	0.008	0.049	0.067	53.257	7.020	0.01	0.008	0.039	0.057	34.572	4.340	0.010	0.008	0.026	0.044	16.499
25	9.180	0.001	0.008	0.049	0.058	46.003	6.960	0.01	0.008	0.039	0.057	34.277	4.300	0.010	0.008	0.026	0.044	16.347
26	9.170	0.000	0.000	0.013	0.013	10.300	6.930	0.01	0.008	0.039	0.057	34.129	4.220	0.010	0.008	0.026	0.044	16.043
27	9.070	0.010	0.008	0.049	0.067	52.504	6.890	0.01	0.008	0.039	0.057	33.932	4.030	0.010	0.008	0.025	0.043	14.972
28	9.000	0.010	0.008	0.048	0.066	51.322	6.850	0.01	0.008	0.039	0.057	33.735	3.960	0.010	0.008	0.024	0.042	14.370
29	8.940	0.010	0.008	0.048	0.066	50.979	6.820	0.01	0.008	0.038	0.056	32.998	3.910	0.010	0.008	0.024	0.042	14.189
30	8.910	0.010	0.008	0.048	0.066	50.808	6.750	0.01	0.008	0.038	0.056	32.659						
31	8.900	0.010	0.008	0.048	0.066	50.751	6.700	0.001	0.008	0.038	0.047	27.207						
TenDaily I	11.168	0.008	0.007	0.054	0.069	67.071	8.001	0.01	0.008	0.044	0.062	42.854	6.138	0.01	0.008	0.035	0.053	28.229
TenDaily II	9.647	0.008	0.006	0.044	0.059	48.969	7.427	0.01	0.008	0.041	0.059	38.059	5.402	0.01	0.008	0.032	0.05	23.237
TenDaily III	9.105	0.008	0.007	0.045	0.061	47.959	6.935	0.009	0.008	0.039	0.056	33.686	4.287	0.01	0.008	0.026	0.044	16.329
Total	December					1687.941	January					1179.671	February					661.618

Annual Sediment Load (M.T.) - 4302689.85

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Shakkar at Gadarwara ( CW1NAU000391)  
 Local River : Shakkar

Division : Narmada Division, Bhopal  
 Sub-Div : MNSD-I, Narmadapuram

Days	March--2024					April--2024					May--2024							
	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	3.710	0.010	0.008	0.023	0.041	13.142	0.970	0.01	0.007	0.008	0.025	2.095	0					
2	3.460	0.010	0.008	0.022	0.040	11.958	0.910	0.01	0.007	0.007	0.024	1.887	0					
3	3.400	0.010	0.008	0.022	0.040	11.750	0.820	0.01	0.007	0.007	0.024	1.700	0					
4	3.340	0.010	0.008	0.021	0.039	11.254	0.790	0.01	0.007	0.006	0.023	1.570	0					
5	3.070	0.010	0.008	0.020	0.038	10.079	0.700	0.01	0.007	0.006	0.023	1.391	0					
6	2.950	0.010	0.008	0.019	0.037	9.4310	0.690	0.01	0.007	0.006	0.023	1.371	0					
7	2.800	0.010	0.008	0.018	0.036	8.7090	0.650	0.01	0.007	0.005	0.022	1.236	0					
8	2.660	0.010	0.008	0.018	0.036	8.2740	0.600	0.01	0.007	0.005	0.022	1.140	0					
9	2.530	0.010	0.008	0.017	0.035	7.6510	0.580	0.01	0.007	0.005	0.022	1.102	0					
10	2.450	0.010	0.008	0.016	0.034	7.1970	0.530	0.01	0.007	0.005	0.022	1.007	0					
11	2.340	0.010	0.008	0.016	0.034	6.8740	0.540	0.01	0.007	0.005	0.022	1.026	0					
12	2.220	0.010	0.008	0.015	0.033	6.3300	0.520	0.01	0.007	0.005	0.022	0.988	0					
13	2.000	0.010	0.008	0.014	0.032	5.5300	0.470	0.01	0.007	0.004	0.021	0.853	0					
14	1.920	0.010	0.008	0.013	0.031	5.1430	0.620	0.01	0.007	0.005	0.022	1.178	0					
15	1.810	0.010	0.008	0.013	0.031	4.8480	0.520	0.01	0.007	0.005	0.022	0.988	0					
16	1.720	0.010	0.008	0.012	0.030	4.4580	0.450	0.01	0.007	0.004	0.021	0.816	0					
17	1.700	0.010	0.008	0.012	0.030	4.4060	0.350	0.01	0.007	0.003	0.02	0.605	0					
18	1.680	0.010	0.008	0.012	0.030	4.3550	0.340	0.01	0.007	0.003	0.02	0.588	0					
19	1.630	0.010	0.008	0.012	0.030	4.2250	0.320	0.01	0.007	0.003	0.02	0.553	0					
20	1.580	0.010	0.008	0.011	0.029	3.9590	0.310	0.01	0.007	0.003	0.02	0.536	0					
21	1.480	0.010	0.008	0.011	0.029	3.7080	0					0						
22	1.440	0.010	0.008	0.011	0.029	3.6080	0					0						
23	1.400	0.010	0.008	0.010	0.028	3.3870	0					0						
24	1.380	0.010	0.008	0.010	0.028	3.3380	0					0						
25	1.340	0.010	0.008	0.010	0.028	3.2420	0					0						
26	1.320	0.010	0.008	0.010	0.028	3.1930	0					0						
27	1.220	0.010	0.007	0.009	0.026	2.7410	0					0						
28	1.170	0.010	0.007	0.009	0.026	2.6280	0					0						
29	1.140	0.010	0.007	0.009	0.026	2.5610	0					0						
30	1.070	0.010	0.007	0.009	0.026	2.4040	0					0						
31	1.000	0.001	0.007	0.008	0.016	1.3820						0						
TenDaily I	3.037	0.01	0.008	0.02	0.038	9.945	0.724	0.01	0.007	0.006	0.023	1.45	0	0	0	0	0	
TenDaily II	1.86	0.01	0.008	0.013	0.031	5.013	0.444	0.01	0.007	0.004	0.021	0.813	0	0	0	0	0	
TenDaily III	1.269	0.009	0.008	0.01	0.026	2.927	0	0	0	0	0	0	0	0	0	0	0	
Total	March					181.765	April					22.632						0

Annual Sediment Load (M.T.) - 4302689.85

**Annual Sediment Load for period : 1987-2024**

Station Name : Shakkar at Gadarwara ( CW1NAU000391) Division : Narmada Division, Bhopal

Local River : Shakkar

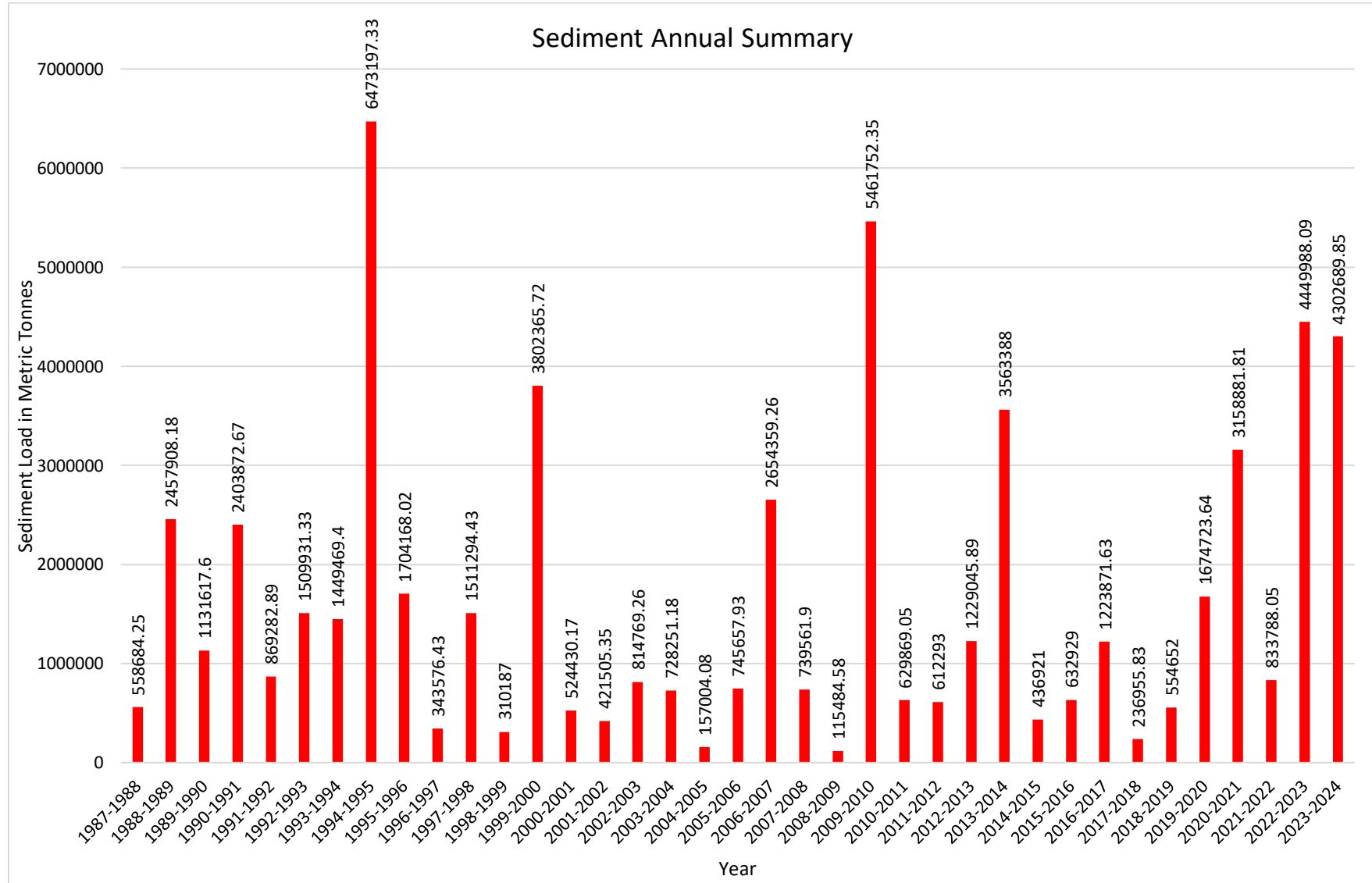
Sub-Division : MNSD-I, Narmadapuram

<b>Year</b>	<b>Monsoon (M.T.)</b>	<b>Non-Monsoon (M.T.)</b>	<b>Annual Load (M.T.)</b>	<b>Annual Run Off (MCM)</b>
<b>1987-1988</b>	558684.25	0	558684.25	469.4
<b>1988-1989</b>	2457908.18	0	2457908.18	1489.96
<b>1989-1990</b>	1131617.6	0	1131617.6	1056.04
<b>1990-1991</b>	2403872.67	0	2403872.67	2143.98
<b>1991-1992</b>	869282.89	0	869282.89	694.18
<b>1992-1993</b>	1509931.33	0	1509931.33	1102.19
<b>1993-1994</b>	1449469.4	0	1449469.4	1357.02
<b>1994-1995</b>	6473197.33	0	6473197.33	2994.98
<b>1995-1996</b>	1704168.02	0	1704168.02	868.31
<b>1996-1997</b>	343576.43	0	343576.43	642.71
<b>1997-1998</b>	1511294.43	0	1511294.43	1064.63
<b>1998-1999</b>	310187	0	310187	768.64
<b>1999-2000</b>	3802365.72	0	3802365.72	3620.84
<b>2000-2001</b>	524430.17	0	524430.17	701.09
<b>2001-2002</b>	421505.35	0	421505.35	575.17
<b>2002-2003</b>	814769.26	0	814769.26	1193.79
<b>2003-2004</b>	728251.18	0	728251.18	1567.57
<b>2004-2005</b>	157004.08	0	157004.08	637.78
<b>2005-2006</b>	745497.82	160.11	745657.93	1411.11
<b>2006-2007</b>	2654320.91	38.34	2654359.26	2307.03
<b>2007-2008</b>	739549.33	12.56	739561.9	1627.42
<b>2008-2009</b>	115482.48	2.1	115484.58	788.83
<b>2009-2010</b>	5461673.61	78.74	5461752.35	2151.56
<b>2010-2011</b>	629850	19.05	629869.05	1314.56
<b>2011-2012</b>	612288	5	612293	1280
<b>2012-2013</b>	1228999.91	45.98	1229045.89	2214.79
<b>2013-2014</b>	3562927	462	3563388	2941
<b>2014-2015</b>	436903	18	436921	1066
<b>2015-2016</b>	632929	0	632929	1075
<b>2016-2017</b>	1223466.6	405.03	1223871.63	2542.2
<b>2017-2018</b>	236955.83	0	236955.83	803.74
<b>2018-2019</b>	554652	0	554652	907
<b>2019-2020</b>	1674404.8	318.84	1674723.64	1921.41
<b>2020-2021</b>	3158039.99	841.82	3158881.81	1476.8
<b>2021-2022</b>	832041.37	1746.68	833788.05	1007.39
<b>2022-2023</b>	4446859.17	3128.92	4449988.09	3171.65
<b>2023-2024</b>	<b>4298956.22</b>	<b>3733.63</b>	<b>4302689.85</b>	<b>3954.41</b>

### Annual Sediment Load for period : 1987-2024

Station Name : Shakkar at Gadarwara ( CW1NAU000391)  
 Bhopal. Local River : Shakkar

Division : Narmada Division,  
 Sub-Div : MNSD-I, Narmadapuram



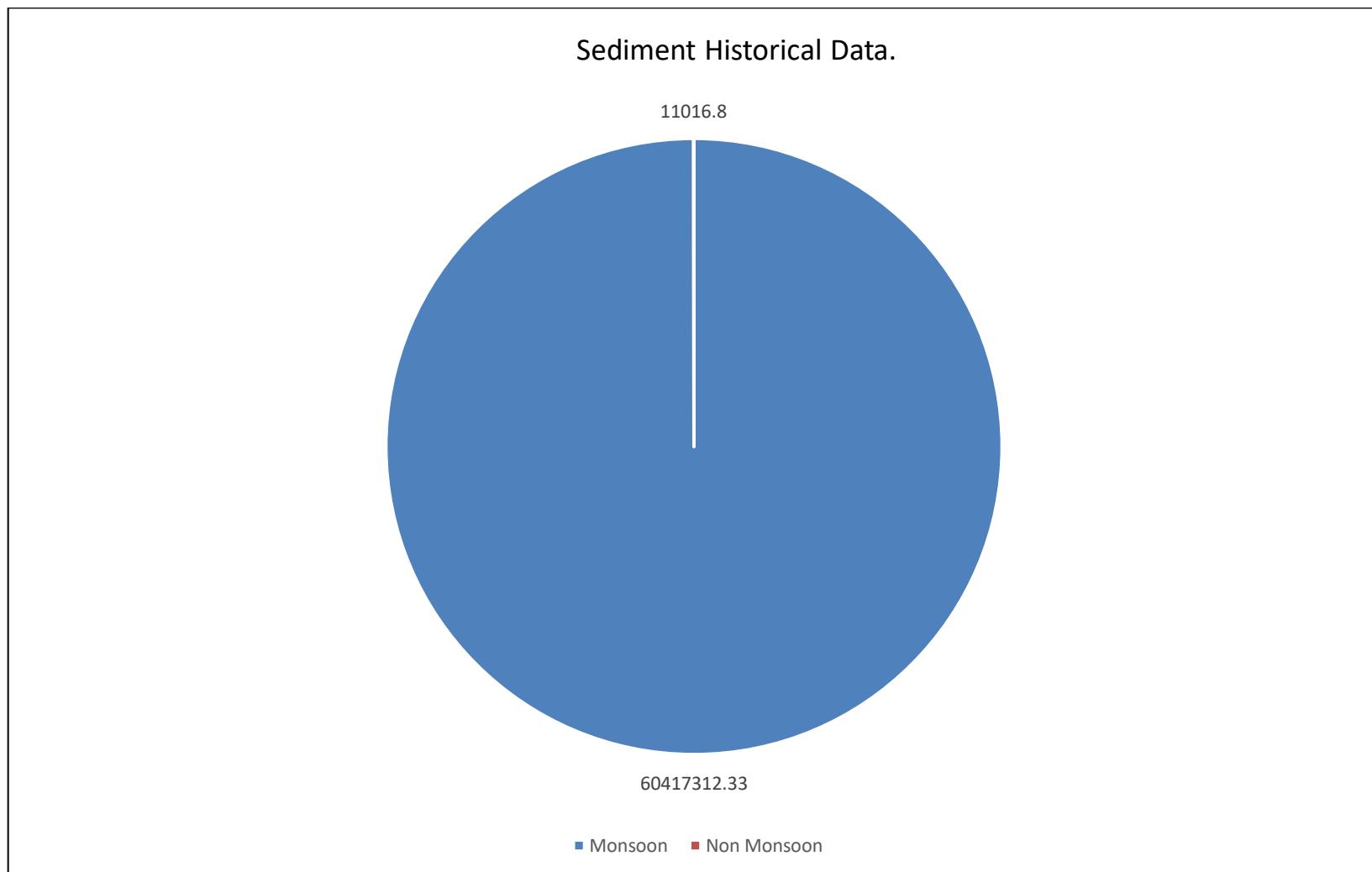
### **Seasonal Sediment Load for the period : 1987-2024**

Station Name : Shakkar at Gadarwara ( CW1NAU000391)

Division : Narmada Division, Bhopal

Local River : Shakkar

Sub-Div : MNSD-I, Narmadapuram



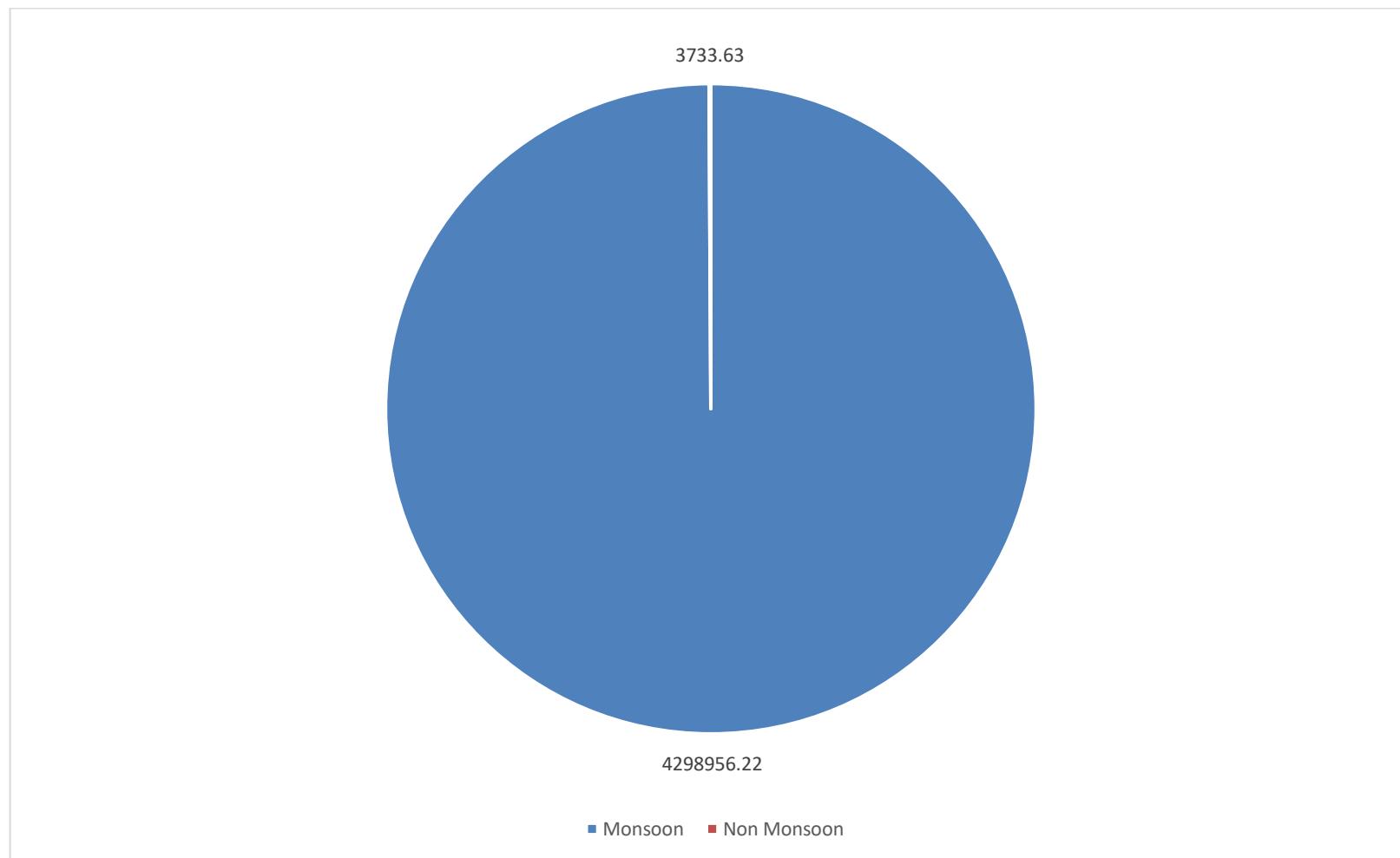
### **Seasonal Sediment Load for the period : 2023-2024**

Station Name : Shakkar at Gadarwara ( CW1NAU000391)

Local River : Shakkar

Division : Narmada Division, Bhopal

Sub-Div : MNSD-I, Narmadapuram





#### 4.8 बरमानघाट में नर्मदा

HISTORY SHEET (SEDIMENT)					
				Water Year	: 2023 - 2024
Site	: Barmanghat			Code	: CW1NAU000188
State	: Madhya Pradesh			District	Narmadapuram
Basin	: Narmada			Independent River	: Narmada
Tributary	: -			Sub Tributary	: -
Sub-Sub Tributary	: -			Local River	: Narmada
Division	: Narmada Division(ND), Bhopal			Sub-Division	: Middle Narmada Sub-Division-I, Narmadapuram
Drainage Area	: 26453.0 Sq. Km.			Bank	: Right
Latitude	: 23°01'51"			Longitude	: 79°00'56"
Current Zero of Gauge (m)	: 306				
CATEGORY		Opening Date		Closing Date	
Gauge	: 09/12/1970				
Discharge	: 20/11/1971				
Sediment	: 27/08/1972				
Water Quality	: 01/06/1979				
Reduced Level		Opening Date		Closing Date	
306.0		12-09-1970			

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Barmanghat ( CW1NAU000188)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

Days	Jun-23					Jul-23					Aug-23							
	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	135.0	0.00	0.00	0.012	0.012	140.0	715.0	0.00	0.00	0.211	0.211	13035	328.6	0.00	0.00	0.18	0.18	5110
2	103.0	0.00	0.00	0.014	0.014	124.6	556.5	0.00	0.00	0.218	0.218	10482	370.9	0.00	0.00	0.412	0.412	13203
3	97.90	0.00	0.00	0.014	0.014	118.4	514.7	0.00	0.00	0.324	0.324	14408	406.4	0.00	0.00	0.184	0.184	6461
4	114.0	0.00	0.00	0.016	0.016	157.6	426.6	0.00	0.00	0.113	0.113	4165	8654	0.00	0.00	0.311	0.311	232526
5	149.0	0.00	0.00	0.016	0.016	206.0	290.4	0.00	0.00	0.108	0.108	2710	1127	0.00	0.00	0.403	0.403	392412
6	105.0	0.00	0.00	0.016	0.016	145.2	278.0	0.00	0.00	0.086	0.086	2066	8448	0.00	0.00	0.403	0.403	294146
7	106.0	0.00	0.00	0.016	0.016	146.5	491.0	0.00	0.00	1.407	1.407	59688	3190	0.00	0.00	0.261	0.261	71931
8	169.0	0.00	0.00	0.016	0.016	233.6	531.0	0.00	0.00	0.697	0.697	31977	2811	0.00	0.00	0.371	0.371	90095
9	115.0	0.00	0.00	0.016	0.016	159.0	485.0	0.00	0.00	0.674	0.674	28243	1869	0.00	0.00	0.502	0.502	81042
10	98.70	0.00	0.00	0.015	0.015	127.9	1055.8	0.00	0.00	0.697	0.697	63581	1571	0.00	0.00	0.303	0.303	41117
11	103.0	0.00	0.00	0.015	0.015	133.5	1076.3	0.00	0.00	0.581	0.581	54029	952.9	0.00	0.00	0.140	0.140	11526
12	99.10	0.00	0.00	0.015	0.015	128.4	670.4	0.00	0.00	0.415	0.415	24038	799.7	0.00	0.00	0.135	0.135	9328
13	98.70	0.00	0.00	0.017	0.017	145.0	706.6	0.00	0.00	0.145	0.145	8852.3	706.4	0.00	0.00	0.137	0.137	8362
14	114.0	0.00	0.00	0.017	0.017	167.4	624.2	0.00	0.00	0.317	0.317	17096	508.3	0.00	0.00	0.029	0.029	1274
15	108.0	0.00	0.00	0.018	0.018	168.0	481.8	0.00	0.00	0.264	0.264	10990	450.0	0.00	0.00	0.267	0.267	10381
16	110.0	0.00	0.00	0.018	0.018	171.1	515.6	0.00	0.00	0.237	0.237	10558	440.9	0.00	0.00	0.250	0.250	9523
17	106.0	0.00	0.00	0.019	0.019	174.0	1295	0.00	0.00	0.215	0.215	24063	420.9	0.00	0.00	0.252	0.252	9164
18	103.0	0.00	0.00	0.021	0.021	186.9	668.8	0.00	0.00	0.164	0.164	9477	402.6	0.00	0.00	0.253	0.253	8801
19	104.0	0.00	0.00	0.025	0.025	224.6	930.3	0.00	0.00	0.265	0.265	21300	2134	0.00	0.00	0.244	0.244	44986
20	102.0	0.00	0.00	0.026	0.026	229.1	685.2	0.00	0.00	0.345	0.345	20424	2281	0.00	0.00	0.408	0.408	80408
21	105.0	0.00	0.00	0.028	0.028	254.0	900.5	0.00	0.00	0.431	0.431	33533	2824	0.00	0.00	0.213	0.213	51974
22	106.0	0.00	0.00	0.03	0.03	274.8	1172	0.00	0.00	0.205	0.205	20764	1994	0.00	0.00	0.011	0.011	1895
23	108.0	0.00	0.00	0.031	0.031	289.3	1506	0.00	0.00	0.179	0.179	23290	803.0	0.00	0.00	0.142	0.142	9852
24	466.0	0.00	0.00	0.033	0.033	1328.7	1340	0.00	0.00	0.168	0.168	19443	699.9	0.00	0.00	0.180	0.180	10885
25	133.0	0.00	0.00	0.08	0.08	919.3	1093	0.00	0.00	0.272	0.272	25693	683.4	0.00	0.00	0.034	0.034	2008
26	135.0	0.00	0.00	0.062	0.062	723.2	720.7	0.00	0.00	0.171	0.171	10648	612.5	0.00	0.00	0.132	0.132	6985
27	290.0	0.00	0.00	0.051	0.051	1277.9	701.3	0.00	0.00	0.117	0.117	7089	588.4	0.00	0.00	0.226	0.226	11489
28	2275	0.00	0.00	0.056	0.056	11007	639.7	0.00	0.00	0.128	0.128	7075	574.5	0.00	0.00	0.064	0.064	3177
29	3135	0.00	0.00	0.06	0.06	16252	418.4	0.00	0.00	0.167	0.167	6037	496.7	0.00	0.00	0.025	0.025	1073
30	941.0	0.00	0.00	0.103	0.103	8374	386.0	0.00	0.00	0.108	0.108	3602	481.2	0.00	0.00	0.040	0.040	1663
31							377.9	0.00	0.00	0.217	0.217	7085	420.9	0.00	0.00	0.303	0.303	11019
TenDaily I	119.26	0	0	0.015	0.015	155.875	534.4	0	0	0.454	0.454	23035.52	3891.69	0	0	0.333	0.333	122804.3
TenDaily II	104.78	0	0	0.019	0.019	172.803	765.46	0	0	0.295	0.295	20082.69	909.66	0	0	0.212	0.212	19375.22
TenDaily III	769.4	0	0	0.053	0.053	4070.036	841.409	0	0	0.197	0.197	14932.63	925.3	0	0	0.125	0.125	10183.59
Total	June					43987.15	July					595441	August					1533815

Annual Sediment Load (M.T.) - 2831877.45

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Barmanghat ( CW1NAU000188 )

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

Days	Sep-23					Oct-23					November---2023							
	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	386.7	0.00	0.00	0.837	0.837	27964.9	399.0	0.00	0.00	0.061	0.061	2103	211.0	0.00	0.00	0.054	0.054	984.4
2	377.9	0.00	0.00	0.090	0.090	2938.6	457.0	0.00	0.00	0.088	0.088	3475	210.0	0.00	0.00	0.054	0.054	979.8
3	365.3	0.00	0.00	0.082	0.082	2588.1	698.0	0.00	0.00	0.047	0.047	2834	217.0	0.00	0.00	0.049	0.049	918.7
4	361.9	0.00	0.00	0.080	0.080	2501.5	602.0	0.00	0.00	0.054	0.054	2809	221.0	0.00	0.00	0.045	0.045	859.2
5	363.1	0.00	0.00	0.198	0.198	6211.6	604.0	0.00	0.00	0.038	0.038	1983	185.0	0.00	0.00	0.043	0.043	687.3
6	373.6	0.00	0.00	0.198	0.198	6391.3	557.4	0.00	0.00	0.040	0.040	1926	180.0	0.00	0.00	0.045	0.045	699.8
7	375.8	0.00	0.00	0.321	0.321	10422.6	295.0	0.00	0.00	0.068	0.068	1733	206.0	0.00	0.00	0.047	0.047	836.5
8	379.5	0.00	0.00	0.398	0.398	13049.9	275.0	0.00	0.00	0.070	0.070	1663	218.0	0.00	0.00	0.044	0.044	828.7
9	571.6	0.00	0.00	0.316	0.316	15606.1	266.6	0.00	0.00	0.072	0.072	1658	222.0	0.00	0.00	0.040	0.040	767.2
10	535.4	0.00	0.00	0.303	0.303	14016.3	259.3	0.00	0.00	0.073	0.073	1635	214.0	0.00	0.00	0.038	0.038	702.6
11	592.7	0.00	0.00	0.200	0.200	10241.9	251.0	0.00	0.00	0.084	0.084	1822	207.0	0.00	0.00	0.036	0.036	643.9
12	486.6	0.00	0.00	0.322	0.322	13537.6	249.1	0.00	0.00	0.080	0.080	1722	200.0	0.00	0.00	0.046	0.046	794.9
13	588.4	0.00	0.00	0.317	0.317	16115.6	251.5	0.00	0.00	0.080	0.080	1738	195.0	0.00	0.00	0.042	0.042	707.6
14	423.5	0.00	0.00	0.327	0.327	11965.1	247.4	0.00	0.00	0.082	0.082	1753	177.0	0.00	0.00	0.033	0.033	504.7
15	409.7	0.00	0.00	0.326	0.326	11539.8	244.2	0.00	0.00	0.081	0.081	1709	172.0	0.00	0.00	0.031	0.031	460.7
16	3364.8	0.00	0.00	0.329	0.329	95646.5	246.3	0.00	0.00	0.078	0.078	1660	164.0	0.00	0.00	0.029	0.029	410.9
17	3823.2	0.00	0.00	0.284	0.284	93812.2	245.0	0.00	0.00	0.078	0.078	1651	150.0	0.00	0.00	0.036	0.036	466.6
18	2946.6	0.00	0.00	0.068	0.068	17311.9	242.4	0.00	0.00	0.075	0.075	1571	148.0	0.00	0.00	0.026	0.026	332.5
19	1030.6	0.00	0.00	0.037	0.037	3294.6	237.0	0.00	0.00	0.074	0.074	1515	110.0	0.00	0.00	0.029	0.029	275.6
20	638	0.00	0.00	0.040	0.040	2204.9	228.4	0.00	0.00	0.071	0.071	1401	76.20	0.00	0.00	0.037	0.037	243.6
21	681.5	0.00	0.00	0.084	0.084	4946.1	226.2	0.00	0.00	0.069	0.069	1349	173.0	0.00	0.00	0.025	0.025	373.7
22	1071.9	0.00	0.00	0.056	0.056	5186.3	225.0	0.00	0.00	0.068	0.068	1322	151.0	0.00	0.00	0.023	0.023	300.1
23	1003.6	0.00	0.00	0.034	0.034	2948.2	238.7	0.00	0.00	0.066	0.066	1361	178.0	0.00	0.00	0.022	0.022	338.3
24	3838.1	0.00	0.00	0.198	0.198	65659.1	222.4	0.00	0.00	0.063	0.063	1211	166.0	0.00	0.00	0.019	0.019	272.5
25	1047.7	0.00	0.00	0.321	0.321	29057.3	207.0	0.00	0.00	0.061	0.061	1091	217.0	0.00	0.00	0.022	0.022	412.5
26	601.8	0.00	0.00	0.288	0.288	14974.7	205.0	0.00	0.00	0.059	0.059	1045	210.0	0.00	0.00	0.047	0.047	852.8
27	573	0.00	0.00	0.249	0.249	12327.3	204.0	0.00	0.00	0.057	0.057	1005	206.0	0.00	0.00	0.047	0.047	836.5
28	513.3	0.00	0.00	0.023	0.023	1020.0	208.0	0.00	0.00	0.054	0.054	970.4	169.0	0.00	0.00	0.037	0.037	540.3
29	507.1	0.00	0.00	0.253	0.253	11084.8	201.0	0.00	0.00	0.057	0.057	989.9	161.0	0.00	0.00	0.019	0.019	264.3
30	481.2	0.00	0.00	0.251	0.251	10435.5	195.0	0.00	0.00	0.055	0.055	926.6	153.0	0.00	0.00	0.018	0.018	237.9
31						205.0	0.00	0.00	0.054	0.054	956.4							
TenDaily I	409.08	0	0	0.282	0.282	10169.08	441.33	0	0	0.061	0.061	2182.042	208.4	0	0	0.046	0.046	826.442
TenDaily II	1430.41	0	0	0.225	0.225	27566.99	244.23	0	0	0.078	0.078	1654.169	159.92	0	0	0.035	0.035	484.085
TenDaily III	1031.92	0	0	0.176	0.176	15763.93	212.482	0	0	0.06	0.06	1111.475	178.4	0	0	0.028	0.028	442.886
Total	September					535000	October					50588.33	November					17534.14

Annual Sediment Load (M.T.) - 2831877.45

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Barmanghat ( CW1NAU000188)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

Days	December--2023						January--2024						February--2024						
	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	119.0	0.00	0.00	0.030	0.030	308.4	99.90	0.00	0.00	0.017	0.017	146.7	120.0	0.00	0.00	0.031	0.031	321.4	
2	138.0	0.00	0.00	0.034	0.034	405.4	102.0	0.00	0.00	0.027	0.027	237.9	113.0	0.00	0.00	0.029	0.029	283.1	
3	110.0	0.00	0.00	0.029	0.029	275.6	108.0	0.00	0.00	0.028	0.028	261.3	109.0	0.00	0.00	0.028	0.028	263.7	
4	144.0	0.00	0.00	0.020	0.020	248.8	101.0	0.00	0.00	0.027	0.027	235.6	110.0	0.00	0.00	0.029	0.029	275.6	
5	141.0	0.00	0.00	0.035	0.035	426.4	107.0	0.00	0.00	0.028	0.028	258.9	125.0	0.00	0.00	0.018	0.018	194.4	
6	136.0	0.00	0.00	0.034	0.034	399.5	110.0	0.00	0.00	0.029	0.029	275.6	122.0	0.00	0.00	0.031	0.031	326.8	
7	128.0	0.00	0.00	0.032	0.032	353.9	115.0	0.00	0.00	0.030	0.030	298.1	118.0	0.00	0.00	0.030	0.030	305.9	
8	121.0	0.00	0.00	0.031	0.031	324.1	90.70	0.00	0.00	0.020	0.020	156.7	115.0	0.00	0.00	0.030	0.030	298.1	
9	117.0	0.00	0.00	0.030	0.030	303.3	88.50	0.00	0.00	0.024	0.024	183.5	111.0	0.00	0.00	0.029	0.029	278.1	
10	115.0	0.00	0.00	0.030	0.030	298.1	91.80	0.00	0.00	0.025	0.025	198.3	108.0	0.00	0.00	0.028	0.028	261.3	
11	109.0	0.00	0.00	0.019	0.019	178.9	104.0	0.00	0.00	0.027	0.027	242.6	92.00	0.00	0.00	0.025	0.025	198.7	
12	96.90	0.00	0.00	0.026	0.026	217.7	127.0	0.00	0.00	0.032	0.032	351.1	98.60	0.00	0.00	0.017	0.017	144.8	
13	90.60	0.00	0.00	0.024	0.024	187.9	139.0	0.00	0.00	0.034	0.034	408.3	101.0	0.00	0.00	0.027	0.027	235.6	
14	88.80	0.00	0.00	0.024	0.024	184.1	130.0	0.00	0.00	0.033	0.033	370.7	109.0	0.00	0.00	0.028	0.028	263.7	
15	77.40	0.00	0.00	0.022	0.022	147.1	117.0	0.00	0.00	0.022	0.022	222.4	129.0	0.00	0.00	0.032	0.032	356.7	
16	95.10	0.00	0.00	0.025	0.025	205.4	121.0	0.00	0.00	0.031	0.031	324.1	130.0	0.00	0.00	0.033	0.033	370.7	
17	115.0	0.00	0.00	0.030	0.030	298.1	115.0	0.00	0.00	0.030	0.030	298.1	133.0	0.00	0.00	0.033	0.033	379.2	
18	155.0	0.00	0.00	0.016	0.016	214.3	111.0	0.00	0.00	0.029	0.029	278.1	120.0	0.00	0.00	0.031	0.031	321.4	
19	150.0	0.00	0.00	0.036	0.036	466.6	122.0	0.00	0.00	0.031	0.031	326.8	117.0	0.00	0.00	0.016	0.016	161.7	
20	135.0	0.00	0.00	0.034	0.034	396.6	116.0	0.00	0.00	0.033	0.033	330.7	121.0	0.00	0.00	0.031	0.031	324.1	
21	122.0	0.00	0.00	0.031	0.031	326.8	110.0	0.00	0.00	0.029	0.029	275.6	114.0	0.00	0.00	0.029	0.029	285.6	
22	129.0	0.00	0.00	0.032	0.032	356.7	114.0	0.00	0.00	0.021	0.021	206.8	103.0	0.00	0.00	0.027	0.027	240.3	
23	164.0	0.00	0.00	0.039	0.039	552.6	116.0	0.00	0.00	0.030	0.030	300.7	118.0	0.00	0.00	0.030	0.030	305.9	
24	160.0	0.00	0.00	0.038	0.038	525.3	120.0	0.00	0.00	0.031	0.031	321.4	126.0	0.00	0.00	0.032	0.032	348.4	
25	152.0	0.00	0.00	0.037	0.037	485.9	117.0	0.00	0.00	0.030	0.030	303.3	120.0	0.00	0.00	0.031	0.031	321.4	
26	120.0	0.00	0.00	0.018	0.018	186.6	115.0	0.00	0.00	0.030	0.030	298.1	119.0	0.00	0.00	0.030	0.030	308.4	
27	128.0	0.00	0.00	0.032	0.032	353.9	116.0	0.00	0.00	0.030	0.030	300.7	96.10	0.00	0.00	0.026	0.026	215.9	
28	133.0	0.00	0.00	0.033	0.033	379.2	120.0	0.00	0.00	0.031	0.031	321.4	112.0	0.00	0.00	0.029	0.029	280.6	
29	116.0	0.00	0.00	0.030	0.030	300.7	118.0	0.00	0.00	0.019	0.019	193.7	90.20	0.00	0.00	0.024	0.024	187.0	
30	103.0	0.00	0.00	0.027	0.027	240.3	120.0	0.00	0.00	0.031	0.031	321.4							
31	95.00	0.00	0.00	0.025	0.025	205.2	122.0	0.00	0.00	0.031	0.031	326.8							
TenDaily I	126.9	0	0	0.031	0.031	334.351	101.39	0	0	0.026	0.026	225.265	115.1	0	0	0.028	0.028	280.835	
TenDaily II	111.28	0	0	0.026	0.026	249.664	120.2	0	0	0.03	0.03	315.291	115.06	0	0	0.027	0.027	275.661	
TenDaily III	129.273	0	0	0.031	0.031	355.74	117.091	0	0	0.028	0.028	288.168	110.922	0	0	0.029	0.029	277.06	
Total		December					9753.29	January					8575.399	February					8058.493

Annual Sediment Load (M.T.) - 2831877.45

### Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Narmada at Barmanghat ( CW1NAU000188)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram

Days	March--2024					April--2024					May--2024							
	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	78.30	0.00	0.00	0.022	0.022	148.8	152.0	0.00	0.00	0.019	0.019	249.5	178.0	0.00	0.00	0.042	0.042	645.9
2	71.70	0.00	0.00	0.020	0.020	123.9	112.0	0.00	0.00	0.029	0.029	280.6	146.0	0.00	0.00	0.036	0.036	454.1
3	70.00	0.00	0.00	0.020	0.020	121.0	84.10	0.00	0.00	0.023	0.023	167.1	121.0	0.00	0.00	0.031	0.031	324.1
4	84.90	0.00	0.00	0.014	0.014	102.7	92.30	0.00	0.00	0.025	0.025	199.4	180.0	0.00	0.00	0.042	0.042	653.2
5	82.80	0.00	0.00	0.023	0.023	164.5	108.0	0.00	0.00	0.028	0.028	261.3	145.0	0.00	0.00	0.035	0.035	438.5
6	76.20	0.00	0.00	0.021	0.021	138.3	87.70	0.00	0.00	0.024	0.024	181.9	215.0	0.00	0.00	0.011	0.011	204.3
7	73.10	0.00	0.00	0.021	0.021	132.6	94.00	0.00	0.00	0.025	0.025	203.0	124.0	0.00	0.00	0.031	0.031	332.1
8	79.80	0.00	0.00	0.022	0.022	151.7	111.0	0.00	0.00	0.016	0.016	153.4	120.0	0.00	0.00	0.031	0.031	321.4
9	77.00	0.00	0.00	0.022	0.022	146.4	126.0	0.00	0.00	0.032	0.032	348.4	108.0	0.00	0.00	0.028	0.028	261.3
10	95.00	0.00	0.00	0.025	0.025	205.2	119.0	0.00	0.00	0.030	0.030	308.4	118.0	0.00	0.00	0.03	0.03	305.9
11	91.90	0.00	0.00	0.014	0.014	111.2	125.0	0.00	0.00	0.032	0.032	345.6	183.0	0.00	0.00	0.043	0.043	679.9
12	102.0	0.00	0.00	0.027	0.027	237.9	88.30	0.00	0.00	0.024	0.024	183.1	140.0	0.00	0.00	0.034	0.034	411.3
13	89.90	0.00	0.00	0.024	0.024	186.4	98.20	0.00	0.00	0.026	0.026	220.6	211.0	0.00	0.00	0.013	0.013	237.0
14	72.10	0.00	0.00	0.020	0.020	124.6	80.00	0.00	0.00	0.022	0.022	152.1	214.0	0.00	0.00	0.048	0.048	887.5
15	71.20	0.00	0.00	0.020	0.020	123.0	73.90	0.00	0.00	0.015	0.015	95.8	211.0	0.00	0.00	0.048	0.048	875.1
16	69.30	0.00	0.00	0.020	0.020	119.8	71.10	0.00	0.00	0.020	0.020	122.9	189.0	0.00	0.00	0.044	0.044	718.5
17	70.00	0.00	0.00	0.020	0.020	121.0	107.0	0.00	0.00	0.028	0.028	258.9	184.0	0.00	0.00	0.043	0.043	683.6
18	65.90	0.00	0.00	0.012	0.012	68.3	110.0	0.00	0.00	0.029	0.029	275.6	191.0	0.00	0.00	0.044	0.044	726.1
19	64.10	0.00	0.00	0.019	0.019	105.2	98.90	0.00	0.00	0.026	0.026	222.2	145.0	0.00	0.00	0.035	0.035	438.5
20	96.20	0.00	0.00	0.026	0.026	216.1	92.90	0.00	0.00	0.025	0.025	200.7	182.0	0.00	0.00	0.013	0.013	204.4
21	83.80	0.00	0.00	0.023	0.023	166.5	95.00	0.00	0.00	0.025	0.025	205.2	180.0	0.00	0.00	0.042	0.042	653.2
22	82.90	0.00	0.00	0.023	0.023	164.7	113.0	0.00	0.00	0.014	0.014	136.7	178.0	0.00	0.00	0.042	0.042	645.9
23	113.0	0.00	0.00	0.029	0.029	283.1	118.0	0.00	0.00	0.030	0.030	305.9	110.0	0.00	0.00	0.029	0.029	275.6
24	105.0	0.00	0.00	0.028	0.028	254.0	145.0	0.00	0.00	0.035	0.035	438.5	159.0	0.00	0.00	0.038	0.038	522.0
25	110.0	0.00	0.00	0.029	0.029	275.6	147.0	0.00	0.00	0.036	0.036	457.2	186.0	0.00	0.00	0.043	0.043	691.0
26	91.30	0.00	0.00	0.012	0.012	94.66	136.0	0.00	0.00	0.034	0.034	399.5	125.0	0.00	0.00	0.032	0.032	345.6
27	77.90	0.00	0.00	0.022	0.022	148.1	156.0	0.00	0.00	0.038	0.038	512.2	188.0	0.00	0.00	0.016	0.016	259.9
28	91.90	0.00	0.00	0.025	0.025	198.5	150.0	0.00	0.00	0.036	0.036	466.6	184.0	0.00	0.00	0.043	0.043	683.6
29	80.00	0.00	0.00	0.022	0.022	152.1	217.0	0.00	0.00	0.013	0.013	243.7	189.0	0.00	0.00	0.044	0.044	718.5
30	120.0	0.00	0.00	0.031	0.031	321.4	185.0	0.00	0.00	0.043	0.043	687.3	181.0	0.00	0.00	0.042	0.042	656.8
31	95.00	0.00	0.00	0.025	0.025	205.2						177.0	0.00	0.00	0.031	0.031	474.1	
TenDaily I	78.88	0	0	0.021	0.021	143.506	108.61	0	0	0.025	0.025	235.307	145.5	0	0	0.032	0.032	394.079
TenDaily II	79.26	0	0	0.02	0.02	141.351	94.53	0	0	0.025	0.025	207.73	185	0	0	0.037	0.037	586.181
TenDaily III	95.527	0	0	0.024	0.024	205.813	146.2	0	0	0.03	0.03	385.275	168.818	0	0	0.037	0.037	538.751
Total	March					5112.513	April					8283.116						15728.86

Annual Sediment Load (M.T.) - 2831877.45

### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Barmanghat (CW1NAU000188) Division : Narmada Division, Bhopal  
 Local River : Narmada Sub-Division: MNSD-I, Narmadapuram

<b>Year</b>	<b>Monsoon (M.T.)</b>	<b>Non-Monsoon (M.T.)</b>	<b>Annual Load (M.T.)</b>	<b>Annual Run Off (MCM)</b>
<b>1987-1988</b>	4381713.26	0	4381713.26	7218.11
<b>1988-1989</b>	8267376.12	0	8267376.12	12306.84
<b>1989-1990</b>	1419707.17	0	1419707.17	3539.78
<b>1990-1991</b>	20391794.48	0	20391794.48	16171.23
<b>1991-1992</b>	16865568.65	0	16865568.65	12532.34
<b>1992-1993</b>	9827989.92	0	9827989.92	8121.38
<b>1993-1994</b>	7409792.47	0	7409792.47	8252.5
<b>1994-1995</b>	60655648.9	0	60655648.9	26240.7
<b>1995-1996</b>	13038553.8	0	13038553.8	10345.6
<b>1996-1997</b>	733589.54	0	733589.54	4254.21
<b>1997-1998</b>	6005110.89	0	6005110.89	8409.89
<b>1998-1999</b>	1253537.41	0	1253537.41	6845.88
<b>1999-2000</b>	12801168.91	0	12801168.91	20564.29
<b>2000-2001</b>	1591161.9	0	1591161.9	6223.5
<b>2001-2002</b>	2438049.9	0	2438049.9	10661.06
<b>2002-2003</b>	8769326.44	0	8769326.44	6764.87
<b>2003-2004</b>	9592151.93	0	9592151.93	14842.88
<b>2004-2005</b>	2583377.56	0	2583377.56	8770.91
<b>2005-2006</b>	15179014.84	79829.98	15258844.82	21037.63
<b>2006-2007</b>	3190311.39	40541.34	3230852.72	9267.54
<b>2007-2008</b>	1070163.99	77034.66	1147198.65	6153.63
<b>2008-2009</b>	2081124.18	58625.3	2139749.48	8569.49
<b>2009-2010</b>	18820922.04	78878	18899800.04	5717.65
<b>2010-2011</b>	1663068.17	160331.96	1823400.13	7788.37
<b>2011-2012</b>	11067511	122367	11189878	25203
<b>2012-2013</b>	1576090.85	35014.79	1611105.63	10312.87
<b>2013-2014</b>	20335632	77300	20412932	22328
<b>2014-2015</b>	4226014	60963	4286977	8875
<b>2015-2016</b>	748211.06	9753.75	757964.81	2940.63
<b>2016-2017</b>	8001661.45	39094.35	8040755.8	11706.22
<b>2017-2018</b>	609270.82	25589.58	634860.4	2933.71
<b>2018-2019</b>	410212	22702	432914	8511
<b>2019-2020</b>	8241441.8	33771.86	8275213.66	18604.27
<b>2020-2021</b>	8598005.8	18855.54	8616861.34	12451.81
<b>2021-2022</b>	425785.07	33712.51	459497.58	5521.41
<b>2022-2023</b>	2872943.85	43515.53	2916459.37	13069.73
<b>2023-2024</b>	2776365.78	55511.67	2831877.45	13448.13

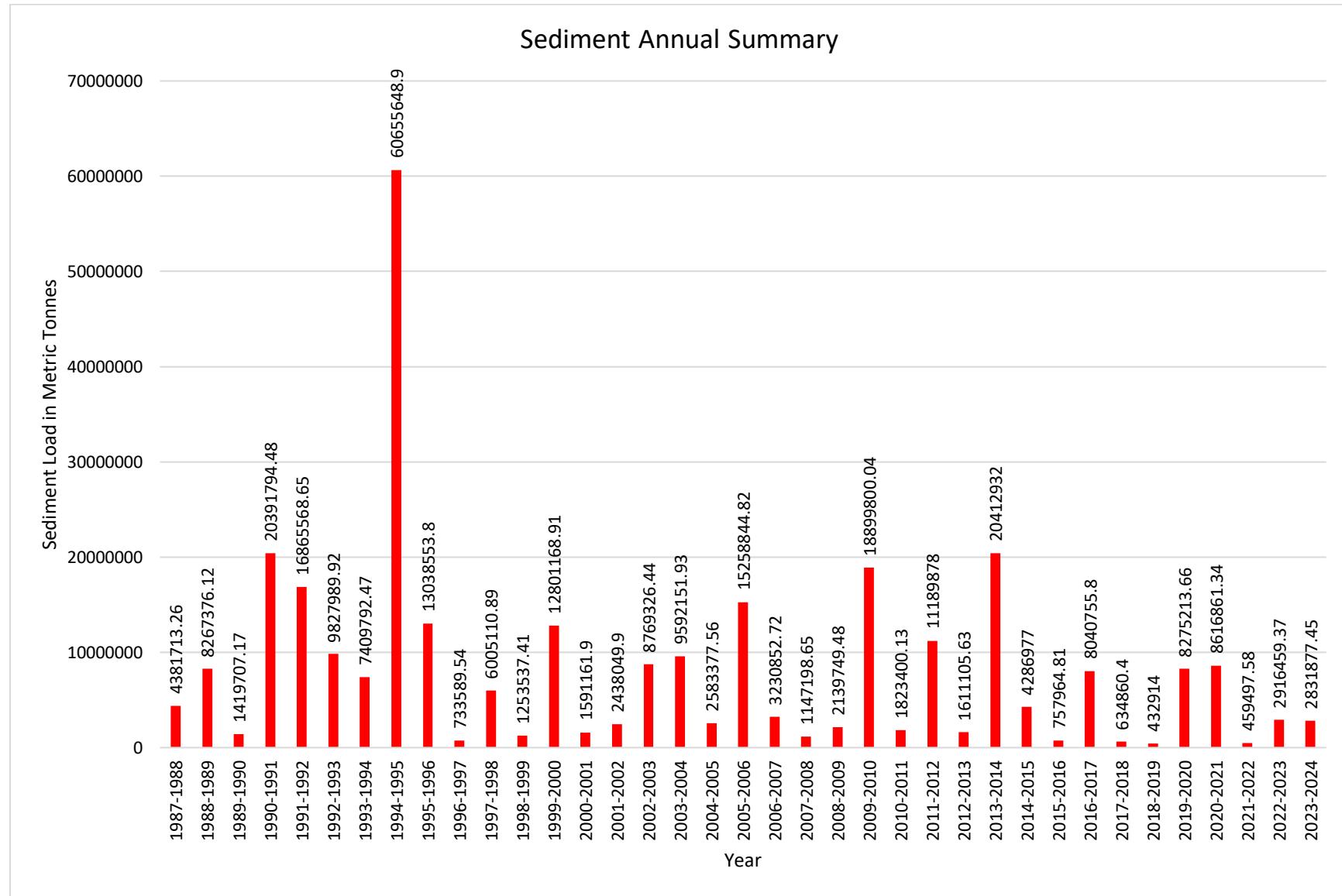
### Annual Sediment Load for period : 1987-2024

Station Name : Narmada at Barmanghat ( CW1NAU000188)

Local River : Narmada

Division : Narmada Division, Bhopal

Sub-Division: MNSD-I, Narmadapuram



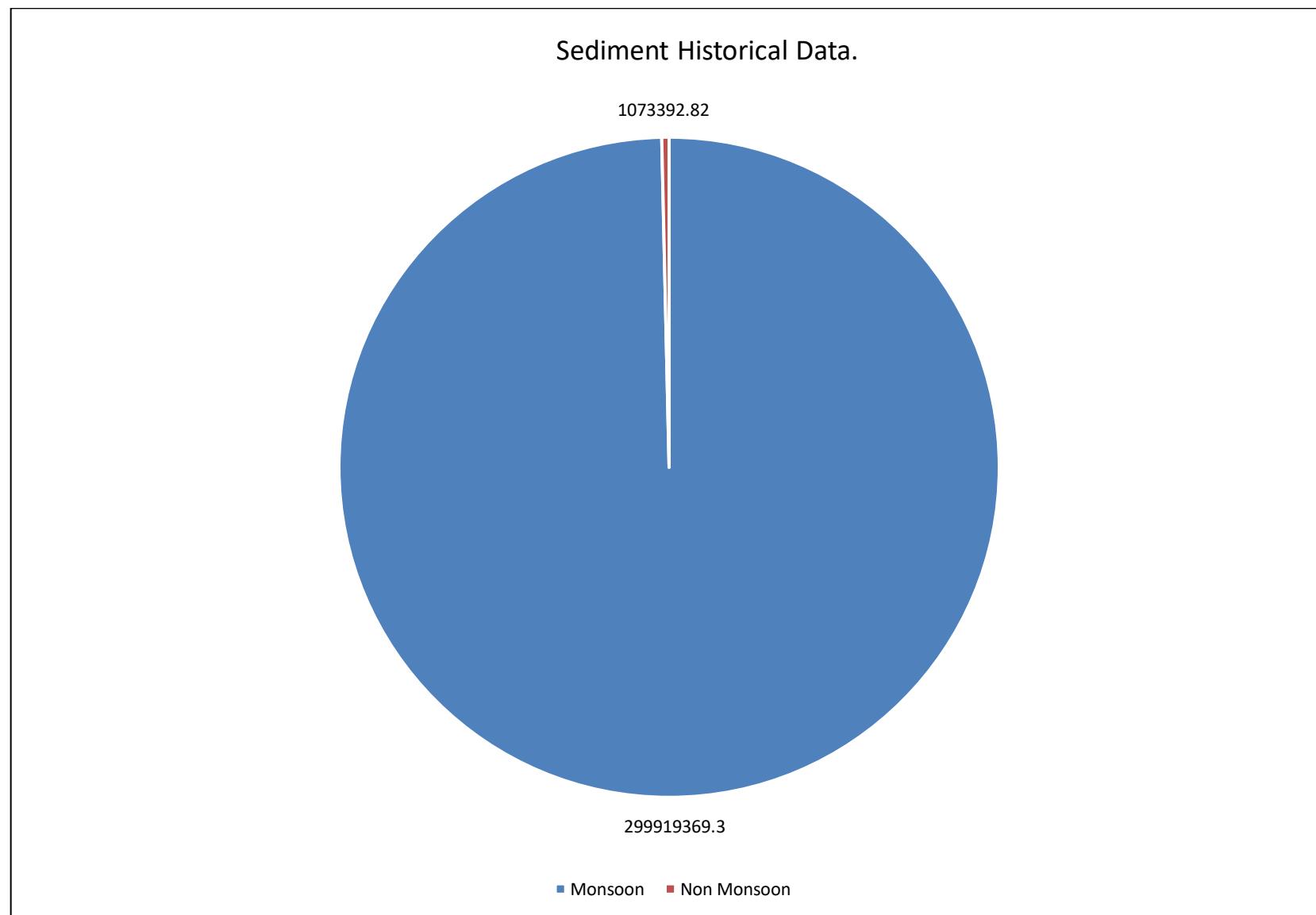
### **Seasonal Sediment Load for period : 1987-2024**

Station Name : Narmada at Barmanghat ( CW1NAU000188)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram



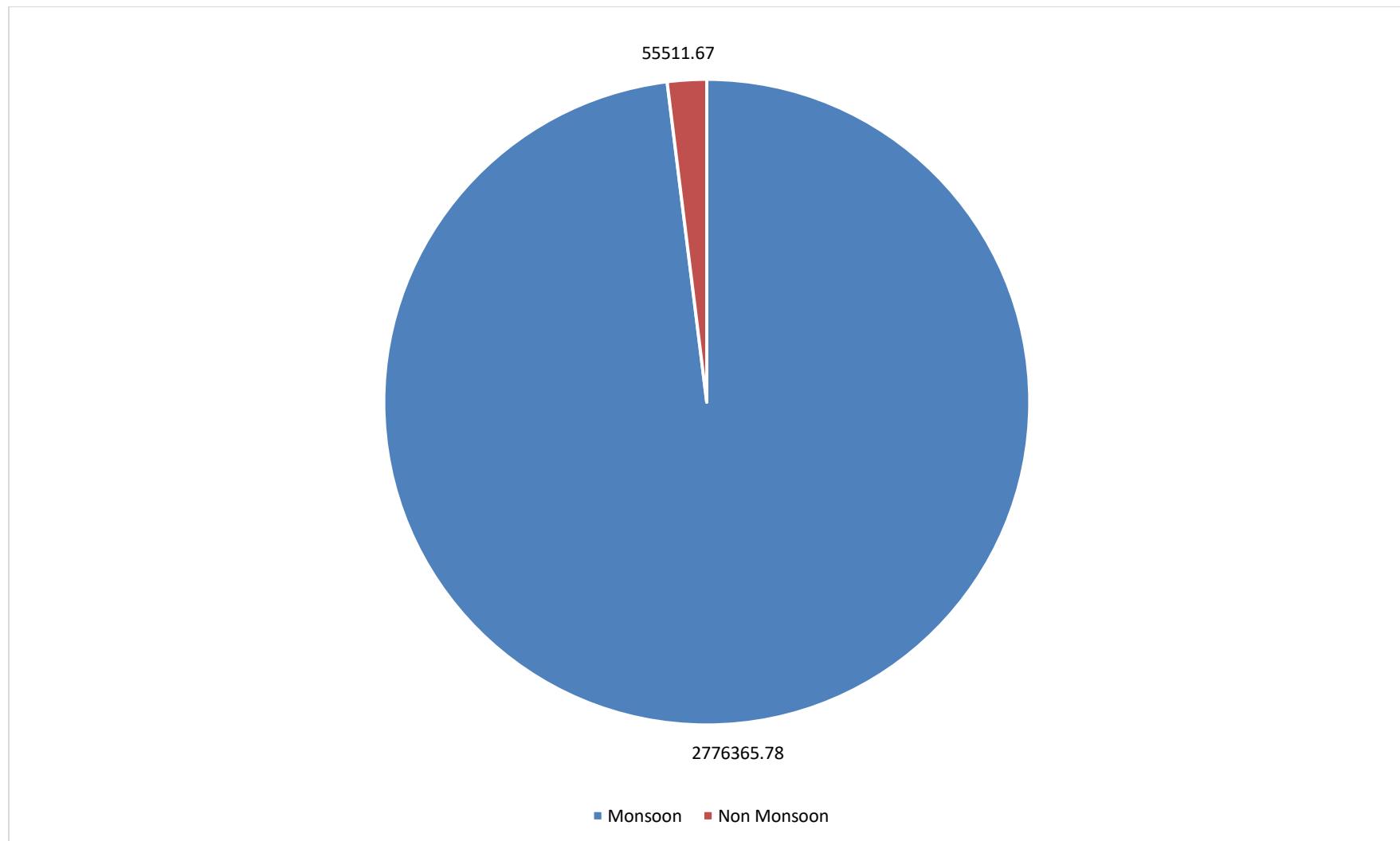
### **Seasonal Sediment Load for period: 2023-2024**

Station Name : Narmada at Barmanghat ( CW1NAU000188)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : MNSD-I, Narmadapuram





#### 4.9 बमनी में बंजर

HISTORY SHEET (SEDIMENT)					
				Water Year	: 2023 - 2024
<b>Site</b>	: Bamni			<b>Code</b>	: CW1NAU000781
<b>State</b>	: Madhya Pradesh			<b>District</b>	MANDLA
<b>Basin</b>	: Narmada			<b>Independent River</b>	: Narmada
<b>Tributary</b>	: -			<b>Sub Tributary</b>	: -
<b>Sub-Sub Tributary</b>	: -			<b>Local River</b>	: Banjar
<b>Division</b>	: Narmada Division(ND), Bhopal			<b>Sub-Division</b>	: Upper Narmada Sub-Division, Jabalpur
<b>Drainage Area</b>	: 1864.0 Sq. Km.			<b>Bank</b>	: Left
<b>Latitude</b>	: 22°29'03"			<b>Longitude</b>	: 80°22'41"
<b>Current Zero of Gauge (m)</b>	: 436				
<b>CATEGORY</b>		<b>Opening Date</b>		<b>Closing Date</b>	
<b>Gauge</b>	: 20/06/1999				
<b>Discharge</b>	: 30/11/1999				
<b>Sediment</b>	: 01/07/2002				
<b>Water Quality</b>	: 01/07/2002				
<b>Reduced Level</b>		<b>Opening Date</b>		<b>Closing Date</b>	
440.0		20/06/1999		29/11/2019	
436.0		30/11/2019		-	

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Banjar at Bamni (CW1NAU000781)

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Days	June					July					August							
	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	No Flow				0	52.79	0.000	0.000	0.150	0.150	665.91	31.190	0.000	0.000	0.120	0.120	312.60
2	0					0	38.5	0.030	0.020	0.130	0.180	598.75	36.190	0.000	0.000	0.120	0.120	362.71
3	0					0	22.59	0.000	0.000	0.100	0.100	197.13	226.100	0.050	0.050	0.190	0.300	5762.84
4	0					0	17.92	0.000	0.000	0.100	0.100	156.38	809.000	0.250	0.240	0.530	1.020	71225.65
5	0					0	14.54	0.000	0.000	0.070	0.070	90.45	425.300	0.120	0.190	0.240	0.550	20173.51
6	0					0	13.57	0.010	0.010	0.090	0.120	136.00	234.000	0.070	0.070	0.250	0.390	7925.30
7	0					0	13.6	0.010	0.010	0.090	0.120	136.30	137.300	0.050	0.050	0.190	0.280	3369.01
8	0					0	52.86	0.000	0.000	0.150	0.150	675.93	108.700	0.040	0.040	0.180	0.260	2470.01
9	0					0	22.6	0.020	0.020	0.110	0.140	281.18	68.050	0.040	0.040	0.170	0.240	1387.57
10	0					0	114.07	0.050	0.050	0.180	0.270	2690.59	52.770	0.000	0.000	0.150	0.150	679.34
11	0					0	50.8	0.000	0.000	0.140	0.140	614.48	45.920	0.000	0.000	0.130	0.130	527.68
12	0					0	38.35	0.000	0.000	0.120	0.120	397.61	43.690	0.000	0.000	0.130	0.130	483.18
13	0					0	22.72	0.000	0.000	0.120	0.120	225.75	37.680	0.030	0.020	0.130	0.180	582.74
14	0					0	18.02	0.000	0.000	0.100	0.100	158.81	37.470	0.030	0.020	0.120	0.160	527.70
15	0					0	18.37	0.000	0.000	0.110	0.110	166.65	37.660	0.030	0.020	0.130	0.180	579.18
16	0					0	133	0.050	0.050	0.200	0.310	3504.82	31.390	0.000	0.000	0.120	0.120	311.89
17	0					0	71.27	0.040	0.040	0.170	0.240	1484.01	24.980	0.000	0.000	0.110	0.110	246.04
18	0					0	102.2	0.040	0.040	0.180	0.260	2295.82	38.580	0.000	0.000	0.120	0.120	403.33
19	0					0	65.42	0.030	0.030	0.160	0.230	1300.03	109.900	0.050	0.040	0.180	0.270	2525.77
20	0					0	61.3	0.030	0.030	0.160	0.220	1181.08	133.200	0.050	0.050	0.200	0.310	3510.09
21	0					0	58.94	0.030	0.030	0.160	0.220	1115.24	97.850	0.040	0.040	0.170	0.250	2113.56
22	0					0	37.7	0.000	0.000	0.120	0.120	384.36	61.610	0.030	0.030	0.160	0.230	1203.02
23	0					0	37	0.030	0.020	0.130	0.180	565.83	50.770	0.000	0.000	0.140	0.140	609.73
24	0					0	53.08	0.000	0.000	0.150	0.150	687.92	45.720	0.000	0.000	0.140	0.140	537.23
25	0					0	58.16	0.030	0.030	0.150	0.210	1055.26	52.740	0.000	0.000	0.150	0.150	669.84
26	0					0	37.18	0.000	0.000	0.120	0.120	372.63	45.600	0.000	0.000	0.130	0.130	527.94
27	0					0	21.76	0.000	0.000	0.100	0.100	186.13	43.850	0.030	0.030	0.140	0.190	719.84
28	310.6	0.07	0.07	0.2	0.33	8802.16	17.81	0.000	0.000	0.100	0.100	153.88	37.840	0.000	0.000	0.120	0.120	389.06
29	280.3	0.08	0.08	0.26	0.43	10292.62	97.9	0.040	0.040	0.180	0.270	2258.44	30.940	0.000	0.000	0.120	0.120	307.42
30	112.4	0.05	0.05	0.18	0.27	2602.64	58.4	0.030	0.030	0.150	0.210	1079.79	22.020	0.000	0.000	0.100	0.100	190.25
31						37.46	0.000	0.000	0.120	0.120	378.68	20.880	0.000	0.000	0.100	0.100	176.80	
TenDaily I	0	0	0	0	0	36.3	0.01	0.01	0.12	0.14	562.86	212.86	0.06	0.07	0.21	0.34	11366.85	
TenDaily II	0	0	0	0	0	58.15	0.02	0.02	0.14	0.18	1132.9	54.05	0.02	0.02	0.14	0.17	969.76	
TenDaily III	70.33	0.02	0.02	0.06	0.1	2169.74	46.85	0.01	0.01	0.13	0.16	748.92	46.35	0.01	0.01	0.13	0.15	676.79
Total		June				21697.42	July					25195.83	August					130810.8

Annual Sediment Load (M.T.) - 350031.69

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Banjar at Bamni (CW1NAU000781)

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Days	September--2023					October--2023					November--2023							
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total M.T./day			
1	22.29	0.000	0.000	0.101	0.101	194.51	123.8	0.050	0.049	0.197	0.296	3166.1	17.85	0.000	0.000	0.075	0.075	115.67
2	20.50	0.000	0.000	0.096	0.096	170.04	102.0	0.045	0.044	0.184	0.273	2405.9	17.75	0.000	0.000	0.074	0.074	113.49
3	17.80	0.016	0.015	0.096	0.127	195.32	73.34	0.032	0.031	0.151	0.214	1356.0	17.73	0.000	0.000	0.074	0.074	113.36
4	17.67	0.000	0.000	0.093	0.093	141.98	64.29	0.030	0.029	0.147	0.206	1144.3	17.46	0.000	0.000	0.073	0.073	110.12
5	31.21	0.000	0.000	0.117	0.117	315.50	52.34	0.000	0.000	0.144	0.144	651.19	17.40	0.016	0.015	0.099	0.130	195.44
6	24.95	0.000	0.000	0.115	0.115	247.90	50.22	0.000	0.000	0.137	0.137	594.44	16.70	0.000	0.000	0.072	0.072	103.89
7	31.20	0.022	0.021	0.121	0.164	442.09	44.20	0.000	0.000	0.128	0.128	488.82	16.68	0.000	0.000	0.072	0.072	103.76
8	43.70	0.000	0.000	0.129	0.129	487.06	38.34	0.025	0.024	0.130	0.179	592.95	16.66	0.000	0.000	0.071	0.071	102.20
9	71.21	0.038	0.037	0.167	0.242	1488.9	37.60	0.000	0.000	0.117	0.117	380.09	16.47	0.000	0.000	0.071	0.071	101.03
10	68.20	0.035	0.034	0.160	0.229	1349.4	36.14	0.000	0.000	0.115	0.115	359.09	16.43	0.000	0.000	0.070	0.070	99.369
11	64.27	0.033	0.032	0.162	0.227	1260.5	31.24	0.000	0.000	0.106	0.106	286.11	16.07	0.000	0.000	0.069	0.069	95.803
12	73.15	0.039	0.038	0.168	0.245	1548.4	26.42	0.000	0.000	0.102	0.102	232.83	15.40	0.015	0.013	0.095	0.123	163.66
13	56.89	0.029	0.028	0.152	0.209	1027.3	22.26	0.000	0.000	0.098	0.098	188.48	14.34	0.000	0.000	0.068	0.068	84.250
14	45.91	0.000	0.000	0.138	0.138	547.39	22.00	0.000	0.000	0.096	0.096	182.48	14.21	0.000	0.000	0.067	0.067	82.259
15	453.6	0.127	0.126	0.246	0.499	19556	21.70	0.018	0.017	0.107	0.142	266.23	14.02	0.000	0.000	0.066	0.066	79.948
16	747.7	0.143	0.135	0.426	0.704	45479	21.08	0.000	0.000	0.093	0.093	169.38	13.74	0.000	0.000	0.065	0.065	77.164
17	330.0	0.088	0.090	0.279	0.457	13030	21.05	0.000	0.000	0.091	0.091	165.50	13.51	0.000	0.000	0.065	0.065	75.872
18	179.2	0.041	0.040	0.174	0.255	3948.1	20.84	0.000	0.000	0.090	0.090	162.05	13.08	0.000	0.000	0.065	0.065	73.457
19	121.5	0.037	0.036	0.161	0.234	2456.4	20.83	0.000	0.000	0.089	0.089	160.17	12.50	0.013	0.012	0.088	0.113	122.04
20	102.9	0.037	0.036	0.157	0.230	2044.8	20.43	0.000	0.000	0.087	0.087	153.57	12.12	0.000	0.000	0.063	0.063	65.972
21	121.7	0.038	0.037	0.162	0.237	2492.0	20.41	0.000	0.000	0.085	0.085	149.89	12.08	0.000	0.000	0.063	0.063	65.754
22	412.6	0.115	0.114	0.232	0.461	16434	20.10	0.000	0.000	0.083	0.083	144.14	12.01	0.000	0.000	0.062	0.062	64.335
23	351.8	0.103	0.102	0.220	0.425	12918	20.05	0.000	0.000	0.083	0.083	143.78	11.64	0.000	0.000	0.062	0.062	62.353
24	280.0	0.080	0.081	0.263	0.424	10257	19.50	0.017	0.016	0.103	0.136	229.13	11.60	0.000	0.000	0.061	0.061	61.137
25	139.5	0.039	0.038	0.166	0.243	2928.8	18.53	0.000	0.000	0.082	0.082	131.28	11.55	0.000	0.000	0.061	0.061	60.873
26	115.2	0.036	0.035	0.158	0.229	2279.3	18.49	0.000	0.000	0.081	0.081	129.40	11.05	0.012	0.011	0.084	0.107	102.16
27	97.96	0.035	0.034	0.154	0.223	1887.4	18.38	0.000	0.000	0.080	0.080	127.04	11.00	0.012	0.011	0.084	0.107	101.69
28	73.50	0.037	0.036	0.164	0.237	1505.0	18.34	0.000	0.000	0.079	0.079	125.18	10.42	0.000	0.000	0.060	0.060	54.017
29	69.53	0.031	0.030	0.149	0.210	1261.6	18.20	0.016	0.015	0.100	0.131	206.00	10.39	0.000	0.000	0.059	0.059	52.964
30	111.4	0.037	0.036	0.159	0.232	2233.0	18.03	0.000	0.000	0.077	0.077	119.95	10.35	0.000	0.000	0.059	0.059	52.760
31						17.98	0.000	0.000	0.077	0.077	119.62							
TenDaily I	34.873	0.011	0.011	0.119	0.141	503.269	62.227	0.018	0.018	0.145	0.181	1113.887	17.113	0.002	0.002	0.075	0.078	115.833
TenDaily II	217.512	0.057	0.056	0.206	0.32	9089.866	22.785	0.002	0.002	0.096	0.099	196.681	13.899	0.003	0.003	0.071	0.076	92.042
TenDaily III	177.319	0.055	0.054	0.183	0.292	5419.669	18.91	0.003	0.003	0.085	0.09	147.765	11.209	0.002	0.002	0.066	0.07	67.804
Total	September					150128	October					14731.1	November					2756.79

Annual Sediment Load (M.T.) - 350031.69

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Banjar at Bamni (CW1NAU000781)

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Days	December--2023					January--2024					February--2024							
	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	15.99	0.000	0.000	0.069	0.069	95.326	8.780	0.011	0.01	0.061	0.082	62.205	1.931	0.004	0.004	0.045	0.053	8.8420
2	15.95	0.015	0.014	0.096	0.125	172.26	7.436	0.01	0.009	0.073	0.092	59.107	1.929	0.004	0.004	0.045	0.053	8.8330
3	15.45	0.015	0.014	0.095	0.124	165.525	6.742	0.009	0.008	0.071	0.088	51.261	1.918	0.004	0.004	0.045	0.053	8.7830
4	14.42	0.000	0.000	0.067	0.067	83.474	6.294	0.009	0.008	0.069	0.086	46.767	1.915	0.004	0.004	0.045	0.053	8.7690
5	14.32	0.014	0.013	0.092	0.119	147.23	5.883	0.008	0.007	0.067	0.082	41.680	1.743	0.004	0.003	0.044	0.051	7.6800
6	14.18	0.014	0.013	0.092	0.119	145.79	5.283	0.008	0.007	0.065	0.08	36.516	1.738	0.004	0.003	0.044	0.051	7.6580
7	14.03	0.014	0.013	0.091	0.118	143.04	4.700	0.007	0.006	0.062	0.075	30.456	1.734	0.004	0.003	0.044	0.051	7.6410
8	14.07	0.014	0.013	0.092	0.119	144.66	2.909	0.006	0.005	0.052	0.063	15.834	1.729	0.004	0.003	0.044	0.051	7.6190
9	13.76	0.014	0.013	0.091	0.118	140.29	2.730	0.005	0.005	0.051	0.061	14.388	1.721	0.004	0.003	0.044	0.051	7.5830
10	14.20	0.014	0.013	0.092	0.119	146.00	2.714	0.005	0.005	0.051	0.061	14.304	1.716	0.004	0.003	0.044	0.051	7.5610
11	14.24	0.000	0.000	0.066	0.066	81.202	2.693	0.005	0.005	0.051	0.061	14.193	1.713	0.004	0.003	0.044	0.051	7.5480
12	13.98	0.014	0.013	0.091	0.118	142.53	2.676	0.005	0.005	0.051	0.061	14.104	1.705	0.004	0.003	0.044	0.051	7.5130
13	13.74	0.014	0.013	0.091	0.118	140.08	2.567	0.005	0.004	0.05	0.059	13.086	1.709	0.004	0.003	0.044	0.051	7.5310
14	13.52	0.014	0.012	0.090	0.116	135.50	2.550	0.005	0.004	0.05	0.059	12.999	1.705	0.004	0.003	0.044	0.051	7.5130
15	13.50	0.014	0.012	0.090	0.116	135.30	2.546	0.005	0.004	0.05	0.059	12.978	1.949	0.004	0.004	0.046	0.054	9.0930
16	13.09	0.014	0.012	0.089	0.115	130.06	2.525	0.005	0.004	0.05	0.059	12.871	1.944	0.004	0.004	0.045	0.053	8.9020
17	13.05	0.013	0.012	0.089	0.114	128.54	2.395	0.005	0.004	0.049	0.058	12.002	1.920	0.004	0.004	0.045	0.053	8.7920
18	12.54	0.000	0.000	0.065	0.065	70.425	2.377	0.005	0.004	0.049	0.058	11.912	1.910	0.004	0.004	0.045	0.053	8.7460
19	12.52	0.013	0.012	0.088	0.113	122.24	2.354	0.005	0.004	0.049	0.058	11.796	1.783	0.004	0.004	0.044	0.052	8.0110
20	12.10	0.013	0.012	0.087	0.112	117.09	2.328	0.005	0.004	0.049	0.058	11.666	1.775	0.004	0.004	0.044	0.052	7.9750
21	12.07	0.000	0.000	0.064	0.064	66.742	2.315	0.005	0.004	0.048	0.057	11.401	1.765	0.004	0.004	0.044	0.052	7.9300
22	11.57	0.013	0.011	0.085	0.109	108.96	2.136	0.005	0.004	0.047	0.056	10.335	1.763	0.004	0.004	0.044	0.052	7.9210
23	11.51	0.013	0.011	0.085	0.109	108.40	2.132	0.005	0.004	0.047	0.056	10.315	1.756	0.004	0.004	0.044	0.052	7.8890
24	11.10	0.012	0.011	0.084	0.107	102.62	2.113	0.005	0.004	0.047	0.056	10.224	1.748	0.004	0.004	0.044	0.052	7.8530
25	10.30	0.012	0.011	0.082	0.105	93.442	2.100	0.005	0.004	0.047	0.056	10.161	1.745	0.004	0.004	0.044	0.052	7.8400
26	9.695	0.000	0.000	0.063	0.063	52.772	2.095	0.005	0.004	0.047	0.056	10.136	1.740	0.004	0.003	0.044	0.051	7.6670
27	9.617	0.011	0.010	0.080	0.101	83.922	2.091	0.005	0.004	0.047	0.056	10.117	1.739	0.004	0.003	0.044	0.051	7.6630
28	9.471	0.011	0.010	0.080	0.101	82.648	2.085	0.005	0.004	0.047	0.056	10.088	1.993	0.005	0.004	0.046	0.055	9.4710
29	9.410	0.001	0.010	0.079	0.090	73.172	1.964	0.004	0.004	0.046	0.054	9.1630	1.974	0.004	0.004	0.046	0.054	9.2100
30	9.268	0.011	0.010	0.079	0.100	80.076	1.952	0.004	0.004	0.046	0.054	9.1070						
31	9.200	0.011	0.010	0.079	0.100	79.488	1.943	0.004	0.004	0.045	0.053	8.8970						
TenDaily I	14.637	0.011	0.011	0.088	0.11	138.36	5.347	0.008	0.007	0.062	0.077	37.252	1.807	0.004	0.003	0.044	0.052	8.097
TenDaily II	13.228	0.011	0.01	0.085	0.105	120.297	2.501	0.005	0.004	0.05	0.059	12.761	1.811	0.004	0.004	0.044	0.052	8.162
TenDaily III	10.292	0.009	0.009	0.078	0.095	84.749	2.084	0.005	0.004	0.047	0.055	9.995	1.803	0.004	0.004	0.044	0.052	8.16
Total	December					3518.8	January					610.07	February					236.038

Annual Sediment Load (M.T.) - 350031.69

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Banjar at Bamni (CW1NAU000781)

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur

Days	March--2024					April--2024					May--2024							
	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	1.828	0.004	0.004	0.045	0.053	8.3710	1.883	0.004	0.004	0.045	0.053	8.6230	0.223	0.001	0.001	0.021	0.023	0.443
2	1.823	0.004	0.004	0.044	0.052	8.1900	1.576	0.004	0.003	0.042	0.049	6.6720	0					
3	1.620	0.004	0.003	0.043		6.9980	1.318	0.004	0.003	0.04	0.047	5.3520	0					
4	1.616	0.004	0.003	0.043	0.050	6.9810	0.961	0.003	0.002	0.035	0.04	3.3210	0					
5	1.613	0.004	0.003	0.043	0.050	6.9680	0.828	0.003	0.002	0.034	0.039	2.7900	0					
6	1.602	0.004	0.003	0.043	0.050	6.9210	0.823	0.003	0.002	0.034	0.039	2.7730	0					
7	1.595	0.004	0.003	0.043	0.050	6.8900	0.674	0.002	0.002	0.031	0.035	2.0380	0					
8	1.580	0.004	0.003	0.042	0.049	6.6890	0.673	0.002	0.002	0.031	0.035	2.0350	0					
9	1.389	0.004	0.003	0.04	0.047	5.6400	0.667	0.002	0.002	0.031	0.035	2.0170	0					
10	1.380	0.004	0.003	0.04	0.047	5.6040	0.618	0.002	0.002	0.03	0.034	1.8150	0					
11	1.373	0.004	0.003	0.04	0.047	5.5750	1.570	0.004	0.003	0.042	0.049	6.6470	0					
12	1.363	0.004	0.003	0.04	0.047	5.5350	0.609	0.002	0.002	0.03	0.034	1.7890	0					
13	1.218	0.003	0.003	0.039	0.045	4.7360	0.603	0.002	0.002	0.03	0.034	1.7710	0					
14	1.210	0.003	0.003	0.039	0.045	4.7040	0.600	0.002	0.002	0.03	0.034	1.7630	0					
15	1.193	0.003	0.003	0.038	0.044	4.5350	0.534	0.002	0.002	0.029	0.033	1.5230	0					
16	0.970	0.003	0.002	0.036	0.041	3.4360	0.575	0.002	0.002	0.03	0.034	1.6890	0					
17	0.968	0.003	0.002	0.036	0.041	3.4290	0.527	0.002	0.002	0.029	0.033	1.5030	0					
18	0.964	0.003	0.002	0.035	0.04	3.3320	0.372	0.002	0.001	0.025	0.028	0.9000	0					
19	0.960	0.003	0.002	0.035	0.04	3.3180	0.367	0.002	0.001	0.025	0.028	0.8880	0					
20	0.823	0.003	0.002	0.034	0.039	2.7730	0.364	0.002	0.001	0.025	0.028	0.8810	0					
21	0.818	0.003	0.002	0.034	0.039	2.7560	0.360	0.002	0.001	0.025	0.028	0.8710	0					
22	0.809	0.003	0.002	0.033	0.038	2.6560	0.315	0.002	0.001	0.024	0.027	0.7350	0					
23	0.682	0.002	0.002	0.031	0.035	2.0620	0.312	0.002	0.001	0.024	0.027	0.7280	0					
24	0.679	0.002	0.002	0.031	0.035	2.0530	0.310	0.002	0.001	0.024	0.027	0.7230	0					
25	2.320	0.005	0.004	0.048	0.057	11.426	0.315	0.002	0.001	0.024	0.027	0.7350	0					
26	5.408	0.008	0.007	0.065	0.080	37.380	0.311	0.002	0.001	0.024	0.027	0.7260	0					
27	5.259	0.008	0.007	0.065	0.080	36.350	0.231	0.001	0.001	0.021	0.023	0.4590	0					
28	4.728	0.007	0.006	0.062	0.075	30.637	0.230	0.001	0.001	0.021	0.023	0.4570	0					
29	3.798	0.007	0.006	0.058	0.071	23.298	0.228	0.001	0.001	0.021	0.023	0.4530	0					
30	2.640	0.005	0.005	0.051	0.061	13.914	0.225	0.001	0.001	0.021	0.023	0.4470	0					
31	2.080	0.005	0.004	0.047	0.056	10.064							0					
TenDaily I	1.605	0.004	0.003	0.043	0.05	6.925	1.002	0.003	0.002	0.035	0.041	3.744	0.022	0.001	0.001	0.021	0.023	0.443
TenDaily II	1.104	0.003	0.003	0.037	0.043	4.137	0.612	0.002	0.002	0.03	0.034	1.935	0	0	0	0	0	0
TenDaily III	2.656	0.005	0.004	0.048	0.057	15.691	0.284	0.002	0.001	0.023	0.026	0.633	0	0	0	0	0	0
Total	March					283.224	April					63.123						0.443

Annual Sediment Load (M.T.) - 350031.69

**Annual Sediment Load for period: 2002-2024**

Station Name : Banjar at Bamni (CW1NAU000781) Division : Narmada Division, Bhopal  
 Local River : Banjar Sub-Division : UNSD, Jabalpur

<b>Year</b>	<b>Monsoon (M.T.)</b>	<b>Non-Monsoon (M.T.)</b>	<b>Annual Load (M.T.)</b>	<b>Annual Run Off (MCM)</b>
<b>2002-2003</b>	368398	0	368398	607
<b>2003-2004</b>	782914	0	782914	1401
<b>2004-2005</b>	323458	0	323458	742
<b>2005-2006</b>	1639533	0	1639533	1467
<b>2006-2007</b>	324825	0	324825	697
<b>2007-2008</b>	171622	133	171755	568
<b>2008-2009</b>	208836	0	208836	472
<b>2009-2010</b>	137064	103	137167	272
<b>2010-2011</b>	186273	0	186273	477
<b>2011-2012</b>	219514	1406	220919	745
<b>2012-2013</b>	84554	1107	85661	532
<b>2013-2014</b>	209201	733	209934	1376
<b>2014-2015</b>	131573	3093	134666	878
<b>2015-2016</b>	73949	821	74771	527
<b>2016-2017</b>	117094.36	451.58	117545.94	888.6
<b>2017-2018</b>	40875.1	0	40875.1	349.93
<b>2018-2019</b>	93824	0	93824	674
<b>2019-2020</b>	1194215.28	787.35	1195002.64	1805.06
<b>2020-2021</b>	927891.46	102.25	927993.72	1769.69
<b>2021-2022</b>	142554.34	0	142554.34	661.89
<b>2022-2023</b>	256002.1	4453	260455.1	1295.51
<b>2023-2024</b>	345319.99	4711.7	350031.69	1014.39

### Annual Sediment Load for period : 2002-2024

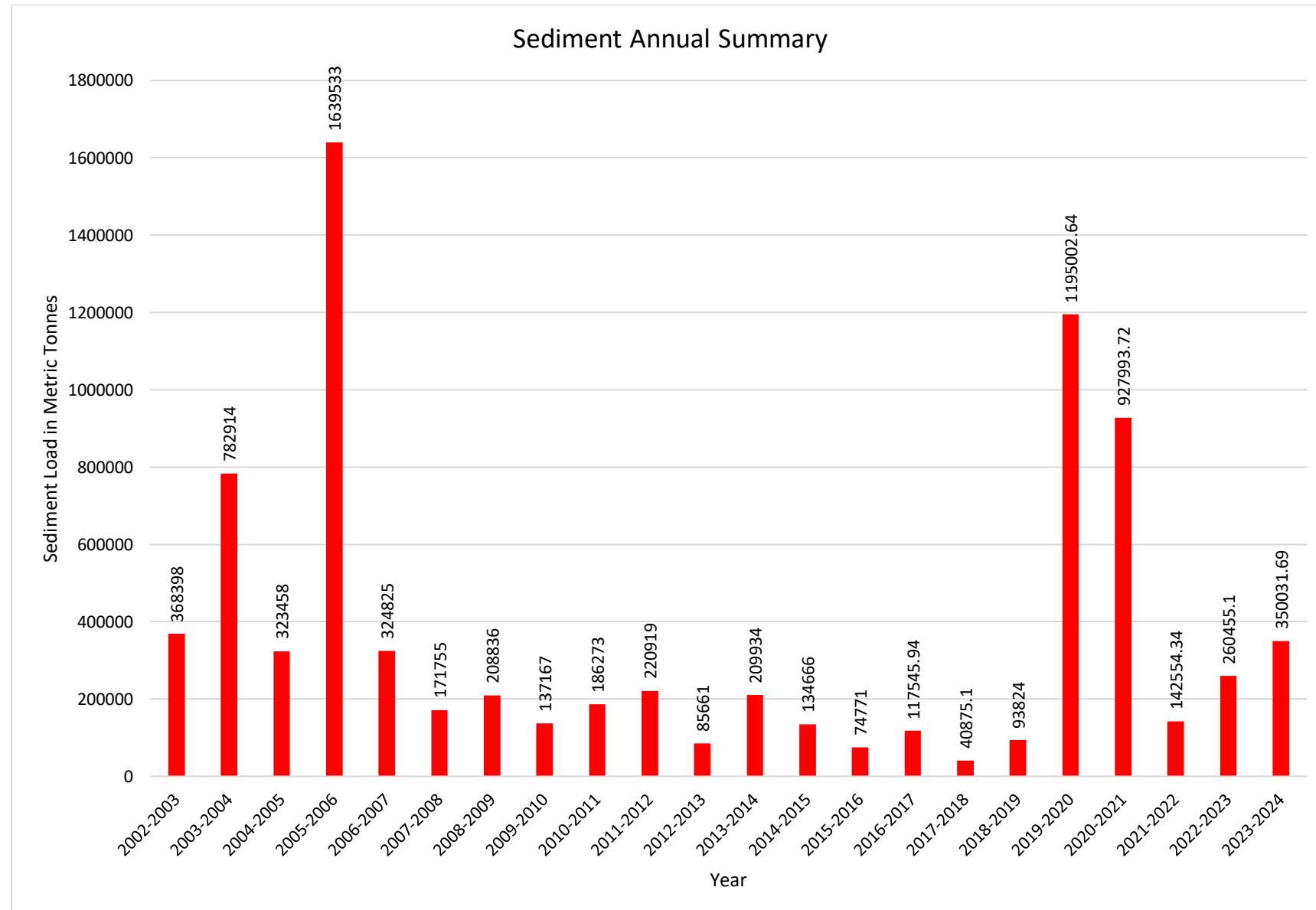
Station Name : Banjar at Bamni (CW1NAU000781)

Local River : Banjar

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur

Sediment Annual Summary



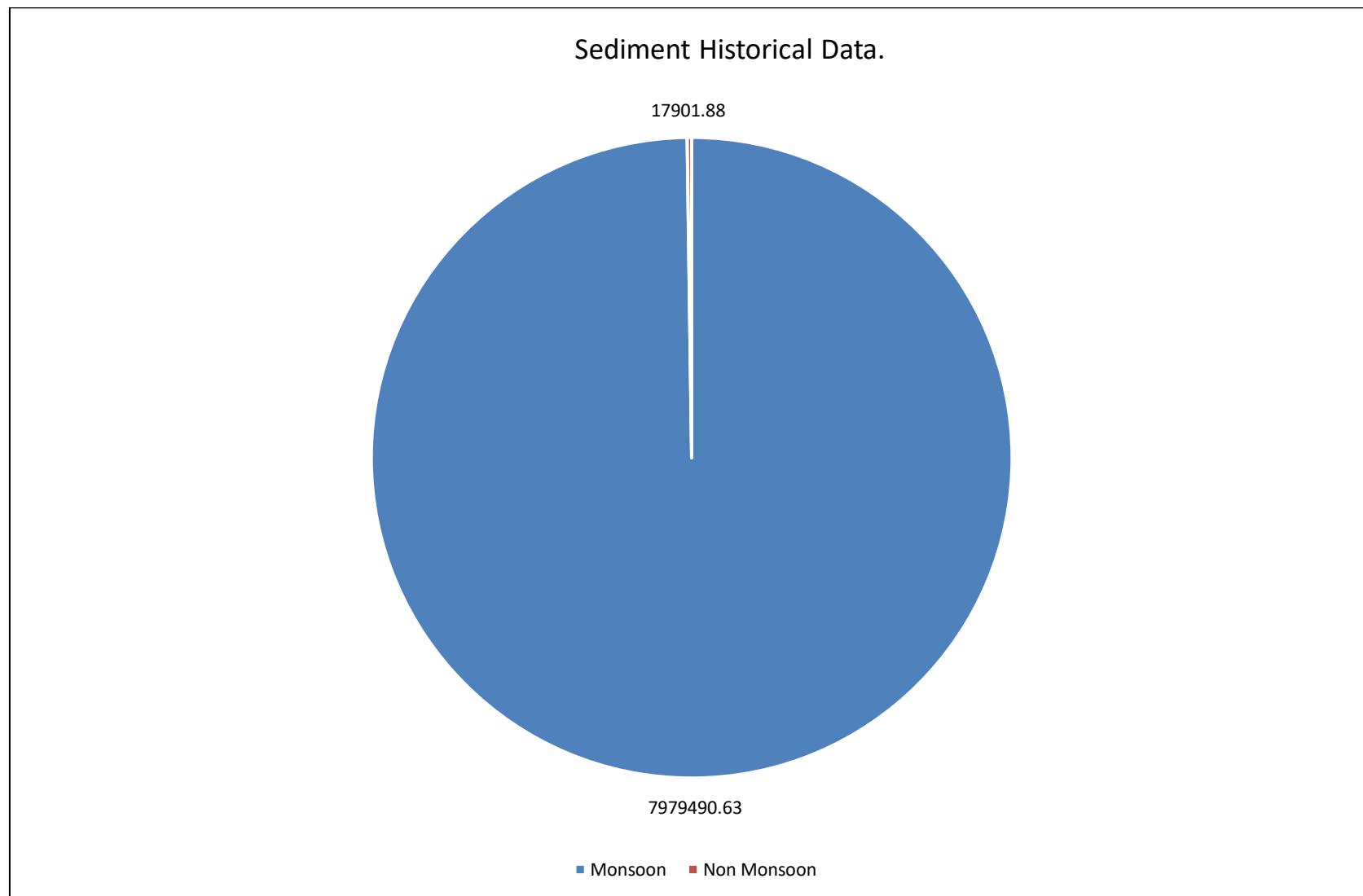
### **Seasonal Sediment Load for period : 2002-2024**

Station Name : Banjar at Bamni (CW1NAU000781)

Division : Narmada Division, Bhopal

Local River : Banjar

Sub-Division : UNSD, Jabalpur



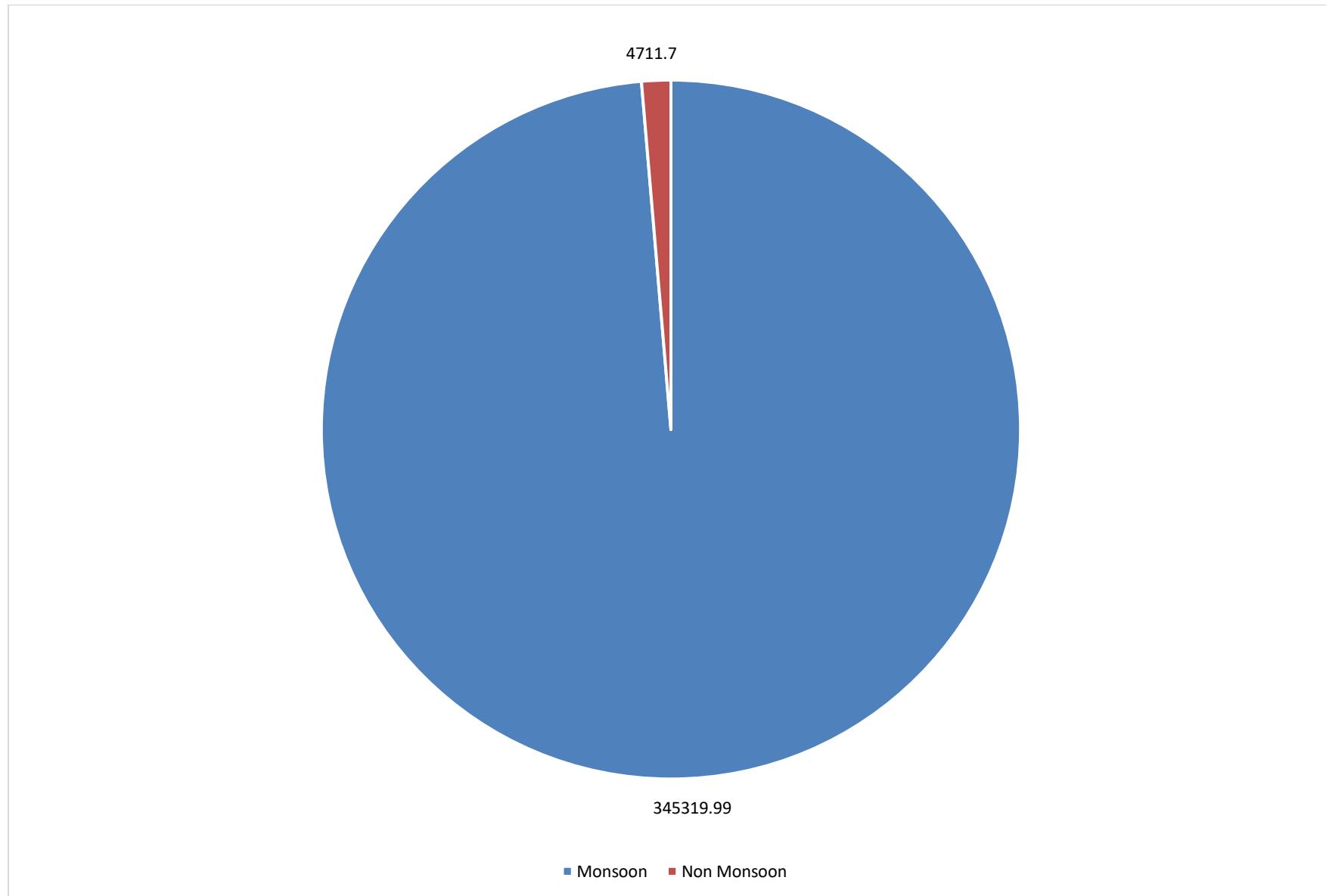
### **Seasonal Sediment Load for period: 2023-24**

Station Name : Banjar at Bamni (CW1NAU000781)

Local River : Banjar

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur





**4.10 मोहगांव में बुढनेर**

**History Sheet**

<b>HISTORY SHEET (SEDIMENT)</b>					
			<b>Water Year</b>	:	2023 - 2024
<b>Site</b>	:	Mohgaon	<b>Code</b>	:	CW1NAU000390
<b>State</b>	:	Madhya Pradesh	<b>District</b>	:	MANDLA
<b>Basin</b>	:	Narmada	<b>Independent River</b>	:	Narmada
<b>Tributary</b>	:	-	<b>Sub Tributary</b>	:	-
<b>Sub-Sub Tributary</b>	:	-	<b>Local River</b>	:	Burhner
<b>Division</b>	:	Narmada Division(ND), Bhopal	<b>Sub-Division</b>	:	Upper Narmada Sub-Division, Jabalpur
<b>Drainage Area</b>	:	4090.0 Sq. Km.	<b>Bank</b>	:	Right
<b>Latitude</b>	:	22°45'57"	<b>Longitude</b>	:	80°37'24"
<b>Current Zero of Gauge (m)</b>	:	447.000			
<b>CATEGORY</b>		<b>Opening Date</b>		<b>Closing Date</b>	
<b>Gauge</b>	:	13/01/1977			
<b>Discharge</b>	:	13/01/1977			
<b>Sediment</b>	:	27/08/1992			
<b>Water Quality</b>	:	16/09/1986			
<b>Reduced Level</b>		<b>Opening Date</b>		<b>Closing Date</b>	
447.0		13/01/1977			
447.0					

### Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Burhner at Mohgaon ( CW1NAU000390)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Days	June--2023					July--2023					August--2023							
	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	5.463	0.000	0.000	0.042	0.042	19.824	125.2	0.000	0.000	0.084	0.084	908.65	125.3	0.000	0.000	0.085	0.085	920.20
2	5.455	0.000	0.000	0.042	0.042	19.795	97.0	0.008	0.000	0.094	0.102	854.84	1027	0.015	0.003	0.399	0.417	37016
3	5.403	0.000	0.000	0.042	0.042	19.606	60.1	0.000	0.000	0.078	0.078	405.30	2450	0.051	0.021	0.233	0.305	64562
4	5.390	0.000	0.000	0.042	0.042	19.559	173.2	0.000	0.000	0.112	0.112	1676.0	2204	0.051	0.026	1.442	1.519	289256
5	5.367	0.000	0.000	0.064	0.064	29.677	131.3	0.000	0.000	0.083	0.083	941.58	539.5	0.013	0.003	0.534	0.550	25637
6	5.342	0.000	0.000	0.041	0.041	18.924	63.4	0.000	0.000	0.122	0.122	668.29	168.0	0.011	0.000	0.109	0.120	1741.8
7	5.317	0.000	0.000	0.041	0.041	18.835	128.7	0.000	0.000	0.094	0.094	1045.3	167.1	0.000	0.000	0.104	0.104	1501.5
8	5.319	0.000	0.000	0.041	0.041	18.842	156.5	0.000	0.000	0.117	0.117	1582.0	204.9	0.000	0.000	0.116	0.116	2053.6
9	5.205	0.000	0.000	0.041	0.041	18.438	138.0	0.010	0.000	0.104	0.114	1359.2	162.2	0.000	0.000	0.090	0.090	1261.3
10	5.179	0.000	0.000	0.041	0.041	18.346	156.6	0.000	0.000	0.085	0.085	1150.1	151.6	0.000	0.000	0.080	0.080	1047.9
11	5.170	0.000	0.000	0.041	0.041	18.314	134.0	0.000	0.000	0.081	0.081	937.79	137.5	0.000	0.000	0.083	0.083	986.04
12	5.165	0.000	0.000	0.062	0.062	27.668	93.72	0.000	0.000	0.080	0.080	647.79	131.8	0.000	0.000	0.081	0.081	922.39
13	5.075	0.000	0.000	0.041	0.041	17.978	101.8	0.000	0.000	0.094	0.094	826.78	130.0	0.009	0.000	0.102	0.111	1246.8
14	5.000	0.000	0.000	0.041	0.041	17.712	64.30	0.000	0.000	0.083	0.083	461.11	124.9	0.000	0.000	0.080	0.080	863.31
15	4.990	0.000	0.000	0.041	0.041	17.677	45.77	0.000	0.000	0.082	0.082	324.27	120.0	0.009	0.000	0.100	0.109	1130.1
16	4.977	0.000	0.000	0.041	0.041	17.631	149.0	0.010	0.000	0.106	0.116	1493.3	100.8	0.000	0.000	0.080	0.080	696.73
17	4.942	0.000	0.000	0.040	0.040	17.080	291.7	0.000	0.000	0.366	0.366	9224.3	89.47	0.000	0.000	0.079	0.079	610.69
18	4.940	0.000	0.000	0.040	0.040	17.073	159.1	0.000	0.000	0.098	0.098	1347.1	167.4	0.000	0.000	0.093	0.093	1345.1
19	4.933	0.000	0.000	0.063	0.063	26.851	146.1	0.000	0.000	0.089	0.089	1123.5	470.6	0.014	0.003	0.095	0.112	4553.9
20	4.909	0.000	0.000	0.040	0.040	16.966	129.8	0.000	0.000	0.086	0.086	964.47	183.0	0.012	0.000	0.112	0.124	1960.6
21	4.812	0.000	0.000	0.040	0.040	16.630	95.02	0.000	0.000	0.080	0.080	656.78	160.3	0.000	0.000	0.085	0.085	1177.2
22	4.794	0.000	0.000	0.040	0.040	16.568	148.8	0.000	0.000	0.093	0.093	1195.6	209.7	0.000	0.000	0.098	0.098	1775.6
23	4.780	0.000	0.000	0.040	0.040	16.520	131.0	0.010	0.000	0.102	0.112	1267.7	147.6	0.000	0.000	0.087	0.087	1109.5
24	4.798	0.000	0.000	0.040	0.040	16.582	201.6	0.000	0.000	0.100	0.100	1741.8	130.8	0.000	0.000	0.083	0.083	937.99
25	18.500	0.000	0.000	0.059	0.059	94.306	129.1	0.000	0.000	0.087	0.087	970.42	121.9	0.000	0.000	0.080	0.080	842.57
26	29.320	0.000	0.000	0.070	0.070	177.33	67.10	0.000	0.000	0.098	0.098	568.15	98.01	0.000	0.000	0.081	0.081	685.91
27	90.340	0.000	0.000	0.092	0.092	718.10	60.10	0.000	0.000	0.084	0.084	436.18	86.00	0.008	0.000	0.091	0.099	735.61
28	561.40	0.000	0.000	0.154	0.154	7469.8	48.60	0.000	0.000	0.077	0.077	323.33	66.18	0.000	0.000	0.078	0.078	446.00
29	219.00	0.000	0.000	0.118	0.118	2232.7	48.00	0.005	0.000	0.077	0.082	340.07	60.90	0.000	0.000	0.076	0.076	399.89
30	180.10	0.000	0.000	0.112	0.112	1742.8	282.0	0.015	0.001	0.127	0.143	3484.2	57.11	0.000	0.000	0.076	0.076	375.01
31							144.5	0.000	0.000	0.093	0.093	1161.1	56.75	0.000	0.000	0.075	0.075	367.74
TenDaily I	5.344	0	0	0.044	0.044	20.185	123.004	0.002	0	0.097	0.099	1059.127	720	0.014	0.005	0.319	0.339	42499.82
TenDaily II	5.01	0	0	0.045	0.045	19.495	131.529	0.001	0	0.117	0.118	1735.038	165.547	0.004	0	0.091	0.095	1431.56
TenDaily III	111.784	0	0	0.077	0.077	1250.133	123.256	0.003	0	0.093	0.095	1104.118	108.659	0.001	0	0.083	0.083	804.82
Total		June				12898.13	July					40086.94	August					448166.8

Annual Sediment Load (M.T.) - 604995.66

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Burhner at Mohgaon ( CW1NAU000390)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Days	September--2023						October--2023						November--2023					
	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	55.23	0.000	0.000	0.074	0.074	353.12	150.0	0.010	0.000	0.106	0.116	1503	28.69	0.004	0.000	0.067	0.071	176.00
2	54.48	0.000	0.000	0.074	0.074	348.32	149.0	0.010	0.000	0.106	0.116	1493	28.76	0.004	0.000	0.067	0.071	176.43
3	54.00	0.006	0.000	0.079	0.085	396.58	131.8	0.000	0.000	0.088	0.088	1002	28.11	0.004	0.000	0.066	0.070	170.01
4	58.59	0.000	0.000	0.076	0.076	384.73	125.8	0.000	0.000	0.082	0.082	891.3	28.29	0.004	0.000	0.066	0.070	171.10
5	55.51	0.000	0.000	0.074	0.074	354.91	118.4	0.000	0.000	0.080	0.080	818.4	28.00	0.004	0.000	0.066	0.070	169.34
6	66.96	0.000	0.000	0.078	0.078	451.26	99.69	0.000	0.000	0.079	0.079	680.4	27.67	0.000	0.000	0.064	0.064	153.00
7	97.89	0.008	0.000	0.094	0.102	862.69	92.94	0.000	0.000	0.078	0.078	626.3	27.60	0.004	0.000	0.066	0.070	166.93
8	131.1	0.000	0.000	0.089	0.089	1008.1	68.00	0.007	0.000	0.085	0.092	540.5	27.46	0.004	0.000	0.066	0.070	166.08
9	172.3	0.000	0.000	0.089	0.089	1324.9	64.72	0.000	0.000	0.076	0.076	425.0	27.34	0.004	0.000	0.066	0.070	165.35
10	169.0	0.011	0.000	0.110	0.121	1766.8	61.43	0.000	0.000	0.077	0.077	408.7	27.18	0.004	0.000	0.066	0.070	164.39
11	139.3	0.000	0.000	0.087	0.087	1047.1	59.02	0.000	0.000	0.074	0.074	377.4	26.97	0.004	0.000	0.065	0.069	160.78
12	131.3	0.000	0.000	0.086	0.086	975.61	57.93	0.000	0.000	0.074	0.074	370.4	26.90	0.004	0.000	0.065	0.069	160.37
13	129.8	0.000	0.000	0.085	0.085	953.25	54.56	0.000	0.000	0.073	0.073	344.1	26.86	0.000	0.000	0.063	0.063	146.20
14	169.1	0.000	0.000	0.086	0.086	1256.5	54.00	0.000	0.000	0.072	0.072	335.9	26.79	0.004	0.000	0.065	0.069	159.71
15	530.3	0.000	0.000	0.096	0.096	4398.5	53.00	0.000	0.000	0.071	0.071	325.1	26.61	0.004	0.000	0.065	0.069	158.64
16	553.2	0.013	0.003	0.099	0.115	5496.6	51.69	0.000	0.000	0.071	0.071	317.1	26.64	0.004	0.000	0.065	0.069	158.82
17	294.0	0.015	0.001	0.128	0.144	3657.8	50.95	0.000	0.000	0.071	0.071	312.5	26.50	0.004	0.000	0.065	0.069	157.98
18	165.2	0.013	0.003	0.085	0.101	1441.6	50.47	0.000	0.000	0.070	0.070	305.2	26.42	0.004	0.000	0.065	0.069	157.51
19	156.4	0.000	0.000	0.084	0.084	1135.1	49.27	0.000	0.000	0.070	0.070	298.0	26.40	0.004	0.000	0.065	0.069	157.39
20	173.2	0.000	0.000	0.087	0.087	1301.9	47.62	0.000	0.000	0.070	0.070	288.0	26.20	0.000	0.000	0.063	0.063	142.61
21	171.9	0.000	0.000	0.086	0.086	1277.3	35.03	0.000	0.000	0.069	0.069	208.8	26.15	0.004	0.000	0.065	0.069	155.90
22	634.0	0.050	0.003	0.397	0.450	24650	32.00	0.004	0.000	0.069	0.073	201.8	25.81	0.004	0.000	0.065	0.069	153.87
23	639.3	0.050	0.003	0.089	0.142	7843.4	31.86	0.000	0.000	0.069	0.069	189.9	25.73	0.004	0.000	0.064	0.068	151.17
24	282.0	0.015	0.001	0.127	0.143	3484.2	31.50	0.004	0.000	0.068	0.072	196.0	25.59	0.004	0.000	0.064	0.068	150.35
25	165.5	0.000	0.000	0.088	0.088	1258.3	31.00	0.000	0.000	0.068	0.068	182.1	25.62	0.004	0.000	0.064	0.068	150.52
26	155.6	0.000	0.000	0.085	0.085	1142.7	30.88	0.000	0.000	0.067	0.067	178.8	25.30	0.004	0.000	0.064	0.068	148.64
27	149.3	0.000	0.000	0.084	0.084	1083.6	30.55	0.000	0.000	0.067	0.067	176.8	25.25	0.004	0.000	0.064	0.068	148.35
28	131.0	0.010	0.000	0.102	0.112	1267.7	30.60	0.000	0.000	0.066	0.066	174.5	25.00	0.000	0.000	0.062	0.062	133.92
29	128.8	0.000	0.000	0.083	0.083	923.65	30.00	0.004	0.000	0.067	0.071	184.0	24.93	0.004	0.000	0.064	0.068	146.47
30	165.0	0.000	0.000	0.085	0.085	1211.8	29.01	0.000	0.000	0.066	0.066	165.4	24.86	0.004	0.000	0.064	0.068	146.06
31						29.10	0.000	0.000	0.065	0.065	163.4							
TenDaily I	91.506	0.003	0	0.084	0.086	725.141	106.178	0.003	0	0.086	0.088	838.941	27.91	0.004	0	0.066	0.07	167.862
TenDaily II	244.18	0.004	0.001	0.092	0.097	2166.398	52.851	0	0	0.072	0.072	327.377	26.629	0.003	0	0.065	0.068	156.001
TenDaily III	262.24	0.013	0.001	0.123	0.136	4414.25	31.048	0.001	0	0.067	0.068	183.788	25.424	0.004	0	0.064	0.068	148.524
Total	September					73057.89	October					13684.85	November					4723.865

Annual Sediment Load (M.T.) - 604995.66

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Burhner at Mohgaon ( CW1NAU000390)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Days	December--2023					January--2024					February--2024							
	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	24.73	0.004	0.000	0.064	0.068	145.29	18.56	0.000	0.000	0.059	0.059	94.611	12.41	0.003	0.000	0.053	0.056	60.045
2	24.63	0.004	0.000	0.064	0.068	144.71	18.35	0.003	0.000	0.059	0.062	98.297	12.36	0.003	0.000	0.052	0.055	58.735
3	24.50	0.004	0.000	0.064	0.068	143.94	18.02	0.003	0.000	0.058	0.061	94.973	12.19	0.003	0.000	0.052	0.055	57.927
4	24.56	0.000	0.000	0.063	0.063	133.69	17.88	0.003	0.000	0.058	0.061	94.235	12.00	0.002	0.000	0.052	0.054	55.987
5	24.44	0.004	0.000	0.064	0.068	143.59	17.59	0.003	0.000	0.058	0.061	92.706	12.12	0.000	0.000	0.058	0.058	60.736
6	24.41	0.004	0.000	0.064	0.068	143.41	17.64	0.003	0.000	0.058	0.061	92.970	11.95	0.002	0.000	0.052	0.054	55.754
7	24.43	0.004	0.000	0.064	0.068	143.53	17.00	0.003	0.000	0.057	0.060	88.128	11.90	0.002	0.000	0.052	0.054	55.521
8	24.32	0.004	0.000	0.063	0.067	140.78	16.22	0.000	0.000	0.058	0.058	81.282	11.73	0.002	0.000	0.052	0.054	54.727
9	24.85	0.004	0.000	0.064	0.068	146.00	15.98	0.003	0.000	0.056	0.059	81.460	11.71	0.002	0.000	0.052	0.054	54.634
10	25.50	0.004	0.000	0.064	0.068	149.82	15.52	0.003	0.000	0.056	0.059	79.115	11.52	0.002	0.000	0.051	0.053	52.752
11	25.65	0.000	0.000	0.064	0.064	141.83	15.36	0.003	0.000	0.056	0.059	78.299	11.50	0.002	0.000	0.051	0.053	52.661
12	25.63	0.004	0.000	0.064	0.068	150.58	14.98	0.003	0.000	0.055	0.058	75.068	11.47	0.000	0.000	0.057	0.057	56.487
13	25.43	0.004	0.000	0.064	0.068	149.41	14.77	0.003	0.000	0.055	0.058	74.015	11.34	0.002	0.000	0.051	0.053	51.928
14	25.37	0.004	0.000	0.064	0.068	149.05	14.50	0.003	0.000	0.055	0.058	72.662	11.32	0.002	0.000	0.051	0.053	51.837
15	25.25	0.004	0.000	0.064	0.068	148.35	14.01	0.000	0.000	0.058	0.058	70.207	11.27	0.002	0.000	0.051	0.053	51.608
16	25.10	0.004	0.000	0.064	0.068	147.47	13.57	0.003	0.000	0.054	0.057	66.830	10.99	0.002	0.000	0.051	0.053	50.325
17	25.00	0.004	0.000	0.064	0.068	146.88	13.49	0.003	0.000	0.054	0.057	66.436	10.88	0.002	0.000	0.051	0.053	49.822
18	24.83	0.000	0.000	0.063	0.063	135.16	13.39	0.003	0.000	0.054	0.057	65.943	10.60	0.002	0.000	0.050	0.052	47.624
19	24.59	0.004	0.000	0.064	0.068	144.47	13.16	0.003	0.000	0.053	0.056	63.673	10.74	0.000	0.000	0.056	0.056	51.964
20	24.56	0.004	0.000	0.064	0.068	144.30	12.91	0.003	0.000	0.053	0.056	62.464	10.70	0.002	0.000	0.050	0.052	48.073
21	24.43	0.004	0.000	0.064	0.068	143.53	12.80	0.003	0.000	0.053	0.056	61.932	10.69	0.002	0.000	0.050	0.052	48.028
22	24.03	0.004	0.000	0.063	0.067	139.11	12.73	0.000	0.000	0.057	0.057	62.693	10.71	0.002	0.000	0.050	0.052	48.118
23	22.16	0.003	0.000	0.062	0.065	124.45	12.70	0.003	0.000	0.053	0.056	61.448	10.66	0.002	0.000	0.050	0.052	47.893
24	21.70	0.003	0.000	0.061	0.064	119.99	12.68	0.003	0.000	0.053	0.056	61.351	10.60	0.002	0.000	0.050	0.052	47.624
25	21.40	0.003	0.000	0.061	0.064	118.33	12.62	0.003	0.000	0.053	0.056	61.061	10.50	0.002	0.000	0.050	0.052	47.174
26	21.26	0.000	0.000	0.062	0.062	113.89	12.60	0.003	0.000	0.053	0.056	60.964	10.56	0.000	0.000	0.056	0.056	51.094
27	21.00	0.003	0.000	0.061	0.064	116.12	12.66	0.003	0.000	0.053	0.056	61.254	10.53	0.002	0.000	0.050	0.052	47.309
28	20.53	0.003	0.000	0.061	0.064	113.52	12.50	0.003	0.000	0.053	0.056	60.480	10.44	0.002	0.000	0.050	0.052	46.905
29	19.91	0.003	0.000	0.060	0.063	108.37	12.56	0.000	0.000	0.057	0.057	61.855	10.43	0.002	0.000	0.050	0.052	46.860
30	19.35	0.003	0.000	0.060	0.063	105.33	12.55	0.003	0.000	0.053	0.056	60.722						
31	19.00	0.003	0.000	0.069	0.072	118.20	12.42	0.003	0.000	0.053	0.056	60.093						
TenDaily I	24.637	0.004	0	0.064	0.067	143.476	17.276	0.002	0	0.058	0.06	89.778	11.989	0.002	0	0.053	0.055	56.682
TenDaily II	25.141	0.003	0	0.064	0.067	145.749	14.014	0.003	0	0.055	0.057	69.56	11.081	0.002	0	0.052	0.054	51.233
TenDaily III	21.343	0.003	0	0.062	0.065	120.076	12.62	0.002	0	0.054	0.056	61.259	10.569	0.002	0	0.051	0.052	47.889
Total	December					4213.092	January					2267.225	February					1510.151

Annual Sediment Load (M.T.) - 604995.66

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Burhner at Mohgaon ( CW1NAU000390)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur

Days	March--2024					April--2024					May--2024							
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	10.41	0.002	0.000	0.050	0.052	46.770	9.245	0.000	0.000	0.052	0.052	41.536	9.138	0.002	0.000	0.048	0.050	39.476
2	10.39	0.002	0.000	0.050	0.052	46.680	9.228	0.002	0.000	0.048	0.050	39.865	9.120	0.002	0.000	0.048	0.050	39.398
3	10.35	0.002	0.000	0.050	0.052	46.500	9.197	0.002	0.000	0.048	0.050	39.731	9.047	0.002	0.000	0.048	0.050	39.083
4	10.25	0.000	0.000	0.054	0.054	47.822	8.070	0.002	0.000	0.047	0.049	34.165	8.995	0.002	0.000	0.048	0.050	38.858
5	10.23	0.002	0.000	0.050	0.052	45.961	23.88	0.004	0.000	0.063	0.067	138.24	8.950	0.002	0.000	0.048	0.050	38.664
6	10.20	0.002	0.000	0.050	0.052	45.827	26.11	0.004	0.000	0.065	0.069	155.66	8.857	0.002	0.000	0.048	0.050	38.262
7	10.10	0.002	0.000	0.050	0.052	45.377	22.00	0.003	0.000	0.062	0.065	123.55	8.814	0.002	0.000	0.048	0.050	38.076
8	10.05	0.000	0.000	0.054	0.054	46.889	14.34	0.000	0.000	0.051	0.051	63.188	8.811	0.002	0.000	0.048	0.050	38.064
9	10.06	0.002	0.000	0.049	0.051	44.328	13.76	0.003	0.000	0.054	0.057	67.765	8.806	0.002	0.000	0.048	0.050	38.042
10	10.00	0.002	0.000	0.049	0.051	44.064	13.28	0.003	0.000	0.054	0.057	65.401	8.706	0.002	0.000	0.048	0.050	37.610
11	9.933	0.000	0.000	0.052	0.052	44.627	12.50	0.003	0.000	0.053	0.056	60.480	8.673	0.002	0.000	0.047	0.049	36.718
12	9.905	0.002	0.000	0.049	0.051	43.645	11.79	0.002	0.000	0.052	0.054	55.007	8.300	0.002	0.000	0.047	0.049	35.139
13	9.854	0.002	0.000	0.049	0.051	43.421	11.46	0.002	0.000	0.051	0.053	52.478	8.140	0.002	0.000	0.047	0.049	34.462
14	9.841	0.002	0.000	0.049	0.051	43.363	11.40	0.002	0.000	0.051	0.053	52.203	8.138	0.002	0.000	0.047	0.049	34.453
15	9.833	0.002	0.000	0.049	0.051	43.328	11.31	0.002	0.000	0.051	0.053	51.791	8.136	0.002	0.000	0.047	0.049	34.445
16	9.655	0.002	0.000	0.049	0.051	42.544	11.21	0.002	0.000	0.051	0.053	51.333	7.995	0.002	0.000	0.046	0.048	33.157
17	9.600	0.002	0.000	0.049	0.051	42.301	11.02	0.002	0.000	0.051	0.053	50.463	7.982	0.002	0.000	0.046	0.048	33.103
18	9.636	0.000	0.000	0.051	0.051	42.460	10.88	0.002	0.000	0.051	0.053	49.822	7.973	0.002	0.000	0.046	0.048	33.066
19	9.560	0.002	0.000	0.049	0.051	42.125	10.70	0.002	0.000	0.050	0.052	48.073	7.900	0.002	0.000	0.046	0.048	32.763
20	9.542	0.002	0.000	0.049	0.051	42.046	10.36	0.002	0.000	0.050	0.052	46.545	7.804	0.002	0.000	0.046	0.048	32.365
21	9.519	0.002	0.000	0.049	0.051	41.945	10.20	0.002	0.000	0.050	0.052	45.827	9.372	0.002	0.000	0.049	0.051	41.297
22	9.529	0.002	0.000	0.049	0.051	41.989	10.06	0.000	0.000	0.047	0.047	40.852	11.78	0.002	0.000	0.052	0.054	54.961
23	9.443	0.002	0.000	0.049	0.051	41.610	9.974	0.002	0.000	0.049	0.051	43.949	13.20	0.003	0.000	0.053	0.056	63.867
24	9.440	0.002	0.000	0.049	0.051	41.596	9.870	0.002	0.000	0.049	0.051	43.491	13.30	0.003	0.000	0.054	0.057	65.500
25	9.435	0.002	0.000	0.049	0.051	41.574	9.821	0.002	0.000	0.049	0.051	43.275	13.05	0.003	0.000	0.053	0.056	63.141
26	9.426	0.000	0.000	0.050	0.050	40.720	9.753	0.002	0.000	0.049	0.051	42.976	12.50	0.003	0.000	0.053	0.056	60.480
27	9.368	0.002	0.000	0.049	0.051	41.279	9.699	0.002	0.000	0.049	0.051	42.738	11.91	0.002	0.000	0.052	0.054	55.567
28	9.343	0.002	0.000	0.048	0.050	40.362	9.600	0.002	0.000	0.049	0.051	42.301	11.63	0.002	0.000	0.052	0.054	54.261
29	9.346	0.002	0.000	0.048	0.050	40.375	9.524	0.000	0.000	0.048	0.048	39.498	11.36	0.002	0.000	0.051	0.053	52.020
30	9.321	0.002	0.000	0.048	0.050	40.267	9.298	0.002	0.000	0.048	0.050	40.167	10.78	0.002	0.000	0.050	0.052	48.432
31	9.300	0.002	0.000	0.048	0.050	40.176							10.61	0.002	0.000	0.050	0.052	47.669
TenDaily I	10.204	0.002	0	0.051	0.052	46.022	14.911	0.002	0	0.054	0.057	76.91	8.924	0.002	0	0.048	0.05	38.553
TenDaily II	9.736	0.002	0	0.049	0.051	42.986	11.263	0.002	0	0.051	0.053	51.819	8.104	0.002	0	0.046	0.048	33.967
TenDaily III	9.406	0.002	0	0.049	0.051	41.081	9.78	0.002	0	0.049	0.05	42.507	11.772	0.002	0	0.052	0.054	55.199
Total			March			1341.973		April					1712.366					1332.397

Annual Sediment Load (M.T.) - 604995.66

### Annual Sediment Load for period : 1992-2024

Station Name : Burhner at Mohgaon ( CW1NAU000390) Division : Narmada Division Bhopal  
 Local River : Burhner Sub-Division : UNSD, Jabalpur

<b>Year</b>	<b>Monsoon (M.T.)</b>	<b>Non-Monsoon (M.T.)</b>	<b>Annual Load (M.T.)</b>	<b>Annual Run Off (MCM)</b>
<b>1992-1993</b>	605097.97	0	605097.97	1022.52
<b>1993-1994</b>	2614918.9	0	2614918.9	2015.96
<b>1994-1995</b>	10303377	0	10303377	4417.32
<b>1995-1996</b>	4828059.7	0	4828059.7	2475.42
<b>1996-1997</b>	1409800.5	0	1409800.5	1337.38
<b>1997-1998</b>	4380351	0	4380351	2072.02
<b>1998-1999</b>	2103433.4	0	2103433.4	2106.9
<b>1999-2000</b>	3021685.8	0	3021685.8	3110.3
<b>2000-2001</b>	1855837	0	1855837	1549.75
<b>2001-2002</b>	2744673.3	0	2744673.3	2798
<b>2002-2003</b>	949968.19	0	949968.19	1292.67
<b>2003-2004</b>	4909521	0	4909521	3497.51
<b>2004-2005</b>	3346347.5	0	3346347.5	2981.94
<b>2005-2006</b>	9693524	2164.29	9695688.3	3698.57
<b>2006-2007</b>	3637424.9	3056.18	3640481.1	2304.52
<b>2007-2008</b>	1020925.3	1009.61	1021934.9	1532.21
<b>2008-2009</b>	705272.35	1919.72	707192.08	1315.69
<b>2009-2010</b>	645909.89	118.37	646028.25	635.45
<b>2010-2011</b>	2985568	482.57	2986050.5	2013.97
<b>2011-2012</b>	2679812	5483	2685295	3386
<b>2012-2013</b>	1718997.3	903.17	1719900.5	2124.72
<b>2013-2014</b>	2060996	1539	2062535	3161
<b>2014-2015</b>	1776997	7796	1784793	2169
<b>2015-2016</b>	1096956	1604	1098559	1453
<b>2016-2017</b>	2319029.1	571.6	2319600.7	2504.24
<b>2017-2018</b>	1459628.2	1000.54	1460628.7	1338.53
<b>2018-2019</b>	1688779	1202	1689981	1746
<b>2019-2020</b>	4522616.3	14538.71	4537155	3617.78
<b>2020-2021</b>	1632760	2411.57	1635171.5	3056.76
<b>2021-2022</b>	171271.76	679.58	171951.34	1692.37
<b>2022-2023</b>	1162176.43	27406	1189582.43	2969.39
<b>2023-2024</b>	<b>592618.46</b>	<b>12377.2</b>	<b>604995.66</b>	<b>2277.18</b>

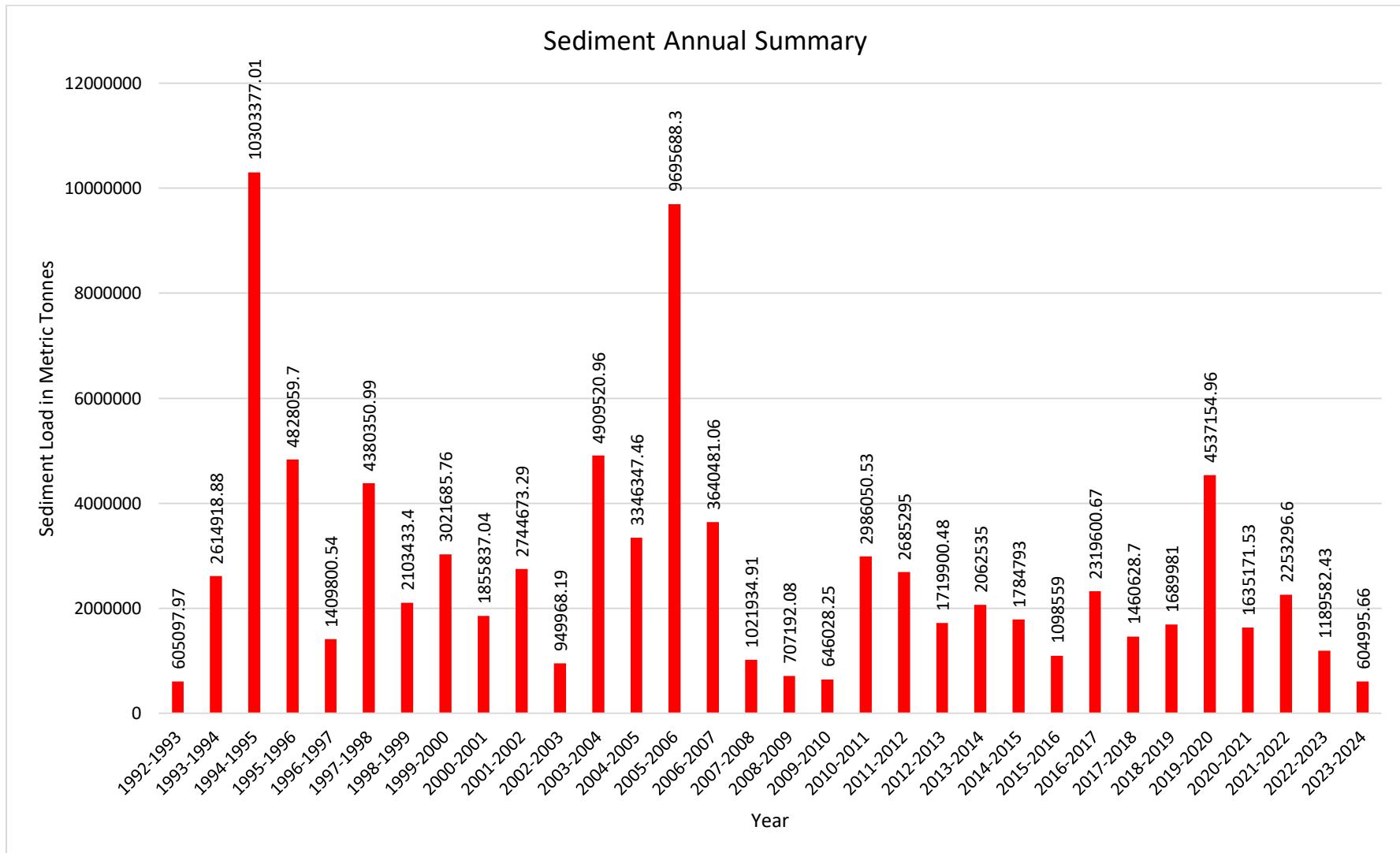
### Annual Sediment Load for period : 1992-2024

Station Name : Burhner at Mohgaon ( CW1NAU000390)

Local River : Burhner

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur



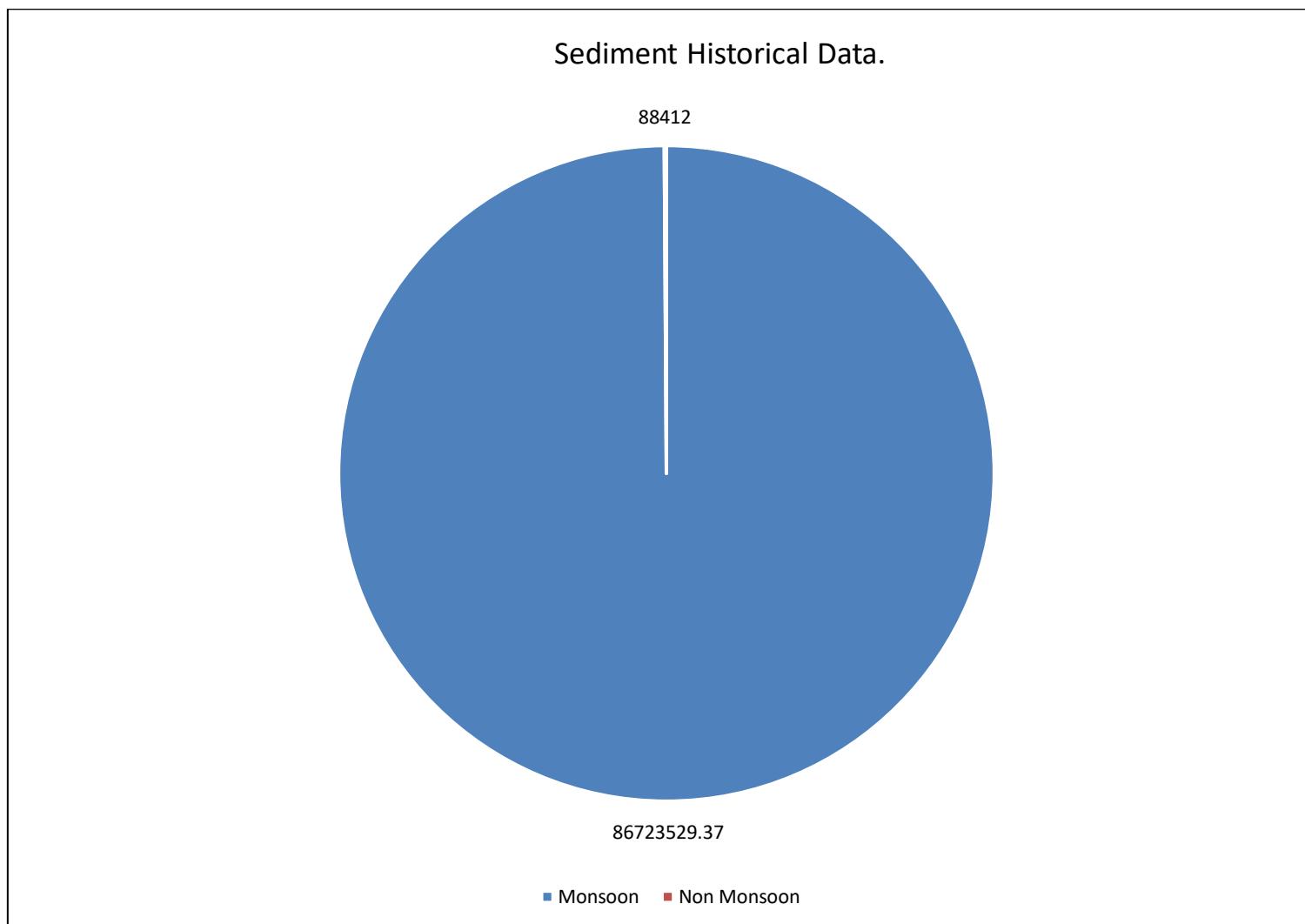
### **Seasonal Sediment Load for period : 1992-2024**

Station Name : Burhner at Mohgaon ( CW1NAU000390)

Division : Narmada Division, Bhopal

Local River : Burhner

Sub-Division : UNSD, Jabalpur



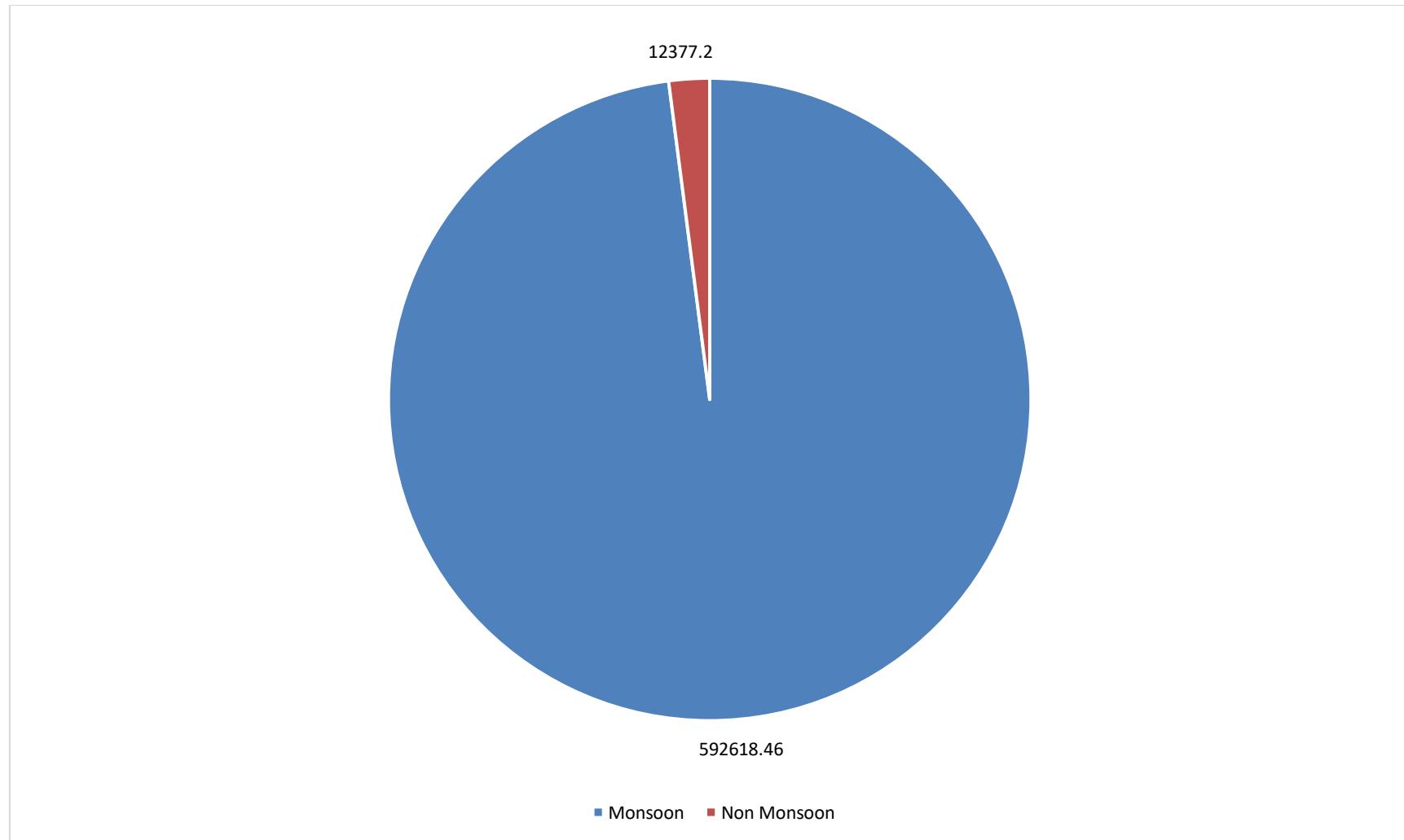
### **Seasonal Sediment Load for period : 2023-24**

Station Name : Burhner at Mohgaon ( CW1NAU000390)

Local River : Burhner

Division : Narmada Division, Bhopal

Sub-Division : UNSD, Jabalpur





## 4.11 मनोट में नर्मदा

### History Sheet

HISTORY SHEET (SEDIMENT)					
			Water Year	:	2023 - 2024
<b>Site</b>	:	Manot	<b>Code</b>	:	CW1NAU000378
<b>State</b>	:	Madhya Pradesh	<b>District</b>	:	MANDLA
<b>Basin</b>	:	Narmada	<b>Independent River</b>	:	Narmada
<b>Tributary</b>	:	-	<b>Sub Tributary</b>	:	-
<b>Sub-Sub Tributary</b>	:	-	<b>Local River</b>	:	Narmada
<b>Division</b>	:	Narmada Division(ND), Bhopal	<b>Sub-Division</b>	:	Upper Narmada Sub-Division, Jabalpur
<b>Drainage Area</b>	:	4467.0 Sq. Km.	<b>Bank</b>	:	Right
<b>Latitude</b>	:	22°44'09"	<b>Longitude</b>	:	80°30'47"
<b>Current Zero of Gauge (m)</b>	:	442			
<b>CATEGORY</b>		<b>Opening Date</b>		<b>Closing Date</b>	
<b>Gauge</b>	:	16/12/1976			
<b>Discharge</b>	:	16/12/1976			
<b>Sediment</b>	:	09/11/1979			
<b>Water Quality</b>	:	01/01/1980			
<b>Reduced Level</b>		<b>Opening Date</b>		<b>Closing Date</b>	
442.0		16/12/1976			
442.0					

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Manot ( CW1NAU000378)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Days	June--2023					July--2023					August--2023								
	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	7.392	0.000	0.000	0.031	0.031	19.80	236.1	0.000	0.000	0.161	0.161	3284	143.6	0.000	0.000	0.303	0.303	3759.3	
2	6.718	0.000	0.000	0.018	0.018	10.45	176.8	0.000	0.000	1.115	1.115	17032	655.1	0.000	0.000	0.318	0.318	17999	
3	6.299	0.000	0.000	0.017	0.017	9.252	113.9	0.000	0.000	0.062	0.062	610.1	3723	0.000	0.000	0.452	0.452	145394	
4	6.085	0.000	0.000	0.017	0.017	8.938	98.97	0.000	0.000	0.060	0.060	513.1	4750	0.000	0.000	0.758	0.758	311083	
5	5.866	0.000	0.000	0.058	0.058	29.40	221.4	0.000	0.000	0.132	0.132	2525	1053	0.000	0.000	0.282	0.282	25644.0	
6	5.846	0.000	0.000	0.016	0.016	8.082	98.55	0.000	0.000	0.060	0.060	510.9	525.8	0.000	0.000	1.125	1.125	51107.8	
7	6.308	0.000	0.000	0.017	0.017	9.265	140.9	0.000	0.000	0.080	0.080	973.9	429.1	0.000	0.000	0.252	0.252	9343	
8	7.644	0.000	0.000	0.019	0.019	12.55	151.8	0.000	0.000	0.086	0.086	1128	363.5	0.000	0.000	0.230	0.230	7223	
9	6.260	0.000	0.000	0.017	0.017	9.195	230.5	0.000	0.000	0.086	0.086	1713	271.4	0.000	0.000	0.220	0.220	5159	
10	5.825	0.000	0.000	0.016	0.016	8.052	299.3	0.000	0.000	0.186	0.186	4810	220.7	0.000	0.000	0.206	0.206	3928	
11	5.315	0.000	0.000	0.015	0.015	6.888	249.7	0.000	0.000	0.070	0.070	1510	169.9	0.000	0.000	0.155	0.155	2275	
12	4.801	0.000	0.000	0.031	0.031	12.86	277.2	0.000	0.000	0.071	0.071	1700	153.1	0.000	0.000	0.180	0.180	2381	
13	4.189	0.000	0.000	0.013	0.013	4.705	216.4	0.000	0.000	0.054	0.054	1010	144.5	0.000	0.000	0.102	0.102	1273	
14	3.668	0.000	0.000	0.012	0.012	3.803	135.8	0.000	0.000	0.080	0.080	938.7	131.7	0.000	0.000	0.182	0.182	2071	
15	3.456	0.000	0.000	0.012	0.012	3.583	90.8	0.000	0.000	0.072	0.072	564.7	110.6	0.000	0.000	0.088	0.088	840.9	
16	3.267	0.000	0.000	0.012	0.012	3.387	390.0	0.000	0.000	0.207	0.207	6975	105.9	0.000	0.000	0.180	0.180	1647	
17	3.084	0.000	0.000	0.011	0.011	2.931	305.1	0.000	0.000	0.206	0.206	5430	96.57	0.000	0.000	0.179	0.179	1494	
18	2.910	0.000	0.000	0.011	0.011	2.766	289.3	0.000	0.000	0.206	0.206	5149	169.5	0.000	0.000	0.178	0.178	2607	
19	2.727	0.000	0.000	0.011	0.011	2.592	280.1	0.000	0.000	0.198	0.198	4792	377.5	0.000	0.000	0.213	0.213	6947	
20	2.425	0.000	0.000	0.010	0.010	2.095	216.7	0.000	0.000	0.194	0.194	3632	385.8	0.000	0.000	0.180	0.180	6000	
21	2.263	0.000	0.000	0.009	0.009	1.760	144.5	0.000	0.000	0.011	0.011	137.3	219.9	0.000	0.000	0.240	0.240	4560	
22	1.867	0.000	0.000	0.008	0.008	1.290	127.6	0.000	0.000	0.006	0.006	66.15	429.7	0.000	0.000	0.217	0.217	8056	
23	1.548	0.000	0.000	0.008	0.008	1.070	112.5	0.000	0.000	0.012	0.012	116.6	240.5	0.000	0.000	0.243	0.243	5049	
24	2.268	0.000	0.000	0.009	0.009	1.764	108.2	0.000	0.000	0.012	0.012	112.2	286.1	0.000	0.000	0.240	0.240	5933	
25	1.650	0.000	0.000	0.008	0.008	1.140	107.5	0.000	0.000	0.014	0.014	130.0	160.3	0.000	0.000	0.242	0.242	3352	
26	3.678	0.000	0.000	0.013	0.013	4.131	86.15	0.000	0.000	0.032	0.032	238.2	141.9	0.000	0.000	0.242	0.242	2967	
27	67.150	0.000	0.000	0.049	0.049	284.3	63.88	0.000	0.000	0.026	0.026	143.5	139.8	0.000	0.000	0.100	0.100	1208	
28	393.80	0.000	0.000	0.192	0.192	6533	51.86	0.000	0.000	0.026	0.026	116.5	110.1	0.000	0.000	0.241	0.241	2293	
29	487.50	0.000	0.000	0.206	0.206	8677	64.70	0.000	0.000	0.065	0.065	363.4	94.94	0.000	0.000	0.240	0.240	1969	
30	354.80	0.000	0.000	0.202	0.202	6192	412.5	0.000	0.000	1.090	1.090	38848	82.04	0.000	0.000	0.190	0.190	1347	
31						165.8	0.000	0.000	0.195	0.195	2793	73.76	0.000	0.000	0.181	0.181	1153		
TenDaily I	6.424	0	0	0.023	0.023	12.497	176.822	0	0	0.203	0.203	3309.997	1213.47	0	0	0.415	0.415	58063.99	
TenDaily II	3.584	0	0	0.014	0.014	4.561	245.107	0	0	0.136	0.136	3170.2	184.507	0	0	0.164	0.164	2753.605	
TenDaily III	131.652	0	0	0.07	0.07	2169.708	131.381	0	0	0.135	0.135	3914.989	179.913	0	0	0.216	0.216	3444.192	
Total		June					21867.67	July					107866.8	August					646062

Annual Sediment Load (M.T.) - 861988.04

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Manot ( CW1NAU000378)  
 BhopalLocal River : Narmada

Division : Narmada Division,  
 Sub-Division : UNSD, Jabalpur

Days	September--2023					October--2023					November--2023							
	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day	Q cumecs.	Coarse g/l	Medium g/l	Fine g/l	Total g/l	Total M.T./day
1	64.42	0.000	0.000	0.085	0.085	473.10	184.6	0.000	0.000	0.118	0.118	1882.0	24.51	0.000	0.000	0.027	0.027	57.18
2	65.99	0.000	0.000	0.085	0.085	484.63	140.7	0.000	0.000	0.101	0.101	1227.8	23.95	0.000	0.000	0.037	0.037	76.56
3	59.56	0.000	0.000	0.062	0.062	319.05	115.3	0.000	0.000	0.185	0.185	1843.0	23.49	0.000	0.000	0.036	0.036	73.06
4	53.82	0.000	0.000	0.084	0.084	390.60	111.7	0.000	0.000	0.184	0.184	1775.8	23.00	0.000	0.000	0.036	0.036	71.54
5	48.17	0.000	0.000	0.084	0.084	349.60	109.9	0.000	0.000	0.184	0.184	1747.1	23.00	0.000	0.000	0.036	0.036	71.54
6	60.79	0.000	0.000	0.085	0.085	446.44	94.1	0.000	0.000	0.205	0.205	1666.7	22.54	0.000	0.000	0.026	0.026	50.63
7	140.2	0.000	0.000	0.101	0.101	1223.4	82.85	0.000	0.000	0.207	0.207	1481.8	22.47	0.000	0.000	0.035	0.035	67.95
8	269.8	0.000	0.000	0.230	0.230	5361.5	69.4	0.000	0.000	0.067	0.067	401.74	21.91	0.000	0.000	0.035	0.035	66.26
9	225.8	0.000	0.000	0.067	0.067	1307.1	59.89	0.000	0.000	0.206	0.206	1065.9	21.81	0.000	0.000	0.035	0.035	65.95
10	234.6	0.000	0.000	0.135	0.135	2736.4	55.09	0.000	0.000	0.202	0.202	961.5	21.39	0.000	0.000	0.034	0.034	62.84
11	172.6	0.000	0.000	0.098	0.098	1461.4	53.14	0.000	0.000	0.001	0.001	4.591	21.30	0.000	0.000	0.034	0.034	62.57
12	149.4	0.000	0.000	0.099	0.099	1277.9	52.00	0.000	0.000	0.001	0.001	4.493	20.80	0.000	0.000	0.034	0.034	61.10
13	137.3	0.000	0.000	0.098	0.098	1162.5	49.81	0.000	0.000	0.001	0.001	4.304	20.26	0.000	0.000	0.027	0.027	47.26
14	170.5	0.000	0.000	0.097	0.097	1428.9	47.22	0.000	0.000	0.001	0.001	4.080	19.78	0.000	0.000	0.033	0.033	56.40
15	536.8	0.000	0.000	0.107	0.107	4962.6	44.9	0.000	0.000	0.001	0.001	3.879	19.64	0.000	0.000	0.033	0.033	56.00
16	699.1	0.000	0.000	0.099	0.099	5979.8	43.73	0.000	0.000	0.001	0.001	3.778	19.17	0.000	0.000	0.032	0.032	53.00
17	312.7	0.000	0.000	0.159	0.159	4295.7	42.21	0.000	0.000	0.001	0.001	3.647	19.11	0.000	0.000	0.032	0.032	52.84
18	246.9	0.000	0.000	0.101	0.101	2154.5	40.84	0.000	0.000	0.001	0.001	3.529	18.67	0.000	0.000	0.032	0.032	51.62
19	249.5	0.000	0.000	0.101	0.101	2177.2	52.17	0.000	0.000	0.008	0.008	36.060	18.67	0.000	0.000	0.032	0.032	51.62
20	301.6	0.000	0.000	0.104	0.104	2710.1	42.14	0.000	0.000	0.051	0.051	185.69	18.20	0.000	0.000	0.699	0.699	1099
21	179.6	0.000	0.000	0.132	0.132	2048.3	40.78	0.000	0.000	0.002	0.002	7.047	17.74	0.000	0.000	0.031	0.031	47.52
22	745.3	0.000	0.000	0.109	0.109	7018.9	39.35	0.000	0.000	0.049	0.049	166.59	17.32	0.000	0.000	0.030	0.030	44.89
23	409.7	0.000	0.000	0.109	0.109	3858.4	37.89	0.000	0.000	0.002	0.002	6.547	17.25	0.000	0.000	0.030	0.030	44.71
24	276.7	0.000	0.000	0.149	0.149	3562.1	36.5	0.000	0.000	0.047	0.047	148.2	16.76	0.000	0.000	0.030	0.030	43.44
25	238.4	0.000	0.000	0.115	0.115	2368.7	36.06	0.000	0.000	0.002	0.002	6.231	16.70	0.000	0.000	0.030	0.030	43.29
26	168.5	0.000	0.000	0.114	0.114	1659.7	34.61	0.000	0.000	0.002	0.002	5.981	16.24	0.000	0.000	0.029	0.029	40.69
27	153.7	0.000	0.000	0.114	0.114	1513.9	33.5	0.000	0.000	0.002	0.002	5.789	15.75	0.000	0.000	0.029	0.029	39.46
28	136.9	0.000	0.000	0.099	0.099	1171.0	30.72	0.000	0.000	0.002	0.002	5.308	15.30	0.000	0.000	0.020	0.020	26.44
29	131.1	0.000	0.000	0.109	0.109	1234.6	29.1	0.000	0.000	0.041	0.041	103.08	15.20	0.000	0.000	0.028	0.028	36.77
30	152.9	0.000	0.000	0.113	0.113	1492.8	28.27	0.000	0.000	0.002	0.002	4.885	14.61	0.000	0.000	0.028	0.028	35.35
31						26.9	0.000	0.000	0.002	0.002	4.648							
TenDaily I	122.315	0	0	0.102	0.102	1309.182	102.353	0	0	0.166	0.166	1405.332	22.807	0	0	0.034	0.034	66.351
TenDaily II	297.64	0	0	0.106	0.106	2761.084	46.816	0	0	0.007	0.007	25.405	19.56	0	0	0.099	0.099	159.157
TenDaily III	259.28	0	0	0.116	0.116	2592.847	33.971	0	0	0.014	0.014	42.212	16.287	0	0	0.029	0.029	40.256
Total	September					66631.13	October					14771.7	November					2657.635

Annual Sediment Load (M.T.) - 861988.04

### Daily Observed Sediment Datasheet for period : 2023-24

Station Name : Narmada at Manot ( CW1NAU000378)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Days	December--2023					January--2024					February--2024							
	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	14.56	0.000	0.000	0.013	0.013	16.354	10.40	0.000	0.000	0.012	0.012	10.783	6.667	0.000	0.000	0.007	0.007	4.0320
2	14.45	0.000	0.000	0.027	0.027	33.709	10.35	0.000	0.000	0.023	0.023	20.568	6.634	0.000	0.000	0.018	0.018	10.317
3	14.45	0.000	0.000	0.027	0.027	33.709	9.983	0.000	0.000	0.022	0.022	18.976	6.372	0.000	0.000	0.017	0.017	9.3590
4	14.02	0.000	0.000	0.054	0.054	65.412	9.928	0.000	0.000	0.022	0.022	18.871	6.360	0.000	0.000	0.017	0.017	9.3420
5	20.33	0.000	0.000	0.033	0.033	57.965	9.543	0.000	0.000	0.022	0.022	18.139	6.354	0.000	0.000	0.021	0.021	11.529
6	17.68	0.000	0.000	0.031	0.031	47.354	9.500	0.000	0.000	0.022	0.022	18.058	6.329	0.000	0.000	0.017	0.017	9.2960
7	17.61	0.000	0.000	0.031	0.031	47.167	9.108	0.000	0.000	0.021	0.021	16.526	6.063	0.000	0.000	0.017	0.017	8.9050
8	17.19	0.000	0.000	0.030	0.030	44.556	8.738	0.000	0.000	0.007	0.007	5.2850	6.042	0.000	0.000	0.017	0.017	8.8740
9	17.13	0.000	0.000	0.030	0.030	44.401	8.722	0.000	0.000	0.020	0.020	15.072	6.017	0.000	0.000	0.017	0.017	8.8380
10	20.30	0.000	0.000	0.033	0.033	57.879	8.331	0.000	0.000	0.020	0.020	14.396	6.003	0.000	0.000	0.017	0.017	8.8170
11	23.10	0.000	0.000	0.011	0.011	21.954	8.313	0.000	0.000	0.020	0.020	14.365	5.900	0.000	0.000	0.016	0.016	8.1560
12	20.41	0.000	0.000	0.033	0.033	58.193	8.277	0.000	0.000	0.020	0.020	14.303	5.664	0.000	0.000	0.015	0.015	7.3410
13	18.6	0.000	0.000	0.032	0.032	51.425	8.010	0.000	0.000	0.020	0.020	13.841	5.647	0.000	0.000	0.016	0.016	7.8060
14	17.62	0.000	0.000	0.031	0.031	47.193	7.980	0.000	0.000	0.019	0.019	13.100	7.251	0.000	0.000	0.018	0.018	11.277
15	16.63	0.000	0.000	0.030	0.030	43.105	7.977	0.000	0.000	0.019	0.019	13.095	7.039	0.000	0.000	0.018	0.018	10.947
16	16.56	0.000	0.000	0.030	0.030	42.924	7.945	0.000	0.000	0.019	0.019	13.043	7.021	0.000	0.000	0.018	0.018	10.919
17	16.1	0.000	0.000	0.029	0.029	40.340	7.609	0.000	0.000	0.019	0.019	12.491	6.707	0.000	0.000	0.018	0.018	10.431
18	15.14	0.000	0.000	0.007	0.007	9.1570	7.578	0.000	0.000	0.019	0.019	12.440	6.707	0.000	0.000	0.018	0.018	10.431
19	15.10	0.000	0.000	0.028	0.028	36.530	7.543	0.000	0.000	0.019	0.019	12.383	6.693	0.000	0.000	0.033	0.033	19.083
20	14.56	0.000	0.000	0.027	0.027	33.966	7.495	0.000	0.000	0.019	0.019	12.304	6.362	0.000	0.000	0.017	0.017	9.3450
21	13.98	0.000	0.000	0.027	0.027	32.613	7.230	0.000	0.000	0.018	0.018	11.244	6.333	0.000	0.000	0.017	0.017	9.3020
22	13.58	0.000	0.000	0.026	0.026	30.506	7.224	0.000	0.000	0.014	0.014	8.738	6.309	0.000	0.000	0.017	0.017	9.2670
23	13.1	0.000	0.000	0.026	0.026	29.428	7.205	0.000	0.000	0.018	0.018	11.205	5.978	0.000	0.000	0.017	0.017	8.7800
24	12.74	0.000	0.000	0.025	0.025	27.518	7.177	0.000	0.000	0.018	0.018	11.162	5.956	0.000	0.000	0.016	0.016	8.2340
25	12.39	0.000	0.000	0.025	0.025	26.762	7.151	0.000	0.000	0.013	0.013	8.0320	5.956	0.000	0.000	0.016	0.016	8.2340
26	12.04	0.000	0.000	0.008	0.008	8.3220	7.005	0.000	0.000	0.018	0.018	10.894	5.623	0.000	0.000	0.017	0.017	8.2590
27	11.98	0.000	0.000	0.025	0.025	25.877	7.005	0.000	0.000	0.018	0.018	10.894	5.599	0.000	0.000	0.016	0.016	7.7400
28	11.56	0.000	0.000	0.024	0.024	23.971	7.000	0.000	0.000	0.018	0.018	10.886	5.314	0.000	0.000	0.015	0.015	6.8870
29	11.5	0.000	0.000	0.024	0.024	23.846	6.961	0.000	0.000	0.013	0.013	7.8190	5.293	0.000	0.000	0.015	0.015	6.8600
30	11.16	0.000	0.000	0.024	0.024	23.141	6.715	0.000	0.000	0.018	0.018	10.443						
31	10.78	0.000	0.000	0.023	0.023	21.422	6.689	0.000	0.000	0.018	0.018	10.403						
TenDaily I	16.772	0	0	0.031	0.031	44.851	9.46	0	0	0.019	0.019	15.667	6.284	0	0	0.017	0.017	8.931
TenDaily II	17.382	0	0	0.026	0.026	38.479	7.873	0	0	0.019	0.019	13.136	6.499	0	0	0.019	0.019	10.574
TenDaily III	12.255	0	0	0.023	0.023	24.855	7.033	0	0	0.017	0.017	10.156	5.818	0	0	0.016	0.016	8.174
Total	December					1106.699	January					399.756	February					268.607

Annual Sediment Load (M.T.) - 861988.04

### Daily Observed Sediment Datasheet for period: 2023-24

Station Name : Narmada at Manot ( CW1NAU000378)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur

Days	March--2024					April--2024					May--2024							
	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	5.264	0.000	0.000	0.015	0.015	6.8220	4.326	0.000	0.000	0.014	0.014	5.2330	2.393	0.000	0.000	0.010	0.010	2.0680
2	4.961	0.000	0.000	0.015	0.015	6.4290	4.303	0.000	0.000	0.014	0.014	5.2050	2.373	0.000	0.000	0.010	0.010	2.0500
3	4.961	0.000	0.000	0.015	0.015	6.4290	4.144	0.000	0.000	0.013	0.013	4.6550	2.356	0.000	0.000	0.010	0.010	2.0360
4	4.948	0.000	0.000	0.015	0.015	6.4130	4.131	0.000	0.000	0.013	0.013	4.6400	2.248	0.000	0.000	0.009	0.009	1.7480
5	4.921	0.000	0.000	0.015	0.015	6.3780	3.930	0.000	0.000	0.013	0.013	4.4140	2.088	0.000	0.000	0.009	0.009	1.6240
6	4.664	0.000	0.000	0.014	0.014	5.6420	3.917	0.000	0.000	0.013	0.013	4.4000	1.961	0.000	0.000	0.009	0.009	1.5250
7	4.633	0.000	0.000	0.014	0.014	5.6040	3.755	0.000	0.000	0.013	0.013	4.2180	1.876	0.000	0.000	0.009	0.009	1.4590
8	4.633	0.000	0.000	0.014	0.014	5.6040	3.602	0.000	0.000	0.012	0.012	3.7350	1.763	0.000	0.000	0.008	0.008	1.2190
9	4.616	0.000	0.000	0.014	0.014	5.5840	3.448	0.000	0.000	0.012	0.012	3.5750	1.751	0.000	0.000	0.008	0.008	1.2100
10	4.616	0.000	0.000	0.014	0.014	5.5840	3.432	0.000	0.000	0.012	0.012	3.5580	1.617	0.000	0.000	0.008	0.008	1.1180
11	4.385	0.000	0.000	0.014	0.014	5.3040	3.270	0.000	0.000	0.012	0.012	3.3900	1.605	0.000	0.000	0.008	0.008	1.1090
12	4.378	0.000	0.000	0.014	0.014	5.2960	3.259	0.000	0.000	0.012	0.012	3.3790	1.516	0.000	0.000	0.008	0.008	1.0480
13	4.363	0.000	0.000	0.014	0.014	5.2770	3.247	0.000	0.000	0.012	0.012	3.3660	1.504	0.000	0.000	0.007	0.007	0.9100
14	4.355	0.000	0.000	0.014	0.014	5.2680	3.440	0.000	0.000	0.012	0.012	3.5670	1.498	0.000	0.000	0.007	0.007	0.9060
15	4.346	0.000	0.000	0.014	0.014	5.2570	3.617	0.000	0.000	0.012	0.012	3.7500	1.935	0.000	0.000	0.009	0.009	1.5050
16	4.134	0.000	0.000	0.013	0.013	4.6430	3.788	0.000	0.000	0.013	0.013	4.2550	1.924	0.000	0.000	0.009	0.009	1.4960
17	4.134	0.000	0.000	0.013	0.013	4.6430	3.788	0.000	0.000	0.013	0.013	4.2550	3.122	0.000	0.000	0.011	0.011	2.9670
18	4.126	0.000	0.000	0.013	0.013	4.6340	3.602	0.000	0.000	0.012	0.012	3.7350	3.108	0.000	0.000	0.011	0.011	2.9540
19	3.945	0.000	0.000	0.013	0.013	4.4310	3.589	0.000	0.000	0.012	0.012	3.7210	2.840	0.000	0.000	0.011	0.011	2.6990
20	3.934	0.000	0.000	0.013	0.013	4.4190	3.422	0.000	0.000	0.012	0.012	3.5480	2.832	0.000	0.000	0.011	0.011	2.6920
21	3.766	0.000	0.000	0.013	0.013	4.2300	3.238	0.000	0.000	0.012	0.012	3.3570	2.653	0.000	0.000	0.010	0.010	2.2920
22	5.611	0.000	0.000	0.016	0.016	7.7570	3.067	0.000	0.000	0.011	0.011	2.9150	2.638	0.000	0.000	0.010	0.010	2.2790
23	4.937	0.000	0.000	0.015	0.015	6.3980	3.059	0.000	0.000	0.011	0.011	2.9070	3.118	0.000	0.000	0.011	0.011	2.9630
24	5.338	0.000	0.000	0.015	0.015	6.9180	2.860	0.000	0.000	0.011	0.011	2.7180	3.930	0.000	0.000	0.013	0.013	4.4140
25	5.694	0.000	0.000	0.016	0.016	7.8710	2.846	0.000	0.000	0.011	0.011	2.7050	3.581	0.000	0.000	0.012	0.012	3.7130
26	6.034	0.000	0.000	0.017	0.017	8.8630	2.688	0.000	0.000	0.010	0.010	2.3220	3.428	0.000	0.000	0.012	0.012	3.5540
27	5.586	0.000	0.000	0.016	0.016	7.7220	2.676	0.000	0.000	0.010	0.010	2.3120	3.037	0.000	0.000	0.011	0.011	2.8860
28	5.255	0.000	0.000	0.015	0.015	6.8100	2.670	0.000	0.000	0.010	0.010	2.3070	2.672	0.000	0.000	0.010	0.010	2.3090
29	4.904	0.000	0.000	0.015	0.015	6.3560	2.537	0.000	0.000	0.010	0.010	2.1920	2.506	0.000	0.000	0.010	0.010	2.1650
30	4.888	0.000	0.000	0.015	0.015	6.3350	2.518	0.000	0.000	0.010	0.010	2.1760	2.338	0.000	0.000	0.010	0.010	2.0200
31	4.625	0.000	0.000	0.014	0.014	5.5940							2.327	0.000	0.000	0.010	0.010	2.0110
TenDaily I	4.822	0	0	0.015	0.015	6.049	3.899	0	0	0.013	0.013	4.363	2.043	0	0	0.009	0.009	1.606
TenDaily II	4.21	0	0	0.014	0.014	4.917	3.502	0	0	0.012	0.012	3.697	2.188	0	0	0.009	0.009	1.829
TenDaily III	5.149	0	0	0.015	0.015	6.805	2.816	0	0	0.011	0.011	2.591	2.93	0	0	0.011	0.011	2.782
Total	March				184.515	April				106.508								64.947

Annual Sediment Load (M.T.) - 861988.04

**Annual Sediment Load for period: 1987-2024**

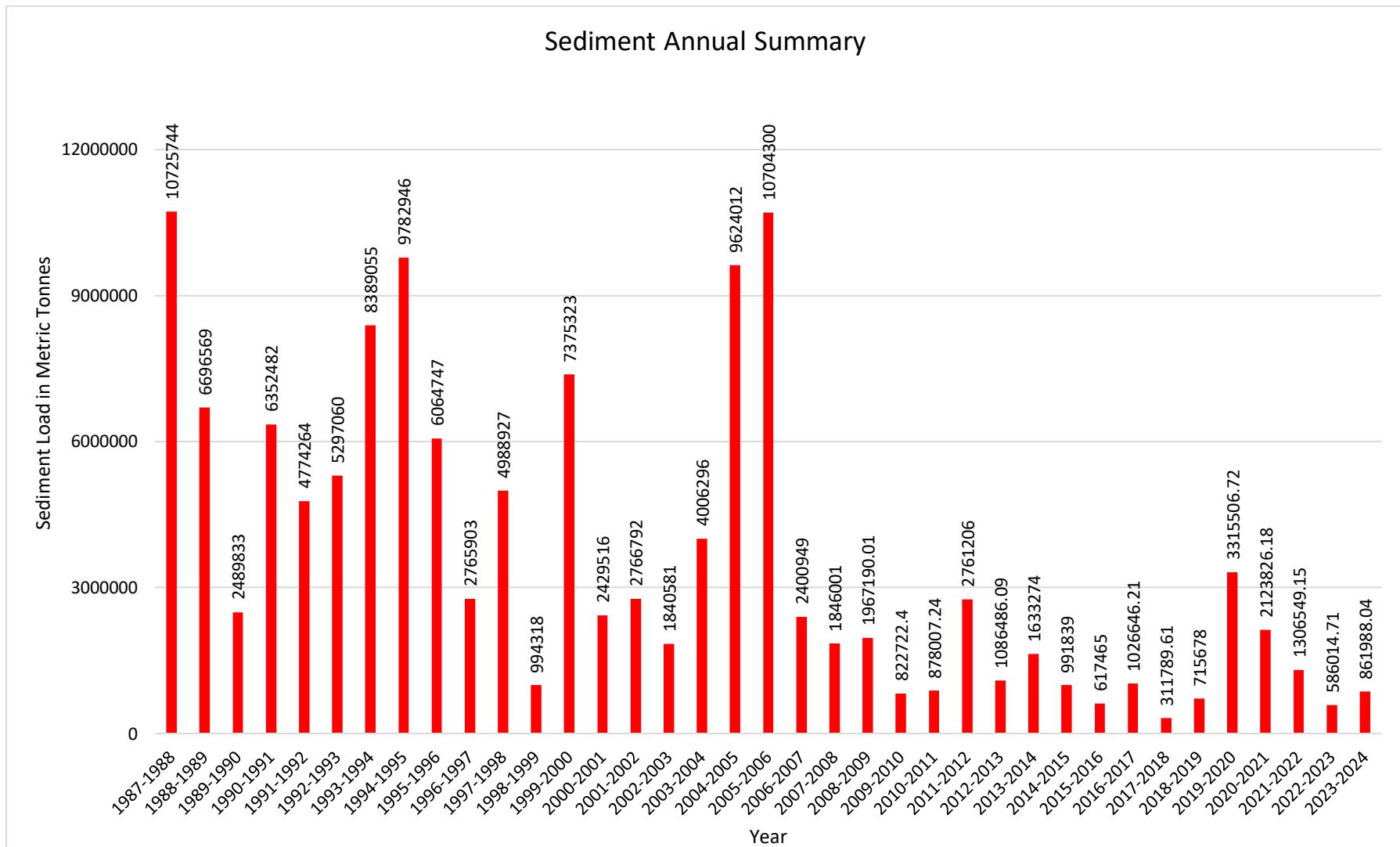
Station Name : Narmada at Manot ( CW1NAU000378) Division : Narmada Division, Bhopal  
 Local River : Narmada Sub-Division : UNSD, Jabalpur

<b>Year</b>	<b>Monsoon (M.T.)</b>	<b>Non-Monsoon (M.T.)</b>	<b>Annual Load (M.T.)</b>	<b>Annual Run Off (MCM)</b>
<b>1987-1988</b>	10725744	0	10725744	3916
<b>1988-1989</b>	6696569	0	6696569	3252
<b>1989-1990</b>	2489833	0	2489833	1423
<b>1990-1991</b>	6352482	0	6352482	4327
<b>1991-1992</b>	4774264	0	4774264	3270
<b>1992-1993</b>	5297060	0	5297060	2563
<b>1993-1994</b>	8389055	0	8389055	2849
<b>1994-1995</b>	9782946	0	9782946	5549
<b>1995-1996</b>	6064747	0	6064747	3479
<b>1996-1997</b>	2765903	0	2765903	2211
<b>1997-1998</b>	4988927	0	4988927	3859
<b>1998-1999</b>	994318	0	994318	2291
<b>1999-2000</b>	7375323	0	7375323	4115
<b>2000-2001</b>	2429516	0	2429516	2043
<b>2001-2002</b>	2766792	0	2766792	3725
<b>2002-2003</b>	1840581	0	1840581	2000
<b>2003-2004</b>	4006296	0	4006296	4442
<b>2004-2005</b>	9624012	0	9624012	3474
<b>2005-2006</b>	10701534	2767	10704300	4890
<b>2006-2007</b>	2398636	2313	2400949	2902
<b>2007-2008</b>	1844237	1764	1846001	1425
<b>2008-2009</b>	1966443.9	746.1	1967190	2225.42
<b>2009-2010</b>	820713.66	2008.74	822722.4	1222.85
<b>2010-2011</b>	876001.91	2005.34	878007.24	2023.37
<b>2011-2012</b>	2758553	2653	2761206	3878
<b>2012-2013</b>	1085095.12	1390.97	1086486.1	2177.72
<b>2013-2014</b>	1628948	4325	1633274	2874
<b>2014-2015</b>	990486	1352	991839	2158
<b>2015-2016</b>	617184	280	617465	1438
<b>2016-2017</b>	1025923.8	722.4	1026646.2	2070.75
<b>2017-2018</b>	310766.81	1022.79	311789.61	1217.46
<b>2018-2019</b>	713233	2445	715678	1771
<b>2019-2020</b>	3304228.99	11277.73	3315506.7	3830.16
<b>2020-2021</b>	2114767.41	9058.78	2123826.2	3554.38
<b>2021-2022</b>	1300413.28	5891.05	1306304.3	2291.34
<b>2022-2023</b>	582938.36	3076.35	586014.71	3300.2
<b>2023-2024</b>	<b>859857</b>	<b>2131.03</b>	<b>861988.04</b>	<b>2895.7</b>

### Annual Sediment Load for period: 1987-2024

Station Name : Narmada at Manot ( CW1NAU000378)  
 Local River : Narmada

Division : Narmada Division, Bhopal  
 Sub-Division : UNSD, Jabalpur



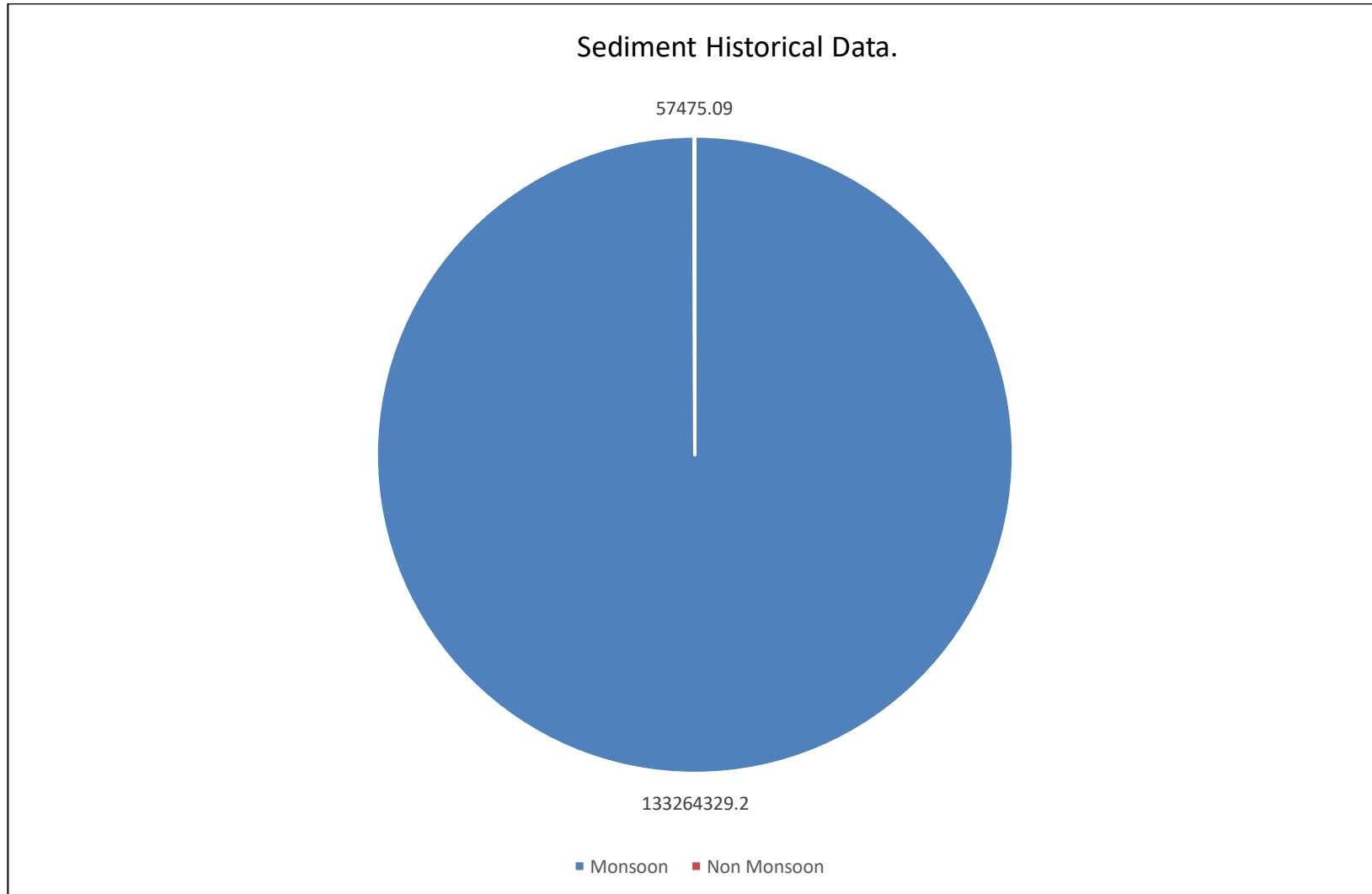
### **Annual Sediment Load for period: 1987-2024**

Station Name : Narmada at Manot ( CW1NAU000378)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur



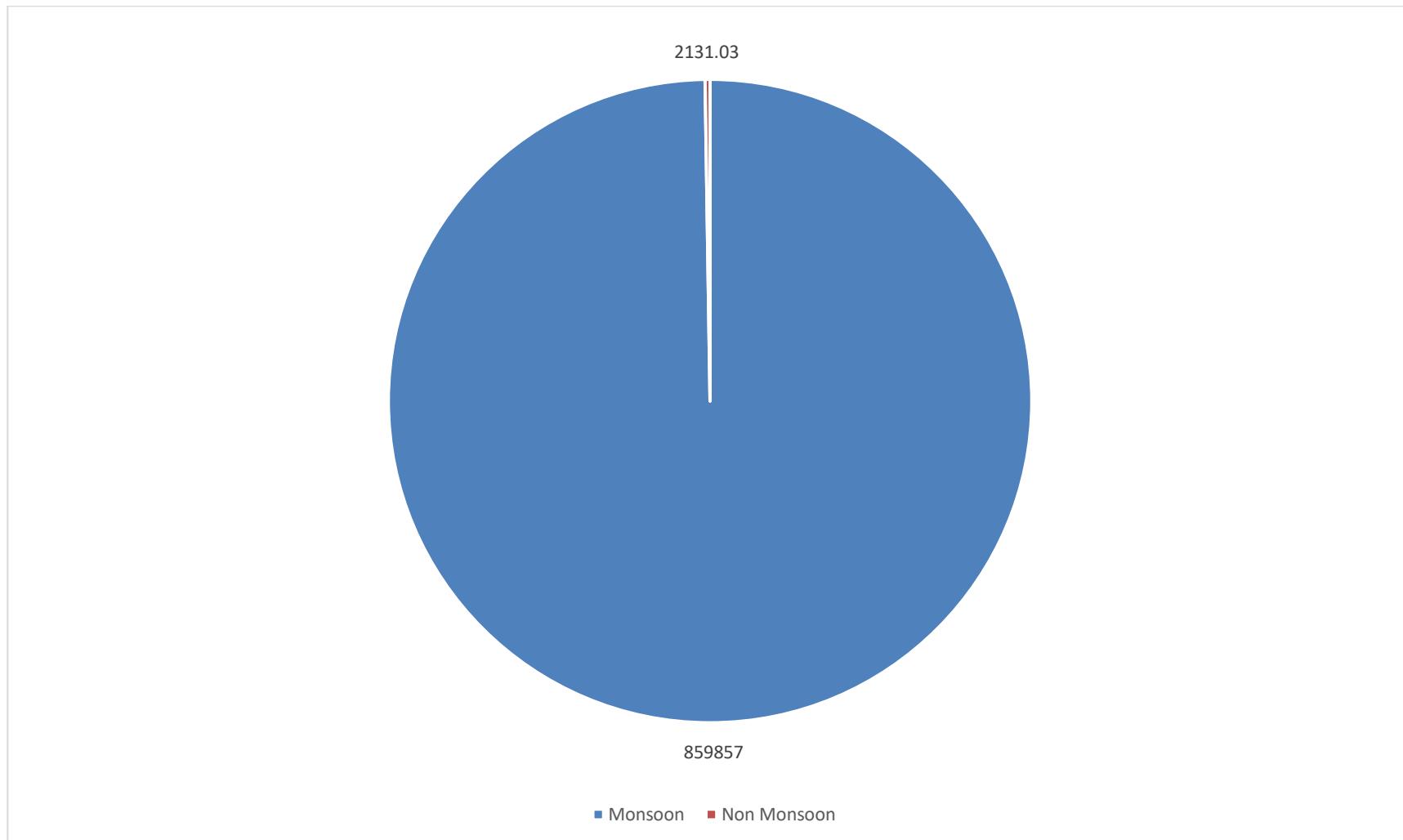
### **Seasonal Sediment Load for period: 2023-24**

Station Name : Narmada at Manot ( CW1NAU000378)

Division : Narmada Division, Bhopal

Local River : Narmada

Sub-Division : UNSD, Jabalpur



## 5 भाग- II तलछट पदार्थ ऑकड़े

## 5.1 चाँदवाडा में ओरसांग

**BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023 -2024**

<b>SITE RIVER MEASURING AUTHORITY</b>	<b>CHANDWADA ORSANG TAPI DIVISION</b>	<b>CODE BASIN CROSS SECTION</b>	<b>01 02 15 032 NARMADA STATION GAUGE LINE</b>
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**PRE MONSOON SURVEY ( DATE 04.05.2023 )**

Discharge 'Q'	Cumecs	Water edge R.B.	m.	L.B.	m.
Area of Section 'A'	Sq.m.	Mean velocity 'V'	m/Sec		
Wetted Perimeter 'P'	m.	Hydraulic Mean Depth 'R'	m.		

Sl. No.	R.D. of sampling point (m)	R.L. of bed (m)	Mean dia. (mm)	Remarks
1	0.00	30.570	2.57	<b>Av.mean dia."m" = 3.36 mm</b>
2	81.00	28.092	4.68	<b>Silt factor "f" = 3.23</b>
3	165.00	15.600	2.71	
4	235.00	17.015	1.77	
5	360.00	18.730	1.62	
6	420.00	21.983	2.61	
7	480.00	26.380	5.57	
8	570.00	32.550	5.35	

Note Pooling /  
Stagnant Water

**MONSOON SURVEY**

Discharge 'Q'	Cumecs	Water edge R.B.	m.	L.B.	m.
Area of Section 'A'	Sq.m.	Mean velocity 'V'	m/Sec		
Wetted Perimeter 'P'	m.	Hydraulic Mean Depth 'R'	m.		

Sl. No.	R.D. of sampling point (m)	R.L. of bed (m)	Mean dia. (mm)	Remarks
				<b>Av.mean dia."m" = mm</b>

SURVEY NOT DONE

**Av.mean dia."m" = mm**

**Silt factor "f" =**

**POST MONSOON SURVEY (DATE 06.12.2023 )**

Discharge 'Q'	Cumecs	Water edge R.B.	m.	L.B.	m.
Area of Section 'A'	Sq.m.	Mean velocity 'V'	m/Sec		
Wetted Perimeter 'P'	m.	Hydraulic Mean Depth 'R'	m.		

Sl. No.	R.D. of sampling point (m)	R.L. of bed (m)	Mean dia. (mm)	Remarks

1	0.00	30.570	3.47	<b>Av.mean dia."m" = 3.16 mm</b>	Pooling / Stagnant Water
2	81.00	28.068	2.89		
3	160.00	15.769	4.35	<b>Silt factor "f" = 3.13</b>	
4	240.00	16.569	3.50		
5	364.00	18.876	1.47		
6	420.00	21.883	3.77		
7	480.00	26.380	2.77		
8	570.00	32.550	3.08		

Note Pooling /  
Stagnant Water

## 5.2 गरुडेश्वर में नर्मदा

<b>BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023 -2024</b>					
SITE RIVER MEASURING AUTHORITY LINE	GARUDESHWAR TAPI TAPI DIVISION	CODE BASIN CROSS SECTION	01 02 15 030 NARMADA STATION GAUGE		
<b><u>PRE MONSOON SURVEY ( DATE 15.05.2023 )</u></b>					
Discharge 'Q'	23.427 Cumecs m. Area of Section 'A' 0.179 m/Sec	Water edge R.B. 130.40 Sq.m. Mean velocity	15.00 m.	L.B. 'V'	
Wetted Perimeter 'P'	165.025 m.	Hydraulic Mean Depth 'R'	0.79 m.		
Sl. No. R.D. of sampling	R.L. of bed Remarks point (m)	Mean dia. (m)			(mm)
1 0.00	14.054	5.34	<b>Av.mean dia."m" =</b>	<b>10.51 mm</b>	Water flows in single channel.
2 240.00	13.074	16.69	<b>Silt factor "f" =</b>	<b>5.71</b>	
3 270.00	12.874	14.66			
4 300.00	12.354	12.99			
5 360.00	11.954	8.09			
6 390.00	12.234	16.80			
7 420.00	11.874	7.53			
8 450.00	12.704	15.01			
9 570.00	20.532	3.75			
10 650.00	39.928	4.23			
Note	Water flows in single channel.				
<b><u>MONSOON SURVEY</u></b>					
Discharge 'Q'	Cumecs m. Area of Section 'A' 'V'	Water edge R.B. Sq.m. m/Sec	m.	L.B. Mean velocity	
Wetted Perimeter 'P'	m.	Hydraulic Mean Depth 'R'	m.		
Sl. No. R.D. of sampling	R.L. of bed Remarks point (m)	Mean dia. (m)			(mm)
SURVEY NOT DONE					<b>Av.mean dia."m" = mm</b>
<b>Silt factor "f" =</b>					
<b><u>POST MONSOON SURVEY (DATE 20.11.2023 )</u></b>					
Discharge 'Q'	17.770 Cumecs m. Area of Section 'A' 0.347 m/Sec	Water edge R.B. 76.125 Sq.m. Mean velocity	17.00 m.	L.B. 'V'	
Wetted Perimeter 'P'	140.012 m.	Hydraulic Mean Depth 'R'	0.549 m.		
Sl. No. R.D. of sampling	R.L. of bed Remarks point (m)	Mean dia. (m)			(mm)
1 0.00	19.272	14.46	<b>Av.mean dia."m" =</b>	<b>10.60 mm</b>	Water flows in single channel.
2 240.00	12.998	7.32	<b>Silt factor "f" =</b>	<b>5.73</b>	
3 270.00	12.768	6.92			
4 300.00	12.098	9.35			
5 360.00	11.748	14.17			
6 390.00	12.048	8.10			
7 420.00	11.548	17.09			
8 450.00	12.762	9.64			
9 570.00	18.997	8.72			
10 650.00	39.928	10.25			
Note	Water flows in single channel.				

### 5.3 मंडलेश्वर में नर्मदा

#### **BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24**

SITE	: NARMADA AT MANDLESHWAR	CODE	: CW1NAM000189
MEASURING AUTHORITY	: NARMADA DIV.	CROSS SECTION	: Station gauge line

#### **PreMonsoon Survey ( Date 26-05-2023 )**

Discharge Observed :	193 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	588.30 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	145.230	3.78		
2	100	138.770	3.43	Av.mean dia "m" =	<b>3.75</b>
3	200	138.205	3.44		
4	300	138.400	3.15	Silt factor	
5	400	138.705	3.85	"f" = $1.76 \sqrt{m}$	
6	500	138.290	4.04	=	<b>3.41</b>
7	600	139.450	4.26		

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

#### **Monsoon Survey ( Date 26-10-2023 )**

Discharge Observed :	257 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	537.50 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	142.880	3.53		
2	100	139.420	3.81	Av.mean dia "m" =	<b>3.32</b>
3	200	138.330	3.66		
4	300	138.610	3.41	Silt factor	
5	400	139.400	3.73	"f" = $1.76 \sqrt{m}$	
6	500	138.200	2.99	=	<b>3.21</b>
7	600	138.070	2.68		

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

#### **PostMonsoon Survey ( Date 05-02-2024 )**

Discharge Observed :	509.5 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	581.57 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	141.020	2.81		
2	100	139.410	4.31	Av.mean dia "m" =	<b>3.12</b>
3	200	138.320	3.84		
4	300	138.600	3.04	Silt factor	
5	400	139.400	2.96	"f" = $1.76 \sqrt{m}$	
6	500	138.190	2.55	=	<b>3.11</b>
7	600	24.000	2.77		

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

## 5.4 नर्मदापुरम में नर्मदा

### BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24

SITE : NARMADA AT NARMADAPURAM CODE : CW1NAM000278  
 MEASURING AUTHORITY : NARMADA DIV CROSS SECTION : Station gauge line

#### PreMonsoon Survey ( Date 30-05-2023 )

Discharge Observed :	129 cumec	Water edge RB :	m	LB :	m
Area of section :	543.60 sq.m	Mean Velocity	:	0.2373	m/sec
Wetted perimeter :	334.70 m	Hydraulic Mean Depth	:	1.6241	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	100	285.316	5.58		
2	200	282.165	5.05	Av.mean dia "m" =	<b>3.41</b>
3	300	283.660	3.89		
4	400	283.460	2.88	Silt factor	
5	500	283.565	2.14	"f" = $1.76 \sqrt{m}$	
6	600	283.610	2.17	=	<b>3.25</b>
7	700	286.150	2.14		

**Note :** i. Discharge observation was at station gauge line.  
 ii. River bed : Flowing water.

#### Monsoon Survey ( Date 03-10-2023 )

Discharge Observed :	749 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	1076.30 sq.m	Mean Velocity	:	0.6959	m/sec
Wetted perimeter :	576.50 m	Hydraulic Mean Depth	:	1.8670	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	100	284.940	3.03		
2	200	282.180	3.13	Av.mean dia "m" =	<b>2.39</b>
3	300	283.550	1.97		
4	400	283.840	1.94	Silt factor	
5	500	283.310	2.16	"f" = $1.76 \sqrt{m}$	
6	600	283.990	2.25	=	<b>2.72</b>
7	700	286.540	2.27		

**Note :** i. Discharge observation was at station gauge line.  
 ii. River bed: Flowing water.

#### PostMonsoon Survey ( Date 04-12-2023 )

Discharge Observed :	208 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	510.80 sq.m	Mean Velocity	:	0.4072	m/sec
Wetted perimeter :	364.20 m	Hydraulic Mean Depth	:	1.4025	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	100	284.920	2.15		
2	200	280.060	2.17	Av.mean dia "m" =	<b>2.00</b>
3	300	283.570	1.91		
4	400	284.030	1.99	Silt factor	
5	500	283.075	1.98	"f" = $1.76 \sqrt{m}$	
6	600	284.265	1.93	=	<b>2.49</b>
7	700	287.670	1.88		

**Note :** i. Discharge observation was at station gauge line.  
 ii. River bed : Flowing water.

## 5.5 सांडिया में नर्मदा

### BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24

SITE	: NARMADA AT SANDIA	CODE	: CW1NAU000450
MEASURING AUTHORITY	: NBO	CROSS SECTION	: Station gauge line

#### PreMonsoon Survey ( Date 06-05-2023 )

Discharge Observed :	83.92 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	93.60 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	100	306.300	3.63		
2	200	297.180	3.17	Av.mean dia "m" =	<b>2.60</b>
3	300	298.800	2.69		
4	400	299.410	2.21	Silt factor	
5	500	299.745	2.35	"f" = $1.76 \sqrt{m}$	
6	600	300.000	2.06	=	<b>2.84</b>
7	700	301.500	2.12		

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

#### Monsoon Survey ( Date 04-09-2023 )

Discharge Observed :	360.1 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	457.30 sq.m	Mean Velocity	:	0.7874	m/sec
Wetted perimeter :	437.80 m	Hydraulic Mean Depth	:	1.0445	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	100	306.300	3.15		
2	200	298.310	3.30	Av.mean dia "m" =	<b>2.83</b>
3	300	299.750	3.45		
4	400	299.910	3.27	Silt factor	
5	500	299.880	2.37	"f" = $1.76 \sqrt{m}$	
6	600	300.050	2.12	=	<b>2.96</b>
7	700	301.500	2.14		

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

#### PostMonsoon Survey ( Date 18-12-2023 )

Discharge Observed :	156.1 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	168.40 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	100	306.300	3.60		
2	200	297.880	3.78	Av.mean dia "m" =	<b>2.81</b>
3	300	298.950	2.67		
4	400	299.910	2.70	Silt factor	
5	500	299.880	2.40	"f" = $1.76 \sqrt{m}$	
6	600	300.050	2.26	=	<b>2.95</b>
7	700	301.500	2.27		

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

## 5.6 गाडरवाडा में शक्कर

### BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24

SITE	: SHAKKAR AT GADARWARA	CODE	: CW1NAU000391
MEASURING AUTHORITY	: Narmada Div.	CROSS SECTION	: Station gauge line

#### PreMonsoon Survey ( Date 11-05-2023 )

Discharge Observed :	---	cumec	Water edge RB :	---	m	LB :	---	m
Area of section :	---	sq.m	Mean Velocity	:			---	m/sec
Wetted perimeter :	---	m	Hydraulic Mean Depth	:			---	m
Sl. No	R.D.of sampling point in meters		R.L. of bed in meters	Mean diameter in mm		Remarks		
1	30		321.555	3.59				
2	60		322.970	3.22			Av.mean dia "m" =	<b>2.65</b>
3	90		322.855	2.80				
4	120		322.565	2.40			Silt factor	
5	150		322.480	2.27			"f" = $1.76 \sqrt{m}$	
6	180		321.800	2.30			=	<b>2.87</b>
7	210		322.350	2.01				

Note : i. Discharge observation was at station gauge line.  
ii. River bed : Stagnant Water.

#### Monsoon Survey ( Date 03-10-2023 )

Discharge Observed :	176.84	cumec	Water edge RB :	0.00	m	LB :	0.00	m
Area of section :	222.78	sq.m	Mean Velocity	:			0.7938	m/sec
Wetted perimeter :	183.77	m	Hydraulic Mean Depth	:			1.2123	m
Sl. No	R.D.of sampling point in meters		R.L. of bed in meters	Mean diameter in mm		Remarks		
1	30		322.150	3.66				
2	60		322.945	2.40			Av.mean dia "m" =	<b>2.55</b>
3	90		322.845	2.38				
4	120		322.555	2.38			Silt factor	
5	150		322.945	2.40			"f" = $1.76 \sqrt{m}$	
6	180		321.900	2.35			=	<b>2.81</b>
7	210		322.360	2.31				

Note : i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

#### PostMonsoon Survey ( Date 19-12-2023 )

Discharge Observed :	9.45	cumec	Water edge RB :	0.00	m	LB :	0.00	m
Area of section :	27.19	sq.m	Mean Velocity	:			0.3476	m/sec
Wetted perimeter :	57.07	m	Hydraulic Mean Depth	:			0.4764	m
Sl. No	R.D.of sampling point in meters		R.L. of bed in meters	Mean diameter in mm		Remarks		
1	30		322.170	2.71				
2	60		322.945	2.94			Av.mean dia "m" =	<b>2.49</b>
3	90		322.815	2.42				
4	120		322.505	2.39			Silt factor	
5	150		322.360	2.42			"f" = $1.76 \sqrt{m}$	
6	180		322.745	2.29			=	<b>2.78</b>
7	210		322.160	2.24				

Note : i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

## 5.7 बरमानधाट में नर्मदा

### BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24

SITE	: NARMADA AT BARMANGHAT	CODE	: CW1NAU000188
MEASURING AUTHORITY	: NARMADA DIV	CROSS SECTION	: Station gauge line

#### PreMonsoon Survey ( Date 23-05-2023 )

Discharge Observed :	94 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	130.80 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	60	311.900	3.51		
2	120	310.715	3.06	Av.mean dia "m" =	<b>2.54</b>
3	180	306.765	2.43		
4	240	306.115	2.38	Silt factor	
5	300	308.580	2.36	"f" = $1.76 \sqrt{m}$	
6	360	322.620	2.04	=	<b>2.81</b>
7	420	331.130	2.02		

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

#### Monsoon Survey ( Date 14-09-2023 )

Discharge Observed :	423.5 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	176.30 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	60	311.930	3.55		
2	120	310.850	3.50	Av.mean dia "m" =	<b>2.59</b>
3	180	307.030	2.59		
4	240	306.050	2.21	Silt factor	
5	300	308.850	2.19	"f" = $1.76 \sqrt{m}$	
6	360	323.212	2.03	=	<b>2.83</b>
7	420	327.830	2.06		

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

#### PostMonsoon Survey ( Date 07-12-2023 )

Discharge Observed :	128 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	134.90 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	60	311.925	3.43		
2	120	311.025	3.52	Av.mean dia "m" =	<b>2.69</b>
3	180	306.980	2.78		
4	240	306.015	2.58	Silt factor	
5	300	308.965	2.28	"f" = $1.76 \sqrt{m}$	
6	360	323.340	2.15	=	<b>2.89</b>
7	420	331.130	2.07		

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

## 5.8 बामनी में बंजर

### BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24

SITE	: BANJAR AT BAMNI	CODE	: CW1NAU000781
MEASURING AUTHORITY	: Narmada Div	CROSS SECTION	: Station gauge line

#### PreMonsoon Survey ( Date 18-05-2023 )

Discharge Observed :	3.833 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	0.00 m	Hydraulic Mean Depth	:		m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	439.540	3.79		
2	100	439.360	3.50	Av.mean dia "m" =	<b>3.14</b>
3	150	439.360	2.98		
4	200	439.400	2.27	Silt factor "f" = $1.76 \sqrt{m}$	$= 3.12$

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

#### Monsoon Survey ( Date 30-10-2023 )

Discharge Observed :	18.03 cumec	Water edge RB :	m	LB :	m
Area of section :	sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	m	Hydraulic Mean Depth	:		m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	439.110	3.55		
2	100	439.180	3.49	Av.mean dia "m" =	<b>3.13</b>
3	150	439.610	2.77		
4	200	439.480	2.73	Silt factor "f" = $1.76 \sqrt{m}$	$= 3.12$

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed : Flowing water.

#### PostMonsoon Survey ( Date 16-02-2024 )

Discharge Observed :	1.94 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	0.00 m	Hydraulic Mean Depth	:		m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	439.210			
2	100	439.230	2.60	Av.mean dia "m" =	<b>2.45</b>
3	150	439.740	2.57		
4	200	439.520	2.19	Silt factor "f" = $1.76 \sqrt{m}$	$= 2.76$

**Note :**

- i. Discharge observation was at station gauge line.
- ii. River bed: Flowing water.

## 5.9 मोहगांव में बुद्धनेर

### BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24

SITE	: BUDHNER AT MOHGAON	CODE	: CW1NAU000390
MEASURING AUTHORITY	: Narmada Div.	CROSS SECTION	: Station gauge line

#### PreMonsoon Survey ( Date 17-05-2023 )

Discharge Observed :	10.1 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	0.00 m	Hydraulic Mean Depth	:		m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	450.930	4.13		
2	100	449.570	3.76	Av.mean dia "m" =	<b>3.41</b>
3	150	452.735	3.08		
4	200	460.560	2.64	Silt factor "f" = $1.76 \sqrt{m}$	= <b>3.25</b>

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

#### Monsoon Survey ( Date 31-10-2023 )

Discharge Observed :	29.1 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	0.00 m	Hydraulic Mean Depth	:		m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	451.060	3.22		
2	100	449.390	3.35	Av.mean dia "m" =	<b>2.92</b>
3	150	452.070	2.67		
4	200	460.400	2.42	Silt factor "f" = $1.76 \sqrt{m}$	= <b>3.00</b>

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

#### PostMonsoon Survey ( Date 20-02-2024 )

Discharge Observed :	10.7 cumec	Water edge RB :	0.00 m	LB :	0.00 m
Area of section :	0.00 sq.m	Mean Velocity	:		m/sec
Wetted perimeter :	30.20 m	Hydraulic Mean Depth	:	0.0000	m
Sl. No	R.D.of sampling point in meters	R.L. of bed in meters	Mean diameter in mm	Remarks	
1	50	451.030	3.97		
2	100	449.330	2.61	Av.mean dia "m" =	<b>2.87</b>
3	150	451.730	2.59		
4	200	460.450	2.30	Silt factor "f" = $1.76 \sqrt{m}$	= <b>2.98</b>

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

## 5.10 मानोट में नर्मदा

BED MATERIAL ANALYSIS DATA FOR THE YEAR 2023-24

SITE : NARMADA AT MANOT CODE : CW1NAU000378  
MEASURING CROSS SECTION : Station gauge line  
AUTHORITY : narmada div.

PreMonsoon Survey ( Date 31-05-2023 )

Discharge Observed :	10.33	cumec	Water edge RB :	0.00	m	LB :	0.00	m
Area of section :	0.00	sq.m	Mean Velocity :					m/sec
Wetted perimeter :	50.10	m	Hydraulic Mean Depth :				0.0000	m
Sl. No	R.D.of sampling point in meters		R.L. of bed in meters	Mean diameter in mm		Remarks		
1	50		444.170	3.70				
2	100		443.870	3.54		Av.mean dia "m" =	2.97	
3	150		442.500	2.87				
4	200		448.450	2.37		Silt factor		
5	250		448.440	2.37		"f" = 1.76 √ m		
						=	3.03	

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

Monsoon Survey ( Date 31-10-2023 )

Discharge Observed :	26.9	cumec	Water edge RB :	0.00	m	LB :	0.00	m
Area of section :	0.00	sq.m	Mean Velocity	:				m/sec
Wetted perimeter :	76.09	m	Hydraulic Mean Depth	:			0.0000	m
Sl. No	R.D.of sampling point in meters		R.L. of bed in meters	Mean diameter in mm			Remarks	
1	50		444.200	3.73				
2	100		443.890	3.82			Av.mean dia "m" = <b>3.38</b>	
3	150		442.440	3.85				
4	200		448.420	2.75			Silt factor	
5	250		448.410	2.77			$"f" = 1.76 \sqrt{m}$	
							$= 3.24$	

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Flowing water.

PostMonsoon Survey ( Date 21-02-2024 )

**Note :** i. Discharge observation was at station gauge line.  
ii. River bed : Stagnant Water.

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## Notes-