



सरकारी प्रयोग के लिए
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संगठित जल वैज्ञानिकीय आँकड़ा पुस्तक

(अवर्गीकृत नदी कछारें)

INTEGRATED HYDROLOGICAL DATA BOOK

(NON-CLASSIFIED RIVER BASINS)

जल वैज्ञानिकीय आँकड़ा निदेशालय
सूचना प्रणाली संगठन
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**HYDROLOGICAL DATA DIRECTORATE
INFORMATION SYSTEMS
ORGANISATION
WATER PLANNING & PROJECTS WING
CENTRAL WATER COMMISSION
NEW DELHI**

October, 2007

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FOREWORD

Water Resources planning requires time series data on hydrological aspects. The hydrological observation stations of CWC collect and process the basic hydrological data on gauge, discharge, silt, sedimentation and water quality on a regular basis for onward transmission to the CWC regional field offices, who document it in the form of Water Year Book, Sediment Year Book and Water Quality Year Book. Integrated Hydrological Data Book is a compendium of important hydrological information on major basins consolidated at the national level.

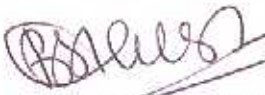
The present issue of the data book provides updated basin/site-wise data covering 12 non-classified basins covering aspects such as location, drainage area, population, temperature, average runoff, seasonal water flow, historical water levels, average sediment load, water quality parameters and land use statistics.

The compilation and presentation of data book has been done by the Hydrological Data Directorate of Information System Organisation in WP&P Wing of CWC, by collecting the required data from the field offices of CWC.

It is expected that the updated information would be of use to researchers, policy makers and the public at large. While every care has been taken to ensure accuracy of data, the possibility of errors and omissions in such a voluminous publication cannot altogether be ruled out.

Suggestion for improvement of the contents and presentation of the publication will be highly appreciated.

New Delhi
October, 2007


(**B.S. AHUJA**)
Chairman
CWC

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ABBREVIATIONS

-	:	Anion
+	:	Cation
°C	:	Degree Centigrade
BOD	:	Bio-Chemical Oxygen Demand
cumec	:	Cubic Meter per Second
CWC	:	Central Water Commission
DO	:	Dissolved Oxygen
G	:	Gauge Sites
GD	:	Gauge & Discharge sites
GDQ	:	Gauge, Discharge and Water Quality Sites
GDS	:	Gauge, Discharge & Sediment sites
GDSQ	:	Gauge, Discharge, Sediment and Water Quality Sites
m	:	Meter
m.e./litre	:	Milli equivalent per Litre
max	:	Maximum
MCM	:	Million Cubic Meter
mg/l	:	Milligram per Litre
mhos/cm	:	Micro mhos per Centimeter
min	:	Minimum
mm	:	Millimeters
MPN	:	Most Probable Number
N.A.	:	Not Applicable
NF	:	No flow
pH	:	Negative logarithm of hydrogen ion concentration
ppm	:	Part per million
Q	:	Water Discharge per Second
RD	:	River Dry
RSC	:	Residual Sodium Carbonate
SAR	:	Sodium Absorption Ratio
SNR	:	Sample Not received
Sod % age	:	Sodium percentage
Sq Km	:	Square Kilometers
TDS	:	Total Dissolved Solids
W YEAR	:	Water Year
WQ	:	Water Quality

C O N T E N T S

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SECTION-I
DESCRIPTION OF DIFFERENT RIVER BASINS

DESCRIPTION OF DIFFERENT RIVER BASINS

1. Mahanadi Basin

Location: The basin is physically bounded in the North by Central India hills, in the South and East by the Eastern Ghats and in the West by Maikala hill range. The Chiroli Hills form the watershed dividing the Wainganga valley from the Mahanadi Basin, the upper portion of which is designed as the Chattisgarh Basin. It is a typical basin considered from geographical and geological point of view. The Mahanadi basin lies encompassed within geographical co-ordinates of 80°30' to 86°50' East longitudes and 19°20' to 23°35' of North latitudes running a total length of about 851 km.. The total catchment area of the basin is 1,41,600 sq.km..

The river Mahanadi is one of the major inter-state east flowing rivers in peninsular India. It originates at an elevation of about 442 m. above Mean Sea Level (m.s.l.) near Pharsiya village near Nagri town in Raipur district of Chhatisgarh. During the course of its traverse, it drains fairly large areas of Chhatisgarh and Orissa and comparatively small area in the state of Jharkhand and Maharashtra. The total length of the river from its origin to confluence of the Bay of Bengal is about 851 km., of which, 357 km. is in Chhatisgarh and the balance 494 km. in Orissa. During its traverse, a number of tributaries join the river on both the flanks. There are 14 major tributaries of which 12 nos. are joining upstream of Hirakud reservoir and 2 nos. down stream of it.

On the Left Bank six tributaries namely the Seonath, the Hasdeo, the Mand, the Ib, the Kelo and Borai drain into main channel upstream of Hirakud reservoir. The drainage system upstream of Hirakud reservoir is more extensive on the left bank of Mahanadi as compared to that on the Right Bank. On the Right Bank six tributaries namely the Pairi, the Jonk, the Sukha, Kanji, the Lilar and the Lath join upstream of Hirakud reservoir and two tributaries namely Tel and Ong join down stream of it. The three major tributaries namely the Seonath and the Ib on the Left Bank and the Tel on the Right Bank together constitute nearly 46.63% of the total catchment area of the river Mahanadi. The Seonath, which is the largest tributary of Mahanadi, rises in village Kotgai, District Durg (Chhatisgarh) and drains three districts of Chhatisgarh namely Durg, Rajandgaon and Bilaspur. The Tel, which is the second largest tributary of Mahanadi River, rises in village Jorigam of Koraput district of Orissa and drains four districts of Orissa namely Koraput, Kalahandi, Balangir and Phulbhani. The Ib, which is the third largest tributary of Mahanadi, rises in village Pandrapat,

District Raigarh (Chhatisgarh) and drains Raigarh district of Chhatisgarh and two districts of Orissa, namely Sundergarh and Sambalpur.

Urban Centres: Three important urban centres in the basin are Raipur, Durg & Cuttack.

Industries: Mahanadi, because of its rich mineral reserve and adequate power resource has a favourable industrial climate. The important industries presently existing in the basin are iron & steel plant at Bhilai, aluminum factories at Hirakund and Korba, paper mill near Cuttack and cement industries at Sundargarh. Other industries based primarily on agricultural produce are sugar, textile and oil mills. Mining of coal, iron and manganese are other industrial activities.

Sites: The Central as well as State Governments carry out hydrological observations. The CWC maintains 21 gauge discharge sites in the basin. At 15 of these stations, sediment observations are also made.

2. Subernarekha, Burhabalang, & Baitarni

a) Subernarekha

Location: The Subernarekha is one of the longest east flowing inter-state river. It covers large areas of Bihar and some parts of West Bengal and Orissa. The basin lies between north latitudes of 21°-33' to 23°-32' and east longitudes of 85°-09' to 87°-27' situated in the northeast corner of the peninsular India. It is bounded on the northwest by the Chhotanagpur Plateau, in the south west by Brahmani Basin, in the south by Burhabalang basin and in the south-east by the Bay of Bengal.

The Subernarekha river originates near Nagri village in Ranchi district of Jharkhand at an elevation of 600 m. The total length of the river is about 395 Km. The principal tributaries of the river are Kanchi, Kharkai and Karkari.

Urban Centres: The important cities/ towns in the basin are Jamshedpur, Ranchi, Muri, etc.

Industries: Important industries in the basin are tobacco products in Chakradharpur, cement, asbestos sheets, glass and ceramics at Chaibasa. Locomotives and coaches, automobiles, agricultural equipment, wires and cables, iron and steel machinery, metal tubes and conduits, copper and brass, chemicals (acids) and caustics, fertilizers and Soaps at Jamshedpur.

The important minerals found in the basin are copper, uranium, chromium, gold, vanadium, limestone, dolomite, asbestos, china clay, talc and building stones besides iron and aluminum.

Sites: Water quality observation is also being done along with gauge and discharge observation at three sites Ghatsila, Muri and Adityapur. Sediment observations are made at only Ghatsila and Adityapur.

b) Burhabalang

Location: The Burhabalang is one of the east flowing medium river situated in the northern part of Orissa State. It is bounded by the geographical coordinates of north latitudes between 21° 22' to 22° 20' and east longitudes 86° 20' to 87° 05'. It drains parts of the areas in Mayurbhanj and Balasore districts of Orissa with a total catchment area of 4800 sq.km.. This is a flashy river having a source at an elevation of 800 m. and drops into the sea after traversing a total distance of 125 kms.

Urban Centres: The important towns of the basin are Baripada and Balasore.

Industries: The basin has no large industry. Recently some medium and small scale industries have been established in and around Balasore and Baripada.

The basin has no significant mineral resources, iron ore, china clay, quartz and soap stone are found in limited areas in the Mayurbhanj portion of the basin. Limestone is seen in the Similipal hill ranges.

Sites: Gauge discharge observations are made at Govindpur station.

c) Baitarni

Location: The Baitarni is one of the important east flowing rivers of peninsular India, flowing eastward and joining the Bay of Bengal. The river rises in the hill ranges of Keonjhar District of Orissa near Mankarancho village at an elevation of about 900m. above m.s.l. On its way, many tributaries join the river from both banks. On its way many tributaries join the river from both banks. The total catchment area of this basin is 10,982 sq.km.. The basin is situated approximately between east longitudes of 85°-10' to 87°-03' and between north latitudes of 20°-35' to 22°-15'. The basin is surrounded by the Brahmani on the South and West, the Subernarekha on the north, the Burhabalang and the Bay of Bengal on the east. The river is flashy in nature having a total length of 355m, with the upper reach up to Anandpur in the hilly region. There is a considerable fall in geographical gradient from RL. 367m. at Champua to RL 28m at Anandpur.

Urban Centres: The important towns in the basin are Joda, Champua, Karanjia, Keonjhar, Anandpur and Jaipur.

Industries: The basin is backward from the industrial point of view. There are three medium scale industries in the basin viz. (i) Ferro-Manganese Plant (ii) The sponge Iron Plant at Joda and (iii) The Orissa Sponge Iron Plant. There are few small scale industries also in the basin.

The basin is rich in mineral wealth. Iron ore, copper, chromite, asbestos, manganese, atomic minerals, china clay and soap stone are available in Cuttack, Keonjhar, Mayurbhanj districts of Orissa and in the Singhbhum district of Bihar.

Sites: Water Quality observation is also being done along with gauge and discharge observations at sites Anandpur and Champua. Sediment observation is also made at these stations.

3. Brahmani

Location: The Brahmani is one of the major inter-state east flowing river amongst the peninsular rivers in India. This basin is situated within the geographical co-ordinates of north latitude 20° -28' to 23° - 35' and east longitude 83°-52' to 87°-03' approximately. This basin is bounded in the north by Chhotanagpur plateau in the west and south by Mahanadi basin and in the east by the Bay of Bengal. The basin covers Bihar, Jharkhand, Madhya Pradesh and Orissa States and drains an area of 39033 sq.km..

The Brahmani, known as the South Koel in the upper reaches, originates near Nagri village in Ranchi District of Bihar at an elevation of about 600m. The total length of its run is about 799 km. The principal tributaries of this river are Sankh, Tirka and Karo.

Urban Centres: The important towns of the basin are, Rourkela, Talcher, Angul, Dhenkanal, Jajpur and Rajgangpur.

Industries: It has two prominent industrial belts, one at Rourkela and the other at Talcher. At Rourkela besides the Steel Plant there exist a number of other industries, like fertilizers, cement, explosives, chemicals and machine tools, The Talcher industrial area has the National Aluminium Company at Angul, the Fertilizer Plant and other small industries. The basin is rich in mineral resources like coal, iron ore, copper, bauxite, chromite, limestone, manganese, dolomites, lead, fire-clay and china clay, etc.

Sites: Water Quality observation is being conducted alongwith gauge and discharge observation at five G&D sites namely Jenapur, Gomlai, Panposh, Jaraikela and Tilga. Sediment observations are also made at all these five stations.

4. Rushikulya, Vamsadhara, Sarda & Nagavali

a) Rushikulya

Location: The river Rushikulya is one of the medium sized east flowing river in peninsular India. It is an important river of Orissa state and covers entire catchment area in the districts of Phulbani and Ganjam. The river flows through Purushottampur, Pratappur and joins with the Bay of Bengal at Ganjam district.

The river Rushikulya originates at an elevation of about 1000 m. near Matabarhi village of Phulbani district and lies within the geographical coordinates of 19° 07' to 20° 19' north latitude and 84° 01' to 85° 06' east longitude. The total catchment area is 7700 sq.km.

Urban Centres: Only one city Berhampur is situated in the basin and important towns are Chhatrapur, Ganjam, Aska, Bhajanagar and Sorada.

Industries: A number of large scale industries have been set up in the basin. Among them are M/s Jayashree Chemical Industries. Aska Co-operative Sugar Industries Ltd., Aska Spinning Mills, Monorama Chemical Works Ltd., Orissa Tubes Pvt. Ltd., etc. There are about 3360 numbers of small scale industries of different categories mainly food and allied, forest & wood based, rubber and plastic products and glass and ceramics. There is enough scope for setting up forest based industries. A major steel plant is proposed near Gopalpur. The basin is rich in mineral wealth. The major economic minerals are clay, lime stone, manganese, sand talc, black sand and grinding materials.

Sites: Gauge Discharge, sediment and water quality observation is made at Purushottampur station.

b) Vamsadhara

Location: The Vamsadhara river is an important east flowing river between Mahanadi and Godavari. The river originates near Lanjigarh village in Kalahanadi district and runs to a total distance of about 254 km. before it joins the Bay of Bengal at Kalingapatnam. A number of tributaries join the river on both the sides. Much of its catchment falls on the left. The basin is narrow and full of undulations. It is situated within the geographical coordinates of 18° 15' to 19° 55' north latitudes and 83° 20' to 84° 20' east longitudes. The total catchment area of this basin works out to 10830 Sq.km.

Urban Centres: Srikakulam, Narasannapeta, Patapatnam, tekkali, Palasa, Sompeta, Parlakhemundi, Gunupur, Kashinagar, Bissam Cuttack are the important towns in the basin.

Industries: There is no large scale industry in the basin but there are a number of agro and forest based small scale industries in Srikakulam district of Andhra Pradesh and Koraput & Kalahandi district of Orissa. The important minerals found in the Vamsdhara basin are manganese, graphite, quartz, limestone, mica and bauxite besides building materials. Manganese ore is available extensively in Srikakulam and Koraput districts.

Sites: Water quality, Gauge discharge and sediment observations are done at Kashinagar station. Gauge discharge observation is also made at Gunupur.

c) Sarada

Location: The river Sarada, an east flowing medium sized river, lies in the district of Visakhapatnam of Andhra Pradesh. The geographical co-ordinates of the river are north latitude $17^{\circ} 25'$ to $18^{\circ} 17'$ and east longitude $82^{\circ} 32'$ to $83^{\circ} 06'$. The basin is surrounded by Nagavali in the north, Gostari, Gambi Rangedda, Megadnigedda in the east Bay of Bengal in the South and Machhkund sub-basin of the Godavari in the west. The catchment area of the basin is 2665 sq.km. It rises at an elevation of 1000 m. and runs a distance of 122 Kms. before joining the sea.

Urban Centres: Visakhapatnam is the main important town in the basin.

Industries: There are many large scale industries like Visakhapatnam Steel plant, Bharat Heavy Plates and Vessels Limited, Hindustan Shipyard Ltd. etc. Important minerals found in the basin are manganese, quartz, graphite, mica, bauxite, aluminium and fire clay.

Sites: Gauge & discharge observations are made at Anakapali station.

d) Nagavali

Location: The river Nagavali is a medium sized east flowing river in peninsular India and lies within the geographical co-ordinates of north latitude $18^{\circ} 10'$ to $19^{\circ} 44'$ and east longitudes of $82^{\circ} 53'$ and $84^{\circ} 05'$. It is surrounded by Vamsadhara in the north, Champavathi and Peddagedda in the south, Godavari in the west and the Bay of Bengal in the east. It drains parts of the districts of Kalahandi, Rayagada, Koraput of Orissa and Srikakulam, Vijayanagaram and Visakhapatnam of Andhra Pradesh state. The total basin area is 9510 sq.km.

The Nagavali originates near the Lakhbahal in Kalahandi district at an elevation of about 1300m. The total length of the river run is 256 Km. out of which the first 161 kms, are in Orissa and the rest in Andhra Pradesh. The important tributaries are Barha, Baldiya, Satklnala, Sitagurha, Srikona, Janjhvati, Gumidigedda, Vottigedda, Suvrarnamukhi, Vonigedda, Vagavathi and Relligedda.

Urban Centres: The important towns in the basin are Amadalavalasa, Rayagada, Parvatipuram, Palkonda, Veeragattam and Bobbili.

Industries: The basin has no large industry. The existing small scale industries are mostly oriented to forest and agricultural produce and are located in the Srikakulam Regional Economy. Manganese, quartz, mica, graphite, limestone, bauxite and construction materials are found in abundance in the Basin.

Sites: Gauge discharge, sediment and water quality observations are made at Srikakulam station.

5. Godavari

Location: The river Godavari, the largest of the peninsular rivers, and third largest in India, drains about 10% of India's total geographical area. The catchment area of the river is 3,12,812 sq.km. and is spread in the States of Maharashtra (48.6%), Andhra Pradesh (23.4%), Madhya Pradesh (10.0%), Chhatisgarh (10.9%), Orissa (5.7%) and Karnataka (1.4%) The basin lies in the Deccan Plateau and is situated between latitude 16° 16' North and 22° 43' North and longitude 73° 26' East and 83° 07' East.

The river Godavari rises in the Nasik district of Maharashtra, about 80 km. from the Arabian sea at an elevation of 1,067 m after flowing for about 1,465 km in a generally south-east direction, through Maharashtra and Andhra Pradesh it falls into the Bay of Bengal.

The Godavari basin is bounded on the north by the Satmala Hills, the Ajantha Range and the Mahadeo Hills on the south and east by the Eastern Ghats and on the west by the Western Ghats. The basin is roughly triangular in shape and the main river itself runs practically along the base of the triangle.

The western edge of the basin is an almost unbroken line formed by the Sahyadri range of the Western Ghats, from 600 to 2100 m height. It has the heaviest rainfall and the dampest climate in the basin. Hardly 50 to 60 km. east of the ghats lie the sparsely cultivated and undulating plains of the Deccan, with a dry climate.

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

The river Pranhita, conveying the combined waters of the Penganga, the Wardha and Wainganga, which drain Nagpur and the southern slopes of the Satpura ranges, falls into Godavari about 306 km.. Below its confluence with the Majira. Forty eight km. lower, the waters of the Indravathi join the river. Both the Pranhita and the Indravathi are major rivers in their own right. The last major tributary is the Sabari from Orissa, which falls into the Godavari, 100 km. above Rajahmundry.

The largest tributary of the Godavari is the Pranhita with about 34% coverage of drainage area. The Pravara, Manjira and Maner are notable right bank tributaries covering about 16.1%, the Purna, Pranhita, Indravathi and Sabari are important left bank tributaries, covering nearly 59.7% of the total catchment area of the basin. The Godavari in the upper, middle and lower reaches make up for the balance of 24.2%.

Urban Centres: Nagpur is the most important urban centre in the basin. Other important towns in the area are Nasik, Aurangabad, Warangal, Rajamundry, Akola, Amravati, and Ahmednagar.

This basin is working since pre-independence era and a number of interstate agreements exist among basin states on sharing of water of the basin and very often court cases arise on this issue.

Industries: Rich in forests, agricultural and mineral resources, the industrial potential of the Godavari basin is high. A small part of the enormous forest wealth of the basin is at present utilised as timber and in the manufacture of paper and other timber products. Industries based on agricultural produce are the processing of agricultural commodities like rice milling, cotton ginning, pressing, spinning and weaving, manufacture of sugar, manufacture of textiles, extraction of oil from groundnut and other oil seeds. Mining of coal, manganese and other ores is an important activity in the districts rich in minerals. Most of the ores are at present being exported. Small engineering industries are spread all over the area.

The Godavari basin has a rich variety of mineral wealth spread over vast areas. The principal minerals found are bauxite, manganese, iron ore and coal. Other minerals like lead, zinc, corundum, refractory minerals and kaolin are also found in small quantities in different parts of the basin.

Sites: There are 28 water quality measurement sites on the basin and as many as 25 of them are for sediment measurements also. In addition, there are 27 gauge discharge observation stations in the basin.

6. Krishna

Location: The Krishna basin extends over an area of 2,58,948 Sq.km. out of which 27.01% is in Maharashtra, 44.06% is in Karnataka and 28.93% falls in Andhra Pradesh. The basin lies between east longitudes $73^{\circ} 21'$ to $81^{\circ} 09'$ and north latitudes $13^{\circ} 07'$ to $19^{\circ} 25'$ lying in the deccan plateau. The Krishna rises in the Western Ghats at an altitude of 1337 m just north of Mahabaleshwar, about 64 km. from the Arabian Sea and flows from west to east through the States of Maharashtra, Karnataka and Andhra Pradesh to join the Bay of Bengal. The total length of the river from the sources to its outfall in the sea is about 1,400 km of which 612 km are in Andhra Pradesh, 306 km in Maharashtra and 483 km in Karnataka. Together with its tributaries, the river drains about 708 km. of the Western Ghats, which is its chief source of supply. The Ghataprabha, the Malaprabha, the Bhima, the Tungabhadra and Musi are the principal tributaries. The Krishna Basin's predominant land use is agriculture.

The Krishna basin is bounded on the north by the ridge separating it from the Godavari basin, on the south and east by the Eastern Ghats and on the west by the Western Ghats. The basin is roughly triangular in shape with its base along the Western Ghats, the apex at Vijayawada and the Krishna itself forming the median. All the major tributaries draining the base of the triangle fall into the river in the upper two-thirds of its length.

The interior of the basin is a plateau, the greater part of which is at an elevation from 300 to 600 m. Its general slope is eastwards. Great undulating plains, divided from each other by flat-topped ranges of hills are the main characteristics of this plateau. To the south of the Krishna, the Eastern Ghats comprises parallel ranges, which are the successive outcrops of an ancient series of stratified rocks.

The delta of the Krishna formed by deposits at the mouth of the river over past ages, consists of a wide belt of river-borne alluvium. The process of silt deposition at the mouth of the river is still continuing and the delta is gradually extending into the sea.

About 137 km. from the source, it receives a main tributary, the Koyna, from the western side of the Mahabaleshwar hills. Lower down, the river Yerla falls into the Krishna from the left and then the Varna, the Panchganga and the Dudhganga from the right.

Just near its confluence with Dudhganga and about 306 km. from its source, the Krishna enters Karnataka State. At this point, the bed level of the river at an altitude of about 533 m. and the river has emerged from the heavy rainfall zone along, and near the Western Ghats. After flowing for 201

km. in Karnataka territory, the Krishna receives, from its right, the waters of the Ghataprabha, and 35 km. lower down, those of the Malaprabha. Both these tributaries have their sources in the Western Ghats.

A short distance downstream of its confluence with the Malaprabha, the Krishna drops about 122 m. from the tableland of the Deccan plateau to the alluvial lands of Raichur. The Krishna receives its two major tributaries, the Bhima and the Tungabhadra the former on its left at 789 km. from its source and the latter 129 km. further downstream near Kurnool from its right. Both the Bhima and the Tungabhadra drain large area of the Western Ghats and each is a major river in its own right.

From a short distance below its confluence with the Tungabhadra, the Krishna runs in a deep gorge through a series of hills, for nearly 290 km. before emerging into the coastal belt at Pulichintala, at an elevation of about 37 m. above sea level. Beyond this point, the river flows for about 80 km. before it spreads into the delta. Vijayawada is at the head of the delta.

The Dindi and the Musi join the Krishna from its left between Kurnool and Pulichintala and two more tributaries, the Palleru and the Muneru also from the left, fall into the river between Pulichintala and Vijayawada.

Urban Centres: The major cities in the basin are Pune, Hyderabad and Vijayawada and the important towns are Satara, Karad, Sangli, Kolhapur, Sholapur, in Maharashtra state. Bijapur, Gulbarga, Raichur, Bagalkot, Bellary, Belgaum, Dharwar, Hospet, Davanagere, Badravathi Chikkamagalur, Tumkur, Chitradurga, Shimoga in Karnataka state and Mahboobnagar, Kurnool, Nandyala, Nalgonda, Miryalaguda, Khammam, Guntur, Gudivada, Machilipatnam in Andhra Pradesh state.

Industries: There are many large medium and small-scale industries in the catchment. The main industries in the catchment are Textiles, Sugar, Chemical, Cement factories, Automobiles, Engineering goods, Extraction of Gold, Indian Aluminium Company Belgaum, Bharat Heavy Electrical Limited (Hyderabad), Hindustan Machine Tools Limited (Hyderabad), Nuclear Fuel Complex (Hyderabad), Hindustan Cables Limited (Hyderabad), Indian Drugs and Pharmaceuticals Limited (Hyderabad), Bharat Dynamics Limited (Hyderabad), Bharat Electricals Limited (Hyderabad), etc. Among the small-scale industries, engineering works, ferrous and non-ferrous foundries and cotton ginning are important. There are also cottage industries like weaving, carpentry, leather, rope making, tiles, pottery, copper and brass works in the catchment. The important minerals found in the catchment are gold, bauxite, lime stone, iron ore, manganese ore, quartz, copper, red oxide, soapstone, etc.

Sites: There are 35 water quality observation stations in the basin. Sediment observations are also made at 25 stations. In addition, there are 22 gauge discharge observation stations in the basin.

7. Cauvery

Location: The river Cauvery originates at Talakaveri in Coorg District of Karnataka in Brahmagiri Range of hills in the Western ghats at an elevation of 1,341 m. and drains a total of 81,155 Sq.kms. area of which 34,273 Sq.kms. lies in Karnataka, 43,856 sq.kms. in Tamilnadu, 2,866 sq.kms. in Kerala and 160 sq.kms. in the Union Territory of Pondicherry. The Cauvery basin is bounded by Tungabhadra sub-basin of Krishna basin on the northern side and Palar basin on the Southern side. The Western ghats from the Western boundary, the Nilgiris, an offshore of Western ghats, extend eastwards to the Eastern ghats and divide the basin into two natural and political regions i.e. Karnataka plateau in the North and the Tamilnadu plateau in the South. In Tamilnadu, the Eastern part of the basin is in the elevation range of 0 to 150 m slopping gently up from the sea.

At Shivanasamudram, the river branches off into two parts and falls through a height of 91 m. in a series of falls and rapids. The falls at this point is utilised for power generation. The power station at Shivansamudram was built as early as 1902. The two branches of the river joins after the fall and flows through a wide gorge which is known as "Mekedatu" (Goats leap) and continues its journey and forms the boundary between Karnataka and Tamilnadu States for a distance of 64 kms. At Hogennekkal Falls, it takes southernly direction and enters the Mettur Reservoir, which was constructed in 1934. A tributary called Bhavani joins Cauvery on the Right bank about 45 kms below Mettur Reservoir, thereafter it takes Easternly course to enter the plains of Tamilnadu. Two more tributaries Noyil and Amaravathi join on the right bank and here the river widens with sandy bed and flows as "Akhandu Cauvery".

Immediately after crossing Tiruchirappalli district, the river divides into two parts, the northern branch being called "The Coleron" and southern branch remains as Cauvery and from here the Cauvery Delta begins. After flowing for about 16 kms., the two branches join again to form "Srirangam Island". On the Cauvery branch a Grand Anicut is said to have been constructed by a Chola King in 1st Century AD. Below the Grand Anicut, the Cauvery branch splits into two, Cauvery and Vennar. These branches divide and sub-divide into small branches and forms a network all over the delta.

The total length of the river from the origin to its outfall into the sea is 800 kms. of which 320 kms. is in Karnataka, 416 kms. in Tamilnadu and 64 kms. form the common border between the Karnataka and Tamilnadu states. The Cauvery basin is fan shaped in Karnataka and leaf shaped in Tamilnadu. The run-off does not drain off quickly because of its shape and therefore no fast raising floods occur in the basin. The basin receives rainfall mainly from the S-W Monsoon and partially from N-E Monsoon in

the Karnataka. The basin in Tamilnadu receives good flows from the North-East Monsoon.

The Cauvery river system consists of 21 principal tributaries each with catchment area exceeding 250 sq.kms. The largest of all of them of Catchment area are Shimsha, lying wholly in Karnataka, the Amaravathi rising in Kerala but lying mostly in Tamilnadu and the Kabini rising in both Kerala and Tamilnadu but lying mostly in Karnataka. The Bhavani is the fourth largest and the second longest. It rises in Kerala and Karnataka but lies mostly in Tamilnadu. The longest tributary, the Hemavathi (245 kms.) is the fifth largest in catchment area and lies wholly in Karnataka.

From the point of view of flow contribution to the system, apart from the head reach of the Cauvery main, the most important tributaries are i) the Hemavathi, ii) the Kabini and iii) the Bhavani.

There are disputes in sharing of this river water among states.

Urban Centres: Important cities on the basin are Coimbatore, Bangalore & Tiruchirapalli.

Industries: Some of the main industries in the basin are Paper mills, Sugar mills, Chemical Factories, Cotton mills, Steel & Cement factories, etc.

Mining activity in the basin includes Stone mining for building construction works.

Sites: There are 16 Water Quality observation stations in the basin. Sediment observations are also made at 11 of these stations.

8. East flowing rivers

The basin of east flowing rivers consists of all small independent river basins of peninsular India lying to the south of Krishna basin except Cauvery basin. It lies within $8^{\circ} 12'$ to $15^{\circ} 56'$ north latitude & $77^{\circ} 29'$ to $79^{\circ} 59'$ east longitude. All these rivers are draining into the Bay of Bengal.

The basin of East flowing rivers covers large areas in the states of Andhra Pradesh, Tamilnadu and a small area in the state of Karnataka. There are eleven river basins of which the Palar and Ponniyar are more important. Other river basins are the Pellar, Vellar, the Vaigai, the Vaippar, and the Tambraparani. Brief descriptions of these river basins are given below.

i) The Palar

The Palar basin is an important basin among the 12 basins lying between the Pennar and the Cauvery basins. This basin is divided into three major topographical divisions namely, (i) the hill ranges of Eastern Ghats (ii) the plateau region and (iii) the coastal plains. Though most of the drainage area lies in Tamilnadu, its drainage area extends also to cover the southeast and southwest parts of Karnataka and Andhra Pradesh respectively. The shape of the basin is rhombus and lies approximately between $12^{\circ} 15'$ and $13^{\circ} 38'$ north latitudes. The basin finds its outlet in to Bay of Bengal.

The Palar drains an area of 17,871 sq.kms. out of which nearly 57 percent lies in Tamilnadu and the balance in the states of Karnataka and Andhra Pradesh.

ii) The Ponniar

The Ponniar basin is the second largest interstate East Flowing river basin among the 12 basins lies between the Pennar and the Cauvery basins. It covers a large area in the state of Tamilnadu, besides the areas covered in the states of Karnataka and Andhra Pradesh. It lies between the east longitudes $77^{\circ} 33'$ to $79^{\circ} 47'$ and north latitudes $11^{\circ} 45'$ to $13^{\circ} 30'$. This basin is bounded on the north west and south by various ranges of the Eastern Ghats like the Velikonda range, the Nagari hills, the Javadu hills, the Shevaroy hills, the Chitteri hills and the Kalrayan hills and in the east by the Bay of Bengal. The Ponniar basin is elongated in shape and finds its outlet in to the Bay of Bengal.

The Ponniar drains an area of 16,019 Sq.kms. out of which nearly 77 percent lies in Tamilnadu.

The Ponnar or the Dakshina Pinakini river rises near Hongashenhalli village at an elevation of about 900m above m.s.l. at north latitude $13^{\circ} 25'$ and east longitude $77^{\circ} 58'$ in the Kolar district of Karnataka state. From its origin, the river Ponnar generally flows in the southern direction through the Kolar and Bangalore districts of Karnataka to a length of 79 km before entering the Dharmapuri district of Tamilnadu. The river flows another 247 kms. generally in the south easterly direction in the districts of Dharmapuri, Vellore, Tiruvannamalai, Cuddalore and Villupuram districts, then the river flows in the easterly direction below the Tirukoyilur anicut for another 70 kms. before finding its way into the Bay of Bengal. The river Ponnar branches into two, the Gadilam near Cuddalore and the Ponnar near the Union Territory of Pondicherry. On its way the river Ponnar receives a number of small streams and rivulets.

iii) The Vellar

The Vellar river rises at an elevation of 900 m near the village of Tumba in the Chittori hills, of the Eastern Ghats in the Salem district of Tamilnadu. It flows generally in an easterly direction for a total length of 210 Km through the Salem & Cuddalore districts in Tamilnadu and finally out falls into the Bay of Bengal near Porto Nova in Cuddalore district. It drains a total catchment area of about 8,922 sq.kms. The catchment area lies entirely in Tamilnadu. The Gomukinadhi and Manimukthanadi are the important left tributaries and Swetanadhi and Chinnar are the right tributaries of the Vellar.

iv) The Vaigai

The Vaigai basin is an important basin among the 12 basins lying between the Cauvery and Kanyakumari. The basin is bounded by the Varushanadu hills, the Andipatti hills, the Cardaman hills and the Palani hills on the west and by the Palk Strait and Palk Bay on the east. The basin lies between $9^{\circ} 17'$ to $10^{\circ} 22'$ north latitudes approximately. This basin is divided into two major topographical divisions namely (i) the hilly areas and (ii) the plains. The basin is elongated in shape and drains into the Palk Bay. The Vaigai drains an area of 7,741 Sq.kms., which entirely lies in the state of Tamilnadu.

The Vaigai river on the western slopes of the Varushanadu hills at an elevation on 1,200m above m.s.l. near Kottaimalai in the Madurai district at a north latitude $9^{\circ} 32'$ and east longitude $77^{\circ} 23'$ and flows in the northerly and north easterly directions up to its confluence with the Varahanadhi and then takes a turn towards the east and south east to flow through Madurai, Sivakangai and Ramanathapuram districts. After traversing about 258 kms. the river Vaigai discharges into Ramnad big tank and some other

tanks. The surplus water from the tanks finally discharges into the Palk Bay near Mandapam. On its way the Vaigai receives two important tributaries namely the Suruliyar and the Manjalar on its left bank, besides a large number of small streams and rivulets. The river has been dammed down stream of its confluence with the Suruliyar.

The Suruliyar and the Manjalar, the two important left bank tributaries together account for nearly 20 percent of the total catchment area of the Vaigai. The Suruliyar the principal tributary of the Vaigai also rises in the eastern slopes of the Varushanadu hills and flows in the north and northeasterly direction. It receives Theniar on its left bank, just before its confluence with the Vaigai. The Manjalar another major tributary rises in the Palani hills and flows generally in the easterly direction before joining the Vaigai below the Vaigai dam. The Vaigai also receives another minor tributary namely the Varshanadhi on its left bank below the Vaigai dam.

v) The Vaippar

The Vaippar river rises on the eastern slopes of the Varushanadu hill ranges of the Western Ghats near Sivagiri in Thirunelveli district in Tamilnadu at an elevation of about 900m. It flows generally in an easterly direction for a length of about 125 kms. through Thirunelveli, Virudhunagar and Tuticorin districts in Tamilnadu and joins the gulf of Mannar near Kalattur. The river basin is located on south of Vaigai. It drains a total catchment area of 5,069 sq.kms. The catchment area lies entirely in Tamilnadu.

The Arjuna-nadhi and Vijanadhi are the important tributaries. Both the tributaries are left tributaries. There are four anicuts in the basin. No large storages exist in this basin.

vi) The Tambraparni

The Tambraparani river rises on the eastern slopes of the Western Ghats at an elevation of about 1,400m at north latitude 8° 46' and east longitude 77° 15' near Alwarkurichi village in Thirunelveli district of Tamilnadu to flow in a generally easterly direction for a total length of 130 kms. and joins the Gulf of Mannar. The Chittar and Manimuthar are the left & right bank tributaries of this river. The total area drained by the Tambraparani is 5,482 sq.kms.. There are number of anicuts across this river of which the more important are the Marudur and the Srivaikuntam anicut systems. Papanasam Hydro Electric Project and Manimuthar Dam are two important storages in this river.

Other small river basins in the east flowing rivers are as under:

a) The Gundalakamma

The Gundalakamma river rises near Iskagundam village in Kurnool district at an elevation of 600m from the eastern slopes of the Nallamala hills at north latitude $15^{\circ} 38'$ and east longitude $78^{\circ} 47'$ and flows in a north-east, east and southern direction for a total length of 220 kms. to join the Bay of Bengal. The total area drained by this river is 8,494 sq.kms. The Kandleru is its important left bank tributary.

b) The Paleru

The Paleru river rises near Gogulapalle village in Nellore District at an elevation of 325m at North Latitude $15^{\circ} 17'$ and East Longitude $79^{\circ} 13'$ and flows in an easterly direction for a total length of 104 kms. to join into the Bay of Bengal. The Paleru drains an area of 2,483 sq.kms.

c) The Pennar

The Pennar river is one of the major East Flowing rivers in Southern India. It rises in the Chennakesava hill of the Nandidurg range in Karnataka, flows in the north westernly direction through the Kolar and Tumkur districts of Karnataka, it enters Andhra Pradesh in the Hindupur taluk of Anantapur district, runs eastwards before draining into the Bay of Bengal near Nellore. The Basin lies between east longitude $77^{\circ} 04'$ to $80^{\circ} 10'$ and north latitude $13^{\circ} 16'$ to $15^{\circ} 52'$.

d) The Swarnamukhi

The Swarnamukhi is an East Flowing river basin having a small catchment Area of 3,225 sq.kms.. It rises at an elevation of 300m in the Eastern Ghat ranges near Pakala village in Chittur district of Andhra Pradesh at North latitude $13^{\circ} 28'$ and east longitude $79^{\circ} 09'$. It runs generally in north eastern direction passing through the famous Tirupati hills before joining into the Bay of Bengal. Its total length is 130 kms.. This Independent river has no major tributaries and therefore its flow depends only on rainfall in its upper catchment.

e) The Kalingi

The river Kalingi is one of the East flowing rivers in Andhra Pradesh. It originates near Kalashasti in Andhra Pradesh and drains completely in Andhra Pradesh and joins in Pulicat lake after Sulerpet. The catchment area of Kalingi river is 5,927 sq.kms. and the length is 76 kms.. The important tributary is Kalleru river which joins Kalingi river after Sulerpet

town. At present there are two medium irrigation projects in this basin namely (1) Kalingi Reservoir and (2) Thanyali Anicut which irrigate an area of 4,650 acres and 10,000 acres respectively.

Industries: Agriculture based industries are located on this basin area.

Site: There are 24 water quality observation stations in the basin. Sediment observations are also made at 6 of these stations. In addition, one gauge discharge observation station is also there in the basin.

9. West flowing rivers

The basin of West flowing rivers consists of all small independent river basins of peninsular India lying to the south of Krishna basin, except Cauvery basin. There are about 22 rivers basins and they are located within 8° 43' to 19° 10' North latitude and 73° 15' to 76° 51' East longitude. These rivers are draining into the Arabian Sea.

The basin of the West Flowing rivers located in the South West corner of the peninsular India covers areas in the states of Maharashtra, Karnataka, Tamilnadu and Kerala. There are a number of medium and minor river basins in this region. All the rivers originate from the high mountains of the Western Ghats and exhibit similar characteristics. They have steep high banks, which rarely overflow or cause floods.

Important west flowing river basins are described as under.

i) The Bharathapuzha

The Bharathapuzha river is the second longest west flowing river that drains into the Arabian Sea in Kerala State. This basin is bounded in the east by the Cauvery basin and in the west by the Arabian Sea. The basin lies approximately between 10° 26' and 11° 13' north latitudes and 75° 53' to 77° 13' east longitudes. Its drainage area is spread over the two states namely Tamilnadu and Kerala. The basin is elongated in shape and finds its outlet into the Arabian Sea.

The total drainage area of the basin is 6,186 sq.kms.. Out of which nearly 71 percent lies in the Kerala State.

ii) The Periyar

The Periyar 244 kms. in length is the longest river of Kerala and drains an area of 5,398 sq.kms. It rises at the forest land Sivagiri peak 80 kms. south of Devikulam at an elevation of 2,438m above m.s.l. and traverses the steep mountainous terrain before it is joined by the Mullaiyar, 16 kms. downstream. The river then turns west and continues to flow in the direction for about 16 km. in a sandy bed. After a winding course of about 13 kms., the river reaches Vandiperiyar and passes through a second narrow gorge below which the Perumthura joins it. Further down, it is joined by six tributaries after which the important tributary Edmala joins the Periyar. Passing Malayattur and thereafter taking a meandering course, the river reaches Alwaye where it divides itself into two branches. The upper branch joins the Chalakudi river at Punthenvelikara and then expands into a broad sheet of water at Munambham. The other branch taking a southerly

course is broken up into a number of small channels, which fall into the Vembanad Lake as Varapuzha.

iii) The Ulhas

The Ulhas river is one of the West Flowing rivers in Maharashtra falling into the Arabian Sea. The boundary of the basin consists of the main Sahyadri hills on the east, westerly off shoots on the north and south and on the west, a narrow opening at the end leading to the sea. The Ulhas basin lies between north, latitudes of 18° 44' to 19° 42' and east longitudes of 72° 45' to 73° 48'.

The Ulhas drains an area of 4,637 sq.kms. which lies completely in Maharashtra. The Thane, Raigad and Pune districts fall in the basin. The Ulhas rises from Sahyadri hill ranges in the Raigad district of Maharashtra at an elevation of 600m above m.s.l. The total length of this west flowing river from its origin to its outfall in to the Arabian Sea is 122 kms.

The important tributaries of the Ulhas river are Pej, Barvi Murbari, Kalu, Shari, Bhasta, Salpe, Poshir and Shilar. The Kalu and Bhasta are the major right bank tributaries which together accounts for 55.7% of the total catchment area of Ulhas.

There are mainly two completed projects on the tributaries of the Ulhas river on Bhivapuri and on Barvi. Two ongoing projects are on Bhates and Poshir.

iv) The Netravathi

The Netravathi rises between Kudermukh and Ballalaryan Durga in the Dakshina Kannada district of Karnataka at an elevation of about 1000m at 75° 20' East longitude and 30° 10' North latitude flows in a generally north-south direction for 40 kms. up to Gohattu, where it takes a turn towards the west and flow in a generally east-west direction practically up to its outfall into the Arabian Sea near Mangalore. The Kumaradhara, a major left-bank tributary joins it near the village Uppinangadi. The total length of the Netravathi is 103 kms. from its source to the outfall. The river drains an area of 3,657 sq.kms.. No major project is in existence in this basin. However, the investigation for the project titled multi-purpose Netravathi Anicut Scheme has been completed.

v) The Chaliyar

The Chaliyar, known in the lower reaches, as the Beypore is one of the major rivers of Kerala. The main river starts from the Elambalari hills at an

altitude of 2,067m above m.s.l. It is formed by the confluence of numerous streams and rivers. Its important tributaries are the Cherupuzha, the Kurumbanpuzha, the Kanhirapuzha, The Punnapuzha, the Karimpuzha, the Vadapurampuzha, the Chaliyarpuzha. The Chaliyar flowing for a total length of about 169 kms. finally joins the Arabian Sea at Beypore. The river drains a total area of about 2,933 sq.kms. of which 388 sq.kms.. lies in Tamilnadu.

vi) The Pamba

The Pamba, 176 kms in length is the third longest river in Kerala. It is formed by the confluence of the Pamba Aar, Kaki Aar, Arudhai Aar, Kakkad Aar and Kall Aar. The Pamba Aar rises in the Peermedu Plateau at an elevation of 1,670m. The Kaki Aar, which forms the major tributary of the Pamba river is a much larger stream at the beginning than the main river. The Pamba river, after receiving the Kaki Aar flows in a Westerly direction till the Arudhai Aar joins it. At Narayanamuzhi, it turns and follows a south-eastern direction until the Kakkad Aar joins it. Beyond the confluence, the river flows in a southerly direction up to Vadasserikkara where it is joined by the Kall Aar, which has its origin in the Valanjakkatti Malai. The catchment area of the river is 2,235 sq.kms..

At Pandanad the river bifurcates, one branch taking a westerly course. The Manimala joins the Pamba in its Neeretupuram branch. The river thereafter flows northwards and falls into the Vembanad lake through several branches.

At present there are two completed structures in Pamba basin.

vii) The Valapatanam

The Valapatanam river rises south of Ammatti village in the district of Coorg in Karnataka State at 75° 52' east longitude 12° 13' north latitude at an elevation of 900 m above m.s.l. The river has a total length of 101 kms. from its source to its fall into the Arabian sea. The river drains an area of 1,867 sq.km.. of which 546 sq.kms. lies in Karnataka and rest in Kerala.

The multipurpose Kattampally project at Kattampally, and Pazhassi project at Valiambra are the main irrigation Projects in this basin. The Kattampally project has been planned in two stages. The stage I will not only prevent saline water intrusion and reduction of flood, but also provide irrigation benefits to an area of 1,280 ha. The second stage of the project is expected to irrigate an additional area of 1,650 hectares. The Pazhassi project is proposed to irrigate 16,110 hectares of land.

vii) The Chalakudi

The Chalakudi river has its origin from the Anamalai hills of Western Ghats. It is formed by the confluence of five streams namely the Parambikulam, the Kuriarkutty, the Sholayar, the Karappara and the Anakayam. The river has a length of 130 kms. The total drainage area of the river is 1,704 sq.kms. of which 300 sq.kms. lies in Tamilnadu and the rest is in Kerala.

The Chalakudi river diversion scheme with a weir across the Chalakudi river at Thumburmuzhi is the only Major irrigation scheme in existence in the basin. Presently the project is irrigating an area of 13,500 hectares of land and has a potential to irrigate 19,696 hectares ultimately in the Karuvannur, Chalakudi and Periyar basins.

Next to the Periyar and Pamba basin the Chalakudi basin offers the maximum scope for hydel power development.

ix) The Kallada

The river is formed by the three rivers i.e. Kulathupuzha, Chendurni and Kalthuruthy joining together near Parappar. The river has its origin in Papanasam range south of Kulathupuzha in Quilon district of Kerala State at an altitude of 900 m above m.s.l. The river has a length of 121 kms. and drains an area of 1,699 sq.kms. before confluencing with the Ashtamudilake. The Kallada irrigation project is the one existing major project in the basin. The releases from Kallada dam are used to generate electricity.

There are other small 13 river basins on west flowing rivers and their drainage area varies from 165 sq.kms. to 1,550 sq.kms.

Industries: Mainly agriculture based industries are located in these basins.

Sites: There are 26 Water Quality observation stations in west flowing river basin. Sediment observations are also made at 17 of these stations. In addition, there are six gauge discharge observation stations in the basin.

10. Tapi

Locaton: The Tapi is the second largest westward draining inter state river basin. It covers a large area in the State of Maharashtra besides areas in the states of Madhya Pradesh and Gujarat. The Tapi Basin is the northern-most basin of the Deccan plateau and is situated between latitudes 20° N to 22° N approximately. The Satpura range forms its northern boundary whereas the Ajanta and Satmala hills form its southern extremity. Mahadeo hills form its eastern boundary. The basin finds its outlet in the Arabian Sea in the west. Bounded on the three sides by the hill ranges, the river Tapi, along with its tributaries, more or less flows over the plains of Vidharbha, Khandesh and Gujarat.

The Tapi River drains an area of 65,145 sq.kms. out of which nearly 80 percent lies in Maharashtra state.

The Tapi river originates near Multai in Betul district at an elevation of 752 m above m.s.l. The total length of this west flowing river from its origin to its out fall into the sea is 724 km. For the first 282 km the river flows in Madhya Pradesh, out of which 54 km forms the common boundary with Maharashtra State. It flows for 228 km in Maharashtra before entering Gujarat. Traversing a length of 214 km in Gujarat, the Tapi river joins Arabian sea in the Gulf of Cambay after flowing past the Surat city. The river receives tidal influence for a length of about 25 km upstream from the mouth.

The Tapi river receives several tributaries on both the banks. There are 14 major tributaries having a length more than 50 km. On the right bank, 4 tributaries namely the Vaki, Gomai, Arunavati and Aner join the Tapi river. On the left bank, 10 important tributaries namely the Nesu, Amaravati, Buray, Panjhra, Bori, Girna, Waghur, Purna, Mona and Sipna drain into the main channel. The drainage system on the left bank of the Tapi river is, therefore, more extensive as compared to the right Bank area.

The Purna and the Girnma, the two important left bank tributaries together account for nearly 45 percent of the total catchment area of the Tapi river. The Purna is the principal tributary of the Tapi river originating in Betul district in Gawilgarh hills of the Satpura range, mostly drains the three districts of Vidharbha, namely Amravati, Akola and Buldhana. The Girna, another major tributary, rises in the western Ghats and drains Nasik and Jalgaon districts of Maharashtra.

Urban Centres: Surat is the most important city in the area. Other cities are Amravati, Malegaon, Akola, and Jalgaon.

Industries: Important industries in the basin are textile factories in Surat and newsprint factory at Nepanagar. Other industries are machine tools, drugs & pharmaceuticals, plastics, paper & sugar mills, Dal, Oil & Shaw Mills.

Sites: There are 12 Water Quality observation sites are in the basin. Sediment observations are also made at 8 of these stations.

11. Narmada

Location: The Narmada is the largest west flowing and seventh largest river of India. It drains an area of 98,796 sq.kms. out of which nearly 87% lies in Madhya Pradesh besides some areas in the states of Maharashtra and Gujarat. The Narmada basin lies between east longitudes $72^{\circ} 32'$ to $81^{\circ} 45'$ and north latitudes $21^{\circ} 20'$ to $23^{\circ} 45'$. It flows through Deccan trap in between Vindhya and Satpura ranges of hills before falling into the gulf of Cambay in the Arabian Sea.

The Narmada rises from a Kund (spring) at an elevation of 1057m. at Amarkantak in the Maikal hill in Shahdol district of Madhya Pradesh and flows through Madhya Pradesh, Maharashtra and Gujarat between Vindhya and Satpura hill ranges before falling into the gulf of Cambay in the Arabian Sea about 10 km north of Bharuch district of Gujarat. The total length of this west flowing river from its origin to its outfall into the Sea is 1,312 kms. For the first 1,079 kms. it runs in Madhya Pradesh and thereafter it forms the common boundary between Madhya Pradesh and Maharashtra for 35 kms., and Maharashtra and Gujarat for 35 kms. In Gujarat State it stretches for 159 km.

There are 41 important tributaries to the Narmada River. Significant among them are Burhner, Banjar, Hiran, Tawa, Chhota Tawa, Orsang and Kundi which are major tributaries having catchment area of more than 3,500 sq.kms each. The remaining tributaries are having catchment areas ranging from 500 to 2,500 sq.kms.

Urban Centres: Jabalpur town is the main city in this basin area. The second largest urban pocket in the Narmada is Bharuch of Gujarat. Other urbanized centers are Khandawa and Dewas of Madhya Pradesh.

Industries: There are about 40 large scale and 70 small-scale industries in the area. But compared to other basins, industrialisation is thin in this area. Important minerals found in the basin are Bauxite, Clay, coal, dolomite, graphite, iron ore, manganese, talc & limestone, etc.

Sites: There are 21 Water Quality observation sites are in the basin. Sediment observations are also made at 13 of these stations. Further, there are 31 gauge and discharge sites being maintained by State Government of Gujarat in Narmada basin.

12. Mahi, Sabarmati, Luni and other west flowing rivers Basin

West flowing river basins, excluding those of Narmada & Tapi, considered here consist of 14 rivers namely Mahi, Sabarmati, Luni and other small river basins. The salient features of major 8 basins are explained below.

i) The Mahi

The river Mahi is one of the major west flowing interstate rivers of India, draining into the Gulf of Cambay. The basin is bounded on the North and the North - West by Aravalli hills, on the East by the ridge separating it from the Chambal Basin, on the South by the Vindhya and on the West by the gulf of Cambay. The basin has a maximum width of about 250 kms. The river Mahi originates on the Northern slope of Vindhya at latitude $22^{\circ} 35' N$ and longitude $74^{\circ} 58' E$ near the village of Sardarpur in the Dhar District of Madhya Pradesh at an elevation of 500 m above m.s.l. Its length is 583 kms. and it traverses the states of Madhya Pradesh, Rajasthan and Gujarat.

The river Mahi drains an area of 34,842 sq.kms. Initially the river flows Northwards through Dhar and Jhabua districts of M.P. and then turns left and passes through the Ratlam district of M.P., then turning to North - West, it enters the Banswara district of Rajasthan and flows in South-West directions and thereafter enters the Panchmahal district of Gujarat state. Then the river continues to flow in the same direction through Kheda district of Gujarat and finally falls into Gulf of Cambay in Arabian Sea.

ii) The Luni

The Luni is the only river basin of any significance in Western Rajasthan which forms the bulk of arid zone. Luni originates from Western slopes of the Aravalli ranges at an elevation of 772 m above m.s.l. near Ajmer flowing in South West direction and traversing a course of 511 kms. in Rajasthan, it finally flows into the Rann of Kutchh. Its total catchment area falls in Rajasthan. Luni basin is situated in between $24^{\circ} 11'$ to $26^{\circ} 43'$ North latitude and $70^{\circ} 37'$ to $74^{\circ} 39'$ East longitude approximately, The peculiarity of this river is that it tends to increase its width rather than deepening the bed because the banks are of soils which are easily erodable whereas beds are of sand. The floods develop and disappear so rapidly that they have no time to scour the bed. The Aravalli ranges form its East boundary whereas main course of river in Barmer district itself forms North boundary and mostly Banas and initial reach of Chambal river form its Southern boundary. Luni receives all the main tributaries on its left bank except one i.e. Jojari (Mithri) on the right bank. Luni receives ten tributaries namely Lilari, Guhiya, Bandi (Hemawas), Sukri(Hemawas), Sukri, Mithri, Jawai, Khari

Bandi, Sukri Bandi and Sugi. Hence the drainage on the left bank of Luni is, therefore, more extensive than on Right Bank. The Luni drains an area of 32,879 sq Kms. In Rajasthan state only.

iii) The Sabarmati

The river Sabarmati is one of the major West flowing interstate rivers in India, draining into the Gulf of Cambay. The basin is bounded by Aravalli hills in the North and North-east, by ridge separating it from basins of minor streams and draining into Rann of Kutchh and Gulf of Cambay in West and by Gulf of Cambay in South. The basin has a maximum length of 300 km and maximum width of 105 kms. It is triangular in shape with the main river as the base and the source of the Watrak as the apex point. It originates in the Aravalli hills at latitude $24^{\circ} 40'$ N and longitude $73^{\circ} 20'$ E in the Rajasthan State at an elevation of 762 m above m.s.l. The river Sabarmati drains an area of 21,674 sq kms. with a total length of 371 kms..

The Sabarmati river with its origin in Rajasthan flows generally in south west direction. It enters the Gujarat State and passes through the plains and continues to flow in the same direction and joins the Gulf of Cambay in the Arabian sea.

iv) The Banas

The river Banas originates from Aravalli hills and descends in a South-Western direction through Rajasthan state and travels through Banaskantha and Mehsana district of Gujarat before it drains into little Rann of Kutchh. The Banas basin is the Northern basin and is situated between $23^{\circ} 30'$ & $24^{\circ} 55'$ North latitudes and $71^{\circ} 15'$ to $73^{\circ} 15'$ East longitudes approximately. Saraswati and Luni basins form the Southern and Northern boundaries of this basin. The Aravalli hills form its eastern extremity. The Banas drains an area of 8,674 sq.kms. out of which nearly 37.69% lies in Rajasthan state and remaining 62.31% falls in Gujarat state.

The Banas river rises near Pindwara of Sirohi district of Rajasthan at an elevation of 372.51m above m.s.l. Little Rann of Kutchh is the outfall of Banas river. Sipu is the only right bank tributary of Banas river which drains into the main channel. There are 6 tributaries on the left bank of Banas river namely the Batria, the Sukli, the Sewaran, the Suket, the Balaram and the Khari which drain into the main channel. Hence the draining system on the left bank of the Banas river is more extensive as compared to the right area. The Sipu and the Khari are the two important right and left bank tributaries which together drain nearly 37% of the total catchment area of Banas.

v) The Bhadar

Bhadar is one of the major rivers of Saurashtra and it drains about 1/7th of the area of Saurashtra. The Bhadar basin is the South Western basin and situated between 21° 25' to 22° 10' North latitude and 69° 45' to 71° 20' East longitude. The river Bhadar originates at an elevation of 261 m above m.s.l. in Vaddi about 26 kms. North-West of Jasdan in Rajkot district and flows towards South upto Jasdan village and then turns towards South-West upto village Jetpur and finally changes its direction towards West till its confluence with Arabian sea at Navibandar (Porbandar). Thus from Jetpur to Porbandar the river Bhadar fertiles Rajkot, Jamnagar, Amreli and Junagadh district of Saurashtra. The river drains an area of 7,094 sq kms. out of which 706 sq. kms. in hilly and the rest in plain regions of Saurashtra.

The total length of this South West flowing river from its origin to its outfall into the sea is 198 kms.. For the first 150 kms. the river flows in Rajkot district and the rest of 48 kms. in Junagadh district. The river receives tidal influence for a length of about 26 kms. from mouth in Junagadh district. The river Bhadar receives several tributaries on both the banks. There are 9 major tributaries having a length of more than 25 kms. out of which 6 tributaries namely Gondali, Chapparwadi, Phopal, Utawali, Moj and Venu are feeding from right and the remaining 3 tributaries namely Vasavadi, Surwa and Galolia from left. The drainage system on the right bank of river Bhadar is more extensive as compared to the left bank.

vi) The Shetrunji

The Shetrunji is one of the major rivers of Saurashtra. The Shetrunji basin is the Eastern most basin of Saurashtra and is situated in between 21° 00' to 21° 47' North latitude and 70° 50' to 72° 10' East longitude. The river Shetrunji originates at Chchai hills in Gir forest of Junagadh district at R.L. 380 m above m.s.l and flows towards East direction till its confluence with Gulf of Cambay near Santhrapur port. The river Shetrunji fertiles the Amreli and Bhavanagar districts and a small area of Junagadh district of Saurashtra. The Shetrunji drains an area of 5,514 sq.kms. out of which more than 50% in Amreli district.

The total length of this East flowing river from its origin to the outfall into the Gulf of Cambay is 182 kms. This river receives tidal influence for a length of 5 kms. from mouth. The Shetrunji receives several tributaries on both banks. There are 9 tributaries having lengths more than 15 kms. Out of which Safara, Shel, Khari and Talaji are the 4 tributaries on the right bank of Shetrunji and the remaining 5 tributaries namely Stali, Thebu, Gagadia, Rajwal and Kharo are on left bank. The drainage system on left

bank of Shetrunji is more extensive as compared to the right bank area. The Stali, Thebi and Gagadia 3 important tributaries feeding from left bank of Shetrunji and drain nearly 34% of total catchment area of river Shetrunji.

vii) The Vaitarna

The river Vaitarna originates from hilly terrains of Maharashtra at Trimbak, district Nasik. After running for 120 kms., in Maharashtra towards West, it falls in the Arabian Sea. The Catchment area of the basin is 3637 sq.km. The complete catchment area is located between East longitude of 72° 45' to 73° 35' and North latitude of 19° 30' to 20° 20'. The main tributaries of this river are Pinjal, Ganjal, Surya, Daharji and Tansa.

viii) Dhadar

The river Dhadar is one of the West flowing rivers in Gujarat state. It originates from Pavagadh hills of Gujarat state and flows through Vadodara and Bharuch districts. The river Dhadar after flowing 87 kms. receives Vishwamitri tributary from right bank at Pingalwada village. After flowing 55 kms it falls into the Gulf of Cambay. The total catchment area of Dhadar basin is 3,423 sq.kms.. It lies between east longitude 72° 30' and 72° 45' and north latitude 21° 45' and 22° 45'. The important tributaries of Dhadar are Vishwamitri and Rangav.

Urban Centres: Ahmedabad & Vadodara are two important cities on west flowing rivers basin.

Industries: In addition to agriculture based industries there are important industries of textile, leather & leather goods, plastic, rubber goods, paper, newsprint, automobile, machine tools, drugs, Pharmaceuticals etc.

Sites: There are 19 Water Quality observation centers in this basin. Sediment observations are also made at 13 of these stations. In addition there are 10 gauge discharge observation stations in the basin.

WATER AND RELATED STATISTICS

1. Water Resources of India

1.1 The Annual precipitation including snowfall is the main source of water in the country and is estimated to be of the order of 4000 Cu. Km. The total water resource potential of the country, which occurs as natural run off in the rivers is estimated at 1869 Cu. Km. considering both surface and groundwater as one system. However, due to various constraints of topography, uneven distribution of resource over space and time, it has been estimated that only about 1122 Cu. Km. including 690 Cu. Km. from surface water resources can be put to beneficial use. However, 370 Cu. Km. of estimated utilizable surface water comes from the non-classified river basins.

1.2 The distribution of water resources potential in the country shows that as against the national per capita annual availability of water of 1731 Cu. M. (estimated as on 1st March 2004) the average availability in Brahmaputra and Barak basin is as high as 14057 Cu. M. while it is as low as 308 Cu. M. in Sabarmati basin in 2000. Brahmaputra and Barak basin with 7.6 % of geographical area and 5.2 % of population of all the basins in the country has 31 % of the annual water resources. Per capita annual availability for rest of the country excluding Brahmaputra and Barak basin works out to about 1345 Cu. M.. Any situation of availability of less than 1000 Cu. M. per capita is considered by international agencies as scarcity conditions. Cauvery, Pennar, Sabarmati, East flowing rivers and west flowing rivers are some of the basins which fall into this category.

2. Drainage/catchment area and population distribution.

2.1 The 12 non-classified river basins cover an estimated population of 50 crores on 1st March 2004 accounting for 46% of total population of India. The drainage area of these basins account for 43% of the total geographical area of the country. The Godavari basin has the highest drainage area of 3,12,800 Sq. Kms. followed by Krishna basin with drainage area of 2,58,948 Sq. Kms. and Mahanadi basin with drainage area of 1,41,600 Sq. Kms. The river basins of Rushikulya (7,700 sq. kms.), Vamsadhara (10,830 sq. kms.), Sarda (2,665 sq. kms.) and Nagavali (9,510 sq. kms.) together have the least total drainage area of 30,705 Sq. Kms.

The population wise, the East flowing rivers have the highest population of 9.86 crores followed by Krishna (7.65 crores), east flowing rivers (7.35 crores) and Godavari with 6.8 crores. West flowing rivers have the maximum population density of 846 persons per Sq. Km. followed by east flowing rivers (722 persons per Sq. Km.). Narmada has the least population density of 187 persons per

Sq. Km. followed by Godavari basin with density of 217 persons per Sq. Km.

2.2 The average annual potential/average annual flow in non-classified river basins is maximum at 113.53 Cu. Km. in West Flowing rivers from Tadri to Kanyakumari followed by 110.54 Cu. Km. at Godavari basin and 87.41 Cu. Km. in West Flowing Rivers from Tapi to Tadri. The run off at terminal site is, however, maximum at Polavaram in Godavari (88728 MCM.), followed by 68824 MCM in West Flowing Rivers from Tapi to Kanyakumari and 46477 MCM in Mahandi Basin at Tikrapara. The site wise distribution is given in Table 1.1.

2.3 Surface Water Storage

So far a total storage capacity of 212.79 Cu. Km. (Table 1.3) has been created in India and the projects under construction will add up another 76.26 Cu. Km. The reservoir projects under consideration will contribute further about 107.54 Cu. Km. of water storage capacity. Therefore expected storage capacity would be 376 Cu. Km. against total availability of 1869 Cu. Km. of water in the river basins of this country. The Krishna basin leads in term of storage capacity (49.55 Cu. Km.) followed by Godavari basin (31.33 Cu. Km.) and Narmada basin (23.60 Cu. Km.). Pennar basin leads (76%) in terms of storage capacity created as percentage of average annual flow followed by Tapi basin (71%) which even otherwise has requirement for higher storage capacity as it covers the semi desert areas of Madhya Pradesh, Maharashtra & Gujarat. The West Flowing Rivers of Kutch, Shaurashtra including Luni, Krishna, Narmada and Brahmani & Baitarni basins exceed 50% capacity of their respective average annual flow. The storage percentage is, however, less than 25% in few basins and hence there is a scope for increasing storage potential in them particularly for those basins for which the annual average flow is higher. This publication presents data on average annual runoff at terminal sites of all basins with catchment area upto the site (Table 1.1).

3. Details of other information

3.1 Observations on water discharges, volume of sediments deposited on the flow areas & examinations of water qualities are made at different water releasing points of the river basins. Geographical locations of observation sites, types of experiments done on those sites and dates of commencement of experiments are also given for understanding distribution of waters on participating States. There are 57 (Table 1.2) such sites on Krishna basin out of 286 sites and 56 sites in Godavari basin. Rushikulaya & other small three rivers altogether have only 5 observation centres.

3.2 Live storage capacities in respect of different river basins are given in table 1.3.

3.3 Site-wise further details of findings in terms of seasonal & annual flow of water for last ten years and historical extreme levels like maximum & minimum water levels & discharges, from the times of commencements of observations to latest information available, are presented as time series data in table 1.5 .

3.4 Site-wise maximum and minimum observed water levels and discharges in different river basins are given in table 1.6.

3.5 Expectation of availability of required amount of water is of paramount importance for any plan/project or irrigated cultivation purposes. Therefore dependable flow of water (Table 1.7) at 10 equal percentile levels has been presented here for each site. And the percentiles have been evaluated taking into consideration the whole period of releases of water from the sites from the day of its openings. Monthly average flow of water per unit drainage area (Table 1.8) has also been shown in the publication based on its evaluation for total ages of different sites separately. This will also help in understanding expected water availability in different months of a year.

3.6 The site-wise historical observations on latitude, longitude, stage record, drainage area in these non-classified basins is presented in Table 1.4.

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b´)	Longitute (x°-y´)		Temprature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Mahanadi Rises from Pharsiya village near Nagri Town in Raipur Distt. of Chhattisgarh at an elevation of 442 m. Length 851 Km.	Madhya Pradesh Chhattisgarh Orissa Bihar Maharashtra	130 74970 65600 650 250	Mahanadi Seonath Jonk Hasdeo Mand Ib Ong Tel	51733 30761 3673 9803 5237 12447 5128 22818	19-20 to 23-35	80-30 to 86-50	GD =4 GDQ =2 GDSQ=14	7 to 45.5	1400	Monthly range 40 in Winter to 360 in Summer
		Total	141600	Total	141600						

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1	Mahanadi (water withdrawals during 1997-99)	Iron Ores Coal Lime stone Quartzite Copper Ores Silver Lead Mica Bauxite Galena & Graphite	179.25	Iron Steel Copper Cement Paper and Aluminium Tikarapara (124450)	46477 (1972 to 2002)	Black Red Yellow Brownish red to Yellowish red Dark Gray Coastal alluvial	Hirakund Tandula Hasdeo Bango Dam Mand Diversion Project Ib Diversion Scheme Sunder Dam Barupa Barrage	8141.00 312.07 7901.21 - - - - 4700.00 -	5892.00 302.09 - - - - - 4440.00 -	14195.00 310.00 2532.71 - 111.62 199.00 65.69 2300.84

Source : Water Year Book for year 2002-2003.

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
2 Subernarekha, Burhablang and Baitarni										
2.1 Subernarekha	Coal Iron Ore	88.23	Tobacco	6552	Gravelly Sandy	-	-	-	-	-
(water withdrawals during 1997-99)	Bauxite Copper Chromium Gold Vanadium Lime Stone Dolomite Asbestos Chinaclay Talc and Building Stone		Products, Cement, Asbestos Sheets, Ceramics, Glass, Coaches & Locomotive , Automobiles, Agricultural Equipment, Wires & Cables, Iron & Steel Machinery, Metal Tubes & conduits, Copper & Brass, Chemical Acids & Caustics, Fertilizer, Soaps	(1971 to 2003) Gatshila (14176)	Loams Alluvium & Black Clays Laterite Red etc.					
2.2 Burhabalang	Iron ore, China Clay, Quartz, Soap stone & Lime stone found in limited areas.	NIL	2844	Red & Yellow	-	-	-	-	-	-
(water withdrawals during 1997-99)					Soil Laterite Soil Alluvial Soil					

Source : Water Year Book for year 2002-2003.

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b´)	Longitute (x°-y´)		Temprature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2.3	Baitarni Rises in the hill ranges of Keonjhar Distt. of Orissa near Manka-ranchovillage at an elevation of 900 m. Length 355 Km.	Bihar Orissa	736 10246	Salindi Kusai Orarai Others	1793 870 821 7498	20-35 to 22-15	85-10 to 87-03	GDSQ =2	10 to 45	1600	-
		Total	10982	Total	10982						
3	Brahmani Rises from Nagri village in Ranchi Distt. of Bihar at an elevation of 600 m. Length 799 Km.	Bihar/Jharkhand Orissa M.P.	15769 22364 900	Brahmani Karo Sankh Tikra	26831 2741 6933 2528	20-28 to 23-35	83-52 to 87-03	GDSQ =5	13 to 45	1500	Average Monthly Evaporation varies from 18 to 135
		Total	39033	Total	39033						

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
2.3	Baitarni (water withdrawals during 1997-99)	Iron Ore, Copper, Chromite, Asbestos, Manganese, Atomic Minerals, China Clay & Soap Stone		Ferro - Manganese Plant Sponge Iron Plant	4746 (1990-2003) Anandpur (8570)	Red & Yellow Laterite Alluvial	Akhuapada Kanpur Irrigation Project	- 242.65	- 184.15	451.46 581.09
3	Brahmani (water withdrawals during 1997-99)	Iron Copper Chromite Coal Manganese Lime stone Dolomite Lead Fire-Clay Bauxite & China-Clay	96.78	Steel Plants Cement Aluminium Explosive Chemical Machine Tools Fertilizer Plant	17636 (1979 to 2003) Jenapur (33955)	Red & Yellow Mixed Red & Black Red Sandy Red Loamy & Coastel Alluvium		-	-	-

Source : Water Year Book for year 2002-2003.

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
4	Rushikulya, Vamsadhara, Sarada & Nagavali		96.79							
4.1	Rushikulya (water withdrawals during 1997-99)	Clay Lime Stone Manganese Sand Talc Black Sand & Grinding Material		Chemical Sugar Spining Mills	2069 (1992 to 2003) Purshottampur (7112)	Red & Yellow Laterite Alluvial Saline		-	-	-
4.2	Vamsadhara (water withdrawals during 1997-99)	Manganese Grayphite Lime Stone Bauxite Mica & Quartz		No large scale Industries.	2256 (1971 to 2003) Kashi Nagar (7820)	Red & Black Red Sandy Balck Laterite Yellow		-	-	-
4.3	Sarada (water withdrawals during 1997-99)	Manganese Grayphite Aluminium Bauxite & --		Steel Plant	424.4 (1990 to 2003) Anakapalli (2090)	Red & Coastal Sands Laterite Alluvial Forest		-	-	-
4.4	Nagavali (water withdrawals during 1997-99)	Manganese Grayphite Lime Stone Bauxite & Mica		There is no large scale Industries.	2337 (1991 to 2003) Srikakulam (9500)	Coastel Sand Red Mixed Laterite Forest	Thotapally Narayan Puram Jaiyavathi Janjavathi	- - -	- - -	189.73 79.97 113.27

Source : Water Year Book for year 2002-2003.

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a °-b ')	Longitude (x °-y ')		Temperature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evaporation (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
5.	Godavari Rises from Nasik distt. of Maharashtra at an elevation of 1067 m. Length 1465 Km.	Andhra Pradesh Karnataka Madhya Pd. Maharashtra Orissa	73201 4405 65255 152199 17740	Godavari Pravara Purna Manjira Maner Pranhita Indravathi Sabari	75600 6500 15600 30800 13100 109100 41700 20400	16-16 to 22-43	73-26 to 83-07	GD =24 GDQ = 7 GDSQ=25	15 to 40	1132	Mean daily evaporation varies from about 5 mm near coastal region to 16.6 mm in uper region.
		Total	312800		312800						

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
5.	Godavari (water withdrawals during 1995-2000)	Bauxite Manganege Iron Ore Coal Lead Zinc Corundum	572.81	Paper Other Timber Product Rice Milling Cotton Ginning processing Spinning & Weaving Manufacture of various textile Extraction of Oil from Ground Nut & other Oil Seeds Small Engineering Industries	88728 (1966 to 2000) Polavaram (307800)	Black Red Laterite Alluvium Mixed Saline & Alkaline	Waghed Ozarkhed Karanjawan Palkhed Gangapur N.Madmeswar Jayakwadi Stage-I Puma Mula Bhandaradara Maner Adhole S.R.S. Project Stage-I Kaddam Nizam Sagar Lower Maner Maner Project Manjira Dhuti Weir Bagh Idiadhoh Cotton Barrage Lakhnavaram	76.48 67.96 175.56 21.24 215.8 - 2909.00 934.46 735.8 312.6 67.68 30.00 3172.00 - 186.80 841.30 - 85.52 - 15.43 269.00 - - 60.46	70.00 62.50 166.22 21.24 203.8 - 2170.00 809.3 636.8 307.53 49.27 27.6 2322.00 137.1 724.92 - 69.66 - 7.79 241.00 - - 47.39	24.72 20.56 54.82 44.43 538.98 - 225.20 127.95 245.13 219.20 87.28 17.57 392.80 - 6654.70 - - 21.02 254.54 209.84 161.86 -

Source : Water Year Book for year 2001-2002.

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b ')	Longitute (x°-y ')		Temprature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
6.	Krishna Rises from near Mahabaleshwar about 64 Km. from Arabian Sea at an elevation of 1337 m. Length 1401 Km.	Andhra Prd	76252	Ghatprabha	8829	13-7 to	73-21 to	GD =22 GDSQ=25 GDQ =10	15 to 39	565 to 1508	-
		Maharashtra	69425	Malaprabha	11549	19-25	81-9				
		Karnataka	113271	Bhima	70614						
				Tungabhadra	47827						
				Hangari	23590						
				Musi	11212						
				Palleru	3263						
				Muneru	10409						
				Others	71655						
				Total	258948	Total	258948				
7.	Cauvery Originate at Talakavasi in Georg Distt. of Karnataka at an elevation of 1341 m. Length 800 Kms.	Karnataka	34273	Harangi	717	10-05 to	75-30 to	GDQ = 5 GDSQ=11	20 TO 30	500 to 3800	Annual 2500
		Tamil Nadu	43856	Hemavathi	5410	13-30	79-45				
		Kerala	2866	Lakshmana-	1690						
		Pondicherry	160	Tirtha	7040						
				Kabini	7040						
				Shimsha	8469						
				Arkavathi	4150						
				Bhawani	6154						
				Amravathi	8380						
				Others	39145						
		Total	81155	Total	81155						

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
6	Krishna (water withdrawals during 1998-99)	Bauxite Manganeg Iron Ore Copper Gold Coal Lime Stone Lead Zinc Corundum Ilmenite Refractory minerals & Kaolin	643.82	Textile Sugar Chemical Cement Automobiles Engineering Extraction of Gold Alluminum Electrical Dynamic	26706 (6/65 to 5/96) Vijaywada 251360	Forest Deep Black Medium Black, Coarse Shallow Black, Mixed Red & Black, Red, Red Loamy, Red Sandy, Redish Brown, Laterite, Deltaic Alluvium	Radha Nagari Ghod Khadakwasla Stage - I Vir Dham Konya Dam Tungabhadra Bhadra Ghataprabha Stage -II Upper Krishna Rajouliunda Diversion Musi Project Naga-Arjun-Sagar Sri Sailam P.D. Jurala Prakashan Barrag	- - - - - - 3767.00 2023.00 - - 1066.00 - - - 11559.00 8716.00 - -	- - - - - - - 1780.00 - - 863.00 - - - 6767.00 - -	Major & Medium Projects -20363; Through Kony Hydro Electric Power Project, Tungbhadra Dam, Nagarjun Sagar Project and Prakashan Barrage -12666 for export to other basins; Total withdrawal 33029 Import from Godavari basin through Sri Ram Sagar Project - 986
7.	Cauvery (water withdrawals during 1996-99)	Stone Mining	286.54	Paper Mills Sugar Mills Chemical Factory Cotton Mills	8512 (6/72 to 5/2000) Musiri (66243)	Black Cotton Red Laterite Alluvial Forest Mixed	Krishnaraja Saga Hemavathi Mattur Bhawani Lower Kabini	1400.35 1050.62 2708.79 928.80 552.74	1275.69 1012.60 2646.77 907.80 453.06	- - - - -

Source : Water Year Book of Krishna Basin for year 1995-1996, Water Year Book of Cauvery Basin for year 1999-2000.

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b ')	Longitute (x°-y ')		Temprature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
8.	East Flowing Rivers of Coastal of Andhra Pradesh, Karnataka and Tamil Nadu										
8.1	Gundlakama Rises near Iskagudem Village in Kurnool Distt. of Andhra Pd. at an elevation of 600 m. Length 220 Km.	Andhra Pd.	8494			15-38	78-47	GDSQ = 1	-	-	-
		Total	8494								
8.2	Paleru Rises from near Gogulapalle Village in Nellore Distt. of Andhra Pradesh at an elevation of 325 m. Length 104 Km.	Andhra Pd.	2483			15-17	79-13	GD = 1	-	-	-
		Total	2483								
8.3	Pennar Rises from Thena- nahesava Hills of Nandidurg range in Karnataka Length 597 Km.	Karnataka Andhra Pd.	6937 48276	Jayamangali Chitravathi Kunderu Papagini Sagileru Cheyyeru Others	1282 5908 8057 7423 3077 7325 22141	13-16 to 15-52	77-04 to 80-10	GDQ = 7 GDSQ= 1	15.02 to 40.9	508 to 988	-
		Total	55213	Total	55213						

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)

**8. East Flowing Rivers of Coastal of Andhra Pradesh, Karnataka & Tamil Nadu
(water withdrawals during 1996-97)**

8.1 Gundlakama					1192 (6/78 to 5/2000) Thammavaram (7889)			-	-	-
8.2 Paleru					161 (6/91 to 5/2000) K.Bitragunta (2420)			-	-	-
8.3 Pennar					1742 (6/88 to 5/2000) Nellore 50800	Somashila	2093.00	-	-	-

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	8.4 Swarnamukhi				431 (6/78 to 5/2000) Naidupeta (2650)			-	-	-
	8.5 Kalingi				235 (6/87-5/2000) Sullurpet (5927)			-	-	-
	8.6 Palar				559 (6/78-5/2000) Chengalpattu (16230)			-	-	-
	8.7 Ponnaiar				330 (6/72-5/2000) Villupuram (12900)		Krishnagiri Sathanur Reservo	66.10 228.91	-	-

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b ')	Longitute (x°-y ')		Temprature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
8.8	Vellar Rises near village Tumba in Chottori Hills of Eastern Ghats in Salem Distt. of Tamil Nadu at an elevation of 900 m. Length 210 Kms	Tamil Nadu	8922				-	GDQ = 1	-	-	-
		Total	8922								
8.9	Vaigai Rises in Western shopes of Varusha- nadu Hills near Kottaimalai in Madurai Distt. of Tamil Nadu at an elevation of 1200 m. Length 258 Km.	Tamil Nadu	7741	Mangalar Suruliyar Varahanadi Others	375 1210 380 5776	9-17 to 10-22		GDQ = 1 GDSQ = 1	25 to 35	635 to 1270	-
		Total	7741	Total	7741						

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	8.8 Vellar				520 (6/90-5/2000) Kudalaiyathur (7890)			-	-	-
	8.9 Vaigai				166 (6/72-5/2000) Parmakudi (6796)		Vaigai Reservoir	194.78	-	-

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
8.10	Vaipar				109 (6/90-5/2000) Irukkankudi (3721)			-	-	-
8.11	Tambraparani				573 (6/79-5/2000) Murappandu (4380)			-	-	-

Source : Water Year Book for year 1999-2000.

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)

9. West Flowing Rivers from Kanniyakumari to Tapi

9.1 Ulahas					2816 (6/87 - 5/2000) Badlapur (785)			-	-	-
9.2 Kal					903 (6/87 - 5/2000) Mangaon (259)			-	-	-
9.3 Kajavi					906 (6/92 - 5/2000) Anjanari (315)	Sandy mixed with Gravel.		-	-	-
9.4 Gad					2983 (6/87 - 5/2000) Adavali (835)			-	-	-

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	9.5 MandovyiMadai				3697 (6/71 - 5/2000) Ganjim (880)		Anjunem	-	-	-
	9.6 Agnashini				5003 (6/88 - 5/2000) Santeguli (1090)			-	-	-
	9.7 Haladi				1978 (6/86 - 5/2000) Haladi (583)			-	-	-
	9.8 Swarna				1648 (6/90 - 5/2000) Yennehole (327)		Proposed Dam Si	370.95	105.68	-

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b ')	Longitude (x°-y ')		Temperature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9.9	Netravati Rises between Kudermukh of Ballalaryan Durga in Dakshina Kannada Distt. of Karnataka at an elevation of 1000 m. Length 103 Km.	Karnataka Total	3657 3657			-	-	GDSQ = 1	21.7 to 32.4	2002 to 5277	-
9.10	Payaswani Originate from Pattighat reserved forest in Coorg Distt. of Karnataka at an elevation of 1350 m. Length 105 Km.	Karnataka Kerala Total	581 957 1538			-	-	GDSQ = 1	-	-	-
9.11	Valapatanam Rises from South of Ammatti Village in the Distt. of Coorg of Karnatak at an elevation of 900 m. Length 101 Km.	Karnataka Kerala Total	546 1321 1867			-	-	GDSQ = 1	22 to 32.9	2369 to 4268	-

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	9.9 Netravathi				11707 (6/71 - 5/2000) Bantwal (3184)			-	-	-
	9.10 Payaswani				3660 (6/86 - 5/2000) Erinjipuzha (957)			-	-	-
	9.11 Valapatanam				3575 (6/86 - 5/2000) Perumannu (1070)	Kattampally Pazhassi		-	-	-

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude	Longitude		Temperature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
						(a°-b ')	(x°-y ')				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9.12	Chaliyar (Beypore)	Kerala	2545			-	-	GDSQ = 1	25.8 to 29.4	1289 to 5042	-
	Rises from Elambabari Hills in Kerala State at an elevation of 2067 m. Length 169 Km.	Tamil Nadu	388								
	Total		2933								
9.13	Kadalundi	Kerala	1112			-	-	GDSQ = 1	25.8 to 29.4	1289 to 5042	-
	Rises from East of Karuvarukkundu Village in Calicut Distt. in Kerala at an elevation of 900 m. Length 130 Km.										
Total			1112								
9.14	Bharathapuzha	Tamil Nadu	1786			10-26 to 11-13	75-53 to 77-13	GDQ = 3 GDSQ = 2	22.2 to 37.4	2000 to 3000	-
	Rises in the Eastern slops of Anamalai Hills of Western Ghat in Tamil Nadu at an elevation of 2250 m. Length 209 Km.	Kerala	4400								
	Total		6186								
9.15	Chalakudi	Kerala	1404			-	-	GDSQ = 1	25.9 to 28.7	1494 to 4588	-
	Rises from Anamalai Hills of Western Ghat	Tamil Nadu	300								
	Total		1704								

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catchment Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
9.12	Chaliyar (Beyepore)				4241 (6/81 - 5/2000) Kuniyil (1876)			-	-	-
9.13	Kadalundi				1401 (6/87-5/2000) Karathodu (750)			-	-	-
9.14	Bharathapuzha				752 (6/80-5/2000) Mankara (2775)		Malampuzha Res.	228.40	226.00	-
9.15	Chalakudi				1918 (6/78-5/2000) Arangaly (1342)		Chalakudi River Diversion Scheme Sholayar H.E.S. Peringilkuthu Left Bank Scheme	443.50	299.50	-

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
9.16	Periyar				7292 (6/71-5/2000)		Periyarvalley Pro	453.50	299.35	-
					Neeleshwaram (4234)		Edamalayar	1089.80	1017.80	1824.00
							Iducky Hydrel Pro	1996.30	1489.50	2027.90
9.17	Morathupuzha				5052 (6/78-5/2000)			-	-	-
					Ramamangalam (1208)					
9.18	Meenachil				1762 (6/86-5/2000)			-	-	-
					Kidangoor (615)					
9.19	Pamba				4060 (6/86-5/2000)	Pamba Hydrel Project		487.30	471.68	1046.80
					Malakkara (1713)					

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
9.20	Achankovil				1208 (6/78-5/2000) Thumpamon (810)			-	-	-
9.21	Kalada				1600 (6/78-5/2000) Pattazhy (1210)	Kalada Irrigation Project		-	-	-
9.22	Vamanapuram				662 (6/79-5/2000) Ayilam (540)			-	-	-

Source : Water Year Book for year 1999-2000.

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b ')	Longitude (x°-y ')		Temperature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
10	Tapi Rises from Near Multai in Betul Distt. of Madhya Pradesh at an elevation of 752 m. Length 724 Km.	M.P. Maharashtra Gujarat	9804 51504 3837	Tapi(Main) Gomai Arunavati Buray Panjhra Bori Aner Girna Waghur Purna	22522 1148 935 1419 3257 2580 1702 10061 2592 18929	20.00 to 22.00	72.45 to 78.15	GDQ = 4 GDSQ = 8	10 to 48	830	
		Total	65145	Total	65145						
11	Narmada Originates from Amarkantal of Shehdol Distt. of Madhya Pradesh at an elevation of 1057 m. Length 1312 Km.	Madhya Pradesh Maharashtra Gujarat	85859 1538 11399	Burhner Hiran Tawa Chhota Tawa Kundi Orsang Others	4228 4795 6338 5055 3973 3946 70461	21-20 to 23-45	72-32 to 81-45	GD = 2 GDQ = 5 GDSQ = 16	7.5 to 42	674 to 1623	Lower Zone 12.0 to 28.0 Middle Zone 1.0 to 3.0
		Total	98796	Total	98796						

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
10	Tapi (water withdrawals during 1995-98)	Coal	190.84	Paper Mills	6694	Shallow Black	Ukai Dam	8510.00	7092.00	Information not available
				Sugar Mills	(6/78-5/99)	Medium Black	Kate Purna	97.67	86.35	
				Cotton Spinning Mills	Ghala (63325)	Black Cotton	Nalganga	76.20	69.32	
				Dal Mills		Light Brown to Redish Brown	Kakrapar weir	51.51	36.57	
				Oil Mills		Dark Yellow & Redish				
11	Narmada (water withdrawals during 1995-99)	Bauxite Clay Coal Dolomite Graphite Iron Ore Manganese Talc & Lime Stone	162.56	40 Large Scale & 70 Medium Scale Industries.	34273.5 (3/72-5/2000)	Shallow Black	Karjan	630.00	-	-
				Industries are low as compared with other Basins.	Gurudeshwar (87892)	BlackMedium	Sardar Sarover	-	-	-
						BlackMedium	Jobat	-	-	-
						Deep	Man	-	-	-
						BlackMixed Red & Black Sandy	Upper Beda	-	-	-
							Maheshwar	-	-	-
							Narmada Sagar			
							Sukta	89.50	78.05	62.37
							Kolar	270.00	265.00	210.38
							Tawa	2310.00	2050.50	1677.04
							Barna	539.00	455.00	284.97
					Bargi	3920.00	3180.00	167.62		
	Matiyari	56.80	51.12	13.11						

Source : Water Year Book of Tapi Basin for year 1998-1999, Water Year Book of Narmada Basin for year 1999-2000.

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b´)	Longitude (x°-y´)		Temperature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evaporation (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
12	Mahi, Sabarmati & Other West Flowing Rivers of Saurashtra and Kutch										
12.1	Mahi Rises from Near village Sardarpur in Dhar Distt. of Madhya Pradesh at an elevation of 500 m. Length 583 Km.	Madhya Pradesh Rajasthan Gujarat	6695 16453 11694 Total	Som Anas Panam Others Total	8707 5604 2470 18061 34842	22-35	74-58	GD = 2 GDSQ = 3 GDQ = 1	5 to 50	785	-
12.2	Sabarmati Originates in Aravali Hills in Rajasthan at an elevation of 762 m. Length 371 Km.	Rajasthan Gujarat	4124 17550 Total	Sei Wakal Harnav Hathmati Watrak Others Total	946 1625 972 1526 8638 7967 21674	24-40	73-20	GD = 3 GDSQ = 1 GDQ = 1	9 to 48	787.5	-
12.3	Luni Western Slope of Aravali Hills near Ajmer in Rajasthan at an elevation of 772 m. Length 511 Km.	Rajasthan	32879 Total	Guhiya & Sukri Bandi Sukari Jawai Others Total	4126 3016 3280 2701 19756 32879	24-11 to 26-43	70-37 to 74-39	GD = 2	2 to 46	300-500	-

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
12 Mahi, Sabarmati & Other West Flowing Rivers of Saurashtra and Kutch.										
			(water withdrawals during 1995-97)	465.36						
12.1 Mahi					4359 (6/78-5/98) Khanpur (32,510)		Mahi Bajaj Sagar Kadana Wanakbori Weir	2180.00 1542.00 41.88	1712.00 1203.00 36.22	- - -
12.2 Sabarmati					1559 (3/91-5/97) Nabhoi (20149)		Dharoi Dam Watrak	907.88 176.90	731.99 154.30	- -
12.3 Luni					365 (6/74-5/98) Gandhav (32010)					

Table No.1.1 : Basins Salient Feature

Sl. No.	Name of the Basin (Origin, Altitude & Length of the River)	State	Drainage Area (Sq.Km)	Principal Tributaries & their Catchment Area		Basin Location		Number of Hydrological Observation Site	Climate Details		
				Tributary	Area (Sq.Km)	Latitude (a°-b´)	Longitude (x°-y´)		Temperature Variation (Centigrade) (°C)	Average Annual Rainfall (mm)	Evapo-ration (mm)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
12.4	Banas Rises from village Pindara of Sirohi Distt. in Rajasthan at an elevation of 372.51 m. Length 266 Km.	Rajasthan Gujarat	3269 5405	Sipu Sukli Khari Others	1420 438 1391 5425	23-30 to 438 24-55	71-15 to 73-15	GD = 1 GDQ = 2 GDSQ = 1	4 to 49	921.4	-
		Total	8674	Total	8674						
12.5	Shetrunji Originates at Chchai Hills in Gir Forest of Junagarh Distt. of Gujarat at an elevation of 380 m. Length 182 Km.	Gujarat	5514	Satali Theli Gagaria Kharai Others	651 484 754 665 2960	21-00 to 21-47	70-50 to 72-10	GDSQ = 1	6 to 47	604.52	-
		Total	5514	Total	5514						
12.6	Bhadar Rises from Near Vaddi village of Rajkot Distt. of Gujarat at an elevation of 261 m. Length 198 Km.	Gujarat	7094	Vasavadi Gondali Venu Others	583 513 590 5408	21-45 to 22-10	69-45 to 71-20	GDSQ = 1	4 to 45	625	-
		Total	7094	Total	7094						
12.7	Machhu Rises from near village Khokharai in Surendra Nagar Distt. of Gujarat at an elevation of 220 m. Length 142 Km.	Gujarat	2515	Beti Maha Others	236 508 1771	22-10 to 23-10	70-40 to 71-45	GD = 1	6 to 44	533	-
		Total	2515	Total	2515						

Table No.1.1 : Salient Features of Different River Basins

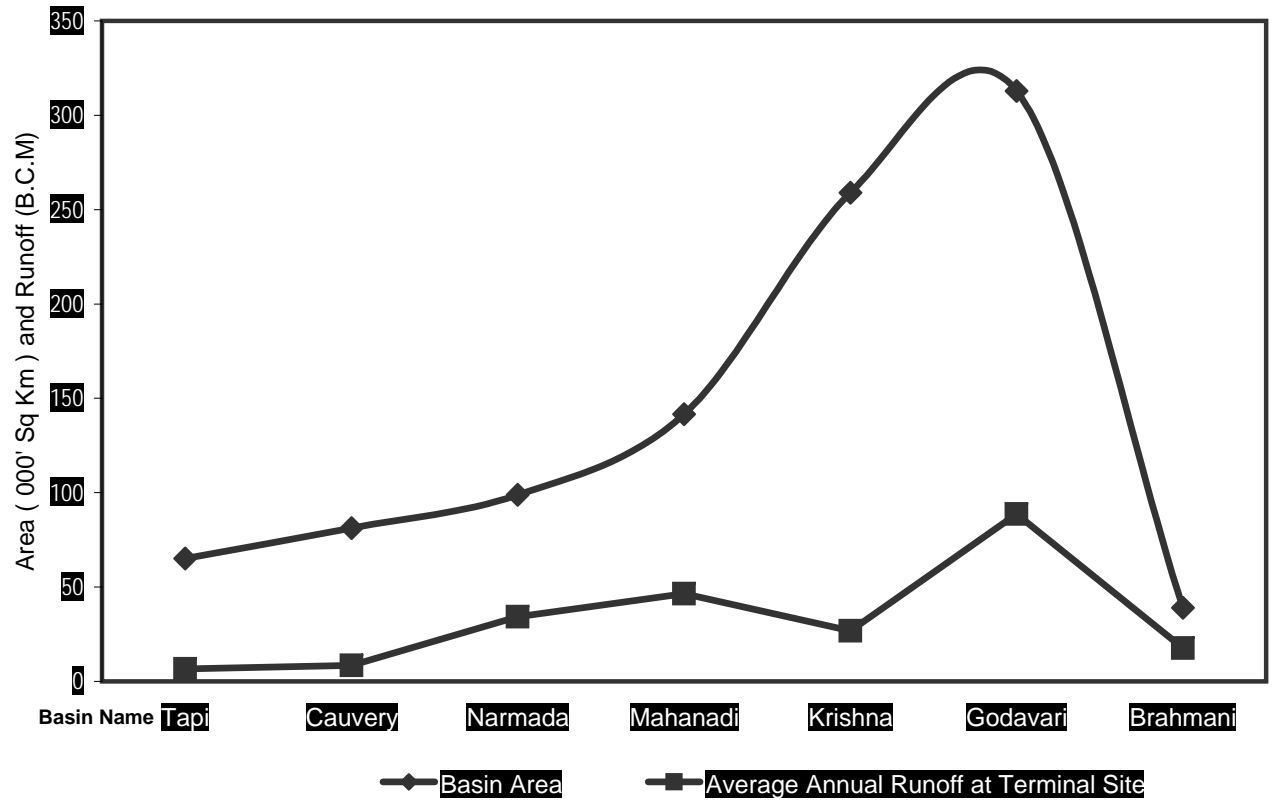
Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
12.4	Banas				449.8 (7/71-5/98) Kamalpur (6960)		Sipu Dam Dantiwada Dam	177.80 464.00	156.00 444.00	-
12.5	Shetrunji				182.4 (11/70-5/98) Lowara (3953)		Shetrunji Irrigati Scheme	350.00	309.00	-
12.6	Bhadar				474.3 (11/70-5/98) Ganod (6266)		Bhadar Irrigati Scheme	238.00	221	-
12.7	Machhu				171.1 (12/70-5/98) Gungoan (2137)			-	-	-

Table No.1.1 : Salient Features of Different River Basins

Sl. No.	Basin Name	Principal Minerals	Estimated Population (Lakh) (as per 2001 Census)	Major Industries	Average Annual Runoff (MCM) (at terminal Site with Catch me Area)	Soil Characteristics	Major Projects			
							Name	Gross Storage (MCM)	Live Storage (MCM)	Water withdrawal (MCM)
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
12.12	Dhadar				489.5 (6/89-5/98) Pingalwada (2400)			-	-	-
12.13	Damanganga				751.4 (6/91-5/98) Nanipalsan (764)		Madhuban Dam	567.00	-	-
12.14	Kim				452.1 (10/90-5/98) Motinaroli (804)			-	-	-

Source : Water Year Book for year 1997-1998.

Basinwise Catchment Area & Average Annual Runoff at Terminal Site



S. No.	Basin name	Terminal site	S. No.	Basin name	Terminal site
1	Tapi	Ghala	4	Mahanadi	Tikarapara
2	Cauvery	Musiri	5	Krishna	Vijaywada
3	Narmada	Gurudeshwar	6	Godavari	Polavaram
			7	Brahmani	Jenapur

Table No. 1.2 : Number of Hydrological Observation Sites in Different River Basins

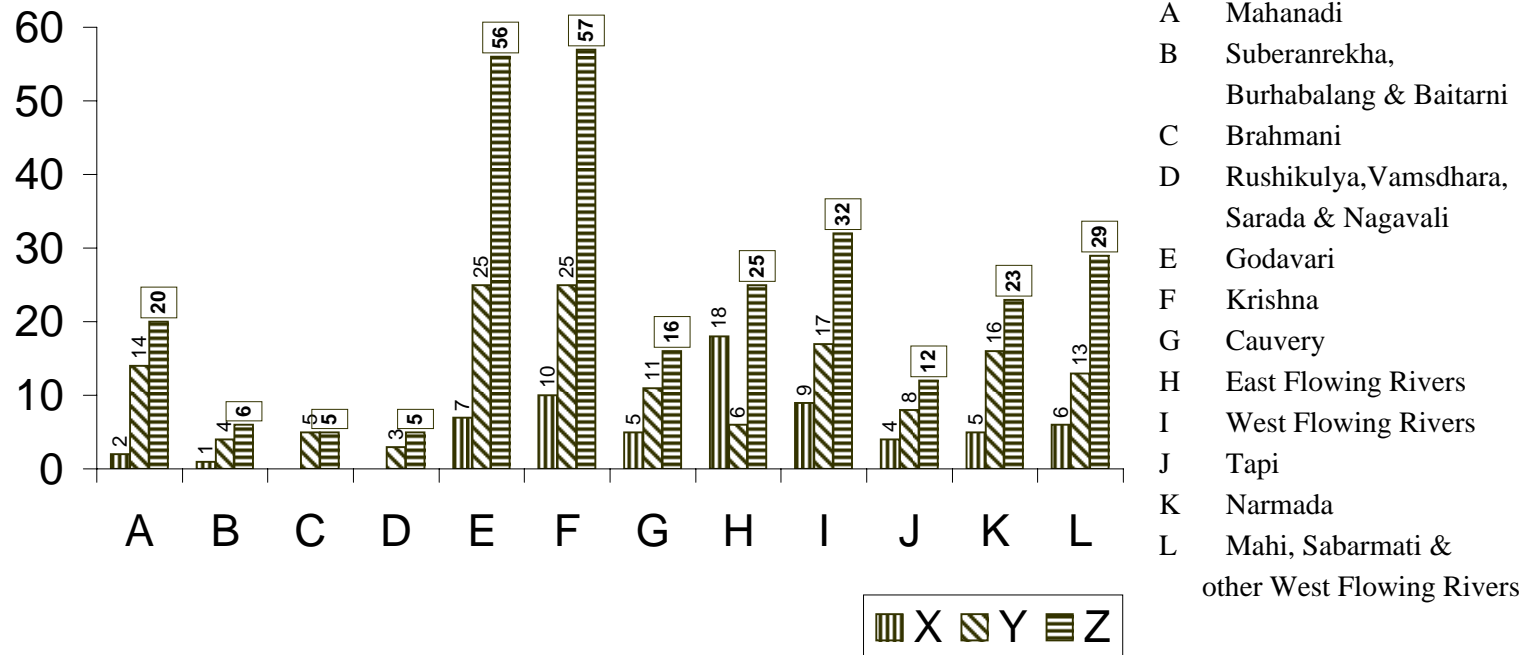
S.No.	Basin Name	Type & Nos. of Sites				Frequency of Water Quality Monitoring
		Guage & Discharge	Guage, Discharge & Water Quality	Guage, Discharge, Sediment & Water Quality	Total no. of Sites	
1	2	3	4	5	6	7
1	Mahanadi	4	2	14	20	Once a month
2	Suberanrekha, Burhabalang & Baitarni	1	1	4	6	-do-
3	Brahmani	Nil	Nil	5	5	-do-
4	Rushikulya, Vamsdhara, Sarada & Nagavali	Nil	Nil	4	4	-do-
5	Godavari	28	3	26	57	Thrice a month
6	Krishna	25	10	22	57	-do-
7	Cauvery	Nil	17	14	31	Once a month
8	East Flowing Rivers of Coastal Andhra Pradesh, Karnataka & Tamil Nadu	2	16	9	27	-do-
9	West Flowing Rivers from Kanya Kumari to Tapi	6	14	18	38	-do-
10	Tapi	Nil	4	8	12	-do-
11	Narmada	7	5	13	25	Twice a month
12	Mahi, Sabarmati & other West Flowing Rivers of Saurashtra & Kutch	12	6	10	28	-do-
Total		85	78	147	310	

Source : Water Year Books of differernt Basins.

(Updated during October 2007)

Note : Guage-Discharge & Sediment observations are taken daily.

Number of Different Types of Observation Sites on River Basins



X : Guage, Discharge & Water Quality

Y : Guage, Discharge, Sediment & Water Quality

Z : Total Number of Observation Sites

Table No.1.3 : Live Storage Capacity in respect of Different River Basins

(Cubic km.)

Sl. No.	Basin Name	Average Annual Flow	Live Storage Capacities				Percentage of likely storage to Average Annual Flow ((Col.6+Col.7)/Col.3)*100
			Completed Projects	Projects Under Construction	Total	Projects Under Consideration	
1	2	3	4	5	6	7	8
1	Mahanadi	66.88	12.33	1.87	14.21	10.09	36
2	Subernarekh	12.37	0.67	1.65	2.32	2.33	32
3	Brahmani & Baitarn	28.48	46.58	0.88	5.52	8.72	50
4	Rushikulya, Vamsadhara, Sarada & Nagavali*						
5	Godavari	110.54	25.12	6.21	31.33	5.84	34
6	Krishna	78.12	41.80	7.74	49.55	1.13	65
7	Cauvery	21.36	8.60	0.27	8.87	0.26	43
8	East Flowing Rivers of Coastal of Andhra Pradesh, Karnataka & Tamil Nad						
a)	East Flowing Rivers from Mahanadi to Godavari & Krishna to Pennar	22.52	1.60	1.42	3.03	0.95	18
b)	Pennar	6.32	2.65	2.17	4.82	-	76
c)	East Flowing Rivers Between Pennar And Kanyakumar	16.45	1.84	0.07	1.91	-	
9	West Flowing rivers from Tapi to Kanya Kumar						
a)	West Flowing Rivers from Tapi to Tadri	87.41	11.27	3.46	14.73	0.08	17
b)	West Flowing Rivers from Tadri to Kanyakumar	113.53	10.24	1.32	11.55	1.45	11
10	Tapi	14.88	4.41	0.85	10.26	0.29	71
11	Narmada	45.64	7.23	16.39	23.60	0.41	53
12	Mahi, Sabarmati & Other west flowing Rivers of Saurashtra & Kutch						
a)	Sabarmati	3.80	1.31	0.06	1.37	0.09	38
b)	Mahi	11.02	4.72	0.26	4.98	0.01	45
c)	West Flowing Rivers of Kutch, Saurashtra including Luni	15.09	4.73	0.80	5.52	2.85	55
Total		654.41	185.10	45.42	193.57	34.50	645

Source : Water and Related Statistics, February, 2000, Table No.1.7 (Page No.18).

Note : * : Included in Sl. No. 8(a)

Average Annual Flow, Estimated Utilisable Flow and Total Live Storage Capacity in Different River Basins

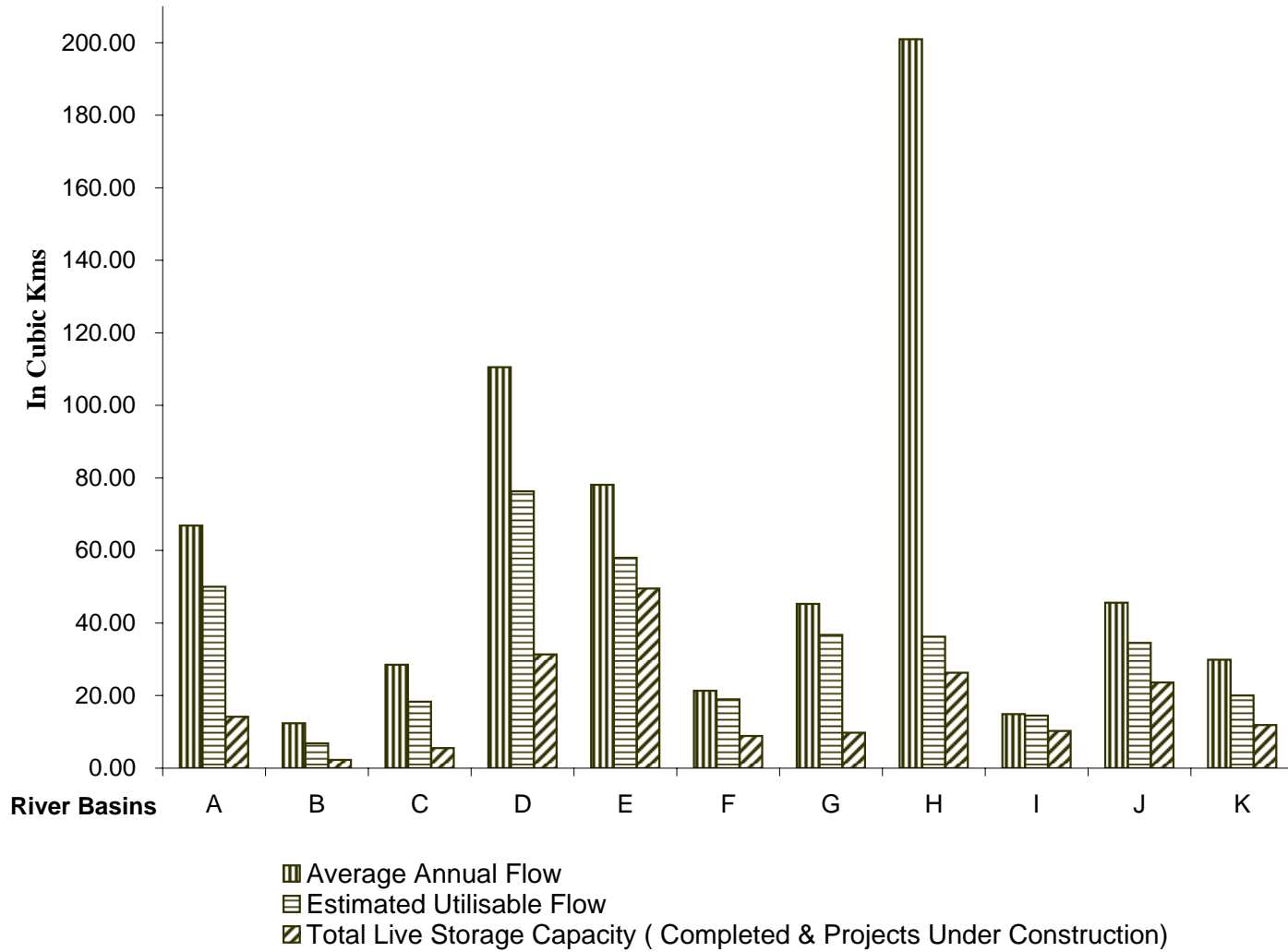


Table No. 1.4 : Sitewise Important Historical Observations for Different River Basins

I Basin : Mahanadi											
Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge (MCM)	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Baronda	3225	20°55'06"	81°52'56"	283.000	289.400	18.09.1980	7/77 to 5/2003	06.12.77	29.06.80	02.06.80
2	Rajim	8760	20°58'00"	81°52'30"	275.000	283.710	18.09.1980	2/71 to 5/2003	01.02.71	04.12.72	01.09.72
3	Seorinarayan	48050	21°53'50"	82°35'30"	209.500	222.960	11.07.1994	12/85 to 5/2003	09.12.85	-	-
4	Basantpur	57780	21°43'18"	82°47'27"	206.000	219.820	20.09.1980	2/71 to 5/2003	11.05.71	07.04.73	01.09.72
5	Kotni	6990	21°13'02"	81°14'19"	268.000	280.080	30.08.1978	9/77 to 5/2003	30.09.78	-	-
6	Pathardih	2511	21°20'28"	81°35'48"	271.000	279.210	12.07.1994	9/87 to 5/2003	15.09.89	-	01.08.92
7	Simga	16060	21°37'33"	81°41'36"	244.000	257.680	13.07.1994	9/71 to 5/2003	09.09.71	30.12.72	01.09.72
8	Andhiyarkore	2210	21°47'00"	81°36'30"	252.000	260.150	08.10.1994	9/77 to 5/2003	29.11.77	12.07.80	01.06.80
9	Ghatora	3035	22°02'04"	82°13'34"	246.000	254.650	21.07.1994	10/77 to 5/2003	17.09.79	-	01.11.91
10	Jondhra	29645	21°43'00"	82°20'34"	219.000	230.595	14.07.1994	1/79 to 5/2003	21.07.79	11.10.80	02.06.80
11	Rampur	2920	21°39'00"	82°31'00"	219.000	227.890	30.08.1982	1/71 to 5/2003	20.02.71	05.07.76	15.09.72
12	Manendragarh	1100	23°12'10"	82°12'54"	411.000	420.860	12.07.1990	6/87 to 5/2003	21.06.89	09.07.93	01.10.92
13	Bamnidhi	9730	21°53'55"	82°32'37"	223.000	229.255	22.08.1975	1/71 to 5/2003	18.02.71	01.05.73	01.09.72
14	Kurubhata	4625	21°59'15"	83°12'15"	215.000	220.320	18.07.1995	10/77 to 5/2003	01.04.78	22.07.80	01.07.80
15	Sundergarh	5870	22°06'55"	84°00'40"	214.000	222.900	13.08.1998	8/77 to 5/2003	30.12.77	21.07.80	02.06.80
16	Selebhata	4650	20°59'00"	82°42'29"	130.000	140.280	30.08.1982	7/71 to 5/2003	12.11.71	01.05.73	15.09.72
17	Pandigaon	6060	20°05'35"	83°05'00"	180.000	190.945	27.07.1992	3/89 to 5/2003	16.06.89	-	-
18	Kesinga	11960	20°11'51"	83°13'30"	166.000	178.835	13.09.1977	11/77 to 5/2003	07.11.78	-	-
19	Kantamal	19600	20°38'49"	83°43'45"	118.000	131.850	29.08.1982	8/71 to 5/2003	26.08.71	22.07.76	01.10.72
20	Sukma	1365	20°48'30"	84°30'00"	150.000	158.080	23.07.1995	6/87 to 5/2003	20.06.89	-	-
21	Tikarpara	124450	20°38'00"	84°37'08"	50.000	74.980	30.08.1982	2/71 to 5/2003	28.05.72	01.06.73	01.12.72

Source: Water Year Book for 2002-03 (Bhubaneswar/CWC).

Table No.1.4 : Sitewise Important Historical Observations for Different River Basins

II Basin : Subarnarekha, Burhabalang & Baitarni											
Sl. No.	Site Name	Drainage Area (Km²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge (MCM)_	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Muri	1330	23°22'00"N	85°48'00"E	231.000	237.80	09.07.94	20.08.88 to 5/03	01.11.89	-	01.05.91
2	Adityapur	6309	22°47'29"N	86°10'06"E	123.000	139.850	13.09.73	23.03.71 to 5/03	22.11.71	02.06.75	01.01.76
3	Ghatsila	14176	22°34'49"N	86°28'08"E	72.000	86.83	13.10.73	16.03.71 to 5/03	16.03.71	30.12.72	10.09.72
4	Govindapur	4495	21°33'00"N	86°55'06"E	0.000	9.50	12.10.73	24.04.91 to 5/03	07.03.92	-	-
5	Champua	1710	22°03'57"N	85°40'56"E	367.000	376.41	07.08.85	01.06.87 to 5/03	20.07.90	09.08.01	01.09.01
6	Anandpur	8570	21°12'40"N	86°07'21"E	28.000	41.20	19.08.75	21.02.71 to 5/03	13.03.71	26.08.72	01.09.72

Source: Water Year Book for 2002-03

Table No. 1.4 : Sitewise Important Historical Observations for Different River Basins

III Basin : Brahmani											
Sl. No.	Site Name	Drainage Area (Km²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrece		Discharge (MCM)_	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Tilga	3160	22°20'00"N	84°30'00"E	372.000	379.320	28.09.87	4/78 to 5/03	15.07.80	21.07.80	01.06.80
2	Jaraikela	9160	22°19'08"N	85°06'19"E	185.000	194.055	06.08.77	7/71 to 5/03	29.12.71	01.06.75	01.09.75
3	Panposh	19448	22°13'32"N	84°48'17"E	170.500	180.310	26.07.96	8/77 to 5/03	21.06.96	01.08.96	01.11.90
4	Gomlai	21950	21°50'16"N	84°56'33"E	135.000	147.000	26.07.96	8/77 to 5/03	21.01.79	17.07.80	01.06.80
5	Jenapur	33955	20°55'23"N	86°00'51"E	13.000	23.475	18.08.84	7/77 to 5/03	20.07.79	09.07.80	01.03.80

Source: Water Year Book for 2002-03

Table No. 1.4 : Sitewise Important Historical Observations for Different River Basins

IV Basin : Rushikulya, Vamsadhara, Sarada & Nagavali											
Sl. No.	Site Name	Drainage Area (Km²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge (MCM)_	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Purushottampur	7112	19°31'00"N	84°53'00"E	12.000	19.665	04.11.99	07/78 to 5/03	16.06.92	15.01.01	08.10.01
2	Kashi Nagar	7820	18°50'49"N	83°57'04"E	51.000	58.935	18.09.80	03/79 to 5/03	28.04.71	27.07.92	24.09.92
3	Ankapali	2090	17°41'00"N	83°01'08"E	20.400	28.450	10.05.90	12/87 to 5/03	16.08.89	-	-
4	Srikakulam	9500	18°18'48"N	83°53'18"E	6.65	14.53	12.05.90	02/88 to 5/03	25.08.90	27.06.01	27.06.01

Source: Water Year Book 2002-03

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

V Basin : Godavari											
Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Polavaram	307800	17°14'45"	81°39'35"	10.897	-	-	2004-05	01.01.66	25.10.66	25.10.66
2	Koida	305460	17°27'21"	81°30'20"	13.000	-	-	- do -	13.11.76	-	-
3	Konta	19550	17°48'00"	81°23'00"	30.100	-	-	- do -	28.10.65	01.01.68	05.05.68
4	Injaram	12925	17°50'00"	81°23'00"	35.957	-	-	- do -	19.01.66	-	-
5	Potteru	1120	18°10'13"	81°47'40"	120.500	-	-	- do -	20.05.97	-	-
6	Saradaput	3047	18°36'00"	82°08'00"	88.000	-	-	- do -	05.09.70	-	-
7	Sangam	1565	17°35'50"	80°49'40"	53.000	-	-	- do -	24.08.96	-	-
8	Perur	268200	18°33'00"	80°22'00"	83.000	-	-	- do -	17.09.65	24.02.68	24.10.68
9	Pathagudem	40000	18°49'00"	80°21'00"	85.750	-	-	- do -	20.07.64	21.07.65	01.01.72
10	Medapalli	2031	19°24'42"	80°37'49"	202.770	-	-	- do -	19.12.66	-	-
11	Mirdapalli	24210	19°17'56"	80°41'34"	228.500	-	-	- do -	27.10.72	-	-
12	Tumnar	1700	19°00'30"	81°14'20"	315.007	-	-	- do -	09.12.91	-	-
13	Chindnar	17270	19°05'00"	81°18'00"	325.002	-	-	- do -	07.12.71	-	-
14	Cherribeda	890	19°38'23"	81°29'07"	563.700	-	-	- do -	13.11.96	-	-
15	Amabai	1968	19°17'00"	81°47'20"	84.000	-	-	- do -	30.10.93	-	-
16	Sonarpal	1523	19°16'00"	81°52'00"	534.356	-	-	- do -	05.12.91	-	-
17	Jagdapur	7380	19°06'30"	82°01'30"	544.595	-	-	- do -	21.09.65	21.09.65	01.12.79
18	Kosagumda	1635	19°16'37"	82°14'00"	547.000	-	-	- do -	13.11.96	-	-
19	Murthahandi	N.A.	19°03'00"	82°17'00"	533.600	-	-	- do -	01.12.88	-	-
20	Nowrangpur	3545	19°12'00"	82°31'00"	550.716	-	-	- do -	21.12.65	01.06.69	01.01.72
21	Tekra	108780	18°57'06"	79°57'45"	95.090	-	-	- do -	15.07.64	01.07.65	15.06.66
22	Bhatpalli	3100	19°18'47"	79°27'57"	156.000	-	-	- do -	01.10.86	07.10.88	04.01.88
23	Sirpur	47500	19°32'54"	79°32'51"	145.710	-	-	- do -	01.02.68	-	-
24	Bamni	46020	19°48'48"	79°22'58"	157.380	-	-	- do -	16.10.65	13.12.65	03.06.66

Contd/---

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

V Basin : Godavari											
Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
25	P.G. Bridge	18441	19°49'08"	78°34'11"	196.828	-	-	2004-05	21.07.65	19.10.65	31.05.66
26	Mangrul	2500	20°11'15"	77°59'15"	188.000	-	-	- do -	09.11.92	-	-
27	Marlegaon	7410	19°32'28"	77°40'19"	386.109	-	-	- do -	01.09.64	-	-
28	Kanhergaon	3515	19°57'37"	77°09'03"	465.000	-	-	- do -	20.07.92	-	-
29	Ghugus	21429	19°56'05"	79°05'29"	166.061	-	-	- do -	29.12.65	-	-
30	Nandgaon	4580	20°31'01"	78°48'21"	198.000	-	-	- do -	21.07.86	13.07.88	01.01.88
31	Hivra	10240	20°32'54"	78°19'29"	230.000	-	-	- do -	11.08.87	26.06.90	16.12.87
32	Bhisnur	5000	21°06'26"	78°07'59"	286.000	-	-	- do -	25.06.88	26.06.90	07.11.87
33	Ashti	50990	19°41'05"	79°47'19"	137.276	-	-	- do -	14.07.65	14.03.66	01.06.66
34	Rajoli	1900	20°11'30"	79°40'03"	229.000	-	-	- do -	25.06.86	-	-
35	Wairagarh	2600	20°25'26"	80°05'09"	95.000	-	-	- do -	07.08.92	-	-
36	Salebardi	1800	20°54'40"	79°55'42"	223.800	-	-	- do -	21.06.86	-	-
37	Pauni	35520	20°47'46"	79°38'32"	223.275	-	-	- do -	21.09.64	12.01.66	12.01.66
38	Satrapur	11100	21°13'04"	79°14'05"	263.300	-	-	- do -	30.05.86	01.08.88	09.12.87
39	Ramkona	2500	21°43'16"	78°49'11"	338.000	-	-	- do -	21.11.86	-	-
40	Rajegaon	5380	21°37'32"	80°15'09"	272.000	-	-	- do -	26.07.86	22.06.90	15.01.88
41	Kumhari	8070	21°52'58"	80°10'41"	289.000	-	-	- do -	01.12.86	10.09.88	01.01.88
42	Keolari	2970	22°22'52"	79°54'06"	425.000	-	-	- do -	29.06.87	-	-
43	Somanpalli	12691	18°38'30"	79°49'35"	117.975	-	-	- do -	17.03.67	-	-
44	Mancherial	102900	18°50'00"	79°27'00"	124.316	-	-	- do -	01.06.66	01.06.66	01.12.79
45	Gandlapet	1360	18°49'16"	78°26'17"	312.000	-	-	- do -	10.09.86	-	31.07.88
46	Betmorga	2105	18°42'12"	77°32'30"	347.500	-	-	- do -	03.07.97	-	15.07.97
47	Degloor	1900	18°32'12"	77°34'56"	352.000	-	-	- do -	17.07.87	01.01.94	15.09.88
48	Saigaon	9960	18°03'00"	77°03'00"	542.723	-	-	- do -	10.11.67	19.07.73	16.08.73

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Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

V Basin : Godavari

Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
49	Bhatkneda	4650	18°25'38"	76°40'22"	570.500	-	-	2004-05	19.07.91	-	-
50	Yelli	53630	19°02'00"	77°28'00"	334.300	-	-	- do -	22.04.78	01.06.78	01.07.78
51	Purna	15000	19°11'00"	77°02'00"	358.000	-	-	- do -	02.09.69	10.10.72	01.11.72
52	Zari	5550	19°23'41"	76°46'24"	373.000	-	-	- do -	18.06.87	-	01.08.88
53	G.R. Bridge	33934	18°57'00"	76°45'00"	364.000	-	-	- do -	19.06.76	01.07.76	01.07.76
54	Dhalegaon	30840	19°12'00"	76°22'00"	386.575	-	-	- do -	16.08.64	11.07.71	01.07.72
55	Pachegaon	5800	19°32'00"	74°52'00"	475.000	-	-	- do -	23.07.83	-	-
56	Ghargaon	626	19°19'13"	74°10'43"	597.810	-	-	- do -	29.07.91	-	-

Source : Water Year Book for 2004-2005. (Godavari Basin) (Updated during September 2007)

Table No. 1.4 : Site wise Important Historical Observations for Different River Basins

VI Basin : Krishna

Sl. No.	Site Name	Drainage Area (Km2)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment			
						Peak Water Level (m)	Record Date of Occurrence		Discharge	Sediment	Water Quality	
1	2	3	4	5	6	7	8	9	10	11	12	
1	VIJAYAWADA	251360.00	16°30'00"	80°37'00"	8.152	19.052	10/16/1998	1965	2005	24.03.64	01/02/1965	01/01/1972
2	KEESARA	9854.00	16°43'00"	80°19'00"	27.500	36.810	5/20/1969	1965	2005	26.06.64	02/07/1965	01/01/1972
3	MADHIRA	1850.00	16°55'00"	80°21'00"	44.500	52.010	9/29/2005	1985	2005	07.06.84	-	01/06/1992
4	PURUSHOTHAMAGUDEM	2720.00	17°25'00"	79°57'00"	144.000	154.250	7/23/1989	1989	2005	01.09.87	-	-
5	PALERU BRIDGE	2928.00	16°57'00"	80°03'00"	70.357	78.877	7/23/1989	1965	2005	01.07.64	-	01/06/1992
6	WADENAPALLI	235544.00	16°48'00"	80°04'00"	22.054	41.144	10/16/1998	1965	2005	10.12.64	01/12/1966	01/06/1972
7	DAMERACHERLA	11501.00	16°44'00"	79°40'00"	55.000	62.040	7/24/1989	1968	2005	27.07.68	-	01/01/1980
8	PONDUGALA	221220.00	16°41'00"	79°10'00"	42.334	60.934	10/15/1998	1975	2005	13.11.75	01/12/1975	01/12/1975
9	HALIA	3100.00	16°46'00"	79°21'00"	127.900	134.405	9/23/1991	1984	2005	11.07.84	-	01/06/1992
10	LAKSHMIPURAM	2400.00	15°45'30"	78°04'30"	286.300	290.360	10/2/1996	1984	2005	13.09.84	-	-
11	BAWAPURAM	67180.00	15°52'58"	77°56'52"	270.245	280.495	11/19/1992	1965	2005	01.04.64	01/06/1965	01/01/1972
12	MANTRALAYAM	60630.00	15°56'56"	77°25'58"	306.000	315.800	11/18/1992	1972	2005	01.06.72	26/07/1977	01/08/1977
13	T RAMAPURAM	23500.00	15°39'33"	76°57'58"	349.368	354.328	9/2/1996	1965	2005	23.08.64	-	01/01/1980
14	KELLODU	4320.00	13°45'06"	76°19'00"	97.750*	103.150	11/17/1992	1990	2005	11.07.90	-	01/07/1994
15	HOOVINAHOLE	2585.00	13°58'57"	76°45'06"	93.500	96.400	10/9/2000	2004	2005	-	-	-
16	MAROL	4901.00	14°56'20"	75°37'05"	507.551	517.601	11/18/1992	1966	2005	01.02.66	16/09/1972	01/02/1973
17	HARALAHALLI	14582.00	14°49'54"	75°40'33"	507.436	518.350	11/18/1992	1966	2005	13.12.66	01/11/1972	01/11/1972
18	BYLADAHALLI	2300.00	14°26'03"	75°47'00"	530.400	538.450	11/17/1992	1985	2005	11.06.85	10/12/1997	02/06/1986
19	KUPPELUR	1850.00	14°29'30"	75°37'33"	533.400	541.320	11/18/1992	1990	2005	24.07.90	-	01/07/1994
20	HONALI	7075.00	14°14'18"	75°39'30"	533.900	546.470	7/16/1994	1980	2005	06.06.80	15/09/1995	02/06/1986
21	SHIMOGA	2831.00	13°55'08"	75°34'41"	556.500	565.040	8/3/1982	1972	2005	22.01.72	14/09/1972	01/01/1973
22	HOLEHONNUR	2990.00	13°58'33"	75°41'06"	88.500	94.680	8/17/2005	2004	2005	30.08.81	-	01/07/2003
23	KRISHNA AGRAHARAM	132920.00	16°15'00"	77°51'00"	270.000	282.300	8/9/2005	1981	2005	11.11.64	01/06/1982	01/06/1982
24	YADGIR	69863.00	16°44'03"	77°07'30"	350.503	361.643	10/16/1998	1965	2005	15.08.90	01/06/1965	01/01/1972
25	MALKHED	7650.00	17°12'35"	77°09'25"	390.000	400.910	8/16/1990	1990	2005	02.08.79	08/09/1992	01/06/1992
26	CHINCHOLI	830.00	17°45'00"	76°41'00"	526.300	532.500	7/12/1991	1979	2005	24.11.78	Affected by backwater	
27	JEWANGI	1920.00	17°15'00"	77°28'00"	421.100	426.960	8/15/1990	1978	2005	25.07.79	-	-
28	BORIOMERGA	2640.00	17°30'00"	76°14'00"	427.000	434.320	9/6/1998	1979	2005	06.08.64	-	-
29	WADAKBAL	12092.00	17°32'00"	75°53'00"	416.883	428.563	9/29/1989	1965	2005	10.08.64	01/06/1965	01/09/1972
30	TAKLI	33916.00	17°25'00"	75°51'00"	409.278	423.308	8/28/1997	1965	2005	25.07.79	01/12/1966	01/09/1972

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Table No. 1.4 : Site wise Important Historical Observations for Different River Basins

VI Basin : Krishna

Sl. No.	Site Name	Drainage Area (Km2)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period		Date of Establishment		
						Peak Water Level (m)	Record Date of Occurrence			Discharge	Sediment	Water Quality
1	2	3	4	5	6	7	8	9		10	11	12
31	KOKANGAON	1640.00	17°18'00"	75°49'00"	452.000	456.520	9/22/1981	1979	2005	26.07.79	-	-
32	SHIRDHON	630.00	17°24'00"	75°32'00"	437.000	440.200	9/22/1981	1979	2005	22.02.66	-	-
33	NARSINGPUR	22856.00	17°58'00"	75°08'00"	448.243	462.160	8/25/1997	1966	2005	16.08.65	-	-
34	SARATI	7200.00	17°54'00"	75°02'00"	468.128	476.328	9/26/1979	1965	2005	24.11.67	01/06/1966	01/09/1972
35	DHOND	11660.00	18°28'00"	74°34'00"	496.000	508.400	8/2/1976	1967	2005	21.07.92	-	-
36	PHULGAON	2205.00	18°40'00"	74°02'00"	81.000	93.800	8/23/1997	1992	2005	01.02.76	-	02/08/1993
37	HUVINHEDGI	55150.00	16°29'07"	76°55'07"	342.240	356.350	8/8/2005	1976	2005	21.09.95	01/06/1976	01/06/1976
38	TALIKOT	2486.00	16°28'22"	76°17'23"	48.000*	56.010	10/8/2001	1995	2005	01.06.82	-	-
39	CHOLACHGUDA	9373.00	15°52'00"	75°43'00"	522.500	535.620	11/18/1992	1982	2005	16.06.91	01/06/1982	01/06/1982
40	NAVALGUND	2952.00	15°33'00"	75°22'00"	558.000	565.310	9/18/2000	1991	2005	20.04.67	-	-
41	MUDHOL	6734.00	16°19'00"	75°12'00"	520.000	532.350	8/5/2005	2000	2005	14.07.71	08/09/2003	01/11/2000
42	GOKAK FALLS	2770.00	16°10'00"	74°49'00"	536.004	546.880	9/23/2005	1971	2005	17.06.80	-	-
43	GOTUR	1100.00	16°13'00"	74°31'00"	615.830	625.630	7/17/2005	1980	2005	01.12.78	-	-
44	DADDI	1150.00	16°04'00"	74°28'00"	674.153	681.003	6/28/1983	1978	2005	01.02.76	-	-
45	PANDEGAON	690.00	16°56'00"	74°56'00"	576.785	581.265	6/28/1991	1979	2005	06.10.79	-	-
46	SADALGA	2322.00	16°34'00"	74°32'00"	525.160	538.950	6/29/1983	1969	2005	24.06.69	-	-
47	BASTAWDE	640.00	16°27'00"	74°21'00"	535.100	546.530	7/27/2005	1979	2005	27.08.79	-	-
48	VANDUR	550.00	16°34'00"	74°17'00"	531.000	542.020	7/25/1989	1979	2005	18.07.79	-	-
49	TERWAD	2425.00	16°44'00"	74°35'00"	520.000	546.144	8/10/1979	1979	2005	22.08.79	-	-
50	KURUNDWAD	15190.00	16°41'00"	75°36'00"	519.455	539.760	8/5/2005	1972	2005	20.05.72	06/08/2003	01/07/2003
51	ARJUNWAD	12660.00	16°47'00"	74°34'00"	523.225	543.685	8/5/2005	1969	2005	21.09.67	-	-
52	SAMDOLI	1948.00	16°51'00"	74°30'00"	528.594	546.324	8/5/2005	1966	2005	01.12.64	-	-
53	KARAD	5462.00	17°18'00"	74°18'00"	549.915	565.045	8/2/2005	1965	2005	21.06.65	22/06/1965	01/09/1972
54	WARUNJI	1890.00	17°16'00"	74°10'00"	549.437	565.927	8/2/2005	1966	2005	13.01.66	01/06/1974	01/06/1974
55	KOYNA	920.00	17°23'00"	73°44'00"	568.000	581.610	8/2/2005	1972	2005	15.10.72	-	-

Source: Krishna & CO-Ordination Circle, Central Water Commission, H.No.11-4-648, 2nd Floor, Krishna Godavari Bhawan, A.C. Guards, Hyderabad-500004. Letter No.KCC/C22012/12/2006/DRS/987-91 and dated 24.07.2007. (Updated during September 2007)

Note : * : Mark denotes Arbitrary value
: - : Not Available

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

VII Basin : Cauvery											
Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Gopurajapuram	-	10°51'00"N	79°48'00"E	(-) 2.000	-	-	2004-05	01.02.99	-	02.09.2000
2	Annavasal	-	10°58'20"N	79°45'20"E	4.000	-	-	- do -	01.02.99	-	02.09.2000
3	Menangudi	-	10°56'50"N	79°42'20"E	4.000	-	-	- do -	21.08.96	-	01.09.2000
4	Porakudi	-	10°54'10"N	79°42'30"E	2.000	-	-	- do -	01.02.99	-	01.09.2000
5	Peralam	-	10°58'00"N	79°39'50"E	6.000	-	-	- do -	01.02.99	-	01.09.2000
6	Thengudi	-	10°55'00"N	79°38'30"E	5.000	-	-	- do -	06.03.97	-	02.09.2000
7	Musiri	66243	10°56'30"N	78°26'06"E	82.000	-	-	- do -	01.06.72	31.03.73	01.06.78
8	Nallamaranpatti	9080	10°52'51"N	77°59'05"E	129.000	-	-	- do -	23.01.78	10.12.78	16.08.78
9	Elunuthimangalam	3386	11°01'54"N	77°53'32"E	129.000	-	-	- do -	07.08.98	-	01.06.2000
10	Kodumudi	53233	11°04'52"N	77°53'27"E	121.570	-	-	- do -	21.06.71	11.07.72	01.06.78
11	Savandapur	5776	11°31'18"N	77°30'36"E	179.000	-	-	- do -	17.07.78	24.04.79	02.04.79
12	Thengumarahada	1370	11°34'20"N	76°55'15"E	336.650	-	-	- do -	02.04.79	01.06.02	01.06.79
13	Nellithurai	1475	11°17'16"N	76°53'35"E	301.000	-	-	- do -	01.06.79	01.07.02	01.06.79
14	Urachikottai	44100	11°28'40"N	77°42'05"E	154.000	-	-	- do -	05.08.79	04.01.01	01.06.79
15	Thenur	1248	11°31'38"N	77°45'10"E	168.000	-	-	- do -	24.09.99	-	01.06.01
16	Savanur	258	11°33'18"N	77°42'54"E	170.000	-	-	- do -	20.09.99	-	01.06.01
17	Thoppur	362	11°56'14"N	78°03'18"E	320.000	-	-	- do -	21.10.99	-	01.06.01
18	Kudlur	709	11°56'14"N	77°27'50"E	433.000	-	-	- do -	06.03.99	-	01.02.01
19	Hongenakkal	1636	12°07'15"N	77°47'07"E	252.000	-	-	- do -	05.10.96	-	05.10.96
20	Biligundulu	36682	12°10'48"N	77°43'48"E	255.000	-	-	- do -	30.08.71	06.09.72	01.06.78
21	T.Bekuppe	3500	12°31'00"N	77°26'00"E	604.000	-	-	- do -	24.11.03	-	01.12.03
22	T.K Halli	7890	12°25'00"N	77°11'36"E	580.000	-	-	- do -	12.06.78	01.06.85	02.06.79
23	Kollegal	21082	12°11'21"N	77°06'00"E	622.000	-	-	- do -	06.02.71	15.03.72	01.06.78
24	T.Narsipur	7000	12°13'48"N	76°53'46"E	635.000	-	-	- do -	12.03.71	20.03.72	01.06.78
25	Muthankera	1260	11°50'00"N	76°07'00"E	705.000	-	-	- do -	23.05.72	15.02.74	01.06.78
26	Kattemalalavadi	1330	12°20'45"N	76°17'18"E	765.000	-	-	- do -	26.06.79	-	01.07.79
27	Akkihebbal	5236	12°36'10"N	76°24'10"E	755.000	-	-	- do -	23.01.02	-	01.09.02
28	Mukundur Hosahalli	3050	12°49'06"N	76°08'00"E	8000.000	-	-	- do -	16.10.78	01.06.94	01.12.80
29	Thimmanahalli	1010	12°59'00"N	76°02'21"E	910.000	-	-	- do -	29.06.2000	-	02.09.02
30	Sakleshpur	617	12°57'12"N	75°47'09"E	882.000	-	-	- do -	05.04.02	-	02.09.02
31	Kudige	1934	12°30'09"N	75°57'43"E	809.000	-	-	- do -	01.05.72	15.06.72	01.06.78

Source:Water Year Book for 2004-2005. (Cauvery Basin)

(Updated during September 2007)

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

VIII Basin : East Flowing Rivers

Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Thammavaram	7889	15°56'00"N	79°57'00"E	13.365	-	-	2004-05	09.09.77	01.06.79	01.06.79
2	K.Bitragunda	2420	15°18'10"N	80°00'15"E	0.200	-	-	- do -	06.06.90	-	-
3	Nellore	50800	14°28'10"N	79°59'20"E	7.230	-	-	- do -	28.08.87	-	01.09.88
4	Nandipalli	2486	14°42'50"N	79°01'20"E	95.000	-	-	- do -	18.06.90	-	01.06.94
5	Chennur	37981	14°34'20"N	78°48'00"E	115.805	-	-	- do -	13.07.89	08.08.89	01.09.89
6	Kamalapuram	7187	14°34'50"N	78°40'40"E	135.650	-	-	- do -	06.11.89	-	01.06.94
7	Alladupalli	8758	14°42'40"N	78°42'40"E	132.955	-	-	- do -	21.08.85	11.07.96	01.07.87
8	Tadapatri	12482	14°55'20"N	78°01'10"E	223.650	-	-	- do -	12.12.71	-	01.09.79
9	Nagalamadike	5050	14°11'20"N	77°22'20"E	544.550	-	-	- do -	11.07.78	-	01.06.80
10	Singavaram	6262	14°35'50"N	78°01'00"E	256.465	-	-	- do -	06.11.79	-	15.09.81
11	Naidupeta	2650	13°56'50"N	79°53'50"E	20.130	-	-	- do -	19.10.77	-	01.12.80
12	Sullurpet	5927	13°42'40"N	80°00'30"E	(-)2.00	-	-	- do -	05.10.88	-	01.12.88
13	Chengalpattu	16230	12°39'00"N	79°56'50"E	26.000	-	-	- do -	01.10.78	-	01.06.79
14	Magaral	1803	12°42'30"N	79°45'00"E	58.000	-	-	- do -	25.11.71	-	01.11.83
15	Arcot	10174	12°54'50"N	79°20'00"E	159.000	-	-	- do -	20.09.79	-	01.06.88
16	Avaramkuppam	3300	12°41'03"N	78°32'13"E	365.275	-	-	- do -	10.07.78	-	01.08.79
17	Kumarapalayam	2208	11°59'00"N	79°40'50"E	8.500	-	-	- do -	02.11.2004	-	-
18	Villupuram	12900	11°52'14"N	79°27'34"E	42.000	-	-	- do -	09.10.72	-	01.01.87
19	Vazhavachanur	10780	12°03'55"N	78°58'42"E	133.000	-	-	- do -	21.07.78	19.10.2001	01.08.78
20	Gummanur	4620	12°33'18"N	78°08'20"E	490.000	-	-	- do -	20.09.78	26.08.81	20.09.78
21	Kudalaiyathur	7890	11°25'20"N	79°28'20"E	11.000	-	-	- do -	15.11.89	-	01.06.93
22	Paramakudi	6796	09°33'11"N	78°35'10"E	38.000	-	-	- do -	03.11.71	-	05.11.87
23	Theni	1200	09°59'58"N	77°29'06"E	278.000	-	-	- do -	07.06.78	29.01.79	15.07.78
24	Ambasamudram	850	09°55'32"N	77°30'46"E	296.500	-	-	- do -	05.01.99	09.10.2002	02.08.99
25	Irrukkankudi	3721	09°19'26"N	77°59'25"E	46.000	-	-	- do -	25.11.89	-	01.06.93
26	Murappanadu	4380	08°42'52"N	77°50'11"E	14.025	-	-	- do -	23.11.77	15.02.79	15.08.78
27	A.P.Puram	1095	08°54'04"N	77°38'55"E	61.000	-	-	- do -	14.12.79	-	01.06.93

Source: Water Year Book for 2004-2005 (East Flowing Rivers)

(Updated during September 2007)

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

X Basin : Tapi

Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (in Metre)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Dedtalai	6660	21°30'47"N	76°45'26"E	270.000	282.850	27.07.2003	2003-04	12.12.77	24.01.84	01.08.79
2	Burhanpur	8487	21°17'54"N	76°14'10"E	213.000	228.450	28.07.2003	- do -	14.09.72	23.12.72	01.06.77
3	Lakhpuri	3560	20°50'44"N	77°21'38"E	259.000	264.350	28.07.2003	- do -	18.02.77	-	03.11.86
4	Gopalkheda	9500	20°52'27"N	76°59'29"E	236.000	241.900	28.07.2003	- do -	17.02.77	30.07.79	01.08.79
5	Yerli	16517	20°56'09"N	76°28'33"E	213.000	218.320	09.08.2003	- do -	01.03.72	09.04.73	01.06.77
6	Dapuri	8901	20°54'00"N	75°27'42"E	188.000	192.760	24.08.2003	- do -	21.01.72	01.07.73	01.06.77
7	Savkheda	48136	21°08'53"N	75°14'27"E	141.000	151.100	24.08.2003	- do -	10.04.72	01.11.72	01.06.77
8	Malkheda	1830	21°03'23"N	75°04'18"E	170.000	173.200	24.08.2003	- do -	02.11.77	-	01.09.90
9	Morane	1933	20°54'33"N	74°42'04"E	264.000	266.295	27.09.2003	- do -	28.03.78	29.08.86	01.07.86
10	Gidhade	54750	21°17'41"N	74°48'33"E	119.000	131.900	24.08.2003	- do -	15.06.90	-	01.09.90
11	Sarangkheda	58400	21°25'42"N	74°31'38"E	108.000	118.300	24.08.2003	- do -	19.10.77	13.07.84	01.01.80
12	Ghala	63325	21°17'50"N	73°01'31"E	1.870	8.300	30.09.2003	- do -	01.06.78	-	01.08.83

Source: Water Year Book for 2003-2004, Tapi Basin, Gandhi Nagar.

(Updated during September 2007)

Km² : Sq.Kilometre

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

IX Basin : West Flowing Rivers											
Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Pen	125	18°44'00"N	73°07'00"E	7.000	-	-	2004-05	17.09.96	-	-
2	Nagothane	420	18°32'00"N	73°10'00"E	2.000	-	-	- do -	25.09.96	-	-
3	Kolad	294	18°24'40"N	73°12'45"E	7.000	-	-	- do -	13.09.96	-	-
4	Badalapur	785	19°09'30"N	73°15'20"E	9.017	-	-	- do -	16.02.88	-	02.07.93
5	Mangaon	259	18°13'55"N	73°17'10"E	3.905	-	-	- do -	01.12.86	-	02.07.93
6	Anjanari	315	16°56'00"N	73°31'30"E	11.000	-	-	- do -	08.08.91	-	-
7	Belne Bridge	605	16°13'00"N	73°36'00"E	8.500	-	-	- do -	16.06.2000	-	01.07.2000
8	Ganjim	880	15°28'15"N	74°06'00"E	0.000	-	-	- do -	26.05.71	-	-
9	Collem	117	15°20'20"N	74°15'00"E	65.000	-	-	- do -	26.05.71	-	-
10	Santeguli	1090	14°26'00"N	74°35'10"E	8.000	-	-	- do -	09.06.88	-	01.09.93
11	Haladi	583	13°42'52"N	74°51'09"E	2.000	-	-	- do -	30.12.85	-	01.09.93
12	Avershe	253	13°31'18"N	74°52'48"E	88.000	-	-	- do -	24.06.02	-	01.09.2002
13	Yennehole	327	14°18'40"N	74°58'57"E	15.000	-	-	- do -	24.07.89	-	01.09.93
14	Addoor	688	12°55'49"N	74°57'11"E	10.000	-	-	- do -	17.07.2003	-	02.09.2002
15	Bantwal	3184	12°53'04"N	75°02'35"E	1.000	-	-	- do -	01.11.70	22.06.72	15.06.78
16	Erinjipuzha	957	12°29'00"N	75°08'50"E	9.100	-	-	- do -	25.06.85	13.06.88	01.07.88
17	Perumannu	1070	11°58'10"N	75°35'15"E	3.470	-	-	- do -	25.06.85	26.07.86	02.06.86
18	Kuttyadi	238	11°37'30"N	75°46'00"E	0.000	-	-	- do -	13.03.2000	-	01.10.02
19	Kuniyil	1876	11°14'26"N	76°01'32"E	0.000	-	-	- do -	04.01.79	21.01.79	15.01.79
20	Karathodu	750	11°03'25"N	76°02'18"E	2.000	-	-	- do -	20.06.86	22.06.89	01.12.88
21	Kumbidi	5755	10°51'00"N	76°02'00"E	4.000	-	-	- do -	8.01.79	24.06.80	03.12.79
22	Pulamanthole	940	10°53'50"N	76°11'50"E	10.400	-	-	- do -	17.02.86	28.08.86	02.06.86
23	Mankara	2775	10°45'40"N	76°29'20"E	45.000	-	-	- do -	21.06.85	-	02.06.86
24	Pudur	1313	10°46'20"N	76°34'30"E	58.000	-	-	- do -	02.09.85	-	02.06.86
25	Ambarampalyam	950	10°36'00"N	76°59'00"E	217.000	-	-	- do -	09.03.78	01.07.02	01.08.78
26	Arangaly	1342	10°16'50"N	76°18'55"E	0.000	-	-	- do -	27.04.78	08.07.80	01.08.78
27	Neeleswaram	4234	10°11'00"N	76°30'00"E	1.000	-	-	- do -	16.03.71	26.09.72	15.06.78
28	Vandiperiyar	712.0	09°34'30"N	77°05'30"E	789.000	-	-	- do -	07.06.2000	-	01.10.02
29	Ramamangalam	1208	09°50'00"N	76°28'00"E	0.000	-	-	- do -	25.04.78	02.02.79	15.08.78
30	Kalampur	405	09°59'25"N	76°37'50"E	5.000	-	-	- do -	23.06.86	01.06.88	01.06.88

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Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

IX Basin : West Flowing Rivers											
Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
31	Kidangoor	615	09°40'30"N	76°36'20"E	-1.200	-	-	2004-05	02.07.85	01.06.87	02.06.86
32	Kallooppara	731	09°24'10"N	76°39'00"E	0.000	-	-	- do -	19.06.85	19.05.86	02.06.86
33	Malakkara	1713	09°19'45"N	76°39'50"E	1.000	-	-	- do -	19.06.85	18.06.86	01.07.86
34	Thumpamon	810	09°13'40"N	76°42'40"E	5.000	-	-	- do -	28.01.78	23.03.81	15.10.78
35	Pattazhy	1210	09°04'00"N	76°45'40"E	3.000	-	-	- do -	20.04.78	25.09.80	15.10.78
36	Ayilam	540	08°42'55"N	76°51'15"E	0.000	-	-	- do -	18.12.78	26.12.78	02.01.79
37	Kuzhithurai	841	08°18'08"N	77°11'19"E	0.000	-	-	- do -	01.11.2000	-	02.12.02
38	Ashramam	258	08°09'30"N	77°27'36"E	1.000	-	-	- do -	21.09.99	-	02.12.02

Source: Water Year Book for 2004-2005. (West Flowing Rivers)

(Updated during September 2007)

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

XI Basin : Narmada

Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Chandwada	3846	22°01'48"	73°25'30"	18.000	26.800	04.09.2002	06/2002 to 05/2003	01.11.1979	01.08.1988	15.03.1980
2	Gurudeshwar	87892	21°53'11"	73°39'09"	10.000	29.390	04.09.2002	06/2002 to 05/2003	23.03.1972	21.01.1973	15.06.1977
3	Pati	2151	21°57'00"	74°45'30"	187.000	193.850	03.09.2002	06/2002 to 05/03	23.02.1999	-	-
4	Dhulsar	787	22°12'00"	74°52'00"	151.000	154.500	24.08.2002	06/2002 to 05/03	15.03.1999	-	-
5	Rajghat	77674.1	22°04'32"	74°51'15"	110.000	125.400	03.09.2002	06/2002 to 05/03	17.01.1972	23.06.1972	15.06.1979
6	Mandaleshwar	72809.3	22°10'06"	75°39'36"	138.000	147.980	03.09.2002	06/2002 to 05/03	28.08.1971	14.04.1972	18.06.1979
7	Kogaon	3919	22°06'00"	75°41'00"	151.000	161.850	03.09.2002	06/2002 to 05/03	01.07.1978	-	15.09.1986
8	Mortakka	67184	22°13'30"	76°02'20"	153.000	163.750	20.08.2002	06/2002 to 05/03	01.07.1999	23.08.1999	01.09.1999
9	Handia	54027	22°29'18"	77°00'00"	258.000	269.650	19.08.2002	06/2002 to 05/03	26.04.1977	11.12.1977	01.08.1979
10	Chhidgaon	1729	22°25'00"	77°20'00"	287.000	292.600	23.08.2002	06/2002 to 05/03	22.12.1976	-	16.09.1986
11	Hoshangabad	44548	22°46'36"	77°43'00"	282.000	294.200	19.08.2002	06/2002 to 05/03	16.09.1972	29.12.1972	15.07.1979
12	Shahpur	841	22°11'03"	77°53'01"	376.000	384.090	24.06.2002	06/2002 to 05/03	20.06.2000	-	-
13	Sandia	33953.5	22°55'00"	78°21'00"	297.000	311.420	19.08.2002	06/2002 to 05/03	18.04.1978	09.08.1978	15.09.1979
14	Gadarwara	2270	22°06'00"	75°41'00"	321.000	328.850	06.09.2002	06/2002 to 05/03	01.02.1977	15.06.1978	16.08.1979
15	Barmanghat	26453	22°01'36"	79°00'54"	306.000	323.500	18.08.2002	06/2002 to 05/03	20.11.1971	27.08.1972	01.06.1979
16	Belkheri	1508	22°54'54"	79°20'24"	340.000	350.400	18.08.2002	06/2002 to 05/03	16.03.1977	-	01.09.1986
17	Patan	3950	23°18'30"	79°39'45"	89.000	352.500	19.08.2002	06/2002 to 05/03	30.08.1979	-	01.09.1986
18	Bamni	1864	80°29'00"	80°22'00"	440.000	445.500	18.08.2002	06/2002 to 05/03	01.07.1991	-	-
19	Mohgaon	3919	22°45'42"	80°37'30"	447.000	455.950	18.08.2002	06/2002 to 05/03	13.01.1977	27.08.1992	16.09.1986
20	Manot	4667	22°44'00"	80°31'00"	442.000	449.400	08.09.2002	06/2002 to 05/03	16.12.1976	09.11.1979	01.01.1980
21	Dindori	2292	22°57'00"	81°05'00"	660.000	666.120	24.06.2002	06/2002 to 05/03	01.08.1988	-	15.03.1990
22	Bijora	14561	22°55'30"	79°55'30"	366.000	372.300	-	06/2002 to 05/03	1967	1980	-

Source : Water Year Book for 2002-2003 (Narmada Basin)

(Updated during September 2007)

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

XI Basin : Narmada

Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Chandwada	3846	22°01'48"	73°25'30"	18.000	26.800	04.09.2002	06/2002 to 05/2003	01.11.1979	01.08.1988	15.03.1980
2	Gurudeshwar	87892	21°53'11"	73°39'09"	10.000	29.390	04.09.2002	06/2002 to 05/2003	23.03.1972	21.01.1973	15.06.1977
3	Pati	2151	21°57'00"	74°45'30"	187.000	193.850	03.09.2002	06/2002 to 05/03	23.02.1999	-	-
4	Dhulsar	787	22°12'00"	74°52'00"	151.000	154.500	24.08.2002	06/2002 to 05/03	15.03.1999	-	-
5	Rajghat	77674.1	22°04'32"	74°51'15"	110.000	125.400	03.09.2002	06/2002 to 05/03	17.01.1972	23.06.1972	15.06.1979
6	Mandaleshwar	72809.3	22°10'06"	75°39'36"	138.000	147.980	03.09.2002	06/2002 to 05/03	28.08.1971	14.04.1972	18.06.1979
7	Kogaon	3919	22°06'00"	75°41'00"	151.000	161.850	03.09.2002	06/2002 to 05/03	01.07.1978	-	15.09.1986
8	Mortakka	67184	22°13'30"	76°02'20"	153.000	163.750	20.08.2002	06/2002 to 05/03	01.07.1999	23.08.1999	01.09.1999
9	Handia	54027	22°29'18"	77°00'00"	258.000	269.650	19.08.2002	06/2002 to 05/03	26.04.1977	11.12.1977	01.08.1979
10	Chhidgaon	1729	22°25'00"	77°20'00"	287.000	292.600	23.08.2002	06/2002 to 05/03	22.12.1976	-	16.09.1986
11	Hoshangabad	44548	22°46'36"	77°43'00"	282.000	294.200	19.08.2002	06/2002 to 05/03	16.09.1972	29.12.1972	15.07.1979
12	Shahpur	841	22°11'03"	77°53'01"	376.000	384.090	24.06.2002	06/2002 to 05/03	20.06.2000	-	-
13	Sandia	33953.5	22°55'00"	78°21'00"	297.000	311.420	19.08.2002	06/2002 to 05/03	18.04.1978	09.08.1978	15.09.1979
14	Gadarwara	2270	22°06'00"	75°41'00"	321.000	328.850	06.09.2002	06/2002 to 05/03	01.02.1977	15.06.1978	16.08.1979
15	Barmanghat	26453	22°01'36"	79°00'54"	306.000	323.500	18.08.2002	06/2002 to 05/03	20.11.1971	27.08.1972	01.06.1979
16	Belkheri	1508	22°54'54"	79°20'24"	340.000	350.400	18.08.2002	06/2002 to 05/03	16.03.1977	-	01.09.1986
17	Patan	3950	23°18'30"	79°39'45"	89.000	352.500	19.08.2002	06/2002 to 05/03	30.08.1979	-	01.09.1986
18	Bamni	1864	80°29'00"	80°22'00"	440.000	445.500	18.08.2002	06/2002 to 05/03	01.07.1991	-	-
19	Mohgaon	3919	22°45'42"	80°37'30"	447.000	455.950	18.08.2002	06/2002 to 05/03	13.01.1977	27.08.1992	16.09.1986
20	Manot	4667	22°44'00"	80°31'00"	442.000	449.400	08.09.2002	06/2002 to 05/03	16.12.1976	09.11.1979	01.01.1980
21	Dindori	2292	22°57'00"	81°05'00"	660.000	666.120	24.06.2002	06/2002 to 05/03	01.08.1988	-	15.03.1990
22	Bijora	14561	22°55'30"	79°55'30"	366.000	372.300	-	06/2002 to 05/03	1967	1980	-

Source : Water Year Book for 2002-2003 (Narmada Basin)

(Updated during September 2007)

Table No.1.4 : Site-wise Important Historical Observations for Different River Basins

XII Basin : Mahi, Sabarmati & Other Rivers of Saurashtra Kutch.											
Sl. No.	Site Name	Drainage Area (Km ²)	Latitude	Longitude	Zero of Gauge (m)	Stage Record		Reference Period	Date of Establishment		
						Peak Water Level (m)	Date of Occurrence		Discharge	Sediment	Water Quality
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Khanpur	32510	22°31'55"N	73°08'27"E	8.220	12.130	28.06.2002	2002-03	21.12.78	01.06.87	01.01.79
2	Chakaliya	3121	23°02'58"N	74°19'14"E	180.000	189.800	03.09.2000	2002-03	13.02.91	-	-
3	Paderdibadi	16247	23°46'03"N	74°08'12"E	131.000	135.100	04.09.2002	2002-03	24.06.78	21.07.80	01.07.78
4	Rangeli	8329	23°51'16"N	74°13'25"E	150.000	152.880	10.08.2002	2002-03	15.07.78	-	01.07.88
5	Dhariawad	1510	24°04'43"N	74°28'02"E	203.000	206.500	03.09.2002	2002-03	01.06.88	-	-
6	Mataji	3880	23°20'57"N	74°43'31"E	295.000	300.800	04.09.2002	2002-03	21.07.82	21.07.82	21.07.82
7	Vautha	19636	22°38'59"N	72°32'08"E	12.000	15.190	05.09.2002	2002-03	24.06.2000	-	01.06.2002
9	Kheda	7550	22°44'45"N	72°40'49"E	19.000	20.380	06.09.2002	2002-03	10.07.89	-	-
10	Ratanpur	2916	22°58'31"N	72°53'02"E	37.000	38.420	05.09.2002	2002-03	11.07.89	-	-
11	Derol Bridge	6724	23°34'24"N	72°48'25"E	89.000	91.100	29.06.2002	2002-03	01.06.91	25.09.92	15.07.92
12	Kheroj	3650	24°13'45"N	73°00'26"E	210.500	213.350	27.06.2002	2002-03	22.06.92	-	-
13	Jotasan	1421	24°21'20"N	73°10'05"E	285.000	288.250	02.09.2002	2002-03	14.06.95	-	-
14	Gandhav	32010	24°59'22"N	71°40'47"E	31.000	River Dry	River Dry	2002-03	24.06.74	-	-
15	Balotra(Jasol)	19000	25°49'18"N	72°13'23"E	102.000	River Dry	River Dry	2002-03	11.07.90	-	-
16	Kamalpur	6960	23°47'59"N	71°45'00"E	34.000	River Dry	River Dry	2002-03	25.07.71	25.08.73	01.07.77
17	Chitrasani	320	24°17'20"N	72°29'54"E	184.000	185.590	28.06.2002	2002-03	03.07.90	-	15.07.88
18	Sarotry	2200	24°22'04"N	72°32'48"E	186.000	187.100	29.06.2002	2002-03	01.06.89	-	-
19	Abu Road	1600	24°29'38"N	72°47'30"E	254.850	256.050	28.06.2002	2002-03	03.07.89	-	01.07.88
20	Lowara	3953	21°26'36"N	71°33'42"E	56.000	64.080	28.06.2002	2002-03	29.11.70	25.07.73	01.07.77
21	Ganod	6266	21°39'53"N	70°10'52"E	26.000	31.450	29.06.2002	2002-03	14.11.70	07.07.73	01.07.77
22	Gungan	2137	20°57'42"N	70°45'52"E	8.000	11.100	28.06.2002	2002-03	09.12.70	-	-
23	Sapawada	2125	23°32'54"N	72°00'52"E	36.000	River Dry	River Dry	2002-03	31.08.89	-	-
24	Mahuwa	1995	21°00'52"N	73°08'25"E	9.000	19.500	26.06.2002	2002-03	21.11.70	18.06.73	15.06.77
25	Gadat	1510	20°51'22"N	72°59'05"E	1.500	12.360	26.06.2002	2002-03	12.03.79	01.02.85	01.04.80
26	Durvesh	2019	19°42'45"N	72°55'50"E	0.000	14.500	26.06.2002	2002-03	26.01.71	26.01.71	01.06.77
27	Pongalwada	2400	22°06'37"N	73°04'44"E	2.000	13.850	05.09.2002	2002-03	30.06.89	N.A.	15.03.90
28	Ozerkheda	640.0	20°06'01"N	73°16'16"E	80.100	89.200	29.06.2002	2002-03	28.09.83	N.A.	N.A.
29	Nanipalsan	764.0	20°12'10"N	73°16'52"E	95.000	101.850	02.09.2002	2002-03	13.10.83	N.A.	N.A.
30	Motinaroli	804.0	21°24'16"N	72°57'48"E	5.000	15.080	04.09.2002	2002-03	17.10.90	N.A.	01.07.91

Source: Water Year Book for 2002-03 (Mahi, Sabarmati & Other Rivers of Saurashtra Kutch).

(Updated during September 2007)

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basins

I Basin Mahanadi			Unit : M.C.M.											
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1	Baronda	Monsoon	1754.98	534.95	172.07	223.29	2968.42	1675.31	2173.34	1141.09	2924.68	1033.22	637.74	
		Non-Monsoon	6.64	9.31	1.71	4.48	20.26	4.88	7.46	5.81	25.96	9.01	8.18	
		Annual	1761.63	544.25	173.79	227.77	3008.68	1580.19	2180.81	1146.90	2950.64	1042.23	548.93	
2	Rajim	Monsoon	4868.26	896.55	409.18	507.69	7051.59	3503.26	3814.11	1872.40	7273.24	2343.66	1598.16	
		Non-Monsoon	20.88	33.89	9.48	16.08	41.54	10.41	22.75	15.47	51.29	29.22	20.32	
		Annual	4889.14	930.43	418.66	523.77	7093.12	3513.67	3835.85	1887.67	7324.53	2372.88	1616.48	
3	Basantpur	Monsoon	24966.46	10193.50	10593.43	9225.38	32703.09	19507.70	16736.99	16319.15	51709.12	18727.79	11845.12	
		Non-Monsoon	664.95	555.64	225.77	336.65	1980.85	958.48	1012.36	826.84	2022.93	1131.00	1116.88	
		Annual	25631.40	10749.14	10819.20	9562.03	34683.94	20466.18	17749.36	17146.00	53732.06	19858.78	12961.98	
4	Kotni	Monsoon	3760.01	564.74	859.01	396.63	4276.12	1898.03	1585.95	1283.64	5161.94	2518.77	826.98	
		Non-Monsoon	12.48	12.84	0.54	0.09	49.50	4.20	5.51	43.67	144.78	20.69	3.53	
		Annual	3772.49	577.58	859.55	396.71	4325.62	1902.23	1591.46	1327.31	6306.72	2539.46	830.51	
5	Pathardih	Monsoon					2004.11	1088.42	1424.81	810.16	2094.66	1335.81	1012.76	
		Non-Monsoon	Observation started with effect from					22.03	18.70	9.28	28.76	51.75	37.98	10.54
		Annual	year 1990-91 1990-91					2026.14	1107.12	1434.09	838.91	2146.41	1373.79	1023.30
6	Simga	Monsoon	7135.73	1552.48	2058.78	1862.59	9771.87	4432.64	3938.90	3300.61	13531.51	5603.87	2761.61	
		Non-Monsoon	181.85	177.80	44.52	68.81	173.48	76.64	49.17	101.96	227.28	129.15	73.81	
		Annual	7317.58	1730.28	2103.30	1931.40	9945.35	4509.28	3988.07	3402.57	13758.79	5733.02	2835.42	
7	Andhiyarkore	Monsoon	212.28	173.34	493.51	175.26	791.76	293.60	254.44	145.85	841.35	324.13	264.79	
		Non-Monsoon	26.03	24.79	18.24	18.07	39.39	13.99	10.17	12.03	38.00	31.16	17.71	
		Annual	238.32	198.13	511.75	193.33	831.16	307.58	264.61	157.88	879.35	355.29	282.50	

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Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basins

I Basin Mahanadi			Unit : M.C.M.										
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
8	Ghatora	Monsoon	918.33	534.39	954.16	481.88	1383.06	949.92	648.44	1283.72	3093.06	991.31	1054.43
		Non-Monsoon	32.95	22.20	15.77	16.09	39.07	18.48	9.88	24.20	51.10	23.05	15.00
		Annual	951.28	556.60	969.93	497.97	1422.14	968.40	658.33	1307.92	3144.16	1014.36	1069.43
9	Jondhra	Monsoon	12067.66	3831.45	5241.59	4252.17	16244.61	6815.08	5877.91	7521.31	21647.03	7946.72	6139.33
		Non-Monsoon	311.96	254.54	97.56	88.53	338.09	143.90	98.88	194.74	426.66	172.51	102.31
		Annual	12379.62	4085.99	6339.15	4340.70	16582.69	6958.98	5976.79	7716.05	22073.69	8119.23	6241.64
10	Rampur	Monsoon	1661.57	807.69	270.98	660.53	2453.62	894.47	1724.47	1304.36	3455.41	979.67	434.85
		Non-Monsoon	9.03	7.73	1.03	2.66	15.66	2.63	3.90	6.94	10.08	9.05	0.43
		Annual	1670.60	815.43	272.00	663.19	2469.29	897.10	1728.37	1311.30	3465.49	988.72	435.28
11	Manendragarh	Monsoon	Observation started with effect			195.69	571.21	446.19	234.98	293.49	673.55	318.45	331.85
		Non-Monsoon	from year 1989-90			9.56	17.10	8.33	2.74	14.30	19.51	50.05	13.85
		Annual				205.25	588.32	454.52	237.72	307.79	693.07	368.50	345.70
12	Bamnidhi	Monsoon	5131.25	3765.86	2952.04	2406.06	3905.91	4209.30	1621.40	1982.40	11103.96	1974.94	2845.58
		Non-Monsoon	193.31	167.67	82.39	151.91	1424.32	807.98	1018.87	384.98	1143.90	548.59	800.80
		Annual	5324.56	3933.53	3034.43	2557.98	5330.23	5017.27	2640.28	2367.38	12247.86	2523.53	3646.38
13	Kurubhata	Monsoon	2444.58	2083.54	2209.87	2097.36	2656.40	3117.01	1577.11	2660.91	4275.61	1768.94	2888.65
		Non-Monsoon	104.01	114.87	50.33	98.87	199.62	131.94	39.47	66.97	162.60	65.65	78.21
		Annual	2548.58	2198.40	2260.20	2196.24	2856.02	3248.94	1616.58	2727.88	4438.21	1834.59	2966.87
14	Surdergarh	Monsoon	2950.75	3118.41	3326.10	2294.47	3297.59	4383.92	1873.06	3089.88	5708.41	2458.00	4086.16
		Non-Monsoon	117.16	120.81	113.78	87.19	125.83	108.20	51.40	65.73	123.14	113.09	52.04
		Annual	3067.91	3239.22	3439.88	2381.66	3423.41	4492.12	1924.46	3155.61	5831.56	2571.09	4138.19
15	Salebhata	Monsoon	3050.87	690.26	566.59	1255.65	2473.74	1152.06	2293.78	1639.56	4043.66	1525.61	573.69
		Non-Monsoon	30.27	26.66	10.53	26.64	44.36	24.14	14.61	18.28	66.04	37.06	8.43
		Annual	3081.14	716.92	577.12	1282.29	2518.09	1176.20	2308.38	1657.84	4109.71	1562.68	582.12

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Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basins

I Basin Mahanadi			Unit : M.C.M.										
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
16	Kesinga	Monsoon	5215.92	2569.16	2338.54	3173.06	14419.86	7942.77	7289.85	4463.90	10168.43	5684.10	2748.89
		Non-Monsoon	68.51	103.36	44.22	265.05	227.69	119.45	45.12	100.67	203.57	131.02	185.77
		Annual	5284.42	2672.52	2382.76	3441.11	14647.54	8062.22	7334.97	4564.57	10372.00	5815.12	2934.66
17	Kantamal	Monsoon	10594.37	3271.69	3661.96	5781.34	21382.88	14660.07	12428.59	7693.25	20137.84	9299.67	3756.09
		Non-Monsoon	161.08	144.32	63.32	359.74	558.90	310.47	156.49	224.22	812.31	379.72	151.43
		Annual	10755.45	3416.01	3725.28	6141.08	21941.78	14970.53	12585.08	7917.47	20950.15	9679.39	3907.53
18	Sukma	Monsoon	Observation started with effect			327.95	955.78	494.51	1116.57	454.91	1417.91	815.22	88.14
		Non-Monsoon	from year 1989-90			6.24	16.42	5.40	1.28	4.84	13.96	6.81	0.00
		Annual				334.19	972.20	499.91	1117.85	459.74	1431.87	822.03	88.14
19	Pandigaon	Monsoon	Observation started with effect			803.00	1163.90	3773.40	3821.80	2556.20	3661.50	3327.30	1439.50
		Non-Monsoon	from year 1989-90			93.70	157.50	84.20	39.20	80.90	180.20	92.30	33.40
		Annual				896.70	1321.40	3857.60	3861.00	2637.10	3811.70	3419.60	1472.90
20	Tikarapara	Monsoon	55319.00	19814.00	21511.00	25379.00	65100.00	40699.00	42513.00	31188.00	118425.00	25920.00	19870.00
		Non-Monsoon	4288.00	4101.00	2363.00	3995.00	6678.00	4736.00	5211.00	5241.00	6823.00	5812.00	4804.00
		Annual	59607.00	23915.00	23874.00	29374.00	71778.00	45435.00	47724.00	36429.00	125248.00	31732.00	24674.00

Source: Office of the Superintending Engineer, CWC, Bhubaneswar

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

II Basin : Subarnarekha, Burhabalang & Baitarni		Unit : M.C.M.											
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
a) Basin: Subarnarekha													
1	Ghatsila	Monsoon	3918.00	4959.00	6180.00	6579.00	9120.00	5013.00	3100.00	5413.00	13302.00	7911.00	4081.00
		Non-Monsoon	346.10	217.00	140.00	245.10	261.80	338.10	62.84	186.80	506.80	286.30	158.10
		Annual	4264.10	5176.00	6320.00	6824.10	9381.80	5351.10	3162.84	5599.80	13808.80	8197.30	4239.10
2	Muri	Monsoon	Dis. Obsn. Started from 1.11.89				3126.00	528.40	417.20	568.00	908.60	639.10	738.80
		Non-Monsoon					365.90	217.40	64.89	194.80	172.10	187.40	107.20
		Annual					3492.00	745.80	482.09	762.80	1080.70	826.50	846.00
3	Adityapur	Monsoon	1795.00	2008.00	2641.00	2590.00	4658.00	2049.00	1362.00	2863.00	5920.00	3428.00	1421.00
		Non-Monsoon	89.91	53.70	43.45	98.33	140.10	106.80	68.84	62.07	127.40	90.56	29.88
		Annual	1884.91	2061.70	2684.45	2688.33	4798.10	2155.80	1431.00	2925.07	6047.40	3518.56	1450.88
b) Basin: Burhabalang													
	Govindpur	Monsoon	Discharge observation started from 7.3.92						1837.00	2253.00	3428.00	3232.00	1403.00
		Non-Monsoon						80.42	128.80	302.90	262.40	130.40	
		Annual						1917.42	2381.80	3730.90	3494.40	1533.40	
		Non-Monsoon											
c) Basin: Baitarani													
1	Champua	Monsoon	Discharge observation started from 20.7.90				943.10	990.90	389.70	905.40	1520.00	789.60	634.60
		Non-Monsoon					128.70	112.90	60.57	85.96	131.60	106.20	89.31
		Annual					1071.80	1103.80	450.27	991.36	1651.60	895.80	723.91
2	Anandapur	Monsoon	3713.00	1954.00	4113.00	5905.00	6245.00	5897.00	2535.00	4386.00	7356.00	4141.00	2282.00
		Non-Monsoon	215.40	224.70	99.87	177.00	202.00	245.80	143.00	176.50	518.50	386.00	227.30
		Annual	3928.40	2178.70	4212.87	6082.00	6447.00	6142.80	2678.00	4562.50	7874.50	4527.00	2509.30

Source: Office of the Superintending Engineer, CWC, Bhubaneswar

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

III Basin: Brahmani			Unit : M.C.M.										
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Jenapur	Monsoon	14019.00	11610.00	14466.00	11983.00	16684.00	19885.00	9425.00	12907.00	27517.00	11355.00	14171.00
		Non-Monsoon	3561.00	3720.00	2765.00	3095.00	3165.00	2691.00	1373.00	3918.00	3513.00	4009.00	2673.00
		Annual	17580.00	15330.00	17231.00	15078.00	19849.00	22576.00	10798.00	16825.00	31030.00	15364.00	16844.00
2	Panposh	Monsoon	Discharge Obsn. Started from 21.6.96										6545.00
		Non-Monsoon											331.90
		Annual											6876.90
3	Gomlai	Monsoon	9565.00	10478.00	11409.00	8432.00	12374.00	11336.00	4766.00	8727.00	21440.00	9713.00	7144.00
		Non-Monsoon	550.00	450.00	277.00	466.50	677.70	570.50	235.20	319.50	619.00	510.20	459.90
		Annual	10115.00	10928.00	11686.00	8898.50	13051.70	11906.50	5001.20	9046.50	22059.00	10223.20	7603.90
4	Tilga	Monsoon	1430.00	1812.00	2056.00	1204.00	1696.00	2054.00	1126.00	1876.00	3361.00	1594.00	1983.00
		Non-Monsoon	111.40	83.00	34.00	65.02	100.50	134.60	41.99	55.18	100.60	156.20	59.86
		Annual	1541.40	1895.00	2090.00	1269.02	1796.50	2189.00	1167.99	1931.18	3461.60	1750.20	2042.86
5	Jaraikela	Monsoon	4022.00	4770.00	4955.00	3525.00	5460.00	4307.00	1785.00	3460.00	7649.00	4160.00	3545.00
		Non-Monsoon	298.00	171.00	76.00	276.10	290.10	236.60	86.16	130.80	236.00	220.50	133.90
		Annual	4320.00	4941.00	5031.00	3801.10	5750.10	4543.60	1871.16	3590.80	7885.00	4380.50	3678.00

Source: Office of the Superintending Engineer, CWC, Bhubaneswar

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

IV Basin: Rushikulya, Vamsdhara, Saroda & Nagavali												Unit : M.C.M.	
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Basin: Rushikulya													
a)	Purushottampur	Monsoon	Discharge Obsn. started			1432.00	2451.00	1731.00	2810.00	1445.00	1739.00	3249.00	718.10
		Non-Monsoon	from 14.6.89				Not Observed		47.84	14.04	783.40	200.20	14.78
		Annual				1432.00	2451.00	1731.00	2857.84	1459.04	2522.40	3449.20	732.88
Basin: Vamsadhara													
b)	Kashinagar	Monsoon	2059.00	608.40	2333.00	1752.00	6381.00	3525.00	4329.00	1406.00	3020.00	3758.00	1059.00
		Non-Monsoon	168.00	118.40	68.00	604.40	503.90	259.70	286.10	120.70	939.10	305.40	118.50
		Annual	2227.00	726.80	2401.00	2356.00	6884.90	3784.70	4615.10	1526.70	3959.10	4063.40	1177.50
Basin: Nagavali													
c)	Srikakulam	Monsoon	Discharge Obsn. started				3126.00	3549.00	2940.00	1380.00	2241.00	2744.00	2553.00
		Non-Monsoon	from 25.8.90				365.90	333.00	233.90	84.46	793.10	215.50	169.70
		Annual					3492.00	3882.00	3173.90	1464.46	3034.10	2959.50	2722.70
Basin: Saroda													
d)	Ankapalli	Monsoon	Discharge Obsn. started			No flow	581.40	277.60	574.60	177.20	248.90	780.20	1106.00
		Non-Monsoon	from 16.8.89			No flow	31.70	20.20	58.90	9.81	97.92	54.62	37.31
		Annual				No flow	613.10	297.80	633.50	187.00	346.82	834.82	1143.31

Source: Office of the Superintending Engineer, CWC, Bhubaneswar

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

V Basin :Godavari		Unit : M.C.M.											
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Polavaram	Monsoon	169569.30	66016.30	82461.00	54206.70	152181.10	78914.00	52705.00	39260.00	68976.00	90084.00	72386.00
		Non-Monsoon	8751.60	5570.70	4476.30	3868.80	8368.00	7638.60	5856.00	7827.00	5846.00	6739.00	2901.00
		Annual	178320.90	71587.00	86937.30	58075.50	160549.10	86552.60	58560.00	47087.00	74822.00	96823.00	75287.00
2	Koida	Monsoon	177732.80	73352.90	85223.00	60129.40	135588.20	78382.80	57711.00	42358.00	87392.00	124082.00	85688.00
		Non-Monsoon	7698.20	6031.50	5845.20	3819.10	9070.00	7628.60	6392.00	10299.00	6235.00	6250.00	3701.00
		Annual	185431.00	79384.40	91068.20	63948.50	144658.20	86011.40	64103.00	52657.00	93627.00	130332.00	89389.00
3	Konta	Monsoon	20052.70	11220.80	10481.30	7978.10	17573.40	12896.10	10093.00	7723.00	11909.00	13065.00	13976.00
		Non-Monsoon	4079.60	4076.20	3817.90	2161.10	4748.20	4268.50	3899.00	3341.00	3044.00	3571.00	1981.00
		Annual	24132.30	15297.00	14299.20	10139.20	22321.60	17164.60	13992.00	11065.00	14952.00	16636.00	15957.00
4	Injaram	Monsoon	18436.70	8928.90	9531.60	6856.80	15674.40	9867.30	8936.00	5643.00	7092.00	12573.00	9805.00
		Non-Monsoon	2275.70	2155.80	1887.50	1445.60	2769.50	2278.00	2262.00	1772.00	1440.00	2019.00	1014.00
		Annual	20712.40	11084.70	11419.10	8302.40	18443.90	12145.30	11198.00	7415.00	8532.00	14592.00	10819.00
5	Potteru	Monsoon	-	-	-	-	-	-	-	1241.80	1145.70	1755.50	1244.10
		Non-Monsoon	-	-	-	-	-	-	-	684.00	729.60	1199.50	582.20
		Annual	-	-	-	-	-	-	-	1925.80	1875.30	2955.00	1826.30
6	Saradaput	Monsoon	7765.50	5046.10	4013.30	3523.30	7239.70	4927.70	3503.40	2764.30	2535.30	5027.30	3911.40
		Non-Monsoon	1105.30	1283.60	1094.40	666.00	1458.40	1270.00	1078.50	1019.00	553.50	639.50	306.80
		Annual	8870.80	6329.70	5107.70	4189.30	8698.10	6197.70	4581.90	3783.30	3088.80	5666.80	4218.10
7	Sangam	Monsoon	-	-	-	-	-	-	144.20	92.00	391.20	360.10	341.40
		Non-Monsoon	-	-	-	-	-	-	11.27	5.08	5.02	4.11	7.14
		Annual	-	-	-	-	-	-	155.47	97.10	396.30	364.20	348.50
8	Perur	Monsoon	134514.60	44000.10	61096.20	35587.00	106806.40	64129.00	39957.40	33302.10	62411.00	70545.80	63173.70
		Non-Monsoon	2890.30	1335.10	1408.80	1511.50	4521.10	2726.10	2240.60	6099.50	2399.30	2342.10	1167.40
		Annual	137404.90	45335.20	62505.00	37098.50	111327.50	66855.10	42198.00	39401.60	64810.30	72887.90	64341.10
9	Pathagudem	Monsoon	46323.10	18721.60	24532.80	15333.10	39013.40	20017.00	15819.20	12564.80	16151.90	26708.10	18177.10
		Non-Monsoon	972.40	670.60	397.90	355.00	1085.40	537.30	670.90	1490.50	456.80	403.70	196.20
		Annual	47295.50	19392.20	24930.70	15688.10	40098.80	20554.30	16490.10	14055.30	16608.70	27111.80	18373.30
10	Medapalli	Monsoon	5555.60	295.20	3433.50	3046.20	2095.20	1157.30	409.40	0.00	1428.30		
		Non-Monsoon	93.30	175.40	623.30	109.70	23.40	19.20	0.00	0.00	0.00	Discharge Observations not conducted	
		Annual	5648.90	470.60	4056.80	3155.90	2118.60	1176.50	409.40	0.00	1428.30		

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Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

V Basin :Godavari												Unit : M.C.M.	
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
11	Madadapalli	Monsoon	44682.20	40004.90	34519.90	20865.20	54185.20	44926.80	47698.20	20525.50	27347.00	Discharge Observations not conducted	
		Non-Monsoon	755.50	840.00	3092.00	3762.40	5552.10	5148.40	2913.70	0.00	0.00		
		Annual	45437.70	40844.90	37611.90	24627.60	59737.30	50075.20	50611.80	20525.50	27347.00		
12	Tumnar	Monsoon	-	-	-	-	-	-	1103.90	522.00	1099.60	1673.90	841.90
		Non-Monsoon	-	-	-	22.10	84.90	46.20	35.30	49.30	34.50	37.40	25.70
		Annual	-	-	-	-	-	-	1139.10	571.30	1134.10	1711.30	867.60
13	Chindanar	Monsoon	16437.50	9123.60	10185.30	6764.50	13660.30	9011.60	5888.40	4605.60	4017.20	24966.90	Discharge Observations
		Non-Monsoon	601.20	340.70	296.20	205.00	526.40	205.10	391.20	941.10	97.90	75.50	not conducted
		Annual	17038.70	9464.30	10481.50	6969.50	14186.70	9216.70	6279.60	5546.70	4115.10	25042.40	170.00
14	Cherribeda	Monsoon	-	-	-	-	-	-	-	117.30	107.30	505.20	170.00
		Non-Monsoon	-	-	-	-	-	-	-	19.80	4.60	15.80	2.70
		Annual	-	-	-	-	-	-	-	137.10	111.90	521.00	172.80
15	Amabal	Monsoon	-	-	-	-	1062.00	896.60	746.20	520.40	409.90	943.90	511.60
		Non-Monsoon	-	-	-	-	71.20	3.50	1.80	23.50	5.80	5.80	0.00
		Annual	-	-	-	-	1133.20	900.10	748.00	543.90	415.70	949.70	511.60
16	Sonarpal	Monsoon	-	-	-	-	-	-	643.10	342.00	402.70	826.60	549.20
		Non-Monsoon	-	-	-	-	-	-	1.40	12.30	4.00	3.10	0.00
		Annual	-	-	-	-	-	-	644.60	354.30	406.70	829.70	549.20
17	Jagdapur	Monsoon	6649.10	4462.00	4137.70	2783.90	5766.60	3486.30	2053.10	2200.10	1299.90	2568.70	2021.40
		Non-Monsoon	386.80	224.10	203.30	168.00	319.90	178.80	425.50	775.30	77.20	41.40	65.20
		Annual	7035.90	4686.10	4341.00	2951.90	6086.50	3665.10	2478.60	2975.40	1377.10	2610.10	2086.70
18	Kosagumta	Monsoon	-	-	-	-	-	-	-	79.10	441.70	726.90	713.30
		Non-Monsoon	-	-	-	-	-	-	-	39.70	21.80	15.90	15.40
		Annual	-	-	-	-	-	-	-	118.80	463.50	742.80	728.70
19	Murthahandi	Monsoon	759.60	-	1392.60	1094.80	2901.90	1571.40	964.50	1072.20	694.90	1264.40	1308.70
		Non-Monsoon	284.30	257.50	198.50	184.60	457.70	389.80	498.70	686.70	117.60	121.20	128.00
		Annual	1043.90	-	1591.10	1279.40	3359.60	1961.20	1463.20	1758.90	812.50	1385.60	1436.70
20	Nowrangpur	Monsoon	5431.00	3582.40	3243.70	2423.70	5503.80	2972.40	1217.70	1870.00	667.50	1341.60	1506.80
		Non-Monsoon	410.20	316.60	362.20	277.90	639.00	367.30	797.70	1262.10	46.70	42.90	64.90
		Annual	5841.20	3899.00	3605.90	2701.60	6142.80	3339.70	2015.40	3132.10	714.20	1384.50	1571.70

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Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

V Basin :Godavari		Unit : M.C.M.											
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
21	Tekra	Monsoon	60712.30	20606.00	38847.30	21382.20	76657.40	30511.70	14744.10	18087.20	30677.20	40844.80	32270.00
		Non-Monsoon	1644.10	342.60	535.80	1097.40	2083.90	901.10	475.50	4818.00	1161.30	1311.30	484.80
		Annual	62356.40	20948.60	39383.10	22479.60	78741.30	31412.80	15219.60	22905.20	31838.50	42156.10	32754.80
22	Bhatpalli	Monsoon	2669.00	811.90	1649.50	616.30	2381.90	2571.70	1023.90	326.10	1693.00	715.70	1983.10
		Non-Monsoon	96.40	33.00	38.10	21.80	91.50	85.70	57.70	56.40	59.00	51.50	55.10
		Annual	2765.40	844.90	1687.60	638.10	2473.40	2657.40	1081.70	382.50	1752.00	767.20	2038.30
23	Sirpur	Monsoon	29745.80	6339.50	14280.70	5191.90	21640.60	12037.70	5221.50	3295.00	10364.30	14582.30	13185.90
		Non-Monsoon	451.60	117.60	336.10	286.90	628.60	491.00	180.70	857.80	339.90	253.50	226.20
		Annual	30197.40	6457.10	14616.80	5478.80	22269.20	12528.70	5402.20	4152.80	10704.20	14835.80	13412.10
24	Bamni	Monsoon	24406.60	6265.40	13486.80	5176.90	25071.90	12338.40	4798.50	2398.30	8407.80	12495.00	9677.50
		Non-Monsoon	464.90	87.50	362.60	381.40	660.60	468.90	197.60	824.30	292.20	419.10	191.80
		Annual	24871.50	6352.90	13849.40	5558.30	25732.50	12807.30	4996.10	3220.70	8700.00	12914.10	9869.30
25	P.G. Bridge	Monsoon	10982.30	967.40	5228.20	2346.90	5054.20	3929.30	2617.00	824.50	4290.70	5742.30	3046.90
		Non-Monsoon	163.90	4.20	53.80	41.00	144.40	120.40	56.00	163.10	77.10	132.90	43.00
		Annual	11146.20	971.60	5282.00	2387.90	5198.60	4049.70	2673.00	987.60	4367.80	5875.20	3089.90
26	Mangrul	Monsoon	-	-	-	122.50	514.00	353.90	120.30	50.30	235.20	587.00	423.10
		Non-Monsoon	-	-	-	11.00	29.40	19.50	12.10	8.60	7.80	17.80	7.40
		Annual	-	-	-	133.50	543.40	373.40	132.40	58.90	243.00	604.80	430.50
27	Marlegaon	Monsoon	3191.00	408.20	1237.40	426.10	803.70	629.20	660.00	252.70	1768.80	2198.30	421.20
		Non-Monsoon	57.30	76.00	18.20	57.90	39.00	40.50	36.30	112.30	44.60	39.50	45.30
		Annual	3248.30	484.20	1255.60	484.00	842.70	669.70	696.30	365.00	1813.40	2237.80	466.50
28	Kanhaergaon	Monsoon	-	-	300.50	186.70	329.40	289.00	246.70	167.60	1188.90	1217.60	360.80
		Non-Monsoon	-	-	0.50	4.00	1.50	1.30	0.40	35.90	4.80	0.00	0.00
		Annual	-	-	301.00	190.70	330.90	290.30	247.10	203.50	1193.70	1217.60	360.80

Contd/...

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

V Basin :Godavari		Unit : M.C.M.											
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
29	Ghugus	Monsoon	9009.30	3337.10	5366.60	1599.80	10014.30	4265.30	1480.90	827.90	2886.40	5706.20	4134.70
		Non-Monsoon	137.90	32.10	147.90	144.40	373.00	153.30	50.50	539.80	138.70	175.10	88.60
		Annual	9147.20	3369.20	5514.50	1744.20	10387.30	4418.60	1531.40	1367.70	3025.10	5881.30	4223.30
30	Nandgaon	Monsoon	1798.70	792.10	1037.70	342.60	1982.80	843.50	251.50	191.10	438.20	953.60	169.10
		Non-Monsoon	35.90	11.50	8.30	8.20	51.50	43.10	14.40	177.60	85.60	104.50	65.90
		Annual	1834.60	803.60	1046.00	350.80	2034.30	886.60	265.90	368.60	523.90	1058.10	235.00
31	Hivra	Monsoon	2636.90	1048.00	1805.60	298.40	3733.20	1065.20	519.20	356.50	1473.10	2894.10	888.30
		Non-Monsoon	54.60	4.40	133.90	195.90	297.80	139.80	27.10	499.90	75.80	146.80	42.60
		Annual	2691.50	1052.40	1939.50	494.30	4031.00	1205.00	546.30	856.40	1548.90	3040.90	930.90
32	Bhisnur	Monsoon	1095.10	581.10	447.90	106.80	1356.80	515.80	67.70	214.90	1268.80	1427.20	146.10
		Non-Monsoon	15.00	1.80	142.70	218.90	221.90	175.90	16.60	424.00	39.90	53.80	32.00
		Annual	1110.10	582.90	590.60	325.70	1578.70	691.70	84.30	638.80	1308.70	1481.00	178.10
33	Ahsti	Monsoon	27908.60	16897.30	22417.60	19578.30	60361.00	18552.30	8487.00	14809.60	17591.20	29320.30	16440.20
		Non-Monsoon	926.80	169.40	267.50	428.90	1084.60	543.10	275.40	3376.00	872.60	845.80	149.80
		Annual	28835.40	17066.70	22685.10	20007.20	61445.60	19095.40	8761.00	18185.60	18463.80	30166.10	16590.00
34	Rajoli	Monsoon	1449.50	505.00	1161.20	606.90	1558.50	481.50	237.00	476.40	263.50	831.60	1511.60
		Non-Monsoon	3.80	0.40	1.00	0.50	8.00	1.10	0.00	15.80	1.70	0.70	0.40
		Annual	1453.30	505.40	1162.20	607.40	1566.50	482.60	237.00	492.20	265.20	832.30	1512.00
35	Wairagarf	Monsoon	-	-	-	595.00	1521.50	792.30	490.90	552.20	519.20	973.30	1082.20
		Non-Monsoon	-	-	-	1.00	8.70	2.10	1.40	15.40	1.30	2.70	0.10
		Annual	-	-	-	596.00	1530.20	794.40	492.30	567.60	520.50	976.00	1082.30
36	Salebardi	Monsoon	519.40	506.90	630.00	658.30	562.10	742.00	330.00	532.30	627.80	654.80	599.80
		Non-Monsoon	4.70	0.30	1.20	3.20	2.90	1.30	0.30	50.00	2.80	3.10	0.00
		Annual	524.10	507.20	631.20	661.50	565.00	743.30	330.30	582.30	630.60	657.90	599.80

Contd/...

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

V Basin :Godavari		Unit : M.C.M.											
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
37	Pauni	Monsoon	13631.00	7365.80	8185.30	10198.00	30552.30	8361.20	4588.00	9318.60	9819.00	17141.30	6993.80
		Non-Monsoon	819.90	182.70	285.70	388.80	953.80	394.80	246.00	3008.00	688.50	759.40	107.30
		Annual	14450.90	7548.50	8471.00	10586.80	31506.10	8756.00	4834.00	12326.60	10507.50	17900.60	7101.10
38	Satrapur	Monsoon	1937.40	1516.60	1429.50	2128.70	6594.80	1343.40	1131.30	2605.60	1952.20	4788.20	714.60
		Non-Monsoon	354.00	14.50	76.00	82.20	300.70	86.20	53.90	1394.00	212.30	201.40	16.00
		Annual	2291.40	1531.10	1505.50	2210.90	6895.50	1429.60	1185.20	3999.60	2164.50	4989.60	730.60
39	Ramkona	Monsoon	1417.50	730.70	736.40	1060.90	1549.60	400.40	566.60	1023.30	886.30	1520.60	202.90
		Non-Monsoon	16.40	0.00	0.80	9.60	35.10	9.80	6.50	322.60	47.10	26.30	3.50
		Annual	1433.90	730.70	737.20	1070.50	1584.70	410.20	573.10	1345.90	933.40	1546.90	206.30
40	Rajegaon	Monsoon	3893.40	2175.40	2130.40	1992.60	11590.60	3245.70	1099.50	2897.60	2556.50	3300.50	1598.50
		Non-Monsoon	101.30	14.60	9.20	19.40	137.70	34.40	10.80	338.10	49.80	31.00	0.20
		Annual	3994.70	2190.00	2139.60	2012.00	11728.30	3280.10	1110.30	3235.70	2606.30	3331.50	1598.70
41	Kumhari	Monsoon	4888.30	1816.40	2630.50	2984.20	9937.20	2631.10	1625.60	3112.60	3435.50	5889.00	1658.20
		Non-Monsoon	129.30	18.30	11.60	53.70	102.40	73.40	67.00	1073.90	115.80	143.60	77.80
		Annual	5017.60	1834.70	2642.10	3037.90	10039.60	2704.50	1692.50	4186.50	3551.30	6032.60	1736.00
42	Keolari	Monsoon	1579.90	317.90	880.40	989.50	2577.50	912.50	672.40	852.30	977.40	1935.60	412.40
		Non-Monsoon	36.90	9.30	1.30	12.90	31.50	66.10	43.40	447.90	137.40	106.50	26.50
		Annual	1616.80	327.20	881.70	1002.40	2609.00	978.60	715.80	1300.20	1114.80	2042.10	438.90
43	Somanpalli	Monsoon	2813.10	1000.80	608.40	1194.90	717.60	1549.70	1821.20	194.80	1468.20	1810.80	1468.20
		Non-Monsoon	201.50	88.00	75.20	14.60	89.70	122.10	142.90	233.70	108.90	108.90	233.70
		Annual	3014.60	1088.80	683.60	1209.50	807.30	1671.80	1964.10	223.90	1701.90	1919.70	1701.90
44	Mancheria	Monsoon	27598.90	6793.80	4255.10	2647.40	3606.00	9161.00	6516.00	1368.30	22108.50	6344.90	10973.30
		Non-Monsoon	801.70	320.70	342.00	148.20	628.80	577.20	616.10	148.00	417.30	455.80	382.80
		Annual	28400.60	7114.50	4597.10	2795.60	4234.80	9738.20	7132.10	1516.30	22525.80	6800.70	11356.10

Contd/...

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

V Basin :Godavari			Unit : M.C.M.										
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
45	Gandlapet	Monsoon	808.90	111.70	18.90	68.80	38.30	366.10	72.90	1.80	177.70	164.20	171.90
		Non-Monsoon	1.50	0.00	0.00	0.00	3.50	1.00	0.00	0.00	0.30	0.00	0.00
		Annual	810.40	111.70	18.90	68.80	41.80	367.10	72.90	1.80	178.00	164.20	171.90
46	Betmogra	Monsoon	600.10	47.80	129.30	122.50	1.40	315.20	80.00	27.50	770.90	245.70	342.10
		Non-Monsoon	12.70	0.00	0.00	0.00	0.10	0.00	0.90	5.00	0.90	1.60	0.00
		Annual	612.80	47.80	129.30	122.50	1.50	315.20	80.90	32.50	771.80	247.30	342.10
47	Degloor	Monsoon	533.70	70.90	105.50	690.40	18.20	285.70	476.50	57.40	694.70	253.50	599.30
		Non-Monsoon	2.30	0.00	0.00	0.00	5.10	1.90	0.40	6.60	12.00	0.00	0.00
		Annual	536.00	70.90	105.50	690.40	23.30	287.60	476.90	64.00	706.70	253.50	599.30
48	Saigaon	Monsoon	3272.40	401.60	340.80	230.10	18.10	330.10	1856.10	27.70	4644.50	501.20	1656.30
		Non-Monsoon	18.80	0.00	0.00	0.00	0.00	0.10	0.50	2.10	4.50	0.00	0.00
		Annual	3291.20	401.60	340.80	230.10	18.10	330.20	1856.60	29.70	4649.00	501.20	1656.30
49	Bhatkheda	Monsoon	-	20.20	5.20	278.60	13.90	197.50	498.00	8.00	1563.40	252.40	721.70
		Non-Monsoon	-	0.00	0.00	43.70	0.00	0.00	0.00	1.20	0.00	0.00	0.00
		Annual	-	20.20	5.20	322.30	13.90	197.50	498.00	9.30	1563.40	252.40	721.70
50	Yelli	Monsoon	12915.30	4763.30	3408.10	1322.10	2318.90	1629.80	2951.10	461.70	10857.60	3719.20	4967.30
		Non-Monsoon	458.20	132.40	60.20	15.10	102.60	0.10	8.30	114.50	35.10	63.90	13.90
		Annual	13373.50	4895.70	3468.30	1337.20	2421.50	1629.90	2959.40	576.20	10892.70	3783.10	4981.20
51	Purna	Monsoon	3719.30	999.40	1293.60	438.40	163.80	410.20	881.60	241.30	4429.70	1393.70	1712.10
		Non-Monsoon	110.60	27.10	65.10	17.20	4.50	0.00	3.40	67.80	26.30	2.40	3.60
		Annual	3829.90	1026.50	1358.70	455.60	168.30	410.20	885.00	309.10	4456.00	1396.00	1715.70
52	Zari	Monsoon	1149.60	413.90	670.20	347.00	23.70	59.80	221.20	64.30	1417.80	481.40	533.50
		Non-Monsoon	11.90	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.60	0.00	5.90
		Annual	1161.50	413.90	670.20	352.50	23.70	59.80	221.20	64.30	1418.40	481.40	539.40

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Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

V Basin :Godavari		Unit : M.C.M.											
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
53	G.R. Bridge	Monsoon	2468.90	2468.90	973.30	366.40	1728.50	422.40	1100.30	137.90	4298.10	1028.90	2578.50
		Non-Monsoon	236.60	102.30	1.20	4.70	0.00	0.00	0.00	0.00	1.20	0.00	0.00
		Annual	2705.50	2571.20	974.50	371.10	1728.50	422.40	1100.30	137.90	4299.30	1028.90	2578.50
54	Dhalegaon	Monsoon	3938.30	2536.10	805.60	184.80	2145.10	263.20	667.30	77.40	3147.00	711.00	1729.60
		Non-Monsoon	279.00	133.50	15.30	49.20	93.70	11.30	0.00	47.20	33.10	15.70	9.30
		Annual	4217.30	2669.60	820.90	234.00	2238.80	274.50	667.30	124.60	3180.10	726.70	1738.90
55	Pachegaon	Monsoon	816.60	938.00	16.10	29.90	936.20	17.60	196.40	300.20	569.00	323.50	87.30
		Non-Monsoon	0.00	0.00	0.00	0.00	0.00	0.00	0.30	3.30	3.50	1.00	0.10
		Annual	816.60	938.00	16.10	29.90	936.20	17.60	196.70	303.50	572.50	324.50	87.40
56	Ghargaon	Monsoon	-	-	-	-	1316.40	2729.90	798.10	872.30	682.30	671.40	408.30
		Non-Monsoon	-	-	-	-	0.00	0.00	0.00	12.70	4.50	1.40	0.00
		Annual	-	-	-	-	1316.40	2729.90	798.10	885.00	686.80	672.90	408.30

Source : Letter No.1/17/96-GC(Tech)/1106 dated 08.05.2003 from Superintending Engineer, Godavari Circle, Hyderabad and Water Year Book of Godavari Basin for the year 1995-96.

Table No. 1.5 : Site-wise Monsoon, Non-monsoon (NM) & Annual Flow of Water in Different River Basins

VI Basin : Krishna			Unit: MCM									
Sl No.	Site Name	Season	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13
1	VIJAYAWADA	MON	15035	14539	30816	8360	5866	2053	313	250	616	35590
		NM	3987	1979	2720	1915	1258	1098	62	89	31	443
		ANNUAL	19022	16519	33536	10275	7123	3151	375	339	647	36034
2	KEESARA	MON	2749	746	2859	1467	2776	465	225	763	680	2980
		NM	284	236	284	136	169	81	0	73	30	268
		ANNUAL	3033	982	3143	1602	2945	547	225	836	710	3248
3	MADHIRA	MON	626	193	559	419	649	91	61	86	177	781
		NM	118	83	119	68	76	55	0	12	13	164
		ANNUAL	744	276	678	487	725	145	61	98	190	946
4	PURUSHOTHAMAGUDEM	MON	288	20	296	13	578	17	2	159	13	287
		NM	1	1	2	0	0	0	0	1	0	38
		ANNUAL	289	20	298	13	578	17	2	160	13	324
5	PALERU BRIDGE	MON	344	268	561	311	504	111	37	12	34	483
		NM	192	93	182	58	46	99	0	2	49	168
		ANNUAL	192	93	182	58	46	99	0	2	49	168
6	WADENAPALLI	MON	14930	17925	30180	10496	6518	4319	3513	1517	3079	35270
		NM	6086	3660	4991	4165	3130	2735	682	921	1238	2525
		ANNUAL	21016	21585	35170	14661	9648	7054	4195	2437	4318	37795
7	DAMERACHERLA	MON	704	383	1192	474	765	387	8	40	233	1233
		NM	353	116	337	169	267	152	7	0	247	399
		ANNUAL	1056	499	1529	642	1032	540	15	40	480	1632
8	PONDUGALA	MON	15690	18366	34918	11282	7176	5862	6156	1087	1844	9628
		NM	5230	4590	4604	6061	4447	3563	1001	898	736	1131
		ANNUAL	20920	22956	39522	17343	11623	9424	7156	1984	2580	10759
9	HALIA	MON	52	21	117	16	101	201	1	17	107	879
		NM	13	4	9	4	8	6	0	0	8	51
		ANNUAL	65	25	126	20	109	207	2	18	115	930
10	LAKSHMIPURAM	MON	513	48	567	2	223	172	2	3	49	155
		NM	14	0	9	0	0	7	0	0	0	1
		ANNUAL	528	48	576	2	224	178	2	3	49	155
11	BAWAPURAM	MON	5250	4391	8141	5070	5474	3287	778	490	1531	5920
		NM	187	298	181	140	156	130	55	178	166	195
		ANNUAL	5437	4688	8322	5210	5630	3417	833	668	1696	6115

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Table No. 1.5 : Site-wise Monsoon, Non-monsoon (NM) & Annual Flow of Water in Different River Basins

VI Basin : Krishna			Unit: MCM									
Sl No.	Site Name	Season	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13
12	MANTRALAYAM	MON	5475	5224	7954	6307	5862	3623	920	851	2195	7068
		NM	606	610	556	399	393	408	280	361	318	465
		ANNUAL	6081	5834	8510	6706	6255	4032	1201	1213	2513	7533
13	T RAMAPURAM	MON	1265	283	1024	737	891	1260	235	181	309	966
		NM	119	110	96	84	83	76	28	48	45	124
		ANNUAL	1384	392	1120	821	974	1336	263	229	353	1090
14	KELLODU	MON	43	60	60	253	444	22	10	10	0	50
		NM	3	6	6	12	0	4	0	0	0	1
		ANNUAL	46	66	66	265	444	26	10	10	0	50
15	HOOVINAHOLE	MON	Regular observations from 2005.									
		NM										
		ANNUAL										
16	MAROL	MON	1045	2517	1835	2121	2017	803	806	847	1393	2325
		NM	0	49	2	0	0	0	0	0	0	0
		ANNUAL	1045	2565	1836	2121	2017	803	806	847	1393	2325
17	HARALAHALLI	MON	4885	7376	7033	7902	7062	4745	3585	3274	3418	7208
		NM	388	480	614	573	710	329	121	94	131	352
		ANNUAL	5273	7855	7647	8475	7772	5074	3706	3369	3549	7560
18	BYLADAHALLI	MON	406	353	410	317	460	233	127	47	100	344
		NM	83	44	111	28	115	10	4	0	0	51
		ANNUAL	489	397	521	345	576	244	131	47	100	395
19	KUPPELUR	MON	134	428	398	329	407	45	49	73	240	472
		NM	4	10	5	2	2	0	1	1	0	2
		ANNUAL	138	438	403	331	408	45	50	74	240	475
20	HONALI	MON	4488	7240	6301	7107	6179	4173	3752	3515	5244	7421
		NM	378	506	697	633	716	365	224	251	410	582
		ANNUAL	4866	7746	6997	7740	6895	4538	3976	3766	5654	8003
21	SHIMOGA	MON	4041	6162	5318	6065	5481	4217	3550	3425	4220	6070
		NM	105	188	213	119	96	76	77	56	56	150
		ANNUAL	4145	6351	5531	6185	5578	4293	3627	3481	4276	6221
22	HOLEHONNUR	MON	Regular observations from 2005.									
		NM										
		ANNUAL										
23	KRISHNA AGRAHARAM	MON	24854	30234	40653	22128	13114	12260	4833	2893	13672	45844
		NM	932	1152	978	355	730	650	1589	882	399	620
		ANNUAL	25787	31386	41631	22483	13844	12910	6422	3775	14071	46464
24	YADGIR	MON	8206	5111	20816	3389	3588	2427	728	920	2507	13512
		NM	158	136	337	121	238	57	153	772	79	56
		ANNUAL	8364	5247	21152	3511	3825	2484	880	1692	2586	13568

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Table No. 1.5 : Site-wise Monsoon, Non-monsoon (NM) & Annual Flow of Water in Different River Basins

VI Basin : Krishna			Unit: MCM									
Sl No.	Site Name	Season	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13
25	MALKHED	MON	1046	125	2907	449	1016	556	216	247	175	896
		NM	63	17	71	23	34	42	19	36	2	40
		ANNUAL	1109	142	2978	472	1049	598	235	282	176	935
26	CHINCHOLI	MON	0	0	0	42	49	0	0	0	0	0
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	0	0	0	42	49	0	0	0	0	0
27	JEWANGI	MON	228	49	876	83	35	201	32	143	3	213
		NM	8	2	9	3	48	5	1	2	0	10
		ANNUAL	236	50	885	86	83	206	33	145	3	222
28	BORIOMERGA	MON	259	17	1042	32	92	12	0	2	6	17
		NM	0	0	27	0	0	0	0	1	0	0
		ANNUAL	259	17	1069	32	92	12	0	3	6	17
29	WADAKBAL	MON	565	123	3709	200	200	189	16	1	189	349
		NM	0	0	10	18	18	0	3	2	2	5
		ANNUAL	565	123	3719	218	218	189	19	3	190	354
30	TAKLI	MON	4139	4473	9071	2303	252	726	42	8	1473	8999
		NM	23	69	55	12	25	0	7	2	0	0
		ANNUAL	4162	4542	9126	2315	277	726	49	9	1473	8999
31	KOKANGAON	MON	188	15	265	18	20	89	0	1	0	0
		NM	2	1	1	0	0	0	0	1	0	0
		ANNUAL	189	15	267	18	20	89	0	2	0	0
32	SHIRDHON	MON	59	1	162	7	11	42	0	1	3	2
		NM	0	0	1	0	0	0	0	0	0	0
		ANNUAL	60	1	163	7	11	42	0	1	3	2
33	NARSINGPUR	MON	3281	4661	5436	3023	131	336	296	106	1510	10469
		NM	0	2	0	86	245	142	202	206	378	313
		ANNUAL	3281	4663	5436	3109	376	477	498	312	1887	10782
34	SARATI	MON	1184	1239	1810	977	7	134	72	7	1014	2576
		NM	0	0	0	0	0	0	0	6	0	0
		ANNUAL	1184	1239	1810	977	7	134	72	14	1014	2576
35	DHOND	MON	3284	4634	3838	2198	983	864	1754	968	2767	9531
		NM	52	249	0	0	0	0	0	0	0	0
		ANNUAL	3336	4883	3838	2198	983	864	1754	968	2767	9531
36	PHULGAON	MON	1306	1952	1284	957	539	619	948	674	1263	1526
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	1306	1952	1284	957	539	619	948	674	1263	1526
37	HUVINHEDGI	MON	13438	21414	15914	16548	7372	7276	3747	2446	9367	25875
		NM	574	613	631	553	683	692	914	1100	948	919
		ANNUAL	14012	22028	16545	17101	8054	7968	4662	3546	10315	26795
38	TALIKOT	MON	322	117	657	140	313	358	160	24	118	102
		NM	2	11	40	2	5	0	0	3	10	19
		ANNUAL	324	128	697	142	317	358	160	27	129	121
39	CHOLACHGUDA	MON	1072	617	904	642	836	1161	318	200	559	789
		NM	1070	252	163	257	170	502	47	105	84	233
		ANNUAL	2142	869	1067	899	1006	1663	365	305	644	1022

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Table No. 1.5 : Site-wise Monsoon, Non-monsoon (NM) & Annual Flow of Water in Different River Basins

VI Basin : Krishna			Unit: MCM									
SI No.	Site Name	Season	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13
40	NAVALGUND	MON	291	213	230	240	249	131	47	54	129	299
		NM	103	82	46	68	34	35	22	14	42	80
		ANNUAL	395	295	276	309	283	166	70	68	171	379
41	MUDHOL	MON	Q from 2000				740	705	532	334	1033	4076
		NM	Q from 2000				69	44	44	28	0	52
		ANNUAL	Q from 2000				809	749	576	363	1033	4128
42	GOKAK FALLS	MON	780	3042	857	1948	851	517	560	355	748	3998
		NM	54	79	70	85	63	3	0	0	0	0
		ANNUAL	834	3121	927	2033	914	520	560	355	748	3998
43	GOTUR	MON	1150	1617	1122	1473	915	788	834	688	983	2051
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	1150	1617	1122	1473	915	788	834	688	983	2051
44	DADDI	MON	1561	2544	1637	2466	1556	1433	1338	1244	1848	2960
		NM	6	13	6	1	2	1	0	3	1	3
		ANNUAL	1567	2558	1643	2467	1558	1434	1338	1247	1849	2963
45	PANDEGAON	MON	38	2	136	29	29	18	1	0	3	9
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	38	2	136	29	29	18	1	0	3	9
46	SADALGA	MON	2254	3198	1861	2398	1450	962	1577	918	1852	4920
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	2254	3198	1861	2398	1450	962	1577	918	1852	4920
47	BASTAWDE	MON	1057	1601	1151	1470	982	828	793	816	1061	1687
		NM	1	0	0	0	0	0	0	0	0	0
		ANNUAL	1058	1601	602	1470	982	828	793	816	1061	1687
48	VANDUR	MON	639	1064	402	824	389	255	374	249	503	1432
		NM	286	220	1004	216	262	137	148	96	85	143
		ANNUAL	925	1284	373	1039	651	392	522	345	588	1575
49	TERWAD	MON	3170	5883	2916	3588	2666	3129	3151	2524	4294	8175
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	3170	5883	2916	3588	2666	3129	3151	2524	4294	8175
50	KURUNDWAD	MON	8605	15296	8273	10622	5356	6029	5918	4707	10831	23770
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	8605	15296	8273	10622	5356	6029	5918	4707	10831	23770
51	ARJUNWAD	MON	6273	10474	4976	8115	2877	3391	3223	2700	7788	18333
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	6273	10474	4976	8115	2877	3391	3223	2700	7788	18333
52	SAMDOLI	MON	2410	3497	1791	2844	1399	1526	1361	1438	2638	5839
		NM	0	0	0	0	0	0	0	0	0	0
		ANNUAL	2410	3497	1791	2844	1399	1526	1361	1438	2638	5839
53	KARAD	MON	3222	6506	3065	4661	1788	1712	2097	1779	4645	10048
		NM	568	672	558	627	607	523	499	542	434	435
		ANNUAL	3790	7178	3622	5288	2395	2235	2596	2320	5080	10483
54	WARUNJI	MON	1732	4200	1850	2974	2974	1161	1514	1331	2841	6041
		NM	524	535	528	516	516	502	509	503	441	383
		ANNUAL	2256	4736	2378	3490	3490	1663	2023	1833	3282	6424
55	KOYNA	MON	193	2293	568	1580	302	200	419	280	1254	3013
		NM	180	494	439	473	412	428	437	412	398	342
		ANNUAL	374	2787	468	2052	714	628	856	692	1652	3355

Source: Krishna & CO-Ordination Circle, Central Water Commission, H.No.11-4-648, 2nd Floor, Krishna Godavari Bhawan, A.C. Guards, Hyderabad-

500004.Letter No.KCC/C22012/12/2006/DRS/987-91and dated 24.07.2007.

(Updated during September 2007)

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

VII Basin : Cauvery		Unit : M.C.M.											
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Musiri	Monsoon	3007	5962	8617	5799	9829	4831	4632	7053	6709	5452	7590
		Non-Monsoon	767	1806	1833	1797	2843	1751	1963	2701	1829	2087	2129
		Annual	3774	7768	10450	7596	12672	6582	6595	9754	8538	7539	9719
2	Nallamaranpatti	Monsoon	34	29	284	1438	460	54	97	423	218	166	104
		Non-Monsoon	13	3	42	321	36	0	211	313	296	158	36
		Annual	47	32	326	1759	496	54	308	736	514	324	140
3	Kodumudi	Monsoon	3382	6980	8894	5959	10108	5262	4474	6513	6922	5572	7164
		Non-Monsoon	1139	2370	2466	1848	2961	1940	1830	2435	2040	2276	2441
		Annual	4521	9350	11360	7807	13069	7202	6304	8948	8962	7848	9605
4	Savandapur	Monsoon	294	315	569	312	598	329	293	353	373	405	288
		Non-Monsoon	210	230	280	274	321	404	284	300	356	249	265
		Annual	504	545	849	586	919	733	577	653	729	654	553
5	Tengumarahada	Monsoon	134	384	503	222	313	157	218	201	166	197	212
		Non-Monsoon	85	115	134	119	86	74	129	121	109	87	128
		Annual	219	499	637	341	399	231	347	322	275	284	340
6	Nellithurai	Monsoon	966	936	1749	960	1660	879	1092	1267	1022	820	591
		Non-Monsoon	170	227	328	89	111	240	445	508	296	41	77
		Annual	1136	1163	2077	1049	1771	1119	1537	1775	1318	861	668
7	Urachikottai	Monsoon	3235	6309	8297	5350	9255	4880	4175	5827	6573	4770	7282
		Non-Monsoon	1289	2205	2315	1535	2736	1701	1718	2077	1257	1557	1749
		Annual	4524	8514	10612	6885	11991	6581	5893	7904	7830	6327	9031
8	Biligundulu	Monsoon	3307	8249	8762	5105	9770	4339	5462	6195	5760	6194	7384
		Non-Monsoon	1156	1395	1392	1418	1387	1197	1526	1650	1578	1555	1656
		Annual	4463	9644	10154	6523	11157	5536	6988	7845	7338	7749	9040

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Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

VII Basin : Cauvery		Unit : M.C.M.											
Sl.No.	Site Name	Season	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
9	Kanakpara	Monsoon	29	289	108	133	61	102	231	175	401	285	506
		Non-Monsoon	1	29	14	41	7	7	39	51	40	109	64
		Annual	30	318	122	174	68	109	270	226	441	394	570
10	T.K Halli	Monsoon	179	651	511	472	382	373	1002	588	858	727	1244
		Non-Monsoon	92	108	141	189	117	110	94	141	164	200	168
		Annual	271	759	652	661	499	483	1096	729	1022	927	1412
11	Kollegal	Monsoon	3154	6067	8483	3953	9734	3756	4094	6033	4651	5514	5725
		Non-Monsoon	1005	995	1083	1030	1022	974	1162	1525	1158	1150	1355
		Annual	4159	7062	9566	4983	10756	4730	5256	7558	5809	6664	7080
12	T.Narsipur	Monsoon	1731	2757	3599	2372	4012	2055	1992	2483	2259	2095	2355
		Non-Monsoon	401	290	331	261	293	281	323	482	511	283	487
		Annual	2132	3047	3930	2633	4305	2336	2315	2965	2770	2378	2842
13	Muthankera	Monsoon	2183	2522	3169	2066	3289	2104	2409	2373	2406	2124	2135
		Non-Monsoon	116	83	183	141	186	92	185	163	158	91	252
		Annual	2299	2605	3352	2207	3475	2196	2594	2536	2564	2215	2387
14	Kattemalalavadi	Monsoon	163	465	672	282	677	277	293	458	298	330	297
		Non-Monsoon	2	11	25	9	13	7	27	25	13	10	22
		Annual	165	476	697	291	690	284	320	483	311	340	319
15	M.H. Halli	Monsoon	621	1482	2010	924	2172	429	338	500	343	621	933
		Non-Monsoon	390	395	553	597	311	409	245	191	199	340	187
		Annual	1011	1877	2563	1521	2483	838	583	691	542	961	1120
16	Kudige	Monsoon	2397	3021	3322	1993	3997	2226	2465	2974	2259	2430	2262
		Non-Monsoon	109	82	188	119	167	89	172	185	191	130	174
		Annual	2506	3103	3510	2112	4164	2315	2637	3159	2450	2560	2436

Source: Water Year Book for 2000-2001.

Note : The G&D Site Originally established at Thorenur was shifted to Kudige on 01.11.1973.
Hence the Flow Data is considered from 1974-75.

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

VIII Basin : East Flowing River												Unit : M.C.M.	
Sl.No.	Site Name	Season	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Thammavaram	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	1218.00	1601.00	1344.00	1030.00	1189.00	1273.00	899.00	1709.00	1732	1729	916.0
2	K.Bitragunta	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	-	300.00	137.00	323.00	323.00	58.00	463.40	206.2	434.0	3.133
3	Nellore	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	643.50	782.10	3820.00	173.00	1140.00	555.90	14.77	7281.00	1182	3377	33.78
4	Chennur	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	1382.00	1671.00	598.50	1360.00	875.10	893.20	6548.00	1575	3789	1068
5	Alladupalli	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	1215.00	1265.00	1144.00	765.10	1017.00	741.90	709.30	2905.00	1245	2707	1241
6	Singavaram	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	314.30	4.67	197.30	6.83	0.26	Dry	33.44	666.90	13.14	127.4	28.51
7	Tadapatri	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	433.30	67.13	47.26	43.03	86.75	32.57	43.80	380.00	90.36	464.0	89.24
8	Nagalamadike	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	36.46	1.04	154.10	Dry	4.41	0.95	Dry	1.60	0.407	20.36	2.212

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

VIII Basin : East Flowing River												Unit : M.C.M.	
Sl.No.	Site Name	Season	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
9	Nandipalli	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	190.60	213.90	23.24	60.83	52.01	37.24	488.50	28.81	242.7	1.918
10	Kamalapuram	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	34.13	813.70	12.53	53.91	16.68	47.52	1275.00	200.1	146.9	Dry
11	Naidupeta	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	181.30	472.30	969.10	94.44	515.20	205.20	95.82	1199.00	580.2	196.7	22.40
12	Sullurpet	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	24.54	144.50	293.50	27.65	246.60	174.50	89.34	658.20	400.5	125.9	12.45
13	Chengalpattu	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	34.62	47.10	928.80	78.41	231.30	182.00	94.75	1849.00	1088	1327	27.68
14	Magaral	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	Dry	Dry	287.50	54.10	29.90	77.01	9.30	737.80	608.1	419.9	1.065
15	Arcot	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	Dry	Dry	1176.00	0.17	212.20	7.49	51.83	834.00	55.18	64.08	Dry
16	Avaramkuppam	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	42.34	3.74	162.70	15.69	52.30	8.88	60.26	233.00	29.41	105.0	7.116
17	Villupuram	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	9.16	Dry	1014.00	189.20	327.20	80.88	1.40	1710.00	903.10	803.50	61.25
18	Vazhavachanur	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	41.16	9.47	1051.00	298.50	336.70	143.30	90.12	1253.00	758.0	576.9	208.2

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

VIII Basin : East Flowing River												Unit : M.C.M.	
Sl.No.	Site Name	Season	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
19	Gummanur	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	172.60	25.92	532.00	70.29	169.70	78.28	141.20	234.10	314.3	301.0	236.8
20	Kudalaiyathur	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	Dry	493.50	824.70	1434.00	179.30	20.04	410.90	691.0	880.9	266.8
21	Paramakudi	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	27.52	9.77	0.40	177.60	527.80	260.80	Dry	10.80	450.1	510.7	22.06
22	Theni	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	709.30	615.40	514.80	905.70	667.70	819.40	588.70	583.20	767.0	880.8	481.9
23	Irrukkankudi	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	230.20	10.63	15.91	93.90	18.73	Dry	54.94	571.4	100.8	8.334
24	Murappanadu	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	381.60	511.40	386.90	996.10	1215.00	558.60	242.10	215.30	881.8	420.7	390.7
25	A.P.Puram	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	32.57	6.19	11.98	72.47	38.36	8.83	2.90	0.02	169.0	30.98	1.767

Source: Water Year Book for 1999-2000

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

IX Basin : West Flowing River		Unit : M.C.M.											
Sl.No.	Site Name	Season	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Badlapur	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	2140.00	3742.00	3326.00	2370.00	3209.00	3876.00	1808.00	2424.00	2576.00	2642.00	2539
2	Mangaon	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	813.20	1243.00	1096.00	801.70	1134.00	1376.00	869.50	921.00	913.80	1156.00	1006
3	Anjanari	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	-	-	620.90	907.10	1043.00	750.60	961.00	860.30	1068.00	1019
4	Adavali	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	3111.00	3215.00	3091.00	2382.00	3301.00	3210.00	2964.00	3309.00	2834.00	3316.00	2713
5	Ganjim	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	2766.00	4053.00	3214.00	3313.00	3191.00	4658.00	2948.00	2547.00	3796.00	3032.00	3842
6	Collem	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	428.80	627.40	479.20	486.20	471.50	627.50	414.70	421.00	524.40	420.40	393.20
7	Santeguli	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	3395.00	4751.00	4925.00	5566.00	4287.00	6567.00	3521.00	3718.00	6040.00	5898.00	5121
8	Haladi	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	2022.00	2554.00	2077.00	2203.00	2069.00	2800.00	1699.00	1531.00	2122.00	2125.00	2008
9	Yennehole	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	-	1746.00	1551.00	1767.00	1405.00	2143.00	1375.00	1409.00	1612.00	1803.00	1665
10	Bantwal	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	9485.00	12417.00	11128.00	12674.00	9577.00	15076.00	10023.00	10053.00	12073.00	12487.00	10972
11	Erinjipuzha	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	2330.00	2798.00	2832.00	2794.00	1863.00	3301.00	1948.00	2488.00	2522.00	2478.00	2271

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

IX Basin : West Flowing River		Unit : M.C.M.											
Sl.No.	Site Name	Season	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
12	Perumannu	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	3084.00	3695.00	3636.00	4742.00	3355.00	4688.00	3272.00	3568.00	4166.00	4311.00	3976
13	Kuniyal	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	3399.00	3262.00	4325.00	5539.00	3941.00	6060.00	3842.00	3940.00	4617.00	5775.00	4853
14	Karathodu	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	1033.00	1059.00	1543.00	1815.00	1105.00	1937.00	1239.00	1024.00	1561.00	1195.00	1518
15	Kumbidi	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	4107.00	3808.00	5539.00	6041.00	3686.00	6785.00	4744.00	3850.00	4041.00	5449.00	3614
16	Pulamanthole	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	1639.00	1275.00	1816.00	2469.00	1502.00	2304.00	1729.00	1606.00	2005.00	2197.00	1891
17	Mankara	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	387.30	446.80	638.90	1323.00	439.50	1274.00	546.50	597.80	907.80	1658.00	1046
18	Pudur	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	204.60	299.30	289.90	550.70	239.70	562.40	206.30	164.60	306.10	426.70	213.70
19	Ambarampalyan	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	286.40	263.40	250.00	824.50	351.80	551.40	299.80	266.80	358.30	499.10	362.80
20	Arangaly	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	1739.00	1656.00	1961.00	2362.00	1598.00	2765.00	1854.00	1351.00	1419.00	2663.00	1951
21	Neeleswaram	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	7628.00	6177.00	9968.00	8143.00	6355.00	8911.00	6715.00	6048.00	6603.00	8761.00	5777
22	Ramamangalan	Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-
		Annual	5290.00	4529.00	4876.00	6098.00	5505.00	5902.00	5509.00	5002.00	4897.00	6703.00	5214

Table No.1.5 : Sitewise Monsoon Non-monsoon & Annual Flow of Water in Different River Basins

IX		Basin :	West Flowing River										Unit : M.C.M.	
SL.No.	Site Name	Season	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
23	Kalampur	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	1380.00	952.50	1049.00	1340.00	1062.00	1329.00	1257.00	1214.00	1148.00	1578.00	1238	
24	Kidangoor	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	1751.00	1362.00	1761.00	2252.00	1874.00	1893.00	1753.00	1723.00	1966.00	2310.00	1752	
25	Kallooppara	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	2073.00	1378.00	1803.00	2398.00	2002.00	2147.00	1951.00	1905.00	1973.00	2196.00	1474	
26	Malakkar	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	4355.00	3289.00	4064.00	5397.00	4300.00	4721.00	4247.00	3785.00	3666.00	5295.00	3728	
27	Thumpamon	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	1439.00	860.50	1470.00	1911.00	1284.00	1614.00	1449.00	1039.00	1072.00	1613.00	1195	
28	Pattazhi	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	1893.00	1511.00	1943.00	2839.00	1533.00	2032.00	1472.00	1196.00	1208.00	2054.00	1711	
29	Ayilam	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	749.50	488.80	965.30	1134.00	876.80	750.80	542.40	542.70	651.00	920.50	740.2	
30	Kolad	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	<-----Stared w.e.f. 13.09.1996 ----->									817.20	471.40	449.40
31	Nagothane	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	<-----Stared w.e.f. 25.09.1996 ----->									1603.00	1261.00	604.70
32	Pan	Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Non-Monsoon	-	-	-	-	-	-	-	-	-	-	-	
		Annual	<-----Stared w.e.f. 17.09.1996 ----->									334.60	305.80	218.50

Source: Water Year Book for 1999-2000

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basins

XI Basin: Narmada												Unit : M.C.M.	
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Orsang at Chandwada	Monsoon	301.28	149.33	1613.50	1026.92	2586.23	839.48	531.13	820.70	3867.53	481.16	211.96
		Non-Monsoon	0.00	0.00	2.60	0.00	27.45	0.78	0.96	0.01	23.93	0.10	13.52
		Annual	301.28	149.33	1616.10	1026.92	2613.68	840.26	532.09	820.71	3891.46	481.26	225.48
2	Narmada at	Monsoon	32556.44	13181.81	30197.66	19849.61	46091.72	22462.95	16535.93	29925.68	69256.49	18175.28	21616.87
		Non-Monsoon	2458.43	1818.31	2531.53	3339.45	4784.37	3027.15	4149.07	5625.04	4208.38	5217.46	5342.50
		Annual	301.28	149.33	1616.10	1026.92	50876.09	25490.10	20685.00	35550.72	73464.87	23392.74	26959.37
3	Narmada at Rajghat	Monsoon	20887.44	32219.10	12797.13	28997.31	16937.82	40178.03	22188.37	16848.52	31357.32	67798.63	21103.58
		Non-Monsoon	3157.00	2282.12	1683.75	2145.50	2913.78	4541.60	2958.08	3423.76	4783.32	4471.55	4072.00
		Annual	301.28	149.33	1616.10	1026.92	19851.60	44719.63	25146.45	20272.28	36140.64	72270.18	25175.58
4	Narmada at Mandleshwar	Monsoon	35222.46	12921.09	29582.91	16664.25	42935.62	21644.02	16564.47	30158.61	64561.80	20359.79	19129.97
		Non-Monsoon	2340.26	1785.51	2195.27	2701.20	4662.49	3233.87	3188.10	4947.83	3942.03	4196.51	4485.45
		Annual	301.28	149.33	1616.10	1026.92	47598.11	24877.89	19752.57	35106.44	68503.83	24556.30	23615.42
5	Kundi at Kogaon	Monsoon	711.10	162.60	2041.89	1831.06	2153.48	569.14	219.41	940.51	1825.62	635.44	1292.87
		Non-Monsoon	4.21	1.05	66.45	22.37	80.59	5.82	2.75	24.62	24.79	1.68	38.56
		Annual	301.28	149.33	1616.10	1026.92	2234.07	574.96	222.16	965.13	1850.41	637.12	1331.43
6	Chhota Tawa at Ginnore	Monsoon	2332.30	709.50	2657.14	1394.55	2402.45	956.32	553.11	2531.03	4482.91	1499.27	2086.90
		Non-Monsoon	14.90	32.83	71.37	15.19	73.72	1.31	0.78	102.65	50.07	6.91	80.31
		Annual	301.28	149.33	1616.10	1026.92	2476.17	957.63	553.89	2633.68	4532.98	1506.18	2167.21
7	Narmada at Handia	Monsoon	28588.08	10460.51	18891.90	11937.53	30299.62	21645.30	15493.53	20746.31	54880.23	17869.95	9483.75
		Non-Monsoon	2058.73	1634.39	1743.79	2727.23	4072.33	3306.74	3453.73	5238.29	3467.94	3294.63	3570.39
		Annual	301.28	149.33	1616.10	1026.92	34371.95	24952.04	18947.26	25984.60	58348.17	21164.58	13054.14
8	Ganjal at Chhidgaon	Monsoon	1463.40	216.57	788.65	683.20	1572.38	364.01	372.88	1075.55	2137.40	677.08	886.60
		Non-Monsoon	33.60	18.31	23.30	18.61	50.38	11.01	12.00	56.01	45.37	19.76	64.79
		Annual	301.28	149.33	1616.10	1026.92	1622.76	375.02	384.88	1131.56	2182.77	696.84	951.39
9	Narmada at Hoshangabad	Monsoon	22565.95	10646.20	18771.52	9747.75	28212.62	18456.87	13927.04	17118.17	48600.81	14561.75	6694.39
		Non-Monsoon	1564.22	1209.59	1716.21	2614.68	4035.30	2744.31	3107.30	4046.41	3757.60	4620.09	4308.48
		Annual	301.28	149.33	1616.10	1026.92	32247.92	21201.18	17034.34	21164.58	52358.41	19181.84	11002.87
10	Narmada at Sandia	Monsoon	9114.15	6065.60	14107.58	5720.28	20069.14	13580.72	10464.36	10913.37	33572.86	12608.10	5080.22
		Non-Monsoon	1212.10	943.15	1281.04	2049.68	3586.53	2829.38	2481.65	3622.25	3417.50	3577.61	3868.51
		Annual	301.28	149.33	1616.10	1026.92	23655.67	16410.10	12946.01	14535.62	36990.36	16185.71	8948.73

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basins

XI Basin: Narmada			Unit : M.C.M.										
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
11	Shakkat at Gadarwara	Monsoon	1336.72	394.00	1359.63	923.14	2080.30	659.47	1062.94	1324.67	2917.43	793.04	608.08
		Non-Monsoon	66.21	44.21	60.24	42.63	97.10	39.62	44.31	76.72	105.74	55.06	48.30
		Annual	301.28	149.33	1616.10	1026.92	2177.40	699.09	1107.25	1401.39	3023.17	848.10	656.38
12	Narmada at Barmanghat	Monsoon	8133.66	6512.62	5420.58	3029.53	15613.04	11020.41	7732.20	7561.70	25138.14	9774.38	3698.30
		Non-Monsoon	706.29	601.50	886.01	1658.41	2540.94	1877.14	2097.49	3356.58	2884.84	3512.66	2720.56
		Annual	301.28	149.33	1616.10	1026.92	18153.98	12897.55	9829.69	10918.28	28022.98	13287.04	6418.86
13	Sher at Belkheri	Monsoon	611.97	188.07	554.51	455.60	1174.17	435.16	624.74	623.52	1626.88	489.32	236.46
		Non-Monsoon	24.49	19.87	10.98	14.20	32.19	12.77	12.82	18.96	27.72	30.58	14.50
		Annual	301.28	149.33	1616.10	1026.92	1206.36	447.93	637.56	642.48	1654.60	519.90	250.96
14	Hiran at Patan	Monsoon	1256.88	1415.68	1258.43	439.48	2988.50	1794.45	1711.12	1317.89	3467.26	1436.37	496.41
		Non-Monsoon	77.17	154.54	94.68	40.43	144.89	82.77	110.44	119.11	123.41	111.12	63.68
		Annual	301.28	149.33	1616.10	1026.92	3133.39	1877.22	1821.56	1437.00	3590.67	1547.49	560.09
15	Narmada at Jamtara	Monsoon	8555.33	5393.58	9707.30	1725.13	10372.20	7889.24	6749.71	5093.21	19724.48	7175.48	2906.78
		Non-Monsoon	510.94	375.97	623.46	955.72	2594.72	1876.58	2040.75	3433.60	2918.17	3327.09	3148.44
		Annual	301.28	149.33	1616.10	1026.92	12966.92	9765.82	8790.46	8526.81	22642.65	10502.57	6055.22
16	Banjar at Hirdaya Nagar	Monsoon	1961.09	578.45	1964.57	934.48	2921.67	1436.43	1098.67	1345.96	4643.90	1508.97	796.49
		Non-Monsoon	36.88	40.69	27.41	27.66	89.71	17.25	7.18	38.37	219.14	101.30	17.92
		Annual	301.28	149.33	1616.10	1026.92	3011.38	1453.68	1105.85	1384.33	4863.04	1610.27	814.41
17	Burhner at Mohgaon	Monsoon	2120.46	1651.19	2509.06	1017.66	3583.41	1937.18	2102.07	1887.89	4177.25	2323.57	1256.43
		Non-Monsoon	73.48	107.14	56.29	40.83	136.21	44.80	38.08	67.21	126.54	127.88	54.16
		Annual	301.28	149.33	1616.10	1026.92	3719.62	1981.98	2140.15	1955.10	4303.79	2451.45	1310.59
18	Narmada at Manot	Monsoon	3469.55	3688.27	3101.84	1309.88	4119.56	2914.95	2418.26	2593.50	5293.54	3097.26	2027.91
		Non-Monsoon	154.98	211.07	103.68	97.02	206.64	92.94	88.02	121.74	180.23	254.44	138.90
		Annual	301.28	149.33	1616.10	1026.92	4326.20	3007.89	2506.28	2715.24	5473.77	3351.70	2166.81
19	Narmada at Dindori	Monsoon	0.00	0.00	656.71	699.00	1399.13	1051.91	897.28	1011.64	2408.56	1069.01	1099.62
		Non-Monsoon	0.00	0.00	68.15	63.87	105.99	72.93	55.37	88.38	7127.64	127.70	80.38
		Annual	301.28	149.33	1616.10	1026.92	1505.12	1124.84	952.65	1100.02	9536.20	1196.71	1180.00

Source: Letter (No.5/1/2000/CE(NBO)/416), dated 21/05/2002, of Superintending Engineer, CWC, Bhopal.

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basin

XII Basin : Mahi, Sabarmati & other West Flowing Rivers of Saurashtra & Kut												Unit : M.C.M.		
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
a) Basin: Mahi														
1	Khanpur	Monsoon	1922.00	919.30	2453.00	2088.00	9642.00	4387.00	492.70	3240.00	19112.00	476.30	-	
		Non-Monsoon	147.00	190.30	307.00	212.00	1918.00	244.00	376.40	239.00	571.00	315.20	-	
		Annual	2069.00	1109.60	2760.00	2300.00	11560.00	4631.00	869.10	3479.00	19683.00	791.50	-	
2	Chalaliya	Monsoon						987.50	323.50	1410.00	5267.00	776.10	-	
		Non-Monsoon	Discharge Observation started from 13.2.91.						17.80	7.80	15.00	29.00	1.90	-
		Annual						1005.30	331.30	1425.00	5296.00	778.00	-	
3	Paderdibadi	Monsoon	1637.00	641.00	834.20	868.30	3762.00	2109.00	661.70	1217.00	6258.00	327.90	-	
		Non-Monsoon	116.00	44.30	51.70	106.60	192.00	120.00	81.20	105.00	168.00	39.80	-	
		Annual	1753.00	685.30	885.90	974.90	3954.00	2229.00	742.90	1322.00	6426.00	367.70	-	
4	Rangeli	Monsoon	528.70	-	-	470.80	Data Not	962.00	556.80	753.00	2181.00	150.90	-	
		Non-Monsoon	85.80	-	-	98.40	published	88.00	76.30	69.70	121.00	27.10	-	
		Annual	614.50	-	-	569.20	0.00	1050.00	633.10	822.70	2302.00	178.00	-	
5	Dhariawad	Monsoon	Observation	started	89.40	Data Not	460.50	247.50	30.85	140.40	349.80	26.45	-	
		Non-Monsoon	w.e.f 1.6.88		0.00	published	50.50	11.80	3.79	7.30	3.20	0.53	-	
		Annual	-	-	89.40	0.00	511.00	259.30	34.64	147.70	353.00	26.98	-	
6	Mataji	Monsoon	1224.00	481.90	1893.00	702.70	2277.00	1333.00	372.70	1074.00	2556.00	877.90	-	
		Non-Monsoon	5.00	6.00	31.00	5.70	41.00	8.00	15.10	33.00	17.00	12.20	-	
		Annual	1229.00	487.90	1924.00	708.40	2318.00	1341.00	387.80	1107.00	2573.00	890.10	-	

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basin

XII Basin : Mahi, Sabarmati & other West Flowing Rivers of Saurashtra & Kutch												Unit : M.C.M.		
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
b) Basin : Sabarmati														
1	Nabhoi	Monsoon						888.10	918.70	1435.00	4374.00	202.60	-	
		Non-Monsoon	Observation Started from 14.2.91					23.40	12.20	53.00	9.00	4.00	-	
		Annual						911.50	930.90	1488.00	4383.00	206.60	-	
2	Kheda	Monsoon				151.50	738.80	189.50	29.75	278.20	1299.00	23.04	-	
		Non-Monsoon	Observation Started w.e.f.10.7.85				0.00	3.10	0.00	0.00	0.00	1.00	0.00	-
		Annual					151.50	741.90	189.50	29.75	278.20	1300.00	23.04	-
3	Ratanpur	Monsoon						143.50	54.49	231.00	728.50	38.25	-	
		Non-Monsoon	Observation Started w.e.f.11.7.85					1.90	0.02	0.10	20.00	0.00	-	
		Annual						145.40	54.51	231.10	748.50	38.25	-	
4	Derol Bridge	Monsoon								714.20	1885.00	166.30	-	
		Non-Monsoon	Observation Started w.e.f.1.6.91								126.00	139.00	119.40	-
		Annual									840.20	2024.00	285.70	-
5	Kheroj	Monsoon							793.00	421.30	1048.00	189.50	-	
		Non-Monsoon	Discharge Observation w.e.f.1.6.91							10.40	0.00	8.00	0.80	-
		Annual								803.40	421.30	1056.00	190.30	-
c) Basin : Luni														
1	Gandhav	Monsoon	0.00	0.00	0.00	0.00	1991.00	3.43	841.30	91.80	442.10	489.30	-	
		Non-Monsoon	0.00	0.00	0.00	0.00	20.00	0.85	5.30	0.89	32.20	0.00	-	
		Annual	0.00	0.00	0.00	0.00	2011.00	4.28	846.60	92.69	474.30	489.30	-	
2	Balotra	Monsoon	Observation started w.e.f 11.7.90				0.00	712.60	0.00	1036.00	5.44	307.90	613.50	-
		Non-Monsoon					0.00	0.00	0.00	0.00	0.00	0.00	-	
		Annual					0.00	712.60	0.00	1036.00	5.44	307.90	613.50	-

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basin

XII Basin : Mahi, Sabarmati & other West Flowing Rivers of Saurashtra & Kutch												Unit : M.C.M.		
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
d) Basin : Banas														
1	Kamalpur	Monsoon	0.00	0.00	46.22	34.04	639.70	0.77	865.10	984.40	3262.00	59.49	-	
		Non-Monsoon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	-
		Annual	0.00	0.00	46.22	34.04	639.70	0.77	865.10	984.40	3274.00	59.49	-	
2	Chitrasani	Monsoon					52.49	11.40	107.90	37.74	150.70	33.81	-	
		Non-Monsoon	Observation Started w.e.f.15.6.91				Data not	0.60	0.04	2.10	0.04	7.20	0.00	-
		Annual					53.09	11.44	110.00	37.78	157.90	33.81	-	
3	Sarotry	Monsoon				35.03	870.90	65.20	897.90	220.70	1483.00	133.20	-	
		Non-Monsoon	Discharge Observation w.e.f.1.6.85				0.00	17.60	0.80	26.60	16.10	1128.00	2.20	-
		Annual					35.03	888.50	66.00	924.50	236.80	2611.00	135.40	-
4	Abu Road	Monsoon				12.98	431.50	19.84	489.00	77.48	602.40	58.29	-	
		Non-Monsoon	Discharge Observation w.e.f.3.7.85				0.00	4.50	0.00	10.90	2.07	8.90	0.00	-
		Annual					12.98	436.00	19.84	499.90	79.55	611.30	58.29	-
e) Basin : Damanganga														
1	Ozerkhed	Monsoon						1010.00	643.60	913.50	1740.00	883.30	-	
		Non-Monsoon	Discharge Observation w.e.f.1.6.91					7.00	10.30	29.70	5.00	5.30	-	
		Annual						1017.00	653.90	943.20	1745.00	888.60	-	
2	Nanipalsar	Monsoon						1041.00	633.00	907.40	1220.00	433.60	-	
		Non-Monsoon	w.e.f.1.6.91					1.00	2.20	27.20	8.00	5.40	-	
		Annual						1042.00	635.20	934.60	1228.00	439.00	-	

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basin

XII Basin : Mahi, Sabarmati & other West Flowing Rivers of Saurashtra & Kutch												Unit : M.C.M.	
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
f) Basin : Independent River:													
1	Shetrunji at Lowara	Monsoon	113.40	19.44	484.80	182.60	200.80	65.75	118.50	155.00	314.00	51.97	-
		Non-Monsoon	0.00	1.99	0.60	4.40	4.10	0.00	0.00	0.70	0.70	0.00	-
		Annual	113.40	21.43	485.40	187.00	204.90	65.75	118.50	155.70	314.70	51.97	-
2	Bhadar at Ganod	Monsoon	56.90	0.00	1723.00	0.60	164.70	83.72	372.30	38.27	832.20	42.37	-
		Non-Monsoon	0.00	2.59	5.00	293.80	0.00	0.00	0.10	0.00	2.60	0.00	-
		Annual	56.90	2.59	1728.00	294.40	164.70	83.72	372.40	38.27	834.80	42.37	-
3	Machhu at Gungan	Monsoon	111.20	14.06	670.00	294.80	48.13	3.76	46.38	1.63	667.50	17.05	-
		Non-Monsoon	0.00	0.00	0.00	185.30	0.82	0.00	0.00	0.00	12.10	0.00	-
		Annual	111.20	14.06	670.00	480.10	48.95	3.76	46.38	1.63	679.60	17.05	-
4	Rupen at Sapawada	Monsoon				185.30	104.70	8.05	54.76	225.50	177.80	25.04	-
		Non-Monsoon	Started w.e.f. 31.8.89			0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
		Annual				185.30	104.70	8.05	54.76	225.50	177.80	25.04	-
5	Purna at Mahuwa	Monsoon	495.60	326.06	2022.00	1182.00	1020.00	594.70	956.30	1319.00	2953.00	681.30	-
		Non-Monsoon	18.60	15.70	48.00	39.00	55.00	23.00	28.60	64.00	38.00	28.60	-
		Annual	514.20	341.76	2070.00	1221.00	1075.00	617.70	984.90	1383.00	2991.00	709.90	-
6	Ambica at Gadat	Monsoon	859.40	351.40	2253.00	1224.00	1044.00	915.80	1337.00	1617.00	3807.00	891.90	-
		Non-Monsoon	29.50	23.00	59.00	41.00	53.00	26.70	52.00	88.00	52.00	46.30	-
		Annual	888.90	374.40	2312.00	1265.00	1097.00	942.50	1389.00	1705.00	3859.00	938.20	-
7	Vitarana at Durvesh	Monsoon	1678.00	1397.00	2840.00	1998.00	3481.00	2263.00	1906.00	2463.00	3989.00	1620.00	-
		Non-Monsoon	0.00	1.00	8.00	6.00	12.00	2.00	4.00	33.00	1.00	18.00	-
		Annual	1678.00	1398.00	2848.00	2004.00	3493.00	2265.00	1910.00	2496.00	3990.00	1638.00	-
8	Dhadar at Pongalwada	Monsoon					933.10	296.00	131.60	416.80	624.90	330.30	-
		Non-Monsoon	Discharge Observation started w.e.f.30.6.89				30.20	8.80	8.30	11.20	13.10	15.10	-
		Annual					963.30	304.80	139.90	428.00	638.00	345.40	-
9	Kim at Motinaroli	Monsoon						105.60	511.40	320.00	857.50	190.50	-
		Non-Monsoon	Discharge Observation started w.e.f.17.10.90					26.20	33.20	36.40	46.40	31.70	-
		Annual						131.80	544.60	356.40	903.90	222.20	-

Source: Office of the Superintending Engineer, CWC, Vadodra
 - : Not Available

Table No.1.6 : Sitewise Maximum and Minimum Observed Water Levels & Discharges in Different River Basins

I Basin: Mahanadi River

S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed		Minimum Observed		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Discharge		Discharge		
								Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Sukma	158.080	23.07.1995	2536	152.790	11.02.1994	0.050	23.07.1995	2512	11.02.1994	0.050	06/89 to 05/02
2	Kantamal	131.415	29.08.1982	16409	119.745	18.04.1988	0.027	28.07.1992	16283	18.04.1998	0.027	08/71 to 05/02
3	Kesinga	178.835	13.09.1977	19603	168.045	17.05.1993	0.033	22.08.1990	19441	17.05.1993	0.033	11/78 to 05/02
4	Pandigaon @@	190.945	27.07.1992	4250	182.010	08.05.1994	0.040	28.07.1992	4217	08.05.1994	0.040	06/89 to 05/02
5	Salebhata	140.280	30.08.1982	14547.5	130.510	16.12.1996	0.016	30.08.1982	14508	16.12.1996	0.016	11/71 to 05/02
6	Sundergarh	222.900	11.09.1998	10500	216.510	27.05.1980	0.004	11.09.1998	10404	27.05.1980	0.004	12/77 to 05/02
7	Kurubhata	220.320	18.07.1995	2200	215.900	23.04.1980	0.100	08.08.1985	2120	23.04.1980	0.100	04/77 to 05/02
8	Basantpur	219.820	20.09.1980	26874	207.845	22.05.1975	1.000	15.08.1976	26142	22.05.1975	1.000	09/70 to 05/02
9	Bamnidhi	229.285	22.08.1975	12700	224.325	15.05.1980	0.900	22.08.1975	9583	15.05.1980	0.900	04/77 to 05/02
10	Manendragarh	420.860	12.07.1990	2329	413.020	31.03.1990	0.046	12.07.1990	2088	31.03.1990	0.046	06/89 to 05/02
11	Seorinarayan	222.960	11.07.1994	18960	211.930	07.05.1995	0.130	11.07.1994	17500	07.05.1995	0.130	12/85 to 05/02
12	Rampur	227.890	30.08.1982	4100	220.445	08.01.1986	0.100	31.08.1982	3578	08.01.1983	0.100	02/71 to 05/02
13	Jondhra	230.595	14.07.1994	12700	219.790	27.05.1997	0.076	20.09.1980	11033	27.05.1997	0.076	06/79 to 05/02
14	Ghatora	254.650	11.07.1994	2872	247.350	12.05.1993	0.021	14.07.1994	1893	12.05.1993	0.021	09/79 to 05/02
15	Andhiyakore	260.150	08.10.1994	1365	253.700	05.03.1999	0.147	08.10.1994	1365	05.03.1999	0.147	11/77 to 05/02
16	Simga	257.680	13.07.1994	11708	245.785	13.05.1999	0.036	13.07.1994	11703	13.05.1993	0.036	08/71 to 05/02
17	Pathardih	279.210	12.07.1994	1950	272.140	03.05.1993	0.026	02.08.1996	1890	03.05.1993	0.026	09/89 to 05/02
18	Kotni	280.080	30.08.1998	5120	270.380	02.03.1996	0.014	15.08.1986	5098	02.03.1996	0.014	09/78 to 05/02
19	Rajim	283.710	18.09.1980	8652	275.970	01.05.1972	0.100	16.08.1978	8620	01.05.1972	0.100	05/71 to 05/02
20	Baronda	289.400	18.09.1980	6450	284.155	25.04.1989	0.003	18.09.1980	6250	25.04.1989	0.003	12/77to 05/02

Source: letter No.HOC/Data-2/2002/448-49 dated 25.02.2003, Superintending Engineer, CWC, Bhubaneshwar.

Note : @@ : Site closed during May-1998.

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basins

II Basin: Subarnarekha

S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Muri	237.800	09.07.94	590	234.28	15.06.97	0.060	07.09.91	412.5	15.06.97	0.06	11/89 to 5/2002
2	Adityapur	139.850	03.09.73	10100	123.81	19.05.72	0.100	20.08.75	6416	19.05.72	0.1	11/71 to 5/2002
3	Ghatsila	86.840	13.10.73	14400	74.18	22.02.93	0.683	06.08.97	1058.2	22.02.93	0.683	03/71 to 5/2002
Basin : Burhabalang												
1	Gobindpur	9.000	31.10.99	1933	2.315	24.03.97	0.981	01.11.99	1811	24.03.97	0.981	03/92 to 5/2002

Source: letter No.HOC/Data-2/2002/448-49 dated 25.02.2003 Office of the Superintending Engineer, CWC, Bhubaneswar.

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basins

III Basin: Brahmani												
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	Tilga	379.42	28.09.87	3012	373.30	28.05.80	0.000	28.08.87	2805	28.05.80	0.000	06/79 to 5/02
2	Jaraikel	194.07	06.08.97	12800	185.96	10.05.80	0.410	06.08.87	12545	10.05.80	0.410	12/71 to 5/02
3	Panposh	180.38	06.08.97	11120	171.23	28.02.01	9.700	26.07.96	10921	28.02.01	9.700	06/96 to 5/02
4	Gomlai	147.00	26.07.96	10520	138.845	01.06.91	0.000	26.07.96	10503	01.06.91	0.000	01/79 to 5/02
5	Jenapur	23.475	18.08.84	9975	15.87	10.05.80	3.900	18.08.84	9702	10.05.80	3.900	07/79 to 5/02

Source: letter No.HOC/Data-2/2002/448-49 dated 25.02.2003 Office of the Superintending Engineer, CWC, Bhubaneswar.

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basins

IV Rushikulya, Vamsadhara, Saroda & Nagavali

S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed		Minimum Observed		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Discharge		Discharge		
								Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
a)	Basin: Rushikulya Purushottampur	19.660	04.11.90	3085.00	Dry Bed	-	-	22.08.97	2195	-	Dry Bed	06/89 to 5/02
b)	Basin: Vamsadhara Kashinagar	58.940	18.09.80	16790.00	Dry Bed	-	-	23.09.72	6589	-	Dry Bed	04/71 to 5/02
c)	Basin: Nagavali Srikakulam	14.530	12.05.90	7669.00	Dry Bed	-	-	28.07.92	2013	-	Dry Bed	08/90 to 5/02
d)	Basin: Sarada Anakapalle	28.450	10.05.90	5364.00	Dry Bed	-	-	10.10.92	499.7	-	Dry Bed	08/89 to 5/02

Source: letter No.HOC/Data-2/2002/448-49 dated 25.02.2003 Office of the Superintending Engineer, CWC, Bhubaneswar.

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basin

V Basin : Godavari												
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	Polavaram	28.017	16.08.86	87250	12.077	18.05.73	48.40	30.07.88	43506	01.06.72	48.40	6/67 to 5/2001
2	Koida	47.260	16.08.86	97500	14.010	31.05.85	68.00	15.08.83	57978	07.06.88	68.03	6/77 to 5/2001
3	Konta	50.140	16.08.86	14350	30.700	15.05.67	17.60	13.07.98	13798	28.03.73	17.60	6/66 to 5/2001
4	Injaram	50.140	16.08.86	13300	36.242	02.06.86	3.50	14.08.86	10267	26.06.66	3.50	6/66 to 5/2001
5	Poterru	99.270	18.08.99	790.0	93.900	18.05.92	6.40	28.03.97	583	27.04.97	2.85	1997-2001
6	Saradaput	238.272	04.09.94	5340	224.697	17.06.72	5.70	22.08.77	4790	18.06.72	5.00	6/70 to 5/2001
7	Sangam	56.400	10.07.98	637.3	<----- River Bed Dry ----->			10.07.98	637	<--- River Bed Dry --->		1996-2000
8	Perur	87.420	15.08.86	77500	69.155	03.06.94	9.60	11.08.81	51496	03.06.94	9.62	6/65 to 5/2001
9	Pathagudem	103.610	23.08.90	28900	86.130	14.05.95	0.10	21.07.76	24862	24.05.85	0.50	6/65 to 5/2001
10	Medapalli	213.730	12.07.94	6478	205.510	30.04.73	0.00	01.08.69	13750	01.05.86	0.00	6/66 to 5/2002
11	Madadapalli	241.060	15.08.86	Not observed	229.635	10.06.76	0.00	22.08.90	13635	24.05.84	4.50	6/72 to 5/2002
12	Tummar	322.460	24.07.99	991.1	317.342	15.05.93	0.00	24.07.99	991	09.06.92	0.30	6/91 to 5/2001
13	Chindnar	339.160	24.07.95	10878	329.650	28.04.95	1.20	24.7.95	10878	28.04.95	3.97	6/72 to 5/2001
14	Cherribeda	571.260	22.08.97	Not observed	<----- River Bed Dry ----->			14.08.97	38.35	<--- River Bed Dry --->		1997-2001
15	Ambabal	542.086	05.09.94	Not observed	<----- River Bed Dry ----->			16.08.96	511.5	<--- River Bed Dry --->		6/93 to 5/2001
16	Sonarpal	542.156	30.08.94	Not observed	<----- River Bed Dry ----->			31.08.94	689.3	<--- River Bed Dry --->		6/91 to 5/2001
17	Jagdulpur	544.686	09.07.73	2550	533.500	17.05.2000	0.60	22.07.76	2499	17.05.2000	0.58	6/66 to 5/2001
18	Kosagumda	554.180	30.08.2000	820.9	548.030	25.03.97	0.00	01.09.99	176.6	06.03.99	0.31	1997-2001
19	Murthahandi	545.190	14.08.86	Not observed	533.860	30.04.79	0.00	29.07.92	1197	27.05.80	0.40	6/88 to 5/2001
20	Nowrangpur	559.325	07.07.73	7000	549.890	27.03.99	0.50	07.07.73	5933	27.03.99	0.48	6/71 to 5/2001
21	Tekra	114.670	15.09.86	47500	96.175	09.06.66	1.40	11.08.81	33732	16.06.72	1.40	6/64 to 5/2002
22	Bhatpalli	171.720	29.08.90	5004	158.590	08.05.87	0.00	20.10.95	7862	31.05.88	0.00	6/86 to 5/2002
23	Sirpur	160.680	15.08.86	21360	145.765	01.06.73	0.00	21.08.70	15223	22.06.72	0.00	6/68 to 5/2002
24	Bamni	176.000	14.08.86	21720	157.510	17.06.67	0.00	20.10.95	11365	05.06.72	0.00	6/65 to 5/2002
25	P.G. Bridge	214.178	11.08.83	16000	197.192	01.06.65	0.00	20.10.95	6591	01.06.86	0.00	6/65 to 5/2002
26	Mangrul	197.080	02.09.95	820.4	189.440	19.01.96	0.00	02.09.95	698.4	18.02.94	0.00	6/65 to 5/2002
27	Kanhergaon	399.109	10.08.83	4610	386.179	13.06.67	0.00	22.07.76	3141	01.02.86	0.00	6/64 to 5/2002
28	Kanhergaon	473.050	19.06.93	561.8	<----- DRY BED ----->			02.09.95	476.7	01.04.94	0.00	6/92 to 5/2002
29	Ghugus	183.651	14.07.94	11100	166.866	12.06.88	0.00	11.07.73	179.05	01.05.88	0.00	6/65 to 5/2002
30	Nandgaon	213.630	12.07.94	2488	<----- DRY BED ----->			16.08.91	2583.0	01.05.88	0.00	6/86 to 5/2002
31	Hivra	248.410	12.07.94	8724	<----- DRY BED ----->			13.07.94	7699.0	01.05.88	0.00	6/87 to 5/2002
32	Bhisnur	302.980	06.09.94	4452	288.605	24.05.89	0.00	31.08.90	1104.0	01.05.90	0.00	6/88 to 5/2002
33	Asti	155.350	08.09.94	28800	138.071	18.06.72	0.00	21.08.74	21554	12.06.67	0.40	6/65 to 5/2002
34	Rajoli	191.360	14.08.86	2110	<----- DRY BED ----->			06.09.94	1469	01.05.88	0.00	6/86 to 5/2002
35	Wairagarh	101.590	10.07.94	1410	<----- DRY BED ----->			27.07.94	326	01.06.93	0.00	6/92 to 5/2002

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basin

V Basin : Godavari												
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
36	Salebardi	232.300	11.07.94	1390	< ----- DRY BED ----- >			14.08.86	2044	March 88	0.00	6/86 to 5/2002
37	Pauni	237.115	07.09.94	27500	223.710	09.06.66	0.40	11.08.79	18500.0	02.06.66	0.40	6/64 to 5/2002
38	Satrapur	277.610	06.09.94	14173	263.620	13.04.2001	0.136	06.09.94	14173.0	25.06.88	0.14	6/86 to 5/2002
39	Ramkona	349.900	30.07.91	3040	< ----- DRY BED ----- >			16.08.92	1296	01.05.87	0.00	6/86 to 5/2002
40	Rajegaon	283.970	06.09.94	8920	273.040	30.05.87	0.00	18.07.96	6415.0	May 88	0.00	6/86 to 5/2002
41	Kumhari	305.500	21.07.94	9690	291.285	11.05.87	0.00	16.08.92	3766	01.06.87	0.00	6/86 to 5/2002
42	Keolari	440.800	21.07.94	4850	< ----- DRY BED ----- >			22.08.94	2353	01.04.91	0.00	6/87 to 5/2002
43	Somanpalli	128.604	24.07.89	5180	< ----- DRY BED ----- >			21.07.76	3457.0	DRY BED	0.00	6/67 to 5/2000
44	Mancherial	138.615	20.10.95	29200	125.016	09.06.92	0.93	08.10.83	23940.0	25.05.73	0.10	6/66 to 5/2000
45	Gandlapet	318.500	30.08.90	2240	< ----- DRY BED ----- >			30.07.88	1088.0	Many days	0.00	6/87 to 5/2000
46	Betmorga	358.390	19.10.95	1540	< ----- DRY BED ----- >			03.09.88	925.5	Many days	0.00	6/87 to 5/2000
47	Degloor	363.930	19.10.95	2450	< ----- DRY BED ----- >			30.09.88	1127.0	Many days	0.00	6/87 to 5/2000
48	Saigaon	556.008	06.09.69	3395	< ----- DRY BED ----- >			07.10.83	3395.2	Many days	0.00	6/87 to 5/2000
49	Bhatkheda	581.960	16.11.98	1718	< ----- DRY BED ----- >			14.09.95	301.3	Many days	0.00	6/67 to 5/2000
50	Yelli	351.100	13.08.83	9815	< ----- DRY BED ----- >			13.08.83	9815.4	Many days	0.00	6/91 to 5/2000
51	Purna	371.610	05.09.75	7493	< ----- DRY BED ----- >			05.09.75	7493.0	Many days	0.00	6/78 to 5/2000
52	Zari	385.850	30.07.98	1690	< ----- DRY BED ----- >			30.09.88	781.6	Many days	0.00	6/78 to 5/2000
53	G.R. Bridge	377.370	25.07.89	5676	< ----- DRY BED ----- >			16.09.83	5675.7	Many days	0.00	6/87 to 5/2000
54	Dhalegaon	399.290	13.09.69	8040	< ----- DRY BED ----- >			13.09.69	7535.0	Many days	0.00	6/76 to 5/2000
55	Pachegaon	481.580	26.08.97	1363	< ----- DRY BED ----- >			03.08.88	430.0	Many days	0.00	6/83 to 5/2000
56	Ghargaon	608.110	14.07.94	1850	< ----- DRY BED ----- >			14.07.94	1585.0	Many days	0.00	6/94 to 5/2000

Source : Letter No.1/17/96-GC(Tech)/1106 dated 08.05.2003 from Superintending Engineer, Godavari Circle, Hyderabad

Table No. 1.6 : Site-wise Maximum & Minimum observed Water Levels and Discharges in Different River Basins

VI Basin : Krishna

SL. No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record	
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	From	To
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	VIJAYAWADA	19.052	10/16/1998	26000	8.942	11/3/2004	0.000	10/16/1998	25082	7/12/2004	0.000	1965	2005
2	KEESARA	36.810	5/20/1969	8500	27.500	5/25/1986	0.000	9/21/2005	6076.89	3/30/2004	0.000	1965	2005
3	MADHIRA	52.010	9/29/2005	3000	45.000	7/14/1990	6.188	9/22/1991	1306	6/19/2004	0.000	1985	2005
4	PURUSHOTHAMAGUDEM	154.250	7/23/1989	1650	144.000	1/14/2001	0.000	8/24/2000	928.6	11/18/2001	0.000	1989	2005
5	PALERU BRIDGE	78.877	7/23/1989	2400	70.357	3/24/2004	0.000	10/6/1983	2249	3/27/2003	0.000	1965	2005
6	WADENAPALLI	41.144	10/16/1998	23689	24.004	6/6/1987	5.240	10/16/1998	23689	6/1/1972	0.000	1965	2005
7	DAMERACHERLA	62.040	7/24/1989	6100	0.690	4/19/2000	3.852	10/6/1983	5763	4/13/1969	0.000	1968	2005
8	PONDUGALA	60.934	10/15/1998	32000	42.814	7/3/2003	4.340	10/15/1998	31018	7/3/2003	4.340	1975	2005
9	HALIA	134.405	9/23/1991	5300	127.900	6/15/1984	0.000	9/22/1991	2647	8/12/2004	0.000	1984	2005
10	LAKSHMIPURAM	290.360	10/2/1996	1750	286.590	5/11/1986	0.000	10/2/1996	1084	3/1/2001	0.000	1984	2005
11	BAWAPURAM	280.495	11/19/1992	14000	270.245	6/29/2005	0.000	9/22/1991	6723	7/10/2005	0.000	1965	2005
12	MANTRALAYAM	315.800	11/18/1992	13000	305.760	6/25/2003	0.000	9/30/1978	8504	7/12/2005	0.000	1972	2005
13	T RAMAPURAM	354.328	9/2/1996	2200	349.368	5/18/1988	0.000	10/14/1971	1923	4/27/1987	0.000	1965	2005
14	KELLODU	103.150	11/17/1992	600	97.490	1/24/2006	0.000	11/17/1992	576.6	11/13/2002	0.000	1990	2005
15	HOOVINAHOLE	96.400	10/9/2000	30	93.500	3/3/2006	0.000	11/8/2005	7.03	3/2/2006	0.000	2004	2005
16	MAROL	517.601	11/18/1992	1580	507.551	3/18/1996	0.000	7/3/1980	1235	1/13/2003	0.000	1966	2005
17	HARALAHALLI	518.350	11/18/1992	7357	508.086	2/16/2000	33.70	11/18/1992	7357	12/27/2003	0.000	1966	2005
18	BYLADAHALLI	538.450	11/17/1992	1040	530.28	9/9/2003	0.000	11/17/1992	928.1	5/18/2003	0.000	1985	2005
19	KUPPELUR	541.320	11/18/1992	538.3	93.000	5/9/1998	0.000	11/18/1992	538.3	3/1/2003	0.000	1990	2005
20	HONALI	546.470	7/16/1994	7000	534.245	5/24/1981	27.50	8/3/1982	4555	3/22/2004	0.000	1980	2005
21	SHIMOGA	565.040	8/3/1982	4124	557.000	5/1/1983	0.000	8/3/1982	4124	5/26/2003	0.000	1972	2005
22	HOLEHONNUR	94.680	8/17/2005	810	89.290	1/8/2006	0.000	7/26/2005	277.9	1/8/2006	0.000	2004	2005
23	KRISHNA AGRAHARAM	282.300	8/9/2005	20000	270.660	5/29/1993	0.020	8/9/2005	19808	5/25/1998	0.000	1981	2005
24	YADGIR	361.643	10/16/1998	11800	350.503	6/1/1987	0.000	9/7/1969	10254	4/22/1973	0.000	1965	2005
25	MALKHED	400.910	8/16/1990	3250	390.000	5/13/2003	0.000	10/15/1998	2215	5/29/2005	0.000	1990	2005
26	CHINCHOLI	532.500	7/12/1991	Affected by backwater	526.300	3/20/1994	0.000	7/17/1989	925	5/27/1985	0.000	1979	2005
27	JEWANGI	426.960	8/15/1990	1500	421.100	5/25/2000	0.000	8/1/1984	1500	6/11/2002	0.000	1978	2005
28	BORIOMERGA	434.320	9/6/1998	1200	427.000	1/9/1992	0.000	9/6/1998	1093	2/15/2002	0.000	1979	2005
29	WADAKBAL	428.563	9/29/1989	2800	416.883	4/6/1973	0.000	9/29/1989	2746	8/18/1972	0.000	1965	2005
30	TAKLI	423.308	8/28/1997	8710	409.278	6/7/1972	0.000	9/27/1979	8700	11/16/2004	0.000	1965	2005

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Table No. 1.6 : Site-wise Maximum & Minimum observed Water Levels and Discharges in Different River Basins

VI Basin : Krishna

SL. No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record	
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	From	To
1	2	3	4	5	6	7	8	9	10	11	12	13	
31	KOKANGAON	456.520	9/22/1981	650	452.000	6/5/1991	0.000	9/22/1981	634	2/24/2006	0.000	1979	2005
32	SHIRDHON	440.200	9/22/1981	205	437.000	7/11/1988	0.000	10/12/1998	162.6	6/23/1980	0.000	1979	2005
33	NARSINGPUR	462.160	8/25/1997	8500	448.013	12/5/2004	0.000	9/27/1979	7799	12/29/2002	0.000	1966	2005
34	SARATI	476.328	9/26/1979	3200	468.128	2/6/1966	0.000	9/26/1979	2930	4/19/2003	0.000	1965	2005
35	DHOND	508.400	8/2/1976	10000	496.000	1/22/1967	0.000	8/2/1976	9240	2/19/2004	0.000	1967	2005
36	PHULGAON	93.800	8/23/1997	6500	81.000	3/31/1999	0.000	8/23/1997	3006	1/9/2005	0.000	1992	2005
37	HUVINHEDGI	356.350	8/8/2005	10674	341.958	5/11/1979	0.800	7/2/1983	9510.3	5/4/1981	0.100	1976	2005
38	TALIKOT	56.010	10/8/2001	555	48.000	4/22/1996	0.000	10/8/2001	534.2	3/2/2004	0.000	1995	2005
39	CHOLACHGUDA	535.620	11/18/1992	1814	522.500	7/31/1996	0.000	6/6/1991	1531	6/6/2003	0.000	1982	2005
40	NAVALGUND	565.310	9/18/2000	540	558.000	5/16/1998	0.000	9/23/2001	356	5/11/2004	0.000	1991	2005
41	MUDHOL	532.350	8/5/2005	2120	520.000	4/18/2004	0.000	9/24/2005	1094	2/21/2004	0.000	2000	2005
42	GOKAK FALLS	546.880	9/23/2005	4000	538.054	3/20/1988	7.300	7/16/1994	3440	4/30/2006	0.000	1971	2005
43	GOTUR	625.630	7/17/2005	1300	615.830	4/30/1994	0.000	7/25/1989	1270	2/12/2003	0.000	1980	2005
44	DADDI	681.003	6/28/1983	2800	674.153	1/15/1997	0.000	7/24/1989	2185	5/28/2004	0.000	1978	2005
45	PANDEGAON	581.265	6/28/1991	340	576.785	8/30/1990	0.000	9/26/1988	224.8	11/14/1988	0.000	1979	2005
46	SADALGA	538.950	6/29/1983	2435	525.160	4/18/1987	0.000	6/28/1983	1934	3/9/1991	0.000	1969	2005
47	BASTAWDE	546.530	7/27/2005	655	535.1	5/29/1992	0.000	8/15/1982	491.9	2/10/2005	0.000	1979	2005
48	VANDUR	542.020	7/25/1989	600	531.000	3/28/1980	0.000	8/9/1986	562.1	6/8/1983	0.000	1979	2005
49	TERWAD	546.144	8/10/1979	5500	520.000	5/5/2002	0.000	8/10/1997	3590	12/28/1990	0.000	1979	2005
50	KURUNDWAD	539.760	8/5/2005	10100	519.455	10/31/1981	0.000	7/29/2005	7786.37	2/13/1986	0.000	1972	2005
51	ARJUNWAD	543.685	8/5/2005	9400	523.225	2/29/1980	0.000	8/21/1990	6259	11/29/1985	0.000	1969	2005
52	SAMDOLI	546.324	8/5/2005	3064	528.594	1/25/2004	0.000	7/27/1989	2412	11/17/1985	0.000	1966	2005
53	KARAD	565.045	8/2/2005	6350	549.775	3/9/2005	0.000	8/3/2005	6312	31/05/1999	0.000	1965	2005
54	WARUNJI	565.927	8/2/2005	4700	549.437	4/16/1973	0.000	8/2/2005	4641	12/26/2001	0.000	1966	2005
55	KOYNA	581.610	8/2/2005	3230	569.83	6/15/1979	0.000	8/2/2005	3174	1/30/1999	0.000	1972	2005

Source: Krishna & CO-Ordination Circle, Central Water Commission, H.No.11-4-648, 2nd Floor, Krishna Godavari Bhawan, A.C. Guards, Hyderabad-

500004.Letter No.KCC/C22012/12/2006/DRS/987-91and dated 24.07.2007.

(Updated during September 2007)

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basin

VII Basin : Cauvery												
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed		Minimum Observed		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Discharge		Discharge		
								Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Musiri	86.725	13.11.77	4510	82.780	18.03.93	0.000	10.11.93	6949	11.07.87	0.357	6/72 to 5/2001
2	N.Patti	135.300	10.11.93	7500	128.920	23.09.95	0.000	10.11.93	7145	14.09.82	0.010	6/72 to 5/2001
3	Kodumudi	128.140	09.12.72	6000	122.070	06.06.83	1.000	11.07.79	4829	06.06.83	1.200	12/78 to 5/2001
4	Savandapur	190.270	05.11.78	2850	180.320	17.05.99	0.725	20.11.79	1446	02.05.87	0.500	6/71 to 5/2001
5	T.Marahada	342.250	30.11.00	1020	338.210	08.04.83	0.030	30.10.91	849.6	11.04.83	0.030	7/78 to 5/2001
6	Nellithurai	309.450	15.11.92	1675	302.040	17.07.84	0.000	27.07.92	1386	01.08.79	0.150	14/79 to 5/2001
7	Urachikottai	165.920	12.09.81	4720	157.500	22.08.88	0.000	06.07.80	4664	31.01.83	5.000	6/79 to 5/2001
8	Biligundulu	265.840	30.07.91	7080	257.725	06.04.01	19.74	30.07.91	7013	25.06.74	9.800	9/71 to 5/2001
9	Kanakapura	619.925	02.10.84	519.5	612.750	22.01.01	1.436	15.09.88	338.9	21.04.93	0.075	9/78 to 5/2001
10	T.K.Halli	585.950	03.10.84	1219	580.000	05.03.01	0.000	03.10.84	1219	04.06.83	0.500	6/78 to 5/2001
11	Kollegal	630.250	30.07.91	6570	623.510	26.05.74	10.00	17.07.94	5620	05.04.72	10.00	2/71 to 5/2001
12	T.Narasipur	642.300	05.07.80	2875	635.200	02.02.96	4.339	04.07.84	1826	11.04.74	0.700	3/71 to 5/2001
13	Muthankera	712.840	22.05.92	1636	707.045	03.04.00	0.375	10.07.73	1199	05.04.90	0.116	5/72 to 5/2001
14	K.M.Vadi	771.250	14.07.84	688	766.165	02.06.87	0.000	15.07.94	681.2	27.01.00	0.131	6/79 to 5/2001
15	M.H.Halli	846.655	28.07.91	2375	838.695	23.06.95	2.200	19.08.81	1311	02.05.83	0.400	10/78 to 5/2001
16	Kudige	820.410	03.07.80	2265	810.995	10.06.83	1.200	03.07.80	2265	09.04.75	0.200	11/75 to 5/2001

Source: Water Year Book for 2000-2001.

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basins

IX West Flowing Rivers from Kanyakumari to Tapi												
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	Badlapur	19.467	24.07.89	4260.00	9.937	16.03.93	0.000	16.07.88	4440.00	07.01.95	1.481	2/88 to 5/2000
2	Mangaon	10.255	24.07.89	1340.00	4.315	20.12.94	0.100	03.08.95	1116.00	12.05.87	0.000	12/86 to 5/2000
3	Anjanari	18.250	16.07.99	1100.00	11.410	01.06.96	0.000	11.07.98	495.50	01.06.96	0.000	8/91 to 5/2000
4	Adavali	106.750	23.07.89	3500.00	97.600	30.05.95	0.000	01.08.95	2405.00	30.05.95	0.000	12/86 to 5/2000
5	Ganjim	12.520	29.07.82	4400.00	1.410	27.04.86	0.600	29.07.82	4746.00	05.09.99	0.400	5/71 to 5/2000
6	Collem	72.885	28.07.82	520.00	66.510	22.03.82	0.200	01.08.85	617.50	29.03.95	0.082	5/71 to 5/2000
7	Kolad	15.050	16.07.99	590.00	11.000	21.09.97	0.000	23.08.97	576.70	01.06.97	0.000	5/71 to 5/2000
8	Nagothane	13.950	16.09.99	1750.00	3.860	12.07.97	0.000	23.08.97	1727.00	30.11.97	0.000	5/71 to 5/2000
9	Pen	17.000	16.07.99	255.00	8.100	02.06.97	0.000	16.07.99	344.00	01.11.97	0.000	5/71 to 5/2000
10	Santeguli	226.830	19.11.79	5822.00	10.120	21.04.90	0.364	19.11.79	6730.00	11.07.83	0.000	6/88 to 5/2000
11	Haladi	18.880	12.04.92	1155.00	0.840	29.05.89	0.000	18.07.88	915.80	01.04.90	0.000	1/86 to 5/2000
12	Yennehole	9.050	18.07.99	1127.00	16.910	05.05.90	0.000	15.07.94	1062.00	01.06.88	0.000	7/89 to 5/2000
13	Bantwal	24.140	30.07.94	9832.00	1.060	06.05.90	0.050	13.07.94	9832.00	01.03.90	0.050	11/70 to 5/2000
14	Erinjipuzha	13.550	26.07.74	1445.00	12.250	05.05.97	0.000	25.07.74	1277.00	06.05.90	0.000	6/85 to 5/2000
15	Perumannu	19.080	12.07.95	2100.00	5.825	19.04.89	0.000	30.07.94	1878.00	11.04.86	0.000	6/85 to 5/2000
16	Kuniyal	14.500	24.07.89	3177.00	0.030	16.03.97	0.000	21.06.92	3086.00	11.05.87	0.050	1/79 to 5/2000
17	Karathodu	10.630	14.07.94	806.70	0.000	26.02.87	0.000	14.07.94	784.40	02.03.98	0.000	6/86 to 5/2000
18	Kumbidi	13.430	15.07.94	2295.00	4.100	30.03.95	0.177	16.07.94	2813.00	06.02.87	0.000	1/79 to 5/2000
19	Pulamanthok	9.665	27.06.85	1429.00	0.000	02.04.88	0.000	15.07.94	1410.00	02.03.80	0.000	2/86 to 5/2000
20	Mankara	19.070	14.07.94	1220.00	46.870	02.04.92	0.000	28.07.92	664.00	04.03.86	0.000	6/85 to 5/2000
21	Pudur	51.550	14.11.92	610.00	59.600	28.04.97	0.000	28.07.91	744.10	21.06.86	0.000	9/85 to 5/2000
22	Ambarampalyan	65.550	14.11.92	850.00	218.910	31.05.84	0.020	14.11.92	389.40	21.04.86	0.020	3/78 to 5/2000
23	Arangali	7.620	27.06.85	1149.00	0.08	30.04.97	0.000	03.08.94	915.30	20.12.94	0.000	4/78 to 5/2000
24	Neeleswaram	11.105	27.07.74	4430.00	0.760	09.02.97	27.000	15.08.75	3502.00	13.05.83	1.500	3/71 to 5/2000
25	Ramamangalan	8.305	28.06.85	1304.00	11.130	16.04.97	44.50	28.06.85	1304.00	04.04.83	15.000	4/78 to 5/2000
26	Kalampur	13.730	02.08.95	808.40	7.020	30.04.90	0.000	09.08.86	480.30	01.03.87	0.000	6/86 to 5/2000
27	Kidangoor	8.015	03.08.94	842.00	-0.060	16.04.97	0.000	03.08.94	819.90	01.03.87	0.000	7/85 to 5/2000
28	Kalloppara	9.260	03.08.94	885.00	0.530	27.02.95	0.000	03.08.94	848.30	18.04.83	0.000	6/85 to 5/2000
29	Malakara	7.820	03.08.94	1988.00	-0.410	07.04.92	1.386	03.08.94	1988.00	08.04.99	1.222	6/85 to 5/2000
30	Thumpamon	13.735	07.11.78	680.00	5.240	19.03.97	0.200	03.08.94	720.60	07.03.83	0.000	1/78 to 5/2000
31	Pattazhi	13.805	15.11.92	2367.00	1.650	17.03.97	1.765	11.10.92	1459.00	27.04.90	0.000	4/78 to 5/2000
32	Ayilam	10.685	10.10.92	974.80	0.045	06.06.83	0.200	10.10.92	974.80	02.03.82	0.000	12/78 to 5/2000

Source: Water Year Book Year 1999-2000

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basins

IX West Flowing Rivers from Kanyakumari to Tapi												
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	Badlapur	19.467	24.07.89	4260.00	9.937	16.03.93	0.000	16.07.88	4440.00	07.01.95	1.481	2/88 to 5/2000
2	Mangaon	10.255	24.07.89	1340.00	4.315	20.12.94	0.100	03.08.95	1116.00	12.05.87	0.000	12/86 to 5/2000
3	Anjanari	18.250	16.07.99	1100.00	11.410	01.06.96	0.000	11.07.98	495.50	01.06.96	0.000	8/91 to 5/2000
4	Adavali	106.750	23.07.89	3500.00	97.600	30.05.95	0.000	01.08.95	2405.00	30.05.95	0.000	12/86 to 5/2000
5	Ganjim	12.520	29.07.82	4400.00	1.410	27.04.86	0.600	29.07.82	4746.00	05.09.99	0.400	5/71 to 5/2000
6	Collem	72.885	28.07.82	520.00	66.510	22.03.82	0.200	01.08.85	617.50	29.03.95	0.082	5/71 to 5/2000
7	Kolad	15.050	16.07.99	590.00	11.000	21.09.97	0.000	23.08.97	576.70	01.06.97	0.000	5/71 to 5/2000
8	Nagothane	13.950	16.09.99	1750.00	3.860	12.07.97	0.000	23.08.97	1727.00	30.11.97	0.000	5/71 to 5/2000
9	Pen	17.000	16.07.99	255.00	8.100	02.06.97	0.000	16.07.99	344.00	01.11.97	0.000	5/71 to 5/2000
10	Santeguli	226.830	19.11.79	5822.00	10.120	21.04.90	0.364	19.11.79	6730.00	11.07.83	0.000	6/88 to 5/2000
11	Haladi	18.880	12.04.92	1155.00	0.840	29.05.89	0.000	18.07.88	915.80	01.04.90	0.000	1/86 to 5/2000
12	Yennehole	9.050	18.07.99	1127.00	16.910	05.05.90	0.000	15.07.94	1062.00	01.06.88	0.000	7/89 to 5/2000
13	Bantwal	24.140	30.07.94	9832.00	1.060	06.05.90	0.050	13.07.94	9832.00	01.03.90	0.050	11/70 to 5/2000
14	Erinjipuzha	13.550	26.07.74	1445.00	12.250	05.05.97	0.000	25.07.74	1277.00	06.05.90	0.000	6/85 to 5/2000
15	Perumannu	19.080	12.07.95	2100.00	5.825	19.04.89	0.000	30.07.94	1878.00	11.04.86	0.000	6/85 to 5/2000
16	Kuniyal	14.500	24.07.89	3177.00	0.030	16.03.97	0.000	21.06.92	3086.00	11.05.87	0.050	1/79 to 5/2000
17	Karathodu	10.630	14.07.94	806.70	0.000	26.02.87	0.000	14.07.94	784.40	02.03.98	0.000	6/86 to 5/2000
18	Kumbidi	13.430	15.07.94	2295.00	4.100	30.03.95	0.177	16.07.94	2813.00	06.02.87	0.000	1/79 to 5/2000
19	Pulamanthok	9.665	27.06.85	1429.00	0.000	02.04.88	0.000	15.07.94	1410.00	02.03.80	0.000	2/86 to 5/2000
20	Mankara	19.070	14.07.94	1220.00	46.870	02.04.92	0.000	28.07.92	664.00	04.03.86	0.000	6/85 to 5/2000
21	Pudur	51.550	14.11.92	610.00	59.600	28.04.97	0.000	28.07.91	744.10	21.06.86	0.000	9/85 to 5/2000
22	Ambarampalyan	65.550	14.11.92	850.00	218.910	31.05.84	0.020	14.11.92	389.40	21.04.86	0.020	3/78 to 5/2000
23	Arangali	7.620	27.06.85	1149.00	0.08	30.04.97	0.000	03.08.94	915.30	20.12.94	0.000	4/78 to 5/2000
24	Neeleswaram	11.105	27.07.74	4430.00	0.760	09.02.97	27.000	15.08.75	3502.00	13.05.83	1.500	3/71 to 5/2000
25	Ramamangalan	8.305	28.06.85	1304.00	11.130	16.04.97	44.50	28.06.85	1304.00	04.04.83	15.000	4/78 to 5/2000
26	Kalampur	13.730	02.08.95	808.40	7.020	30.04.90	0.000	09.08.86	480.30	01.03.87	0.000	6/86 to 5/2000
27	Kidangoor	8.015	03.08.94	842.00	-0.060	16.04.97	0.000	03.08.94	819.90	01.03.87	0.000	7/85 to 5/2000
28	Kalloppara	9.260	03.08.94	885.00	0.530	27.02.95	0.000	03.08.94	848.30	18.04.83	0.000	6/85 to 5/2000
29	Malakara	7.820	03.08.94	1988.00	-0.410	07.04.92	1.386	03.08.94	1988.00	08.04.99	1.222	6/85 to 5/2000
30	Thumpamon	13.735	07.11.78	680.00	5.240	19.03.97	0.200	03.08.94	720.60	07.03.83	0.000	1/78 to 5/2000
31	Pattazhi	13.805	15.11.92	2367.00	1.650	17.03.97	1.765	11.10.92	1459.00	27.04.90	0.000	4/78 to 5/2000
32	Ayilam	10.685	10.10.92	974.80	0.045	06.06.83	0.200	10.10.92	974.80	02.03.82	0.000	12/78 to 5/2000

Source: Water Year Book Year 1999-2000

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level & Discharge in Different River Basin

X Tapi													
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record	
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)		
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
1	Dedtalai	293.000	15.09.98	15000	River	River	Many Days	0.00	22.09.98	1427	Many Days	0.00	12/77 to 5/99
2	Burhanpur	238.000	15.09.98	26600	do	do	do	0.00	15.09.98	25261	do	0.00	09/72 to 5/99
3	Lakhpuri	268.320	16.09.98	1560	do	do	do	0.00	16.09.98	1343	do	0.00	12/77 to 5/99
4	Gopalkheda	250.150	16.09.98	2210	do	do	do	0.00	16.09.98	2521	do	0.00	02/77 to 5/99
5	Yerli	224.730	17.09.98	3060	do	do	do	0.00	17.09.98	3059	do	0.00	03/77 to 5/99
6	Dapuri	194.150	30.07.98	2000	do	do	do	0.00	30.07.98	1306	do	0.00	01/72 to 5/99
7	Savkheda	159.150	16.09.98	16650	do	do	do	0.00	16.09.98	15894	do	0.00	04/72 to 5/99
8	Malkheda	174.900	30.09.98	950.0	do	do	do	0.00	11.08.98	479.5	do	0.00	11/77 to 5/99
9	Morane	267.330	15.09.98	655.0	do	do	do	0.00	15.09.98	644.7	do	0.00	03/78 to 5/99
10	Gidhade	137.890	16.09.98	17600	do	do	do	0.00	16.09.98	17578	do	0.00	06/71 to 5/99
11	Sarangkheda	123.430	16.09.98	22850	do	do	do	0.00	16.09.98	21292	do	0.00	10/97 to 5/99
12	Ghala	19.835	17.09.98	10200	do	do	do	0.00	09.07.98	458.3	do	0.00	06/78 to 5/99

Source : Water Year Book for 1998-99.

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basins

XI Basin: Narmada												Unit : M.C.M.	
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Orsang at Chandwada	Monsoon	301.28	149.33	1613.50	1026.92	2586.23	839.48	531.13	820.70	3867.53	481.16	211.96
		Non-Monsoon	0.00	0.00	2.60	0.00	27.45	0.78	0.96	0.01	23.93	0.10	13.52
		Annual	301.28	149.33	1616.10	1026.92	2613.68	840.26	532.09	820.71	3891.46	481.26	225.48
2	Narmada at	Monsoon	32556.44	13181.81	30197.66	19849.61	46091.72	22462.95	16535.93	29925.68	69256.49	18175.28	21616.87
		Non-Monsoon	2458.43	1818.31	2531.53	3339.45	4784.37	3027.15	4149.07	5625.04	4208.38	5217.46	5342.50
		Annual	301.28	149.33	1616.10	1026.92	50876.09	25490.10	20685.00	35550.72	73464.87	23392.74	26959.37
3	Narmada at Rajghat	Monsoon	20887.44	32219.10	12797.13	28997.31	16937.82	40178.03	22188.37	16848.52	31357.32	67798.63	21103.58
		Non-Monsoon	3157.00	2282.12	1683.75	2145.50	2913.78	4541.60	2958.08	3423.76	4783.32	4471.55	4072.00
		Annual	301.28	149.33	1616.10	1026.92	19851.60	44719.63	25146.45	20272.28	36140.64	72270.18	25175.58
4	Narmada at Mandleshwar	Monsoon	35222.46	12921.09	29582.91	16664.25	42935.62	21644.02	16564.47	30158.61	64561.80	20359.79	19129.97
		Non-Monsoon	2340.26	1785.51	2195.27	2701.20	4662.49	3233.87	3188.10	4947.83	3942.03	4196.51	4485.45
		Annual	301.28	149.33	1616.10	1026.92	47598.11	24877.89	19752.57	35106.44	68503.83	24556.30	23615.42
5	Kundi at Kogaon	Monsoon	711.10	162.60	2041.89	1831.06	2153.48	569.14	219.41	940.51	1825.62	635.44	1292.87
		Non-Monsoon	4.21	1.05	66.45	22.37	80.59	5.82	2.75	24.62	24.79	1.68	38.56
		Annual	301.28	149.33	1616.10	1026.92	2234.07	574.96	222.16	965.13	1850.41	637.12	1331.43
6	Chhota Tawa at Ginnore	Monsoon	2332.30	709.50	2657.14	1394.55	2402.45	956.32	553.11	2531.03	4482.91	1499.27	2086.90
		Non-Monsoon	14.90	32.83	71.37	15.19	73.72	1.31	0.78	102.65	50.07	6.91	80.31
		Annual	301.28	149.33	1616.10	1026.92	2476.17	957.63	553.89	2633.68	4532.98	1506.18	2167.21
7	Narmada at Handia	Monsoon	28588.08	10460.51	18891.90	11937.53	30299.62	21645.30	15493.53	20746.31	54880.23	17869.95	9483.75
		Non-Monsoon	2058.73	1634.39	1743.79	2727.23	4072.33	3306.74	3453.73	5238.29	3467.94	3294.63	3570.39
		Annual	301.28	149.33	1616.10	1026.92	34371.95	24952.04	18947.26	25984.60	58348.17	21164.58	13054.14
8	Ganjal at Chhidgaon	Monsoon	1463.40	216.57	788.65	683.20	1572.38	364.01	372.88	1075.55	2137.40	677.08	886.60
		Non-Monsoon	33.60	18.31	23.30	18.61	50.38	11.01	12.00	56.01	45.37	19.76	64.79
		Annual	301.28	149.33	1616.10	1026.92	1622.76	375.02	384.88	1131.56	2182.77	696.84	951.39
9	Narmada at Hoshangabad	Monsoon	22565.95	10646.20	18771.52	9747.75	28212.62	18456.87	13927.04	17118.17	48600.81	14561.75	6694.39
		Non-Monsoon	1564.22	1209.59	1716.21	2614.68	4035.30	2744.31	3107.30	4046.41	3757.60	4620.09	4308.48
		Annual	301.28	149.33	1616.10	1026.92	32247.92	21201.18	17034.34	21164.58	52358.41	19181.84	11002.87
10	Narmada at Sandia	Monsoon	9114.15	6065.60	14107.58	5720.28	20069.14	13580.72	10464.36	10913.37	33572.86	12608.10	5080.22
		Non-Monsoon	1212.10	943.15	1281.04	2049.68	3586.53	2829.38	2481.65	3622.25	3417.50	3577.61	3868.51
		Annual	301.28	149.33	1616.10	1026.92	23655.67	16410.10	12946.01	14535.62	36990.36	16185.71	8948.73

Table No.1.5 : Sitewise Monsoon, Non-monsoon & Annual Flow of Water in Different River Basins

XI Basin: Narmada			Unit : M.C.M.										
Sl.No.	Site Name	Season	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
11	Shakkat at Gadarwara	Monsoon	1336.72	394.00	1359.63	923.14	2080.30	659.47	1062.94	1324.67	2917.43	793.04	608.08
		Non-Monsoon	66.21	44.21	60.24	42.63	97.10	39.62	44.31	76.72	105.74	55.06	48.30
		Annual	301.28	149.33	1616.10	1026.92	2177.40	699.09	1107.25	1401.39	3023.17	848.10	656.38
12	Narmada at Barmanghat	Monsoon	8133.66	6512.62	5420.58	3029.53	15613.04	11020.41	7732.20	7561.70	25138.14	9774.38	3698.30
		Non-Monsoon	706.29	601.50	886.01	1658.41	2540.94	1877.14	2097.49	3356.58	2884.84	3512.66	2720.56
		Annual	301.28	149.33	1616.10	1026.92	18153.98	12897.55	9829.69	10918.28	28022.98	13287.04	6418.86
13	Sher at Belkheri	Monsoon	611.97	188.07	554.51	455.60	1174.17	435.16	624.74	623.52	1626.88	489.32	236.46
		Non-Monsoon	24.49	19.87	10.98	14.20	32.19	12.77	12.82	18.96	27.72	30.58	14.50
		Annual	301.28	149.33	1616.10	1026.92	1206.36	447.93	637.56	642.48	1654.60	519.90	250.96
14	Hiran at Patan	Monsoon	1256.88	1415.68	1258.43	439.48	2988.50	1794.45	1711.12	1317.89	3467.26	1436.37	496.41
		Non-Monsoon	77.17	154.54	94.68	40.43	144.89	82.77	110.44	119.11	123.41	111.12	63.68
		Annual	301.28	149.33	1616.10	1026.92	3133.39	1877.22	1821.56	1437.00	3590.67	1547.49	560.09
15	Narmada at Jamtara	Monsoon	8555.33	5393.58	9707.30	1725.13	10372.20	7889.24	6749.71	5093.21	19724.48	7175.48	2906.78
		Non-Monsoon	510.94	375.97	623.46	955.72	2594.72	1876.58	2040.75	3433.60	2918.17	3327.09	3148.44
		Annual	301.28	149.33	1616.10	1026.92	12966.92	9765.82	8790.46	8526.81	22642.65	10502.57	6055.22
16	Banjar at Hirdaya Nagar	Monsoon	1961.09	578.45	1964.57	934.48	2921.67	1436.43	1098.67	1345.96	4643.90	1508.97	796.49
		Non-Monsoon	36.88	40.69	27.41	27.66	89.71	17.25	7.18	38.37	219.14	101.30	17.92
		Annual	301.28	149.33	1616.10	1026.92	3011.38	1453.68	1105.85	1384.33	4863.04	1610.27	814.41
17	Burhner at Mohgaon	Monsoon	2120.46	1651.19	2509.06	1017.66	3583.41	1937.18	2102.07	1887.89	4177.25	2323.57	1256.43
		Non-Monsoon	73.48	107.14	56.29	40.83	136.21	44.80	38.08	67.21	126.54	127.88	54.16
		Annual	301.28	149.33	1616.10	1026.92	3719.62	1981.98	2140.15	1955.10	4303.79	2451.45	1310.59
18	Narmada at Manot	Monsoon	3469.55	3688.27	3101.84	1309.88	4119.56	2914.95	2418.26	2593.50	5293.54	3097.26	2027.91
		Non-Monsoon	154.98	211.07	103.68	97.02	206.64	92.94	88.02	121.74	180.23	254.44	138.90
		Annual	301.28	149.33	1616.10	1026.92	4326.20	3007.89	2506.28	2715.24	5473.77	3351.70	2166.81
19	Narmada at Dindori	Monsoon	0.00	0.00	656.71	699.00	1399.13	1051.91	897.28	1011.64	2408.56	1069.01	1099.62
		Non-Monsoon	0.00	0.00	68.15	63.87	105.99	72.93	55.37	88.38	7127.64	127.70	80.38
		Annual	301.28	149.33	1616.10	1026.92	1505.12	1124.84	952.65	1100.02	9536.20	1196.71	1180.00

Source: Letter (No.5/1/2000/CE(NBO)/416), dated 21/05/2002, of Superintending Engineer, CWC, Bhopal.

Table No.1.6 : Sitewise Maximum & Minimum Observed Water Level and Discharge in Different River Basin

XII Basin : Mahi, Sabarmati & Other Rivers of Saurashtra Kutch												
S.No.	Site Name	Maximum Water Level			Minimum Water Level			Maximum Observed Discharge		Minimum Observed Discharge		Period of Record
		Water Level (m)	Date	Discharge (Cumecs)	Water Level (m)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	Date	Discharge (Cumecs)	
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Khanpur	28.270	01.08.97	13750	Dry River	Many Days	0.00	01.08.97	13783	Many Days	0.00	12/78 to 5/98
2	Chakaliy	191.800	26.06.97	6100	do	do	0.00	01.08.97	3419	do	0.00	02/78 to 5/98
3	Paardibadi	139.140	25.08.97	3560	do	do	0.00	27.08.97	1122	do	0.00	09/77 to 5/98
4	Rangeli	153.350	02.08.97	200.0	do	do	0.00	04.8.97	19.95	do	0.00	07/78 to 5/98
5	Dhariawad	205.600	10.09.97	177.0	do	do	0.00	11.09.97	9.773	do	0.00	07/84 to 5/98
6	Mataji	305.200	26.07.97	4450	do	do	0.00	31.07.97	4504	do	0.00	07/82 to 5/98
7	Nabhoi	20.100	28.06.97	2460	do	do	0.00	26.08.97	536.30	do	0.00	01/91 to 5/98
8	Kheda	26.250	02.08.97	2560	do	do	0.00	01.08.97	2258	do	0.00	04/85 to 5/98
9	Ratanpur	48.200	28.07.97	3680	do	do	0.00	27.07.97	2614	do	0.00	04/85 to 5/98
10	Derol Bridge	95.030	25.06.97	2930	do	do	0.00	-	-	do	0.00	08/80 to 5/98
11	Kheroj	214.900	25.06.97	1330	do	do	0.00	25.06.97	401.0	do	0.00	06/81 to 5/98
12	Gandhav	33.650	29.08.97	540.0	do	do	0.00	29.08.97	534.2	do	0.00	06/74 to 5/98
13	Balotra	104.420	28.08.97	785	do	do	0.00	29.08.97	658.3	do	0.00	07/90 to 5/98
14	Kamalpur	37.175	26.06.97	780.0	do	do	0.00	26.08.97	123.2	do	0.00	07/71 to 5/98
15	Chitrasavi	185.570	25.06.97	26.20	do	do	0.00	11.09.97	17.22	do	0.00	05/78 to 5/98
16	Sarotry	188.660	28.07.97	484.0	do	do	0.00	14.09.97	331.0	do	0.00	06/80 to 5/98
17	Abu Road	256.650	14.09.97	174.0	do	do	0.00	26.08.97	24.13	do	0.00	05/78 to 5/98
18	Lowara	58.700	04.07.97	106.0	do	do	0.00	11.09.97	9.629	do	0.00	12/70 to 5/98
19	Ganod	29.980	13.09.97	1185	do	do	0.00	13.09.97	323.5	do	0.00	11/70 to 5/98
20	Gungan	17.000	24.06.97	540.0	do	do	0.00	09.07.97	130.3	do	0.00	09/70 to 5/98
21	Sapawada	43.000	27.06.97	1185	do	do	0.00	28.06.97	94.50	do	0.00	08/89 to 5/98
22	Mahuwa	18.000	31.07.97	2410	do	do	0.00	25.08.97	2174	do	0.00	10/70 to 5/98
23	Gadat	12.400	31.07.97	2700	do	do	0.00	26.08.97	762.6	do	0.00	01/79 to 5/98
24	Durvash	12.920	31.07.76	4380	do	do	0.00	31.07.97	4044	do	0.00	11/70 to 5/98
25	Pongalwada	17.400	26.08.97	1014	do	do	0.00	26.08.97	1014	do	0.00	04/79 to 5/98
26	Ozerkheda	89.650	31.07.97	1215	do	do	0.00	23.08.97	1002	do	0.00	06/84 to 5/98
27	Naupalsam	107.890	31.07.97	650.0	do	do	0.00	01.08.97	318.0	do	0.00	10/85 to 5/98
28	Motinaroli	18.150	24.08.97	372.0	do	do	0.00	25.08.97	295.2	do	0.00	10/90 to 5/98

Source: Water Year Book for 1997-98

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

I Basin : Mahanadi			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Baronda	1978-2003	2974	2114	1696	1337	1043	671	623	534	206	114
2	Rajim	1971-2003	5912	4804	3701	2918	1935	1762	1574	932	653	419
3	Seorinarayan	1986-2003	33096	21053	17480	15993	14871	11705	8913	7338	5874	4321
4	Basantpur	1972-2003	33615	29718	24913	20959	19962	18587	16351	11674	9637	7725
5	Kotni	1979-2003	4042	2741	2224	1679	1578	1513	1103	834	551	396
6	Pathardih	1989-2003	2086	1434	1241	1059	961	892	700	460	348	343
7	Simga	1972-2003	8434	7245	5861	4996	4678	3888	2793	2304	1771	1136
8	Andhiyarkore	1978-2003	674	505	469	378	308	267	256	205	154	110
9	Ghatora	1980-2003	1471	1297	1114	1082	1014	962	732	545	412	325
10	Jondhra	1979-2003	14481	10827	9670	7938	7002	6339	6039	4341	3427	2310
11	Rampur	1971-2003	2653	1847	1562	1308	1222	943	855	657	435	130
12	Manendragarh	1989-2003	640	473	448	366	329	308	296	258	222	205
13	Bamnidhi	1971-2003	8228	7693	5321	5027	4559	3998	3402	2562	2521	1351
14	Kurubhata	1978-2003	3807	2979	2861	2728	2566	2353	2198	1911	1689	907
15	Sundergarh	1978-2003	4986	4421	4120	3605	3240	3133	2968	2283	2038	948
16	Selebhata	1972-2003	3266	2857	2464	2103	1598	1374	1265	946	579	236
17	Kesinga	1979-2003	8061	4039	6894	2383	11354	4565	4304	2848	10109	2429
18	Kantamal	1975-2003	21975	15520	12862	10772	9384	7141	6323	5417	3791	3416
19	Sukma	2002-2003	-	-	-	-	-	-	-	-	-	-
20	Tikarpara	2002-2003	-	-	-	-	-	-	-	-	-	-

Source: Water Year Book for 2002-2003.

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

II Subernarekha Burhabalang & Baitarni			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
a)	Basin : Subararekha											
1	Muri	11/89 to 5/99	1192	1081	993	846	827	763	746	732	482	-
2	Adityapur	11/71 to 5/99	4725	4286	3434	3016	2614	2206	2071	1696	1340	-
3	Ghatsila	3/71 to 5/99	11285	8984	7940	6401	5569	5257	4443	4058	2738	-
b)	Basin: Burhabalang											
	Govindapur	3/92 to 5/99	-	3589	3353	2990	2382	2099	1961	1763	1533	-
c)	Basin: Baitarani											
1	Anandpur	3/71 to 5/99	7677	6204	5773	4609	4314	4132	3193	2880	2476	-
2	Champua	7/90 to 5/99	1652	1182	1104	1072	991	896	749	724	450	-

Year Book for 1998-99

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

III Basin: Brahmani			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Tilga	6/79-5/99	2916	2419	2076	1982	1874	1769	1580	1496	1178	-
2	Jaraikela	6/72-5/99	7806	6031	5138	4645	4428	4294	3691	3578	2186	-
3	Panposh	6/96-5/99	-	-	13869	12594	11318	9542	7765	6877	6877	-
4	Gomlai	6/89-5/99	15593	12823	11770	10679	10190	9474	8570	7618	5243	-
5	Jenapur	6/80-5/99	23747	20885	19419	17472	16844	15364	15136	14567	11328	-

Source: Water Year Book for 1998-99

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

IV		Rushikulya, Vamsadhra, Saroda & Nagavali										<i>Unit: M. C. M.</i>	
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW										
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
a)	Basin: Rushikulya Purushottampur	6/89 to 5/99	-	3094	2794	2654	2522	1807	1527	1169	733	-	
b)	Basin: Vamsadhra Kashi Nagar	4/71 to 5/99	4118	3501	2947	2509	2338	2153	1800	1593	1176	-	
c)	Basin: Sarada Anakapalli	8/89 to 5/99	1415	1143	835	634	613	347	298	187	105	-	
d)	Basin: Nagavali Srikakulam	8/90 to 5/99	-	3316	3076	2990	2842	2630	2183	1418	1232	-	

Year Book for 1998-99

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

V Godavari			Unit: M. C. M.									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Polavaram	1967- 5/2001	143964	110899	104600	95464	87130	74822	70231	56956	49307	35086
2	Koida	1977-5/2001	159492	131816	106413	94454	90228	81753	69410	61781	54403	35773
3	Konta	1966-5/2001	18396	17121	15510	14871	14218	13658	12491	10605	9820	6278
4	Injaram	1966-5/2001	14472	12819	11329	10854	10152	9516	8739	7433	6220	4721
5	Potteru	1997-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
6	Saradaput	1970-5/2001	6681	5863	5558	5060	4575	4273	4197	3789	3136	2302
7	Sangam	1996-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
8	Perur	1965-5/2001	111863	104422	84235	73156	64713	62778	44341	41171	35829	24385
9	Pathagudem	1965-5/2001	30973	27926	24983	22302	20194	18235	17326	16125	13583	8843
10	Medapalli	1966-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
11	Madadapalli	1972-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
12	Tumnar	1991-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
13	Chindnar	1972-5/2001	14473	10765	9654	9205	8239	7619	6763	5842	4624	3253
14	Cherribeda	1997-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
15	Ambabal	1993-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
16	Sonarpal	1991-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
17	Jagdapur	1966-5/2001	5719	5169	4677	4464	3897	3671	3021	2679	2169	1377
18	Kosagumda	1997-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
19	Murthahandi	1988-2001	2635	1500	1342	1295	1264	1061	1029	841	708	695
20	Nowrangpur	1971-5/2001	4619	3908	3526	3207	2974	2806	2486	2014	1574	714.2
21	Tekra	1964-5/2001	59222	53210	43554	39004	35180	31169	23764	22563	17318	10938
22	Bhatpalli	1986-5/2001	2637	2448	2197	1712	1520	1082	782.9	707.8	298.7	271.3
23	Sirpur	1968-5/2001	23715	19076	16624	14704	12741	10642	6519	5242	3996	3272
24	Bamni	1965-5/2001	23739	18035	15948	13476	11848	9167	6289	5053	3693	2664
25	P.G. Bridge	1965-5/2001	8303	5799	5407	4533	3893	3030	2405	1829	983.0	606.2
26	Mangrul	1992-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
27	Marlegaon	1964-5/2001	3058	2190	1798	1387	1192	861.9	670.4	473.5	330.8	185.9
28	Kanhergaon	1992-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
29	Ghugus	1965-5/2001	9044	7827	7048	5515	4518	3243	3016	2278	1826	873.5
30	Nandgaon	1986-5/2001	1935	1058	966.3	803.6	590.0	442.3	359.7	265.9	170.2	105.4
31	Hivra	1987-5/2001	3635	2815	2541	1705	1205	1024	941.2	794.3	515.2	494.3
32	Bhisnur	1988-5/2001	1540	1343	1169	859.4	638.8	606.4	584.4	296.2	121.9	84.3
33	Asti	1965-5/2001	31394	28371	24637	21790	19486	18423	17071	12496	9101	5769
34	Rajoli	1986-5/2001	1539	1453	997.3	802.0	556.4	492.2	383.4	265.2	205.1	173.2
35	Wairagarh	1992-2001	----- SUFFICIENT DATA IS NOT AVAILABLE ----->									
36	Salebardi	1988-5/2001	767.9	677.9	652.5	630.8	599.8	575.3	532.3	477.4	341.6	330.2
37	Pauni	1964-5/2001	21240	15935	15209	13679	11466	10304	8780	7774	4953	1990

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

V Godavari			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
38	Satrapur	1986-5/2001	5943	4000	2437	2211	1849	1506	1307	997.4	573.4	416.4
39	Ramkona	1986-5/2002	1566	1434	1208	933.4	734.0	573.1	499.0	410.1	196.2	186.1
40	Rajegaon	1986-5/2003	7742	3301	3072	2557	2153	2094	1796	1167	803.3	507.2
41	Kumhari	1986-5/2004	8036	5018	3897	3551	2871	2642	1785	1693	832.0	620.9
42	Keolari	1987-5/2001	2326	1617	1208	1002	974.2	881.8	577.3	407.9	296.5	265.9
43	Somanpalli	1967-5/2001	3605	1964	1769	1429	1224	968.7	725.0	528.4	351.0	223.8
44	Mancherial	1964-5/2001	29037	22468	15774	12101	9738	7367	6104	4287	2049	1516
45	Gandlapet	1986-5/2001	830.2	508.1	272.5	171.9	137.5	72.9	55.3	18.88	4.20	1.78
46	Betmorga	1986-5/2001	1128.2	612.82	440	315.2	188.3	122.6	64.3	32.46	16.9	3.5
47	Degloor	1987-5/2001	982.4	690.4	567.6	503.5	382.2	253.5	88.2	68.55	43.6	23.24
48	Saigaon	1967-5/2001	3352	2084	1418	733.7	631	411.5	280	200.8	64	18.1
49	Bhatkheda	1991-5/2001	711	393	295	242	197	55	16	12	8	5
50	Yelli	1978-5/2001	13691	9450	5250	4229	3468	2744	2018	1493	948.9	576.2
51	Purna	1969-5/2001	4453	3494	1989	1457	1312	867.1	501.1	360.2	307.7	168.4
52	Zari	1987-5/2001	1513	1161	684.3	539.4	447.7	394.5	286.9	64.34	41.8	23.73
53	G.R. Bridge	1976-5/2001	4918	4178	3162	2576	1729	1141	916.3	584.4	358.3	137.9
54	Dhalegaon	1964-5/2001	5744	4947	4211	3150	2661	1654	982.4	675.0	262.4	124.6
55	Pachegoan	1983-5/2001	936.4	621.2	356.3	308.4	164.6	86.84	26.46	17.30	12.48	11.52
56	Ghargaon	1991-5/2001	2023	1316	1101	885	842	798	744	690	681	671

Source : Letter No.1/17/96-GC(Tech)/1106 dated 08.05.2003 from Superintending Engineer, Godavari Circle, Hyderabad and Water Year Book of Godavari Basin for the year 1995-2001

Table No. 1.7 : Site wise Annual Dependable Flow of water in Different River Basins

VI Basin : Krishna

Unit: MCM

Sl. No.	Site Name	Period/ Year	Dependable flow									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	2	3	4	5	6	7	8	9	10	11	12	13
1	VIJAYAWADA	1965-2005	47850	37898	35082	30736	25399	17520	10555	6591	4249	339
2	KEESARA	1965-2005	3937	3194	2317	2049	1412	1174	892	749	510	177
3	MADHIRA	1985-2005	1099	922	739	666	543	441	559	242	150	61
4	PURUSHOTHAMAGUDEM	1988-2005	577	419	294	240	147	55	28	16	12	2
5	PALERU BRIDGE	1965-2005	943	580	474	425	381	254	149	88	50	0
6	WADENAPALLI	1967-2005	52751	45889	38381	34580	28962	21459	16190	10584	8822	2437
7	DAMERACHERLA	1968-2005	1907	1614	1291	956	894	745	642	548	531	15
8	PONDUGALA	1976-2005	46957	39406	31011	25563	22576	17342	11623	8394	7636	1984
9	HALIA	1985-2005	858	162	135	130	112	72	106	25	20	2
10	LAKSHMIPURAM	1985-2005	497	209	167	146	102	68	109	29	5	2
11	BAWAPURAM	1965-2005	10821	8454	6333	5828	5285	4651	3954	2770	1612	668
12	MANTRALAYAM	1972-2005	13112	9194	7500	6897	6255	5502	4956	3433	2466	1201
13	T RAMAPURAM	1966-2005	1743	1265	1090	974	836	777	637	503	399	229
14	KELLODU	1990-2005	350	258	200	66	50	47	32	26	10	0
15	HOOVINAHOLE	2005										
16	MAROL	1967-2005	3267	2548	2298	2007	1829	1563	1402	1265	910	803
17	HARALAHALLI	1967-2005	10437	8488	7666	7282	7035	6626	5578	5233	3904	1707
18	BYLADAHALLI	1985-2005	574	551	502	396	368	309	364	263	142	47
19	KUPPELUR	1990-2005	666	476	445	406	331	266	175	165	64	45
20	HONALI	1980-2005	10103	7745	7332	7178	6927	5976	5384	4934	4370	3076
21	SHIMOGA	1972-2005	6972	6247	5832	5428	5217	4814	4186	4137	3638	1966
22	HOLEHONNUR	2005										
23	KRISHNA AGRAHARAM	1981-2005	43975	41631	32613	29626	25396	20079	15777	13844	12716	3775
24	YADGIR	1965-2005	19359	16131	13518	11314	9116	7968	4974	3770	2741	880
25	MALKHED	1991-2005	2043	1049	951	1901	600	591	354	176	133	102
26	CHINCHOLI	1980-2005	186	71	34	25	12	5	0	0	0	0
27	JEWANGI	1979-2005	770	589	291	225	468	143	96	87	45	3
28	BORIOMERGA	1979-2005	655	420	172	131	297	32	17	12	5	0
29	WADAKBAL	1965-2005	2392	1754	1305	877	573	432	224	189	124	3

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Table No. 1.7 : Site wise Annual Dependable Flow of water in Different River Basins

VI Basin : Krishna

Unit: MCM

Sl. No.	Site Name	Period/ Year	Dependable flow									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	2	3	4	5	6	7	8	9	10	11	12	13
30	TAKLI	1965-2005	10260	8945	7391	6872	5517	4314	2833	2101	745	9
31	KOKANGAON	1979-2005	293	160	130	89	123	35	20	13	0	0
32	SHIRDHON	1979-2005	115	53	36	18	38	7	3	2	1	0
33	NARSINGPUR	1967-2005	10438	7842	6944	6241	5646	4451	3114	2303	473	312
34	SARATI	1965-2005	2282	1843	1645	1449	1207	992	826	432	209	7
35	DHOND	1968-2005	7807	6655	5735	4905	4509	3823	2938	2314	1478	864
36	PHULGAON	1996-2005	1952	1526	1306	1284	1263	957	948	674	619	539
37	HUVINHEDGI	1976-2005	25216	24073	22028	19697	16789	16023	11058	10315	8054	3546
38	TALIKOT	1996-2005	697	358	324	317	160	141	129	128	121	27
39	CHOLACHGUDA	1982-2005	1636	1350	1106	1013	899	866	718	658	342	305
40	NAVALGUND	1991-2005	387	339	302	283	266	253	216	171	118	68
41	MUDHOL	2000-2005	2271	3464	1652	943	809	773	714	611	491	363
42	GOKAK FALLS	1972-2005	3366	2880	2406	2176	2033	1477	1060	882	576	355
43	GOTUR	1980-2005	1855	1534	1424	1338	1159	1124	1077	850	781	527
44	DADDI	1979-2005	2833	2521	2344	2164	2314	1879	1659	1562	1392	1063
45	PANDEGAON	1980-2005	100	54	30	20	8	3	2	1	0	0
46	SADALGA	1969-2005	3723	3205	3075	2861	2648	2473	2250	1856	1525	918
47	BASTAWDE	1979-2005	1780	1548	1410	1309	1438	1131	989	919	809	602
48	VANDUR	1979-2005	1442	1257	1144	1092	1206	922	824	655	483	345
49	TERWAD	1980-2005	6403	5387	4886	4175	3971	3618	3374	3133	2772	2263
50	KURUNDWAD	1972-2005	14422	14638	13152	12595	11248	9503	8564	7586	5908	4707
51	ARJUNWAD	1969-2005	10986	9854	8912	8200	7551	6505	5505	4906	3340	2700
52	SAMDOLI	1967-2005	4356	3942	3551	3353	3165	2878	2593	1982	1524	1361
53	KARAD	1965-2005	7162	6770	5284	5022	4240	3689	3377	2811	2478	2203
54	WARUNJI	1967-2005	4747	3534	3363	3007	2517	2351	2084	1938	1731	1447
55	KOYNA	1973-2005	2874	1912	1453	1160	921	833	708	571	478	364

Source: Krishna & CO-Ordination Circle, Central Water Commission, H.No.11-4-648, 2nd Floor, Krishna Godavari Bhawan, A.C. Guards, Hyderabad-500004.Letter No.KCC/C22012/12/2006/DRS/987-91and dated 24.07.2007. (Updated during September 2007)

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

VII Basin :Cauvery			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Musiri	1973-2001	13568	12672	10450	8973	7768	6595	5719	4827	3774	2431
2	Nallamaranpatti	1979-2001	736	514	325	308	271	140	68	47	33	32
3	Kodumudi	1972-2001	13069	12664	11271	9605	8962	7807	6476	5640	4521	3157
4	Savandapur	1978-2001	980	876	729	654	643	553	545	481	442	436
5	Tengumarahada	1979-2001	499	407	347	322	275	265	219	193	168	154
6	Nellithurai	1979-2001	2077	1775	1633	1318	1210	1136	1049	893	667	544
7	Urachikottai	1979-2001	11540	10293	9031	7830	6581	6314	5537	5335	4524	2971
8	Biligundulu	1972-2001	11810	10154	9644	9040	7845	7211	6069	5418	4463	3042
9	Kanakpara	1979-2001	441	318	270	226	174	135	109	68	30	16
10	T.K Halli	1978-2001	1096	1022	759	689	661	593	551	483	378	271
11	Kollegal	1972-2001	9805	9549	7856	7551	7062	5256	4730	4224	3936	2155
12	T.Narsipur	1972-2001	4305	3930	3299	3117	2869	2712	2378	2274	2132	1091
13	Muthankera	1973-2001	3475	3116	2851	2564	2341	2251	2196	2002	1570	1051
14	Kattamalalavadi	1979-2001	504	483	467	320	311	291	165	138	114	22
15	M.H. Halli	1979-2001	2563	2483	1877	1492	1120	1020	838	691	583	542
16	Kudige	1974-2001	4274	3510	3103	2697	2562	2450	2327	2112	1622	956

Source: Water Year Book for 2000-2001

Table No.1.7 : Site-wise Annual Dependable Flow of Water in Different River Basins

VIII Basin : East Flowing Rivers			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Thammavaram	2000-01	1709	1601	1344	1255	1189	1046	964.0	878.0	728.0	532.0
2	K.Bitragunda	2000-01	434.0	323.0	323.0	300.0	206.2	137.0	129.1	58.00	3.133	3.133
3	Avaramkuppam	2000-01	205.4	105.0	60.26	43.30	42.34	23.19	12.73	4.605	1.227	0.700
4	Villupuram	2000-01	1131	803.5	327.2	189.2	91.45	56.53	42.59	9.156	Dry	Dry
5	Vazhavachanur	2000-01	1015	707.1	298.5	222.9	176.8	147.2	130.5	41.16	9.472	9.245
6	Gummanur	2000-01	419.8	308.7	236.8	220.4	172.6	141.2	83.11	64.30	56.85	25.95
7	Paramkundi	2000-01	527.8	260.8	177.6	47.76	24.62	15.46	10.48	7.171	0.062	Dry
8	Theni	2000-01	880.8	819.4	718.0	672.9	653.3	591.0	583.2	481.9	355.2	312.6
9	Irrukkankudi	2000-01	230.2	100.8	93.90	54.94	18.73	10.63	8.334	Dry	Dry	Dry
10	Murappanadu	2000-01	1201	881.8	511.4	420.7	386.9	343.6	280.3	240.2	229.4	215.3
11	A.P. Puram	2000-01	72.47	38.36	30.98	11.98	6.187	2.898	0.657	0.035	0.020	0.009
12	Ambassmudram	2000-01	73.63	73.63	73.63	52.48	52.48	52.48	52.48	52.48	52.48	52.48
13	Nellore	2000-01	4094	3820	1182	1140	1117	643.5	555.9	33.78	14.77	14.77
14	Chennur	2000-01	3789	3350	1671	1575	1382	1068	893.2	875.1	598.5	598.5
15	Alladupalli	2000-01	2905	2109	1265	1241	1215	1138	765.1	741.9	265.4	265.4
16	Singavaram	2000-01	314.3	163.2	72.14	32.40	22.90	13.14	4.666	2.160	Dry	Dry
17	Tadapatri	2000-01	632.7	464.0	284.9	150.9	97.72	89.14	70.37	47.26	32.57	22.03
18	Nagalamadike	2000-01	154.1	21.43	4.406	3.110	2.596	1.642	1.382	0.407	0.000	0.000
19	Nandipalli	2000-01	242.7	213.9	190.6	64.99	60.83	37.24	28.81	23.24	1.918	1.918
20	Kamalapuram	2000-01	813.7	200.1	146.9	53.91	47.52	16.68	12.53	11.55	0.000	0.000
21	Naidupeta	2000-01	825.8	531.5	472.3	294.4	205.2	181.3	94.44	66.96	43.91	22.40
22	Sullurpet	2000-01	400.5	293.5	246.6	144.5	125.9	89.34	24.54	13.26	12.45	12.45
23	Chengalpattu	2000-01	1088	928.8	326.5	94.75	78.41	47.10	29.96	14.70	12.19	6.994
24	Magaral	2000-01	608.1	301.2	147.4	54.10	29.90	3.223	0.480	0.000	0.000	0.000
25	Arcot	2000-01	604.9	212.2	95.53	51.83	13.95	0.166	0.000	0.000	0.000	0.000
26	Kudalaiyathur	2000-01	880.9	824.7	691.0	493.5	410.9	179.3	98.87	20.04	0.000	0.000

Note : M.C.M. : Million Cubic Metre

Source: Water Year Book for 2000-01, Cauvery & Southern Rivers Organisation, Coimbatore.

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basin

IX West Flowing Rivers from Kanyakumari to Taj			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Badlapur	6/88-5/2000	3742	3326	3209	2642	2576	2539	2370	2140	1808	1808
2	Mangaon	6/87-5/2000	1243	1156	1096	1006	936.3	913.8	869.50	801.7	616.9	616.9
3	Anjanari	6/92-5/2000	1068	1043	1019	961	907.1	860.3	750.60	620.9	620.9	620.9
4	Adavali	6/87-5/2000	3309	3301	3210	3111	3091	2834	2722	2621	2382	2382
5	Ganjim	6/71-5/2000	4932	4353	4053	3848	3796	3422	3191	2948	2547	2236
6	Collem	6/71-5/2000	1806	1226	627.5	605.3	524.4	479.2	452.9	420.4	340.7	7.59
7	Kolad	6/97-5/2000	817.2	817.2	471.4	471.4	471.4	449.4	449.4	449.4	449.4	449.4
8	Nagothane	6/97-5/2000	1603	1603	1261	1261	1261	604.7	604.7	604.7	604.7	604.7
9	Pen	6/97-5/2000	334.6	334.6	305.8	305.8	305.8	218.5	218.5	218.5	218.5	218.5
10	Ambarampalyan	6/77-5/2000	551.4	439.4	358.3	299.8	280.8	266.8	250	238.6	227.7	194.1
11	Santeguli	6/88-5/2000	6244	6040	5898	5121	4925	2008	3718	3521	3395	3395
12	Haladi	6/86-5/2000	2554	2203	2122	2077	2022	1743	1699	1531	1298	1298
13	Yennehole	6/90-5/2000	1803	1767	1746	1665	1612	1551	1409	1405	1375	1375
15	Erinjipuzha	6/86-5/2000	2832	2798	2522	2488	2330	2271	1948	1863	1532	1532
16	Perumannu	6/86-5/2000	4688	4311	3976	3695	3568	3355	3084	3056	1904	1904
17	Kuniyal	6/81-5/2000	5775	5539	4796	4373	4054	3940	3449	3360	3262	2148
18	Karathodu	6/87-5/2000	1815	1561	1518	1239	1195	1105	1059	1024.0	802.5	802.5
19	Kumbidi	6/80-5/2000	6041	5539	4744	4107	4028	3850	3783	3614	3466	2684
20	Pulamanthol	6/86-5/2000	2304	2197	1891	1816	1729	1639	1606	1502	1048	1048
21	Mankara	6/86-5/2000	1323	1274	907.8	638.9	546.5	449.2	446.8	439.5	354.7	354.7
22	Pudur	6/86-5/2000	550.7	426.7	299.3	289.9	213.7	208.6	205.8	204.6	164.6	164.6
23	Arangali	6/78-5/2000	2663	2362	2327	1854	1739	1656	1575	1393	1286	1169
24	Neeleswaram	6/71-5/2000	10130	8911	8160	7653	6715	6355	6048	5752	4852	3825
25	Ramamangalan	6/78-5/2000	6098	5598	5505	5178	5002	4876	4252	4184	4105	3611
26	Kalampur	6/87-5/2000	1380	1340	1257	1238	1214	1062	1049	952.5	908.9	908.9
27	Kidangoor	6/86-5/2000	2252	1996	1874	1791	1752	1751	1465	1413	1362	1362
28	Kalloppara	6/86-5/2000	2196	2147	2002	1973	1905	1803	1474	1414	1282	1282
29	Malakkara	6/86-5/2000	5295	4721	4300	4247	3785	3728	3649	3289	3112	3112
30	Thumpamor	6/78-5/2000	1614	1470	1439	1195	1139	1039	936.8	860.5	747.4	720.6
31	Pattazhi	6/78-5/2000	2054	1943	1893	1533	1472	1394	1302	1208	1037	902.2
32	Ayilam	6/79-5/2000	933.7	876.18	749.5	691.4	626.4	542.7	532.2	446.8	347.3	288.1

Source: Water Year Book for 1999-2000

Table No.1.7 : Site-wise Annual Dependable Flow of Water in Different River Basins

X Basin: Tapi *Unit: M. C. M.*

Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Dedtalai	2001-02	5542	4468	3802	3131	2521	2270	2232	1810	1042	95.62
2	Burhanpur	2001-02	8715	6691	5830	5241	4631	3893	3634	2638	1554	392
3	Lakhpuri	2001-02	1033	720.9	548.4	469.1	382.1	327.4	288	237	171.2	62.75
4	Gopalkheda	2001-02	1898	1728	1363	1055	835	674.5	494.8	361.7	334.8	265.6
5	Yerli	2001-02	4724	3534	2789	2418	2050	1589	1171	1083	762.6	647.9
6	Dapuri	2001-02	964.5	736.2	653.3	473.1	444.9	291.5	204.1	151.4	84.0	20.73
7	Savkheda	2001-02	14630	11519	10092	8346	7319	6863	5273	4380	3033	1206
8	Malkheda	2001-02	200.2	161.4	87.67	78.05	59.88	42.6	19.93	18.37	9.140	3.560
9	Morane	2001-02	237.7	196.3	160.3	119	107.6	77.14	66.77	46.56	30.84	12.89
10	Gidhade	2001-02	11754	10359	7871	6031	5010	4914	4853	3871	3238	2599
11	Sarangkheda	2001-02	15495	14284	10386	8844	8740	6414	4945	3356	3170	1111
12	Ghala	2001-02	14073	12211	9025	5976	4055	2960	2123	1495	977.6	736.4

Note : M.C.M. : Million Cubic Metre

Source: Water Year Book for 2001-02, Tapi Basin, Gandhi Nagar.

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

XI Basin: Narmada			Unit: M. C. M.									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Orsang at Chandwada	06/1999-5/2000	3448.0	2226.9	1661.6	1185.7	824.0	539.9	352.5	227.9	134.5	52.7
2	Narmada at	06/1999-5/2000	65021.3	49049.6	40356.5	34319.9	27770.0	24547.7	21832.2	17554.3	12068.2	4579.7
3	Uri at Dhulsar	06/1999-5/2000	-	-	-	-	-	-	-	-	-	-
4	Goi at Pati	06/1999-5/2000	-	-	-	-	-	-	-	-	-	-
5	Narmada at Rajghat	06/1999-5/2000	60684.5	47234.3	39397.6	35119.6	27574.3	24931.1	21822.1	18057.7	13764.7	6608.4
6	Narmada at Mandleshwar	06/1999-5/2000	58081.3	46549.3	40217.6	34881.0	26742.0	24500.3	20906.3	18050.9	13170.0	7412.8
7	Kundi at Kogaon	06/1999-5/2000	2427.00	1603.10	1237.40	868.90	723.60	566.30	438.60	283.50	166.50	60.20
8	Naarmada at Mortakka	06/1999-5/2000	-	-	-	-	-	-	-	-	-	-
9	Narmada at Handia	06/1999-5/2000	44827.4	35183.6	29135.9	25776.0	21670.6	17676.8	15855.6	13287.7	9137.3	5346.9
10	Ganjal at Chhidgaon	06/1999-5/2000	2306.7	1583.2	1142.0	867.5	712.7	716.9	494.5	357.0	263.0	154.7
11	Narmada at Hoshangabad	06/1999-5/2000	44480.3	33406.7	27671.0	20087.8	18769.1	15652.4	13394.0	10587.3	8045.1	3694.5
12	Narmada at Sandia	06/1999-5/2000	26343.4	20858.4	17265.1	15214.3	11956.5	9775.8	8248.1	7159.1	5076.3	2515.1
13	Shakkat at Gadarwara	06/1999-5/2000	2730.0	1871.7	1463.3	1178.3	962.6	852.5	711.3	514.2	376.7	5.9
14	Narmada at Barmanghat	06/1999-5/2000	17438.10	18948.00	15136.00	12646.90	10408.40	7877.00	6937.80	4818.70	3453.20	1448.70
15	Sher at Belkheri	06/1999-5/2000	1378.8	947.1	769.3	677.9	565.7	482.8	383.0	303.2	232.3	101.4
16	Hiran at Patan	06/1999-5/2000	2882.3	2329.4	1939.8	1543.0	1393.1	1041.0	770.0	572.9	447.3	114.5
17	Narmada at Jamtara	06/1999-5/2000	18266.5	14080.9	12178.8	9836.9	6929.8	8596.4	4799.3	3735.8	2417.1	1114.1
18	Banjar at Hirdaya Nagar	06/1999-5/2000	2917.2	2203.4	1898.3	1474.7	1211.9	978.4	789.3	672.9	511.9	5.4
19	Banjar at Bamni	06/1999-5/2000	-	-	-	-	-	-	-	-	-	-
20	Burhner at Mohgaon	06/1999-5/2000	3937.6	3091.2	2610.8	2224.9	1875.3	1617.3	1313.2	1168.2	847.2	429.3
21	Narmada at Manot	06/1999-5/2000	5707.1	4278.4	3618.3	2874.4	2485.4	2118.0	1887.3	1625.0	1357.4	810.7
22	Narmada at Bijora	06/1999-5/2000	-	-	-	-	-	-	-	-	-	-
23	Narmada at Dindori	06/1999-5/2000	1880.4	1549.1	1385.8	1224.4	1079.6	912.3	810.3	669.2	537.4	442.9

Source : Water Year Book for 1999-2000

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

XII Basin : Mahi, Sabarmati & Other West Flowing Rivers of Sourashtra & Kutch			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Khanpur	2002-2003	8873	5394	4112	3284	2415	1736	974	755	257	0
2	Chakaliya	- do -	4072	2986	1607	1090	779	689	324	200	67	0
3	Paardibadi	- do -	3872	3125	2546	1868	1265	975	795	372	59.6	0.00
4	Rangeli	- do -	1240	822	704	633	599	390	315	178	0.0	0.00
5	Dhariawad	- do -	347.9	307.5	136.0	69.3	46.4	40.4	33.6	27.0	14.9	0.0
6	Mataji	- do -	2311	1857	1414	1292	999	633	418	228	162.7	0.00
7	Vautha	- do -	<----- (Data is very less for calculation of dependability) ----->									
8	Kheda	- do -	1142	646	261	167	113	35	24	17	0	0
9	Ratanpur	- do -	652	263	180	121	55	43	37	29	9.0	0
10	Derol Bridge	- do -	840	694	286	165	165	23	15	2	0	0
11	Kheroj	- do -	766	409	277	216	163	121	69	43	31	0.0
12	Jotasan	- do -	<----- (Not calculated as record is for less then 10 years) ----->									
13	Gandhav	- do -	1017	626	269	57.2	18	3.5	1.3	0.0	0.0	0.0
14	Balotra (Jasol)	- do -	682.9	511.1	265.3	58.2	17.2	1.1	0.0	0.0	0.0	0.0

Table No.1.7 : Sitewise Annual Dependable Flow of Water in Different River Basins

XII Basin : Mahi, Sabarmati & Other West Flowing Rivers of Sourashtra & Kutch			<i>Unit: M. C. M.</i>									
Sl. No.	Site Name	Period/ Years	DEPENDABLE FLOW									
			10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
15	Kamalpur	- do -	950.6	598.6	240.9	177.3	59.5	12.0	0.5	0	0	0
16	Chitrasani	- do -	93.0	48.5	34.2	17.1	9.0	6.3	4.0	0.3	0.2	0.0
17	Sarotry	- do -	910.1	627.6	193.9	96.21	66.07	42.07	28.63	15.89	3.62	0.0
18	Abu Road	- do -	474.3	293.4	63.9	43.1	23.0	17.1	6.0	3.0	0.0	0.0
19	Lowara	- do -	396.7	304.1	210.7	155.4	115.6	72.5	41.4	22.7	21.5	21.5
20	Ganod	- do -	1243.7	481.8	386.9	222.2	157.1	85.7	55.5	26.1	3.3	0.0
21	Gungan	- do -	451.9	271	186.5	98.8	45.7	24.7	13.5	6.5	1.4	0.0
22	Sapawada	- do -	222.0	106.5	54.2	23.4	17.4	8.0	5.2	1.2	0.0	0.0
23	Mahuwa	- do -	2385	1551	1262	1182	1112	1003	911.9	792.1	423.4	36.78
24	Gadat	- do -	2306	1801	1523	1374	1236	1098	1068	940.0	788.3	13.79
25	Durvesh	- do -	4062	3657	3508	3045	2840	2531	2261	1966	1598	12.42
26	Pingalwada	- do -	866.8	654.7	522.5	420.8	345.4	302.1	273.4	179.7	146.6	46.85
27	Ozerkheda	- do -	1663	1247	1058	884	917	882.9	804	680.2	605	458.7
28	Nanipalsan	- do -	1192	999	912	852	814	673	655	558	475	439
29	Motinaroli	- do -	1035	583.7	423	358.3	276	309.2	233	219.3	175	136.0

Source: Water Year Book for 2002-2003

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

I Basin : Mahanadi			Unit : Millimeter											
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Baronda	1978-2003	4.80	5.18	6.08	2.35	3.44	5.98	33.07	48.51	47.69	20.39	4.23	2.26
2	Rajim	1971-2003	4.31	4.79	34.92	19.44	10.78	3.96	1.16	0.60	0.87	0.17	0.00	0.00
3	Seorinarayar	1986-2003	6.73	2.94	44.34	65.94	6.37	2.38	0.77	0.35	0.28	0.14	0.07	0.01
4	Basantpur	1972-2003	12.87	16.24	18.53	12.66	10.72	22.43	37.77	67.55	73.03	58.39	27.14	7.58
5	Kotni	1979-2003	14.32	1.62	37.50	18.65	2.20	0.64	.00	0.00	0.00	0.00	0.00	0.00
6	Pathardih	1989-2003	9.91	0.59	71.50	32.70	19.10	2.66	0.00	0.00	0.00	0.00	0.00	0.00
7	Singa	1972-2003	12.45	2.60	58.25	38.01	6.00	1.78	0.84	0.37	0.30	0.26	0.12	0.00
8	Andhiyarkor	1978-2003	6.77	2.04	30.58	75.68	1.74	1.20	1.31	0.85	1.10	0.78	0.17	0.04
9	Ghatora	1980-2003	6.06	3.63	27.63	75.86	9.28	1.65	0.90	0.49	0.51	0.21	0.00	0.00
10	Jondhra	1979-2003	6.89	2.59	32.01	51.68	4.14	1.44	0.70	0.35	0.36	0.21	0.08	0.00
11	Rampur	1971-2003	3.31	2.63	33.40	8.03	2.18	0.50	0.05	0.00	0.00	0.00	0.00	0.00
12	Manendragarh	1989-2003	6.44	15.56	93.16	3.48	6.54	1.95	1.52	1.31	2.20	1.89	0.13	0.00
13	Bamnidhi	1971-2003	53.80	62.10	29.67	58.15	31.41	27.22	18.58	7.19	8.45	8.53	6.90	5.03
14	Kurubhata	1978-2003	18.56	43.16	9.94	3.37	15.54	8.21	5.33	2.62	3.81	2.50	0.15	0.00
15	Sundergarh	1978-2003	23.24	29.77	17.95	78.30	18.56	9.00	3.06	1.86	1.89	0.70	0.35	0.00
16	Selebhata	1972-2003	1.64	3.01	35.04	47.64	4.15	1.21	0.00	0.00	0.00	0.00	0.00	0.00
17	Kesinga	1979-2003	14.50	10.82	69.68	59.58	6.85	5.17	6.25	2.62	3.56	3.28	7.06	13.71
18	Kantamal	1975-2003	11.60	8.65	76.21	71.37	8.88	5.61	5.27	2.53	1.36	2.24	5.19	9.80
19	Sukma	2002-2003	-	-	-	-	-	-	-	-	-	-	-	-
20	Tikarpur	2002-2003	1.18	1.46	3.25	7.28	1.56	0.96	0.81	0.77	0.42	0.40	0.47	0.48

Source: Water Year Book for 2002-2003

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

I Basin : Mahanadi			Unit : Millimeter											
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Baronda	1978-2003	4.80	5.18	6.08	2.35	3.44	5.98	33.07	48.51	47.69	20.39	4.23	2.26
2	Rajim	1971-2003	4.31	4.79	34.92	19.44	10.78	3.96	1.16	0.60	0.87	0.17	0.00	0.00
3	Seorinarayar	1986-2003	6.73	2.94	44.34	65.94	6.37	2.38	0.77	0.35	0.28	0.14	0.07	0.01
4	Basantpur	1972-2003	12.87	16.24	18.53	12.66	10.72	22.43	37.77	67.55	73.03	58.39	27.14	7.58
5	Kotni	1979-2003	14.32	1.62	37.50	18.65	2.20	0.64	.00	0.00	0.00	0.00	0.00	0.00
6	Pathardih	1989-2003	9.91	0.59	71.50	32.70	19.10	2.66	0.00	0.00	0.00	0.00	0.00	0.00
7	Singa	1972-2003	12.45	2.60	58.25	38.01	6.00	1.78	0.84	0.37	0.30	0.26	0.12	0.00
8	Andhiyarkor	1978-2003	6.77	2.04	30.58	75.68	1.74	1.20	1.31	0.85	1.10	0.78	0.17	0.04
9	Ghatora	1980-2003	6.06	3.63	27.63	75.86	9.28	1.65	0.90	0.49	0.51	0.21	0.00	0.00
10	Jondhra	1979-2003	6.89	2.59	32.01	51.68	4.14	1.44	0.70	0.35	0.36	0.21	0.08	0.00
11	Rampur	1971-2003	3.31	2.63	33.40	8.03	2.18	0.50	0.05	0.00	0.00	0.00	0.00	0.00
12	Manendragarh	1989-2003	6.44	15.56	93.16	3.48	6.54	1.95	1.52	1.31	2.20	1.89	0.13	0.00
13	Bamnidhi	1971-2003	53.80	62.10	29.67	58.15	31.41	27.22	18.58	7.19	8.45	8.53	6.90	5.03
14	Kurubhata	1978-2003	18.56	43.16	9.94	3.37	15.54	8.21	5.33	2.62	3.81	2.50	0.15	0.00
15	Sundergarh	1978-2003	23.24	29.77	17.95	78.30	18.56	9.00	3.06	1.86	1.89	0.70	0.35	0.00
16	Selebhata	1972-2003	1.64	3.01	35.04	47.64	4.15	1.21	0.00	0.00	0.00	0.00	0.00	0.00
17	Kesinga	1979-2003	14.50	10.82	69.68	59.58	6.85	5.17	6.25	2.62	3.56	3.28	7.06	13.71
18	Kantamal	1975-2003	11.60	8.65	76.21	71.37	8.88	5.61	5.27	2.53	1.36	2.24	5.19	9.80
19	Sukma	2002-2003	-	-	-	-	-	-	-	-	-	-	-	-
20	Tikarpur	2002-2003	1.18	1.46	3.25	7.28	1.56	0.96	0.81	0.77	0.42	0.40	0.47	0.48

Source: Water Year Book for 2002-2003

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

II Subernarekha Burhabalang & Baitarni			<i>Unit : Millimeter</i>											
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
a) Basin : Subararekha														
1	Muri	2002-2003	0.01	0.01	0.03	0.08	0.07	0.03	0.06	0.03	0.01	0.01	0.01	0.00
2	Adityapur	2002-2003	0.03	0.01	0.10	0.12	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00
3	Ghatsila	2002-2003	0.01	0.01	0.09	0.23	0.09	0.03	0.16	0.01	0.00	0.00	0.00	0.00
b) Basin: Burhabalang														
	Govindapur	2002-2003	0.01	0.01	0.09	0.23	0.09	0.03	0.02	0.01	0.00	0.00	0.00	0.00
c) Basin: Baitarani														
1	Anandpur	2002-2003	0.01	0.01	0.04	0.10	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00
2	Champua	2002-2003	0.01	0.01	0.05	0.10	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Source: Water Year Book for 2002-2003

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

III Basin : Brahmani			<i>Unit : Millimeter</i>											
Sl.No	Site Name	Reference	June	July	August	September	October	November	December	January	February	March	April	May
		Period												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Tilga	1998-99	0.03	0.13	0.14	0.27	0.10	0.07	0.02	0.01	0.01	0.00	0.00	0.01
2	Jaraikela	1998-99	0.01	0.06	0.09	0.19	0.07	0.05	0.01	0.01	0.00	0.00	0.00	0.01
3	Panposh	1998-99	0.02	0.10	0.10	0.23	0.07	0.04	0.01	0.01	0.01	0.00	0.00	0.00
4	Gomlai	1998-99	0.01	0.07	0.08	0.18	0.07	0.04	0.01	0.00	0.00	0.00	0.00	0.00
5	Jenapur	1998-99	0.02	0.07	0.06	0.10	0.05	0.05	0.02	0.02	0.01	0.01	0.01	0.02

Source: Water Year Book, 1998-99

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

IV Rushikulya, Vamsadhra, Saroda & Nagavali													<i>Unit : Millimeter</i>		
SL.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
a)	Basin: Rushikulya Purushottampur	2002-2003	0.0026	0.0010	0.0304	0.0606	0.0205	0.0020	0.0011	0.0002	0.0004	0.0001	0.0003	0.0000	
b)	Basin: Vamsadhra Kashi Nagar	2002-2003	0.0044	0.0022	0.0308	0.0325	0.0112	0.0028	0.0016	0.0008	0.0007	0.0007	0.0008	0.0001	
c)	Basin: Saroda Anakapalli	2002-2003	0.0030	0.0010	0.0010	0.0050	0.0050	0.0002	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	
d)	Basin: Nagavali Srikakulam	2002-2003	0.0055	0.0017	0.0128	0.0169	0.0015	0.0015	0.0023	0.0022	0.0015	0.0010	0.0001	0.0000	

Source: Water Year Book doe 2002-2003

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

V Basin : Godavari													Unit : Millimeter	
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Polavaram	1967-2001	7.15	52.46	102.66	71.30	30.55	7.73	4.53	3.21	2.42	2.28	2.02	1.96
2	Koida	1977-2001	8.95	56.03	116.90	73.22	32.32	8.36	5.01	3.67	2.91	2.84	2.30	2.39
3	Konta	1966-2001	34.61	120.94	192.08	137.04	71.48	35.42	27.74	24.00	20.81	21.30	19.10	19.97
4	Injaram	1966-2001	35.93	145.47	254.97	163.54	75.12	30.55	22.98	18.04	14.88	15.04	13.70	14.53
5	Potteru	1997-2001	178.50	226.08	291.77	223.57	134.92	125.87	82.89	85.13	81.71	93.08	88.15	9354.00
6	Saradaput	1970-2001	58.81	186.39	304.59	209.53	94.36	41.63	28.42	22.17	18.70	18.02	16.96	19.61
7	Sagam	1996-2001	0.78	28.04	63.47	52.51	14.95	6.54	3.10	0.73	0.06	0.15	0.00	0.00
8	Perur	1965-2001	7.17	48.36	95.65	66.87	26.82	6.69	2.97	1.94	1.41	1.11	0.68	0.63
9	Pathagudem	1965-2001	17.35	117.43	212.77	129.07	42.88	11.68	5.52	3.47	1.90	1.42	1.05	1.50
10	Medapalli	1966-2001	11.63	151.97	344.59	186.97	58.59	19.10	11.31	7.40	4.18	2.92	1.62	1.07
11	Madadapalli	1973-2001	32.84	177.47	341.00	217.90	98.27	37.55	16.07	12.03	9.06	8.45	8.29	6.99
12	Tumnar	1991-2001	20.97	132.15	218.33	158.52	62.01	19.37	7.36	4.47	2.29	1.64	1.99	1.75
13	Chindnar	1972-2001	22.23	109.81	179.29	118.47	43.72	13.90	6.40	4.75	2.92	2.30	2.03	3.50
14	Cherribeda	1997-2001	10.98	41.51	72.81	69.16	38.36	14.83	6.15	2.64	2.54	0.54	0.00	0.00
15	Ambabal	1993-2001	7.04	77.57	139.74	105.67	31.36	8.29	2.27	5.80	0.03	0.00	0.00	0.00
16	Sonarpal	1991-2001	7.70	60.29	157.88	96.42	23.99	6.09	10.81	0.94	0.00	0.00	0.00	0.00
17	Jagdapur	1966-2001	30.11	109.49	174.42	120.53	44.31	16.51	11.51	8.33	5.47	5.44	4.55	5.93
18	Kosagumda	1997-2001	21.38	52.88	115.63	64.57	24.19	14.68	4.89	2.33	2.37	0.68	1.01	2.71
19	Murthahandi	1988-2001	-	-	-	-	-	-	-	-	-	-	-	-
20	Nowrangpur	1971-2001	46.47	173.21	265.24	182.96	68.92	31.92	26.60	20.14	13.15	13.27	10.12	13.87
21	Tekra	1964-2001	12.02	70.60	129.05	84.10	26.54	6.53	3.49	2.18	1.64	1.21	0.62	0.57
22	Bhatpalli	1986-2001	31.84	102.92	167.95	84.17	67.71	11.41	5.65	3.77	2.34	1.97	2.05	2.87
23	Sirpur	1968-2001	16.17	52.75	99.33	67.76	23.18	4.56	2.40	1.73	1.26	0.91	0.39	0.42
24	Bamni	1965-2001	14.24	51.99	95.83	68.64	22.61	4.44	2.64	1.76	1.21	0.98	0.40	0.37
25	P.G. Bridge	1965-2001	14.96	41.74	82.66	63.45	23.17	4.88	2.37	1.43	0.85	0.63	0.23	0.20
26	Mangrul	1992-2001	10.12	29.72	31.43	36.04	10.58	2.43	1.44	1.44	0.80	0.88	0.57	0.52
27	Marlegaon	1964-2001	10.01	32.12	68.40	56.50	17.45	3.33	2.14	0.98	0.59	0.41	0.49	0.50
28	Kanhergaon	1992-2001	8.96	27.02	41.76	36.08	16.17	6.51	1.29	0.14	0.05	0.03	0.01	0.01
29	Ghugus	1965-2001	12.78	46.87	83.87	67.57	18.15	3.11	2.41	1.25	1.12	0.82	0.28	0.29
30	Nandgaon	1986-2001	10.08	29.50	56.28	43.42	13.34	2.94	2.50	2.93	1.81	1.71	0.59	0.36

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

V Basin : Godavari														<i>Unit : Millimeter</i>
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
31	Hivra	1987-2001	10.23	31.34	42.71	49.90	15.92	3.33	3.67	2.59	1.92	1.62	0.74	1.86
32	Bhisnur	1988-2001	11.57	26.28	30.67	51.90	14.74	3.53	3.92	4.26	3.87	2.78	1.38	4.55
33	Asti	1965-2001	11.40	88.03	168.29	101.24	28.03	7.37	4.07	2.50	1.95	1.35	0.77	0.58
34	Rajoli	1986-2001	4.51	101.56	166.46	80.74	29.14	6.27	0.79	0.39	0.16	0.02	0.00	0.00
35	Wairagarh	1992-2001	5.11	90.14	104.67	91.31	18.83	3.72	1.03	0.48	0.07	0.00	0.00	0.00
36	Salebardi	1988-2001	4.39	93.80	126.13	69.15	21.15	6.09	2.10	0.54	0.36	0.02	0.03	0.01
37	Pauni	1964-2001	11.19	75.50	138.64	83.30	22.47	6.67	4.12	2.82	2.20	1.52	1.05	0.73
38	Satrapur	1986-2001	10.90	37.64	51.65	68.95	17.58	6.05	6.37	4.96	2.55	2.10	1.93	1.17
39	Ramkona	1986-2001	15.68	63.22	103.44	97.78	33.49	8.50	7.12	3.08	1.64	1.45	0.34	0.13
40	Rajegaon	1986-2001	13.10	157.67	190.42	128.05	36.81	8.33	3.93	2.38	1.17	1.62	0.94	0.55
41	Kumhari	1986-2001	13.13	117.04	137.04	109.51	22.64	6.13	7.07	4.52	2.40	1.41	0.75	0.90
42	Keolari	1987-2001	12.65	95.97	92.09	99.29	25.20	4.44	9.03	4.99	3.05	2.43	2.11	1.50
43	Somanpalli	1967-2001	2.39	19.67	42.11	29.77	19.13	4.67	1.99	1.07	0.78	0.70	0.52	0.68
44	Mancherial	1964-2001	2.27	14.14	38.47	38.64	23.00	3.85	1.74	1.12	0.90	0.96	0.51	0.34
45	Gandlapet	1986-2001	5.18	28.76	68.08	40.92	31.55	2.28	0.17	0.18	0.00	0.00	0.00	0.00
46	Betmorga	1986-2001	1.55	16.34	65.70	45.66	28.23	2.43	0.80	0.43	0.34	0.24	0.06	0.06
47	Degloor	1987-2001	4.20	24.62	84.72	57.25	35.70	4.27	0.74	0.33	0.01	0.02	0.00	0.10
48	Saigaon	1967-2001	4.19	7.89	23.62	45.60	27.83	3.67	0.95	0.31	0.13	0.07	0.01	0.13
49	Bhatkheda	1991-2001	0.38	2.88	18.34	27.11	25.49	2.34	0.97	0.00	0.00	0.00	0.00	0.00
50	Yelli	1978-2001	5.47	13.11	24.98	28.97	15.58	2.26	1.17	0.75	0.66	0.58	0.41	0.61
51	Purna	1969-2001	7.44	14.41	32.15	36.49	15.12	2.85	1.39	0.84	0.83	0.65	0.74	0.97
52	Zari	1987-2001	7.83	16.29	23.77	31.19	20.79	3.97	0.37	0.05	0.00	0.02	0.00	0.01
53	G.R. Bridge	1976-2001	3.68	10.30	16.54	18.99	10.12	2.03	1.13	0.64	0.54	0.45	0.26	0.32
54	Dhalegaon	1964-2001	3.97	15.81	26.80	27.56	11.23	2.18	1.53	0.73	0.61	0.47	0.31	0.40
55	Pathegoan	1983-2001	0.81	9.34	17.57	11.08	10.31	1.06	0.09	0.01	0.00	0.00	0.00	0.00
56	Ghargaon	1991-2001	57.55	498.72	393.34	239.47	305.90	211.72	3.67	0.27	0.00	0.00	0.00	0.33

Source : Letter No.1/17/96-GC(Tech)/1106 dated 08.05.2003 from Superintending Engineer, Godavari Circle, Hyderabad

Table No. 1.8 : Site-wise Average Flow per Unit Drainage Area in Different River Basins

VI Basin : Krishna

Unit: Millimeter

Sl. No.	Site Name	Reference Period	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	VIJAYAWADA	1965-2005	0.985	8.647	30.574	25.462	17.724	4.355	1.773	1.245	1.075	1.393	1.470	1.687
2	KEESARA	1965-2005	2.691	22.852	55.990	44.689	35.039	11.882	5.152	2.564	1.404	1.185	0.791	2.129
3	MADHIRA	1985-2005	3.494	21.357	74.069	73.984	57.691	24.988	14.398	8.888	6.216	5.335	3.721	6.244
4	PURUSHOTHAMAGUDEM	1988-2005	0.431	11.751	17.585	21.834	12.391	1.643	0.302	0.111	0.010	0.000	0.006	0.741
5	PALERU BRIDGE	1965-2005	2.993	11.284	27.543	30.488	30.852	14.754	8.251	5.180	4.446	5.081	4.076	3.504
6	WADENAPALLI	1967-2005	2.179	11.989	35.117	25.550	22.388	6.423	3.150	3.030	2.899	3.396	2.610	1.554
7	DAMERACHERLA	1968-2005	0.736	3.849	11.407	21.100	21.806	10.302	4.295	4.503	4.310	4.296	2.769	0.970
8	PONDUGALA	1976-2005	2.575	10.750	31.026	22.881	17.609	3.919	2.999	2.705	2.931	4.345	3.362	2.093
9	HALIA	1985-2005	0.870	2.258	3.632	24.238	19.248	4.108	0.752	0.583	0.486	0.555	0.390	0.261
10	LAKSHMIPURAM	1985-2005	1.407	3.248	5.417	14.558	26.525	2.593	0.270	0.370	0.202	0.314	0.187	0.235
11	BAWAPURAM	1965-2005	2.030	6.775	26.434	21.549	19.167	5.307	1.618	1.022	1.014	1.134	0.676	1.208
12	MANTRALAYAM	1972-2005	2.255	8.206	32.359	25.646	24.009	8.273	3.175	2.343	1.936	2.018	1.402	0.926
13	T RAMAPURAM	1966-2005	1.285	1.282	2.817	12.426	11.031	4.382	2.424	1.237	0.592	0.268	0.156	0.637
14	KELLODU	1990-2005	0.886	0.510	0.913	2.291	15.588	5.321	0.767	0.199	0.093	0.052	0.072	0.285
15	HOOVINAHOLE	2005	0.000	0.000	0.000	0.000	2.591	3.903	0.338	0.000	0.000	0.000	0.000	0.000
16	MAROL	1967-2005	20.207	130.587	140.891	50.640	31.649	13.495	2.714	0.398	0.120	0.029	0.112	1.041
17	HARALAHALLI	1967-2005	32.466	127.363	148.458	62.811	46.873	26.150	10.437	4.850	4.385	3.676	5.663	7.968
18	BYLADAHALLI	1985-2005	5.116	12.384	28.469	24.746	39.909	22.097	4.753	2.859	2.346	2.635	6.533	7.778
19	KUPPELUR	1990-2005	1.032	37.718	53.83	22.548	31.634	15.745	2.274	0.235	0.064	0.015	0.408	0.131
20	HONALI	1980-2005	73.677	261.164	300.540	110.394	76.623	35.746	17.224	10.147	9.755	7.976	10.803	10.234
21	SHIMOGA	1972-2005	167.303	608.642	627.322	198.717	101.647	45.560	25.621	9.439	2.871	1.692	1.534	2.907
22	HOLEHONNUR	2005	18.465	65.321	147.984	60.362	57.635	23.259	12.299	11.188	19.661	26.211	34.043	32.141
23	KRISHNA AGRAHARAM	1981-2005	5.764	41.130	64.098	37.198	30.150	5.205	1.755	1.164	0.952	0.756	0.625	0.614
24	YADGIR	1965-2005	4.682	18.920	34.760	43.843	26.930	5.349	2.063	1.054	0.556	0.300	0.176	0.595
25	MALKHED	1991-2005	2.405	9.035	22.912	24.207	33.454	4.084	1.543	0.885	0.470	0.327	0.191	0.397
26	CHINCHOLI	1980-2005	2.124	8.609	5.478	21.839	11.170	1.294	0.131	0.033	0.000	0.000	0.000	0.000
27	JEWANGI	1979-2005	1.826	14.129	34.842	48.151	31.693	4.032	2.094	0.805	0.613	0.303	0.294	0.695
28	BORIOMERGA	1979-2005	1.709	3.923	11.202	37.130	15.041	3.344	0.433	0.120	0.028	0.003	0.000	0.359
29	WADAKBAL	1965-2005	4.200	5.583	9.413	30.973	17.959	3.992	1.104	0.400	0.245	0.166	0.093	0.632
30	TAKLI	1965-2005	5.038	35.651	53.932	35.851	24.114	4.123	1.893	0.972	0.489	0.324	0.186	0.604

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Table No. 1.8 : Site-wise Average Flow per Unit Drainage Area in Different River Basins

VI Basin : Krishna

Unit: Millimeter

Sl. No.	Site Name	Reference Period	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
31	KOKANGAON	1979-2005	5.137	2.404	2.428	22.649	17.841	3.433	0.809	0.196	0.078	0.037	0.016	0.232
32	SHIRDHON	1979-2005	2.217	1.518	1.761	17.928	19.446	2.991	1.201	0.281	0.081	0.029	0.000	0.000
33	NARSINGPUR	1967-2005	7.002	51.171	80.200	42.612	22.305	3.351	2.293	1.467	1.169	1.185	0.880	0.958
34	SARATI	1965-2005	5.604	38.804	56.943	38.186	23.784	4.068	2.434	1.370	0.689	0.309	0.260	1.317
35	DHOND	1968-2005	16.025	118.459	146.184	66.194	25.311	4.147	2.378	1.540	0.809	0.631	0.638	1.126
36	PHULGAON	1996-2005	19.526	180.142	218.631	89.621	38.569	3.682	0.000	0.000	0.000	0.000	0.000	0.000
37	HUVINHEDGI	1976-2005	11.599	84.448	122.907	41.679	29.407	5.625	2.840	2.058	1.842	1.676	1.195	1.476
38	TALIKOT	1996-2005	5.819	4.935	9.454	28.609	38.097	3.408	0.810	0.306	0.134	0.065	0.044	2.005
39	CHOLACHGUDA	1982-2005	10.619	7.707	12.174	18.975	21.584	8.718	5.274	4.116	2.609	3.635	3.302	2.994
40	NAVALGUND	1991-2005	8.535	4.027	6.328	18.527	23.019	7.474	5.838	4.408	2.598	1.146	0.458	0.907
41	MUDHOL	2000-2005	7.418	22.637	59.152	27.825	16.086	3.849	3.203	1.213	0.679	0.783	0.065	0.706
42	GOKAK FALLS	1972-2005	32.965	230.857	288.186	68.719	27.940	10.384	6.102	4.525	2.870	2.545	2.533	2.908
43	GOTUR	1980-2005	94.014	456.135	410.862	104.905	44.877	3.562	0.000	0.000	0.000	0.000	0.000	0.000
44	DADDI	1979-2005	170.978	699.305	627.925	169.112	69.104	13.548	2.783	0.177	0.005	0.000	0.000	0.216
45	PANDEGAON	1980-2005	1.810	2.125	1.281	13.037	19.061	2.368	0.315	0.016	0.000	0.000	0.000	0.000
46	SADALGA	1969-2005	68.301	423.510	444.764	120.375	52.989	4.064	0.000	0.000	0.000	0.000	0.004	0.113
47	BASTAWDE	1979-2005	152.141	755.776	747.311	187.055	79.570	6.150	0.000	0.000	0.000	0.038	0.000	0.000
48	VANDUR	1979-2005	115.680	547.716	685.165	194.951	78.350	19.711	23.340	20.796	24.407	26.054	26.697	24.531
49	TERWAD	1980-2005	103.037	641.196	732.849	187.230	63.100	0.733	0.063	0.057	0.103	0.074	0.079	0.082
50	KURUNDWAD	1972-2005	43.368	250.468	292.885	91.197	39.627	4.506	0.731	0.160	0.125	0.169	0.237	0.377
51	ARJUNWAD	1969-2005	34.736	195.353	232.132	80.379	40.438	4.866	0.792	0.383	0.484	0.489	1.155	0.562
52	SAMDOLI	1967-2005	101.725	570.959	624.447	186.870	68.661	4.185	0.544	0.041	0.000	0.000	0.006	0.000
53	KARAD	1965-2005	50.231	252.654	292.498	116.678	45.036	13.737	12.642	12.680	12.530	14.589	15.374	15.444
54	WARUNJI	1967-2005	96.394	423.770	527.240	183.204	65.997	18.244	25.242	31.624	32.967	39.998	41.104	36.860
55	KOYNA	1973-2005	47.813	184.301	502.332	186.810	31.475	21.987	49.926	59.607	65.696	79.600	82.773	74.472

Source: Krishna & CO-Ordination Circle, Central Water Commission, H.No.11-4-648, 2nd Floor, Krishna Godavari Bhawan, A.C. Guards, Hyderabad-

500004.Letter No.KCC/C22012/12/2006/DRS/987-91and dated 24.07.2007.

(Updated during September 2007)

Note : Unit: Monthly Average Flow in M.Cum/Sq.km X 1000 or mm

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

VII Basin : Cauvery												<i>Unit : Millimeter</i>			
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
1	Musiri	6/72 to 5/2001	3.207	14.63	23.20	22.63	18.12	17.55	12.21	10.94	3.655	1.597	0.816	0.731	
2	Nallamaranpatti	12/78 to 5/2001	0.220	0.896	1.765	1.425	2.434	19.23	9.093	1.835	0.759	0.556	0.046	0.101	
3	Kodumudi	6/71 to 5/2001	5.072	21.16	31.00	29.12	22.48	18.22	15.53	14.82	5.509	3.006	2.210	2.128	
4	Savandapur	7/78 to 5/2001	5.635	14.19	12.11	10.87	12.36	23.20	13.88	9.663	7.231	8.138	6.770	4.769	
5	Tengumarahada	4/79 to 5/2001	15.65	28.48	31.05	24.12	29.53	31.88	17.90	10.81	10.17	11.79	11.26	11.90	
6	Nellithurai	6/79 to 5/2001	106.1	310.80	154.9	81.71	109.2	121.3	63.85	41.90	28.56	38.29	26.69	24.98	
7	Urachikottai	8/79 to 5/2001	7.456	22.35	32.54	30.69	24.15	15.12	12.17	16.20	3.695	2.058	2.059	2.390	
8	Biligundulu	9/71 to 5/2001	8.884	36.08	52.02	32.86	32.50	19.62	12.08	6.195	4.219	3.751	4.370	6.031	
9	Kanakpara	9/78 to 5/2001	2.758	1.988	5.231	17.16	21.34	6.609	2.854	1.127	0.722	0.807	0.853	1.523	
10	T.K Halli	6/78 to 5/2001	3.258	3.125	7.527	21.90	26.34	13.25	6.742	2.779	1.477	1.572	1.490	2.737	
11	Kollegal	2/71 to 5/2001	15.17	64.67	88.66	43.60	37.53	23.32	15.33	8.623	5.886	5.496	6.493	8.143	
12	T.Narsipur	3/71 to 5/2001	31.89	113.7	114.4	53.04	39.52	25.98	15.42	7.215	6.538	7.382	10.57	15.00	
13	Muthankera	5/72 to 5/2001	277.0	616.8	535.1	213.1	141.0	83.95	41.69	20.35	9.711	6.280	12.54	20.25	
14	Kattemalalavadi	6/79 to 5/2001	32.74	92.70	70.69	21.86	16.47	9.152	4.417	1.163	0.228	0.117	0.147	0.443	
15	M.H. Halli	10/78 to 5/2001	20.44	78.65	115.0	60.63	48.22	37.78	25.21	17.69	19.86	20.51	23.10	20.91	
16	Kudige	11/73 to 5/2001	148.9	466.5	458.9	152.3	93.37	48.13	25.45	14.12	11.32	7.789	9.463	12.15	

Source: Water Year Book for 2000-2001.

Table No.1.8 : Site-wise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

VIII Basin : East Flowing River			<i>Unit : M.C.M.</i>											
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Thammavaram	2000-01	2.077	3.616	8.057	23.430	31.34	30.79	17.89	14.41	8.053	5.211	2.692	4.230
2	K.Bitragunda	- do -	3.076	0.993	4.806	6.513	30.82	32.22	11.20	1.447	1.304	0.675	0.266	4.005
3	Nellore	- do -	0.229	0.454	1.715	6.933	11.72	10.53	4.501	0.270	0.027	0.018	0.010	0.243
4	Chennur	- do -	1.808	2.846	8.701	10.88	12.35	5.822	3.695	1.541	0.362	0.050	0.063	0.143
5	Alladupalli	- do -	4.805	13.67	32.95	35.86	46.37	15.12	11.80	6.133	1.393	0.441	0.267	0.767
6	Singavaram	- do -	0.582	1.433	1.113	7.901	4.714	2.477	0.132	0.029	0.010	0.000	0.000	0.006
7	Tadapatri	- do -	0.371	1.297	0.945	6.430	8.936	6.663	1.397	0.545	0.113	0.030	0.011	0.181
8	Nagalamadike	- do -	0.006	0.126	0.670	5.413	2.023	1.052	0.056	0.008	0.017	0.000	0.000	0.071
9	Nandipalli	- do -	1.435	1.475	3.903	4.844	22.70	11.55	3.319	1.102	0.565	0.181	0.138	0.200
10	Kamalapuram	- do -	1.398	0.055	1.187	5.665	9.767	11.8	2.633	0.455	0.057	0.000	0.010	0.000
11	Naidupeta	- do -	0.805	0.088	0.519	0.778	9.203	65.80	37.27	8.583	5.263	0.120	0.002	0.555
12	Sullurpet	- do -	1.174	0.060	0.116	0.074	3.863	14.83	9.459	1.274	0.034	0.000	0.001	0.213
13	Chengalpattu	- do -	0.068	0.069	0.112	0.442	0.916	11.42	7.961	0.554	0.211	1.000	0.001	0.002
14	Magaral	- do -	0.000	0.251	0.154	0.837	2.538	37.43	32.48	2.366	1.146	0.721	0.000	0.015
15	Arcot	- do -	0.007	0.002	0.058	2.314	2.708	6.363	2.641	0.237	0.079	0.061	0.000	0.002
16	Kudalaiyathur	- do -	0.000	0.000	0.000	0.040	1.099	32.56	25.57	1.472	0.186	0.120	0.000	0.000
17	Villupuram	- do -	0.000	0.011	0.019	0.206	3.185	12.37	8.522	0.712	0.122	0.063	0.029	0.065
18	Vazhavachanur	- do -	0.109	0.158	0.121	0.737	6.338	10.64	7.841	1.371	1.290	0.991	0.931	0.404
19	Gummanur	- do -	1.010	0.484	2.056	12.09	15.78	9.055	2.880	0.824	0.256	0.121	0.105	0.486
20	Paramakudi	- do -	0.013	0.034	0.000	0.299	2.610	14.33	4.691	0.299	0.206	1.038	0.035	0.064
21	Theni	- do -	17.37	45.91	67.53	62.58	81.19	108.30	70.24	41.09	20.23	15.25	6.817	6.177
22	Irrukkankudi	- do -	0.053	0.06	5.011	0.041	3.648	14.04	8.767	0.323	0.087	0.008	0.000	0.001
23	Murappanadu	- do -	5.559	5.142	0.027	3.789	6.219	38.78	29.66	9.358	9.497	9.715	3.859	3.684
24	A.P.Puram	- do -	0.150	0.445	0.582	0.066	1.054	8.144	6.685	2.395	0.737	3.021	0.333	0.187
25	Ambasamudram	- do -	0.000	0.000	4.156	5.080	8.950	12.47	14.64	13.19	9.730	4.082	1.879	0.000

Note : M.C.M. : Million Cubic Metre

Source: Water Year Book for 2000-01, Cauvery & Southern Rivers Organisation, Coimbatore.

Table No.1.8 : Sitewise month-wise Average Flow Per Unit Drainage Area In Different River Basins.

IX Basin : West Flowing Rivers		Unit : Millimeter												
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Badlapur	2000-01	237.3	1280	949.9	541.8	170.1	33.22	18.83	13.46	13.36	13.44	16.38	25.29
2	Mangaon	- do -	356.3	1515	1086	479.6	146.2	2.502	0.290	0.000	0.000	0.000	0.000	0.900
3	Anjanari	- do -	269.4	976.1	659.6	369.3	170.7	34.91	0.363	0.587	0.392	0.238	0.082	0.000
4	Beline Bridge	- do -	134.4	1218	613.6	222.9	94.52	18.13	5.096	1.846	0.012	0.421	0.000	0.000
5	Ganjim	- do -	344.9	1436	1206	409.1	193.1	69.42	23.61	10.07	4.558	2.907	1.932	2.094
6	Collem	- do -	381.5	1519	1501	478.7	182.1	53.39	24.43	15.91	9.470	6.982	5.095	6.822
7	Kolad	- do -	198.3	752.7	650.4	229.8	10.17	1.199	0.000	0.000	0.000	0.000	0.000	0.000
8	Nagothane	- do -	382.40	808.6	813.7	384.0	171.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	Pen	- do -	90.47	926.3	772.5	360.6	125.2	9.559	0.000	0.000	0.000	0.000	0.000	0.000
10	Ambarampalyam	- do -	17.12	19.07	27.25	37.13	35.2	80.32	46.58	40.51	27.48	16.24	6.851	12.02
11	Santeguli	- do -	456.6	1927	1357	488.00	234.1	98.47	44.57	22.31	13.37	9.269	6.808	11.41
12	Haladi	- do -	299.0	980.9	864.2	361.9	192.3	125.5	88.21	86.92	84.15	106.4	95.41	84.21
13	Yennehole	- do -	616.4	1858.0	1401	534.1	317.6	129.8	44.58	12.47	2.863	0.295	0.991	10.12
14	Bantwal	- do -	396.9	1171	1124	464.6	288.3	120.2	44.05	18.19	6.881	3.814	3.081	9.607
15	Erinjipuzha	- do -	217.8	745.8	716.0	312.5	229.3	121.8	46.71	19.48	6.180	1.696	1.823	9.382
16	Perumannu	- do -	388.9	1137	917.8	409.3	256.1	116.8	33.62	15.23	6.448	6.760	4.598	19.430
17	Kuniyal	- do -	332.0	665	529.8	263.3	221.9	125.0	46.72	20.04	7.925	5.483	3.733	17.85
18	Karathodu	- do -	197.4	539.8	343.7	185.0	213.8	132.0	37.16	13.19	5.850	5.758	6.468	16.37
19	Kumbidi	- do -	104.8	227.3	169.9	85.44	84.16	56.50	17.91	9.199	3.002	0.762	2.305	5.376
20	Pulamanthole	- do -	206.1	509.4	393.4	235.6	266.1	147.4	41.88	15.67	6.495	4.760	11.15	22.870
21	Mankara	- do -	22.71	68.69	46.36	29.71	31.68	38.27	12.66	5.441	2.591	1.023	1.671	2.326
22	Pudur	- do -	18.20	47.63	32.96	19.17	23.41	36.54	15.99	6.657	3.691	2.515	3.227	3.327
23	Arangali	- do -	179.20	402.4	342.6	163.0	128.6	84.82	28.22	17.73	11.15	11.37	11.89	19.840
24	Neeswaram	- do -	233.1	424.0	390.9	202.5	179.4	115.6	41.21	20.78	17.43	19.15	26.37	43.82
25	Ramamangalam	- do -	563.1	807.1	653.7	414.5	436.3	324.5	183.5	148.4	131.6	142.4	147.0	187.8

Table No.1.8 : Sitewise month-wise Average Flow Per Unit Drainage Area In Different River Basins.

IX Basin : West Flowing Rivers			<i>Unit : Millimeter</i>											
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
26	Kalampur	- do -	436.8	785.2	602.3	380.8	371.4	187.5	52.36	14.61	2.045	1.0	6.39	57.8
27	Kidangoor	- do -	503.8	644.5	499.3	312.4	415.7	243.3	45.23	9.306	3.286	2.549	26.960	116.5
28	Kallooppa	- do -	436.3	548.8	432.7	285.9	361.2	217.0	38.11	7.220	6.255	2.902	24.65	94.03
29	Malakkara	- do -	351.9	486.7	412.2	284.3	335.6	211.2	67.02	36.18	20.470	21.05	30.80	86.54
30	Thumpamon	- do -	235.4	291.7	240.2	179.6	235.7	186.5	35.55	11.58	5.718	4.409	15.36	39.20
31	Pattazhi	- do -	161.4	216.4	186.8	151.8	207.7	195.1	65.37	34.64	19.860	19.00	19.67	36.65
32	Ayilam	- do -	190.6	168.0	138.5	140.1	228.9	174.4	54.80	17.95	11.45	13.81	24.65	47.28
33	Adavali	- do -	<-----Data is Not Available----->											
34	Vandiperiyar	- do -	34.15	36.3	130.2	27.54	17.54	5.919	1.413	0.000	0.000	0.000	0.000	0.000
35	Ashramam	- do -	0.000	0.000	95.83	24.18	50.86	48.85	5.728	11.12	4.367	0.000	46.40	7.296
36	Kuttyadi	- do -	498.6	692.9	1245	548.3	418.3	61.95	57.99	20.90	17.03	13.56	28.53	61.62

Note : M.C.M. : Million Cubic Metre

Source: Water Year Book for 2000-01, Cauvery & Southern Rivers Organisation, Coimbatore.

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

X Basin : Tapi		Unit : M.C.M.												
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Dedtalai	2001-02	0.0200	0.0279	0.2415	0.0205	0.0217	0.0026	0.0009	0.0008	0.0005	0.0003	0.0001	0.00
2	Burhanpur	2001-02	0.0222	0.0226	0.247	0.0197	0.0215	0.0019	0.0008	0.0005	0.0005	0.0002	0	0
3	Lakhpuri	2001-02	0.0183	0.0019	0.0397	0.0055	0.0115	0.0005	0.0001	0.0001	0.0001	0	0.0000	0.0000
4	Gopalkheda	2001-02	0.0101	0.0009	0.0149	0.0018	0.0186	0.0004	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
5	Yerli	2001-02	0.0191	0.0022	0.0205	0.0018	0.021	0.0008	0.0001	0.000	0.0001	0.0000	0.000	0.000
6	Dapuri	2001-02	0.0002	0.000	0.0021	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000
7	Savkheda	2001-02	0.0072	0.0029	0.0374	0.0020	0.0132	0.0004	0.000	0.0000	0.0000	0.000	0.000	0.0000
8	Malkheda	2001-02	0.001	0.000	0.004	0.0010	0.00016	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9	Morane	2001-02	0.000	0.000	0.000	0.0005	0.0023	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	Gidhade	2001-02	0.0087	0.0037	0.0335	0.0022	0.011	0.0002	0.000	0.000	0.0000	0.0000	0.0000	0.0000
11	Sarangkheda	2001-02	0.0022	0.0023	0.0356	0.0017	0.0129	0.0002	0.000	0.0000	0.0000	0.0000	0.0000	0.0000
12	Ghala	2001-02	0.0028	0.0039	0.0051	0.0017	0.0017	0.0015	0.0017	0.0013	0.0009	0.0007	0.001	0.0012

Note : M.C.M. : Million Cubic Metre

Source: Water Year Book for 2001-02, Tapi Basin, Gandhi Nagar.

Table No.1.8 : Sitewise and month-wise Average Flow Per Unit Drainage Area In Different River Basins.

XI Basin : Narmada			Unit : Millimeter											
Sl.No.	Site Name	Reference Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Chandwada	1980-2002	12.18	76.84	174.68	84.96	9.64	2.14	0.56	0.22	0.07	0.03	0.01	0.01
2	Gurudeshwar	1977-2002	8.79	63.67	145.58	97.09	25.67	9.53	7.75	5.20	4.18	4.14	3.00	2.45
3	Rajghat	1979-2002	9.78	78.92	175.75	108.83	24.57	0.93	7.29	5.26	4.67	4.59	3.14	2.40
4	Mandaleshwar	1979-2002	10.51	79.63	180.75	111.31	32.93	10.33	9.12	5.73	5.65	4.99	3.64	2.89
5	Kogaon	1986-2002	17.43	41.36	96.44	70.01	23.98	5.98	2.14	0.96	0.42	0.31	0.22	0.15
6	Ginnore	1999-2002	18.00	92.11	175.86	109.50	21.85	6.14	3.92	1.83	1.01	0.45	0.07	0.04
7	Handia	1979-2002	12.89	84.52	190.57	101.60	26.43	11.63	11.82	7.05	7.98	7.31	5.31	3.88
8	Chhidgaon	1986-2002	17.55	112.14	272.50	132.28	21.54	6.55	5.52	3.99	2.38	1.73	1.01	0.73
9	Hoshangabad	1979-2002	17.33	86.82	207.80	115.19	29.66	12.89	11.38	7.10	7.72	6.85	5.34	4.48
10	Sandia	1979-2002	10.60	74.70	164.42	86.42	25.99	13.86	12.79	7.59	8.79	8.47	6.96	5.87
11	Gadarwara	1979-2002	19.03	104.80	254.19	116.93	29.50	9.84	8.49	5.56	4.83	3.63	2.39	2.00
12	Barmanghat	1979-2002	10.77	74.01	177.66	90.36	30.02	13.75	11.20	6.04	8.42	6.69	5.89	4.04
13	Belkheri	1986-2002	20.52	107.04	223.86	89.18	20.32	9.08	7.71	3.16	2.83	2.34	1.10	0.86
14	Patan	1986-2002	8.16	53.38	156.72	115.53	30.25	11.35	7.19	4.77	3.66	3.03	2.26	1.50
15	Jamtara	1979-2002	12.33	105.58	208.49	95.95	33.60	16.51	13.29	6.16	92.54	9.26	8.51	6.00
16	Hriday Nagar	1986-2002	20.19	127.72	196.44	98.73	26.47	7.26	3.72	3.45	2.76	1.49	0.34	0.08
17	Mohgaon	1986-2002	22.94	128.46	213.59	120.54	28.56	7.07	6.89	6.91	4.92	1.89	0.53	0.27
18	Manot	1980-2002	28.11	146.08	240.05	143.65	28.92	10.78	8.69	9.88	5.61	3.08	1.32	0.67
19	Dindori	1990-2002	31.28	112.85	195.65	119.93	28.63	13.54	12.22	12.76	6.78	5.03	3.01	2.36

Source :Letter No.5/1/2000/CE(NBO)/416 Dated 21.05.2002 from Superintending Engineer©, Bhopal.

SECTION-II
SEDIMENTATION STATISTICS

SECTION - II

SEDIMENTATION STATISTICS

Whenever, water flows in a channel (natural or artificial), it tries to scour its surface. Silt or gravel or even larger boulders are detached from its bed or banks. The moving water sweeps these detached particles downstream. Silting and scouring in channels is not very uncommon and must be avoided by proper designs. Scouring lowers the full supply level and causes loss of command. It may also cause breaching of canal banks and failure of foundations of irrigation structures. Silting interferes with the proper working of a channel as the channel section gets reduced by silting, thereby reducing its discharging capacity.

Development and construction of projects formulated by harnessing the available water resources during last three to four decades has been instrumental in bringing the Green revolution that has essentially made India to achieve self-sufficiency in food and has ushered in an era of prosperity. However, these projects are seriously threatened by sedimentation due to the silt carried by various rivers and streams up to the point of their interception. Sediment is also threatening denudation of our forests. The sediment in a canal is a burden to be borne by the flowing water and is, therefore, designated as sediment load. The sediment may move in water either as bed load or as suspended load. Bed load is that in which the sediment moves along the bed with occasional jumps into the main river. While the suspended load is one in which the material is maintained in suspension due to the turbulence of the flowing water.

Sediment is one of the major obstructions on the flow line or channel of water and unmanageable quantity of it shorten longevity of channels. Moreover, it causes soil-erosion. Therefore, study of sediments and nature of its deposits on downstream are very important for preparation of any water supply projects and for this purpose sound database on sediments are essential tools.

The analysis of suspended sediment sample is carried out for three different grade of sediments, namely, coarse sediment, having particle diameter above 0.2 mm., medium sediment with diameter ranging from 0.075 to 0.2 mm. And fine sediment with diameter less than 0.075 mm.

The water sample from each group is passed through 100/72 mesh sieve (B.S.S). The residue on the sieve is washed with clear water several times, transferred to a crucible and its oven dry weight is measured. This gives the

coarse sediment in the group from which the sediment intensity in gm./lit, for the group is worked out.

After the removal of coarse sediment, the filtrate and washings, which now contain the medium and fine sediment is passed through 200 mesh sieve (B.S.S). Sediment particles retained on the sieve are medium sediment and part of the fine sediment. So, the residue in the sieve is thoroughly washed with clear water several times, transferred to a crucible and its oven dry weight is measured. Medium grade sediment intensity in gm/1 for that particular group is worked out, as is done for coarse sediment.

The filtrate and washings after separation of coarse and medium grade of sediment now contain only fine grade of sediment in suspension. The filtrate and washings obtained from all the groups are combined together in an enameled bucket and kept overnight for settlement. About 5 to 10 ml. of 10% alum solution is added to hasten the coagulation of colloidal silt. After the settlement is complete, the supernatant liquid is siphoned off carefully and the reduced volume of suspension is filtered through a dried and pre weighted Whitman No.2 grade filter paper. Extra washings with clear water are given to remove excessive alum, if used. The filter paper along with the residue is dried to its constant weight and weighed. From this weight, weight of the fine sediment in gm/1 is determined. The intensity of fine silt in gm/ lit., so obtained, is the amount of the sediment for the entire cross section.

The total sediment load of the river along the cross-section is evaluated from the coarse and medium sediment concentration obtained group-wise and the sediment for the entire cross section. In this section detailed information on quantity of average sediment deposits on the streamlines is presented here separately for all sites on ten daily and monthly basis for last 10 years (table 2.1). In ten-daily summary tables T/D values are rounded off to nearest full integer when more than 1000, nearest first decimal figure when between 100-999 and nearest two decimal figures when less than 100. The frequency of sediment observation is daily during monsoon season and once in a week during the lean period. Data for non -observed days is estimated/ interpolated from the relationship of discharge vs. sediment load prepared on the basis of observed sediment concentration and weighted mean discharge of the same year.

Sediment concentration in gm./lit. (coarse, medium and fine) is recorded in the daily flow tables. The sediment load reported in the 10 daily tables indicates average sediment load. The sediment load as given in the seasonal and monthly summary tables (table 2.2) indicates total sediment load. In monthly and seasonal summary tables sediment load is rounded off to full

integer. The annual/ seasonal sediment yield in mm is the notional depth of soil in mm. over the catchment equivalent to annual/ seasonal suspended sediment runoff calculated at the sediment observation station. It is computed using the relation.

Sediment yield (mm)=Total suspended sediment load (T)/ 1400*
Catchment Area (Km²)

It can be seen that among the basins Godavari (88.822 million metric tonnes at Pathagudem site) followed by Narmada (73.140 million metric tonnes at Mandleshwar) Basin carries highest amount of sediments compared to others. However, Sediment load deposited is highest on Godavari (2220 Metric Tonnes per Sq. Kms.) basin on unit area basis. It is 1855 Metric Tones per Sq. Kms in Tapi basin and 1004 MT per Sq. Kms. in Narmada basin.

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Table No.2.1 : Sitewise Sediment Load for Different River Basins

Unit: Million Metric Tonnes

Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

I Basin: Mahanadi

Site Name	Mahanadi at Tikarpar:			Tel at Kantamal			Ong at Salebhata			Ib at Sundergarh		
1 1993-94	8.292	0.605	8.897	5.189	0.016	5.205	0.342	0.000	0.342	2.653	0.010	2.663
2 1994-95	55.049	0.999	56.048	19.078	0.093	19.171	0.624	0.000	0.624	5.693	0.006	5.699
3 1995-96	9.042	1.241	10.283	3.303	0.220	3.523	0.250	0.001	0.251	2.168	0.020	2.188
4 1996-97	5.469	0.589	6.058	2.063	0.021	2.084	0.132	0.000	0.132	5.594	0.002	5.596
5 1997-98	10.526	0.858	11.384	7.774	0.126	7.900	0.780	0.001	0.781	2.631	0.674	3.305
6 1998-99	5.675	0.948	6.623	1.240	0.011	1.251	2.147	0.005	2.152	4.791	0.075	4.866
7 1999-2000	3.031	0.845	3.876	3.038	4.739	7.777	0.316	0.000	0.316	3.085	0.013	3.098
8 2000-2001	2.658	0.071	2.729	2.486	0.105	2.591	0.013	0.000	0.013	0.973	0.002	0.975
9 2001-2002	16.098	0.380	16.478	25.663	0.140	25.803	0.212	0.000	0.212	5.941	0.005	5.946
10 2002-2003	1.985	0.180	2.165	2.328	0.008	2.336	0.222	0.000	0.222	2.319	0.005	2.324

Site Name	Mand at Kurubhatta			Mahanadi at Basantpui			Hasdeo at Bannidihi			Jonk at Rampur		
1 1993-94	2.453	0.008	2.461	8.264	0.043	8.307	1.118	0.073	1.191	0.429	0.000	0.429
2 1994-95	5.721	0.014	5.735	31.619	0.172	31.791	7.325	0.392	7.717	1.321	0.001	1.322
3 1995-96	1.451	0.007	1.458	6.402	0.038	6.440	0.883	0.041	0.924	0.535	0.000	0.535
4 1996-97	4.846	0.005	4.851	4.228	0.029	4.257	0.745	0.028	0.773	0.136	0.000	0.136
5 1997-98	2.655	0.361	3.016	5.565	0.128	5.693	0.335	0.151	0.486	1.216	0.005	1.221
6 1998-99	2.460	0.009	2.469	3.321	54.157	57.478	0.337	0.047	0.384	5.881	0.006	5.887
7 1999-2000	2.293	0.031	2.324	3.908	0.031	3.939	0.568	0.044	0.612	0.221	0.000	0.221
8 2000-2001	0.526	0.001	0.527	1.061	0.015	1.076	0.175	0.055	0.230	0.004	0.000	0.004
9 2001-2002	4.225	0.024	4.249	11.460	0.033	11.493	1.240	0.005	1.245	0.530	0.000	0.530
10 2002-2003	1.804	0.004	1.808	2.400	0.061	2.461	0.134	0.015	0.149	0.078	0.000	0.078

Contd/...

Table No.2.1 : Sitewise Sediment Load for Different River Basins

Unit: Million Metric Tonnes

Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

I Basin: Mahanadi

	Site Name	Seonath at Jondhra			Hamp at Andhiyankori			Seonath at Simga					
1	1993-94	3.775	0.043	3.818	0.329	0.001	0.330	1.428	0.005	1.433	0.646	0.000	0.646
2	1994-95	12.529	0.113	12.642	1.681	0.004	1.685	6.093	0.009	6.102	3.347	0.001	3.348
3	1995-96	2.612	0.027	2.639	0.516	0.001	0.517	2.053	0.006	2.059	1.059	0.001	1.060
4	1996-97	12.529	0.113	12.642	1.681	0.004	1.685	6.093	0.009	6.102	3.347	0.001	3.348
5	1997-98	4.297	0.181	4.478	0.628	0.155	0.783	2.730	0.028	2.758	0.864	0.002	0.866
6	1998-99	1.991	0.033	2.024	0.436	0.011	0.447	0.370	0.007	0.377	0.118	0.001	0.119
7	1999-2000	2.248	0.016	2.264	0.605	0.002	0.607	0.979	0.003	0.982	0.231	0.001	0.232
8	2000-2001	0.477	0.001	0.478	0.111	0.000	0.111	0.409	0.000	0.409	0.144	0.000	0.144
9	2001-2002	4.124	0.001	4.125	0.685	0.000	0.685	262.902	0.004	262.906	2.654	0.002	2.656
10	2002-2003	1.129	0.002	1.131	0.558	0.000	0.558	0.574	0.000	0.574	0.084	0.000	0.084

	Site Name	Pairi at Baronda			Hasdeo at Manendragarl		
1	1993-94	0.829	0.000	0.829	0.127	0.004	0.131
2	1994-95	2.937	0.002	2.939	0.153	0.000	0.153
3	1995-96	0.542	0.000	0.542	0.036	0.002	0.038
4	1996-97	0.969	0.003	0.972	0.030	0.000	0.030
5	1997-98	1.803	0.000	1.803	-	-	0.000
6	1998-99	0.096	0.001	0.097	0.061	0.000	0.061
7	1999-2000	38.560	0.001	38.561	0.118	0.000	0.118
8	2000-2001	0.077	0.000	0.077	0.040	0.000	0.040
9	2001-2002	0.003	0.000	0.003	0.076	0.000	0.076
10	2002-2003	0.660	0.000	0.660	0.050	0.000	0.050

Source: Suspended Sediment Data Book (Vol.-I) for 2002-2003

Table No.2.1 : Sitewise Sediment Load for Different River Basins

Unit: Million Metric Tonnes

Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

II Basin : Subarnarekha, Burhabalang & Baitarni

Site Name	Subranrekha at Ghatsila			Kharkai at Adityapur			Baitarani at Anandpur					
1 1993-94	2.106	0.020	2.126	0.724	0.008	0.732	2.534	0.010	2.544		5.402	5.402
2 1994-95	7.931	0.024	7.955	2.819	0.019	2.838	6.120	0.241	6.361		17.154	17.154
3 1995-96	2.752	0.204	2.956	0.642	0.087	0.729	2.166	0.015	2.181		5.866	5.866
4 1996-97	2.788	0.008	2.796	0.423	0.001	0.424	2.805	0.022	2.827		6.047	6.047
5 1997-98	6.190	0.125	6.315	1.318	0.064	1.382	4.421	0.118	4.539		12.236	12.236
6 1998-99	0.920	0.198	1.118	0.356	0.021	0.377	0.929	0.105	1.034			0.000
7 1999-2000	2.522	0.091	2.613	2.011	0.047	2.058	4.747	0.255	5.002			0.000
8 2000-2001	0.642	0.025	0.667	0.241	0.002	0.243	1.863	0.015	1.878			0.000
9 2001-2002	3.018	0.033	3.051	0.913	0.003	0.916	1.914	0.013	1.927			0.000
10 2002-2003	1.236	0.018	1.254	0.504	0.004	0.508	0.496	0.012	0.508			0.000

Site Name	Baitarani at Champua		
1 1993-94	Sediment Observation Started w.e.f		
2 1994-95	09.08.2001		
3 1995-96			
4 1996-97			
5 1997-98			
6 1998-99			
7 1999-2000			
8 2000-2001			
9 2001-2002			
10 2002-2003	0.178	0.003	0.181

Source: Suspended Sediment Data Book (Vol.-II) for 2002-2003.

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Unit: Million Metric Tonnes

Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

III Basin: Brahmani

Site Name	Brahmani at Jenapur			Brahmani at Gomlai			Koel at Jaraikela			Sankh at Tilga		
1 1993-94	5.847	0.374	6.221	5.921	0.036	5.957	3.857	0.008	3.865	3.010	0.016	3.026
2 1994-95	15.700	0.558	16.258	21.989	0.032	22.021	9.317	0.014	9.331	3.687	0.017	3.704
3 1995-96	3.070	0.478	3.548	6.855	0.295	7.150	3.365	0.303	3.668	1.764	0.071	1.835
4 1996-97	5.684	0.207	5.891	12.387	0.008	12.395	6.820	0.004	6.824	2.895	0.003	2.898
5 1997-98	6.052	0.279	6.331	12.749	0.418	13.167	7.813	0.183	7.996	2.903	0.142	3.045
6 1998-99	3.119	0.243	3.362	5.962	0.233	6.195	2.680	0.175	2.855	2.815	0.112	2.927
7 1999-2000	6.950	0.349	7.299	7.675	0.030	7.705	4.289	0.012	4.301	2.224	0.007	2.231
8 2000-2001	2.467	0.131	2.598	3.589	0.009	3.598	2.920	0.005	2.925	0.642	0.001	0.643
9 2001-2002	12.650	0.090	12.740	11.989	0.008	11.997	4.275	0.003	4.278	2.340	0.003	2.343
10 2002-2003	1.678	0.007	1.685	3.430	0.004	3.434	0.990	0.000	0.990	1.107	0.001	1.108

Site Name	Brahmani at Panposh		
1 1993-94	observation		0.000
2 1994-95	started		0.000
3 1995-96	w.e.f.1996-9'		0.000
4 1996-97			0.000
5 1997-98	13.317	0.201	13.518
6 1998-99	5.733	0.119	5.852
7 1999-2000	8.665	0.045	8.710
8 2000-2001	6.041	0.010	6.051
9 2001-2002	10.560	0.009	10.569
10 2002-2003	4.804	0.008	4.812

Source: Suspended Sediment Data Book (Vol.-II) for 2002-2003.

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Unit: Million Metric Tonnes

Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

IV Basin: Rushikulya, Vamsadhara, Saroda & Nagavali

	Rushikulya at Purushattampur			Vamsadhara at Kashinagar			Nagavali at Srikakulam			
1	1993-94	Sediment Observation Started w.e.f.		1.370	0.011	1.381	Sediment Observation Started w.e.f.			
2	1994-95	15.01.2001		2.482	0.499	2.981	27.06.2001			
3	1995-96			2.662	0.326	2.988				
4	1996-97			0.063	0.125	0.188				
5	1997-98			6.739	0.048	6.787				
6	1998-99			1.000	0.082	1.082				
7	1999-2000			0.949	0.056	1.005				
8	2000-2001			0.521	0.000	0.521				
9	2001-2002	1.644	0.023	1.667	2.350	0.014	2.364	1.754	0.026	1.780
10	2002-2003	0.705	0.000	0.705	0.476	0.000	0.476	0.366	0.003	0.369

Data Book (Vol.-II) for 2002-2003.

Table No.2.1 : Site-wise Sediment Load for Different River Basins

V odavari Basin													<i>Unit: Million Metric Tonnes</i>	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Polavaram			Sabari at Konta			Perur			Indravati at Pathagudem			
1	1996-97	26.870	0.148	27.018	2.411	0.039	2.450	20.568	0.060	20.628	8.305	0.001	8.306	
2	1997-98	21.760	0.176	21.936	2.585	0.098	2.683	17.600	0.527	18.127	8.018	0.045	8.063	
3	1998-99	40.205	0.148	40.353	3.336	0.200	3.536	31.203	0.036	31.239	6.690	0.014	6.704	
4	1999-2000	44.77	0.110	44.880	8.14	0.118	8.258	44.451	0.014	44.465	15.183	0.005	15.188	
5	2000-2001	86.361	0.063	86.424	6.564	0.007	6.571	81.149	0.007	81.156	7.305	0.002	7.307	
6	2001-2002	48.644	0.020	48.664	4.471	0.076	4.547	72.553	0.01	72.563	72.563	16.259	88.822	
7	2002-2003	25.058	0.011	25.069	1.939	0.02	1.959	15.411	0.009	15.420	7.682	0.003	7.685	
8	2003-2004	42.850	0.218	43.068	8.939	0.123	9.062	44.204	0.091	44.295	22.820	0.012	22.832	
9	2004-2005	25.18	0.12	25.30	5.46	0.08	5.54	17.06	0.02	17.08	12.51	0.00	12.51	
10	2005-2006	69.71	0.22	69.93	2.59	0.09	2.68	54.07	0.00	54.07	11.66	0.0	11.66	
	Site Name	Indravati at Jagadalpur			Indravati at Nowrangpur			Pranhita at Tekra			Paddavagu at Bhatpalli			
1	1996-97	1.439	0.028	1.467	0.843	0.058	0.901	9.690	0.004	9.694	3.890	0.001	3.891	
2	1997-98	1.389	0.078	1.467	0.956	0.068	1.024	11.920	0.374	12.294	0.668	0.006	0.674	
3	1998-99	1.604	0.001	1.605	0.404	0.000	0.404	19.813	0.017	19.830	3.815	0.000	3.815	
4	1999-2000	1.497	0.000	1.497	0.378	0.000	0.378	54.44	0.004	54.444	0.851	0.001	0.852	
5	2000-2001	1.651	0.001	1.652	0.633	0.000	0.633	50.222	0.000	50.222	4.090	0.000	4.090	
6	2001-2002	2.821	0.002	2.823	1.100	0.000	1.100	19.988	0.001	19.989	1.117	0.001	1.118	
7	2002-2003	1.238	0.001	1.239	0.204	0.000	0.204	32.174	0.007	32.181	0.597	0.000	0.597	
8	2003-2004	3.714	0.001	3.715	6.042	0.000	6.042	35.425	0.005	35.430	2.177	0.000	2.177	
9	2004-2005	2.03	0.00	2.03	0.33	0.00	0.33	3.98	0.02	4.00	0.32	0.00	0.32	
10	2005-2006	1.63	0.00	1.63	0.40	0.00	0.40	27.76	0.00	27.76	1.15	0.00	1.15	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

V odavari Basin													<i>Unit: Million Metric Tonnes</i>	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Wardha at Bamni			Penganga at PG Bridge			Unna at Nandgaon			Wardha at Hivra			
1	1996-97	3.427	0.002	3.429	1.974	0.000	1.974	0.038	0.000	0.038	0.399	0.001	0.400	
2	1997-98	1.567	0.044	1.611	0.282	0.090	0.372	0.023	0.002	0.025	0.088	0.067	0.155	
3	1998-99	7.416	0.003	7.419	3.008	0.002	3.010	0.078	0.000	0.078	0.912	0.000	0.912	
4	1999-2000	10.462	0.007	10.469	5.567	0.001	5.568	0.418	0.000	0.418	0.927	0.000	0.927	
5	2000-2001	17.009	0.001	17.010	2.965	0.000	2.965	0.576	0.000	0.576	0.44	0.000	0.440	
6	2001-2002	15.193	0.001	15.194	4.183	0.001	4.184	0.199	0.000	0.199	0.993	0.000	0.993	
7	2002-2003	31.308	0.001	31.309	9.731	0.003	9.734	1.032	0.000	1.032	1.142	0.000	1.142	
8	2003-2004	7.954	0.002	7.956	2.027	0.000	2.027	1.013	0.000	1.013	1.007	0.001	1.008	
9	2004-2005	0.82	0.00	0.82	0.15	0.00	0.15	0.02	0.0	0.13	0.13	0.00	0.13	
10	2005-2006	14.63	0.00	14.63	11.20	0.00	11.20	0.11	0.0	0.21	1.04	0.00	1.04	
	Site Name	Wardha at Bishnur			Wainganga at Ashti			Wainganga at Pauni			Kanhan at Satrapur			
1	1996-97	0.006	0.000	0.006	2.343	0.000	2.343	2.817	0.003	2.820	1.286	0.003	1.289	
2	1997-98	0.082	0.005	0.087	4.938	0.127	5.065	6.667	0.366	7.033	3.593	0.547	4.140	
3	1998-99	0.202	0.000	0.202	7.578	0.035	7.613	5.046	0.010	5.056	1.381	0.011	1.392	
4	1999-2000	0.092	0.000	0.092	16.292	0.002	16.294	10.893	0.007	10.900	1.908	0.013	1.921	
5	2000-2001	0.003	0.000	0.003	8.751	0.000	8.751	2.918	0.001	2.919	0.275	0.000	0.275	
6	2001-2002	0.000	0.004	0.004	0.000	7.793	7.793	5.556	0.004	5.560	1.331	0.002	1.333	
7	2002-2003	0.145	0.009	0.154	12.809	0.002	12.811	6.125	0.005	6.130	0.701	0.005	0.706	
8	2003-2004	0.016	0.000	0.016	14.202	0.003	14.205	8.14	0.009	8.149	1.702	0.006	1.708	
9	2004-2005	0.02	0.00	0.02	2.53	0.00	2.53	1.66	0.03	1.69	0.18	0.00	0.18	
10	2005-2006	0.02	0.00	0.02	15.23	0.00	15.23	12.19	0.00	12.19	2.98	0.01	2.99	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

V Godavari Basin													<i>Unit: Million Metric Tonnes</i>	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Bagh at Rajegaon			Wainganga at Kumhari			Godavari at Mancherial			Lendi at Degloor			
1	1996-97	0.513	0.000	0.513	0.569	0.000	0.569	0.476	0.005	0.481	0.183	0.000	0.183	
2	1997-98	1.931	0.030	1.961	1.956	0.161	2.117	0.051	0.002	0.053	0.095	0.000	0.095	
3	1998-99	11.220	0.000	11.220	1.008	0.002	1.010	2.378	0.007	2.385	0.126	0.000	0.126	
4	1999-2000	1.901	0.001	1.902	2.449	0.002	2.451	0.390	0.003	0.393	0.015	0.000	0.015	
5	2000-2001	1.102	0.000	1.102	1.256	0.002	1.258	1.897	0.004	1.901	0.243	0.000	0.243	
6	2001-2002	2.039	0.000	2.039	0.999	0.000	0.999	0.305	0.002	0.307	0.000	0.005	0.005	
7	2002-2003	5.927	0.000	5.927	0.685	0.000	0.685	1.27	0.000	1.270	0.003	0.000	0.003	
8	2003-2004	2.344	0.009	2.353	1.711	0.000	1.711	0.524	0.003	0.527	0.011	0.000	0.011	
9	2004-2005	0.47	0.02	0.49	0.27	0.00	0.27	0.06	0.00	0.06	0.26	0.00	0.26	
10	2005-2006	4.86	0.00	4.86	1.60	0.00	1.60	2.55	0.00	2.55	0.01	0.00	0.01	
	Site Name	Manijira at Saigaon			Godavari at Yelli			Purna at Purna			Godavari at G.R.Bridge			
1	1996-97	0.470	0.000	0.470	6.789	0.000	6.789	1.376	0.000	1.376	2.229	0.000	2.229	
2	1997-98	0.024	0.000	0.024	0.068	0.002	0.070	0.228	0.022	0.250	0.006	0.000	0.006	
3	1998-99	1.936	0.000	1.936	18.835	0.000	18.835	3.369	0.000	3.369	0.800	0.000	0.800	
4	1999-2000	0.125	0.000	0.125	2.252	0.000	2.252	1.075	0.000	1.075	0.071	0.000	0.071	
5	2000-2001	0.604	0.000	0.604	5.421	0.000	5.421	1.580	0.000	1.580	0.314	0.000	0.314	
6	2001-2002	0.079	0.000	0.079	2.747	0.000	2.747	0.662	0.000	0.662	0.092	0.000	0.092	
7	2002-2003	0.010	0.000	0.010	1.387	0.000	1.387	1.928	0.000	1.928	0.072	0.000	0.072	
8	2003-2004	0.020	0.000	0.020	0.488	0.000	0.488	0.102	0.000	0.102	0.019	0.000	0.019	
9	2004-2005	0.02	N.A.	N.A.	0.03	N.A.	0.03	0.05	N.A.	0.05	0.00	0.00	0.00	
10	2005-2006	0.74	0.00	0.74	10.54	0.00	10.54	12.46	0.00	12.46	0.07	0.00	0.07	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

Godavari Basin											<i>Unit: Million Metric Tonnes</i>		
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Godavari at Dhalegaon			Sindhpana at Manjlegaon								
1	1996-97	0.148	0.000	0.148	0.000	0.000	0.000						
2	1997-98	0.012	0.005	0.017	<----- Site closed ----->								
3	1998-99	1.941	0.001	1.942									
4	1999-2000	0.414	0.000	0.414									
5	2000-2001	0.887	0.000	0.887									
6	2001-2002	0.125	0.000	0.125									
7	2002-2003	0.365	0.000	0.365									
8	2003-2004	0.099	0.000	0.099									
9	2004-2005	0.12	0.00	0.12									
10	2005-2006	1.96	0.00	1.96									

Source: Suspended Sediment Year Books for 1996-2006 (Godavari Basin) (Updated during September 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

V odavari Basin													<i>Unit: Million Metric Tonnes</i>	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Polavaram			Sabari at Konta			Perur			Indravati at Pathagudem			
1	1996-97	26.870	0.148	27.018	2.411	0.039	2.450	20.568	0.060	20.628	8.305	0.001	8.306	
2	1997-98	21.760	0.176	21.936	2.585	0.098	2.683	17.600	0.527	18.127	8.018	0.045	8.063	
3	1998-99	40.205	0.148	40.353	3.336	0.200	3.536	31.203	0.036	31.239	6.690	0.014	6.704	
4	1999-2000	44.77	0.110	44.880	8.14	0.118	8.258	44.451	0.014	44.465	15.183	0.005	15.188	
5	2000-2001	86.361	0.063	86.424	6.564	0.007	6.571	81.149	0.007	81.156	7.305	0.002	7.307	
6	2001-2002	48.644	0.020	48.664	4.471	0.076	4.547	72.553	0.01	72.563	72.563	16.259	88.822	
7	2002-2003	25.058	0.011	25.069	1.939	0.02	1.959	15.411	0.009	15.420	7.682	0.003	7.685	
8	2003-2004	42.850	0.218	43.068	8.939	0.123	9.062	44.204	0.091	44.295	22.820	0.012	22.832	
9	2004-2005	25.18	0.12	25.30	5.46	0.08	5.54	17.06	0.02	17.08	12.51	0.00	12.51	
10	2005-2006	69.71	0.22	69.93	2.59	0.09	2.68	54.07	0.00	54.07	11.66	0.0	11.66	
	Site Name	Indravati at Jagadapur			Indravati at Nowrangpur			Pranhita at Tekra			Paddavagu at Bhatpalli			
1	1996-97	1.439	0.028	1.467	0.843	0.058	0.901	9.690	0.004	9.694	3.890	0.001	3.891	
2	1997-98	1.389	0.078	1.467	0.956	0.068	1.024	11.920	0.374	12.294	0.668	0.006	0.674	
3	1998-99	1.604	0.001	1.605	0.404	0.000	0.404	19.813	0.017	19.830	3.815	0.000	3.815	
4	1999-2000	1.497	0.000	1.497	0.378	0.000	0.378	54.44	0.004	54.444	0.851	0.001	0.852	
5	2000-2001	1.651	0.001	1.652	0.633	0.000	0.633	50.222	0.000	50.222	4.090	0.000	4.090	
6	2001-2002	2.821	0.002	2.823	1.100	0.000	1.100	19.988	0.001	19.989	1.117	0.001	1.118	
7	2002-2003	1.238	0.001	1.239	0.204	0.000	0.204	32.174	0.007	32.181	0.597	0.000	0.597	
8	2003-2004	3.714	0.001	3.715	6.042	0.000	6.042	35.425	0.005	35.430	2.177	0.000	2.177	
9	2004-2005	2.03	0.00	2.03	0.33	0.00	0.33	3.98	0.02	4.00	0.32	0.00	0.32	
10	2005-2006	1.63	0.00	1.63	0.40	0.00	0.40	27.76	0.00	27.76	1.15	0.00	1.15	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

V odavari Basin													<i>Unit: Million Metric Tonnes</i>	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Wardha at Bamni			Penganga at PG Bridge			Unna at Nandgaon			Wardha at Hivra			
1	1996-97	3.427	0.002	3.429	1.974	0.000	1.974	0.038	0.000	0.038	0.399	0.001	0.400	
2	1997-98	1.567	0.044	1.611	0.282	0.090	0.372	0.023	0.002	0.025	0.088	0.067	0.155	
3	1998-99	7.416	0.003	7.419	3.008	0.002	3.010	0.078	0.000	0.078	0.912	0.000	0.912	
4	1999-2000	10.462	0.007	10.469	5.567	0.001	5.568	0.418	0.000	0.418	0.927	0.000	0.927	
5	2000-2001	17.009	0.001	17.010	2.965	0.000	2.965	0.576	0.000	0.576	0.44	0.000	0.440	
6	2001-2002	15.193	0.001	15.194	4.183	0.001	4.184	0.199	0.000	0.199	0.993	0.000	0.993	
7	2002-2003	31.308	0.001	31.309	9.731	0.003	9.734	1.032	0.000	1.032	1.142	0.000	1.142	
8	2003-2004	7.954	0.002	7.956	2.027	0.000	2.027	1.013	0.000	1.013	1.007	0.001	1.008	
9	2004-2005	0.82	0.00	0.82	0.15	0.00	0.15	0.02	0.0	0.13	0.13	0.00	0.13	
10	2005-2006	14.63	0.00	14.63	11.20	0.00	11.20	0.11	0.0	0.21	1.04	0.00	1.04	
	Site Name	Wardha at Bishnur			Wainganga at Ashti			Wainganga at Pauni			Kanhan at Satrapur			
1	1996-97	0.006	0.000	0.006	2.343	0.000	2.343	2.817	0.003	2.820	1.286	0.003	1.289	
2	1997-98	0.082	0.005	0.087	4.938	0.127	5.065	6.667	0.366	7.033	3.593	0.547	4.140	
3	1998-99	0.202	0.000	0.202	7.578	0.035	7.613	5.046	0.010	5.056	1.381	0.011	1.392	
4	1999-2000	0.092	0.000	0.092	16.292	0.002	16.294	10.893	0.007	10.900	1.908	0.013	1.921	
5	2000-2001	0.003	0.000	0.003	8.751	0.000	8.751	2.918	0.001	2.919	0.275	0.000	0.275	
6	2001-2002	0.000	0.004	0.004	0.000	7.793	7.793	5.556	0.004	5.560	1.331	0.002	1.333	
7	2002-2003	0.145	0.009	0.154	12.809	0.002	12.811	6.125	0.005	6.130	0.701	0.005	0.706	
8	2003-2004	0.016	0.000	0.016	14.202	0.003	14.205	8.14	0.009	8.149	1.702	0.006	1.708	
9	2004-2005	0.02	0.00	0.02	2.53	0.00	2.53	1.66	0.03	1.69	0.18	0.00	0.18	
10	2005-2006	0.02	0.00	0.02	15.23	0.00	15.23	12.19	0.00	12.19	2.98	0.01	2.99	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

V Godavari Basin													<i>Unit: Million Metric Tonnes</i>	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Bagh at Rajegaon			Wainganga at Kumhari			Godavari at Mancherial			Lendi at Degloor			
1	1996-97	0.513	0.000	0.513	0.569	0.000	0.569	0.476	0.005	0.481	0.183	0.000	0.183	
2	1997-98	1.931	0.030	1.961	1.956	0.161	2.117	0.051	0.002	0.053	0.095	0.000	0.095	
3	1998-99	11.220	0.000	11.220	1.008	0.002	1.010	2.378	0.007	2.385	0.126	0.000	0.126	
4	1999-2000	1.901	0.001	1.902	2.449	0.002	2.451	0.390	0.003	0.393	0.015	0.000	0.015	
5	2000-2001	1.102	0.000	1.102	1.256	0.002	1.258	1.897	0.004	1.901	0.243	0.000	0.243	
6	2001-2002	2.039	0.000	2.039	0.999	0.000	0.999	0.305	0.002	0.307	0.000	0.005	0.005	
7	2002-2003	5.927	0.000	5.927	0.685	0.000	0.685	1.27	0.000	1.270	0.003	0.000	0.003	
8	2003-2004	2.344	0.009	2.353	1.711	0.000	1.711	0.524	0.003	0.527	0.011	0.000	0.011	
9	2004-2005	0.47	0.02	0.49	0.27	0.00	0.27	0.06	0.00	0.06	0.26	0.00	0.26	
10	2005-2006	4.86	0.00	4.86	1.60	0.00	1.60	2.55	0.00	2.55	0.01	0.00	0.01	
	Site Name	Manijira at Saigaon			Godavari at Yelli			Purna at Purna			Godavari at G.R.Bridge			
1	1996-97	0.470	0.000	0.470	6.789	0.000	6.789	1.376	0.000	1.376	2.229	0.000	2.229	
2	1997-98	0.024	0.000	0.024	0.068	0.002	0.070	0.228	0.022	0.250	0.006	0.000	0.006	
3	1998-99	1.936	0.000	1.936	18.835	0.000	18.835	3.369	0.000	3.369	0.800	0.000	0.800	
4	1999-2000	0.125	0.000	0.125	2.252	0.000	2.252	1.075	0.000	1.075	0.071	0.000	0.071	
5	2000-2001	0.604	0.000	0.604	5.421	0.000	5.421	1.580	0.000	1.580	0.314	0.000	0.314	
6	2001-2002	0.079	0.000	0.079	2.747	0.000	2.747	0.662	0.000	0.662	0.092	0.000	0.092	
7	2002-2003	0.010	0.000	0.010	1.387	0.000	1.387	1.928	0.000	1.928	0.072	0.000	0.072	
8	2003-2004	0.020	0.000	0.020	0.488	0.000	0.488	0.102	0.000	0.102	0.019	0.000	0.019	
9	2004-2005	0.02	N.A.	N.A.	0.03	N.A.	0.03	0.05	N.A.	0.05	0.00	0.00	0.00	
10	2005-2006	0.74	0.00	0.74	10.54	0.00	10.54	12.46	0.00	12.46	0.07	0.00	0.07	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

Godavari Basin											<i>Unit: Million Metric Tonnes</i>		
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Godavari at Dhalegaon			Sindhpana at Manjlegaon								
1	1996-97	0.148	0.000	0.148	0.000	0.000	0.000						
2	1997-98	0.012	0.005	0.017	<----- Site closed ----->								
3	1998-99	1.941	0.001	1.942									
4	1999-2000	0.414	0.000	0.414									
5	2000-2001	0.887	0.000	0.887									
6	2001-2002	0.125	0.000	0.125									
7	2002-2003	0.365	0.000	0.365									
8	2003-2004	0.099	0.000	0.099									
9	2004-2005	0.12	0.00	0.12									
10	2005-2006	1.96	0.00	1.96									

Source: Suspended Sediment Year Books for 1996-2006 (Godavari Basin) (Updated during September 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

VI		Basin : Krishna											Unit: Million Metric Tonnes
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Vijaywada			Kesara			Wadenapalli			Pondugala		
1	1995-96	0.674	0.026	0.700	0.311	0.008	0.319	0.088	0.039	0.127	1.301	0.030	1.331
2	1996-97	-	-	-	-	-	-	-	-	-	-	-	-
3	1997-98	0.976	0.035	1.011	0.059	0.015	0.074	0.424	0.045	0.469	1.072	0.031	1.103
4	1998-99	2.309	0.046	2.355	0.469	0.024	0.493	0.940	0.172	1.112	0.317	0.060	0.377
5	1999-2000	0.556	0.035	0.591	0.216	0.005	0.221	0.206	0.094	0.300	0.112	0.087	0.199
6	2000-2001	0.573	0.027	0.600	0.496	0.010	0.506	0.310	0.058	0.368	0.235	0.087	0.322
7	2001-2002	0.166	0.014	0.180	0.036	0.003	0.039	0.104	0.033	0.137	0.223	0.085	0.308
8	2002-2003	0.002	0.000	0.002	0.039	0.000	0.039	0.030	0.008	0.038	0.172	0.036	0.208
9	2003-2004	0.009	0.000	0.009	0.156	0.003	0.159	0.015	0.010	0.025	0.009	0.021	0.030
10	2004-2005	0.008	0.000	0.008	0.199	0.002	0.201	0.051	0.012	0.063	0.041	0.025	0.066
	Site name	Bawapuram			Mantralayam			Oollenur			Marol		
1	1995-96	0.389	0.001	0.390	1.202	0.028	1.230	0.043	0.025	0.068	0.307	0.000	0.307
2	1996-97	-	-	-	-	-	-	-	-	-	-	-	-
3	1997-98	0.501	0.011	0.512	0.584	0.055	0.639	0.305	0.029	0.334	0.420	0.040	0.460
4	1998-99	2.386	0.005	2.391	4.061	0.035	4.096	0.328	0.023	0.351	0.381	0.006	0.387
5	1999-2000	1.153	0.028	1.181	1.375	0.051	1.426	0.288	0.023	0.311	1.166	0.001	1.167
6	2000-2001	1.537	0.048	1.585	1.689	0.028	1.717	0.206	0.018	0.224	0.517	0.001	0.518
7	2001-2002	1.146	0.008	1.154	1.801	0.048	1.849	0.064	0.018	0.082	0.056	0.000	0.056
8	2002-2003	0.128	0.002	0.130	0.331	0.014	0.345	0.020	0.027	0.047	0.135	0.000	0.135
9	2003-2004	0.055	0.011	0.066	0.096	0.020	0.116	-	-	-	0.242	0.000	0.242
10	2004-2005	1.028	0.009	1.037	0.839	0.023	0.862	-	-	-	0.225	0.000	0.225

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

VI		Basin : Krishna											Unit: Million Metric Tonnes	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site name	Harlahalli			Shimoga			Krishna Agraharam			Yadgir			
1	1995-96	0.573	0.012	0.585	0.323	0.003	0.326	7.171	0.025	7.196	0.419	0.007	0.426	
2	1996-97	-	-	-	-	-	-	-	-	-	-	-	-	
3	1997-98	0.903	0.081	0.984	0.757	0.007	0.764	4.466	0.09	4.556	2.606	0.018	2.624	
4	1998-99	0.866	0.038	0.904	0.531	0.012	0.543	105.272	0.046	105.318	18.202	0.140	18.342	
5	1999-2000	1.287	0.062	1.349	0.642	0.008	0.650	3.632	0.022	3.654	1.164	0.006	1.170	
6	2000-2001	0.713	0.028	0.741	1.051	0.004	1.055	1.564	0.018	1.582	1.727	0.009	1.736	
7	2001-2002	0.181	0.010	0.191	0.309	0.003	0.312	0.458	0.013	0.471	3.141	0.004	3.145	
8	2002-2003	0.185	0.003	0.188	0.230	0.007	0.237	0.307	0.029	0.336	0.151	0.006	0.157	
9	2003-2004	0.125	0.001	0.126	0.244	0.001	0.245	0.065	0.014	0.079	0.231	0.025	0.256	
10	2004-2005	0.080	0.003	0.083	0.014	0.003	0.017	3.09	0.005	3.095	1.395	0.003	1.398	
	Site name	Malkhed			Wadakbal			Takali			Sarati			
1	1995-96	0.841	0.001	0.842	0.476	0.000	0.476	0.001	0.000	0.001	0.008	0.000	0.008	
2	1996-97	-	-	-	-	-	-	-	-	-	-	-	-	
3	1997-98	0.047	0.000	0.047	0.327	0.000	0.327	0.213	0.002	0.215	0.053	0.000	0.053	
4	1998-99	1.053	0.003	1.056	3.667	0.021	3.688	1.563	0.011	1.574	0.060	0.001	0.061	
5	1999-2000	0.073	0.001	0.074	0.259	0.000	0.259	0.329	0.001	0.330	0.015	0.000	0.015	
6	2000-2001	0.404	0.001	0.405	0.667	0.000	0.667	0.011	0.001	0.012	0.000	0.000	0.000	
7	2001-2002	0.332	0.001	0.333	0.644	0.000	0.644	0.228	0.000	0.228	0.005	0.000	0.005	
8	2002-2003	0.120	0.000	0.120	0.017	0.000	0.017	0.010	0.009	0.019	0.041	0.000	0.041	
9	2003-2004	0.029	0.000	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.004	
10	2004-2005	0.017	0.000	0.017	0.296	0.001	0.297	0.454	0.000	0.454	0.225	0.000	0.225	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

VI Basin : Krishna													Unit: Million Metric Tonnes	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site name	Huvinhedgi			Cholachagudda			Bagalkot			Galgali			
1	1994-95	11.328	0.055	11.383	3.162	0.082	3.244	0.697	0.013	0.710	5.050	0.013	5.063	
2	1995-96	2.395	0.009	2.404	4.858	0.031	4.889	0.619	0.005	0.624	1.809	0.006	1.815	
3	1996-97	-	-	-	-	-	-	-	-	-	-	-	-	
4	1997-98	2.058	0.116	2.174	4.437	0.833	5.270	0.661	0.065	0.726	3.371	0.008	3.379	
5	1998-99	5.952	0.032	5.984	4.774	0.040	4.814	0.432	0.015	0.447	3.147	0.016	3.163	
6	1999-2000	3.731	0.042	3.773	2.451	0.091	2.542	0.566	0.013	0.579	2.314	0.009	2.323	
7	2000-2001	1.558	0.036	1.594	3.804	0.075	3.879	0.003	0.000	0.003	1.245	0.000	1.245	
8	2001-2002	3.006	0.023	3.029	1.809	0.008	1.817	<----- N.A. ----->			<----- N.A. ----->			
9	2002-2003	1.146	0.033	1.179	1.753	0.007	1.760	<----- N.A. ----->			<----- N.A. ----->			
10	2004-2005	1.957	0.042	1.999	3.204	0.027	3.231	<----- N.A. ----->			<----- N.A. ----->			
	Site name	Karad			Warunji			Byaladahalli			Honnali			
1	1995-96	0.270	0.005	0.275	0.171	0.006	0.177	Sediment Observation Startedw.e.f.10.12.97			Sediment Observation Startedw.e.f.15.09.95			
2	1996-97	-	-	-	-	-	-							
3	1997-98	1.604	0.006	1.610	0.843	0.004	0.847							
4	1998-99	0.176	0.004	0.180	0.260	0.004	0.264	0.037	0.003	0.040	0.433	0.085	0.518	
5	1999-2000	0.784	0.006	0.790	0.470	0.004	0.474	0.013	0.001	0.014	0.668	0.073	0.741	
6	2000-2001	0.147	0.003	0.150	0.116	0.005	0.121	0.029	0.005	0.034	0.441	0.046	0.487	
7	2001-2002	0.033	0.002	0.035	0.068	0.007	0.075	0.004	0.000	0.004	0.123	0.004	0.127	
8	2002-2003	0.027	0.003	0.030	0.131	0.006	0.137	0.005	0.001	0.006	0.167	0.007	0.174	
9	2003-2004	0.064	0.004	0.068	0.046	0.007	0.053	0.006	0.000	0.006	0.125	0.003	0.128	
10	2004-2005	1.255	0.005	1.260	0.323	0.005	0.328	0.007	0.000	0.007	0.391	0.004	0.395	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

VI Basin : Krishna		<i>Unit: Million Metric Tonnes</i>											
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site name	Mudhol				Kurundwad							
1	1995-96												
2	1996-97												
3	1997-98												
4	1998-99												
5	1999-2000	<----- New Sites ----->											
6	2000-2001												
7	2001-2002												
8	2002-2003												
9	2003-2004	0.004	0.000	0.004	0.087	0.000	0.087						
10	2004-2005	0.159	0.000	0.159	2.465	0.000	2.465						

Source: Suspended Sediment and Bedmaterial Data Book for 1995-2005(Krishna Basin) (Updated during September 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

VII Basin : Cauvery													Unit: Million Metric Tonnes	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Kudige			Muthankera			T.Narsinpur			Kollegal			
1	1993-94	0.090	0.004	0.094	0.157	0.008	0.165	0.116	0.009	0.125	0.079	0.020	0.099	
2	1994-95	0.258	0.004	0.262	0.315	0.013	0.328	0.248	0.015	0.263	0.582	0.055	0.637	
3	1995-96	0.138	0.002	0.140	0.158	0.005	0.163	0.085	0.009	0.094	0.132	0.029	0.161	
4	1996-97	0.124	0.009	0.133	0.162	0.023	0.185	0.067	0.006	0.073	0.272	0.026	0.298	
5	1997-98	0.187	0.014	0.201	0.225	0.021	0.246	0.135	0.013	0.148	0.268	0.059	0.327	
6	1998-99	0.102	0.002	0.104	0.141	0.010	0.151	0.101	0.012	0.113	0.161	0.013	0.174	
7	1999-00	0.107	0.005	0.112	0.104	0.003	0.107	0.008	0.001	0.009	0.160	0.020	0.180	
8	2000-01	0.087	0.003	0.090	0.105	0.008	0.113	0.120	0.020	0.140	0.288	0.053	0.341	
9	2001-02	0.060	0.005	0.065	0.101	0.005	0.106	0.088	0.016	0.104	0.067	0.015	0.082	
10	2002-03	0.056	0.003	0.059	0.109	0.003	0.112	<-----N.A.----->			0.049	0.014	0.063	
	Site Name	T.K. Halli			Biligundulu			Savandapur			Kodumudi			
1	1993-94	0.021	0.007	0.028	0.337	0.058	0.395	0.007	0.006	0.013	0.137	0.051	0.188	
2	1994-95	0.014	0.004	0.018	1.136	0.094	1.230	0.009	0.012	0.021	0.332	0.270	0.602	
3	1995-96	0.015	0.003	0.018	0.314	0.046	0.360	0.006	0.011	0.017	0.015	0.006	0.021	
4	1996-97	0.005	0.001	0.006	0.639	0.030	0.669	0.006	0.009	0.015	0.286	0.078	0.364	
5	1997-98	0.003	0.000	0.003	0.223	0.128	0.351	0.007	0.009	0.016	0.225	0.065	0.290	
6	1998-99	0.003	0.000	0.003	0.577	0.023	0.600	0.007	0.008	0.015	0.099	0.057	0.156	
7	1999-00	0.007	0.003	0.010	0.539	0.014	0.553	0.011	0.006	0.017	0.016	0.084	0.100	
8	2000-01	0.075	0.007	0.082	0.939	0.038	0.977	0.008	0.006	0.014	0.218	0.064	0.282	
9	2001-02	0.017	0.006	0.023	0.169	0.020	0.189	0.004	0.003	0.007	0.076	0.049	0.125	
10	2002-03	0.002	0.002	0.004	0.094	0.025	0.119	0.007	0.011	0.018	0.023	0.027	0.050	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

VII Basin : Cauvery													<i>Unit: Million Metric Tonnes</i>	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Nallamaranpatty			Musiri			Mukundur Hoshalli			Urachikottai			
1	1993-94	0.128	0.048	0.176	0.875	0.079	0.954							
2	1994-95	0.017	0.061	0.078	0.385	0.255	0.640	0.053	0.013	0.066				
3	1995-96	0.002	0.000	0.002	0.133	0.070	0.203	0.014	0.011	0.025				
4	1996-97	0.014	0.032	0.046	0.160	0.170	0.330	0.011	0.005	0.016				
5	1997-98	0.002	0.108	0.110	0.185	0.205	0.390	0.015	0.004	0.019				
6	1998-99	0.001	0.067	0.068	0.172	0.106	0.278	0.014	0.005	0.019				
7	1999-00	0.006	0.024	0.030	0.127	0.154	0.281	0.018	0.004	0.022				
8	2000-01	0.004	0.000	0.004	0.792	0.132	0.924	0.018	0.001	0.019	0.000	0.002	0.002	
9	2001-02	0.000	0.000	0.000	0.130	0.066	0.196	0.007	0.003	0.010	0.005	0.003	0.008	
10	2002-03	0.000	0.001	0.001	0.027	0.031	0.058	0.001	0.001	0.002	0.019	0.018	0.037	
	Site Name	Thengumarahadu			Nellithurai									
1	1993-94													
2	1994-95													
3	1995-96													
4	1996-97													
5	1997-98													
6	1998-99													
7	1999-00													
8	2000-01													
9	2001-02													
10	2002-03	0.011	0.005	0.016	0.017	0.015	0.032							

Source: Suspended Sediment and Bedmaterial Data Book for 1993-2003 (Cauvery Basin) (Updated during September 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

VIII Basin: East Flowing Rivers													Unit: Million Metric Tonnes	
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Gundalakamma at Thammavaram			Pennar at Chennai			Kunderu at Alladupalli			Ponniar at Gummanur			
1	1994-95	0.024	0.087	0.111	1.284	0.015	1.299	Sediment Observation started from 1996-97			0.003	0.001	0.004	
2	1995-96	0.028	0.010	0.038	0.315	0.010	0.325	2.163	0.019	2.182	0.009	0.004	0.013	
3	1996-97	0.137	0.036	0.173	3.021	0.042	3.063	0.664	0.025	0.689	0.018	0.000	0.018	
4	1997-98	0.137	0.049	0.186	0.943	0.034	0.977	<----- Not Observation ----->			0.103	0.018	0.121	
5	1998-99	0.094	0.025	0.119	<----- Not Observation ----->			<----- Not Observation ----->			0.032	0.000	0.032	
6	1999-2000	0.038	0.007	0.045	<----- Not Observation ----->			<----- Not Observation ----->			0.045	0.000	0.045	
7	2000-2001	0.421	0.003	0.424	3.755	0.038	3.793	1.375	0.105	1.480	0.023	0.000	0.023	
8	2001-2002	0.071	0.004	0.075	4.712	0.032	4.744	<----- Not Observation ----->			0.039	0.000	0.039	
9	2002-2003	0.003	0.000	0.003	0.229	0.000	0.229	0.200	0.000	0.200	0.000	0.000	0.000	
10	2003-2004	0.009	0.000	0.009	0.284	0.002	0.286	0.331	0.003	0.334	0.002	0.000	0.002	
	Site Name	Suriliyar at Theni			Thampaparani at Murappandu			Vaigai at Ambasamundram			Ponniyar at Vazhavachanur			
1	1994-95	0.070	0.071	0.141	0.011	0.046	0.057							
2	1995-96	0.044	0.014	0.058	0.006	0.007	0.013							
3	1996-97	0.045	0.020	0.065	0.003	0.007	0.010							
4	1997-98	0.045	0.020	0.065	0.002	0.073	0.075							
5	1998-99	0.033	0.188	0.221	0.002	0.024	0.026	<----- Not Observation ----->						
6	1999-2000	0.034	0.018	0.052	0.003	0.010	0.013	<----- Not Observation ----->						
7	2000-2001	0.036	0.016	0.052	0.005	0.011	0.016	<----- Not Observation ----->						
8	2001-2002	0.033	0.030	0.063	0.002	0.005	0.007	<----- Site is Not Available ----->			0.000	0.000	0.000	
9	2002-2003	0.012	0.009	0.021	0.001	0.009	0.010	0.003	0.010	0.013	0.000	0.000	0.000	
10	2003-2004	0.010	0.007	0.017	0.000	0.005	0.005	0.010	0.023	0.033	0.000	0.001	0.001	

Source: Sediment Year Book for 1994-2004, Cauvery & Southern Rivers Organisation, Coimbatore.(East Flowing Rivers) (Updated during September 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

IX Basin: West Flowing Rivers													Unit: Million Metric Tonnes		
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)		
	Site Name	Nethravathi at Bantwal				Payaswani at Erinijipuzha				Valapatanam at Perumannu				Chaliyar at Kuniyil	
1	1994-95	1.297	0.038	1.335	0.192	0.007	0.199	0.226	0.004	0.230	0.260	0.013	0.273		
2	1995-96	1.247	0.006	1.253	0.182	0.003	0.185	0.260	0.003	0.263	0.340	0.010	0.350		
3	1996-97	2.769	0.040	2.809	0.206	0.003	0.209	0.391	0.007	0.398	0.315	0.022	0.337		
4	1997-98	2.026	0.010	2.036	0.128	0.042	0.170	0.230	0.008	0.238	0.292	0.024	0.316		
5	1998-99	2.026	0.010	2.036	0.128	0.042	0.170	0.230	0.008	0.238	0.292	0.024	0.316		
6	1999-2000	1.348	0.001	1.349	0.264	0.003	0.267	0.234	0.002	0.236			0.000		
7	2000-2001	0.321	0.000	0.321	0.118	0.002	0.120	0.161	0.010	0.171			0.000		
8	2001-2002	0.353	0.006	0.359	0.116	0.005	0.121	0.150	0.003	0.153	0.105	0.025	0.130		
9	2002-2003	0.437	0.005	0.442	0.081	0.002	0.083	0.135	0.002	0.137	0.063	0.004	0.067		
10	2003-2004	0.649	0.001	0.650	0.111	0.003	0.114	0.054	0.008	0.062	0.046	0.008	0.054		
	Site Name	Bharathapuzha at Kumbidi				Pulanthode at Pulamantole				Chalakudi at Arangaly				Periyar at Neeleswaram	
1	1994-95	0.670	0.099	0.769	0.179	0.015	0.194	0.126	0.004	0.130	0.419	0.020	0.439		
2	1995-96	0.317	0.054	0.371	0.081	0.013	0.094	0.041	0.002	0.043	0.529	0.008	0.537		
3	1996-97	0.236	0.005	0.241	0.082	0.004	0.086	0.029	0.001	0.030	0.335	0.002	0.337		
4	1997-98	0.302	0.030	0.332	0.104	0.020	0.124	0.028	0.005	0.033	0.214	0.007	0.221		
5	1998-99	0.446	0.076	0.522	0.102	0.018	0.120	0.074	0.067	0.141	0.340	0.016	0.356		
6	1999-2000	0.273	0.008	0.281	0.078	0.001	0.079	0.040	0.001	0.041	0.100	0.001	0.101		
7	2000-2001	0.178	0.014	0.192	0.041	0.002	0.043	0.015	0.000	0.015			0.000		
8	2001-2002	0.243	0.047	0.290	0.071	0.016	0.087	0.018	0.002	0.020	0.101	0.012	0.113		
9	2002-2003	0.143	0.010	0.153	0.052	0.003	0.055	0.012	0.003	0.015	0.051	0.004	0.055		
10	2003-2004	0.077	0.010	0.087	0.023	0.004	0.027	0.013	0.003	0.016	0.046	0.011	0.057		
	Site Name	Muvattupuzha at Ramamangalam				Kaliyar at Kalampur				Meenachil at Kidangoor				Manimala at Kallooppa	
1	1994-95	0.138	0.022	0.160	0.041	0.006	0.047	0.039	0.007	0.046	0.086	0.022	0.108		
2	1995-96	0.132	0.034	0.166	0.041	0.002	0.043	0.033	0.003	0.036	0.063	0.005	0.068		
3	1996-97	0.123	0.017	0.140	0.034	0.001	0.035	0.034	0.002	0.036	0.062	0.004	0.066		
4	1997-98	0.101	0.046	0.147	0.036	0.004	0.040	0.016	0.002	0.018	0.072	0.014	0.086		
5	1998-99	0.129	0.034	0.163	0.035	0.051	0.086	0.023	0.068	0.091	0.051	0.014	0.065		
6	1999-2000	0.117	0.016	0.133	0.037	0.001	0.038	0.026	0.001	0.027	0.039	0.001	0.040		
7	2000-2001	0.072	0.016	0.088	0.029	0.001	0.030	0.038	0.003	0.041	0.042	0.002	0.044		
8	2001-2002	0.159	0.037	0.196	0.038	0.002	0.040	0.040	0.011	0.051	0.042	0.011	0.053		
9	2002-2003	0.161	0.017	0.178	0.021	0.002	0.023	0.035	0.009	0.044	0.017	0.003	0.020		
10	2003-2004	0.094	0.012	0.106	0.023	0.001	0.024	0.057	0.016	0.073	0.019	0.005	0.024		

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

IX Basin: West Flowing Rivers													Unit: Million Metric Tonnes
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Pamba at Malakkara			Achankovil at Thumpamon			Kallada at Pattazhy			Vamanapuram at Ayilam		
1	1994-95	0.172	0.030	0.202	0.107	0.023	0.130	0.099	0.029	0.128	0.052	0.008	0.060
2	1995-96	0.116	0.016	0.132	0.059	0.008	0.067	0.038	0.016	0.054	0.014	0.008	0.022
3	1996-97	0.086	0.012	0.098	0.084	0.003	0.087	0.037	0.009	0.046	0.057	0.006	0.063
4	1997-98	0.072	0.023	0.095	0.065	0.021	0.086	0.038	0.017	0.055	0.021	0.003	0.024
5	1998-99	0.235	0.055	0.290	0.050	0.084	0.134	0.068	0.021	0.089	0.059	0.003	0.062
6	1999-2000	0.086	0.004	0.090	0.026	0.001	0.027	0.040	0.006	0.046	0.035	0.004	0.039
7	2000-2001	0.083	0.005	0.088	0.017	0.001	0.018	0.047	0.003	0.050	0.030	0.005	0.035
8	2001-2002	0.069	0.022	0.091	0.029	0.017	0.046	0.015	0.005	0.020	0.031	0.007	0.038
9	2002-2003	0.023	0.008	0.031	0.009	0.006	0.015	0.009	0.006	0.015	0.010	0.006	0.016
10	2003-2004	0.045	0.007	0.052	0.011	0.008	0.019	0.008	0.007	0.015	0.012	0.008	0.020
	Site Name	Kadalundi at Karathodu			Aliyar at ambarampalayam								
1	1994-95	0.142	0.011	0.153									
2	1995-96	0.064	0.014	0.078									
3	1996-97	0.052	0.002	0.054									
4	1997-98	0.101	0.012	0.113									
5	1998-99	0.073	0.004	0.077									
6	1999-2000	<-----Not Observation----->											
7	2000-2001	0.039	0.005	0.044									
8	2001-2002	0.060	0.009	0.069									
9	2002-2003	0.042	0.004	0.046	0.002	0.002	0.004						
10	2003-2004	0.020	0.007	0.027	0.002	0.001	0.003						

Source: Sediment Year Book for 1994-2004, Cauvery & Southern Rivers Organisation, Coimbatore.(West Flowing Rivers) (Updated during September 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

IX Basin: West Flowing Rivers													Unit: Million Metric Tonnes		
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)		
	Site Name	Nethravathi at Bantwal				Payaswani at Erinijipuzha				Valapatanam at Perumannu				Chaliyar at Kuniyil	
1	1994-95	1.297	0.038	1.335	0.192	0.007	0.199	0.226	0.004	0.230	0.260	0.013	0.273		
2	1995-96	1.247	0.006	1.253	0.182	0.003	0.185	0.260	0.003	0.263	0.340	0.010	0.350		
3	1996-97	2.769	0.040	2.809	0.206	0.003	0.209	0.391	0.007	0.398	0.315	0.022	0.337		
4	1997-98	2.026	0.010	2.036	0.128	0.042	0.170	0.230	0.008	0.238	0.292	0.024	0.316		
5	1998-99	2.026	0.010	2.036	0.128	0.042	0.170	0.230	0.008	0.238	0.292	0.024	0.316		
6	1999-2000	1.348	0.001	1.349	0.264	0.003	0.267	0.234	0.002	0.236			0.000		
7	2000-2001	0.321	0.000	0.321	0.118	0.002	0.120	0.161	0.010	0.171			0.000		
8	2001-2002	0.353	0.006	0.359	0.116	0.005	0.121	0.150	0.003	0.153	0.105	0.025	0.130		
9	2002-2003	0.437	0.005	0.442	0.081	0.002	0.083	0.135	0.002	0.137	0.063	0.004	0.067		
10	2003-2004	0.649	0.001	0.650	0.111	0.003	0.114	0.054	0.008	0.062	0.046	0.008	0.054		
	Site Name	Bharathapuzha at Kumbidi				Pulanthode at Pulamanthole				Chalakudi at Arangaly				Periyar at Neeleswaram	
1	1994-95	0.670	0.099	0.769	0.179	0.015	0.194	0.126	0.004	0.130	0.419	0.020	0.439		
2	1995-96	0.317	0.054	0.371	0.081	0.013	0.094	0.041	0.002	0.043	0.529	0.008	0.537		
3	1996-97	0.236	0.005	0.241	0.082	0.004	0.086	0.029	0.001	0.030	0.335	0.002	0.337		
4	1997-98	0.302	0.030	0.332	0.104	0.020	0.124	0.028	0.005	0.033	0.214	0.007	0.221		
5	1998-99	0.446	0.076	0.522	0.102	0.018	0.120	0.074	0.067	0.141	0.340	0.016	0.356		
6	1999-2000	0.273	0.008	0.281	0.078	0.001	0.079	0.040	0.001	0.041	0.100	0.001	0.101		
7	2000-2001	0.178	0.014	0.192	0.041	0.002	0.043	0.015	0.000	0.015			0.000		
8	2001-2002	0.243	0.047	0.290	0.071	0.016	0.087	0.018	0.002	0.020	0.101	0.012	0.113		
9	2002-2003	0.143	0.010	0.153	0.052	0.003	0.055	0.012	0.003	0.015	0.051	0.004	0.055		
10	2003-2004	0.077	0.010	0.087	0.023	0.004	0.027	0.013	0.003	0.016	0.046	0.011	0.057		
	Site Name	Muvattupuzha at Ramamangalam				Kaliyar at Kalampur				Meenachil at Kidangoor				Manimala at Kallooppa	
1	1994-95	0.138	0.022	0.160	0.041	0.006	0.047	0.039	0.007	0.046	0.086	0.022	0.108		
2	1995-96	0.132	0.034	0.166	0.041	0.002	0.043	0.033	0.003	0.036	0.063	0.005	0.068		
3	1996-97	0.123	0.017	0.140	0.034	0.001	0.035	0.034	0.002	0.036	0.062	0.004	0.066		
4	1997-98	0.101	0.046	0.147	0.036	0.004	0.040	0.016	0.002	0.018	0.072	0.014	0.086		
5	1998-99	0.129	0.034	0.163	0.035	0.051	0.086	0.023	0.068	0.091	0.051	0.014	0.065		
6	1999-2000	0.117	0.016	0.133	0.037	0.001	0.038	0.026	0.001	0.027	0.039	0.001	0.040		
7	2000-2001	0.072	0.016	0.088	0.029	0.001	0.030	0.038	0.003	0.041	0.042	0.002	0.044		
8	2001-2002	0.159	0.037	0.196	0.038	0.002	0.040	0.040	0.011	0.051	0.042	0.011	0.053		
9	2002-2003	0.161	0.017	0.178	0.021	0.002	0.023	0.035	0.009	0.044	0.017	0.003	0.020		
10	2003-2004	0.094	0.012	0.106	0.023	0.001	0.024	0.057	0.016	0.073	0.019	0.005	0.024		

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

IX Basin: West Flowing Rivers													Unit: Million Metric Tonnes
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Pamba at Malakkara			Achankovil at Thumpamon			Kallada at Pattazhy			Vamanapuram at Ayilam		
1	1994-95	0.172	0.030	0.202	0.107	0.023	0.130	0.099	0.029	0.128	0.052	0.008	0.060
2	1995-96	0.116	0.016	0.132	0.059	0.008	0.067	0.038	0.016	0.054	0.014	0.008	0.022
3	1996-97	0.086	0.012	0.098	0.084	0.003	0.087	0.037	0.009	0.046	0.057	0.006	0.063
4	1997-98	0.072	0.023	0.095	0.065	0.021	0.086	0.038	0.017	0.055	0.021	0.003	0.024
5	1998-99	0.235	0.055	0.290	0.050	0.084	0.134	0.068	0.021	0.089	0.059	0.003	0.062
6	1999-2000	0.086	0.004	0.090	0.026	0.001	0.027	0.040	0.006	0.046	0.035	0.004	0.039
7	2000-2001	0.083	0.005	0.088	0.017	0.001	0.018	0.047	0.003	0.050	0.030	0.005	0.035
8	2001-2002	0.069	0.022	0.091	0.029	0.017	0.046	0.015	0.005	0.020	0.031	0.007	0.038
9	2002-2003	0.023	0.008	0.031	0.009	0.006	0.015	0.009	0.006	0.015	0.010	0.006	0.016
10	2003-2004	0.045	0.007	0.052	0.011	0.008	0.019	0.008	0.007	0.015	0.012	0.008	0.020
	Site Name	Kadalundi at Karathodu			Aliyar at ambarampalayam								
1	1994-95	0.142	0.011	0.153									
2	1995-96	0.064	0.014	0.078									
3	1996-97	0.052	0.002	0.054									
4	1997-98	0.101	0.012	0.113									
5	1998-99	0.073	0.004	0.077									
6	1999-2000	<-----Not Observation----->			Observation Started from								
7	2000-2001	0.039	0.005	0.044									
8	2001-2002	0.060	0.009	0.069									
9	2002-2003	0.042	0.004	0.046	0.002	0.002	0.004						
10	2003-2004	0.020	0.007	0.027	0.002	0.001	0.003						

Source: Sediment Year Book for 1994-2004, Cauvery & Southern Rivers Organisation, Coimbatore.(West Flowing Rivers) (Updated during September 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

X Basin : Tapi													Unit: Million Metric Tonnes	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Year : 1992-2001														
Site Name	Sarankheda			Panjhara at Morane				Savkheda		Yarna at Dapri				
1	1992-93	9.186	0.000	9.186	0.023	0.000	0.023	8.175	0.000	8.175	0.318	0.000	0.318	
2	1993-94	18.199	0.001	18.200	0.037	0.000	0.037	12.461	0.003	12.464	0.038	0.000	0.038	
3	1994-95	23.307	0.001	23.308	0.122	0.000	0.122	24.085	0.001	24.086	0.245	0.000	0.246	
4	1995-96	<-----Sediment Year Book Not Published----->												
5	1996-97	<-----Sediment Year Book Not Published----->												
6	1997-98	6.159	0.828	6.987	0.280	0.000	0.280	5.367	2.852	8.219	0.061	0.003	0.064	
7	1998-99	42.878	0.037	42.915	0.629	0.000	0.629	16.206	0.022	16.228	0.767	0.000	0.767	
8	1999-2000	7.382	0.006	7.388	0.025	0.000	0.025	6.807	0.016	6.823	0.047	0.000	0.047	
9	2000-2001	4.686	0.000	4.686	0.000	0.000	0.000	3.336	0.000	3.336	0.066	0.000	0.066	
10	2001-2002	4.796	0.127	4.923	0.766	0.000	0.766	2.514	0.800	3.314	0.003	0.000	0.003	
Site Name	Purna at Yerli			Purna at Gopalkheda				Burhanpura		Dedtali				
1	1992-93	1.614	0.002	1.616	3.573	0.002	3.575	4.594	0.001	4.594	3.051	0.000	3.051	
2	1993-94	1.931	0.000	1.931	0.110	0.000	0.111	18.462	0.002	18.464	5.956	0.000	5.956	
3	1994-95	1.928	0.003	1.931	3.847	0.005	3.852	10.475	0.002	10.477	7.829	0.000	7.829	
4	1995-96	-	-	-	-	-	-	-	-	-	-	-	-	
5	1996-97	-	-	-	-	-	-	-	-	-	-	-	-	
6	1997-98	0.345	0.195	0.540	0.909	0.565	1.474	15.662	0.086	15.748	4.737	0.033	4.770	
7	1998-99	1.453	0.016	1.469	1.467	0.018	1.485	14.644	0.014	14.658	11.487	0.000	11.487	
8	1999-2000	0.739	0.003	0.742	1.155	0.000	1.155	4.415	0.007	4.422	2.250	0.085	2.335	
9	2000-2001	0.366	0.000	0.366	0.378	0.001	0.379	0.834	0.015	0.849	1.616	0.044	1.660	
10	2001-2002	0.354	0.513	0.867	0.198	0.062	0.260	7.769	0.598	8.367	2.419	0.360	2.779	

Source: Sediment Data Books for 1992-2002 (Tapi Basin)

(Updated during September 2007)

Table No.2.1 : Site-wise Sediment Load for Different River Basins

XI Basin: Narmada													Unit: Million Metric Tonnes	
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Site Name	Orsang at Chandwada			Narmada at Garudeshwar			Narmada at Rajghat			Narmada at Mandleshwar			
1	1993-94	0.845	0.000	0.845	9.946	0.001	9.946	50.975	0.081	51.056	53.967	0.054	54.021	
2	1994-95	1.828	0.000	1.828	36.523	0.012	36.534	108.226	0.066	108.292	103.964	0.064	104.028	
3	1995-96	0.641	0.000	0.641	2.233	0.019	2.253	15.647	0.033	15.679	33.377	0.031	33.408	
4	1996-97	2.782	0.000	2.782	8.309	0.016	8.325	18.010	0.088	18.098	19.987	0.036	20.023	
5	1997-98	1.543	0.000	1.543	7.255	0.143	7.398	19.107	0.586	19.694	34.216	0.205	34.421	
6	1998-99	0.833	0.000	0.833	4.359	0.025	4.384	23.834	0.117	23.951	19.151	0.109	19.260	
7	1999-2000	1.698	0.000	1.698	15.146	0.179	15.325	63.659	0.102	63.761	72.906	0.234	73.140	
8	2000-2001	0.500	0.000	0.500	1.674	0.025	1.699	7.987	0.028	8.015	5.124	0.12	5.244	
9	2001-2002	0.681	0.000	0.681	4.179	0.061	4.240	12.603	0.034	12.637	18.022	0.056	18.078	
10	2002-2003	0.658	0.000	0.658	4.705	0.046	4.751	36.003	0.027	36.030	23.533	0.026	23.559	
	Site Name	Chhota Tawa at Ginnore			Narmada at Handia			Narmada at Hoshangabad			Narmada at Sandia			
1	1993-94	3.134	0.002	3.136	28.867	0.085	28.953	22.153	0.031	22.184	7.464	0.027	7.491	
2	1994-95	5.075	0.001	5.076	32.560	0.236	32.796	23.837	0.057	23.893	10.503	0.075	10.578	
3	1995-96	1.101	0.000	1.101	102.003	0.061	102.064	41.285	0.035	41.320	42.998	0.125	43.123	
4	1996-97	2.320	0.001	2.321	271.652	0.040	271.692	13.104	0.083	13.187	11.232	0.070	11.302	
5	1997-98	2.320	0.001	2.321	8.169	0.077	8.245	1.728	0.171	1.900	2.404	0.045	2.450	
6	1998-99	Observation Suspended w.e.f.1997-98			17.130	1.497	18.627	14.056	1.423	15.479	6.873	0.805	7.678	
7	1999-2000				60.419	0.126	60.545	27.854	0.952	28.806	35.145	0.250	35.398	
8	2000-2001	-	-	-	4.651	0.828	5.479	5.364	0.046	5.410	9.459	0.033	9.492	
9	2001-2002	-	-	-	23.565	0.071	23.636	11.442	0.077	11.519	17.388	0.085	17.473	
10	2002-2003	-	-	-	41.982	0.170	42.152	12.64	0.187	12.827	14.125	0.152	14.277	

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

XI Basin: Narmada		Unit: Million Metric Tonnes											
Sl. No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Shakkar at Gadarwara			Narmada at Barmanghat			Narmada at Jamtara			Banjar at Hirdaynagar		
1	1993-94	1.193	0.001	1.194	7.200	0.038	7.237	1.475	0.025	1.500	0.547	0.000	0.548
2	1994-95	6.073	0.002	6.075	59.033	0.038	59.071	3.639	0.028	3.667	2.383	0.000	2.384
3	1995-96	1.515	0.000	1.515	13.169	0.044	13.213	1.568	0.034	1.602	0.353	0.000	0.353
4	1996-97	0.433	0.000	0.433	0.706	0.038	0.744	0.483	0.102	0.585	0.192	0.000	0.193
5	1997-98	1.439	0.137	1.576	5.778	0.715	6.493	1.156	0.132	1.288	0.875	0.000	0.875
6	1998-99	0.294	0.002	0.296	1.332	0.030	1.362	0.713	0.022	0.735	0.487	0.008	0.495
7	1999-2000	3.559	0.0001	3.360	12.354	0.038	12.392	8.390	0.059	8.449	1.844	0.007	1.851
8	2000-2001	0.493	0.000	0.493	1.364	0.262	1.626	0.515	0.004	0.519	0.201	0.000	0.201
9	2001-2002	0.351	0.000	0.351	2.347	0.022	2.369	0.000	0.000	0.000	1.253	0.000	1.253
10	2002-2003	0.646	0.000	0.646	7.825	0.036	7.861	-	-	-	-	-	-
	Site Name	Burhner at Mohgaon			Narmada at Manot			Narmada at Mortaakka			Banjar at Bamni		
1	1993-94	2.576	0.004	2.580	7.275	0.004	7.279						
2	1994-95	11.488	0.027	11.515	9.395	0.004	9.399						
3	1995-96	4.572	0.047	4.619	5.871	0.044	5.915						
4	1996-97	1.368	0.021	1.389	2.699	0.004	2.703						
5	1997-98	4.003	0.614	4.617	4.867	0.875	5.742	Observation Suspended w.e.f.2002-03		Observation Suspended w.e.f.2002-03			
6	1998-99	1.941	0.063	2.004	0.975	0.012	0.987						
7	1999-2000	2.877	0.048	2.925	7.257	0.004	7.261						
8	2000-2001	1.813	0.023	1.836	2.049	0.008	2.057						
9	2001-2002	2.522	0.004	2.526	2.757	0.003	2.760						
10	2002-2003	0.852	0.000	0.852	1.846	0.001	1.847	15.817	0.069	15.886	0.355	0.000	0.355

Source: Sediment data Books for 1993-2003 (Narmada Basin)

(Updated during Septmber 2007).

Table No.2.1 : Site-wise Sediment Load for Different River Basins

XII Basin : Mahi, Sabarmati & other West Flowing Rivers of Saureshra & Kutch											Unit: Million Metric Tonnes		
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Khanpur			Vaitarana at Durvesh			Padaradibadi			Mataji		
1	1992-93	0.018	0.002	0.020	0.450	0.000	0.450	0.052	0.000	0.052	0.166	0.000	0.166
2	1993-94	1.709	0.001	1.710	0.409	0.001	0.410	0.267	0.000	0.268	1.210	0.000	1.210
3	1994-95	5.996	0.002	5.999	1.108	0.000	1.108	1.207	0.001	1.208	3.407	0.000	3.407
4	1995-96	-	-	-	-	-	-	-	-	-	-	-	-
5	1996-97	-	-	-	-	-	-	-	-	-	-	-	-
6	1997-98	3.355	0.003	3.358	0.667	0.001	0.668	0.017	0.001	0.018	1.569	0.012	1.581
7	1998-99	2.039	0.003	2.042	0.457	0.000	0.457	0.017	0.000	0.017	0.603	0.001	0.604
8	1999-2000	0.006	0.000	0.006	0.541	0.001	0.542	0.006	0.000	0.006	0.074	0.000	0.074
9	2000-2001	0.091	0.218	0.309	0.448	0.000	0.448	0.968	0.000	0.968	0.050	0.000	0.050
10	2001-2002	0.052	0.266	0.318	0.561	0.002	0.563	0.005	0.000	0.005	0.053	0.000	0.053
	Site Name	Ambica at Gadat			Banar at Kamalpur			Bhadar at Ganod			Purna at Mahuwa		
1	1992-93	0.923	0.000	0.923	3.379	0.000	3.379	0.211	0.000	0.211	0.293	0.000	0.293
2	1993-94	0.799	0.000	0.799	4.114	0.000	4.114	0.012	0.000	0.012	0.853	0.000	0.853
3	1994-95	5.986	0.000	5.986	8.557	0.002	8.559	0.303	0.000	0.303	3.607	0.000	3.607
4	1995-96	<----- Sediment Year Book Not Published ----->											
5	1996-97	<----- Sediment Year Book Not Published ----->											
6	1997-98	0.542	0.001	0.543	0.864	0.000	0.864	0.009	0.000	0.009	0.143	0.000	0.143
7	1998-99	0.809	0.000	0.809	0.026	0.000	0.026	0.001	0.000	0.001	0.878	0.000	0.878
8	1999-2000	0.221	0.000	0.221	0.000	0.000	0.000	0.000	0.000	0.000	0.256	0.000	0.256
9	2000-2001	0.082	0.008	0.090	0.009	0.000	0.009	0.009	0.000	0.009	0.055	0.000	0.055
10	2001-2002	0.650	0.004	0.654	0.014	0.000	0.014	0.061	0.000	0.061	0.544	0.003	0.547

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

XII Basin : Mahi, Sabarmati & other West Flowing Rivers of Saureshra & Kutch											Unit: Million Metric Tonnes		
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Site Name	Shetrunji at Lowara			Sabarmati at Derol Bridge			Tapi at Dedtali			Tapi at Burhanpur		
1	1992-93	0.358	0.000	0.358	<-----Sediment Started w.e.f. 25.09.1995----->								
2	1993-94	0.694	0.000	0.694	----- Sediment Started w.e.f. 1999-2000 ----->								
3	1994-95	0.000	0.000	0.000									
4	1995-96	-	-	-	0.087		0.087						
5	1996-97	-	-	-	0.265	0.002	0.266						
6	1997-98	0.016	0.000	0.016	-	-	-						
7	1998-99	0.944	0.000	0.944	-	-	-						
8	1999-2000	0.022	-	0.022	0.000	0.000	0.000	2.250	0.000	2.250	4.415	0.007	4.422
9	2000-2001	0.669	0.000	0.669	0.000	0.000	0.000	1.616	0.044	1.660	0.834	0.015	0.849
10	2001-2002	0.340	0.000	0.340	0.088	0.051	0.139	2.419	0.360	2.779	7.769	0.598	8.367
	Site Name	Purna at Gopalkheda			Purna at Yearli			Girna at Dapuri			Tapi at Savkheda		
1	1992-93												
2	1993-94												
3	1994-95												
4	1995-96	<----- Sediment Started w.e.f. 1999-2000 ----->											
5	1996-97												
6	1997-98												
7	1998-99												
8	1999-2000	1.155	0.000	1.155	0.739	0.003	0.742	0.047	0.000	0.047	6.807	0.016	6.823
9	2000-2001	0.378	0.001	0.379	0.366	0.000	0.366	0.066	0.000	0.066	3.336	0.000	3.336
10	2001-2002	0.198	0.062	0.260	0.354	0.513	0.867	0.003	0.000	0.003	2.514	0.800	3.314

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Table No.2.1 : Site-wise Sediment Load for Different River Basins

XII Basin : Mahi, Sabarmati & other West Flowing Rivers of Saureshra & Kutch											<i>Unit: Million Metric Tonnes</i>		
Sl.No	Year	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual	Monsoon	Non-Monsoon	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Site Name Panjhara at Morane													
1	1992-93												
2	1993-94												
3	1994-95												
4	1995-96	:-Sediment Started w.e.f.1999-2000:-											
5	1996-97												
6	1997-98												
7	1998-99												
8	1999-2000	0.025	0.000	0.025									
9	2000-2001	-	-	-									
10	2001-2002	0.766	0.000	0.766									

Source: Sediment Data Book for 1992-2002 (West Flowing River Basins)

(Updated during September 2007).

Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

I Site / Period (1)	Basin : Mahanadi											Unit : Tonnes per day	
	June (2)	July (3)	August (4)	September (5)	October (6)	November (7)	December (8)	January (9)	February (10)	March (11)	April (12)	May (13)	
Year : 2002-2003													
Mahanadi at Tikarpara	2628	3983	6399	41055	3332	3033	1287	1272	516.7	409.4	456.6	499.7	
01-10 days	3836	6044	16075	58947	5716	1700	1156	581.7	390.7	449.1	440.6	496.4	
11-20 days	5239	7042	23528	7305	3922	1515	1138	710.8	443.0	434.0	479.4	391.8	
R - days	3901	5733	15598	35769	4311	2083	1186	850.3	450.6	430.9	458.9	460.3	
Monthly													
Tel at Kantamal													
01-10 days	98.22	1060	19395	30184	285.3	27.73	342.70	50.86	67.64	18.07	0.000	0.000	
11-20 days	797.7	4193	10733	14511	916.7	41.60	13.15	14.73	60.03	0.000	0.000	0.000	
R - days	12103	4082	120438	1425	114.8	75.25	25.97	10.13	54.60	0.000	0.000	0.000	
Monthly	4333	3143	52455	15373	428.5	48.19	124.00	24.75	61.20	5.828	0.000	0.000	
Ong at Salebhata													
01-10 days	0.000	20.61	131.1	6676	22.45	26.43	0.000	0.00	0.000	0.000	0.000	0.000	
11-20 days	0.000	65.13	367.2	11466	23.91	14.62	0.000	0.000	0.000	0.000	0.000	0.000	
R - days	74.00	119.2	2793	121	22.00	0.000	0.000	0.00	0.000	0.000	0.000	0.000	
Monthly	24.50	69.95	1152	6088	22.70	13.68	0.000	0.00	0.000	0.000	0.000	0.000	
Ib at Sundergarh													
01-10 days	0.000	3856	1640	30708	174.8	11.62	38.78	14.51	13.05	1.538	0.000	0.000	
11-20 days	820.5	2003	27363	25020	630	206.6	31.57	20.03	9.407	0.000	0.000	0.000	
R - days	2863	1681	3417	130675	497	104.5	15.25	8.125	6.217	0.000	0.000	0.000	
Monthly	1228	2486	10569	62135	436	107.6	27.46	14.02	9.796	0.496	0.000	0.000	

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Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

I Site / Period (1)	Basin : Mahanadi											Unit : Tonnes per day	
	June (2)	July (3)	August (4)	September (5)	October (6)	November (7)	December (8)	January (9)	February (10)	March (11)	April (12)	May (13)	
Year : 2002-2003													
Mand at Kurubhata													
01-10 days	0.000	1780	2892	38723	149.1	51.42	21.52	15.50	11.89	7.670	0.000	0.000	
11-20 days	0.000	3528	62248	50471	159.9	46.09	24.23	27.72	79.98	0.000	0.000	0.000	
R - days	7542	4986	4208	2761	15.13	38.61	20.16	28.64	45.69	0.000	0.000	0.000	
Monthly	2514	3481	22506	30652	105.0	45.37	21.91	24.11	45.86	2.474	0.000	0.000	
Mahanadi at Basantpur													
01-10 days	412.8	2008	1059	95836	766.9	326.9	105.9	207.5	545.3	677.7	416.6	197.9	
11-20 days	404	572.1	40893	26994	1091	179.0	75.03	179.3	432.3	486.0	346.9	202.5	
R - days	7467	506.5	53765	1027	1633	152.8	189.1	190.3	461.5	392.2	210.4	151.6	
Monthly	2761	1012	32611	41286	1179	219.6	125.5	192.3	481.0	514.6	324.6	183.0	
Hasdeo at Bamnidhi													
01-10 days	0.000	2258	360.1	1012	206.3	113.7	82.99	55.43	41.03	120.5	63.64	25.53	
11-20 days	40.23	1663	3157	1593	166.4	163.0	115.6	49.23	104.0	45.29	53.96	36.61	
R - days	973.0	925.9	447.8	296	171.8	115.0	70.14	47.15	69.77	63.30	30.57	32.78	
Monthly	337.8	1594	1293	967	181.2	130.6	88.96	50.49	71.73	75.94	40.30	31.68	
Hasdeo at Manendragarh													
01-10 days	0.000	20.53	257.4	1157	8.470	0.000	0.000	0.000	0.047	0.000	0.000	0.000	
11-20 days	0.000	16.52	918.5	1561	0.681	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
R - days	31.00	71.31	802.5	20.22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Monthly	10.38	37.25	664.1	912.7	2.952	0.000	0.000	0.000	0.017	0.000	0.000	0.000	

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Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

I Site / Period (1)	Basin : Mahanadi											Unit : Tonnes per day
	June (2)	July (3)	August (4)	September (5)	October (6)	November (7)	December (8)	January (9)	February (10)	March (11)	April (12)	May (13)
Year : 2002-2003												
Jonk at Rampur												
01-10 days	0.000	4.696	147.5	2109	3.022	1.398	0.000	0.000	0.000	0.000	0.000	0.000
11-20 days	0.000	10.98	464.2	4065	2.757	0.237	0.000	0.000	0.000	0.000	0.000	0.000
R - days	0.000	5.273	918.1	6.716	2.938	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Monthly	0.000	6.929	523.1	2060	2.907	0.545	0.000	0.000	0.000	0.000	0.000	0.000
Seonath at Jondhra												
01-10 days	0.000	681.6	542.4	34719	54.74	74.25	27.67	10.94	0.000	0.000	0.000	0.000
11-20 days	0.000	12.30	28593	15014	181.4	39.62	13.00	5.192	0.000	0.000	0.000	0.000
R - days	13338	126.9	16882	637.2	367.0	27.33	15.21	3.961	0.000	0.000	0.000	0.000
Monthly	4446	268.8	15389	16790	206.4	47.07	18.52	6.609	0.000	0.000	0.000	0.000
Hamp at Andhiyarkore												
01-10 days	0.000	7.95	5046	42370	0.495	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11-20 days	0.000	10.57	4566	472.0	0.410	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R - days	1783	12.56	1342	5.289	0.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Monthly	594.4	10.43	3577	14282	0.314	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Seonath at Simga												
01-10 days	0.000	73.21	42.39	11096	16.85	26.39	2.735	0.000	0.000	0.000	0.000	0.000
11-20 days	0.000	20.03	21197	2142	43.80	8.166	2.052	0.000	0.000	0.000	0.000	0.000
R - days	8017	254.7	13055	33.44	72.12	4.762	0.793	0.000	0.000	0.000	0.000	0.000
Monthly	2672	120.4	11484	4424	45.15	13.10	1.826	0.000	0.000	0.000	0.000	0.000
Mahanadi at Rajim												
01-10 days	16.80	12.10	91.35	1498	56.96	12.94	0.942	0.000	0.000	0.000	0.000	0.000
11-20 days	13.55	52.51	802.8	64.04	196.1	14.03	0.264	0.000	0.000	0.000	0.000	0.000
R - days	47.00	44.55	4910	21.59	25.41	5.90	0.476	0.000	0.000	0.000	0.000	0.000
Monthly	25.82	36.65	2031	527.8	90.64	10.96	0.558	0.000	0.000	0.000	0.000	0.000

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Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

I												
Basin : Mahanadi												
<i>Unit : Tonnes per day</i>												
Site / Period	June	July	August	September	October	November	December	January	Feburary	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2002-2003												
Pairi at Baronda												
01-10 days	0.000	1.212	28.58	402.0	9.835	1.155	0.000	0.000	0.000	0.000	0.000	0.000
11-20 days	0.000	21.11	64.22	55.83	14.29	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R - days	3.000	4.385	5426	11.50	7.544	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Monthly	0.985	8.756	1955	156.4	10.46	0.385	0.000	0.000	0.000	0.000	0.000	0.000

Source: Sediment Year Book, 2002-2003

Annual Sediment Load and Annual Runoff in Mahanadi Basin

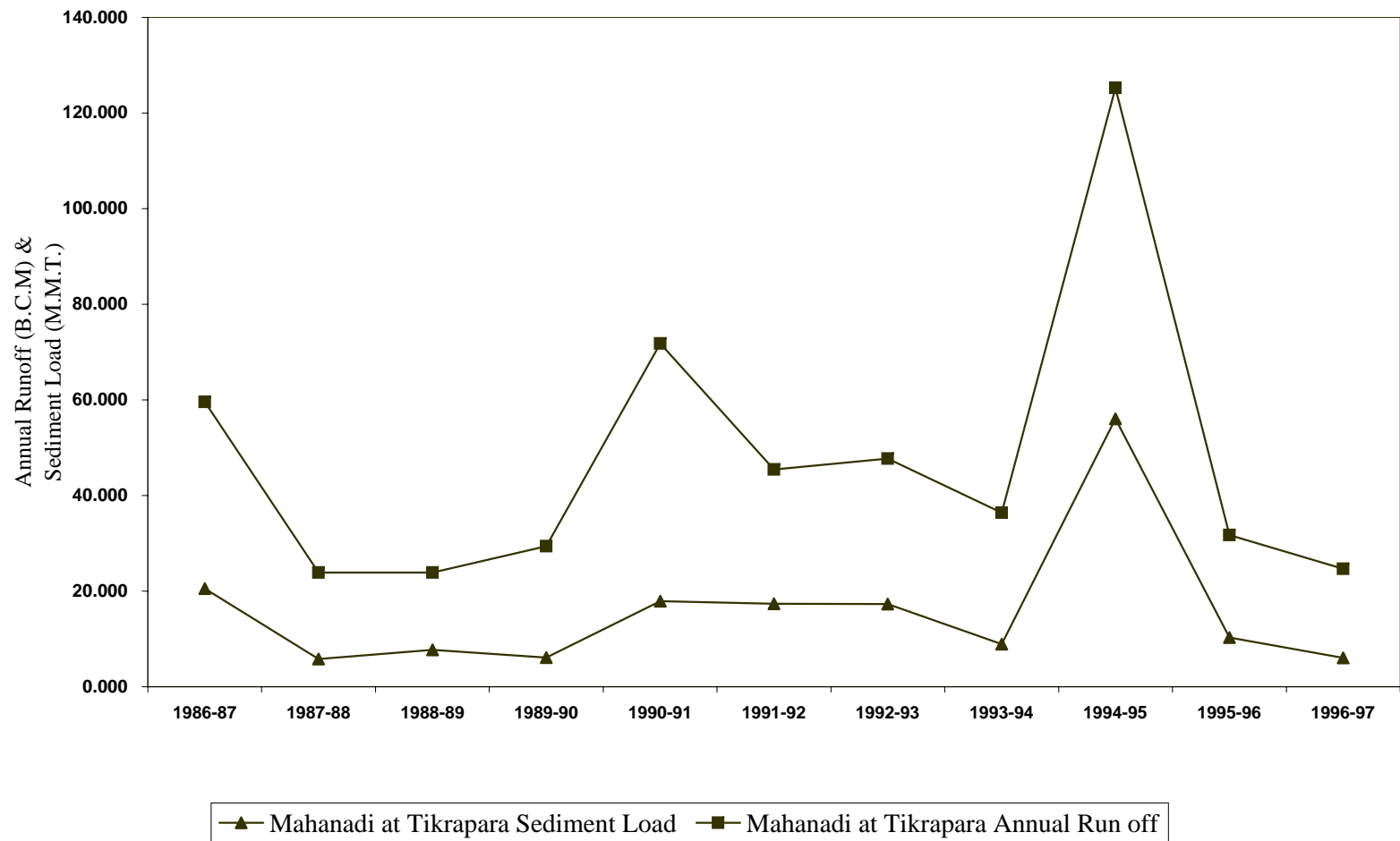


Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

II Subernarekha, Burhabalang & Baitarni												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2002-2003												
a) Basin : Subernarekha												
Subarnarekha at Ghatsila												
01-10 days	680	1448	1079	17194	2801	376.2	71.46	42.18	39.84	31.56	54.44	32.11
11-20 days	403.6	869.5	23956	44592	1176	336.8	65.31	40.36	52.43	29.52	53.98	33.73
R - days	10318	1053	6632	8968	1515	268.9	46.65	37.49	40.08	30.90	35.13	31.63
Monthly	3801	1121	10429	23584	1820	327.3	60.67	39.93	44.41	30.67	47.85	32.5
Kharkai at Adityapur												
01-10 days	5.553	1044	2359	4844	1235	53.59	22.23	9.645	13.00	9.170	47.44	0.000
11-20 days	226.7	32.53	12916	13685	204.9	35.53	23.67	11.74	14.49	14.63	58.31	0.000
R - days	5918	113.6	2727	4555	188.2	24.32	14.82	10.09	14.26	20.69	11.81	0.000
Monthly	2050	387.5	5895	7695	531.3	37.81	20.06	10.48	13.89	15.02	39.19	0.000
b) Basin: Burhabalang												
No sediment observation site												
c) Basin: Baitarani												
Baitarani at Anandpur												
01-10 days	58.74	946.0	2274	16021	559.5	179.4	79.29	69.34	28.18	27.92	39.12	32.49
11-20 days	306.1	493.0	2657	12298	290.9	149.0	75.32	50.59	33.13	34.66	32.27	37.19
R - days	1458	1463	7192	2198	503.4	103.0	76.35	36.23	32.29	43.69	17.30	12.96
Monthly	607.6	980.0	4143	10172	453.0	143.8	76.97	51.54	31.12	35.69	29.56	27.08
Baitarani at Champua												
01-10 days	0.000	203.8	1059	6568	534.2	72.72	6.237	5.515	4.662	3.887	4.566	9.609
11-20 days	78.29	317.5	1361	3531	279.5	21.05	6.865	4.455	4.138	3.995	4.485	24.08
R - days	185.40	249.0	2245	826.9	108.0	13.83	6.346	4.212	4.285	4.560	2.696	46.73
Monthly	93.99	256.5	1577	3642	300.8	35.87	6.478	4.711	4.367	4.161	3.916	27.45

Source: Suspended Sediment Data Book (Vol-II), 2002-2003

Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

III Basin : Brahmani												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2002-2003												
Brahmani at Jenapur												
01-10 days	37.1	9171	6587	30227	7321	283	10.6	7.0	15.7	7.3	8.5	14.2
11-20 days	239.7	7602	27054	27180	690	185.5	7.8	7.6	3.2	4.2	4.8	6.6
R - days	4450.1	1094	30461	11908	520	88.6	9.5	2.9	5.5	8.7	16.6	2.04
Monthly	1575.6	5799	21661	23105	2769	186	9.3	5.7	8.3	6.8	9.9	7.4
Brahmani at Gomlai												
01-10 days	30	10392	28246	76028	1393	97.5	6.51	1.42	11.74	3.51	9.73	0.98
11-20 days	4524	2552	62677	62461	1948	133.21	4.65	1.43	1.57	5.59	2.59	10.16
R - days	48810	7265	20636	11850	1235.8	56.04	2.07	1.04	1.03	1.249	2.45	4.31
Monthly	1788	6753	36652	50113	1516	95.6	4.34	1.29	5.05	3.38	4.93	5.12
Brahmani at Panposh												
01-10 days	73	6476	24577	82586	1886	426.9	9.24	3.98	7.82	7.18	36.53	1.56
11-20 days	3903	2062	111853	121143	2018	146.7	2.69	7.22	5.54	12.60	0.84	3.24
R - days	61958	5910	28082	23044	1256.6	67.38	10.11	2.33	5.17	8.64	2.76	1.69
Monthly	21978	4851	53974	75591	1705	213.6	7.44	4.44	6.25	9.45	13.38	2.15
Sankh at Tilga												
01-10 days	0.0	4579	7899	8364	1586	51.2	3.32	0.000	0.000	0.000	0.000	0.000
11-20 days	5112.1	5556	10912	17979	2512	9.15	2.17	0.000	0.000	0.000	0.000	0.000
R - days	32565	4942	3828	3898.4	125.0	3.36	0.000	0.000	0.000	0.000	0.000	0.000
Monthly	12559	5023	7426	10080	1366	21.22	1.77	0.000	0.000	0.000	0.000	0.000
Koel at Jaraikela												
01-10 days	3.2	6802	6666	17388	-	-	-	-	-	-	-	-
11-20 days	4939.6	625	21630	-	-	-	-	-	-	-	-	-
R - days	38467	3416	8341	-	-	-	-	-	-	-	-	-
Monthly	14470	3608	12087	17388	-	-	-	-	-	-	-	-

Source: Suspended Sediment Data Book (Vol-II), 2002-2003.

Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

IV Rushikulya, Vamsadhra, Saroda & Nagavali												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2002-2003												
Vamsadhara at Kashinagar												
01-10 days	884.9	385.7	4260	8644	111.2	19.48	0.000	0.000	0.000	0.239	0.000	0.000
11-20 days	1545	483.3	531.3	5228	1542	7.178	0.000	0.000	3.676	0.00	2.806	0.000
R - days	2691	73.64	18096	1072	231.3	3.846	0.000	0.000	4.455	0.000	0.000	0.000
Monthly	1707	306.5	7967	4981	615.5	9.847	0.000	0.000	2.586	0.077	0.935	0.000
Vamsadhara at Purushottampur												
01-10 days	0.000	18.95	1461	24823	30.37	12.64	0.000	0.000	0.000	0.000	3.323	0.000
11-20 days	0.000	3.294	1083	8680	2875	13.25	0.000	0.000	0.000	0.000	0.000	0.000
R - days	2834	0.000	25717	171.7	185.9	7.582	0.000	0.000	0.000	0.000	0.000	0.000
Monthly	944.7	7.174	9946	11225	1003	11.16	0.000	0.000	0.000	0.000	1.108	0.000
Nagavali at Srikakulam												
01-10 days	2563.0	161.8	1557	1501	8.104	13.59	0.000	35.86	19.36	5.199	0.000	0.000
11-20 days	1609	175.5	412.2	8518	6848	4.930	39.60	18.09	11.52	0.000	0.000	0.000
R - days	812.1	160.0	8735	154.7	358.3	0.014	37.01	19.45	47.07	49.22	0.000	0.000
Monthly	1691	165.6	3735	4126	2339	6.178	20.91	24.31	24.48	19.14	0.000	0.000

Source: Suspended Sediment Data Book (Vol-II), 2002-2003

Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

V Basin : Godavari												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2004-05												
Godavari at Polavaram												
01-10 days	563	10096	1292415	24339	23382	1893	431	420	910	456	423	1046
11-20 days	107781	22780	399060	25510	9870	2072	404	346	2077	353	398	848
R - days	8523	70891	44834	15623	2813	709	336	347	927	412	980	740
Monthly	1168678	1103064	21846747	654724	363466	46734	12049	11484	37283	12618	17590	27078
Sabari at Konta												
01-10 days	1507	12062	96965	14250	31521	967	742	542	397	724	277	170
11-20 days	168608	36471	42725	13672	5671	1551	815	412	291	679	188	427
R - days	2342	60574	34258	11312	1224	1155	364	532	527	561	177	526
Monthly	1724579	1151642	1773639	392339	385383	36728	19583	15388	11097	20204	6423	11766
Godavari at Perur												
01-10 days	6	154	777843	13362	10583	117	25	13	1443	13	8	5
11-20 days	108358	3478	334280	13128	4127	96	20	11	88	11	6	9
R - days	658	37576	355097	7668	220	39	15	13	21	10	4	10
Monthly	1090222	449660	15027297	341579	149516	2527	606	383	15468	347	181	242
Indravati at Pathagudem												
01-10 days	0	5114	260562	16385	13536	381	82	0	0	0	0	0
11-20 days	180296	34076	202506	20585	4807	315	12	0	0	0	0	0
R - days	8095	89839	360821	7860	837	168	0	0	0	0	0	0
Monthly	1883915	1380129	8599713	448302	192638	8639	939	0	0	0	0	0
Indravathi at Jagdalpur												
01-10 days	14	550	10117	3911	9775	47	15	11	33	0	2	10
11-20 days	65651	9335	10383	3131	525	51	12	10	3	0	3	2
R - days	213	51364	27840	2471	159	22	11	15	0	0	9	0
Monthly	658788	663853	511240	95133	104755	1207	399	373	360	0	132	114

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

V Basin : Godavari Unit : Tonnes per day												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2004-05												
Indravathi at Nowrangpur												
01-10 days	13	0	2330	582	4113	0	0	0	0	0	0	0
11-20 days	225	3560	3215	704	169	0	0	0	0	0	0	0
R - days	0	10066	5378	972	10	0	0	0	0	0	0	0
Monthly	2382	146324	114611	22575	42928	0	0	0	0	0	0	0
Pranahita at Tekra												
01-10 days	14	660	235731	3834	1455	50	18	13	1856	4	0	0
11-20 days	703	2380	98187	4698	421	24	14	9	107	0	0	0
R - days	1571	4337	41186	3140	199	32	12	39	17	0	0	0
Monthly	22880	78112	3742232	116717	20953	1061	456	641	19760	39	0	0
Peddavagu at Bhatpalli												
01-10 days	2	1245	5018	5531	750	23	3	1	234	1	0	251
11-20 days	21	7080	87	6596	62	9	2	1	8	1	0	0
R - days	1175	3089	88	907	5	4	1	89	1	0	0	0
Monthly	11981	117231	52021	130334	8183	354	68	994	2430	13	1	2510
Wardha at Bamni												
01-10 days	1	44	79708	48	8	1	1	8	635	3	0	0
11-20 days	12	51	564	1386	9	3	2	10	12	3	0	0
R - days	15	252	89	32	6	2	6	14	3	3	0	0
Monthly	277	3717	803696	14663	239	61	100	331	6499	87	6	1
Penganga at Penganga Bridge												
01-10 days	0	7	13748	42	25	0	0	0	18	0	0	0
11-20 days	3	21	184	700	22	0	0	0	1	0	0	0
R - days	4	18	44	35	4	0	0	44	0	0	0	0
Monthly	71	479	139803	7776	512	3	0	483	194	0	0	0

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

V Basin : Godavari Unit : Tonnes per day												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2004-05												
Wunna at Nandagon												
01-10 days	0	8	1160	7	1	0	3	4	32	4	0	0
11-20 days	29	13	66	6	0	1	7	17	2	1	0	0
R - days	2	780	32	2	0	2	10	89	11	1	0	0
Monthly	310	8800	12512	154	15	26	206	1189	421	53	6	1
Wardha at Hivra												
01-10 days	0	31	12161	16	2	0	4	20	13	9	0	0
11-20 days	1	412	80	11	1	0	6	7	12	16	0	9
R - days	23	85	13	4	0	0	13	43	7	2	0	1
Monthly	238	5363	122557	304	35	1	240	747	310	271	1	99
Wardha at Bishnur												
01-10 days	0	0	1802	4	0	0	0	0	0	0	0	0
11-20 days	0	166	29	2	0	0	0	0	0	0	0	0
R - days	0	2	6	0	0	0	0	0	0	0	0	0
Monthly	0	1687	18388	60	0	0	0	0	0	0	0	0
Wainganga at Ashti												
01-10 days	14	204	133358	1318	776	15	6	3	405	3	1	0
11-20 days	3172	652	52334	1633	151	9	4	2	20	2	1	0
R - days	1686	6544	44531	1582	89	9	4	2	8	2	1	0
Monthly	48727	80554	2346767	45331	10253	334	146	76	4304	75	26	7
Wainganga at Pauni												
01-10 days	49	136	64307	994	579	31	11	2	2319	1	1	8
11-20 days	6500	292	22978	1086	122	20	3	4	8	3	2	4
R - days	731	27313	33392	1264	102	21	4	253	3	1	3	5
Monthly	72796	304725	1240151	33447	8134	717	183	2847	23295	56	50	171

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

V Basin : Godavari Unit : Tonnes per day												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2004-05												
Kanhan at Satrapur												
01-10 days	107	53	11406	292	96	34	14	3	8	2	1	2
11-20 days	115	182	734	253	80	31	9	3	3	2	1	2
R - days	40	1502	2728	208	54	22	5	7	2	1	1	3
Monthly	2622	18873	151414	7524	2358	879	286	144	127	54	31	82
Bagh at Rajegaon												
01-10 days	0	133	12401	1766	808	6	0	0	2073	1	0	0
11-20 days	4684	1141	5604	736	205	6	0	0	9	0	0	0
R - days	34	11790	5195	1196	29	1	0	299	2	0	0	0
Monthly	46183	142428	237195	36982	10444	125	5	3289	20841	8	0	0
Wainganga at Kumhari												
01-10 days	0	213	1963	67	2	0	3	1	11	1	0	0
11-20 days	2140	144	1996	80	1	3	3	3	2	0	0	0
R - days	58	4383	14360	8	1	3	3	5	2	0	0	0
Monthly	21983	51785	197446	1553	34	58	88	97	142	13	0	0
Godavari at Mancherla												
01-10 days	0	29	218	78	103	9	4	1	36	0	0	0
11-20 days	0	4956	112	191	55	23	3	0	18	0	0	0
R - days	4	426	89	99	29	7	2	116	6	0	0	0
Monthly	42	54536	4279	3682	1896	386	92	118	6	0	0	0
Lendi at Degloor												
01-10 days	0	0	5	2	3	0	-	-	-	-	-	-
11-20 days	0	223	1	5	0	0	-	-	-	-	-	-
R - days	0	23025	0	3	0	0	-	-	-	-	-	-
Monthly	0	255507	58	96	28	0	-	-	-	-	-	-

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

V Basin : Godavari Unit : Tonnes per day												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2004-05												
Manjira at Saigaon												
01-10 days	0	0	107	0	1	0	0	0	0	0	0	0
11-20 days	0	0	0	10	0	0	0	0	0	0	0	0
R - days	0	1571	0	0	0	0	0	0	0	0	0	0
Monthly	0	17276	1072	99	8	0	0	0	0	0	0	0
Godavari at Yelli												
01-10 days	0	0	91	1	1179	58	0	0	0	0	0	0
11-20 days	0	0	1	731	93	58	0	0	0	0	0	0
R - days	0	0	1	974	4	0	0	0	0	0	0	0
Monthly	0	0	933	17050	12759	1157	0	0	0	0	0	0
Purna at Purna												
01-10 days	0	23	62	0	405	0	0	0	0	0	0	0
11-20 days	0	10	0	2260	9	0	0	0	0	0	0	0
R - days	35	428	0	2082	0	0	0	0	0	0	0	0
Monthly	348	5043	624	43425	4140	0	0	0	0	0	0	0
Godavari at G.R.Bridge												
01-10 days	0	63	104	0	210	0	0	0	0	0	0	0
11-20 days	0	15	0	5	1	0	0	0	0	0	0	0
R - days	0	44	0	286	0	0	0	0	0	0	0	0
Monthly	0	1265	1046	2913	2110	0	0	0	0	0	0	0
Godavari at Dhalegaon												
01-10 days	0	5001	142	0	431	0	0	0	0	0	0	0
11-20 days	0	40	2	2	16	0	0	0	0	0	0	0
R - days	0	2023	0	3666	2	0	0	0	0	0	0	0
Monthly	0	72661	1437	36683	4497	0	0	0	0	0	0	0

Source: Suspended Sediment Year Book for 2004-2005(Godavari Basin)

(Updated during September 2007).

Annual Sediment Load and Annual Runoff in Godavari Basin

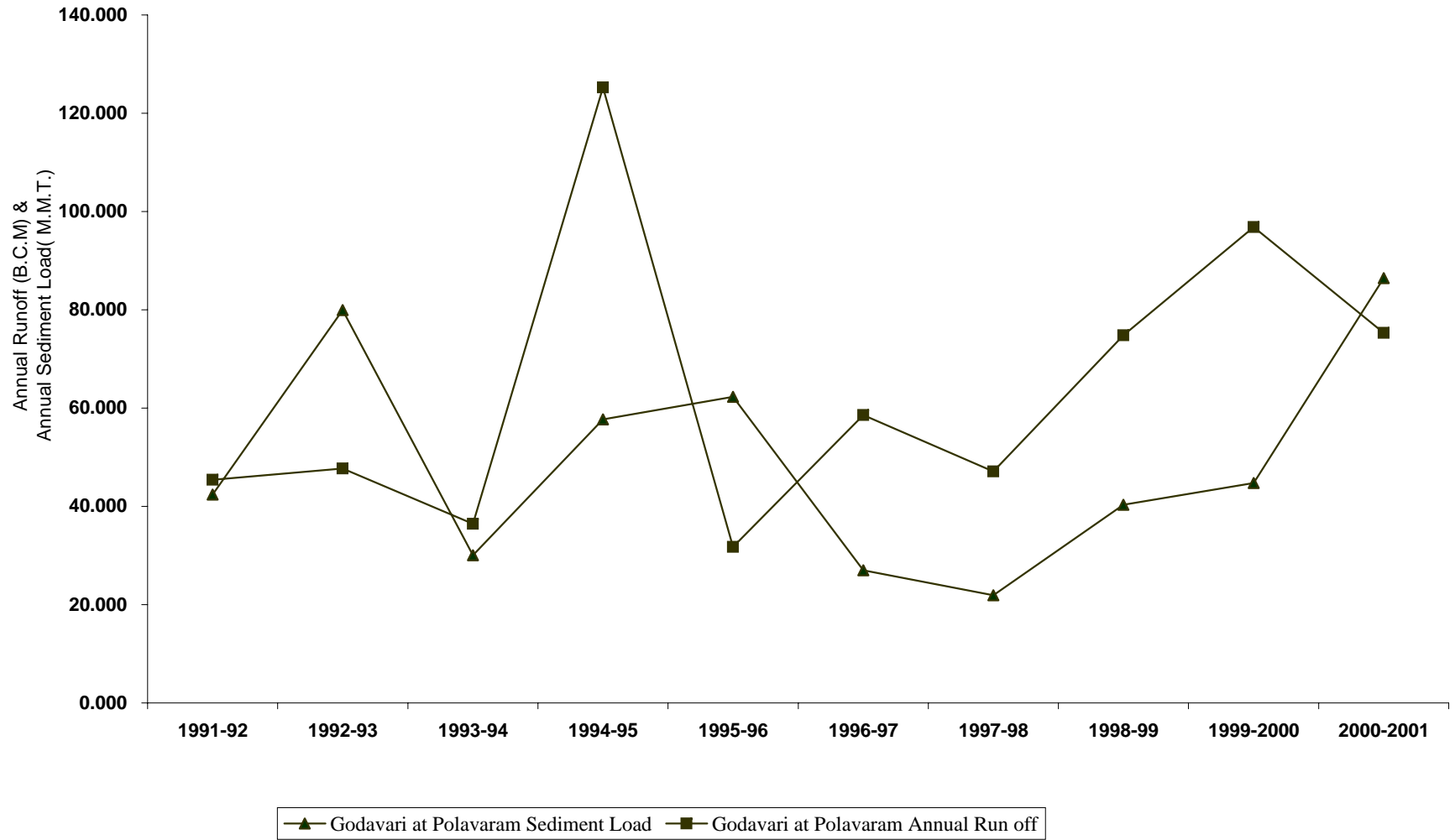


Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VI Basin : Krishna												Unit : Tonnes per day
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2004-2005												
Krishna at Vijayawada												
01-10 days	NIL	NIL	157.4	1.73	428.9	0.02	0.09	0.26	0.26	0.16	0.06	1.57
11-20 days	NIL	NIL	0.14	48.69	0.78	0.00	0.31	0.19	0.20	0.16	0.04	0.14
R - days	NIL	NIL	0.52	120.4	0.20	0.00	0.17	0.16	0.19	0.14	0.04	0.12
Monthly	NIL	NIL	51.01	56.96	138.7	0.01	0.19	0.20	0.22	0.15	0.05	0.60
Munneru at Keesara												
01-10 days	NIL	NIL	15852	30.24	784.0	45.03	12.71	5.73	12.11	NIL	NIL	NIL
11-20 days	NIL	689.7	435.8	146.3	56.03	39.35	21.64	5.98	2.79	NIL	NIL	NIL
R - days	NIL	151.6	31.36	158.6	28.23	18.61	7.81	9.36	0.13	NIL	NIL	NIL
Monthly	NIL	760.4	5265	111.7	281.0	34.33	13.85	7.09	5.36	NIL	NIL	NIL
Krishna at Wadenapalli												
01-10 days	20.39	9.63	14.84	263.5	2627	195.8	143.2	40.38	26.03	9.92	22.50	31.62
11-20 days	14.28	63.67	3.63	643.8	245.6	155.2	79.79	35.67	43.05	32.97	17.87	20.85
R - days	6.88	25.12	554.3	227.3	316.5	192.7	29.54	33.47	48.21	25.14	25.84	6.40
Monthly	13.85	32.56	202.7	378.2	1039	181.2	82.41	36.41	38.78	22.76	22.07	19.20
Krishna at Pondugala												
01-10 days	29.38	16.69	23.02	1162	602.3	242.6	233.9	219.6	61.65	32.14	37.24	70.03
11-20 days	21.54	10.77	85.19	306.3	280.4	297.3	233.3	164.1	78.22	59.04	22.44	38.22
R - days	25.14	72.51	803.5	299.7	236.1	273.9	153.1	65.71	73.84	31.79	57.23	11.50
Monthly	25.35	34.59	320.0	589.5	368.5	271.3	205.0	147.1	71.05	40.69	38.97	39.00
Tungabhadra at Bawapuram												
01-10 days	249.1	15.99	1.09	28279	1993	114.2	83.68	63.99	100.4	2.43	NIL	NIL
11-20 days	69.23	33.38	66407	278.2	652.7	76.77	88.45	88.86	36.74	0.23	NIL	NIL
R - days	34.94	4.23	2906	1510	108.4	56.13	69.60	106.6	42.64	0.01	NIL	NIL
Monthly	117.7	17.43	22453	10022	891.9	82.35	80.22	87.12	61.18	0.86	NIL	NIL

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VI Basin : Krishna												Unit : Tonnes per day	
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2004-2005													
Tungabhadra at Mantralayam													
01-10 days	315.6	34.28	3.54	26538	7521	579.5	416.3	25.93	86.12	6.20	NIL	NIL	
11-20 days	60.11	30.41	36312	752.0	1695	377.7	322.5	44.74	21.51	0.27	NIL	NIL	
R - days	9.55	4.65	6185	3521	272.3	279.0	57.02	42.54	4.82	0.00	NIL	NIL	
Monthly	128.4	22.52	13909	10270	3070	412.1	258.5	37.89	39.82	2.08	NIL	NIL	
Varada at Marol													
01-10 days	3097	1966	7774	573.10	428.1	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
11-20 days	2564	230.2	3300	396.00	40.18	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
R - days	590.5	471.6	841.0	138.60	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Monthly	2084	875.7	3871	369.20	151.1	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Tungabhadra at Harahalli													
01-10 days	9.52	557.5	3444	113.7	101.20	52.25	14.00	4.62	2.89	NIL	5.88	25.84	
11-20 days	1119	93.46	1531	117.9	67.42	55.07	10.19	0.46	NIL	1.02	28.66	0.66	
R - days	219.9	167.5	308.2	90.53	46.80	20.65	11.59	0.00	10.33	NIL	29.89	7.62	
Monthly	449.3	269.4	1714	107.4	70.98	42.66	11.92	1.64	4.36	0.18	21.47	11.25	
Haridra at Byaladahalli													
01-10 days	NIL	NIL	213.3	57.79	22.52	12.55	NIL	NIL	NIL	NIL	NIL	NIL	
11-20 days	NIL	NIL	145.5	41.43	82.56	14.20	NIL	NIL	NIL	NIL	NIL	NIL	
R - days	NIL	NIL	22.25	59.67	11.90	2.43	NIL	NIL	NIL	NIL	NIL	NIL	
Monthly	NIL	NIL	123.6	52.97	38.12	9.72	NIL	NIL	NIL	NIL	NIL	NIL	
Tungabhadra at Honnali													
01-10 days	446.7	2867	20563	194.6	157.2	76.85	15.00	12.22	11.33	13.80	30.71	12.63	
11-20 days	2804.0	658	6426	219.2	109.7	60.55	11.20	7.10	21.10	14.79	27.10	6.88	
R - days	320	2589	1070	189.5	66.8	17.97	8.20	15.00	20.02	7.26	37.35	7.92	
Monthly	1190	2056	9086	201.1	109.8	51.82	11.36	11.58	17.30	11.80	31.72	9.11	

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VI	Basin : Krishna											Unit : Tonnes per day
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2004-2005												
Tunga at Shimoga												
01-10 days				232.0	350.7	77.31	31.28	2.15	0.00	NIL	NIL	NIL
11-20 days				211.7	140.4	70.77	23.98	6.85	0.00	NIL	NIL	NIL
R - days	<----- Not Observed ----->			386.8	74.21	39.60	16.36	1.08	0.00	NIL	1.63	NIL
Monthly				276.8	184.8	62.56	23.63	3.29	0.00	NIL	0.54	NIL
Krishna at Krishna Agraharam												
01-10 days	280.0	97.80	124046	833.0	4991	55.12	34.85	23.26	43.66	10.85	9.36	6.71
11-20 days	76.75	59.70	156936	1375	1630	31.36	45.79	15.39	14.04	10.49	9.82	4.88
R - days	1184	56.95	14428	2450	128.0	30.10	38.55	18.46	12.98	11.53	9.72	11.65
Monthly	158.4	71.01	95759	1553	2180	38.86	39.69	19.02	24.32	10.97	9.63	7.87
Bhima at Yadgir												
01-10 days	759.6	528.2	6842	2791	40552	67.64	32.70	0.00	0.00	0.00	0.00	0.00
11-20 days	1140	128.1	47386	4337	12411	72.67	36.81	0.00	0.00	0.00	0.00	0.00
R - days	539.3	91.01	15048	5201	227.6	61.81	56.61	0.00	0.00	0.00	0.00	0.00
Monthly	812.9	244.0	22833	4110	17166	67.37	42.51	0.00	0.00	0.00	0.00	0.00
Kegna at Malkhed												
01-10 days	26.64	78.02	15.86	49.16	392.7	4.46	0.33	0.06	NIL	NIL	NIL	NIL
11-20 days	9.24	28.37	25.26	621.7	171.8	4.72	0.13	NIL	NIL	NIL	NIL	NIL
R - days	2.49	44.39	10.99	223.4	19.42	1.13	0.10	NIL	NIL	NIL	NIL	NIL
Monthly	12.79	50.07	17.17	298.1	189.0	3.44	0.18	0.02	NIL	NIL	NIL	NIL
Sina at Wadakbal												
01-10 days	4504	21.52	0.77	4258	6672	NIL	NIL	NIL	NIL	NIL	NIL	NIL
11-20 days	58.51	NIL	NIL	8486	145.9	43.95	NIL	2.08	NIL	NIL	NIL	NIL
R - days	45.12	NIL	31.25	5393	NIL	49.51	NIL	NIL	NIL	NIL	15.33	NIL
Monthly	1536	6.94	12.00	6045	2199	31.15	NIL	0.67	NIL	NIL	5.11	NIL

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VI		Basin : Krishna										Unit : Tonnes per day	
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2004-2005													
Bhima at Takli													
01-10 days	NIL	0.74	9021	130.4	10767	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
11-20 days	0.79	NIL	22278	225.0	224.7	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
R - days	NIL	7.42	384.1	2274	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Monthly	0.26	2.87	10233	876.5	3546	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Nira at Sarati													
01-10 days	431.6	NIL	13249	42.17	137.9	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
11-20 days	38.15	NIL	6376	39.22	113.3	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
R - days	13.20	NIL	276.6	1799	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Monthly	161.0	NIL	6429	626.9	81.0	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Krishna at Huvinhedgi													
01-10 days	570.9	251.3	116920	1142	10221	289.1	162.5	160.4	399.3	221.9	170.4	166.3	
11-20 days	166.2	213.9	46448	1417	2051	236.2	195.7	200.4	228.7	190.4	179.1	102.4	
R - days	111.6	149.3	10056	4532	362.1	232.1	155.0	188.8	214.8	155.9	199.8	149.0	
Monthly	282.9	203.0	56268	2363	4087	252.5	170.6	183.4	285.7	188.3	183.1	139.5	
Malaprabha at Cholachudda													
01-10 days	112905	380.8	505.9	1924	50776	380.5	202.9	213.8	NIL	NIL	NIL	8.64	
11-20 days	103.6	87253	6.43	31198	311.5	424.3	191.3	60.48	1.728	NIL	32.83	NIL	
R - days	634.4	70.61	103.6	34026	166.7	207.6	195.4	NIL	35.64	NIL	22.46	640.9	
Monthly	37881	28294	202.0	22383	16539	337.5	196.5	88.48	10.80	NIL	18.43	230.2	
Ghatprabha at Mudhol													
01-10 days	968.5	214.8	5646	536.9	1474	19.52	NIL	NIL	NIL	NIL	NIL	NIL	
11-20 days	846.0	14.49	3395	198.9	21.50	8.04	NIL	NIL	NIL	NIL	NIL	NIL	
R - days	407.1	116.6	1508	380.1	0.76	12.34	NIL	NIL	NIL	NIL	NIL	NIL	
Monthly	740.5	115.3	3452	372.0	482.8	13.30	NIL	NIL	NIL	NIL	NIL	NIL	

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VI		Basin : Krishna										<i>Unit : Tonnes per day</i>	
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2004-2005													
Krishna at Kurundwad													
01-10 days	479.9	3688	71619	1637	1150	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
11-20 days	39531	954	106790	2522	247.5	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
R - days	2728	1487	10279	2228	0.000	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Monthly	14246	2025	61199	2129	450.7	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
Krishna at Karad													
01-10 days	19.39	969.8	39940	217.1	607.3	12.64	26.65	18.86	8.83	26.72	42.30	34.25	
11-20 days	14699	300.8	56635	149.1	60.87	15.60	32.90	19.84	33.16	41.70	22.21	22.08	
R - days	892.1	201.3	9479	289.4	3.86	7.91	15.00	6.72	30.88	44.40	16.39	56.28	
Monthly	5204	481.3	34517	218.6	216.9	12.05	24.53	14.87	23.82	37.82	26.97	38.14	
Koyna at Warunji													
01-10 days	169.1	745.1	9404	42.98	282.6	20.67	49.47	21.31	7.60	22.58	17.91	15.08	
11-20 days	8298	177.5	8383	79.79	31.14	9.46	45.92	40.955	31.11	21.90	6.95	13.21	
R - days	716.7	137.5	3140	364.1	1.970	13.34	24.87	41.92	50.56	27.88	21.39	38.26	
Monthly	3061	346.4	6852	162.3	95.46	14.49	39.60	34.96	28.27	24.24	15.42	22.70	

Source: Suspended Sediment Data Book for 2004-2005 (Krishna Basin)

(Updated during September 2007).

Note : These Sites Bagalkot & Galgali is not available during the period 2004-2005.

Annual Sediment Load and Annual Runoff in Krishna Basin

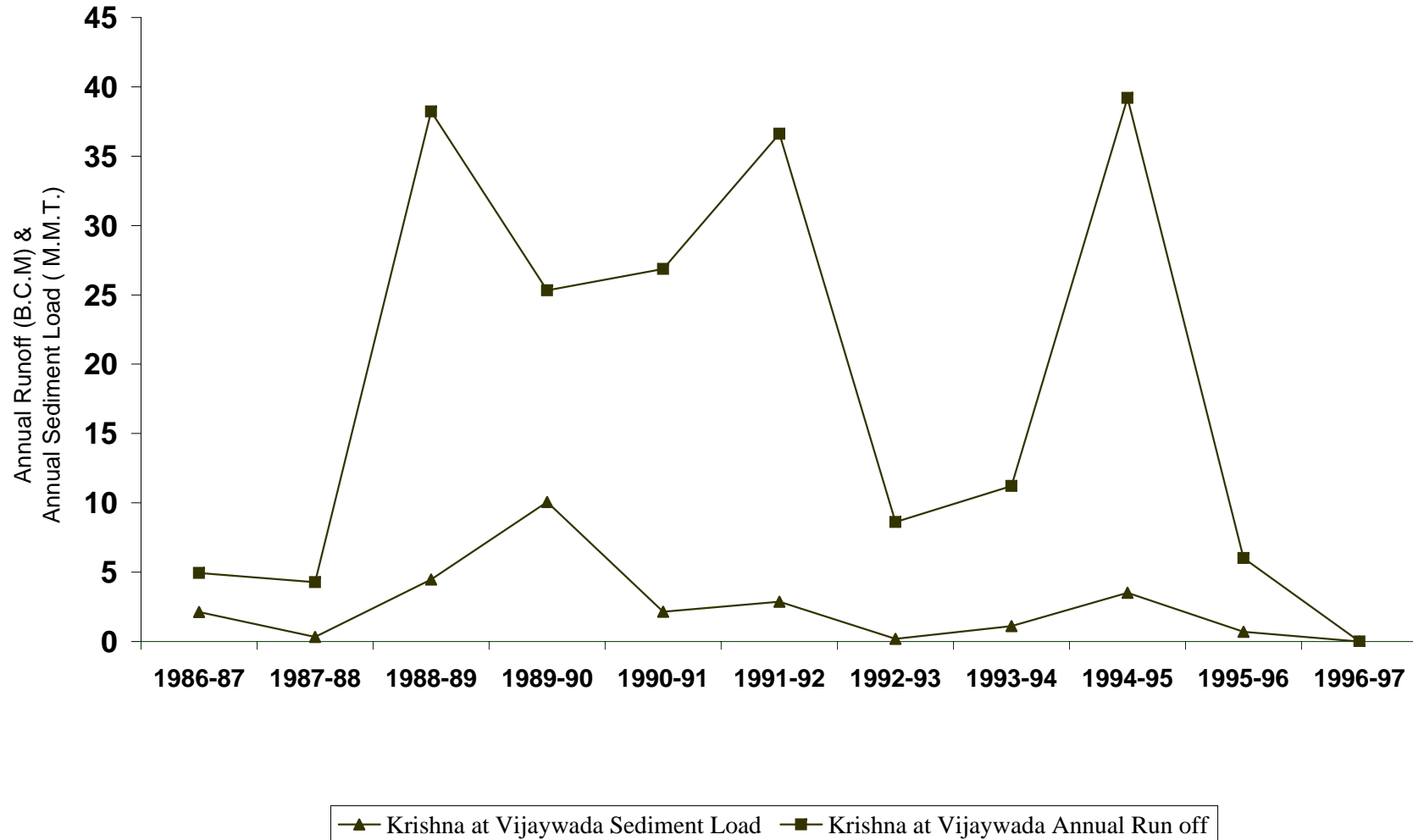


Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VII Basin : Cauvery												Unit : Tonnes per day	
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2002-2003													
Cauvery at Musiri													
01-10 days	0.00	0.00	0.00	291.8	505.1	200.9	484.5	370.3	124.4	0.00	0.00	0.00	
11-20 days	0.00	0.00	0.00	824.0	94.4	364.5	0.40	54.82	25.42	0.00	0.00	0.00	
R - days	0.00	0.00	0.00	639.4	324.8	621.6	689.2	42.97	35.18	0.00	0.00	0.00	
Monthly	0.00	0.00	0.00	585.1	308.6	395.7	401.0	152.4	63.58	0.00	0.00	0.00	
Amaravathy at Nallamarampatty													
01-10 days	0.00	0.00	0.00	0.00	0.00	126.9	0.15	0.00	0.00	0.00	0.00	0.00	
11-20 days	0.00	0.00	11.33	0.00	0.00	0.00	3.05	0.00	0.00	0.00	0.00	0.00	
R - days	0.00	0.00	16.56	0.00	14.04	0.98	0.00	0.00	0.00	0.00	0.00	0.00	
Monthly	0.00	0.00	9.53	0.00	4.98	42.62	1.03	0.00	0.00	0.00	0.00	0.00	
Cauvery at Kodumudi													
01-10 days	23.36	7.50	35.15	320.2	241.7	42.27	263.1	220.4	73.33	8.22	19.29	1.66	
11-20 days	18.43	21.08	35.36	612.0	122.0	391.2	61.44	2.65	150.6	17.63	11.05	1.82	
R - days	8.97	17.29	51.82	345.6	403.6	389.9	718.1	204.4	1.38	28.19	0.00	1.75	
Monthly	16.92	15.35	41.13	425.9	260.5	274.5	359.5	144.5	80.37	18.34	10.11	1.74	
Bhavani at Savandapur													
01-10 days	3.21	10.39	19.96	31.01	11.71	8.95	30.55	52.40	38.96	1.06	18.85	1.76	
11-20 days	3.30	13.87	39.39	26.49	12.67	107.6	94.45	49.40	18.43	246.8	1.68	4.65	
R - days	4.04	17.41	42.86	14.78	410.2	94.40	46.81	42.92	2.92	156.0	14.74	3.55	
Monthly	3.52	14.00	34.35	24.09	153.4	70.32	56.94	48.07	21.33	135.3	11.76	3.33	
Moyar at Thengumarahada													
01-10 days	66.97	13.83	61.18	24.66	245.8	268.7	14.16	8.98	7.73	5.41	2.33	3.58	
11-20 days	17.60	12.81	174.4	108.1	104.2	57.75	12.05	7.87	5.72	14.20	3.55	0.00	
R - days	90.60	11.91	23.88	25.41	97.82	18.87	11.99	7.50	4.57	6.88	0.53	14.32	
Monthly	58.39	12.82	84.46	52.74	147.6	115.1	12.71	8.10	6.11	8.77	2.14	6.24	

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VII Basin : Cauvery												Unit : Tonnes per day	
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2002-2003													
Bhavani at Nekkithurai													
01-10 days		0.74	11.54	3.06	334.6	1298	2.73	1.74	1.72	2.57	1.21	9.27	
11-20 days		1.82	56.60	1.60	1287	18.61	2.10	1.63	1.29	9.75	0.53	3.64	
R - days		1.14	2.10	1.09	6.41	30.11	1.96	1.94	1.53	10.82	64.24	4.98	
Monthly		1.23	22.72	1.92	525.4	448.90	2.26	1.77	1.51	7.85	21.99	5.93	
Cauvery at Urachikottai													
01-10 days	0.00	0.05	6.35	119.2	253.1	29.65	163.5	207.6	20.23	10.93	13.41	0.00	
11-20 days	0.00	2.08	6.28	486.6	122.2	341.1	88.5	0.00	80.13	3.40	3.77	0.00	
R - days	0.00	3.13	10.68	646.9	204.9	249.6	425.9	61.09	0.00	23.03	0.00	0.00	
Monthly	0.00	1.80	7.87	417.5	193.8	206.8	232.4	88.66	35.84	12.80	5.73	0.00	
Cauvery at Biligundulu													
01-10 days	12.63	10.98	80.45	167.7	203.3	1364	147.6	25.66	19.09	14.57	11.78	12.19	
11-20 days	10.75	516.4	459.5	3306	442.7	285.9	61.53	35.60	47.46	14.64	10.42	14.63	
R - days	10.57	56.40	151.3	797.2	2889	195.8	43.33	90.00	16.06	34.83	9.51	20.25	
Monthly	11.32	190.1	227.9	1423	1233	615.1	82.82	51.70	28.35	21.78	10.57	15.83	
Shimsha at T.K.Halli													
01-10 days	1.19	0.00	0.00	2.65	36.51	86.46	24.83	4.24	2.04	0.31	0.66	0.00	
11-20 days	0.00	0.00	0.00	7.64	98.97	32.44	18.69	7.28	1.75	11.60	0.00	0.00	
R - days	0.00	0.00	0.00	28.17	64.51	28.52	14.89	4.09	1.19	2.30	0.00	0.00	
Monthly	0.40	0.00	0.00	12.82	66.59	49.14	19.32	5.17	1.69	4.66	0.22	0.00	
Cauvery at Kollegal													
01-10 days	31.19	41.02	560.1	336.0	228.3	252.0	130.5	46.60	31.35	26.70	17.08	14.18	
11-20 days	16.75	248.9	1403	258.6	196.6	164.9	83.76	55.35	87.30	27.41	16.24	14.71	
R - days	31.66	133.1	420.7	164.8	719.1	140.5	80.05	114.9	29.16	23.86	14.23	12.81	
Monthly	26.53	140.7	782.5	253.2	392.2	185.8	97.52	7367.00	50.70	25.92	15.85	13.87	

Contd/---

Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VII		Basin : Cauvery										<i>Unit : Tonnes per day</i>	
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2002-2003													
Kabini at T.Narasipur													
01-10 days													
11-20 days													
R - days													
Monthly													
Sediment Observation not conducted from 01.06.2002 to 31.05.2003.													
Kabini at Muthankera													
01-10 days	79.72	114.5	1335	236.7	209.8	65.98	19.45	8.56	5.28	5.87	2.47	10.53	
11-20 days	314.7	990.9	4459	177.9	747.3	35.14	19.08	13.67	4.51	26.13	6.20	3.88	
R - days	1379.0	327.0	309.7	34.39	111.9	31.59	11.83	5.82	6.63	13.57	13.85	2.72	
Monthly	591.0	472.6	1979	149.7	348.5	44.24	16.63	9.24	5.39	15.14	7.51	5.61	
Hemavathi at Mukundur Hosahalli													
01-10 days	7.45	5.03	1.24	11.33	11.27	4.30	3.96	2.60	1.97	0.86	1.83	8.52	
11-20 days	2.81	2.02	3.35	6.59	8.69	5.67	5.22	2.37	15.86	2.48	1.55	12.45	
R - days	1.13	0.71	9.44	7.79	5.20	4.05	3.79	1.88	1.01	2.48	1.68	1.54	
Monthly	3.79	2.53	4.83	8.57	8.28	4.68	4.31	2.27	6.66	1.96	1.69	7.31	
Cauvery at Kudige													
01-10 days	9.58	17.35	583.3	111.7	103.3	36.11	22.37	12.15	7.06	2.14	2.13	3.77	
11-20 days	16.54	293.7	2277	82.53	1380	55.55	17.72	9.86	9.85	2.68	2.84	1.52	
R - days	247.3	73.24	254.6	37.35	55.28	33.15	11.34	8.37	2.47	2.53	4.31	1.58	
Monthly	91.14	126.3	1013	77.21	498	41.60	16.96	10.07	6.75	2.45	3.09	2.27	

Source: Suspended Sediment and Bedmaterial Data Book for 2002-2003 (Cauvery Basin)

(Updated during September 2007).

Annual Sediment Load and Annual Runoff in Cauvery Basin

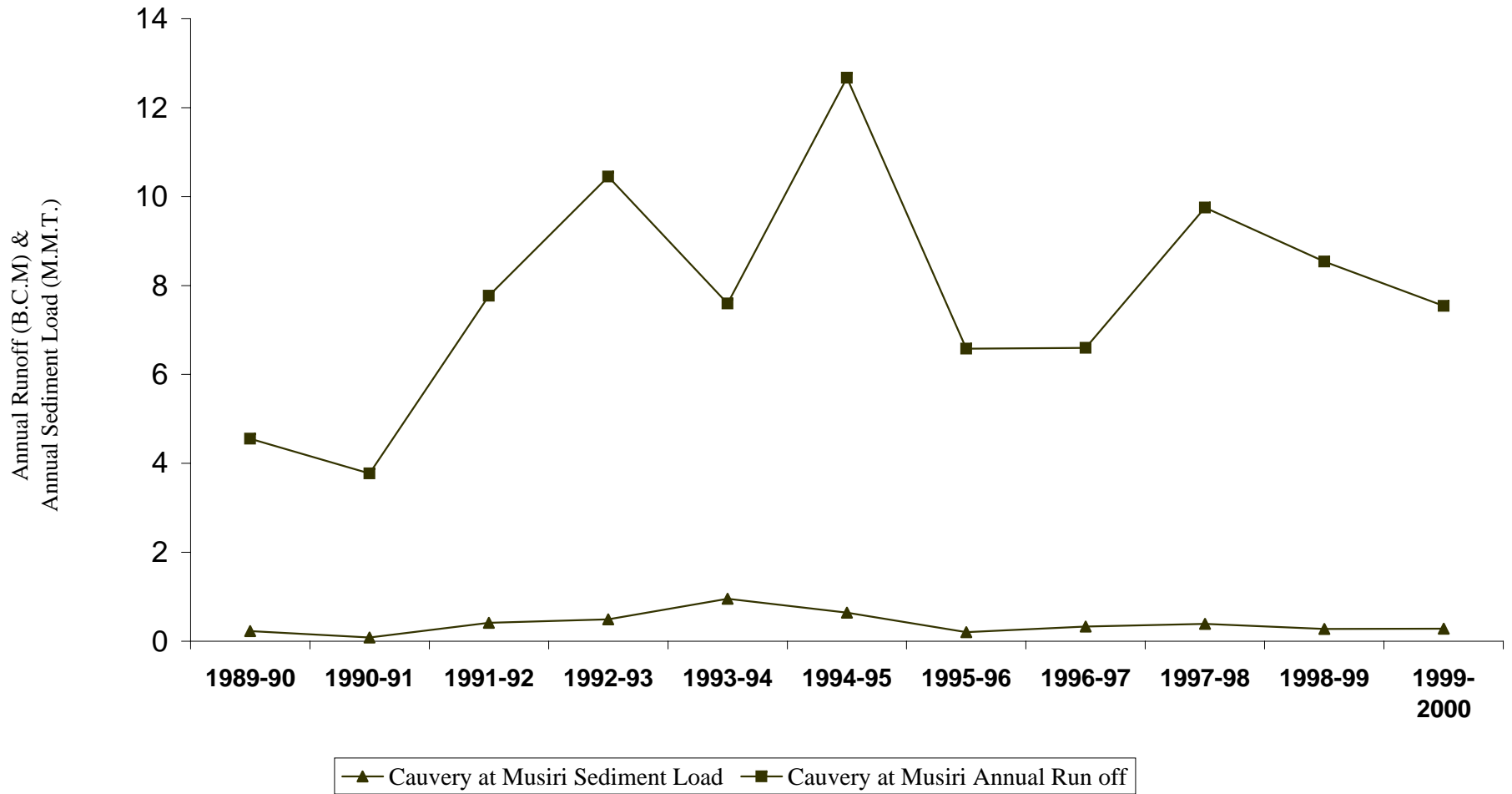


Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VIII	Basin : East Flowing Rivers											<i>Unit : Tonnes per day</i>	
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2003-04													
Gundlakamma at Thammavaram													
01-10 days	0.00	0.00	0.00	0.00	54.40	2.11	0.00	0.00	0.00	0.00	0.66	9.39	
11-20 days	0.00	0.00	0.00	11.19	8.9	0.28	0.00	0.00	0.00	0.00	0.00	9.93	
R - days	0.00	0.00	0.00	187.4	546.3	0.00	0.00	0.00	0.00	0.00	0.00	10.30	
Monthly	0.00	0.00	0.00	66.19	214.3	0.80	0.00	0.00	0.00	0.00	0.22	10.72	
Pennarat Chennur													
01-10 days	0.00	0.00	0.00	0.00	1267	81.28	0.00	0.00	0.00	0.00	0.00	0.00	
11-20 days	0.00	0.00	0.00	0.00	148.7	6.06	0.00	0.00	0.00	0.00	0.00	0.00	
R - days	0.00	0.00	0.00	7111	18040	0.00	0.00	0.00	0.00	0.00	0.00	93.76	
Monthly	0.00	0.00	0.00	2370	6858	29.11	0.00	0.00	0.00	0.00	0.00	33.27	
Kunderu at Alladupalli													
01-10 days	0.00	0.00	0.00	0.00	2264	57.54	0.00	7.82	0.00	0.00	0.00	0.00	
11-20 days	0.00	115.4	0.00	0.00	54.41	0.00	10.99	1.27	0.00	0.00	0.00	176.4	
R - days	0.00	31.61	0.00	18559	10942	0.00	17.79	0.00	0.00	0.00	0.00	7.71	
Monthly	0.00	48.45	0.00	6186	4631	19.18	9.86	2.93	0.00	0.00	0.00	59.65	
Ponniyar at Gummanur													
01-10 days	Nil	Nil	Negl.	0.04	116.3	0.02	2.63	0.24	2.81	Nil	Nil	0.47	
11-20 days	Nil	Nil	Nil	0.26	24.04	4.63	0.53	0.01	0.05	Nil	Nil	0.41	
R - days	Nil	Nil	0.02	4.09	8.99	0.44	0.15	Negl.	Nil	Nil	Nil	0.59	
Monthly	Nil	Nil	0.01	1.46	48.46	1.70	1.07	0.08	0.99	Nil	Nil	0.50	
Ponniyar at Vazhavachanur													
01-10 days	Nil	Nil	0.17	Nil	Nil	2.48	0.72	3.33	Nil	Nil	Nil	60.17	
11-20 days	Nil	Nil	2.79	Nil	5.52	0.42	Nil	44.30	Nil	Nil	Nil	21.66	
R - days	Nil	Nil	0.50	Nil	5.21	1.84	Nil	Nil	Nil	Nil	Nil	0.24	
Monthly	Nil	Nil	1.13	Nil	3.63	1.58	0.23	15.36	Nil	Nil	Nil	26.48	

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Table No.2.2 : Sitewise Ten Daily & Monthly Average Sediment Load for Different River Basins.

VIII	Basin : East Flowing Rivers											<i>Unit : Tonnes per day</i>
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2003-04												
Suruliyar at Theni												
01-10 days	1.49	2.67	16.66	10.55	59.48	224.7	86.07	24.05	2.78	0.14	Nil	3.02
11-20 days	2.20	2.04	2.23	5.94	653.4	174.1	36.63	2.67	2.94	0.46	0.71	12.12
R - days	3.19	1.03	1.24	0.44	220.5	115.6	7.10	1.63	1.45	0.47	0.24	4.00
Monthly	2.29	1.88	6.54	5.65	308.2	171.5	42.10	9.20	2.42	0.36	0.32	6.30
Vaigai at Ambasamudram												
01-10 days	Nil	Nil	Nil	Nil	Nil	1593	70.76	Nil	Nil	Nil	Nil	Nil
11-20 days	Nil	Nil	Nil	Nil	972.0	249.8	Nil	Nil	Nil	Nil	Nil	Nil
R - days	Nil	Nil	Nil	Nil	5.02	427.7	Nil	Nil	Nil	Nil	Nil	Nil
Monthly	Nil	Nil	Nil	Nil	315.3	756.7	22.83	Nil	Nil	Nil	Nil	Nil
Tambraparani at Murappanadu												
01-10 days	3.13	2.37	2.24	3.06	2.23	29.23	132.3	11.77	7.31	9.63	1.12	2.25
11-20 days	2.63	2.30	2.72	3.24	6.35	78.31	30.95	9.78	5.94	2.32	1.82	1.32
R - days	1.99	1.76	3.99	1.40	5.81	141.5	14.38	15.08	17.69	0.84	0.80	2.17
Monthly	2.58	2.13	3.01	2.57	4.83	83.00	57.75	12.31	10.06	4.15	1.25	1.92

Source: Water Year Book for 2003-04, East & West Flowing Rivers Basins,

(Updated during September 2007)

Note : M.C.M. : Million Cubic Metre

Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

IX Basin : West Flowing Rivers												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2003-04												
Nethravathi at Bantwal												
01-10 days	0.00	2837	5011	3774	1611	39.94	0.00	0.00	0.00	0.00	0.00	0.00
11-20 days	148.3	15370	2033	635.5	1061	14.92	0.00	0.00	0.00	0.00	0.00	0.00
R - days	3626	9227	16342	198.7	417.1	11.16	0.00	0.00	0.00	0.00	0.00	16.41
Monthly	1258	9147	8071	1536	1010	22.01	0.00	0.00	0.00	0.00	0.00	5.82
Payaswani at Erinjipuzha												
01-10 days	0.00	528.2	1534	402.0	245.3	38.11	7.88	8.24	2.67	0.00	0.00	2.39
11-20 days	31.69	2244	893.5	128.7	332.7	20.59	8.58	5.56	0.39	0.00	0.00	18.71
R - days	1324	698.4	2230	50.78	144.8	17.52	5.56	3.60	0.01	0.00	0.00	129.60
Monthly	451.9	1142	1574	193.8	237.8	25.41	7.28	5.73	1.06	0.00	0.00	52.79
Valapatanam at Perumannu												
01-10 days	2.66	725.9	500.5	339.5	109.40	32.61	1.77	1.05	0.95	0.99	1.24	6.21
11-20 days	103.6	926.2	316.0	129.8	64.69	21.40	1.26	0.90	1.15	1.04	1.10	450.6
R - days	745.1	617.0	538.1	68.76	69.79	3.24	1.10	0.76	1.04	0.94	1.09	289.6
Monthly	283.8	751.9	454.3	179.4	80.92	19.08	1.37	0.90	1.05	0.99	1.15	250.2
Chaliyar at Kuniyil												
01-10 days	0.68	557.0	191.0	262.5	284.5	194.9	47.40	5.60	0.00	0.00	0.00	153.8
11-20 days	261.8	808.2	212.3	52.08	151.7	55.41	53.58	0.00	0.00	0.00	0.00	118.6
R - days	717.6	337.3	519	22.59	158.6	19.36	63.56	0.00	0.00	0.00	0.00	58.97
Monthly	326.7	560.1	314.1	112.4	197.0	89.87	55.13	1.81	0.00	0.00	0.00	108.1
Kadalundi at Karathodu												
01-10 days	0.00	260.5	80.63	103.2	139.7	43.28	6.03	0.00	0.00	0.00	0.00	0.00
11-20 days	94.93	197.7	38.89	28.92	96.72	16.80	1.65	0.00	0.00	0.00	0.00	0.00
R - days	346.7	169.1	208.4	12.22	153.0	6.39	0.27	0.00	0.00	0.00	0.00	0.00
Monthly	147.2	207.8	112.50	48.12	130.5	22.16	2.58	0.00	0.00	0.00	0.00	0.00

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

IX Basin : West Flowing Rivers												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2003-04												
Bharathapuzha at Kumbidi												
01-10 days	15.54	775.0	319.5	441.9	998.5	209.3	48.50	7.29	1.32	0.00	10.37	97.55
11-20 days	46.53	462.1	155.6	102.7	426.8	69.23	26.55	7.07	0.00	0.00	3.47	173.8
R - days	963.8	944.7	987.0	34.96	797.9	34.45	22.64	0.68	0.00	0.00	7.19	271.2
Monthly	341.9	734.3	503.5	193.2	742.9	104.3	32.24	4.87	0.46	0.00	7.01	183.8
Pulanthodu at Pulamanthole												
01-10 days	5.56	504.6	149.0	38.52	85.68	14.98	3.87	0.60	0.25	0.00	0.54	93.91
11-20 days	115.3	279.3	77.46	11.76	70.84	6.91	2.98	0.41	0.17	0.47	0.15	189.2
R - days	401.0	244.4	136.3	8.35	119.9	2.94	1.80	0.46	0.05	0.00	0.79	65.18
Monthly	179.3	339.6	121.4	19.54	93.05	8.28	2.85	0.49	0.16	0.15	0.49	114.5
Aliyar at Ambrampalayam												
01-10 days	0.67	0.69	1.90	2.74	12.21	4.79	3.74	5.46	4.86	0.71	0.37	0.28
11-20 days	1.00	0.94	0.96	9.28	167.7	5.42	14.81	5.27	2.01	0.50	0.22	0.83
R - days	4.22	1.24	4.63	11.37	5.01	11.84	15.03	2.76	0.96	0.65	0.60	0.66
Monthly	1.96	0.96	2.56	7.80	59.80	7.35	11.31	4.44	2.67	0.62	0.40	0.59
Chalakudy at Arangaly												
01-10 days	13.00	62.62	66.00	61.52	159.7	43.10	5.43	9.73	5.42	4.61	3.71	29.57
11-20 days	29.08	124.1	56.92	30.59	93.32	20.23	4.99	3.94	7.13	1.22	12.13	28.74
R - days	122.6	71.63	311.6	21.31	76.41	23.00	9.60	5.37	6.34	0.00	9.59	44.75
Monthly	54.91	85.30	150.2	37.81	108.7	28.78	6.77	6.32	6.29	1.88	8.48	34.69
Periyar at Neeleeswaram												
01-10 days	11.99	239.0	391.3	272.0	642.9	86.41	14.93	9.41	7.78	10.81	11.92	142.30
11-20 days	28.04	355.0	281.8	56.72	328.8	48.09	10.14	9.29	8.23	8.08	32.40	202.60
R - days	366.5	324.1	912.8	29.44	210.6	22.69	10.19	9.51	11.31	9.19	18.60	371.2
Monthly	135.5	306.9	541.0	119.4	388.2	52.40	11.70	9.41	9.03	9.35	20.97	243.0

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

IX Basin : West Flowing Rivers												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2003-04												
Muvattupuzha at Ramamangalam												
01-10 days	84.41	757.4	258.2	110.8	1152	75.42	35.58	15.22	21.56	11.62	13.77	182.6
11-20 days	161.5	846.3	755.9	28.11	906.4	22.37	14.58	17.21	15.82	12.80	14.82	338.6
R - days	1004	1382	1054	19.73	558.8	17.68	18.72	14.53	12.11	14.88	13.49	328.1
Monthly	416.8	1008	701.1	52.87	862.4	38.49	22.82	15.62	16.65	13.16	14.03	284.5
Kaliyar at Kalampur												
01-10 days	1.45	179.5	185.6	85.72	360.9	59.34	4.62	0.00	0.00	0.00	0.00	0.00
11-20 days	13.88	210.5	189.4	36.43	170.4	22.53	0.81	0.00	0.00	0.00	0.00	0.00
R - days	232.2	208.7	250.0	18.95	128.5	10.01	0.00	0.00	0.00	0.00	0.00	25.91
Monthly	82.83	199.9	209.7	47.03	217.0	30.62	1.75	0.00	0.00	0.00	0.00	9.19
Meenachil at Kidangoor												
01-10 days	11.39	373.4	140.5	187.5	791.1	119.7	4.00	0.00	0.00	0.00	0.00	307.6
11-20 days	68.19	532.3	736.9	21.24	351.7	24.62	1.44	0.00	0.00	0.00	21.45	384.8
R - days	1562	285.7	376.6	8.81	210.5	11.92	1.60	0.00	0.00	0.00	58.94	612.9
Monthly	547.2	393.5	416.7	72.52	443.3	52.10	2.33	0.00	0.00	0.00	26.80	440.8
Manimala at Kalloppara												
01-10 days	3.54	125.4	30.23	232.1	121.7	25.88	0.81	0.00	0.00	0.00	0.00	165.9
11-20 days	14.60	195.4	235.6	4.87	272.4	2.65	0.68	0.00	0.00	0.00	0.39	224.2
R - days	296.0	70.69	152.3	3.07	80.14	1.53	0.45	0.00	0.00	0.00	5.86	86.42
Monthly	104.7	128.6	139.3	80.00	155.6	10.02	0.64	0.00	0.00	0.00	2.08	156.5
Pamba at Malakkara												
01-10 days	0.00	150.4	236.1	133.1	453.9	123.5	2.23	0.00	0.00	0.00	0.00	238.5
11-20 days	5.58	219.2	167.7	15.63	1373	34.09	0.00	0.00	0.00	0.00	3.09	106.8
R - days	652.2	63.32	676.3	8.25	277.9	19.20	0.00	0.00	0.00	0.00	0.32	153.4
Monthly	219.3	141.7	370.3	52.33	688.1	58.92	0.72	0.00	0.00	0.00	1.14	165.8

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

IX Basin : West Flowing Rivers												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2003-04												
Achankovil at Thumpamon												
01-10 days	0.00	10.50	52.72	6.49	259.2	36.77	1.95	0.00	0.00	0.00	0.00	585.2
11-20 days	0.00	247.8	34.87	2.08	147.4	5.21	0.18	0.00	0.00	0.00	0.00	61.11
R - days	41.14	64.48	97.34	0.62	93.87	2.60	0.72	0.00	0.00	0.00	13.81	100.7
Monthly	13.71	106.2	62.79	3.06	164.5	14.86	0.95	0.00	0.00	0.00	4.60	244.2
Kallada at Pattazhy												
01-10 days	3.50	29.77	39.88	34.51	156.0	98.66	17.11	7.38	1.97	7.20	9.22	168.6
11-20 days	2.88	60.77	37.84	6.74	139.1	39.52	13.30	6.99	2.02	1.46	4.69	98.84
R - days	43.95	30.73	30.25	4.62	165.5	16.33	9.18	2.91	1.67	30.38	8.19	125.9
Monthly	16.78	40.11	35.80	15.29	153.9	51.50	13.07	5.67	1.89	13.58	7.37	131.0
Vamanapuram at Ayilam												
01-10 days	0.00	28.19	37.97	9.79	433.8	43.87	6.47	0.00	0.00	0.00	0.00	510.0
11-20 days	0.00	30.87	32.29	0.00	228.9	14.53	4.82	0.00	0.00	0.00	75.82	103.7
R - days	151.1	19.93	33.08	0.00	192.9	8.25	0.00	0.00	0.00	0.00	4.74	18.03
Monthly	50.38	23.64	34.40	3.26	282.2	22.22	3.64	0.00	0.00	0.00	26.85	204.4

Source: Suspended Sediment Year Book for 2003-04.(West Flowing Rivers)

(Updated during September 2007)

Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

X Basin : Tapi												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year :2001-02												
Tapi at Sarankheda												
01-10 days	River Dry/ Trace	118.1	89588	316.8	22477	10.53	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry
11-20 days	151869	264.1	189909	32.33	7457	2.192	- do -	- do -	- do -	- do -	- do -	- do -
R - days	10214	1735	4839	39.89	90.81	River Dry	- do -	- do -	- do -	- do -	- do -	- do -
Monthly	54028	739.0	91877	129.7	9689	4.242	- do -	- do -	- do -	- do -	- do -	- do -
Panjhra at Morane												
01-10 days	River Dry	River Dry	P.Water	P.Water	3.19	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry
11-20 days	P.Water	- do -	- do -	0.239	66.04	- do -	- do -	- do -	- do -	- do -	- do -	- do -
R - days	River Dry	- do -	- do -	7.137	River Dry	- do -	- do -	- do -	- do -	- do -	- do -	- do -
Monthly	River Dry/ P.Water	- do -	- do -	2.459	22.33	- do -	- do -	- do -	- do -	- do -	- do -	- do -
Tapi at Savkheda												
01-10 days	River Dry	39.01	30664	229.7	14809	51.66	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry
11-20 days	17349	415.5	183013	66.73	1462	27.64	- do -	- do -	- do -	- do -	- do -	- do -
R - days	1516	473.6	968.4	158.39	103.9	0.670	- do -	- do -	- do -	- do -	- do -	- do -
Monthly	6288	314.7	69272	14.95	5286	26.66	- do -	- do -	- do -	- do -	- do -	- do -
Girna at Dapuri												
01-10 days	River Dry	River Dry	2.247	P.Water	P.Water	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry
11-20 days	1.436	- do -	341.5	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
R - days	River Dry	- do -	River Dry	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
Monthly	0.479	- do -	110.9	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
Purna at Yerly												
01-10 days	2.156	34.24	1861	110.5	9757	31.05	1.125	D.B.0.3m	D.B.0.3m	D.B.0.3m	P.Water	P.Water
11-20 days	14379	58.65	7719	58.80	587.6	15.31	D.B.0.3m	- do -	- do -	P.Water	- do -	- do -
R - days	76.57	8.172	533.6	50.91	117.1	3.860	- do -	- do -	- do -	- do -	- do -	River Dry
Monthly	4819	32.86	3280	73.39	3362	16.74	0.363	- do -	- do -	D.B.0.3m/ P.Water	- do -	P.Water/ River Dry

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

X Basin : Tapi												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year :2001-02												
Purna at Gopalkheda												
01-10 days	River Dry	0.714	3739	30.85	3971	3.854	Depth Below 0.3m	Poling Water	Depth Below 0.3m	Site Obs. Suspended to con. of temp. bund	Site Obs. Suspended to con. of temp. bund	Site Obs. Suspended to con. of temp. bund
11-20 days	2700	23.69	8722	30.85	157.2	1.328	- do -	- do -	- do -	- do -	- do -	- do -
R - days	31.70	4743	293.0	12.23	16.16	1.006	D.B.0.3m/ Poling Water	- do -	Site Obs. Suspended to con. of temp.bund	- do -	- do -	- do -
Monthly	910.5	9.557	412.4	25.03	13.87	2.063	- do -	- do -	- do -	- do -	- do -	- do -
Tapi at Burhanpur												
01-10 days	2212	407.6	151018	373.8	3365	24.63	8.690	D.B. 0.3m	D.B. 0.3m	D.B. 0.3m	D.B. 0.3m	P.Water
11-20 days	8516	1090	597433	- Trace -	1010	20.29	- Trace -	- do -	- do -	- do -	- do -	- do -
R - days	4472	1664	4625	- do -	101.9	6.144	- do -	- do -	- do -	- do -	P.Water	- do -
Monthly	5067	1074	243077	124.6	1447	17.02	2.803	- do -	- do -	- do -	P.Water/ River Dry	- do -
Tapi at Dedtalai												
01-10 days	D.B. 0.3m	2259	55429	252.3	1004	16.93	1.240	0.472	0.326	0.092	D.B. 0.3m	P.Water
11-20 days	28276	2661	145989	212.2	917.3	6.548	0.576	0.625	0.260	D.B. 0.3m	- do -	- do -
R - days	1412	1113	1952.0	80.99	26.04	7.792	0.540	0.298	0.222	D.B. 0.3m	- do -	- do -
Monthly	9896	1982	65666	181.9	629.0	10.420	0.778	0.460	0.273	0.030	- do -	- do -

Source: Suspended Sediment Data Book for 2001-02 (Tapi Basin)

Updated during September 2007)

P.Water : Pooling Water

D.B.0.3m : Depth Below 0.3m

Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

XI Basin : Narmada												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2002-2003												
Orsang at Chandwada												
01-10 days	0.00	916.3	228.0	53636.0	17.8	0.000	0.0	0.0	0.0	0.0	0.0	0.0
11-20 days	0.00	0.00	0.00	157.8	980.3	0.000	0.0	0.0	0.0	0.0	0.0	0.0
R - days	4651.9	0.00	4672.1	48.07	0.0	0.000	0.0	0.0	0.0	0.0	0.0	0.0
Monthly	1550.6	295.6	1729.8	17947.3	322.0	0.000	0.0	0.0	0.0	0.0	0.0	0.0
Narmada at Garudeshwar												
01-10 days	504.1	5164	31.06	238004	655.0	214.9	126.9	124.8	123.3	219.0	3.651	3.062
11-20 days	335.1	969.9	24.04	25286	306.2	168.9	167.2	101.9	1758.4	3.338	3.865	2.772
R - days	15526	18.30	62891	3444	294.4	139.7	149.5	116.7	1471.1	4.389	3.833	2.903
Monthly	5454.9	1985.0	22334	88911	414.5	174.5	147.9	114.5	1092.3	73.28	3.783	2.912
Narmada at Rajghat												
01-10 days	73.77	4106	3247	1636872	438.7	323.8	92.64	125.3	124.9	166.6	97.89	33.45
11-20 days	9731	256.8	601879	126112	309.1	165.1	178.1	150.7	133.6	158.7	65.11	66.64
R - days	177656	254.0	941075	3577	535.9	224.8	152.5	107.1	149.5	91.76	29.06	36.15
Monthly	62487	1497	529132	588854	431.4	237.9	141.4	127.0	135.0	137.5	64.02	45.12
Narmada at Mandaleshwar												
01-10 days	94.12	2827	4610	1079048	1753	176.5	159.7	168.2	262.6	111.3	48.30	16.46
11-20 days	120.9	112.5	434210	135136	107	151.8	162.7	198.5	159.1	89.79	27.91	21.80
R - days	130793	221.5	506666	5074	788.8	168.6	182.9	237.6	143.9	65.35	46.52	17.92
Monthly	43670	1027	321340	406419	1193	165.6	168.9	202.6	191.7	88.05	30.91	18.70
Narmada at Mortakka												
01-10 days	0.00	0.00	5910	672553	4746	1478	596.0	238.26	313.70	116.53	56.42	36.26
11-20 days	0.00	0.00	433019	73614	3469	683	588.7	317.40	218.34	78.19	48.23	30.11
R - days	0.00	0.00	342325	8316	3187	295.0	947.50	433.53	160.74	58.72	37.15	35.14
Monthly	0.00	0.00	263060	251495	3781	819	718.4	347.59	235.94	83.65	47.27	33.88

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

XI Basin : Narmada												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2002-2003												
Narmada at Handia												
01-10 days	93.89	231.6	115903	1310502	5226	2233	1693.5	1001.5	605.8	390.6	101.07	40.06
11-20 days	203.3	320.1	995362	375862	3046	2144	1630	783.6	643.9	221.9	77.8	35.06
R - days	10133	402.4	1236817	17052	3027	1883	1572	704.1	670.9	151.42	60.28	27.74
Monthly	3477	320.7	797343	567806	3743	2087	1630	825.7	640.2	251.3	79.72	34.07
Narmada at Hoshangabad												
01-10 days	262.94	567.1	41604	322858	3467	1019	1300	1175	948	1122	325.2	213.0
11-20 days	774.3	791.0	590811	43835	4358	1289	1413	1536	1366	653	242.2	233.1
R - days	2397	1282	220508	6148	1963	1177.2	1382	1278	998	503.0	235.2	175.5
Monthly	1145	893.0	282250	12428	3220	1162	1366	1328	1112	751	267.5	206.2
Narmada at Sandia												
01-10 days	419.96	735.9	26440	274747	3896	2505	963.0	861.2	950.0	466.7	154.76	164.98
11-20 days	824.6	952.0	695422	92846	3317	1855	885	860.3	575.6	392.9	78.3	53.00
R - days	1863	1330	276679	3524	1541	1756	871	636.0	561.2	336.11	166.90	49.81
Monthly	1036	1016	331035	123706	2873	2039	905	781.0	705.2	396.5	133.33	87.99
Shakkar at Gadarwara												
01-10 days	0.16	21.84	290	20645	27.01	10.94	2.50	0.40	6.58	0.59	0.00	0.00
11-20 days	0.13	108.97	33154	1734	145.8	8.00	1.52	0.32	4.13	0.00	0.00	0.00
R - days	8.04	59.33	7370	239	39.18	4.13	0.72	0.30	1.32	0.00	0.00	0.00
Monthly	2.78	63.25	13404	7539	69.7	7.69	1.55	0.34	4.20	0.19	0.00	0.00

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

Unit : Tonnes per day

XI Basin : Narmada												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2002-2003												
Narmada at Barmanghat												
01-10 days	40.71	64.23	2435	42953	926.4	441.9	158.0	310.6	199.80	56.12	112.88	84.0
11-20 days	72.99	864.81	669184	18496	1101	135.8	156.0	615.7	77.62	75.76	120.32	57.69
R - days	168.16	75.63	39855	2013	257.7	66.25	137.6	389.9	64.11	98.04	128.45	32.33
Monthly	93.95	326.53	230794	21154	745.3	214.6	150.1	437.2	117.39	77.33	120.55	57.18
Banjar at Bamni												
01-10 days	0.00	46.0	3684	2263	15.4	3.62	0.0	0.0	0.0	0.00	0.00	0.00
11-20 days	0.00	0.00	22949	645	165.6	1.70	0.0	0.0	0.0	0.00	0.00	0.00
R - days	0.00	2112	3012	41.5	27.2	0.53	0.0	0.0	0.0	0.00	0.00	0.00
Monthly	0.00	764	9660	983.3	68.1	1.95	0.0	0.0	0.0	0.00	0.00	0.00
Burhner at Mohgaon												
01-10 days	0.000	95.8	4127	22152	29.06	14.18	0.0	0.0	0.0	0.00	0.00	0.00
11-20 days	487.95	560.3	24365	7573	42.92	8.23	0.0	0.0	0.0	0.00	0.00	0.00
R - days	5677	327.0	17782	180	25.12	6.38	0.0	0.0	0.0	0.00	0.00	0.00
Monthly	2055	327.7	15501	9968	32.13	9.59	0.0	0.0	0.0	0.00	0.00	0.00
Narmada at Manot												
01-10 days	0.51	517.5	7127	54779	173	26.3	9.02	7.74	9.63	2.58	2.60	0.45
11-20 days	2.21	745	64970	23094	63	18.46	7.46	5.69	11.12	2.78	1.38	0.29
R - days	10535	870	19226	367.2	74.8	14.12	6.23	5.05	4.67	1.88	1.00	0.15
Monthly	3513	716	30079	26080	103	19.63	7.53	6.13	8.75	2.40	1.66	0.29

Source: Suspended Sediment Data Book for 2002-2003 (Narmada Basin)

(Updated during September 2007)

Note : These sites Jamtara, Hirday Nagar is not available during the period of 2002-03.

Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

XII Basin : Mahi, Sabarmati and Other West Flowing Rivers of Saurashtra and Kutch. Unit : Tonnes per day												
Site / Period	June	July	August	September	October	November	December	January	February	March	April	May
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Year : 2001-02												
Mahi at Khanpur												
01-10 days	0.596	54.39	3792	2.867	2.193	1.261	1.292	1.202	1.025	1.167	1.386	1.285
11-20 days	626.8	30.13	504.4	5.040	3.689	1.602	1.316	1.305	1.279	1.295	1.372	1.357
R - days	180.3	8.953	7.683	3.343	1.915	1.381	0.700	1.098	1.136	1.260	1.229	1.469
Monthly	269.2	30.44	1389	3.750	2.577	1.415	1.090	1.199	1.148	1.241	1.329	1.374
Mahi at Paderdibadi												
01-10 days	River Dry	55.25	58.91	22.77	0.275	P.Water	- Trace -	- Trace -	- Trace -	- Trace -	- Trace -	- Trace -
11-20 days	59.53	157.7	87.60	7.281	0.145	- Trace -	- do -	- do -	- do -	- do -	- do -	- do -
R - days	P.Water	36.74	19.83	1.641	P.Water	- Trace -	- do -	- do -	- do -	- do -	- do -	- do -
Monthly	19.84	81.71	54.30	10.56	0.136	P.Water/ Trace	- do -	- do -	- do -	- do -	- do -	- do -
Mahi at Mataji												
01-10 days	P.Water	197.0	238.3	0.385	0.008	D.B.0.3m/ P.Water	P.Water	P.Water	P.Water	River Dry	River Dry	River Dry
11-20 days	1369	169	3305	0.133	0.977	P.Water	- do -	- do -	River Dry	-do-	-do-	-do-
R - days	54.39	4.507	0.925	0.145	0.014	- do -	- do -	- do -	River Dry	-do-	-do-	-do-
Monthly	474.6	119.5	1143	0.221	0.323	D.B.0.3m/ P.Water	- do -	- do -	P.Water/ River Dry	-do-	-do-	-do-
Banas at Kamalpur												
01-10 days	River Dry	River Dry	133.3	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry
11-20 days	203.4	180.2	839.1	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
R - days	River Dry	37.84	River Dry	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
Monthly	67.80	71.57	313.7	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
Bhadar at Ganod												
01-10 days	River Dry	5816	D.B.0.3m	D.B.0.3m	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry
11-20 days	D.B.0.3m	D.B.0.3m	272.2	River Dry	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
R - days	River Dry	0.000	D.B.0.3m	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
Monthly	D.B.0.3m/ River Dry	1876	87.82	D.B.0.3m/ River Dry	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -

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Table No.2.2 : Site-wise Ten Daily & Monthly Average Sediment Load for Different River Basins.

XII	Basin : Mahi, Sabarmati and Other West Flowing Rivers of Saurashtra and Kutch.											<i>Unit : Tonnes per day</i>	
Site / Period	June	July	August	September	October	November	December	January	Feburary	March	April	May	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Year : 2001-02													
Shetrunji at Lowara													
01-10 days	22.40	548.1	River Dry	P.Water	P.Water	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	
11-20 days	32670	22.12	697.0	32.51	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -	
R - days	0.174	River Dry	P.Water	P.Water	River Dry	- do -	- do -	- do -	- do -	- do -	- do -	- do -	
Monthly	10897	183.9	224.8	10.84	P.Water/ River Dry	- do -	- do -	- do -	- do -	- do -	- do -	- do -	
Sabarmati at Derol Bridge													
01-10 days	River Dry	River Dry	1.555	D.B.0.3m/ River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	River Dry	0.054	
11-20 days	- do -	2.263	4.885	River Dry	0.109	- do -	- do -	- do -	- do -	- do -	0.260	River Dry	
R - days	- do -	River Dry	0.033	- do -	River Dry	- do -	- do -	- do -	- do -	- do -	4.737	River Dry	
Monthly	- do -	0.730	2.089	D.B.0.3m/ River Dry	0.035	- do -	- do -	- do -	- do -	- do -	1.666	0.018	
Purna at Mahuwa													
01-10 days	P.Water	2333	2319	12.43	9.151	0.295	D.B.0.3m	D.B.0.3m	D.B.0.3m	D.B.0.3m	D.B.0.3m	D.B.0.3m	
11-20 days	12548	18583	12704	30.70	399.6	D.B.0.3m	- do -	- do -	- do -	- do -	- do -	- do -	
R - days	487.2	4225	81.34	186.3	8.286	- do -	- do -	- do -	- do -	- do -	- do -	- do -	
Monthly	4345	8247	4875	76.49	134.8	0.098	- do -	- do -	- do -	- do -	- do -	- do -	
Ambika at Gadat													
01-10 days	0.000	1573	4927	5.42	8.566	0.437	P.Water	P.Water	P.Water	P.Water	P.Water	P.Water	
11-20 days	14864	32420	8069	6.909	13.14	0.000	- do -	- do -	- do -	- do -	- do -	- do -	
R - days	52.29	2730	58.96	19.01	1.757	0.000	- do -	- do -	- do -	- do -	- do -	- do -	
Monthly	4972	11934	4213	10.45	7.624	0.146	- do -	- do -	- do -	- do -	- do -	- do -	
Vaitarna at Durvesh													
01-10 days	River Dry	15293	4613	204.5	584.4	131.8	5.915	P.Water	P.Water	P.Water	P.Water	P.Water	
11-20 days	15400	4323	9920	466.8	492.0	77.52	1.853	- do -	- do -	- do -	- do -	- do -	
R - days	551.1	1530	725.5	1571	209.9	16.57	0.076	- do -	- do -	- do -	- do -	- do -	
Monthly	5317	6870	4945	747.4	421.7	75.31	2.533	- do -	- do -	- do -	- do -	- do -	

Source: Suspended Sediment Data Book for 2001-02 (Mahi, Sabarmati and Other West Flowing Rivers of Saurashtra and Kutch)

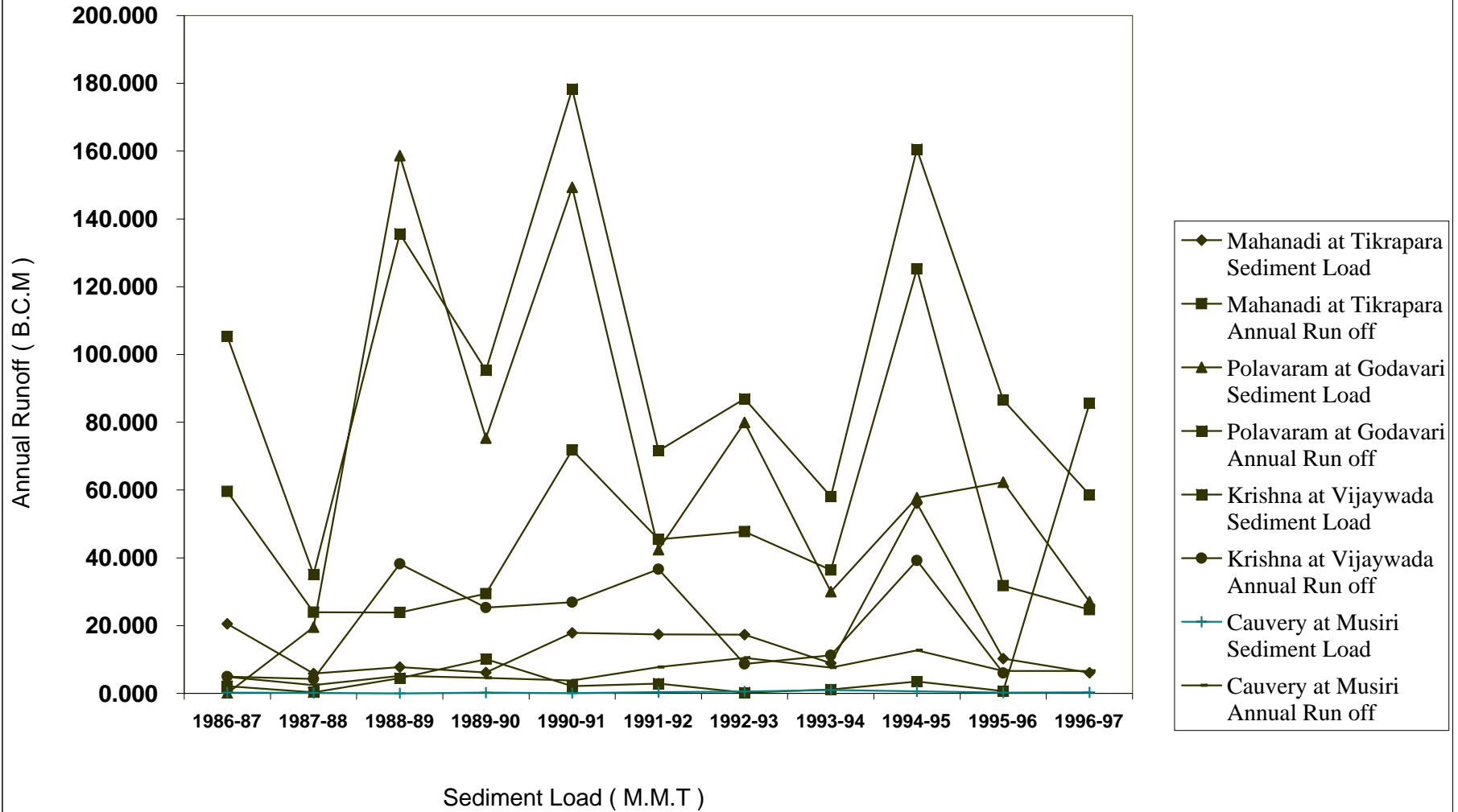
N.A. : Not Available

(Updated during September 2007)

P.Water : Pooling Water

D.B.0.3m : Depth Below 0.3m

Annual Sediment Load and Annual Runoff in Different River Basins



SECTION-III
WATER QUALITY STATISTICS

SECTION - III

WATER QUALITY STATISTICS

Water is a prime necessity for human survival and for growth of agriculture as well as for industrial development. Effective management of water resource, monitoring and control of its quality are becoming increasingly important for sustainable development and human welfare. Pollution of water has become a universal phenomena in present day world and for maintaining water quality at acceptable levels, Environmental Protection Act also includes, as one of its objectives, protection of water from pollution. Now-a-days greater emphasis is also being given to water quality because of concern of environmentalists. Degradation of water quality is not only caused by increasing inflow of domestic and industrial waste water into water course, but also from the abstraction of water from rivers rendering them dry or with meager flow leading to concentration of pollution.

World Health Organisation (WHO) has classified inland water uses in five classes and has fixed tolerance limits of all polluting factors of water. And following the same Bureau of Indian Standards(BIS) has also fixed the same (table 3.1) in Indian context.

Considering importance of water quality an attempt has been made to present here detailed information about the quality of water being supplied from different reservoirs in India. Maximum & minimum values of as many as 42 water quality parameters (table 3.3) and values of the same crossing tolerance limits are presented here (table 3.2) for reviewing the kind of water being discharged/supplied for different purposes.

From the data it can be seen that water coming through east flowing rivers namely Rushikulya, Vamsdhara, Sarada & Nagavali are in general good for all kinds of uses. Most of the Indian waters are alkaline (i.e. having P^H value more than 7.00) and are considered safe for industrial uses especially for boilers, etc.

Comparing with the BIS tolerance limits it can be seen that P^H value is exceeding the prescribed limit at many sites of Godavari, Krishna, Cauvery, East flowing rivers and Narmada river basin. Chemically the water flowing through many sites of Godavari, Krishna and Mahi basins is over-limiting the concentration of magnesium, sodium, ammonia and fluorides. Water of Tapi basin is also having higher concentration of sodium.

Compared to west flowing rivers East flowing rivers show moderate to high conductivity. In contrast to west flowing rivers the well waters of east flowing rivers are more alkaline. The waters of west flowing rivers are

generally of good quality with low to medium ionic concentrations, The dissolved Oxygen also confirmed that this water is of good quality.

The Mahanadi water as a whole was good to very good throughout the year and suitable for all purposes. The water of Cauvery basin showed low to high salinity. Silicate was present in good quantity in all the waters. Nitrate, Fluoride, Phosphate anions were present in low concentration throughout the year at all the water quality stations. Brahmani water in the upper reaches upto Panposh is free from biological pollution and the water is good, healthy and suitable for use for all purposes. Observed sodium proportion and low S.A.R. values in Brahmani and Baitarni throughout the year indicate good water for irrigation purpose. The Subarnrekha water upto Jamshedpur is good to very good with some variation during non-monsoon but huge amount of chemical and biological pollutants of waste effluents from Jamshedpur, polluted the Subarnrekha water.

**Table No.3.1 : Tolerance limits of relating to selected pollution parameters for
Inland Surface Water required for different uses as prescribed by the Bureau
of Indian Standards BIS : 2296-1982**

Sl. No.	Constituent	Unit	Designated use classes of Inland Surface Water				
			A	B	C	D	E
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	pH		6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	6.0-8.5
2	Electric Conductivity at 25°C	micromho/cm/max	-	-	-	1000.00	2250.00
3	Calcium (Ca ⁺⁺)	mg/l(max.)	80.00	-	-	-	-
4	Magnesium (Mg ⁺⁺)	mg/l(max.)	24.00	-	-	-	-
5	Iron (Fe ⁺⁺⁺)	mg/l(max.)	0.30	-	50.00	-	-
6	Free Ammonia (NH ₄ ⁺)	mg/l(max.)	-	-	-	1.20	-
7	Chloride (Cl ⁻)	mg/l(max.)	250.00	-	600.00	-	600.00
8	Fluoride (F ⁻)	mg/l(max.)	1.50	1.50	1.50	-	-
9	Sulphate (SO ₄)	mg/l(max.)	400.00	-	400.00	-	1000.00
10	Nitrate (NO ₃)	mg/l(max.)	20.00	-	50.00	-	-
11	Dissolved Oxygen (DO)	mg/l(min.)	6.00	5.00	4.00	4.00	-
12	Biochemical Oxygen Demand (BOD)	mg/l(max.)	2.00	3.00	3.00	-	-
13	Total Coliform	most probable number/100 ml	50.00*	500.00*	5000.00*	-	-
14	Arsenic (As)	mg/l(max.)	0.05	0.20	0.20	-	-
15	Boron (B)	mg/l(max.)	-	-	-	-	2.00
16	Cadmium (Cd)	mg/l(max.)	0.01	-	-	-	-
17	Chromium (Cr ⁺⁺⁺⁺⁺)	mg/l(max.)	0.05	0.05	0.05	-	-
18	Copper (Cu ⁺⁺)	mg/l(max.)	1.50	-	1.50	-	-
19	Cyanide (Cn)	mg/l(max.)	0.05	0.05	0.05	-	-
20	Lead (Pb)	mg/l(max.)	0.10	-	0.10	-	-
21	Manganese (Mn)	mg/l(max.)	0.50	-	-	-	-
22	Mercury (Hg)	mg/l(max.)	0.001	-	-	-	-
23	Zinc (Zn)	mg/l(max.)	15.00	-	15.00	-	-
24	Phenolic Compounds (C ₆ H ₅ OH)	mg/l(max.)	0.002	0.005	0.005	-	-
25	Total Hardness (CaCO ₃)	mg/l(max.)	300	-	-	-	-
26	Sodium percentage	(max)	-	-	-	-	60.00
27	Sodium Absorption Ratio (SAR)	(max)	-	-	-	-	26.00

Source : Water Quality Year Book for 2002-2003 (Godavari Basin).

Note :

A - Drinking Water source without conventional treatment but after disinfection.

B - Out door bathing organised.

C - Drinking Water source with conventional treatment followed by disinfection.

D - Propagation of wildlife, fisheries.

E - Irrigation, Industrial cooling, Controlled waste disposal.

* If the coliform count is more than the prescribed tolerance limit, the criteria for coliforms shall be satisfied if not more than 20% of samples show more than the tolerance limit specified and not more than 5% samples show more than 4 times the tolerance limit. Further, the faecal coliform should not be more than 40% of the total coliform.

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I	Basin : Mahanadi						
				Year : 2002-2003			
1	Basantpur			DO=5.90 DO=5.90 BOD=2.24 BOD=2.03	July August September October		
2	Salebhata	pH=8.52	April				
3	Kurubhata					DO=5.83	December
4	Mahendergarh	Ph=8.86	March	pH=8.70	October	pH=8.59	January
5	Jondhra	pH=8.90 pH=8.72	March April	pH=8.51	October	pH=8.67 pH=8.54	December January
6	Ghatora	DO=4.07 DO=1.44 DO=1.80	March April May	DO=4.27 DO=1.83	July August	DO=3.91 DO=4.29 DO=3.87	November December January
7	Bamnidhi	pH=8.86 BOD=21.00 BOD=72.00 BOD=72.00	March March April May	pH=8.70 BOD=123.00	October August	pH=8.59 BOD=21.00	January February
8	Andhiyarkore	pH=8.64	April			DO=3.05	February
9	Simga	BOD=2.44 pH=8.57	March April			pH=8.60	December
10	Rampur	Hardness=444.36 Hardness=432.35	April May			Hardness=324.26	February
11	Pathardihi			pH=8.70	October		

Source: Water Quality Data Book (Vol.-I) for 2002-2003

Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing Tolerance Limits for Summer, Monsoon and Winter Seasons

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
II Basin:Subernarekha, Burhablang and Baitarni				Year : 2002-2003			
1	Muri	DO=5.76 BOD=2.04 BOD=2.52	May March May	pH=8.60	July		
2	Jamshedpur	DO(ppm)=3.96 BOD=2.04	May June	DO=5.09	June	BOD=2.64	Janaury
3	Ghatsila	BOD=2.44	March				
4	Adityapur	DO=4.07 DO=4.48 DO=5.22 BOD=2.45 BOD=2.65 Hardness=332.27	June March April March June May			BOD=2.24	February

Source: Water Quality Data Book (Vol.-II) for 2002-2003

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

III Basin: Brahmani

Year : 2002-2003

1	Jenapur	DO=5.94 DO=5.58	April May				
2	Gomlai	DO=5.40 DO=5.76	April May	DO=5.09	September		
3	Pamposh	DO=5.76 DO=5.76 BOD=2.24	April May June	DO=5.90	July		

Source: Water Quality Year Book for 2002-2003

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

IV Rushikulya, Vamsadhara, Sarda & Nagavali

Year : 2002-2003

All Water Quality Parameters are within the Tolerance Limits.

Source: Water Quality Year Book for 2002-2003

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
V Basin : Godavari		Year : 2001-2002					
1	Polavaram	pH=8.6	9 May			pH=8.7 pH=8.6 pH=8.6 pH=8.6	12 November 22 November 20 December 11 February
2	Konta	pH=8.9 DO=5.2 DO=5.6	1 April 2 May 1 June	Iron(Fe)=0.38	4 October		
3	Perur	pH=8.8 pH=8.6 pH=8.6 pH=8.7	1 April 1 June 1 March 2 May	DO=5.7	2 July	pH=8.6 pH=8.6	1 November 3 December
4	Pathagudam	DO=5.7	1 March	DO=5.5	3 September		
5	Jagdapur	DO=5.3	2 May			pH=8.6	3 December
6	Saigaon			DO=5.9 DO=5.9 BOD=2.8	3 September 4 October 3 September		
7	Tekra	pH=8.6 DO=5.9 DO=5.9 BOD=2.5 BOD=2.4	11 April 1 June 11 June 13 May 21 May	pH=8.6 DO=5.8 DO=5.6	22 October 3 July 11 July	pH=8.6 pH=8.8 BOD=2.3	21 December 1 January 1 November

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.			
		Value	Date	Value	Date	Value	Date		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
8	Bhatpalli	BOD=2.9	11 June	Ammonia NH ₄ ⁺ =1.21	11 Ocotber	Magnesium=26.6	12 November		
		pH=8.6	1 March	BOD=2.9	23 August	pH=8.9	1 January		
		BOD=2.6	13 March	Magnesium=25.7	21 September	pH=8.14	14 January		
		Magnesium=36.2	1 March	Magnesium=25.4	21 December	pH=8.6	1 February		
		Magnesium=27.8	13 March			Magnesium=27.6	1 February		
		Magnesium=24.6	21 March			Magnesium=30.9	11 February		
		Magnesium=24.8	11 April						
		Magnesium=31.6	22 April						
		Magnesium=25.7	1 May						
		Magnesium=25.7	13 May						
		Magnesium=24.6	21 May						
		9	Bamni	Cl ⁻ =90	1 June			Magnesium=24.1	1 January
				Magnesium=31.7	1 June			Magnesium=25.8	14 January
Chloride=284	1 June					Magnesium=26.8	21 January		
Floride=2.28	1 June					Magnesium=27.8	11 February		
BOD=40.0	1 June								
DO=4.0	1 June								
Hardness=355	1 June								
Magnesium=26.4	1 March								
Magnesium=24.9	13 March								
Magnesium=33.9	22 April								
Magnesium=38.9	23 May								
Magnesium=44.5	21 May								
10	P.G. Bridge			DO=5.0	11 June	Magnesium=24.6	21 September	pH=8.6	21 November
		BOD=2.1	11 June	BOD=6.0	1 August	pH=8.6	12 November		
		Magnesium=28.7	1March	DO=5.0	1 August	pH=8.6	21 December		
		pH=8.6	21 March	DO=5.5	13 August	pH=9.8	3 January		
		pH=8.8	11 April			pH=8.8	11 January		
		BOD=2.1	21 June			pH=8.7	1 February		
		DO=5.8	1 April			pH=8.6	12 February		
						pH=8.6	21 February		
				Magnesium=24.6	11 December				
				Magnesium=26.3	21 December				

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.																	
		Value	Date	Value	Date	Value	Date																
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)																
11	Nandgoan	pH=8.6 DO=4.7 DO=5.7 Magnesium=24.1	11 June 1 June 11 June 1 March	pH=8.6 Magnesium=24.1 DO=5.2 DO=5.5 DO=4.7 DO=5.7 DO=5.8 DO=5.1 DO=5.1 DO=5.2 DO=5.8 DO=5.3 BOD=2.7 BOD=3.0 BOD=2.3	2 July 23 July 11 July 23 July 1 August 13 August 23 August 11 September 21 September 3 October 11 October 22 October 2 July 1 August 3 October	Magnesium=24.6 Magnesium=30.5 BOD=10.0 BOD=8.0 DO=4.5 DO=5.1 DO=5.6 DO=5.7 DO=5.3 DO=4.7 DO=3.9 DO=3.5	22 January 12 February 11 February 21 February 12 November 21 November 21 December 1 January 14 January 21 January 11 February 21 February																
								12	Hivra	pH=8.6 pH=8.6 pH=8.7 pH=8.7 pH=8.6 pH=8.8 pH=8.7 DO=4.6 DO=4.6 DO=5.7 BOD=5.3 Sodium%=60.71 Sodium%=61.18 Magnesium=24.6 Magnesium=25.4	1 June 1 March 13 March 21 March 1 April 11 April 1 May 22 April 1 May 13 May 13 May 11 April 22 April 1 March 1 June	DO=5.8	11 September	pH=8.7 pH=8.9 pH=8.14 pH=8.8 pH=8.8 pH=8.9 pH=8.7 Magnesium=26.6 Magnesium=25.8 Magnesium=31.5 Magnesium=24.9 Magnesium=25.4 Magnesium=26.8	21 December 1 January 14 January 21 January 1 February 11 February 21 February 12 November 3 December 11 December 14 January 1 February 11 February								
																13	Bhishnur	Iron(Fe)=0.37 DO=3.9	1 Marh 1 June	DO=5.1 DO=5.1	2 July 11 July	DO=3.9 DO=4.2	1 November 12 November

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		DO=3.3	11 June	DO=5.9	23 July	DO=4.7	21 November
		DO=5.0	21 June	DO=4.1	1 August	DO=4.7	3 December
		DO=3.8	1 March	DO=5.8	13 August	DO=5.1	11 December
		DO=2.2	13 March	DO=4.7	23 August	DO=5.7	21 December
		DO=3.6	21 March	DO=4.4	3 September	DO=4.6	3 January
		DO=3.4	1 April	DO=4.1	11 September	DO=5.8	11 January
		DO=3.7	11 April	DO=3.5	23 September	DO=4.5	22 January
		DO=3.2	22 April	DO=3.4	3 October	DO=3.8	12 February
		DO=3.8	1 May	DO=2.8	11 October	DO=2.5	21 February
		DO=5.1	13 May	DO=4.3	22 October	BOD=20.0	1 November
		DO=2.9	21 May	BOD=3.0	1 August	BOD=3.0	21 February
		BDO=4.0	1 June	BOD=3.4	13 August	Magnesium=26.8	11 December
		BOD=3.0	11 June	BOD=20.0	3 October	Magnesium=28.0	3 January
		BOD=6.0	1 March	BOD=25.0	11 October	Magnesium=26.3	11 January
		BOD=4.0	13 March	Magnesium=26.0	2 July	Magnesium=25.8	22 January
		BOD=7.0	21 March	Magnesium=25.5	11 July	Magnesium=28.0	1 February
		BOD=4.0	1 April	Magnesium=26.5	1 August	Magnesium=30.9	11 February
		BOD=3.0	11 April	Magnesium=24.1	21 September	Magnesium=26.4	21 February
		BOD=3.0	22 April				
		BOD=5.0	1 May				
		BOD=35.0	21 May				
		Magnesium=29.4	13 March				
		Magnesium=24.6	21 March				
		Magnesium=26.4	1 April				
		Magnesium=30.2	11 April				
		Magnesium=24.6	22 April				
		Magnesium=27.2	1 May				
14	Ashti	pH=8.6	1 March	BOD=2.7	11 September	pH=8.6	22 November
		pH=8.6	13 March			pH=8.7	3 December
		pH=8.6	21 March			pH=9.0	3 January
		pH=8.7	11 April			pH=8.8	11 January
		pH=8.6	1 May			pH=8.6	22 January
		pH=8.7	13 May			pH=8.6	1 February
		pH=8.6	21 May			pH=8.8	11 February

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		DO=5.2	11 June			pH=8.6	21 February
						BOD=2.2	12 November
15	Pauni	Ammonia NH ₄ ⁺ =2.16	1 March	DO=5.2	2 July	pH=8.6	3 January
		pH=8.7	21 May	DO=5.1	11 July	DO=5.6	21 November
		pH=8.6	11 June	DO=5.3	23 July	DO=5.9	11 December
		DO=5.2	11 June	DO=5.3	13 August	DO=5.3	21 December
		DO=3.0	1 March	DO=4.9	23 August	DO=5.2	3 January
		DO=5.3	21 March	DO=5.1	3 October	DO=5.5	11 January
		DO=5.8	1 April	DO=5.3	11 October	DO=5.0	22 January
		DO=3.4	11 April	BOD=3.9	1 August	DO=4.1	12 February
		DO=4.2	22 April	BOD=5.7	22 October	DO=5.0	21 February
		DO=4.9	1 May			BOD=5.3	12 November
		DO=3.1	13 May			BOD=2.4	21 November
		DO=3.0	13 March			BOD=3.1	22 January
		BOD=3.4	1 March			BOD=3.2	1 February
		BOD=6.0	13 March			BOD=4.0	12 February
		BOD=5.4	1 April			BOD=4.6	21 February
		BOD=5.0	11 April				
		BOD=5.0	22 April				
		BOD=3.9	1 May				
		BOD=4.0	13 May				
		BOD=3.2	1 June				
16	Sartarpur	pH=8.7	11 June	BOD=3.0	1 August	BOD=2.8	3 January
		DO=5.9	21 June	BOD=2.9	11 September	BOD=2.3	11 January
		BOD=3.0	21 June	BOD=3.8	22 October	BOD=2.2	22 January
		BOD=3.8	1 March	BOD=2.2	21 December	BOD=2.1	1 February
		BOD=3.1	13 March			Magnesium=25.4	11 January
		BOD=2.9	1 April			Magnesium=30.2	22 January
		Magnesium=31.3	1 March			Magnesium=35.0	12 February
		Magnesium=28.3	13 March				
		Magnesium=30.5	21 March				
		Magnesium=40.7	1 April				
		Magnesium=37.7	11 April				
		Magnesium=30.2	22 April				

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
17	Rajegaon	Magnesium=24.4	1 June				
		DO=5.5	1 March	Ammonia NH ₄ ⁺ =1.21	22 October	DO=5.8	21 February
		DO=2.5	13 March	DO=5.2	11 July		
		DO=4.1	11 June	DO=5.9	23 July		
		DO=5.6	21 June	DO=5.4	1 August		
		BOD=4.0	13 March	BOD=2.4	11 October		
		BOD=2.1	21 March				
18	Kumhari	BOD=2.6	11 April				
		DO=5.4	11 June	DO=5.4	21 September	BOD=4.4	11 December
		BOD=2.1	1 March	BOD=2.6	3 October	BOD=3.6	11 January
		BOD=5.2	13 March				
		BOD=3.2	21 March				
		BOD=3.0	22 April				
		BOD=5.1	21 May				
19	Mancherial	BOD=5.0	1 June				
		pH=8.6	1 April	pH=8.8	2 July	pH=8.7	3 December
		pH=8.7	11 April	pH=8.7	12 July	pH=8.6	11 December
		pH=8.6	22 April	pH=8.6	20 July	pH=8.6	20 December
		pH=8.6	2 May	pH=8.6	2 August	pH=8.6	11 February
		pH=8.9	9 May	pH=8.6	11 September	DO=5.9	1 November
		pH=8.9	20 May	DO=5.9	20 July	DO=5.9	21 February
		pH=8.7	1 June			Magnesium=24.3	3 December
		pH=8.7	21 June			Magnesium=24.3	11 December
		DO=5.1	11 June				
		DO=5.7	1 March				
		DO=5.7	7 March				
		DO=5.9	19 March				
		DO=5.5	1 April				
		DO=5.9	11 April				
		DO=5.5	2 May				
Floride=1.54	2 May						

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
20	Degloor			DO=5.1	3 September		
				BOD=2.4	2 August		
				BOD=2.4	3 September		
				BOD=2.6	2 July		
				DO=5.1	4 October		
21	Yelli			pH=9.0	2 July		
				pH=8.8	2 August		
				DO=5.5	4 October		
				BOD=2.1	3 September		
22	Purna			DO=5.5	4 October		
				BOD=3.7	4 October		
23	Dhalegaon			Calcium=88	3 September	Magnesium=26.7	1 November
				DO=5.7	3 September	DO=5.7	1 November
				DO=4.5	4 October		
				DO=4.5	4 October		

Source : Water Quality Year Book for 2001-2002

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
1	Vijaywada	pH=8.65 pH=8.57 pH=8.70	1, June 1, June 21, March	pH=8.53 pH=8.58	1, July 2, August	pH=8.62	9, December
2	Keesra	pH=8.53 pH=8.70 pH=8.68	1, June 21, March 21, March	pH=8.62 pH=8.52 BOD=2.50	1, July 12, July 21, September		
3	Wadenpalli	BOD=3.30	19, April	BOD=2.50	1, November		
4	Dhamracherla	pH=8.60 BOD=2.70 BOD=2.40 Hardness=303	21, March 2, March 11, May 2, March	pH=8.51 Hardness=387	11, August 12, July	Hardness=317	1, February
5	Pondugala	pH=8.64 BOD=2.50 BOD=2.90	21, June 9, March May	BOD=2.90	11, November	pH=8.65 BOD=2.30	21, Janaury 21, Janaury
6	Madhira	pH=8.53 pH=8.68	June March				

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
7	Bawapuram	pH=8.56 pH=8.59 pH=9.20 pH=9.11 pH=8.71 pH=8.70 pH=8.87 pH=9.14 BOD=2.30 BOD=2.30	8, June 21, June 21, March 11, April 19, April 1, May 11, May 22, May 19, April May	pH=8.86 pH=8.86 pH=8.86	1, July August August	pH=8.55 pH=8.66 pH=8.72 pH=8.85 BOD=2.50	9, December 21, January 1, February 21, February November
8	Paleru Bridge	Hardness=308 Hardness=475 Hardness=448 Hardness=308 Hardness=339	21, June 3, April 11, April 19, April 8, May	Hardness=338 Hardness=351 Hardness=338	21, August 2, August 20, August		
9	Mantralayam	pH=8.61 pH=8.69 pH=8.68 pH=8.96	1, June 21, June 9, March 21, March	pH=8.70 pH=8.64 Sodium%=64.00	1, July 21, July 2, August	pH=8.60 pH=8.51 pH=8.70 pH=8.74	11, November 21, January 1, February 21, February
10	T.Ramapuram	Hardness=402	10, June	BOD=2.30 BOD=5.60	4, October 21, October	BOD=3.90 Hardness=312	9, December 21, December

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
				Hardness=609	21, July	Hardness=303	1, February
				Hardness=311	2, August	Sodium%=63.49	1, February
				Sodium%=66.80	2, August	Sodium%=77.70	21, February
11	Kellodu	Hardness=63.37	June	Hardness=63.82	October		
12	Oolinur	pH=8.68	21, March	pH=8.82	2, August		
				pH=8.75	11, August		
13	Krishna Agraharam	pH=8.66	21, June	BOD=3.00	2, August	BOD=3.30	1, November
		pH=8.63	21, March			BOD=3.10	9, December
		pH=8.51	22, May			pH=8.52	1, February
		pH=5.40	May			pH=8.51	21, February
		Hardness=312	11, April				
14	Yadgir	pH=8.65	10, June	pH=8.52	21, July	pH=8.74	1, February
		pH=8.52	9, March	pH=8.56	11, August	pH=8.52	21, February
		pH=9.04	21, March	pH=8.65	20, August	BOD=2.50	21, October
		pH=8.54	19, April	pH=8.62	1, September	BOD=2.30	21, December
		BOD=2.70	2, March				
15	Sarati			DO=4.70	July		
				DO=4.40	August		
				DO=5.10	October		
				DO=5.60	November		

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
				BOD=310	October		
				BOD=300	November		
				Sodium%=71.79	October		
				Hardness=305	November		
16	Phulgaon			BOD=2.30	September		
				DO=4.80	August		
17	Malkhed	pH=8.59	21, March	pH=8.66	1, July		
18	Wadakbal	BOD=2.60	June	BOD=2.30	October	BOD=3.50	December
		DO=5.10	June	DO=3.90	July		
				DO=5.80	October		
				Hardness=412	July		
19	Takali			BOD=2.20	August	BOD=2.20	November
				DO=4.00	July	BOD=2.60	December
				DO=5.10	August	DO=5.80	November
				DO=5.60	September	Hardness=367	December
				Hardness=321	July		
				Sodium%=70.98	October		
20	Galgali	DO=5.00	June	DO=4.10	July		
				DO=4.60	August		
				DO=5.70	September		

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
				DO=4.00	October		
21	Karad			DO=4.20	July	pH=8.67	December
				DO=5.40	August	DO=3.90	November
				DO=5.10	October	BOD=2.40	November
				BOD=3.60	September		
				BOD=2.10	October		
22	Huvenhedgi	pH=8.53	21, June	pH=8.54	August	BOD=2.10	11, November
		pH=8.80	21, March			pH=8.62	1, February
		BOD=2.30	21, March			pH=8.60	21, February
23	Cholachgudda	DO=4.70	June	DO=4.70	September	DO=5.70	November
		Sodium%=63.41	March	DO=5.50	October	BOD=4.10	November
				BOD=2.20	October		
24	Bagalkot	DO=4.70	June	DO=4.10	July	DO=5.30	November
		BOD=3.30	March	DO=4.00	September	DO=4.40	December
		Sodium%=64.44	March	DO=5.40	October	BOD=2.20	October
						BOD=2.30	November
						Sodium%=66.73	October
25	Warunji			DO=4.20	July	DO=5.80	November
				DO=5.30	September	BOD=2.60	October
				DO=4.50	October	BOD=2.50	November

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
1	Vijaywada	pH=8.65 pH=8.57 pH=8.70	1, June 1, June 21, March	pH=8.53 pH=8.58	1, July 2, August	pH=8.62	9, December
2	Keesra	pH=8.53 pH=8.70 pH=8.68	1, June 21, March 21, March	pH=8.62 pH=8.52 BOD=2.50	1, July 12, July 21, September		
3	Wadenpalli	BOD=3.30	19, April	BOD=2.50	1, November		
4	Dhamracherla	pH=8.60 BOD=2.70 BOD=2.40 Hardness=303	21, March 2, March 11, May 2, March	pH=8.51 Hardness=387	11, August 12, July	Hardness=317	1, February
5	Pondugala	pH=8.64 BOD=2.50 BOD=2.90	21, June 9, March May	BOD=2.90	11, November	pH=8.65 BOD=2.30	21, Janaury 21, Janaury
6	Madhira	pH=8.53 pH=8.68	June March				

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
7	Bawapuram	pH=8.56 pH=8.59 pH=9.20 pH=9.11 pH=8.71 pH=8.70 pH=8.87 pH=9.14 BOD=2.30 BOD=2.30	8, June 21, June 21, March 11, April 19, April 1, May 11, May 22, May 19, April May	pH=8.86 pH=8.86 pH=8.86	1, July August August	pH=8.55 pH=8.66 pH=8.72 pH=8.85 BOD=2.50	9, December 21, January 1, February 21, February November
8	Paleru Bridge	Hardness=308 Hardness=475 Hardness=448 Hardness=308 Hardness=339	21, June 3, April 11, April 19, April 8, May	Hardness=338 Hardness=351 Hardness=338	21, August 2, August 20, August		
9	Mantralayam	pH=8.61 pH=8.69 pH=8.68 pH=8.96	1, June 21, June 9, March 21, March	pH=8.70 pH=8.64 Sodium%=64.00	1, July 21, July 2, August	pH=8.60 pH=8.51 pH=8.70 pH=8.74	11, November 21, January 1, February 21, February
10	T.Ramapuram	Hardness=402	10, June	BOD=2.30 BOD=5.60	4, October 21, October	BOD=3.90 Hardness=312	9, December 21, December

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
				Hardness=609	21, July	Hardness=303	1, February
				Hardness=311	2, August	Sodium%=63.49	1, February
				Sodium%=66.80	2, August	Sodium%=77.70	21, February
11	Kellodu	Hardness=63.37	June	Hardness=63.82	October		
12	Oolinur	pH=8.68	21, March	pH=8.82	2, August		
				pH=8.75	11, August		
13	Krishna Agraharam	pH=8.66	21, June	BOD=3.00	2, August	BOD=3.30	1, November
		pH=8.63	21, March			BOD=3.10	9, December
		pH=8.51	22, May			pH=8.52	1, February
		pH=5.40	May			pH=8.51	21, February
		Hardness=312	11, April				
14	Yadgir	pH=8.65	10, June	pH=8.52	21, July	pH=8.74	1, February
		pH=8.52	9, March	pH=8.56	11, August	pH=8.52	21, February
		pH=9.04	21, March	pH=8.65	20, August	BOD=2.50	21, October
		pH=8.54	19, April	pH=8.62	1, September	BOD=2.30	21, December
		BOD=2.70	2, March				
15	Sarati			DO=4.70	July		
				DO=4.40	August		
				DO=5.10	October		
				DO=5.60	November		

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
				BOD=310	October		
				BOD=300	November		
				Sodium%=71.79	October		
				Hardness=305	November		
16	Phulgaon			BOD=2.30	September		
				DO=4.80	August		
17	Malkhed	pH=8.59	21, March	pH=8.66	1, July		
18	Wadakbal	BOD=2.60	June	BOD=2.30	October	BOD=3.50	December
		DO=5.10	June	DO=3.90	July		
				DO=5.80	October		
				Hardness=412	July		
19	Takali			BOD=2.20	August	BOD=2.20	November
				DO=4.00	July	BOD=2.60	December
				DO=5.10	August	DO=5.80	November
				DO=5.60	September	Hardness=367	December
				Hardness=321	July		
				Sodium%=70.98	October		
20	Galgali	DO=5.00	June	DO=4.10	July		
				DO=4.60	August		
				DO=5.70	September		

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VI	Basin : Krishna				Year : 1999-2000		
				DO=4.00	October		
21	Karad			DO=4.20	July	pH=8.67	December
				DO=5.40	August	DO=3.90	November
				DO=5.10	October	BOD=2.40	November
				BOD=3.60	September		
				BOD=2.10	October		
22	Huvenhedgi	pH=8.53	21, June	pH=8.54	August	BOD=2.10	11, November
		pH=8.80	21, March			pH=8.62	1, February
		BOD=2.30	21, March			pH=8.60	21, February
23	Cholachgudda	DO=4.70	June	DO=4.70	September	DO=5.70	November
		Sodium%=63.41	March	DO=5.50	October	BOD=4.10	November
				BOD=2.20	October		
24	Bagalkot	DO=4.70	June	DO=4.10	July	DO=5.30	November
		BOD=3.30	March	DO=4.00	September	DO=4.40	December
		Sodium%=64.44	March	DO=5.40	October	BOD=2.20	October
						BOD=2.30	November
						Sodium%=66.73	October
25	Warunji			DO=4.20	July	DO=5.80	November
				DO=5.30	September	BOD=2.60	October
				DO=4.50	October	BOD=2.50	November

Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VII Basin : Cauvery		Year : 2000-2001					
1	Urachikottai					pH=8.50	January
2	Muthankera					pH=8.25 D.O.=5.7	January
3	Kanakpura	pH=8.21 SO ₄ ⁻ =2.540	June	DO=4.8 BOD=5.0	August July	Hardeness=363	Februrary
4	Musiri					pH=8.55 SO ₄ ⁻ =.522	January January
5	Savandapur	DO=5.6	June	SO ₄ ⁻ =0.792 DO=5.6	October June	DO=5.6	February
6	Nellithurai	pH=8.15	May	ph=8.15	May		
7	Biligundulu	SO ₄ ⁻ =0.629	June	BOD=2.9 DO=5.9	July October	pH=8.19	December
8	T.K. Halli	DO=5.2 BOD=2.7	May March			Ph=8.22 SO ₄ ⁻ =.0.833	Janaury Janaury
9	Kollegal	pH=8.27 BOD=3.8	April May	Do=2.3	August	SO ₄ ⁻ =.0.708	November
10	T.Narsipur			pH=8.23 DO=5.2 BOD=2.9	July July July	Sodium%=69.52	February
11	Hoshalli			DO=5.5	October	pH=8.23	January

Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VII Basin : Cauvery		Year : 2000-2001					
12	Kudige					SO ₄ ⁻ =0.833 BOD=2.7 Sodium%=61.62	Janaury Janaury November
13	Kudlur	pH=8.44	May			DO=5.4	February
14	Kodumudi	Ph=8.37 SO ₄ ⁻ =0.557 BOD=2.4	May May May				
15	Elunuthimangalam			Ph=8.64 SO ₄ ⁻ =3.532 Hardness=432 Sodium%=74.28	October October October October		
16	Nallamaranpatty					pH=8.43 SO ₄ ⁻ =0.697	February February
17	Kattomalavadi			SO ₄ ⁻ =0.708	November	pH=8.21	Janaury

Source: Water Quality Year Book for 2000-2001

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

VIII Basin : East Flowing Rivers of Coastal of A.P.& Tamil Nadu.

Year : 2000-2001

1	Thammavaram	pH=8.64	May	pH=8.55	September		
		BOD=3.90	June	BOD=4.00	August		
		Hardness=315.14	April	Sodium%=61.05	July		
		Sodium%=66.64	June	Sodium%=61.37	August		
		Sodium%=60.93	May				
2	Vazhavachanur	DO=3.00	June	DO=5.50	October	DO=4.90	November
		DO=4.80	March			DO=3.90	February
		DO=4.90	April				
		DO=3.20	May				
3	Murappandu	DO=5.3	June	DO=5.7	October	DO=5.7	February
		DO=5.0	March			DO=5.4	November
		DO=5.6	April				
		DO=5.8	May				
4	A.P. Puram	Hardness=693.38	June	Hardness=368.00	September	Hardness=364.76	January
		Hardness=510.96	March	Hardness=452.00	October	Hardness=521.04	February
		Hardness=384.00	April			Hardness=496.00	November
		Hardness=600.00	May			Hardness=480.00	December
		Sodium%=61.64	April				
Sodium%=60.29	June						
5	Gummanur	DO=4.90	March			DO=5.4	November

Source: Water Quality Year Book for 2000-2001.

**Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing
Tolerance Limits for Summer, Monsoon and Winter Seasons**

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IX	Basin : West Flowing Rivers of Coastal of Kerala, Karnataka, & Maharashtra.					Year : 2000-2001	
1	Alladupalli					BOD=2.40 BOD=3.25	December February
2	Mangaon			DO=5.70	September		
3	Badlapur	DO=4.10 DO=5.68 DO=4.05	June March April	DO=5.70	July	DO=5.30 DO=5.70 DO=5.68 DO=5.68	November December January February
4	Kuniyil			pH=8.62	October		
5	Mankara			pH=8.55 DO=3.92	October July		
6	Pudur			DO=4.59 DO=5.12 DO=5.76	July September October	pH=8.55	February
7	Pattazhy	DO=4.90	June				

Source: Water Quality Year Book for 2000-2001.

Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing Tolerance Limits for Summer, Monsoon and Winter Seasons

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
X Basin : Tapi		Year : 1996-97					
1	Lakhpuri	Sodium%=61.64	1 March			Sodium% =63.39	15 January
						Sodium% =62.40	15 February
2	Pingalwada	Fe=0.031	15 June	Sodium%=67.38	1 July	Fe=0.032	1 January
		Sodium%=66.05	1 March			Sodium%=73.38	2 December
		Sodium%=74.43	1 April			Sodium%=73.69	16 December
		Sodium%=67.08	15 April			Sodium%=76.23	1 January
		Sodium%=67.02	1 May			Sodium%=74.55	15 January
		Sodium%=66.42	15 May			Sodium%=75.28	1 February
		Sodium%=74.43	1 June			Sodium%=75.37	15 February
		Sodium%=71.85	15 June				
3	Motinaroli	Sodium%=66.70	15 April			Sodium%=61.76	16 December
						Sodium%=64.36	1 January
						Sodium%=67.64	15 January
						Sodium%=62.26	1 February
						Sodium%=66.42	15 February

Source: Water Quality Year Book for 1996-97

Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing Tolerance Limits for Summer, Monsoon and Winter Seasons of Narmada Basin (2003-2004)

Sl.No.	Site Name	Summer		Monsoon		Winter	
		March to June		July to Oct.		Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Garudeshwar	pH=8.54 pH=8.59 pH=8.70 pH=8.60 pH=8.80	01.03.2004 15.03.2004 01.04.2004 15.04.2004 15.05.2004			pH=8.52	16.02.2004
2	Rajghat	pH=8.56 pH=8.59 BOD=3.4	02.06.2003 05.05.2004 16.06.2003	BOD=4.2	15.10.2003	pH=8.74 pH=8.58	01.01.2004 15.01.2004
3	Mandleshwar	pH=8.70 pH=8.62 pH=8.65 pH=8.58 pH=8.72	03.03.2004 15.03.2004 01.04.2004 15.04.2004 15.05.2004			pH=8.51 pH=8.61 pH=8.53 pH=8.55 pH=8.55	15.12.2003 01.01.2004 15.01.2004 03.02.2004 16.02.2004
4	Kogaon	pH=8.85 pH=8.80 BOD=2.5 BOD=2.8	16.06.2003 03.03.2004 03.03.2004 01.04.2004			pH=8.53 pH=8.55 BOD=2.3	03.11.2003 03.02.2004 03.02.2004
5	Mortakka	pH=8.51 pH=8.54	01.01.2004 05.05.2004				
6	Handia	pH=8.52 pH=8.58 pH=8.55 pH=8.68 pH=8.58	16.06.2003 03.03.2004 01.04.2004 15.04.2004 17.05.2004			pH=8.52 pH=8.48 pH=8.55 BOD=2.9	03.11.2003 02.12.2003 03.02.2004 03.02.2004
7	Chhidgaon	pH=8.52 pH=8.55	03.03.2004 17.05.2004	pH=8.58 pH=8.28	06.10.2003 15.10.2003	pH=8.52	15.12.2003
8	Hoshangabad	pH=8.53 pH=8.55 BOD=2.4	16.06.2003 01.04.2004 16.06.2003	BOD=2.5	01.07.2003		
9	Gadarwara	pH=8.64 pH=8.67 BOD=2.0	02.06.2003 16.06.2003 15.04.2004	BOD=2.6	01.07.2003		
10	Barmanghat	pH=8.53 pH=8.51	02.06.2003 05.05.2004	BOD=2.2 BOD=2.1	01.07.2003 15.07.2003		
11	Belkheri	pH=8.55	05.05.2004				
12	Patan	pH=8.66 pH=8.69 BOD=2.3	02.06.2003 16.06.2003 16.06.2003	BOD=2.5 BOD=0.8 BOD=2.7	01.07.2003 15.07.2003 06.10.2003		
13	Manot	pH=8.55 pH=8.58 pH=8.59 BOD=3.8	03.03.2004 15.03.2004 17.05.2004 15.03.2004				
14	Dindori	pH=8.60	15.03.2004			pH=8.52 pH=8.52 pH=8.51 pH=8.52 pH=8.56	02.12.2003 15.12.2003 01.01.2004 15.01.2004 03.02.2004

Source: Water Quality Year Book for 2003-2004.

Table No 3.2 : Critical Absolute Values of Water Quality Parameters Crossing Tolerance Limits for Summer, Monsoon and Winter Seasons

Sl. No.	Site Name	Summer March to June		Monsoon July to Oct.		Winter Nov. to Feb.	
		Value	Date	Value	Date	Value	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
XII Basin : Mahi,Sabarmati & Others		Year : 1996-97					
1	Derol Bridge	Sodium%=61.13	1 March	Sodium%=62.58	1 July	Sodium%=65.59	1 January
		Sodium%=65.36	15 March			Sodium%=65.88	1 February
		Sodium%=60.13	15 May			Sodium%=65.25	15 February
		Sodium%=60.65	1 June				
		Sodium%=65.87	15 June				
2	Nabhoi	Fe=0.077	1 June	Fe=0.079	1 July	Fe=0.057	15 November
		Fe=0.084	15 June	Fe=0.062	15 July	Fe=0.086	2 December
		Fe=0.062	1 March	Sodium %=75.49	1 July	Fe=0.060	16 December
		Fe=0.077	15 March	Sodium %=71.70	15 July	Fe=0.063	1 January
		Fe=0.108	1 April			Fe=0.107	15 January
		Fe=0.052	15 April			Fe=0.113	1 February
		Fe=0.073	1 May			Fe=0.111	15 February
		Fe=0.079	15 May			NH ₄ ⁺ =1.239	15 November
		NH ₄ ⁺ =1.134	1 April			NH ₄ ⁺ =1.368	2 December
		NH ₄ ⁺ =1.224	15 May			NH ₄ ⁺ =1.191	15 January
		Sodium %=75.34	1 March			NH ₄ ⁺ =1.467	1 February
		Sodium %=75.98	15 March			NH ₄ ⁺ =1.134	15 February
		Sodium %=75.75	1 April			Sodium %=74.93	1 November
		Sodium %=73.63	15 April			Sodium %=76.97	15 November
		Sodium %=76.09	1 May			Sodium %=77.57	2 December
		Sodium %=76.21	15 May			Sodium %=74.37	16 December
				Sodium %=75.05	1 January		
				Sodium %=74.97	15 January		
				Sodium %=74.71	1 February		
				Sodium %=76.30	15 February		

Source: Water Quality Year Book for 1996-97

Table No.3.3 : Sitewise Maximum/Minimum Value of Water Quality Parameters for Different River Basins.

I Basin : Mahanadi

Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2003-04														
1	Tikarapara	Mahanadi	-	-	20.00	31.50	6.70	8.00	143	510	0.031	0.063	0.340	0.920
2	Kesinga	Tel	-	-	27.00	29.00	7.73	8.41	105	240	0.028	0.028	0.065	0.065
3	Kantamal	Tel	-	-	28.00	28.00	7.66	8.10	109	256	-	-	-	-
4	Salebhata	Ong	-	-	24.00	30.50	7.84	8.29	115	393	0.038	0.038	0.813	0.813
5	Sundergarh	Ib	<-----Sample not received----->											
6	Kurubhanta	Mand	-	-	22.50	27.00	3.82	7.84	70	216	-	-	-	-
7	Basantpur	Mahanadi	-	-	22.50	31.00	7.16	8.27	113	329	0.051	0.051	0.265	0.265
8	Bamnidhi	Hasdeo	-	-	22.50	29.00	7.12	9.18	103	420	0.053	0.053	0.204	0.204
9	Manendragarh	Hasdeo	-	-	22.50	24.50	7.14	7.99	75	356	-	-	-	-
10	Rampur	Jonk	-	-	22.50	28.00	7.43	8.25	153	310	-	-	-	-
11	Jondhra	Jonk	-	-	22.50	33.00	7.44	8.22	139	749	-	-	-	-
12	Ghatora	Arpa	-	-	22.50	29.00	7.36	8.03	115	560	-	-	-	-
13	Andhiyarkore	Hamp	-	-	22.50	33.00	7.82	8.25	238	868	-	-	-	-
14	Simga	Seonath	-	-	22.50	33.00	7.58	8.74	149	566	-	-	-	-
15	Pathardhi	Kharun	-	-	22.50	30.00	7.50	8.01	143	564	-	-	-	-
16	Rajim	Mahanadi	-	-	22.50	33.00	7.72	9.00	71	274	-	-	-	-
17	Baronda	Pairi	-	-	22.50	33.00	7.44	8.48	61	430	-	-	-	-

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Table No.3.3 : Sitewise Maximum/Minimum Value of Water Quality Parameters for Different River Basins.

I Basin : Mahanadi

Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2003-04														
1	Tikarapara	Mahanadi	0.640	2.800	0.120	1.640	0.003	0.210	0.001	0.014	0.000	0.014	0.000	0.000
2	Kesinga	Tel	0.494	1.447	0.74	0.658	-	-	-	-	-	-	0.000	0.000
3	Kantamal	Tel	0.494	1.316	0.082	1.198	-	-	-	-	-	-	0.000	0.000
4	Salebhata	Ong	0.599	1.892	0.205	1.069	-	-	-	-	-	-	0.000	0.000
5	Sundergarh	Ib	<-----Sample not received----->											
6	Kurubhanta	Mand	0.411	0.798	0.165	494	-	-	-	-	-	-	0.000	0.000
7	Basantpur	Mahanadi	0.494	1.796	0.070	0.905	-	-	-	-	-	-	0.000	0.000
8	Bamnidhi	Hasdeo	0.449	1.398	0.082	0.658	-	-	-	-	-	-	0.000	0.000
9	Manendragarh	Hasdeo	0.449	1.497	0.082	0.905	-	-	-	-	-	-	0.000	0.000
10	Rampur	Jonk	0.549	5.439	0.082	0.699	-	-	-	-	-	-	0.000	0.000
11	Jondhra	Jonk	0.948	5.758	0.165	2.345	-	-	-	-	-	-	-	-
12	Ghatora	Arpa	0.740	1.974	0.245	1.796	-	-	-	-	-	-	0.000	0.000
13	Andhiyarkore	Hamp	1.152	5.347	0.494	1.896	-	-	-	-	-	-	0.000	0.000
14	Simga	Seonath	0.898	4.524	0.459	2.545	-	-	-	-	-	-	0.000	0.000
15	Pathardhi	Kharun	0.898	2.695	0.082	1.234	-	-	-	-	-	-	0.000	0.000
16	Rajim	Mahanadi	0.549	2.046	0.165	0.987	-	-	-	-	-	-	0.000	0.000
17	Baronda	Pairi	0.399	0.798	0.041	0.905	-	-	-	-	-	-	0.000	0.118

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Table No.3.3 : Sitewise Maximum/Minimum Value of Water Quality Parameters for Different River Basins.

I Basin : Mahanadi

Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2003-04														
1	Tikarapara	Mahanadi	0.710	4.090	0.272	0.780	0.000	0.000	0.017	0.110	0.000	0.000	0.012	0.131
2	Kesinga	Tel	1.033	2.327	0.226	1.269	0.006	0.116	0.042	0.250	-	-	-	-
3	Kantamal	Tel	1.084	2.425	0.254	4.739	0.011	0.046	0.042	0.358	-	-	-	-
4	Salebhata	Ong	1.131	3.852	0.310	1.269	0.008	0.176	0.042	0.198	-	-	-	-
5	Sundergarh	Ib	<-----Sample not received----->											
6	Kurubhanta	Mand	0.688	2.131	0.254	1.074	0.006	0.083	0.033	0.479	-	-	-	-
7	Basantpur	Mahanadi	1.115	3.032	0.282	1.157	0.008	0.113	0.042	0.425	-	-	-	-
8	Bamnidhi	Hasdeo	1.033	4.17	0.282	1.382	0.008	0.103	0.070	0.500	-	-	-	-
9	Manendragarh	Hasdeo	0.738	3.509	0.254	1.157	0.006	0.064	0.250	0.646	-	-	-	-
10	Rampur	Jonk	1.115	2.754	0.000	3.272	0.009	0.104	0.017	0.633	-	-	-	-
11	Jondhra	Jonk	1.344	7.195	0.339	1.269	0.013	0.099	0.125	0.850	-	-	-	-
12	Ghatora	Arpa	1.065	5.523	0.310	1.185	0.069	0.102	0.025	0.281	-	-	-	-
13	Andhiyarkore	Hamp	2.295	8.960	0.254	1.269	0.012	0.105	0.260	1.017	-	-	-	-
14	Simga	Seonath	1.393	5.376	0.451	2.059	0.014	0.104	0.000	0.767	-	-	-	-
15	Pathardhi	Kharun	1.344	5.589	0.480	1.805	0.002	0.141	0.267	1.383	-	-	-	-
16	Rajim	Mahanadi	0.704	2.590	0.310	1.157	0.005	0.074	0.020	0.458	-	-	-	-
17	Baronda	Pairi	0.557	4.114	0.282	1.072	0.007	0.095	0.24	0.167	-	-	-	-

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Table No.3.3 : Sitewise Maximum/Minimum Value of Water Quality Parameters for Different River Basins.

I Basin : Mahanadi

Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Year : 2003-04														
1	Tikarapara	Mahanadi	0.000	0.004	0.000	0.000	0.24	0.610	6.01	8.82	0.41	7.00	-	-
2	Kesinga	Tel	-	-	0.000	0.005	-	-	4.50	7.07	0.13	1.56	-	-
3	Kantamal	Tel	-	-	0.000	0.003	-	-	1.41	7.97	0.19	1.19	-	-
4	Salebhata	Ong	-	-	0.000	0.005	-	-	5.05	7.44	0.37	1.60	-	-
5	Sundergarh	Ib	<-----Sample not received----->											
6	Kurubhanta	Mand	-	-	0.000	0.004	-	-	5.37	7.66	0.29	3.19	-	-
7	Basantpur	Mahanadi	-	-	0.000	0.003	-	-	2.80	8.19	0.30	1.51	-	-
8	Bamnidhi	Hasdeo	-	-	0.000	0.001	-	-	5.22	7.37	0.19	1.79	-	-
9	Manendragarh	Hasdeo	-	-	0.000	0.003	-	-	4.36	7.44	0.36	2.99	-	-
10	Rampur	Jonk	-	-	0.000	0.002	-	-	5.08	7.01	0.29	1.19	-	-
11	Jondhra	Jonk	-	-	0.000	0.009	-	-	4.14	7.66	0.19	1.41	-	-
12	Ghatora	Arpa	-	-	0.000	0.007	-	-	4.40	6.94	0.48	1.31	-	-
13	Andhiyarkore	Hamp	-	-	0.000	0.004	-	-	4.69	7.48	0.36	1.99	-	-
14	Simga	Seonath	-	-	0.000	0.003	-	-	5.08	6.94	0.37	3.21	-	-
15	Pathardhi	Kharun	-	-	0.000	0.008	-	-	4.35	6.83	0.39	2.19	-	-
16	Rajim	Mahanadi	-	-	0.000	0.003	-	-	5.11	7.55	0.36	1.26	-	-
17	Baronda	Pairi	-	-	0.000	0.002	-	-	5.96	8.50	0.40	2.87	-	-

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Table No.3.3 : Sitewise Maximum/Minimum Value of Water Quality Parameters for Different River Basins.

I Basin : Mahanadi

Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)

Year : 2003-04

1	Tikarapara	Mahanadi	-	-	-	-	-	-	-	-	-	-	0.00	0.00
2	Kesinga	Tel	-	-	-	-	-	-	-	-	-	-	-	-
3	Kantamal	Tel	-	-	-	-	-	-	-	-	-	-	-	-
4	Salebhata	Ong	-	-	-	-	-	-	-	-	-	-	-	-
5	Sundergarh	Ib	<-----Sample not received----->											
6	Kurubhanta	Mand	-	-	-	-	-	-	-	-	-	-	-	-
7	Basantpur	Mahanadi	-	-	-	-	-	-	-	-	-	-	-	-
8	Bamnidhi	Hasdeo	-	-	-	-	-	-	-	-	-	-	-	-
9	Manendragarh	Hasdeo	-	-	-	-	-	-	-	-	-	-	-	-
10	Rampur	Jonk	-	-	-	-	-	-	-	-	-	-	-	-
11	Jondhra	Jonk	-	-	-	-	-	-	-	-	-	-	-	-
12	Ghatora	Arpa	-	-	-	-	-	-	-	-	-	-	-	-
13	Andhiyarkore	Hamp	-	-	-	-	-	-	-	-	-	-	-	-
14	Simga	Seonath	-	-	-	-	-	-	-	-	-	-	-	-
15	Pathardhi	Kharun	-	-	-	-	-	-	-	-	-	-	-	-
16	Rajim	Mahanadi	-	-	-	-	-	-	-	-	-	-	-	-
17	Baronda	Pairi	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Sitewise Maximum/Minimum Value of Water Quality Parameters for Different River Basins.

I Basin : Mahanadi

Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)

Year : 2003-04

1	Tikarapara	Mahanadi	-	-	-	-	-	-	-	-	-	-	-	-
2	Kesinga	Tel	-	-	-	-	-	-	-	-	-	-	-	-
3	Kantamal	Tel	-	-	-	-	-	-	-	-	-	-	-	-
4	Salebhata	Ong	-	-	-	-	-	-	-	-	-	-	-	-
5	Sundergarh	Ib	<-----Sample not received----->											
6	Kurubhanta	Mand	-	-	-	-	-	-	-	-	-	-	-	-
7	Basantpur	Mahanadi	-	-	-	-	-	-	-	-	-	-	-	-
8	Bamnidhi	Hasdeo	-	-	-	-	-	-	-	-	-	-	-	-
9	Manendragarh	Hasdeo	-	-	-	-	-	-	-	-	-	-	-	-
10	Rampur	Jonk	-	-	-	-	-	-	-	-	-	-	-	-
11	Jondhra	Jonk	-	-	-	-	-	-	-	-	-	-	-	-
12	Ghatora	Arpa	-	-	-	-	-	-	-	-	-	-	-	-
13	Andhiyarkore	Hamp	-	-	-	-	-	-	-	-	-	-	-	-
14	Simga	Seonath	-	-	-	-	-	-	-	-	-	-	-	-
15	Pathardhi	Kharun	-	-	-	-	-	-	-	-	-	-	-	-
16	Rajim	Mahanadi	-	-	-	-	-	-	-	-	-	-	-	-
17	Baronda	Pairi	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Sitewise Maximum/Minimum Value of Water Quality Parameters for Different River Basins.

I Basin : Mahanadi

Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2003-04														
1	Tikarapara	Mahanadi	-	-	-	-	48.04	222.18	16.50	25.93	0.37	0.62	0.00	0.10
2	Kesinga	Tel	-	-	-	-	-	-	-	-	-	-	-	-
3	Kantamal	Tel	-	-	-	-	-	-	-	-	-	-	-	-
4	Salebhata	Ong	-	-	-	-	-	-	-	-	-	-	-	-
5	Sundergarh	Ib	<-----Sample not received----->											
6	Kurubhanta	Mand	-	-	-	-	-	-	-	-	-	-	-	-
7	Basantpur	Mahanadi	-	-	-	-	-	-	-	-	-	-	-	-
8	Bamnidhi	Hasdeo	-	-	-	-	-	-	-	-	-	-	-	-
9	Manendragarh	Hasdeo	-	-	-	-	-	-	-	-	-	-	-	-
10	Rampur	Jonk	-	-	-	-	-	-	-	-	-	-	-	-
11	Jondhra	Jonk	-	-	-	-	-	-	-	-	-	-	-	-
12	Ghatora	Arpa	-	-	-	-	-	-	-	-	-	-	-	-
13	Andhiyarkore	Hamp	-	-	-	-	-	-	-	-	-	-	-	-
14	Simga	Seonath	-	-	-	-	-	-	-	-	-	-	-	-
15	Pathardhi	Kharun	-	-	-	-	-	-	-	-	-	-	-	-
16	Rajim	Mahanadi	-	-	-	-	-	-	-	-	-	-	-	-
17	Baronda	Pairi	-	-	-	-	-	-	-	-	-	-	-	-

Source: Water Quality Year Book for 2003-2004

Note : All the ionic concentrations are expressed in mg./lit., unless mentioned otherwise.

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

II Basin : Subarnarekha, Burhabalang & Baitarni

Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp. Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

Year : 2002-03

a) Basin : Subarnarekha

1	Ghatshila	Subarnarekha	12.68	697.7	18.0	30.5	7.30	8.10	165	570	0.052	0.230	0.215	1.409
2	Adityapur	Kharkai	3.702	295.7	19.0	30.0	6.80	8.20	133	860	0.046	0.195	0.370	1.949
3	Muri	Subarnarekha	1.239	39.7	15.0	33.0	7.50	8.60	134	310	0.061	0.091	0.370	0.840
4	Jamshedpur	Subanarekha	-	-	18.5	32.0	7.3	8.05	167	300	0.045	0.092	0.370	1.253

b) Basin : Baitarni

1	Anandpur	Baitarni	7.391	540.00	20.5	29.0	7.30	8.20	95	192	0.032	0.068	0.215	0.452
2	Champua	Baitarni	2.810	75.14	21.5	28.5	7.50	7.90	68	540	0.020	0.067	0.109	0.215

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

II Basin : Subarnarekha, Burhabal														
Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2002-03														
a) Basin : Subarnarekha														
1	Ghatshila	Subarnarekha	0.800	2.720	0.400	1.440	0.027	0.050	0.006	0.049	0.003	0.017	0.000	0.000
2	Adityapur	Kharkai	0.640	5.200	0.240	1.440	0.008	0.046	0.009	0.030	0.017	0.092	0.000	0.000
3	Muri	Subarnarekha	0.720	1.440	0.240	0.880	0.011	0.026	0.001	0.012	0.003	0.034	0.000	0.000
4	Jamshedpur	Subanarekha	0.800	1.680	0.160	0.960	0.016	0.090	0.006	0.035	0.027	0.052	0.000	0.000
b) Basin : Baitarni														
1	Anandpur	Baitarni	0.320	0.960	0.160	0.480	0.009	0.031	0.004	0.025	0.003	0.054	0.000	0.000
2	Champua	Baitarni	0.320	2.800	0.160	1.840	0.007	0.031	0.002	0.022	0.002	0.012	0.000	0.000

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

II Basin : Subarnarekha, Burhabal

Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)

Year : 2002-03

a) Basin : Subarnarekha

1	Ghatshila	Subarnarekha	0.738	2.165	0.219	1.424	0.020	0.039	0.042	1.697	0.000	0.000	0.066	0.683
2	Adityapur	Kharkai	0.541	4.429	0.329	1.904	0.004	0.060	0.033	0.832	0.000	0.000	0.018	0.683
3	Muri	Subarnarekha	0.846	2.067	0.326	1.033	0.001	0.063	0.050	0.291	0.000	0.000	0.023	0.093
4	Jamshedpur	Subanarekha	0.837	1.575	0.329	1.370	0.001	0.006	0.017	0.100	0.000	0.000	0.024	0.093

b) Basin : Baitarni

1	Anandpur	Baitarni	0.547	1.280	0.217	0.493	0.005	0.009	0.033	0.166	0.000	0.000	0.010	0.106
2	Champua	Baitarni	0.466	4.135	0.110	0.767	0.005	0.053	0.021	0.324	0.000	0.000	0.041	0.177

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

II Basin : Subarnarekha, Burhabal

Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)

Year : 2002-03

a) Basin : Subarnarekha

1	Ghatshila	Subarnarekha	0.000	0.000	0.002	0.003	0.322	0.684	6.30	8.95	0.72	2.44	-	-
2	Adityapur	Kharkai	0.000	0.000	0.001	0.010	0.270	1.072	4.48	8.39	0.54	2.45	-	-
3	Muri	Subarnarekha	0.001	0.002	0.004	0.011	0.273	0.704	5.76	8.54	0.72	2.52	-	-
4	Jamshedpur	Subanarekha	0.000	0.000	0.003	0.006	0.256	0.684	3.96	7.83	0.75	2.04	-	-

b) Basin : Baitarni

1	Anandpur	Baitarni	0.000	0.000	0.001	0.004	0.138	0.947	-	-	-	-	-	-
2	Champua	Baitarni	0.000	0.000	0.000	0.000	0.301	0.901	-	-	-	-	-	-

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

II Basin : Subarnarekha, Burhabal														
Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2002-03														
a) Basin : Subarnarekha														
1	Ghatshila	Subarnarekha	-	-	-	-	64.05	208.17	7.30	25.22	19.00	0.98	0.00	0.00
2	Adityapur	Kharkai	-	-	-	-	44.04	332.27	15.97	29.95	0.39	1.07	0.00	0.00
3	Muri	Subarnarekha	-	-	-	-	48.04	96.08	20.61	44.77	0.53	1.34	0.00	0.02
4	Jamshedpur	Subanarekha	-	-	-	-	52.04	120.10	20.56	53.23	0.46	1.74	0.00	0.01
b) Basin : Baitarni														
1	Anandpur	Baitarni	-	-	-	-	28.02	72.06	19.08	34.96	0.32	0.71	0.00	0.00
2	Champua	Baitarni	-	-	-	-	24.02	232.19	11.63	26.61	0.17	0.41	0.00	0.01

Note : All the ionic concentrations are expressed in mg./lit., unless mentioned otherwise.

Source: Water Quality Year Book for 2002-03

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

III Basin : Brahmani														
Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2002-03														
1	Jenapur	Brahmani	10.32	3182	21.0	30.0	7.2	8.10	101	290	0.031	0.062	0.248	0.318
2	Talcher	Brahmani	2.372	188	2.2	32.0	7.1	8.10	103	172	0.32	0.052	0.231	0.370
3	Gomlai	Brahmani	10.32	3182	21.5	31.5	7.2	8.00	98	390	0.031	0.099	0.37	0.642
4	Tilga	Sankh/ Brahmani	1.311	256.6	16.0	29.0	7.1	7.80	50	150	0.034	0.061	0.198	0.318
5	Jaraikela	Koel/ Brahmani	2.129	599.2	18.0	31.0	7.1	8.10	79	240	0.032	0.079	0.165	0.396
6	Pamposh	Brahmani	16.45	352.4	19.5	29.5	7.6	8.10	88	280	0.031	0.099	0.265	0.470

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

III Basin : Brahmani														
Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2002-03														
1	Jenapur	Brahmani	0.480	1.360	0.160	0.800	0.001	0.014	0.001	0.009	0.001	0.041	0.000	0.121
2	Talcher	Brahmani	0.560	0.960	0.160	0.480	0.006	0.018	0.002	0.011	0.000	0.041	0.000	0.000
3	Gomlai	Brahmani	0.480	2.080	0.160	1.040	0.003	0.041	0.001	0.019	0.002	0.042	0.000	0.000
4	Tilga	Sankh/ Brahmani	0.240	0.640	0.080	0.480	0.009	0.023	0.003	0.009	0.002	0.016	0.000	0.000
5	Jaraikela	Koel/ Brahmani	0.400	1.200	0.160	0.720	0.002	0.015	0.001	0.007	0.006	0.031	0.000	0.000
6	Pamposh	Brahmani	0.400	1.280	0.160	0.880	0.005	0.029	0.002	0.007	0.011	0.057	0.240	0.430

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

III Basin : Brahmani														
Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2002-03														
1	Jenapur	Brahmani	0.541	1.673	0.217	0.657	0.000	0.000	0.009	0.087	0.000	0.000	0.017	0.171
2	Talcher	Brahmani	0.492	1.132	0.217	0.381	0.000	0.008	0.006	0.116	0.000	0.000	0.022	0.303
3	Gomlai	Brahmani	0.468	1.870	0.272	0.657	0.000	0.023	0.019	0.799	0.000	0.000	0.028	0.631
4	Tilga	Sankh/ Brahmani	0.295	0.886	0.163	0.295	0.000	0.000	0.012	0.063	0.000	0.000	0.013	0.074
5	Jaraikela	Koel/ Brahmani	0.394	1.870	0.164	0.384	0.000	0.004	0.018	0.050	0.000	0.000	0.015	0.081
6	Pamposh	Brahmani	0.492	1.378	0.217	0.438	0.000	0.027	0.048	0.133	0.000	0.000	0.010	0.184

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

III Basin : Brahmani														
Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
1	Jenapur	Brahmani	0.000	0.005	0.000	0.000	0.224	0.967	5.58	8.54	0.37	1.02	-	-
2	Talcher	Brahmani	0.000	0.002	0.000	0.009	0.270	0.562	6.48	8.34	0.41	1.12	-	-
3	Gomlai	Brahmani	0.000	0.007	0.000	0.000	0.270	0.684	5.09	8.14	0.55	1.63	-	-
4	Tilga	Sankh/ Brahmani	0.001	0.003	0.000	0.000	0.224	0.526	5.40	8.39	0.41	1.10	-	-
5	Jaraikela	Koel/ Brahmani	0.000	0.003	0.000	0.002	0.204	0.381	6.12	8.75	0.40	1.43	-	-
6	Pamposh	Brahmani	0.001	0.008	0.000	0.000	0.270	0.743	5.90	8.54	0.72	2.24	-	-

Year : 2002-03

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

III Basin : Brahmani														
Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year : 2002-03														
1	Jenapur	Brahmani	-	-	-	-	-	-	-	-	-	-	0.000	0.000
2	Talcher	Brahmani	-	-	-	-	-	-	-	-	-	-	0.000	0.000
3	Gomlai	Brahmani	-	-	-	-	-	-	-	-	-	-	0.000	0.000
4	Tilga	Sankh/ Brahmani	-	-	-	-	-	-	-	-	-	-	0.000	0.000
5	Jaraikela	Koel/ Brahmani	-	-	-	-	-	-	-	-	-	-	0.000	0.13
6	Pamposh	Brahmani	-	-	-	-	-	-	-	-	-	-	0.000	0.000

Table No.3.3 : Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

III Basin : Brahmani														
Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2002-03														
1	Jenapur	Brahmani	-	-	-	-	34.03	108.09	22.76	52.88	2.73	7.99	0.00	0.00
2	Talcher	Brahmani	-	-	-	-	36.03	72.06	19.09	25.83	0.39	0.49	0.00	0.01
3	Gomlai	Brahmani	-	-	-	-	8.46	88.07	16.63	28.54	0.39	0.54	0.00	0.00
4	Tilga	Sankh/ Brahmani	-	-	-	-	20.02	56.04	19.46	37.70	0.38	0.65	0.01	0.09
5	Jaraikela	Koel/ Brahmani	-	-	-	-	28.02	96.08	16.80	26.06	0.31	0.51	0.00	0.00
6	Pamposh	Brahmani	-	-	-	-	28.02	108.09	16.60	30.67	0.36	0.52	0.00	0.26

Source: Water Quality Year Book for 2002-03

Note : All the ionic concentrations are expressed in mg./lit., unless mentioned otherwise.

Table No.3.3 Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IV Basin : Rushikulya, Vamsadhara, Sarada & Nagavali														
Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2002-2003														
Basin : Rushikulya														
	Purushattampur	Rushikulya	0.170	191.8	33.6	25.0	7.30	8.20	190	350	0.033	0.058	0.335	0.861
Basin : Vamsadhara														
	Kashi Nagar	Vamsadhara	0.940	147.5	16.5	31.5	7.20	8.10	110	660	0.079	0.116	0.370	0.905
Basin : Nagavali														
	Srikakulam	Nagavali	1.450	145.30	26.0	34.1	7.50	8.10	210	560	0.041	0.138	0.283	1.679

Table No.3.3 Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IV Basin : Rushikulya, Vamsadhar														
Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2002-2003														
Basin : Rushikulya														
	Purushattampur	Rushikulya	1.040	1.920	0.72	0.880	0.003	0.017	0.001	0.008	0.000	0.000	0.000	0.009
Basin : Vamsdhara														
	Kashi Nagar	Vamsdhara	0.560	3.200	0.320	2.480	0.006	0.030	0.001	0.011	0.006	0.010	0.000	0.000
Basin : Nagavali														
	Srikakulam	Nagavali	1.440	2.800	0.320	1.200	0.003	0.022	0.002	0.014	0.000	0.000	0.000	0.000

Table No.3.3 Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IV Basin : Rushikulya, Vamsadhar														
Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2002-2003														
Basin : Rushikulya														
	Purushattampur	Rushikulya	1.410	2.445	0.384	0.767	0.005	0.042	0.058	0.175	0.000	0.000	0.008	0.039
Basin : Vamsdhara														
	Kashi Nagar	Vamsdhara	0.689	5.512	0.329	0.925	0.004	0.006	0.017	0.166	0.000	0.000	0.027	0.100
Basin : Nagavali														
	Srikakulam	Nagavali	1.699	3.775	0.326	1.370	0.011	0.068	0.092	0.250	0.000	0.000	0.019	0.213

Table No.3.3 Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IV Basin : Rushikulya, Vamsadhar														
Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year : 2002-2003														
Basin : Rushikulya														
	Purushattampur	Rushikulya	-	-	-	-	-	-	-	-	-	-	0.00	0.00
Basin : Vamsdhara														
	Kashi Nagar	Vamsdhara	-	-	-	-	-	-	-	-	-	-	0.00	0.00
Basin : Nagavali														
	Srikakulam	Nagavali	-	-	-	-	-	-	-	-	-	-	0.00	0.00

Table No.3.3 Sitewise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IV Basin : Rushikulya, Vamsadhar														
Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2002-2003														
Basin : Rushikulya														
	Purushattampur	Rushikulya	-	-	-	-	80.06	132.11	13.57	52.45	0.37	0.91	0.00	0.04
Basin : Vamsdhara														
	Kashi Nagar	Vamsdhara	-	-	-	-	32.03	284.23	11.78	33.73	0.41	0.84	0.05	0.84
Basin : Nagavali														
	Srikakulam	Nagavali	-	-	-	-	88.07	192.15	12.08	52.49	0.30	1.21	0.03	0.38

Note : 1. All the ionic concentrations are expressed in mg./lit. unless mentioned otherwise.

2. (-) indicate that analysis of a particular parameter has not been carried out.

Source: Water Quality YearBook for 2002-03

Table No.3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

V Basin : Godavari														
Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2004-2005														
1	Polavaram	Godavari	264.2	4990	24.0	31.0	7.9	8.3			1.5	2.2	5.9	21.0
2	Konta	Sabari	136.0	1156	24.0	31.5	7.6	8.4	↑	↑	0.7	2.3	6.2	28.0
3	Perur	Godavari	27.10	6296	23.0	30.0	7.9	8.5			1.4	5.7	0.9	33.0
4	Pathagudem	Indravati	5.523	2705	24.0	31.0	7.4	8.3			1.1	2.3	5.0	19.0
5	Jagdapur	Indravati	2.245	162.4	16.0	27.0	7.6	8.5			1.4	2.4	1.4	20.0
6	Nowrangpur	Indravati	2.340	55.04	18.0	28.0	7.3	8.3			1.4	2.5	5.0	23.0
7	Tekra	Pranhita	4.309	3760	21.6	31.8	6.2	8.9			1.6	4.7	9.2	51.0
8	Bhatpalli	Peddavagu	0.030	50.24	17.0	37.0	8.2	8.8			0.8	27.6	0.10	69.4
9	Bamni	Wardha	0.349	698.1	21.0	33.5	7.7	8.7			2.7	45.4	12.6	364.4
10	P.G. Bridge	Penganga	0.000	66.92	25.5	31.5	8.2	9.2			2.7	4.7	15.9	33.8
11	Nandgaon	Wunna	0.318	60.34	12.5	29.0	8.0	9.0			1.6	7.8	11.3	93.1
12	Hivra	Wardha	0.00	12.67	19.2	27.5	8.1	8.9			2.0	4.7	15.6	57.2
13	Bhishnur	Wunna	4.457	9.117	18.0	28.0	7.9	8.4			0.8	5.9	43.0	95.9
14	Ashti	Wainganga	1.231	2118	21.5	34.0	8.0	9.1			1.2	3.9	5.5	44.4
15	Pauni	Wainganga	2.348	750.5	22.0	31.0	8.0	8.9			2.0	5.5	8.5	60.7
16	Satrapur	Kanhan	0.252	83.65	18.0	32.0	7.9	8.6			1.2	5.1	12.6	79.5
17	Rajegaon	Bagh	0.000	149.6	17.0	32.5	7.3	8.0			1.2	3.100	2.3	20.9
18	Kumhari	Wainganga	0.633	89.9	17.0	29.0	7.8	8.5			0.8	2.700	6.2	22.5
19	Mancherial	Godavari	0.697	46.55	15.0	27.0	8.2	8.7			2.3	6.1	32.5	72.0
20	Betmogra	Manar	3.516	4.473	26.0	28.0	8.0	8.0			5.0	6.0	34.0	39.0
21	Degloor	Lendi	-	7.616	26.0	26.0	8.2	8.2			3.2	3.6	17.0	22.0
22	Saigaon	Manjira	-	18.95	-	23.0	-	7.9			-	3.8	-	17.0
23	Yelli	Godavari	-	101.7	-	22.0	-	7.9			-	3.2	-	23.0
24	Purna	Purna	9.899	40.490	22.0	24.0	7.9	8.0			2.0	3.4	16.0	21.0
25	Zari	Dudhna	0.000	3.411	25.0	27.0	8.0	8.4			1.3	2.5	14.0	19.0
26	G.R. Bridge	Godavari	30.93	68.98	26.0	26.0	8.0	8.3			2.3	3.3	20.0	26.0
27	Dhalegaon	Godavari	9.907	27.64	25.0	27.0	7.9	8.7			2.9	3.7	44.0	47.0

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Table No.3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

V Basin : Godavari														
Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2004-2005														
1	Polavaram	Godavari	14	23	1.9	9.2	0.0	9.9	0.0	0.1	0.01	0.35	0.0	11.9
2	Konta	Sabari	6	22	0.5	10.7	0.0	12.5	0.0	0.1	0.01	0.16	0.0	15.0
3	Perur	Godavari	25	40	1.5	12.6	0.0	12.3	0.0	0.3	0.01	0.39	0.0	14.8
4	Pathagudem	Indravati	10	22	1.0	8.7	0.0	12.5	0.0	0.2	0.01	0.12	0.0	15.0
5	Jagdapur	Indravati	16	45	1.5	13.3	0.0	13.8	0.0	0.1	0.02	0.12	0.0	16.6
6	Nowrangpur	Indravati	8	51	1.9	2.9	0.0	12.5	0.0	0.2	0.02	0.15	0.0	15.0
7	Tekra	Pranhita	22	34	2.4	20.1	0.0	11.0	0.0	0.2	0.05	0.63	0.0	13.2
8	Bhatpalli	Peddavagu	19	43	5.4	36.5	N.A.	N.A.	0.0	0.1	0.05	0.52	0.0	24.3
9	Bamni	Wardha	22	235	5.2	80.6	0.0	7.2	0.0	0.2	0.05	2.60	0.0	8.7
10	P.G. Bridge	Penganga	19	33	7.2	22.3	0.0	17.9	0.0	0.2	0.08	0.49	0.0	21.6
11	Nandgaon	Wunna	19	35	5.4	29.4	0.0	17.2	0.0	0.1	0.06	0.41	0.0	20.7
12	Hivra	Wardha	17	32	9.6	25.5	0.0	10.2	0.0	0.100	0.06	0.20	0.0	12.3
13	Bhishnur	Wunna	31	43	18.8	32.8	0.0	10.7	0.0	0.2	0.05	0.38	0.0	12.9
14	Ashti	Wainganga	17	30	1.9	19.5	0.0	13.4	0.0	0.100	0.07	0.41	0.0	16.2
15	Pauni	Wainganga	21	41	6.3	19.6	0.0	15.2	0.0	0.1	0.07	0.72	0.0	18.3
16	Satrapur	Kanhan	25	64	4.4	35.4	N.A.	N.A.	-	-	-	-	-	-
17	Rajegaon	Bagh	3	35	3.4	20.1	N.A.	N.A.	0.0	0.5	0.08	0.49	0.0	0.0
18	Kumhari	Wainganga	21	58	6.8	26.8	N.A.	N.A.	0.0	0.1	0.05	0.63	0.0	10.8
19	Mancherial	Godavari	27	49	5.8	18.2	0.0	21.8	0.0	0.1	0.01	0.09	0.0	26.1
20	Betmogra	Manar	34	57	2.9	16.5	0.0	0.0	0.0	0.1	0.05	0.05	0.0	0.0
21	Degloor	Lendi	38	60	1.9	11.2	0.0	0.0	0.0	0.1	0.05	0.05	0.0	0.0
22	Saigaon	Manjira	-	26	-	4.4	0.0	0.0	-	0.30	-	0.05	-	0.0
23	Yelli	Godavari	-	25	-	4.6	-	0.0	-	0.00	-	0.05	-	0.0
24	Purna	Purna	16	30	4.4	5.3	0.0	0.0	0.0	0.30	0.05	0.05	0.0	0.0
25	Zari	Dudhna	19	22	2.2	4.9	0.0	9.9	N.A.	N.A.	0.05	0.05	0.0	11.9
26	G.R. Bridge	Godavari	26	33	1.7	1.9	0.0	7.9	0.0	0.1	0.05	0.05	0.0	9.5
27	Dhalegaon	Godavari	24	32	3.9	7.3	0.0	39.6	0.0	0.2	0.05	0.05	0.0	47.5

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Table No.3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

V Basin : Godavari														
Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2004-2005														
1	Polavaram	Godavari	60	97	9.6	21.5	0.00	0.46	0.00	9.7			0.02	3.85
2	Konta	Sabari	46	90	3.8	53.6	0.00	0.45	0.00	12.1			0.13	1.01
3	Perur	Godavari	70	176	5.9	36.1	0.00	0.62	0.00	16.0			N.A.	N.A.
4	Pathagudem	Indravati	48	110	7.2	18.7	0.00	0.50	0.00	7.3			0.00	1.14
5	Jagdapur	Indravati	58	210	5.7	20.6	0.00	0.61	0.00	4.0			0.00	1.07
6	Nowrangpur	Indravati	58	180	3.8	29.8	0.00	0.47	0.00	6.0			0.00	1.36
7	Tekra	Pranhita	105	212	2.8	47.5	0.25	1.67	9.1	38.4			0.48	2.41
8	Bhatpalli	Peddavagu	103	347	4.3	47.5	0.21	1.60	4.3	38.4			0.48	6.27
9	Bamni	Wardha	115	532	7.1	826.7	0.22	2.13	7.7	240.1			0.96	28.93
10	P.G. Bridge	Penganga	148	228	5.0	15.6	0.25	0.63	3.8	12.5			0.01	3.86
11	Nandgaon	Wunna	128	264	3.5	78.0	0.19	1.29	5.8	27.9			0.48	5.79
12	Hivra	Wardha	134	265	5.7	24.8	0.21	0.89	5.8	17.3			0.48	2.89
13	Bhishnur	Wunna	267	464	4.3	20.6	0.19	1.44	4.8	13.4			0.48	1.45
14	Ashti	Wainganga	84	168	2.1	23.4	0.19	1.29	4.8	30.7			0.48	1.93
15	Pauni	Wainganga	95	243	5.7	53.9	0.21	1.48	4.8	23.1			0.48	6.27
16	Satrapur	Kanhan	-	-	-	-	-	-	-	-			-	-
17	Rajegaon	Bagh	66	181	1.4	8.5	0.15	0.87	2.9	24.0			0.48	4.82
18	Kumhari	Wainganga	81	266	2.8	14.2	0.21	0.93	3.8	18.3			0.48	5.30
19	Mancherial	Godavari	169	233	16.0	65.5	0.43	1.12	10.6	84.1			0.07	1.12
20	Betmogra	Manar	215	226	25.0	37.0	0.44	0.52	9.0	28.0			1.00	2.69
21	Degloor	Lendi	192	215	25.0	33.0	0.45	0.58	17.0	18.0			0.49	0.67
22	Saigaon	Manjira	-	128	-	15.7	-	0.45	-	6.0			-	0.88
23	Yelli	Godavari	-	135	-	12.0	-	0.42	-	21.0			-	0.67
24	Purna	Purna	99	153	10.0	25.0	0.43	0.62	10.0	19.0			0.44	1.15
25	Zari	Dudhna	73	123	5.8	17.6	0.43	0.58	2.0	16.0			0.34	0.97
26	G.R. Bridge	Godavari	73	89	8.0	20.0	0.44	0.93	18.0	23.0			0.01	0.64
27	Dhalegaon	Godavari	97	167	16.0	37.0	0.43	0.45	19.0	23.0			0.59	1.31

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Table No.3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

V Basin : Godavari														
Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Year : 2004-2005														
1	Polavaram	Godavari	0.00	0.05	0.000	0.088	6.0	24.0	3.8	7.5	0	2.9		
2	Konta	Sabari	0.00	0.02	0.000	0.078	8.0	15.0	4.6	7.5	0.2	1.3		
3	Perur	Godavari	0.00	0.03	0.000	0.082	3.0	23.0	5.4	7.5	0.2	1.0		
4	Pathagudem	Indravati	0.00	0.02	0.000	0.143	6.0	19.0	4.6	7.7	0.2	1.4		
5	Jagdapur	Indravati	0.00	0.02	0.000	0.978	5.0	18.0	6.1	8.4	0.2	1.8		
6	Nowrangpur	Indravati	0.00	0.03	0.000	0.215	6.0	18.0	5.1	6.9	0.2	1.0		
7	Tekra	Pranhita	0.00	0.29	0.010	0.197	16.5	36.0	5.7	7.9	0.5	1.9		
8	Bhatpalli	Peddavagu	0.00	0.32	0.010	0.320	20.4	100.0	5.9	9.8	0.3	4.5		
9	Bamni	Wardha	0.00	2.86	0.099	4.309	18.0	55.0	1.4	7.3	0.5	50.0		
10	P.G. Bridge	Penganga	0.00	0.25	0.010	0.148	28.5	47.5	6.3	9.6	1.5	3.5		
11	Nandgaon	Wunna	0.00	2.29	0.010	0.271	20.4	49.0	3.7	8.7	0.5	9.0		
12	Hivra	Wardha	0.00	0.39	0.010	0.222	22.5	43.0	3.5	7.4	0.5	10.0		
13	Bhishnur	Wunna	0.00	0.11	0.010	1.354	19.5	51.1	0.0	7.1	1.2	42.0		
14	Ashti	Wainganga	0.00	0.32	0.010	0.172	16.5	55.0	5.2	8.9	0.8	2.1		
15	Pauni	Wainganga	0.07	2.86	0.099	0.443	15.0	43.0	6.1	8.1	0.6	4.2		
16	Satrapur	Kanhan	-	-	-	-	-	-	-	-	-	-		
17	Rajegaon	Bagh	0.00	0.43	0.010	1.379	19.5	41.5	5.2	8.7	0.3	5.0		
18	Kumhari	Wainganga	0.00	0.11	0.049	0.345	28.5	63.1	6.2	13.2	0.4	3.1		
19	Mancherial	Godavari	0.00	0.02	0.000	0.160	5.0	23.0	4.6	7.3	0.6	2.3		
20	Betmogra	Manar	-	0.17	0.040	0.110	19.0	32.0	6.0	6.4	0.6	1.9		
21	Degloor	Lendi	-	0.02	0.010	0.140	13.0	27.0	6.2	6.6	1.0	1.1		
22	Saigaon	Manjira	-	-	-	0.010	-	17.0	-	5.6	-	0.3		
23	Yelli	Godavari	-	0.01	-	0.090	-	11.0	-	6.4	-	0.1		
24	Purna	Purna	-	0.01	0.010	0.200	10.0	18.0	5.4	5.5	0.8	1.2		
25	Zari	Dudhna	-	0.01	0.020	0.260	5.0	16.0	4.5	6.2	0.6	2.2		
26	G.R. Bridge	Godavari	-	0.01	0.010	0.080	12.0	23.0	3.9	5.8	1.2	1.5		
27	Dhalegaon	Godavari	-	0.01	0.010	0.110	20.0	30.0	4.6	5.0	0.7	1.0		

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Table No.3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

V Basin : Godavari														
Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year : 2004-2005														
1	Polavaram	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
2	Konta	Sabari	-	-	-	-	-	-	-	-	-	-	-	-
3	Perur	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
4	Pathagudem	Indravati	-	-	-	-	-	-	-	-	-	-	-	-
5	Jagdapur	Indravati	-	-	-	-	-	-	-	-	-	-	-	-
6	Nowrangpur	Indravati	-	-	-	-	-	-	-	-	-	-	-	-
7	Tekra	Pranhita	-	-	-	-	-	-	-	-	-	-	-	-
8	Bhatpalli	Peddavagu	-	-	-	-	-	-	-	-	-	-	-	-
9	Bamni	Wardha	-	-	-	-	-	-	-	-	-	-	-	-
10	P.G. Bridge	Penganga	-	-	-	-	-	-	-	-	-	-	-	-
11	Nandgaon	Wunna	-	-	-	-	-	-	-	-	-	-	-	-
12	Hivra	Wardha	-	-	-	-	-	-	-	-	-	-	-	-
13	Bhishnur	Wunna	-	-	-	-	-	-	-	-	-	-	-	-
14	Ashti	Wainganga	-	-	-	-	-	-	-	-	-	-	-	-
15	Pauni	Wainganga	-	-	-	-	-	-	-	-	-	-	-	-
16	Satrapur	Kanhan	-	-	-	-	-	-	-	-	-	-	-	-
17	Rajegaon	Bagh	-	-	-	-	-	-	-	-	-	-	-	-
18	Kumhari	Wainganga	-	-	-	-	-	-	-	-	-	-	-	-
19	Mancherial	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
20	Betmogra	Manar	-	-	-	-	-	-	-	-	-	-	-	-
21	Degloor	Lendi	-	-	-	-	-	-	-	-	-	-	-	-
22	Saigaon	Manjira	-	-	-	-	-	-	-	-	-	-	-	-
23	Yelli	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
24	Purna	Purna	-	-	-	-	-	-	-	-	-	-	-	-
25	Zari	Dudhna	-	-	-	-	-	-	-	-	-	-	-	-
26	G.R. Bridge	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
27	Dhalegaon	Godavari	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

V Basin : Godavari														
Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
Year : 2004-2005														
1	Polavaram	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
2	Konta	Sabari	-	-	-	-	-	-	-	-	-	-	-	-
3	Perur	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
4	Pathagudem	Indravati	-	-	-	-	-	-	-	-	-	-	-	-
5	Jagdapur	Indravati	-	-	-	-	-	-	-	-	-	-	-	-
6	Nowrangpur	Indravati	-	-	-	-	-	-	-	-	-	-	-	-
7	Tekra	Pranhita	-	-	-	-	-	-	-	-	-	-	-	-
8	Bhatpalli	Peddavagu	-	-	-	-	-	-	-	-	-	-	-	-
9	Bamni	Wardha	-	-	-	-	-	-	-	-	-	-	-	-
10	P.G. Bridge	Penganga	-	-	-	-	-	-	-	-	-	-	-	-
11	Nandgaon	Wunna	-	-	-	-	-	-	-	-	-	-	-	-
12	Hivra	Wardha	-	-	-	-	-	-	-	-	-	-	-	-
13	Bhishnur	Wunna	-	-	-	-	-	-	-	-	-	-	-	-
14	Ashti	Wainganga	-	-	-	-	-	-	-	-	-	-	-	-
15	Pauni	Wainganga	-	-	-	-	-	-	-	-	-	-	-	-
16	Satrapur	Kanhan	-	-	-	-	-	-	-	-	-	-	-	-
17	Rajegaon	Bagh	-	-	-	-	-	-	-	-	-	-	-	-
18	Kumhari	Wainganga	-	-	-	-	-	-	-	-	-	-	-	-
19	Mancherial	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
20	Betmogra	Manar	-	-	-	-	-	-	-	-	-	-	-	-
21	Degloor	Lendi	-	-	-	-	-	-	-	-	-	-	-	-
22	Saigaon	Manjira	-	-	-	-	-	-	-	-	-	-	-	-
23	Yelli	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
24	Purna	Purna	-	-	-	-	-	-	-	-	-	-	-	-
25	Zari	Dudhna	-	-	-	-	-	-	-	-	-	-	-	-
26	G.R. Bridge	Godavari	-	-	-	-	-	-	-	-	-	-	-	-
27	Dhalegaon	Godavari	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

V Basin : Godavari														
Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2004-2005														
1	Polavaram	Godavari	-	-	-	-	45	78	^	^	0.3	1.4	0.0	0.3
2	Konta	Sabari	-	-	-	-	19	53	-----	-----	0.3	2.4	0.0	0.5
3	Perur	Godavari	-	-	-	-	77	124	-----	-----	0.0	1.3	0.0	0.8
4	Pathagudem	Indravati	-	-	-	-	43	71	-----	-----	0.3	1.2	0.0	0.6
5	Jagdapur	Indravati	-	-	-	-	50	154	-----	-----	0.1	0.9	0.0	0.5
6	Nowrangpur	Indravati	-	-	-	-	28	135	-----	-----	0.2	1.9	0.0	0.5
7	Tekra	Pranhita	-	-	-	-	72	158	-----	-----	0.4	2.2	0.0	1.0
8	Bhatpalli	Peddavagu	-	-	-	-	72	196	-----	-----	0.6	3.0	0.0	2.6
9	Bamni	Wardha	-	-	-	-	72	222	-----	-----	0.5	6.1	0.0	1.1
10	P.G. Bridge	Penganga	-	-	-	-	88	925	-----	-----	0.6	1.2	0.0	1.2
11	Nandgaon	Wunna	-	-	-	-	92	155	-----	-----	0.5	3.3	0.0	1.7
12	Hivra	Wardha	-	-	-	-	92	184	-----	-----	0.7	2.1	0.0	1.8
13	Bhishnur	Wunna	-	-	-	-	92	180	-----	-----	1.3	2.9	0.0	3.4
14	Ashti	Wainganga	-	-	-	-	172	214	-----	-----	0.3	2.0	0.0	1.3
15	Pauni	Wainganga	-	-	-	-	64	144	-----	-----	0.4	2.1	0.0	0.9
16	Satrapur	Kanhan	-	-	-	-	96	166	-	-	-	-	-	-
17	Rajegaon	Bagh	-	-	-	-	37	134	-----	-----	0.2	0.9	0.0	0.7
18	Kumhari	Wainganga	-	-	-	-	60	198	-----	-----	0.4	0.8	0.0	0.6
19	Mancherial	Godavari	-	-	-	-	116	152	-----	-----	1.6	2.5	0.7	1.5
20	Betmogra	Manar	-	-	-	-	153	154	-----	-----	1.2	1.4	0.4	0.6
21	Degloor	Lendi	-	-	-	-	141	158	-----	-----	0.6	0.8	0.3	0.4
22	Saigaon	Manjira	-	-	-	-	-	83	-----	-----	-	0.8	-	0.4
23	Yelli	Godavari	-	-	-	-	-	81	-----	-----	-	1.1	-	0.6
24	Purna	Purna	-	-	-	-	58	97	-----	-----	0.9	0.9	0.4	0.6
25	Zari	Dudhna	-	-	-	-	56	75	-----	-----	0.8	1.1	0.4	0.5
26	G.R. Bridge	Godavari	-	-	-	-	73	89	-----	-----	0.9	1.3	0.0	0.0
27	Dhalegaon	Godavari	-	-	-	-	90	96	-----	-----	2.0	2.2	0.9	1.3

Note : 1. All the ionic concentrations are expressed in mg./lit. unless mentioned otherwise.

2. (-) indicate that analysis of a particular parameter has not been carried out.

Source: Water Quality YearBook for 2004-05 (Godavari Basin)

(Updated during September 2007)

Table No.3.3 : Site-wise Maximum.Minimum Values of Water Quality Paramters for Different River Basin.

VI Basin : Krishna														
Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2004-2005														
1	Vijaywada	Krishna	0.230	23.99	25.00	29.50	7.14	8.62	512	742	0.02	0.18	1.52	4.00
2	Keesara	Munneru	3.900	82.68	26.00	28.00	8.18	8.38	434	961	0.043	0.079	2.000	4.261
3	Madhira	Wyra	0.040	55.84	17.00	30.50	7.92	8.24	414	1120	0.020	0.115	1.913	5.696
4	Paleru Bridge	Paleru	0.020	12.93	24.00	30.00	7.37	8.04	821	3180	0.033	0.230	1.000	4.696
5	Wadenapalli	Krishna	15.26	424.9	25.00	30.00	7.73	8.43	458	842	0.005	0.116	1.348	4.522
6	Dameracherla	Musi	1.800	121.0	23.83	43.64	7.83	8.48	828	976	0.023	0.0742	2.000	3.913
7	Pondugala	Krishna	9.690	134.4	24.00	30.00	7.95	8.31	409	699	0.020	0.074	1.435	2.739
8	Halia	Halia	0.130	118.1	15.00	28.50	7.92	8.59	400	1020	0.050	0.1151	1.7826	4.5217
9	Bawapuram	Tungbhadra	0.060	95.64	22.00	29.80	7.98	8.72	674	1250	0.056	0.105	1.435	6.391
10	Mantralayam	Tungbhadra	0.540	410.4	21.00	28.00	7.57	8.61	316	1310	0.059	0.240	0.957	7.000
11	T. Ramapuram	Hagari	4.330	25.47	26.00	29.00	7.96	8.21	374	1440	0.032	0.110	2.000	6.609
12	Kellodu	Vedavathi	-----> No Flow <-----											
13	Marol	Varada	46.02	208	25.00	27.00	7.40	7.70	100	159	0.03	0.04	0.44	0.67
14	Harlahalli	Tungbhadra	58.16	218.7	27.00	28.50	7.20	8.09	180	280	0.04	0.86	0.54	0.77
15	Byaladahalli	Haridra	4.346	5.451	25.00	26.00	8.00	8.10	549	589	0.66	1.32	2.23	2.40
16	Kuppelur	Kumudvathi	2.480	7.48	25.00	26.50	7.88	8.10	433	545	0.12	0.17	1.96	2.88
17	Honali	Tungbhadra	23.60	303.6	27.50	31.00	7.20	7.90	122	318	0.03	1.12	0.43	1.28
18	Shimoga	Tunga	26.11	181.7	23.00	25.00	7.20	7.80	269	352	0.21	0.35	0.96	2.57
19	Holehonnur	Bhedra	8.793	19.05	28.00	29.00	7.20	7.50	459	611	0.20	1.29	1.92	3.39
20	Krishna Agraharam	Krishna	2.110	5678	20.00	28.00	6.40	8.61	282	806	0.005	0.146	0.609	4.261
21	Yadgir	Bhima	21.02	760.2	23.00	28.50	7.75	8.59	295	588	0.028	0.072	0.913	3.217
22	Malkhed	Kagna	0.350	88.21	20.00	26.50	7.87	8.12	245	521	0.069	0.120	0.913	3.391
23	Wadakbal	Sina	1.32	106.0	23.00	25.00	8.03	8.37	237	1293	0.03	0.41	1.52	8.45
24	Takali	Bhima	5.420	483.1	23.50	24.50	8.01	8.61	436	454	0.04	0.05	1.31	2.28
25	Sarati	Nira	74.35	74.35	26.00	28.00	8.11	8.51	248	431	0.02	0.07	0.84	1.83
26	Phulgaon	Bhima	40.92	256.5	23.00	24.50	7.53	8.30	165	407	0.03	0.03	0.44	0.78
27	Huvenhedgi	Krishna	29.24	666.5	22.00	30.00	8.02	8.48	330	817	0.026	0.074	1.478	4.000
28	Cholachguda	Malaprabha	4.670	139.0	22.00	23.50	7.91	8.41	191	429	0.05	0.15	0.52	1.70
29	Mudhol	Ghataprabha	3.470	175.1	25.00	26.00	7.67	8.33	194	1389	0.04	0.09	0.51	3.34
30	Karad	Krishna	0.17	577.0	18.00	25.00	7.34	8.61	70	528	0.01	0.09	0.14	1.48
31	Kurundwad	Krishna	422.3	1584	21.00	21.50	7.56	8.18	114	424	0.02	0.04	0.34	1.24
32	Waruji	Koyna	4.125	405.0	14.00	25.00	7.37	7.72	70	161	0.01	0.02	0.16	0.30

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Table No.3.3 : Site-wise Maximum.Minimum Values of Water Quality Paramters for Different River Basin.

VI Basin : Krishna														
Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2004-2005														
1	Vijaywada	Krishna	1.50	2.590	0.66	2.55	-	-	0.000	0.000	0.000	0.000	0.000	0.000
2	Keesara	Munneru	1.347	2.046	1.152	1.810	-	-	Nil	Nil	Nil	Nil	0.600	0.600
3	Madhira	Wyra	1.248	2.790	1.069	1.974	-	-	Nil	Nil	Nil	Nil	Nil	Nil
4	Paleru Bridge	Paleru	1.497	4.341	1.316	5.182	-	-	Nil	Nil	Nil	Nil	Nil	Nil
5	Wadenapalli	Krishna	1.248	2.196	0.987	2.550	-	-	Nil	Nil	Nil	Nil	0.570	0.833
6	Dameracherla	Musi	2.295	3.792	2.221	3.701	-	-	Nil	Nil	Nil	Nil	Nil	0.467
7	Pondugala	Krishna	0.699	2.395	0.658	1.892	-	-	Nil	Nil	Nil	Nil	Nil	0.367
8	Halia	Halia	1.2974	2.4451	0.987	2.2208	-	-	Nil	Nil	Nil	Nil	0.600	0.666
9	Bawapuram	Tungbhadra	1.297	2.894	0.576	2.468	-	-	Nil	Nil	Nil	Nil	0.333	1.267
10	Mantralayam	Tungbhadra	0.998	3.144	0.494	2.632	-	-	Nil	Nil	Nil	Nil	0.366	0.967
11	T. Ramapuram	Hagari	1.248	2.295	0.411	2.550	-	-	-	-	Nil	Nil	Nil	Nil
12	Kellodu	Vedavathi	<-----No Flow----->											
13	Marol	Varada	0.39	0.63	0.24	0.66	-	-	-	-	-	-	0.00	0.00
14	Harlahalli	Tungbhadra	0.60	1.10	0.44	1.30	-	-	0.000	0.000	-	-	0.00	0.00
15	Byaladahalli	Haridra	1.25	1.88	1.10	1.73	-	-	0.028	0.039	-	-	0.00	0.00
16	Kuppelur	Kumudvathi	1.01	1.41	1.41	1.65	-	-	-	-	-	-	0.00	0.00
17	Honali	Tungbhadra	0.49	0.62	0.39	0.75	-	-	0.004	0.004	-	-	0.00	0.00
18	Shimoga	Tunga	0.32	0.77	0.67	1.04	-	-	0.000	0.012	-	-	0.00	0.00
19	Holehonnur	Bhedra	1.06	1.38	1.03	1.82	-	-	-	-	-	-	0.00	0.00
20	Krishna Agraharam	Krishna	0.848	2.994	0.740	2.879	-	-	Nil	Nil	Nil	Nil	0.60	0.76
21	Yadgir	Bhima	0.609	1.560	0.576	3.450	-	-	Nil	Nil	Nil	Nil	0.600	0.730
22	Malkhed	Kagna	0.798	1.447	0.578	1.152	-	-	Nil	Nil	Nil	Nil	Nil	Nil
23	Wadakbal	Sina	0.10	2.47	0.30	6.53	-	-	0.003	0.007	0.004	0.008	0.00	0.20
24	Takali	Bhima	0.41	1.98	0.79	2.36	-	-	0.002	0.006	0.000	0.007	0.00	0.34
25	Sarati	Nira	0.79	1.54	0.10	0.72	-	-	0.005	0.007	0.000	0.007	0.00	0.80
26	Phulgaon	Bhima	0.59	2.56	0.300	1.33	-	-	0.000	0.002	0.004	0.005	0.00	0.40
27	Huvenhedgi	Krishna	0.898	4.142	0.576	1.645	-	-	Nil	Nil	Nil	Nil	Nil	0.457
28	Cholachguda	Malaprabha	0.51	1.31	0.20	1.11	-	-	0.001	0.010	0.004	0.028	0.00	0.40
29	Mudhol	Ghataprabha	0.72	4.25	0.30	2.47	-	-	0.003	0.006	0.004	0.011	0.00	0.00
30	Karad	Krishna	0.37	1.82	0.04	1.82	-	-	0.000	0.009	0.000	0.010	0.00	1.00
31	Kurundwad	Krishna	0.30	1.84	0.20	1.59	-	-	0.000	0.004	0.004	0.008	0.00	0.60
32	Waruji	Koyna	0.20	0.69	0.10	0.40	-	-	0.000	0.004	0.000	0.004	0.00	0.00

Contd/---

Table No.3.3 : Site-wise Maximum.Minimum Values of Water Quality Paramters for Different River Basin.

VI Basin : Krishna														
Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2004-2005														
1	Vijaywada	Krishna	2.28	6.11	1.16	1.88	0.005	0.061	0.77	1.83	-	-	0.000	0.000
2	Keesara	Munneru	2.803	6.607	0.855	2.647	0.039	0.065	0.688	1.458	-	-	-	-
3	Madhira	Wyra	3.639	8.115	1.026	3.069	0.035	0.058	0.646	1.458	-	-	Nil	Nil
4	Paleru Bridge	Paleru	4.607	7.164	1.971	3.953	0.025	0.074	0.583	1.708	-	-	Nil	Nil
5	Wadenapalli	Krishna	1.984	4.295	1.095	3.044	0.027	0.065	0.854	1.542	-	-	Nil	Nil
6	Dameracherla	Musi	4.131	6.623	2.178	3.151	0.046	0.066	0.833	2.500	-	-	Nil	Nil
7	Pondugala	Krishna	2.721	3.525	0.903	1.726	0.0290	0.047	0.958	1.521	-	-	Nil	Nil
8	Halia	Halia	3.2951	5.8852	0.7464	2.2446	0.0421	0.0579	0.7292	1.4583	-	-	Nil	Nil
9	Bawapuram	Tungbhadra	2.066	5.295	0.746	3.798	0.037	0.066	0.688	6.250	-	-	Nil	Nil
10	Mantralayam	Tungbhadra	2.066	5.066	0.691	4.202	0.031	0.063	0.542	9.583	-	-	Nil	Nil
11	T. Ramapuram	Hagari	2.295	4.918	0.829	4.863	0.000	0.000	1.125	5.938	-	-	Nil	Nil
12	Kellodu	Vedavathi	-----> No Flow <-----											
13	Marol	Varada	0.34	1.12	0.38	0.62	0.003	0.020	0.031	0.031	-	-	0.090	0.320
14	Harlahalli	Tungbhadra	0.44	1.47	0.56	0.74	0.002	0.034	0.040	0.700	-	-	0.200	1.040
15	Byaladahalli	Haridra	3.11	3.26	2.21	2.48	0.028	0.039	0.420	0.440	-	-	0.300	0.310
16	Kuppelur	Kumudvathi	2.43	2.72	1.64	2.50	0.016	0.130	0.050	0.120	-	-	0.160	0.270
17	Honali	Tungbhadra	0.76	1.94	0.43	1.12	0.000	0.021	0.020	0.200	-	-	0.090	0.190
18	Shimoga	Tunga	1.41	1.44	1.19	2.14	0.005	0.005	0.060	0.100	-	-	0.150	0.210
19	Holehonnur	Bhedra	1.98	3.29	1.81	3.35	0.006	0.019	0.040	0.520	-	-	0.110	0.700
20	Krishna Agraharam	Krishna	2.115	5.213	0.470	1.935	0.030	0.057	0.375	1.833	-	-	Nil	Nil
21	Yadgir	Bhima	2.180	3.656	0.470	1.872	0.032	0.063	0.521	1.458	-	-	Nil	Nil
22	Malkhed	Kagna	2.328	5.098	0.221	0.622	0.026	0.060	0.083	0.417	-	-	Nil	Nil
23	Wadakbal	Sina	1.90	5.59	0.28	7.04	0.017	0.027	0.73	4.11	-	-	0.029	0.681
24	Takali	Bhima	1.72	2.20	1.05	1.17	0.010	0.031	0.88	1.85	-	-	0.017	0.106
25	Sarati	Nira	1.63	2.10	0.41	0.93	0.019	0.033	0.35	0.70	-	-	0.005	0.051
26	Phulgaon	Bhima	0.86	2.70	0.30	0.84	0.007	0.011	0.21	0.23	-	-	0.061	0.100
27	Huvenhedgi	Krishna	2.475	4.656	0.630	2.165	0.038	0.074	0.542	2.292	-	-	Nil	Nil
28	Cholachguda	Malaprabha	1.38	2.10	0.26	1.40	0.008	0.037	0.04	0.81	-	-	0.018	0.082
29	Mudhol	Ghataprabha	1.03	4.60	0.42	4.07	0.018	0.025	0.27	1.25	-	-	0.058	0.126
30	Karad	Krishna	0.42	3.10	0.14	0.84	0.002	0.050	0.05	0.47	-	-	0.009	0.203
31	Kurundwad	Krishna	1.30	2.30	0.28	1.05	0.018	0.030	0.18	0.45	-	-	0.034	0.156
32	Waruji	Koyna	0.34	1.00	0.14	0.27	0.001	0.009	0.04	0.10	-	-	0.007	0.070

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Table No.3.3 : Site-wise Maximum.Minimum Values of Water Quality Paramters for Different River Basin.

VI Basin : Krishna														
Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Year : 2004-2005														
1	Vijaywada	Krishna	-	-	0.000	0.000	0.30	0.869	3.90	8.10	0.1	4.40	-	-
2	Keesara	Munneru	-	-	Nil	Nil	0.420	0.477	4.20	7.30	0.10	1.60	-	-
3	Madhira	Wyra	-	-	Nil	Nil	0.434	0.584	-	-	Nil	Nil	-	-
4	Paleru Bridge	Paleru	-	-	Nil	Nil	0.498	1.110	-	-	-	-	-	-
5	Wadenapalli	Krishna	-	-	Nil	Nil	0.456	0.999	4.80	7.30	0.10	2.70	-	-
6	Dameracherla	Musi	-	-	Nil	Nil	0.626	1.147	4.20	7.700	0.40	1.80	-	-
7	Pondugala	Krishna	-	-	Nil	Nil	0.413	0.577	4.70	6.400	0.10	1.20	-	-
8	Halia	Halia	-	-	Nil	Nil	0.520	0.968	-	-	-	-	-	-
9	Bawapuram	Tungbhadra	-	-	Nil	Nil	0.225	0.491	5.00	7.50	0.40	21.00	-	-
10	Mantralayam	Tungbhadra	-	-	Nil	Nil	0.228	0.555	3.10	7.10	0.10	2.30	-	-
11	T. Ramapuram	Hagari	-	-	Nil	Nil	0.000	0.000	4.30	7.30	0.40	1.50	-	-
12	Kellodu	Vedavathi	-----> No Flow <-----											
13	Marol	Varada	-	-	0.000	0.000	0.12	0.27	No flow	No flow	-	-	-	-
14	Harlahalli	Tungbhadra	-	-	0.000	0.000	0.00	0.67	-	-	-	-	-	-
15	Byaladahalli	Haridra	-	-	0.000	0.000	0.16	0.42	No flow	No flow	-	-	-	-
16	Kuppelur	Kumudvathi	-	-	-	-	0.00	0.60	-	-	-	-	-	-
17	Honali	Tungbhadra	0.250	0.360	-	-	0.13	0.45	5.4	7.7	0.7	1.0	-	-
18	Shimoga	Tunga	-	-	0.000	0.000	0.04	0.04	7.9	8.2	0.5	1.0	-	-
19	Holehonnur	Bhedra	-	-	0.000	0.000	0.60	1.63	4.3	7.2	0.6	1.9	-	-
20	Krishna Agraharam	Krishna	-	-	Nil	Nil	0.385	0.926	3.68	8.30	0.2	2.8	-	-
21	Yadgir	Bhima	-	-	Nil	Nil	0.385	0.712	5.40	7.10	0.20	1.00	-	-
22	Malkhed	Kagna	-	-	Nil	Nil	0.444	0.598	-	-	-	-	-	-
23	Wadakbal	Sina	0.000	0.010	0.007	0.017	0.19	0.92	0.4	4.7	0.4	4.2	2.8	14.0
24	Takali	Bhima	0.003	0.004	0.009	0.011	0.03	0.58	5.6	6.6	0.8	2.7	-	-
25	Sarati	Nira	0.000	0.008	0.011	0.015	0.03	0.18	4.7	6.8	2.7	3.6	-	-
26	Phulgaon	Bhima	0.000	0.002	0.005	0.007	0.11	0.49	4.4	7.2	1.3	2.3	-	-
27	Huvenhedgi	Krishna	Nil	Nil	Nil	Nil	0.044	0.769	5.0	7.5	0.4	2.3	-	-
28	Cholachguda	Malaprabha	0.000	0.008	0.006	0.015	0.08	0.30	5.1	7.0	0.5	2.8	-	-
29	Mudhol	Ghataprabha	0.000	0.012	0.009	0.012	0.04	0.26	4.7	7.3	0.2	3.1	-	-
30	Karad	Krishna	0.000	0.006	0.004	0.012	0.04	0.57	4.2	8.1	0.3	3.1	-	-
31	Kurundwad	Krishna	0.000	0.005	0.006	0.011	0.11	0.18	4.7	7.2	0.4	1.9	-	-
32	Waruji	Koyna	0.000	0.005	0.001	0.006	0.03	0.37	5.6	7.3	0.2	2.9	-	-

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Table No.3.3 : Site-wise Maximum.Minimum Values of Water Quality Paramters for Different River Basin.

VI Basin : Krishna														
Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year : 2004-2005														
1	Vijaywada	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
2	Keesara	Munneru	-	-	-	-	-	-	-	-	-	-	Nil	Nil
3	Madhira	Wyra	-	-	-	-	-	-	-	-	-	-	Nil	Nil
4	Paleru Bridge	Paleru	-	-	-	-	-	-	-	-	-	-	Nil	Nil
5	Wadenapalli	Krishna	-	-	-	-	-	-	-	-	-	-	Nil	Nil
6	Dameracherla	Musi	-	-	-	-	-	-	-	-	-	-	Nil	Nil
7	Pondugala	Krishna	-	-	-	-	-	-	-	-	-	-	Nil	Nil
8	Halia	Halia	-	-	-	-	-	-	-	-	-	-	Nil	Nil
9	Bawapuram	Tungbhadra	-	-	-	-	-	-	-	-	-	-	Nil	Nil
10	Mantralayam	Tungbhadra	-	-	-	-	-	-	-	-	-	-	Nil	Nil
11	T. Ramapuram	Hagari	-	-	-	-	-	-	-	-	-	-	Nil	Nil
12	Kellodu	Vedavathi	-----No Flow----->											
13	Marol	Varada	-	-	-	-	-	-	-	-	-	-	-	-
14	Harlahalli	Tungbhadra	-	-	-	-	-	-	-	-	-	-	-	-
15	Byaladahalli	Haridra	-	-	-	-	-	-	-	-	-	0.90	0.13	0.13
16	Kuppelur	Kumudvathi	-	-	-	-	-	-	-	-	-	-	0.11	0.11
17	Honali	Tungbhadra	-	-	-	-	-	-	-	-	1.75	1.75	-	-
18	Shimoga	Tunga	-	-	-	-	-	-	-	-	-	-	-	-
19	Holehonnur	Bhedra	-	-	-	-	-	-	-	-	-	-	0.16	0.16
20	Krishna Agraharam	Krishna	-	-	-	-	-	-	-	-	-	-	Nil	Nil
21	Yadgir	Bhima	-	-	-	-	-	-	-	-	-	-	Nil	Nil
22	Malkhed	Kagna	-	-	-	-	-	-	-	-	-	-	Nil	Nil
23	Wadakbal	Sina	-	-	-	-	-	-	-	-	-	-	0.21	0.42
24	Takali	Bhima	3.2	16.0	-	-	-	-	-	-	-	-	0.20	0.44
25	Sarati	Nira	3.2	8.0	-	-	-	-	-	-	-	-	0.16	0.42
26	Phulgaon	Bhima	5.1	7.0	-	-	-	-	-	-	-	-	0.13	0.31
27	Huvenhedgi	Krishna	-	-	-	-	-	-	-	-	-	-	nil	nil
28	Cholachguda	Malaprabha	2.8	15.0	-	-	-	-	-	-	-	-	0.09	0.30
29	Mudhol	Ghataprabha	2.0	18.0	-	-	-	-	-	-	-	-	0.18	0.55
30	Karad	Krishna	1.0	20.0	-	-	-	-	-	-	-	-	0.12	0.75
31	Kurundwad	Krishna	1.0	14.0	-	-	-	-	-	-	-	-	0.16	0.35
32	Waruji	Koyna	1.6	12.0	-	-	-	-	-	-	-	-	0.10	0.21

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Table No.3.3 : Site-wise Maximum.Minimum Values of Water Quality Paramters for Different River Basin.

VI Basin : Krishna														
Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
Year : 2004-2005														
1	Vijaywada	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
2	Keesara	Munneru	-	-	-	-	-	-	-	-	-	-	-	-
3	Madhira	Wyra	-	-	-	-	-	-	-	-	-	-	-	-
4	Paleru Bridge	Paleru	-	-	-	-	-	-	-	-	-	-	-	-
5	Wadenapalli	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
6	Dameracherla	Musi	-	-	-	-	-	-	-	-	-	-	-	-
7	Pondugala	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
8	Halia	Halia	-	-	-	-	-	-	-	-	-	-	-	-
9	Bawapuram	Tungbhadra	-	-	-	-	-	-	-	-	-	-	-	-
10	Mantralayam	Tungbhadra	-	-	-	-	-	-	-	-	-	-	-	-
11	T. Ramapuram	Hagari	-	-	-	-	-	-	-	-	-	-	-	-
12	Kellodu	Vedavathi	-----No Flow----->											
13	Marol	Varada	-	-	-	-	-	-	-	-	-	-	-	-
14	Harlhalli	Tungbhadra	0.00	0.09	0.00	5.61	0.00	0.04	0.00	0.20	0.00	0.20	-	-
15	Byaladahalli	Haridra	-	-	-	-	-	-	-	-	-	-	-	-
16	Kuppelur	Kumudvathi	-	-	-	-	-	-	-	-	-	-	-	-
17	Honali	Tungbhadra	0.009	0.009	7.53	7.53	0.005	0.005	5.16	5.16	0.57	0.57	-	-
18	Shimoga	Tunga	-	-	-	-	-	-	-	-	-	-	-	-
19	Holehonnur	Bhedra	-	-	-	-	-	-	-	-	-	-	-	-
20	Krishna Agraharam	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
21	Yadgir	Bhima	-	-	-	-	-	-	-	-	-	-	-	-
22	Malkhed	Kagna	-	-	-	-	-	-	-	-	-	-	-	-
23	Wadakbal	Sina	-	-	-	-	-	-	-	-	-	-	-	-
24	Takali	Bhima	-	-	-	-	-	-	-	-	-	-	-	-
25	Sarati	Nira	-	-	-	-	-	-	-	-	-	-	-	-
26	Phulgaon	Bhima	-	-	-	-	-	-	-	-	-	-	-	-
27	Huvenhedgi	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
28	Cholachguda	Malaprabha	-	-	-	-	-	-	-	-	-	-	-	-
29	Mudhol	Ghataprabha	-	-	-	-	-	-	-	-	-	-	-	-
30	Karad	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
31	Kurundwad	Krishna	-	-	-	-	-	-	-	-	-	-	-	-
32	Waruji	Koyna	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum.Minimum Values of Water Quality Paramters for Different River Basin.

VI Basin : Krishna														
Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2004-2005														
1	Vijaywada	Krishna	-	-	-	-	142	222	27.70	55.26	1.09	3.18	0.00	2.95
2	Keesara	Munneru	-	-	-	-	125	193	43.78	54.25	1.79	3.21	0.90	3.26
3	Madhira	Wyra	-	-	-	-	116	230	39.58	61.31	1.78	4.26	0.29	3.52
4	Paleru Bridge	Paleru	-	-	-	-	141	477	11.87	42.57	0.52	2.66	0.01	3.29
5	Wadenapalli	Krishna	-	-	-	-	128	215	27.79	63.20	1.01	3.99	0.04	1.63
6	Dameracherla	Musi	-	-	-	-	230	375	28.52	40.06	1.26	2.27	0.04	0.83
7	Pondugala	Krishna	-	-	-	-	68	194	27.11	66.13	1.04	3.33	0.04	1.36
8	Halia	Halia	-	-	-	-	114	234	36.59	53.09	1.67	4.14	0.31	2.56
9	Bawapuram	Tungbhadra	-	-	-	-	94	252	42.65	65.77	1.48	4.96	0.26	1.34
10	Mantralayam	Tungbhadra	-	-	-	-	89	247	33.63	78.68	1.01	7.34	0.03	3.25
11	T. Ramapuram	Hagari	-	-	-	-	83	263	53.91	59.04	2.20	4.40	0.40	0.94
12	Kellodu	Vedavathi	-----> No Flow <-----											
13	Marol	Varada	-	-	-	-	32	65	25.00	43.70	0.55	0.95	0.00	0.00
14	Harlahalli	Tungbhadra	-	-	-	-	58	120	23.75	27.14	0.65	0.92	0.00	0.00
15	Byaladahalli	Haridra	0.00	0.16	0.00	0.31	118	181	34.31	39.54	1.66	2.21	0.00	0.00
16	Kuppelur	Kumudvathi	-	-	-	-	121	153	40.16	48.07	1.67	2.33	0.00	0.00
17	Honali	Tungbhadra	0.08	0.08	0.029	0.029	44	66	24.22	50.00	0.65	1.70	0.00	0.00
18	Shimoga	Tunga	-	-	-	-	50	91	32.21	65.73	1.01	3.65	0.00	0.00
19	Holehonnur	Bhedra	-	-	-	-	105	160	34.59	49.93	1.78	2.68	0.00	0.00
20	Krishna Agraharam	Krishna	-	-	-	-	80	289	17.60	72.21	0.58	4.78	0.33	2.53
21	Yadgir	Bhima	-	-	-	-	75	250	17.06	66.21	0.66	3.60	0.450	2.06
22	Malkhed	Kagna	-	-	-	-	73	130	25.50	59.72	0.80	3.26	0.87	2.93
23	Wadakbal	Sina	-	-	-	-	40	451	42.22	70.21	1.50	3.98	0.050	1.31
24	Takali	Bhima	-	-	-	-	128	139	31.80	44.79	1.11	1.94	Nil	Nil
25	Sarati	Nira	-	-	-	-	45	113	31.23	63.08	0.89	2.46	Nil	1.01
26	Phulgaon	Bhima	-	-	-	-	45	195	16.60	32.35	0.56	0.66	Nil	Nil
27	Huvenhedgi	Krishna	-	-	-	-	90	236	27.32	67.82	1.16	4.08	0.740	2.68
28	Cholachguda	Malaprabha	-	-	-	-	55	121	24.76	58.99	0.60	2.22	0.08	0.71
29	Mudhol	Ghataprabha	-	-	-	-	55	337	30.91	50.00	0.69	2.00	Nil	0.36
30	Karad	Krishna	-	-	-	-	21	182	7.91	33.33	0.17	1.10	0.01	0.46
31	Kurundwad	Krishna	-	-	-	-	51	172	15.89	46.11	0.36	1.25	Nil	0.36
32	Waruji	Koyna	-	-	-	-	15	57	20.83	42.59	0.34	0.59	0.08	0.10

Note : 1. All the ionic concentrations are expressed in mg./lit. unless mentioned otherwise.

2. (-) indicate that analysis of a particular parameter has not been carried out.

Source: Water Quality YearBook for 2004-05 (Krishna Basin)

(Updated during September 2007)

Table No. 3.3 Site-wise Maximum.Minimum Values of Water Quality Parameters for Different River Basins

VII Basin : Cauvery

Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2004-2005														
1	Musiri	Cauvery	0.131	524.5	26.0	34.0	7.94	8.66	295	765	0.07	0.17	1.00	4.00
2	Nallamaranpatty	Amravathi	0.505	65.01	25.0	28.0	8.05	8.76	189	484	0.01	0.09	0.41	1.97
3	Elunuthimangalam	Noyyal	0.301	2.287	25.5	31.5	8.27	8.63	2520	5616	0.395	0.69	12.55	30.67
4	Kodumudi	Cauvery	5.791	280.3	27.0	33.5	7.64	8.44	283	1360	0.06	0.36	0.82	9.30
5	Savandapur	Bhavani	1.874	40.69	23.0	31.6	7.37	7.94	132	609	0.05	0.13	0.27	1.89
6	Thengumaradala	Moyar	3.211	17.46	20.2	26.3	6.96	7.72	96	253	0.03	0.07	0.16	0.37
7	Nellithurai	Bhavani	2.503	236.9	20.0	23.8	7.42	8.53	64	258	0.02	0.05	0.13	0.72
8	Urachikottai	Cauvery	28.97	475.4	22.0	27.0	7.86	8.64	248	862	0.05	0.13	0.68	3.25
9	Kudlur	Palar	1.019	1.153	24.0	25.0	8.48	8.56	704	439	0.12	0.12	1.51	2.48
10	Sevanur	Chittar	0.246	2.043	23.5	27.0	7.89	8.20	482	872	0.09	0.45	1.26	2.28
11	Thevur	Sarabenga	-	-	-	River Dry	8.75	8.75	426	426	-	0.08	-	1.46
12	Thoppur	Thoppaiyar	-	-	-	-	-	-	-	-	-	-	-	-
13	Biligundulu	Cauvery	29.23	499.2	24.5	30.00	7.60	8.23	223	501	0.04	1.85	0.63	1.80
14	Hogenakkal	Chinnar	0.100	0.500	-	28.00	7.80	8.10	495	495	-	0.79	-	1.30
15	T.Bekuppe	Arkavathi	2.780	12.70	18.5	26.5	7.60	8.00	591	883	0.34	0.83	1.83	4.13
16	T.K. Halli	Shimsha	10.30	161.2	23.5	24.5	7.70	8.10	549	791	0.13	1.52	1.20	3.93
17	Kollegal	Cauvery	37.57	474.3	23.0	29.0	7.40	7.80	238	489	0.04	1.41	0.88	1.32
18	T.Narsipur	Kabini	3.550	184.8	22.5	29.0	7.47	8.21	169	587	0.04	2.06	0.88	1.89
19	Muthenkera	Kabini	2.969	165.5	22.5	26.0	6.59	7.02	44	95	0.02	0.10	0.11	0.26
20	Kattemalalvadi	Lakshmanathirtha	1.430	10.00	22.8	25.5	7.20	7.90	163	475	0.04	0.89	0.60	1.51
21	Akkihebbal	Hemavathi	2.760	86.0	24.0	27.0	7.80	8.20	283	2222	0.03	9.14	0.56	13.21
22	Thimmanahalli	Yagachi	0.070	15.24	24.5	27.0	7.00	7.80	195	862	0.04	2.29	0.80	5.94
23	Shakaleshpura	Hemavathi	0.820	59.02	20.0	25.0	6.60	7.90	80	421	0.03	1.12	0.16	2.87
24	Mukundur Hosahalli	Hemavathy	2.050	27.93	22.5	24.0	7.34	7.80	144	365	0.04	0.77	0.53	1.93
25	Kudige	Cauvery	4.024	58.2	23.0	29.0	7.20	7.70	116	279	0.03	0.58	0.56	1.65

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Table No. 3.3 Site-wise Maximum.Minimum Values of Water Quality Parameters for Different River Basins

VII Basin : Cauvery

Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2004-2005														
1	Musiri	Cauvery	0.88	2.16	1.20	2.40	-	-	0.003	0.004	0.002	0.006	0.00	0.25
2	Nallamaranpatty	Amravathi	1.04	1.92	0.40	1.76	-	-	0.003	0.004	0.001	0.004	0.00	0.12
3	Elunuthimangalam	Noyyal	2.96	7.20	7.04	18.72	-	-	0.005	0.007	0.003	0.005	0.00	0.44
4	Kodumudi	Cauvery	0.80	2.72	1.12	3.76	-	-	0.004	0.004	0.002	0.007	0.00	0.31
5	Savandapur	Bhavani	0.48	2.00	0.72	2.64	-	-	0.003	0.004	0.001	0.004	0.00	0.00
6	Thengumaradala	Moyar	0.40	1.20	0.32	0.88	-	-	0.003	0.005	0.002	0.009	0.00	0.00
7	Nellithurai	Bhavani	0.24	0.88	0.16	1.04	-	-	0.003	0.005	0.002	0.008	0.00	0.13
8	Urachikottai	Cauvery	0.88	1.88	0.80	2.72	-	-	0.003	0.005	0.002	0.014	0.00	0.19
9	Kudlur	Palar	1.20	1.60	1.84	3.04	-	-	0.004	0.005	0.002	0.003	0.006	0.19
10	Sevanur	Chittar	2.16	2.88	1.44	1.68	-	-	0.003	0.005	0.002	0.004	0.000	0.000
11	Thevur	Sarabenga	-	1.60	-	1.20	-	-	-	0.004	-	0.003	-	0.19
12	Thoppur	Thoppaiyar	-	-	-	-	-	-	-	-	-	-	-	-
13	Biligundulu	Cauvery	0.86	1.80	0.63	1.49	-	-	0.000	0.006	-	-	0.000	0.000
14	Hogenakkal	Chinnar	-	2.55	-	0.86	-	-	0.000	-	-	-	0.000	0.005
15	T.Bekuppe	Arkavathi	2.28	3.52	2.12	3.69	-	-	0.000	0.005	-	-	0.000	0.000
16	T.K. Halli	Shimsha	1.30	2.24	1.18	2.28	-	-	0.000	0.030	-	-	0.000	0.000
17	Kollegal	Cauvery	0.63	1.64	0.80	1.73	-	-	0.000	0.005	-	-	0.000	0.000
18	T.Narsipur	Kabini	0.36	1.88	0.24	1.88	-	-	0.000	0.005	0.000	0.000	0.000	0.000
19	Muthenkera	Kabini	0.28	0.40	0.08	0.40	-	-	0.000	0.000	0.000	0.000	0.000	0.000
20	Kattemalavadi	Lakshmanathirtha	0.63	1.88	0.47	1.57	-	-	0.000	0.005	-	-	0.000	0.000
21	Akkihebbal	Hemavathi	1.33	1.80	1.02	1.78	-	-	0.000	0.006	-	-	0.000	0.000
22	Thimmanahalli	Yagachi	0.15	2.31	0.78	2.20	-	-	0.000	0.008	-	-	0.000	0.000
23	Shakaleshpura	Hemavathi	0.38	1.39	0.24	1.22	-	-	0.000	0.041	-	-	0.000	0.000
24	Mukundur Hosahalli	Hemavathy	0.16	0.86	0.08	0.80	-	-	0.010	0.034	-	-	0.000	0.000
25	Kudige	Cauvery	0.25	0.54	0.31	0.57	-	-	-	-	0.000	0.040	0.000	0.000

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Table No. 3.3 Site-wise Maximum.Minimum Values of Water Quality Parameters for Different River Basins

VII Basin : Cauvery

Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2004-2005														
1	Musiri	Cauvery	1.63	3.68	0.79	3.55	0.019	0.041	0.257	0.975	-	-	0.041	0.343
2	Nallamaranpatty	Amravathi	0.98	2.67	0.26	1.42	0.012	0.041	0.578	0.974	-	-	0.035	0.151
3	Elunuthimangalam	Noyyal	2.70	3.91	17.71	47.03	0.037	0.069	1.874	4.090	-	-	0.153	0.413
4	Kodumudi	Cauvery	1.37	4.15	0.79	8.20	0.018	0.041	0.227	2.008	-	-	0.045	0.336
5	Savandapur	Bhavani	0.72	3.44	0.26	1.10	0.006	0.024	0.218	1.437	-	-	0.045	0.336
6	Thengumaradala	Moyar	0.46	0.96	0.36	1.47	0.005	0.016	0.035	0.421	-	-	0.067	0.184
7	Nellithurai	Bhavani	0.31	1.21	0.21	0.82	0.008	0.017	0.018	0.511	-	-	0.023	0.184
8	Urachikottai	Cauvery	1.26	2.68	0.47	2.58	0.013	0.053	0.209	1.786	-	-	0.026	0.546
9	Kudlur	Palar	2.97	4.72	0.94	1.04	0.036	0.50	0.440	0.607	-	-	0.161	0.312
10	Sevanur	Chittar	2.90	4.97	1.27	2.74	0.025	0.051	0.326	1.181	-	-	0.115	0.445
11	Thevur	Sarabenga	-	2.26	-	8.88	-	0.024	-	0.456	-	-	-	0.191
12	Thoppur	Thoppaiyar	-	-	-	-	-	-	-	-	-	-	-	-
13	Biligundulu	Cauvery	1.47	3.40	0.73	1.67	0.014	0.048	0.130	0.480	-	-	0.012	0.025
14	Hogenakkal	Chinnar	3.66	4.21	1.13	1.57	0.013	0.034	0.190	0.260	-	-	0.016	0.665
15	T.Bekuppe	Arkavathi	3.74	5.44	1.66	4.30	0.012	0.028	0.290	0.560	-	-	0.03	0.78
16	T.K. Halli	Shimsha	3.06	4.33	1.13	4.01	0.010	0.090	0.250	0.610	-	-	0.080	0.110
17	Kollegal	Cauvery	1.50	3.64	0.79	1.38	0.001	0.304	0.070	0.340	-	-	0.030	0.310
18	T.Narsipur	Kabini	0.66	4.22	0.90	1.62	0.002	0.053	0.060	0.500	-	-	0.001	0.021
19	Muthenkera	Kabini	0.24	0.46	0.16	0.39	0.005	0.019	0.021	0.096	-	-	0.018	0.297
20	Kattamalavadi	Lakshmanathirtha	0.85	3.61	0.65	1.38	0.012	0.045	0.080	0.220	-	-	0.030	0.100
21	Akkihebbal	Hemavathi	1.77	8.10	0.62	15.10	0.012	0.270	0.20	0.310	-	-	0.080	0.220
22	Thimmanahalli	Yagachi	0.80	4.70	0.45	6.00	0.009	0.050	0.080	0.360	-	-	0.020	0.120
23	Shakaleshpura	Hemavathi	0.66	2.26	0.20	3.11	0.005	0.141	0.20	0.340	-	-	0.002	0.301
24	Mukundur Hosahalli	Hemavathy	0.66	1.99	0.51	1.67	0.004	0.040	0.000	0.150	-	-	0.008	0.018
25	Kudige	Cauvery	0.65	1.31	0.56	1.58	0.010	0.271	0.000	0.030	-	-	0.006	0.013

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Table No. 3.3 Site-wise Maximum.Minimum Values of Water Quality Parameters for Different River Basins

VII Basin : Cauvery													
Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO		BOD		Total C
			Min	Max	Min	Max	Min	Max	(ppm)		(ppm)		(no.per 10 l)
									Min	Max	Min	Max	Min
(1)	(2)	(3)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)
Year : 2004-2005													
1	Musiri	Cauvery	0.000	0.003	0.001	0.003	0.53	1.04	5.6	7.7	0.1	3.7	-
2	Nallamaranpatty	Amravathi	0.000	0.003	0.001	0.004	0.41	1.05	8.4	8.8	0.4	3.4	-
3	Elunuthimangalam	Noyyal	0.001	0.019	0.001	0.016	1.03	1.83	7.0	7.3	1.2	3.2	-
4	Kodumudi	Cauvery	0.001	0.009	0.001	0.035	0.55	1.20	6.6	7.2	0.3	4.7	-
5	Savandapur	Bhavani	0.000	0.003	0.001	0.003	0.32	1.00	5.9	6.4	0.6	3.0	-
6	Thengumaradala	Moyar	0.001	0.005	0.001	0.003	0.18	0.45	6.5	8.1	0.1	2.3	-
7	Nellithurai	Bhavani	0.000	0.004	0.001	0.036	0.15	0.49	7.9	8.3	0.1	1.3	-
8	Urachikottai	Cauvery	0.000	0.002	0.000	0.002	0.58	0.79	6.0	7.5	0.7	4.4	-
9	Kudlur	Palar	0.002	0.002	0.001	0.002	0.74	1.11	River Dry	River Dry	River Dry	River Dry	-
10	Sevanur	Chittar	0.001	0.003	0.001	0.043	0.90	1.58	River Dry	River Dry	River Dry	River Dry	-
11	Thevur	Sarabenga	-	0.002	-	0.002	-	0.81	-	0.000	-	-	-
12	Thoppur	Thoppaiyar	-	-	-	-	-	-	-	-	-	-	-
13	Biligundulu	Cauvery	0.000	0.000	0.000	0.010	0.08	0.54	5.0	7.8	0.1	4.8	-
14	Hogenakkal	Chinnar	0.000	0.000	0.010	0.010	0.24	0.73	-	-	-	-	-
15	T.Bekuppe	Arkavathi	0.00	0.000	0.010	0.016	0.00	1.07	4.5	5.5	0.0	4.7	-
16	T.K. Halli	Shimsha	0.000	0.000	0.000	0.000	0.13	0.89	4.9	7.1	0.7	1.8	-
17	Kollegal	Cauvery	0.000	0.000	0.000	0.080	0.13	0.75	4.1	7.2	0.4	1.3	-
18	T.Narsipur	Kabini	0.000	0.000	0.000	0.032	0.25	1.27	3.4	6.7	0.5	2.4	-
19	Muthenkera	Kabini	0.000	0.091	0.001	0.044	0.197	0.250	5.4	6.80	0.20	1.00	-
20	Kattamalavadi	Lakshmanathirtha	0.000	0.000	0.000	0.000	0.00	1.62	-	-	-	-	-
21	Akkihebbal	Hemavathi	0.000	0.000	0.000	0.002	0.00	1.62	-	-	-	-	-
22	Thimmanahalli	Yagachi	0.000	0.010	0.000	0.000	0.00	0.83	-	-	-	-	-
23	Shakaleshpura	Hemavathi	0.000	0.000	0.000	0.004	0.20	0.56	-	-	-	-	-
24	Mukundur Hosahalli	Hemavathy	0.000	0.000	0.000	0.032	0.04	0.53	4.1	7.8	0.3	1.0	-
25	Kudige	Cauvery	0.000	0.000	0.000	0.32	0.31	0.50	5.4	7.1	0.4	1.0	-

Table No. 3.3 Site-wise Maximum.Minimum Values of Water Quality Parameters for Different River Basins

VII Basin : Cauvery														
Sl. No.	Site Name	Name of the River/ Stream	Coliform	Faecal Coliform		Total plate count		Phytoplankton		Zooplankton		Arsenic		Bo
			(no.per 10 ml)	(no.per 10 ml)		(no.per 10 ml)		(no.per ml)		(no.per litre)		(ppm)		(pp
			Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
(1)	(2)	(3)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)
Year : 2004-2005														
1	Musiri	Cauvery	-	-	-	-	-	-	-	-	-	-	5.84	0.201
2	Nallamaranpatty	Amravathi	-	-	-	-	-	-	-	-	-	-	-	0.293
3	Elunuthimangalam	Noyyal	-	-	-	-	-	-	-	-	-	-	21.05	0.381
4	Kodumudi	Cauvery	-	-	-	-	-	-	-	-	-	-	6.58	0.210
5	Savandapur	Bhavani	-	-	-	-	-	-	-	-	-	-	2.26	0.158
6	Thengumaradala	Moyar	-	-	-	-	-	-	-	-	-	-	0.00	0.075
7	Nellithurai	Bhavani	-	-	-	-	-	-	-	-	-	-	0.00	0.019
8	Urachikottai	Cauvery	-	-	-	-	-	-	-	-	-	-	-	0.198
9	Kudlur	Palar	-	-	-	-	-	-	-	-	-	-	-	0.307
10	Sevanur	Chittar	-	-	-	-	-	-	-	-	-	-	-	0.223
11	Thevur	Sarabenga	-	-	-	-	-	-	-	-	-	-	-	-
12	Thoppur	Thoppaiyar	-	-	-	-	-	-	-	-	-	-	-	-
13	Biligundulu	Cauvery	-	-	-	-	-	-	-	-	-	-	5.07	0.10
14	Hogenakkal	Chinnar	-	-	-	-	-	-	-	-	-	-	0.14	-
15	T.Bekuppe	Arkavathi	-	-	-	-	-	-	-	-	-	-	-	-
16	T.K. Halli	Shimsha	-	-	-	-	-	-	-	-	-	-	-	0.00
17	Kollegal	Cauvery	-	-	-	-	-	-	-	-	-	-	2.30	0.06
18	T.Narsipur	Kabini	-	-	-	-	-	-	-	-	-	-	2.63	0.04
19	Muthenkera	Kabini	-	-	-	-	-	-	-	-	-	-	1.94	0.00
20	Kattamalavadi	Lakshmanathirtha	-	-	-	-	-	-	-	-	-	-	-	0.00
21	Akkihebbal	Hemavathi	-	-	-	-	-	-	-	-	-	-	2.60	0.00
22	Thimmanahalli	Yagachi	-	-	-	-	-	-	-	-	-	-	1.03	0.00
23	Shakaleshpura	Hemavathi	-	-	-	-	-	-	-	-	-	-	0.63	0.00
24	Mukundur Hosahalli	Hemavathy	-	-	-	-	-	-	-	-	-	-	0.22	0.01
25	Kudige	Cauvery	-	-	-	-	-	-	-	-	-	-	0.48	-

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Table No. 3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins

VII Basin : Cauvery

Sl. No.	Site Name	Name of the River/ Stream	Iron		Cadmium		Chromium		Copper		Cyanide		Lead		Manganese
			(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)			
			Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
(1)	(2)	(3)	(63)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	
Year : 2004-2005															
1	Musiri	Cauvery	0.312	-	-	-	1.24	-	2.00	-	-	-	3.20	-	-
2	Nallamaranpatty	Amravathi	0.368	-	-	-	-	-	-	-	-	-	-	-	-
3	Elunuthimangalam	Noyyal	0.795	-	5.00	-	-	0.68	-	1.00	-	-	12.07	-	-
4	Kodumudi	Cauvery	0.335	-	0.00	-	0.46	-	4.00	-	-	-	4.78	-	-
5	Savandapur	Bhavani	0.315	-	0.00	-	0.46	-	2.00	-	-	-	1.56	-	-
6	Thengumaradala	Moyar	0.201	-	4.00	-	0.48	-	2.00	-	-	-	0.75	-	-
7	Nellithurai	Bhavani	0.174	-	0.00	-	0.48	-	11.00	-	-	-	0.52	-	-
8	Urachikottai	Cauvery	0.318	-	-	-	-	-	-	-	-	-	-	-	-
9	Kudlur	Palar	0.317	-	-	-	-	-	-	-	-	-	-	-	-
10	Sevanur	Chittar	0.323	-	-	-	-	-	-	-	-	-	-	-	-
11	Thevur	Sarabenga	0.253	-	-	-	-	-	-	-	-	-	-	-	-
12	Thoppur	Thoppaiyar	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Biligundulu	Cauvery	0.14	-	0.005	-	6.09	-	0.03	-	6.28	-	0.47	-	-
14	Hogenakkal	Chinnar	-	-	-	-	-	-	-	-	-	-	-	-	-
15	T.Bekuppe	Arkavathi	-	-	-	-	-	-	-	-	-	-	-	-	-
16	T.K. Halli	Shimsha	0.11	-	-	-	-	-	-	-	-	-	-	-	-
17	Kollegal	Cauvery	0.14	-	0.007	-	5.51	-	0.005	-	-	-	1.59	-	-
18	T.Narsipur	Kabini	0.13	-	0.006	-	4.49	-	0.003	-	-	-	0.22	-	-
19	Muthenker	Kabini	0.08	-	0.018	-	0.72	-	0.009	-	-	-	-	-	0.00
20	Kattemalalvadi	Lakshmanathirtha	0.17	-	-	-	-	-	-	-	-	-	-	-	0.00
21	Akkihebbal	Hemavathi	0.03	-	0.06	-	5.95	-	0.003	-	-	-	0.59	-	-
22	Thimmanahalli	Yagachi	0.03	-	0.001	-	3.61	0.00	0.00	-	-	-	0.40	-	-
23	Shakaleshpura	Hemavathi	0.06	-	0.011	-	9.00	0.00	0.00	-	-	-	0.49	-	-
24	Mukundur Hosahalli	Hemavathy	0.04	-	0.004	-	5.78	0.00	0.006	-	-	-	0.45	-	-
25	Kudige	Cauvery	-	-	0.006	-	2.87	0.00	0.019	-	-	-	0.72	-	-

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Table No. 3.3 Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins

VII Basin : Cauvery

Sl. No.	Site Name	Name of the River/ Stream	pH		Mercury		Zinc		Hardness		Sodium %		SAR		Residual Chlorine (mg/l)
			Min	Max	(ppm)		(ppm)		Min	Max	Min	Max	Min	Max	
					Min	Max	Min	Max							
(1)	(2)	(3)	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	
Year : 2004-2005															
1	Musiri	Cauvery	-	-	0.28	-	79.00	104	212	31.65	50.44	0.98	2.92	0.00	
2	Nallamaranpatty	Amravathi	-	-	-	-	-	72	168	21.35	36.66	0.48	1.51	0.00	
3	Elunuthimangalam	Noyyal	-	-	0.28	-	110.00	500	1297	49.13	65.76	5.35	11.10	0.00	
4	Kodumudi	Cauvery	-	-	0.23	-	63.00	96	296	27.37	56.80	0.84	5.86	0.00	
5	Savandapur	Bhavani	-	-	0.29	-	34.00	56	232	16.92	28.38	0.36	1.24	0.00	
6	Thengumaradala	Moyar	-	-	0.31	-	19.00	36	104	9.72	18.41	0.21	0.41	0.00	
7	Nellithurai	Bhavani	-	-	0.33	-	23.00	24	96	16.46	33.60	0.23	0.73	0.00	
8	Urachikottai	Cauvery	-	-	-	-	-	88	220	31.09	41.77	0.68	2.19	0.00	
9	Kudlur	Palar	-	-	-	-	-	152	232	32.33	34.25	1.22	1.63	0.00	
10	Sevanur	Chittar	-	-	-	-	-	192	328	24.09	27.70	0.91	1.32	0.00	
11	Thevur	Sarabenga	-	-	-	-	-	-	140	-	33.64	-	1.23	-	
12	Thoppur	Thoppaiyar	-	-	-	-	-	-	-	-	-	-	-	-	
13	Biligundulu	Cauvery	0.03	-	0.052	-	-	87	153	20.21	33.22	0.66	1.53	0.00	
14	Hogenakkal	Chinnar	-	-	-	-	-	-	224	23.64	27.80	1.00	1.24	0.00	
15	T.Bekuppe	Arkavathi	-	-	-	-	-	220	351	21.97	42.33	1.11	2.66	0.00	
16	T.K. Halli	Shimsha	-	-	-	-	-	134	226	19.70	53.47	0.83	3.67	0.00	
17	Kollegal	Cauvery	-	-	0.02	-	0.04	81	166	19.33	42.56	0.74	1.37	0.00	
18	T.Narsipur	Kabini	-	-	0.03	-	0.039	32	185	20.47	60.64	0.76	2.03	0.00	
19	Muthenkera	Kabini	-	-	-	-	0.097	18	40	20.41	25.88	0.26	0.42	-	
20	Kattamalavadi	Lakshmanathirtha	0.00	-	-	-	-	55	173	25.43	37.02	0.69	1.22	0.016	
21	Akkihebbal	Hemavathi	-	-	0.04	-	0.71	126	173	17.89	74.51	0.50	10.77	0.00	
22	Thimmanahalli	Yagachi	-	-	0.09	-	0.041	67	226	21.98	62.13	0.75	6.35	0.19	
23	Shakaleshpura	Hemavathi	-	-	0.02	-	0.074	35	131	5.71	73.97	0.14	4.82	0.23	
24	Mukundur Hosahalli	Hemavathy	-	-	0.04	-	0.034	12	76	26.77	65.78	0.65	4.27	0.48	
25	Kudige	Cauvery	-	-	0.04	-	0.049	31	51	43.41	62.26	0.95	2.99	0.09	

Contd./--- Source: Suspended Sediment Data Book for 2004-2005 (Cauvery Basin) (Updated during September 2005)

Note : All the ionic concentrations are expressed in mg./lit., unless mentioned otherwise.

Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different Basins.

VIII Basin : East Flowing Rivers of Coastal of Andhra Pradesh & Tamil Nadu

Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2004-2005														
1	Thammavaram	Gundalakamma	1.741	30.59	25.1	31.4	7.44	8.38	812	1090	0.048	0.174	1.304	6.609
2	Avaramkuppam	Palar	<---River Dry--->											
3	Villupuram	Ponniyar	2.436	49.04	24.0	26.00	8.21	8.33	380	630	0.08	0.11	1.22	2.28
4	Vazhavachanur	Ponniyar	0.794	40.20	25.0	29.00	7.52	8.25	368	990	0.06	0.15	0.93	4.19
5	Gummanur	Ponniyar	0.311	23.21	23.0	26.00	8.01	8.64	834	1180	0.23	0.44	3.44	5.26
6	Paramakudi	Vaigai	1.369	47.23	26.5	27.00	7.56	8.52	260	285	0.11	0.11	0.57	0.80
7	Ambasamudram	Vaigai	2.024	21.46	21.0	27.00	7.41	8.37	136	546	0.08	0.16	0.21	1.82
8	Theni	Suruliyar	0.085	72.18	23.0	28.00	7.38	8.23	114	861	0.03	0.16	0.21	3.27
9	Irrukkankudi	Vaippar	0.071	0.213	25.0	32.00	7.78	8.99	171	406	0.10	0.18	0.62	1.63
10	Murappanadu	Tambraparani	1.222	45.69	24.5	28.00	6.92	7.90	101	404	0.03	0.16	0.25	1.20
11	A.P. Puram	Chittar	0.016	0.080	22.0	29.00	7.56	8.32	852	3740	0.13	0.37	3.14	18.20

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different Basins.

VIII Basin : East Flowing Rivers of Coasta

Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2004-2005														
1	Thammavaram	Gundalakamma	0.948	2.345	0.823	2.139	-	-	NIL	NIL	NIL	NIL	0.600	0.833
2	Avaramkuppam	Palar	-	-	-	-	-	-	-	-	-	-	-	-
3	Villupuram	Ponniyar	1.44	1.92	1.12	1.68	-	-	0.003	0.004	0.002	0.003	0.00	0.06
4	Vazhavachanur	Ponniyar	1.76	2.80	1.12	3.76	-	-	0.003	0.004	0.003	0.005	0.00	0.00
5	Gummanur	Ponniyar	3.12	3.68	1.20	2.80	-	-	0.003	0.006	0.002	0.021	0.00	0.25
6	Paramakudi	Vaigai	1.28	1.28	0.80	0.96	-	-	0.003	0.003	0.003	0.003	0.00	0.06
7	Ambasamudram	Vaigai	0.56	2.16	0.48	2.16	-	-	0.003	0.003	0.002	0.005	0.00	0.13
8	Theni	Suruliyar	0.48	2.40	0.32	4.16	-	-	0.003	0.005	0.002	0.004	0.00	0.00
9	Irrukkankudi	Vaippar	0.80	1.20	0.32	0.96	-	-	0.003	0.003	0.002	0.005	0.00	0.19
10	Murappanadu	Tambraparani	0.40	1.44	0.32	1.04	-	-	0.003	0.005	0.001	0.006	0.00	0.00
11	A.P. Puram	Chittar	2.32	7.20	2.64	10.72	-	-	0.003	0.004	0.002	0.005	0.00	0.06

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different Basins.

VIII Basin : East Flowing Rivers of Coasta

Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2004-2005														
1	Thammavaram	Gundalakamma	2.066	5.934	1.880	2.516	0.058	0.092	0.750	1.833	-	-	NIL	NIL
2	Avaramkuppam	Palar	-	-	-	-	-	-	-	-	-	-	-	-
3	Villupuram	Ponniyar	2.13	3.06	1.10	1.99	0.021	0.025	0.213	0.875	-	-	0.061	0.094
4	Vazhavachanur	Ponniyar	2.52	5.56	0.83	3.05	0.019	0.047	0.314	1.106	-	-	0.050	0.386
5	Gummanur	Ponniyar	3.35	4.93	3.41	5.80	0.028	0.074	0.376	0.904	-	-	0.116	1.291
6	Paramakudi	Vaigai	1.48	1.98	0.52	0.55	0.018	0.021	0.308	0.613	-	-	0.044	0.109
7	Ambasamudram	Vaigai	0.70	3.27	0.31	1.21	0.016	0.037	0.102	0.775	-	-	0.073	0.201
8	Theni	Suruliyar	0.65	5.35	0.31	1.82	0.007	0.049	0.083	0.967	-	-	0.037	0.792
9	Irrukkankudi	Vaippar	0.96	2.28	0.31	0.83	0.015	0.025	0.158	0.595	-	-	0.004	0.128
10	Murappanadu	Tambraparani	0.52	2.44	0.26	1.09	0.006	0.021	0.112	0.398	-	-	0.029	0.221
11	A.P. Puram	Chittar	2.19	4.51	4.29	25.61	0.028	0.073	1.424	6.239	-	-	0.118	0.381

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different Basins.

VIII Basin : East Flowing Rivers of Coasta														
Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Year : 2004-2005														
1	Thammavaram	Gundalakamma	-	-	NIL	NIL	0.271	0.598	5.20	7.10	0.51	2.90	-	-
2	Avaramkuppam	Palar	-	-	-	-	-	-	-	-	-	-	-	-
3	Villupuram	Ponniyar	0.003	0.006	0.002	0.004	0.71	1.03	-	-	-	-	-	-
4	Vazhavachanur	Ponniyar	0.000	0.007	0.000	0.003	0.84	1.21	3.3	7.7	0.3	1.8	-	-
5	Gummanur	Ponniyar	0.001	0.007	0.02	0.128	0.71	1.00	4.6	7.5	0.3	1.8	-	-
6	Paramakudi	Vaigai	0.001	0.003	0.001	0.002	0.66	0.81	-	-	0.7	3.8	-	-
7	Ambasamudram	Vaigai	0.001	0.005	0.001	0.003	0.39	0.98	6.2	6.7	1.0	2.4	-	-
8	Theni	Suruliyar	0.000	0.008	0.001	0.016	0.24	1.74	6.3	8.1	0.2	2.3	-	-
9	Irrukkankudi	Vaippar	0.002	0.002	0.001	0.002	0.52	0.72	-	-	-	-	-	-
10	Murappanadu	Tambraparani	0.000	0.002	0.001	0.002	0.23	0.65	5.1	6.0	0.3	3.1	-	-
11	A.P. Puram	Chittar	0.000	0.005	0.000	0.003	1.00	2.53	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different Basins.

VIII Basin : East Flowing Rivers of Coasta

Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year : 2004-2005														
1	Thammavaram	Gundalakamma	-	-	-	-	-	-	-	-	-	-	NIL	NIL
2	Avaramkuppam	Palar	-	-	-	-	-	-	-	-	-	-	-	-
3	Villupuram	Ponniyar	-	-	-	-	-	-	-	-	-	-	0.287	0.317
4	Vazhavachanur	Ponniyar	-	-	-	-	-	-	-	-	7.36	7.36	0.202	0.385
5	Gummanur	Ponniyar	-	-	-	-	-	-	-	-	7.61	7.61	0.211	0.462
6	Paramakudi	Vaigai	-	-	-	-	-	-	-	-	-	-	0.211	0.253
7	Ambasamudram	Vaigai	-	-	-	-	-	-	-	-	6.05	6.05	0.109	0.301
8	Theni	Suruliyar	-	-	-	-	-	-	-	-	9.33	9.33	0.102	0.475
9	Irukkankudi	Vaippar	-	-	-	-	-	-	-	-	0.60	0.60	0.192	0.245
10	Murappanadu	Tambraparani	-	-	-	-	-	-	-	-	1.36	1.36	0.109	0.253
11	A.P. Puram	Chittar	-	-	-	-	-	-	-	-	25.89	25.89	0.312	0.421

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different Basins.

VIII Basin : East Flowing Rivers of Coasta

Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
Year : 2004-2005														
1	Thammavaram	Gundalakamma	-	-	-	-	-	-	-	-	-	-	-	-
2	Avaramkuppam	Palar	-	-	-	-	-	-	-	-	-	-	-	-
3	Villupuram	Ponniyar	-	-	-	-	-	-	-	-	-	-	-	-
4	Vazhavachanur	Ponniyar	3.00	3.00	0.29	0.29	4.00	4.00	-	-	3.64	3.64	-	-
5	Gummanur	Ponniyar	5.00	5.00	1.51	1.51	1.00	1.00	-	-	2.37	2.37	-	-
6	Paramakudi	Vaigai	-	-	-	-	-	-	-	-	-	-	-	-
7	Ambasamudram	Vaigai	0.00	0.00	1.26	1.26	11.00	11.00	-	-	2.78	2.78	-	-
8	Theni	Suruliyar	0.00	0.00	1.29	1.29	4.00	4.00	-	-	3.44	3.44	-	-
9	Irrukkankudi	Vaippar	3.00	3.00	0.16	0.16	2.00	2.00	-	-	11.26	11.26	-	-
10	Murappanadu	Tambraparani	5.00	5.00	0.09	0.09	0.00	0.00	-	-	2.27	2.27	-	-
11	A.P. Puram	Chittar	6.00	6.00	2.32	2.32	0.00	0.00	-	-	8.77	8.77	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different Basins.

VIII Basin : East Flowing Rivers of Coasta

Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2004-2005														
1	Thammavaram	Gundalakamma	-	-	-	-	89	212	27.61	78.18	1.01	7.02	1.11	4.63
2	Avaramkuppam	Palar	-	-	-	-	-	-	-	-	-	-	-	-
3	Villupuram	Ponniyar	-	-	-	-	128	180	31.61	38.06	1.08	1.70	NIL	NIL
4	Vazhavachanur	Ponniyar	0.30	0.30	47.00	47.00	144	288	23.94	42.41	0.78	2.50	NIL	NIL
5	Gummanur	Ponniyar	0.47	0.47	21.00	21.00	240	332	40.14	45.07	2.20	3.02	NIL	NIL
6	Paramakudi	Vaigai	-	-	-	-	104	112	20.65	25.4	0.56	0.76	NIL	NIL
7	Ambasamudram	Vaigai	0.24	0.24	64.00	64.00	52	176	14.58	33.09	0.28	1.37	NIL	NIL
8	Theni	Suruliyar	0.30	0.30	83.00	83.00	40	312	14.29	42.19	0.29	2.22	0.37	0.37
9	Irukkankudi	Vaippar	0.26	0.26	62.00	62.00	56	108	32.48	41.06	0.83	1.57	0.03	0.12
10	Murappanadu	Tambraparani	0.24	0.24	54.00	54.00	36	124	22.36	33.33	0.42	1.08	NIL	NIL
11	A.P. Puram	Chittar	0.34	0.34	56.00	56.00	248	845	38.15	53.18	1.99	6.36	NIL	NIL

Note : 1. All the ionic concentrations are expressed in mg./lit. unless mentioned otherwise.

2. (-) indicate that analysis of a particular parameter has not been carried out.

Source: Water Quality YearBook for 2004-05 (East Flowing Rivers)

(Updated during September 2007)

Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IX Basin : West Flowing Rivers of Coastal of Kerala, Karnataka and Maharashtra														
Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2004-05														
1	Badalapur	Ulhas	2.451	92.20	0.0	31.0	7.12	8.02	98	269	0.01	0.04	0.16	0.54
2	Mangaon	Kal	25.98	62.0	25.5	27.0	7.26	7.61	61	99	0.01	0.01	0.17	0.23
3	Adavali/Belne	Gad	0.053	303.3	25.0	28.0	7.10	8.21	83	132	0.01	0.02	0.21	0.33
4	Santeguli	Aghanashini	2.786	144.3	18.0	21.0	6.80	7.40	234	318	0.21	0.43	1.74	2.66
5	Haladi	Haladi	11.42	99.19	25.6	29.6	6.70	7.20	72	219	0.01	0.71	0.32	0.83
6	Yennehole	Yennehole	1.046	75.19	28.0	29.0	6.80	7.10	68	246	0.01	0.17	0.31	0.19
7	Addoor	Gurupur	30.86	121.0	23.5	26.0	6.90	7.50	140	327	0.02	0.03	0.78	1.78
8	Avershe	Sita	1.801	50.75	26.5	28.5	6.80	7.60	99	230	0.01	0.23	0.31	1.37
9	Bantwal	Netravathi	230.5	404.3	27.5	28.0	6.90	7.30	105	206	0.02	0.04	0.55	0.93
10	Erinjipuzha	Payaswani	2.237	206.5	23.5	30.5	6.78	7.29	41	54	0.01	0.03	0.10	0.17
11	Perumannu	Valapatanam	1.374	268.3	26.0	32.0	6.53	7.26	34	55	0.01	0.03	0.09	0.19
12	Kuttiyadi	Kuttiyadi	1.484	66.56	25.0	29.0	6.68	7.80	28	211	0.01	0.07	0.08	0.68
13	Kuniyil	Chaliyar	0.786	157.3	27.0	32.5	6.65	7.25	52	97	0.02	0.05	0.13	0.30
14	Karathodu	Kadalundi	2.510	52.46	26.0	28.0	6.70	6.95	53	122	0.02	0.06	0.18	0.43
15	Pulamanthole	Pulanthodu	1.882	80.66	27.0	32.5	6.78	7.07	52	63	0.03	0.05	0.17	0.28
16	Kumbidi	Bharathapuzha	18.56	233.6	25.0	28.0	7.32	7.55	113	144	0.04	0.07	0.26	0.43
17	Mankara	Bharathapuzha	0.268	13.87	25.0	30.0	7.17	7.70	230	357	0.03	0.10	0.34	1.27
18	Pudur	Bharathapuzha	0.153	9.916	25.0	30.0	7.42	7.80	315	481	0.05	0.12	0.43	1.18
19	Ambarampalayam	Bharathapuzha	1.483	183.5	25.0	30.5	7.13	8.02	82	474	0.03	0.15	0.14	1.16
20	Arangaly	Chalakudy	24.19	94.90	26.0	28.5	6.63	7.05	36	48	0.02	0.04	0.8	0.12
21	Neeleshwaram	Periyar	33.06	400.7	27.0	28.0	6.75	7.40	33	42	0.01	0.04	0.11	0.14
22	Vandiperiyar	Periyar	1.241	5.159	24.0	26.0	6.62	7.02	31	99	0.01	0.09	0.08	0.26
23	Ramangalam	Muvattupuzha	47.61	166.4	27.5	30.5	6.50	7.26	48	62	0.02	0.04	0.10	0.18
24	Kalampur	Kaliyar	3.777	52.79	26.0	28.0	6.60	6.80	35	43	0.02	0.04	0.11	0.14
25	Kidangoor	Meenachil	8.271	52.28	25.0	29.0	6.18	6.78	37	47	0.03	0.05	0.12	0.17
26	Kalloopara	Manimala	8.958	54.07	26.5	29.5	6.30	6.66	35	47	0.01	0.05	0.14	0.20
27	Malakkara	Pamba	45.89	157.6	25.0	28.5	6.58	7.03	29	33	0.02	0.03	0.10	0.12
28	Thumpamon	Achankovil	24.21	39.10	26.5	28.0	6.28	6.60	53	66	0.02	0.05	0.12	0.21
29	Pattazhy	Kallada	19.24	34.10	27.0	28.0	6.50	7.22	26	53	0.02	0.06	0.04	0.19
30	Ayilam	Vamanapuram	10.44	26.31	26.5	27.8	6.80	7.24	43	130	0.03	0.06	0.14	0.47
31	Ashramam	Pazhayar	14.60	14.60	27.0	27.0	7.10	7.10	191	191	0.10	0.10	0.69	0.69

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IX Basin : West Flowing Rivers of Coasta														
Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2004-05														
1	Badalapur	Ulhas	0.30	1.49	0.10	0.72	-	-	0.000	0.013	0.000	0.080	0.00	0.000
2	Mangaon	Kal	0.21	0.40	0.10	0.41	-	-	0.000	0.000	0.000	0.004	0.000	0.000
3	Adavali/Belne	Gad	0.20	0.61	0.10	0.50	-	-	0.000	0.000	0.000	0.004	0.000	0.000
4	Santeguli	Aghanashini	0.30	0.60	0.12	0.16	-	-	-	-	-	-	0.00	0.00
5	Haladi	Haladi	0.23	0.66	0.07	0.39	-	-	-	-	-	-	0.00	0.00
6	Yennehole	Yennehole	0.26	0.60	0.16	0.28	-	-	-	-	-	-	0.00	0.00
7	Addoor	Gurupur	0.60	0.80	0.16	1.02	-	-	-	-	-	-	0.00	0.00
8	Avershe	Sita	0.40	0.85	0.07	0.73	-	-	-	-	-	-	0.00	0.00
9	Bantwal	Netravathi	0.26	0.60	0.07	0.72	-	-	-	-	-	-	0.00	0.00
10	Erinjipuzha	Payaswani	0.12	0.32	0.08	0.28	-	-	-	-	-	-	-	-
11	Perumannu	Valapatanam	0.20	0.36	0.12	0.26	-	-	-	-	-	-	-	-
12	Kuttiyadi	Kuttiyadi	0.20	0.96	0.08	0.60	-	-	-	-	-	-	-	-
13	Kuniyil	Chaliyar	0.28	0.48	0.16	0.44	-	-	-	-	-	-	-	-
14	Karathodu	Kadalundi	0.28	0.48	0.12	0.32	-	-	-	-	-	-	-	-
15	Pulamanthole	Pulanthodu	0.20	0.32	0.12	0.28	-	-	-	-	-	-	-	-
16	Kumbidi	Bharathapuzha	0.48	0.72	0.48	0.60	-	-	-	-	-	-	-	-
17	Mankara	Bharathapuzha	0.96	1.76	0.72	1.76	-	-	-	-	-	-	-	-
18	Pudur	Bharathapuzha	0.84	2.36	0.80	1.80	-	-	-	-	-	-	-	-
19	Ambaramplayam	Bharathapuzha	0.24	1.84	0.32	1.60	-	-	0.002	0.004	0.002	0.004	0.00	0.00
20	Arangaly	Chalakudy	0.20	0.24	0.8	0.20	-	-	-	-	-	-	-	-
21	Neeleshwaram	Periyar	0.12	0.20	0.8	0.20	-	-	-	-	-	-	-	-
22	Vandiperiyar	Periyar	0.16	0.40	0.8	0.40	-	-	-	-	-	-	-	-
23	Ramangalam	Muvattupuzha	0.20	0.28	0.20	0.28	-	-	-	-	-	-	-	-
24	Kalampur	Kaliyar	0.20	0.24	0.12	0.16	-	-	-	-	-	-	-	-
25	Kidangoor	Meenachil	0.12	0.24	0.12	0.20	-	-	-	-	-	-	-	-
26	Kalloopara	Manimala	0.16	0.24	0.12	0.20	-	-	-	-	-	-	-	-
27	Malakkara	Pamba	0.16	0.24	0.08	0.12	-	-	-	-	-	-	-	-
28	Thumpamon	Achankovil	0.28	0.32	0.12	0.16	-	-	-	-	-	-	-	-
29	Pattazhy	Kallada	0.16	0.24	0.08	0.16	-	-	-	-	-	-	-	-
30	Ayilam	Vamanapuram	0.12	0.48	0.08	0.20	-	-	-	-	-	-	-	-
31	Ashramam	Pazhayar	0.79	0.79	0.48	0.48	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IX Basin : West Flowing Rivers of Coasta														
Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year : 2004-05														
1	Badalapur	Ulhas	0.50	1.29	0.12	0.82	0.001	0.024	0.05	0.25	-	-	0.007	0.056
2	Mangaon	Kal	0.50	0.77	0.070	0.21	0.004	0.010	0.05	0.11	-	-	0.004	0.360
3	Adavali/Belne	Gad	0.400	1.300	0.130	0.250	0.002	0.008	0.04	0.06	-	-	0.000	0.050
4	Santeguli	Aghanashini	0.73	1.09	1.63	2.24	0.011	0.042	0.26	0.06	-	-	0.000	0.000
5	Haladi	Haladi	0.29	1.32	0.34	0.87	0.003	0.037	0.020	0.030	-	-	0.000	0.000
6	Yennehole	Yennehole	0.33	0.92	0.34	1.66	0.016	0.027	-	-	-	-	0.000	0.000
7	Addoor	Gurupur	0.65	1.66	0.84	1.75	0.016	0.017	0.020	0.030	-	-	0.000	0.000
8	Avershe	Sita	0.56	1.08	0.32	1.24	0.021	0.090	0.020	0.020	-	-	0.000	0.000
9	Bantwal	Netravathi	0.34	0.99	0.62	1.08	0.22	0.027	0.110	0.120	-	-	0.000	0.000
10	Erinjipuzha	Payaswani	0.22	0.44	0.14	0.25	0.001	0.004	0.021	0.096	-	-	0.15	0.30
11	Perumannu	Valapatanam	0.22	0.40	0.17	0.25	0.001	0.014	0.013	0.065	-	-	0.010	0.128
12	Kuttiyadi	Kuttiyadi	0.22	1.48	0.11	0.68	0.006	0.043	0.004	0.146	-	-	0.006	0.142
13	Kuniyil	Chaliyar	0.34	0.56	0.20	0.31	0.005	0.041	0.021	0.067	-	-	0.003	0.260
14	Karathodu	Kadalundi	0.28	0.40	0.21	0.34	0.003	0.036	0.081	0.146	-	-	0.001	0.207
15	Pulamanthole	Pulanthodu	0.30	0.42	0.17	0.31	0.003	0.043	0.010	0.054	-	-	0.012	0.141
16	Kumbidi	Bharathapuzha	0.76	0.86	0.37	0.48	0.004	0.030	0.060	0.375	-	-	0.032	0.098
17	Mankara	Bharathapuzha	1.62	2.90	0.47	0.85	0.004	0.083	0.021	0.604	-	-	0.064	0.342
18	Pudur	Bharathapuzha	2.60	3.08	0.51	0.96	0.038	0.150	0.050	1.080	-	-	0.088	0.411
19	Ambarampalayam	Bharathapuzha	0.46	3.41	0.21	0.83	0.006	0.046	0.068	0.287	-	-	0.014	0.091
20	Arangaly	Chalakudy	0.20	0.26	0.14	0.23	0.002	0.003	0.021	0.021	-	-	0.01	0.015
21	Neeleshwaram	Periyar	0.20	0.28	0.14	0.17	0.004	0.012	0.018	0.025	-	-	0.012	0.062
22	Vandiperiyar	Periyar	0.20	0.46	0.14	0.41	0.005	0.014	0.008	0.117	-	-	0.010	0.118
23	Ramangalam	Muvattupuzha	0.22	0.30	0.20	0.31	0.003	0.023	0.015	0.050	-	-	0.010	0.172
24	Kalampur	Kaliyar	0.22	0.32	0.14	0.18	0.003	0.007	0.008	0.033	-	-	0.018	0.077
25	Kidangoor	Meenachil	0.18	0.24	0.20	0.23	0.020	0.029	0.021	0.063	-	-	0.015	0.034
26	Kalloopara	Manimala	0.20	0.26	0.17	0.30	0.003	0.013	0.004	0.040	-	-	0.018	0.061
27	Malakkara	Pamba	0.16	0.20	0.12	0.19	0.004	0.029	0.001	0.029	-	-	0.009	0.041
28	Thumpamon	Achankovil	0.26	0.36	0.20	0.23	0.001	0.005	0.071	0.117	-	-	0.011	0.018
29	Pattazhy	Kallada	0.14	0.26	0.12	0.31	0.003	0.019	0.015	0.050	-	-	0.012	0.031
30	Ayilam	Vamanapuram	0.20	0.32	0.23	0.65	0.002	0.009	0.038	0.130	-	-	0.010	0.028
31	Ashramam	Pazhayar	1.10	1.10	0.72	0.72	0.013	0.013	0.202	0.202	-	-	0.004	0.004

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IX Basin : West Flowing Rivers of Coasta														
Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Year : 2004-05														
1	Badalapur	Ulhas	0.000	0.005	0.001	0.025	0.02	0.420	5.2	9.3	0.30	2.30	-	-
2	Mangaon	Kal	0.000	0.000	0.002	0.003	0.02	0.06	5.6	6.5	0.3	2.3	-	-
3	Adavali/Belne	Gad	0.000	0.000	0.001	0.005	0.01	0.32	5.8	7.3	0.1	2.3	-	-
4	Santeguli	Aghanashini	0.000	0.000	0.000	0.000	0.18	0.40	-	-	-	-	-	-
5	Haladi	Haladi	0.000	0.000	0.000	0.000	0.15	27.00	-	-	-	-	-	-
6	Yennehole	Yennehole	0.000	0.000	0.000	0.000	0.17	0.27	-	-	-	-	-	-
7	Addoor	Gurupur	0.000	0.000	0.000	0.000	0.69	1.09	-	-	-	-	-	-
8	Avershe	Sita	0.000	0.000	0.000	0.000	0.18	0.26	-	-	-	-	-	-
9	Bantwal	Netravathi	0.000	0.000	0.000	0.000	0.00	0.26	6.59	8.96	0.67	2.61	-	-
10	Erinjipuzha	Payaswani	0.001	0.002	0.001	0.004	0.143	0.253	6.20	7.20	0.20	0.60	-	-
11	Perumannu	Valapatanam	0.001	0.004	0.001	0.006	0.160	0.263	6.80	7.65	0.40	1.40	-	-
12	Kuttiyadi	Kuttiyadi	0.001	0.006	0.002	0.027	0.117	0.247	-	-	-	-	-	-
13	Kuniyil	Chaliyar	0.001	0.003	0.002	0.029	0.204	0.283	5.30	7.00	0.20	0.80	-	-
14	Karathodu	Kadalundi	0.001	0.091	0.001	0.026	0.153	0.287	6.20	6.80	0.20	1.00	-	-
15	Pulamanthole	Pulanthodu	0.001	0.005	0.001	0.024	0.157	0.260	6.00	7.00	0.20	0.60	-	-
16	Kumbidi	Bharathapuzha	0.001	0.006	0.003	0.027	0.207	0.280	6.40	0.60	0.40	1.60	-	-
17	Mankara	Bharathapuzha	0.004	0.124	0.004	0.023	0.230	0.327	-	-	-	-	-	-
18	Pudur	Bharathapuzha	0.001	0.006	0.002	0.005	0.210	0.340	-	-	-	-	-	-
19	Ambaramplayam	Bharathapuzha	0.001	0.001	0.000	0.003	0.20	0.68	5.6	8.0	0.2	2.0	-	-
20	Arangaly	Chalakudy	0.001	0.002	0.002	0.003	0.137	0.227	6.86	7.00	0.20	1.00	-	-
21	Neeleshwaram	Periyar	0.001	0.002	0.003	0.025	0.117	0.213	6.60	7.60	0.20	0.80	-	-
22	Vandiperiyar	Periyar	0.001	0.005	0.001	0.044	0.157	0.247	-	-	-	-	-	-
23	Ramangalam	Muvattupuzha	0.001	0.001	0.001	0.025	0.140	0.213	6.80	7.82	0.20	0.80	-	-
24	Kalampur	Kaliyar	0.001	0.001	0.001	0.006	0.107	0.220	6.40	7.16	0.20	0.60	-	-
25	Kidangoor	Meenachil	0.001	0.001	0.001	0.005	0.140	0.223	6.20	7.06	0.40	0.80	-	-
26	Kalloopara	Manimala	0.001	0.002	0.001	0.010	0.180	0.253	6.40	7.00	0.20	1.00	-	-
27	Malakkara	Pamba	0.001	0.004	0.001	0.014	0.103	0.217	6.68	7.20	0.20	1.00	-	-
28	Thumpamon	Achankovil	0.001	0.002	0.003	0.005	0.207	0.253	5.60	7.20	0.20	0.80	-	-
29	Pattazhy	Kallada	0.001	0.002	0.001	0.007	0.096	0.283	6.40	7.60	0.20	2.20	-	-
30	Ayilam	Vamanapuram	0.001	0.018	0.004	0.004	0.160	0.207	6.00	7.20	0.40	1.20	-	-
31	Ashramam	Pazhayar	-	-	0.012	0.012	0.317	0.317	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IX Basin : West Flowing Rivers of Coasta														
Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year : 2004-05														
1	Badalapur	Ulhas	-	-	-	-	-	-	-	-	-	-	0.09	0.47
2	Mangaon	Kal	-	-	-	-	-	-	-	-	-	-	0.10	0.19
3	Adavali/Belne	Gad	-	-	-	-	-	-	-	-	-	-	0.00	0.13
4	Santeguli	Aghanashini	-	-	-	-	-	-	-	-	0.00	0.00	-	-
5	Haladi	Haladi	-	-	-	-	-	-	-	-	0.00	0.00	-	-
6	Yennehole	Yennehole	-	-	-	-	-	-	-	-	-	-	-	-
7	Addoor	Gurupur	-	-	-	-	-	-	-	-	-	-	-	-
8	Avershe	Sita	-	-	-	-	-	-	-	-	-	-	-	-
9	Bantwal	Netravathi	-	-	-	-	-	-	-	-	-	-	-	-
10	Erinjipuzha	Payaswani	-	-	-	-	-	-	-	-	0.71	0.71	0.02	0.20
11	Perumannu	Valapatanam	-	-	-	-	-	-	-	-	0.46	0.46	0.01	0.07
12	Kuttiyadi	Kuttiyadi	-	-	-	-	-	-	-	-	1.23	1.23	0.03	0.10
13	Kuniyil	Chaliyar	-	-	-	-	-	-	-	-	2.55	2.55	0.02	0.20
14	Karathodu	Kadalundi	-	-	-	-	-	-	-	-	-	-	0.07	0.24
15	Pulamanthole	Pulanthodu	-	-	-	-	-	-	-	-	1.01	1.01	0.09	0.25
16	Kumbidi	Bharathapuzha	-	-	-	-	-	-	-	-	-	-	0.04	0.29
17	Mankara	Bharathapuzha	-	-	-	-	-	-	-	-	3.16	3.16	0.10	0.48
18	Pudur	Bharathapuzha	-	-	-	-	-	-	-	-	5.48	5.48	0.02	0.24
19	Ambaramplayam	Bharathapuzha	-	-	-	-	-	-	-	-	3.69	3.69	0.155	0.215
20	Arangaly	Chalakudy	-	-	-	-	-	-	-	-	-	-	0.07	0.14
21	Neeleshwaram	Periyar	-	-	-	-	-	-	-	-	1.13	1.13	0.03	0.03
22	Vandiperiyar	Periyar	-	-	-	-	-	-	-	-	-	-	0.01	0.02
23	Ramangalam	Muvattupuzha	-	-	-	-	-	-	-	-	-	-	0.30	0.30
24	Kalampur	Kaliyar	-	-	-	-	-	-	-	-	0.64	0.64	0.15	0.53
25	Kidangoor	Meenachil	-	-	-	-	-	-	-	-	1.59	1.59	0.02	0.02
26	Kalloopara	Manimala	-	-	-	-	-	-	-	-	0.44	0.44	0.01	0.88
27	Malakkara	Pamba	-	-	-	-	-	-	-	-	-	-	0.07	0.48
28	Thumpamon	Achankovil	-	-	-	-	-	-	-	-	0.95	0.95	0.01	0.80
29	Pattazhy	Kallada	-	-	-	-	-	-	-	-	0.63	0.63	0.13	0.13
30	Ayilam	Vamanapuram	-	-	-	-	-	-	-	-	0.63	0.63	0.13	0.13
31	Ashramam	Pazhayar	-	-	-	-	-	-	-	-	-	-	0.62	0.62

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IX Basin : West Flowing Rivers of Coasta														
Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
Year : 2004-05														
1	Badalapur	Ulhas	-	-	-	-	-	-	-	-	-	-	-	-
2	Mangaon	Kal	-	-	-	-	-	-	-	-	-	-	-	-
3	Adavali/Belne	Gad	-	-	-	-	-	-	-	-	-	-	-	-
4	Santeguli	Aghanashini	0.01	0.01	6.57	6.57	0.001	0.001	0.85	0.85	0.46	0.46	-	-
5	Haladi	Haladi	0.09	0.09	7.34	7.34	0.00	0.00	3.35	3.35	0.39	0.39	-	-
6	Yennehole	Yennehole	-	-	-	-	-	-	-	-	-	-	-	-
7	Addoor	Gurupur	-	-	-	-	-	-	-	-	-	-	-	-
8	Avershe	Sita	-	-	-	-	-	-	-	-	-	-	-	-
9	Bantwal	Netravathi	-	-	-	-	-	-	-	-	-	-	-	-
10	Erinjipuzha	Payaswani	0.012	0.012	1.73	1.73	-	-	2.0	2.0	2.73	2.73	-	-
11	Perumannu	Valapatanam	0.010	0.010	0.10	1.10	-	-	2.25	2.25	3.28	3.28	-	-
12	Kuttiyadi	Kuttiyadi	0.016	0.016	0.19	0.19	0.015	0.015	0.85	0.85	1.38	1.38	-	-
13	Kuniyil	Chaliyar	0.006	0.006	2.81	2.81	0.003	0.003	2.20	2.20	9.95	9.95	-	-
14	Karathodu	Kadalundi	-	-	-	-	-	-	-	-	-	-	-	-
15	Pulamanthole	Pulanthodu	0.02	0.02	1.08	1.08	0.007	0.007	0.85	0.85	3.06	3.06	-	-
16	Kumbidi	Bharathapuzha	-	-	-	-	-	-	-	-	-	-	-	-
17	Mankara	Bharathapuzha	0.020	0.020	0.55	0.55	0.020	0.020	9.29	9.29	1.97	1.97	-	-
18	Pudur	Bharathapuzha	0.010	0.010	0.98	0.98	0.010	0.010	1.61	1.61	3.25	3.25	-	-
19	Ambarampalayam	Bharathapuzha	2.00	2.00	0.01	0.01	0.00	0.00	-	-	2.12	2.12	-	-
20	Arangaly	Chalakudy	-	-	-	-	-	-	-	-	-	-	-	-
21	Neeleshwaram	Periyar	0.015	0.015	0.49	0.49	0.046	0.046	1.14	1.14	1.38	1.38	-	-
22	Vandiperiyar	Periyar	-	-	-	-	-	-	-	-	-	-	-	-
23	Ramangalam	Muvattupuzha	-	-	-	-	-	-	1.64	1.64	5.84	5.84	-	-
24	Kalampur	Kaliyar	0.015	0.015	1.09	1.09	-	-	-	-	-	-	-	-
25	Kidangoor	Meenachil	0.016	0.016	1.18	1.18	0.001	0.001	1.63	1.63	3.41	3.41	-	-
26	Kalloopara	Manimala	0.021	0.021	1.41	1.41	0.009	0.009	1.27	1.27	2.26	2.26	-	-
27	Malakkara	Pamba	-	-	-	-	0.008	0.008	1.16	1.16	3.56	3.56	-	-
28	Thumpamon	Achankovil	0.014	0.014	1.13	1.13	-	-	-	-	-	-	-	-
29	Pattazhy	Kallada	0.14	0.14	1.13	1.13	0.010	0.010	1.69	1.69	2.34	2.34	-	-
30	Ayilam	Vamanapuram	1.15	1.15	-	-	2.02	2.02	4.95	4.95	-	-	-	-
31	Ashramam	Pazhayar	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

IX Basin : West Flowing Rivers of Coasta														
Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year : 2004-05														
1	Badalapur	Ulhas	-	-	-	-	20	69	15.00	42.22	0.25	1.18	0.00	0.14
2	Mangaon	Kal	-	-	-	-	25	36	23.16	29.17	0.34	0.42	0.00	0.15
3	Adavali/Belne	Gad	-	-	-	-	18	56	16.42	37.29	0.30	0.60	0.04	0.21
4	Santeguli	Aghanashini	0.05	0.05	0.037	0.037	23	38	63.74	76.31	2.82	4.79	0.00	0.00
5	Haladi	Haladi	0.01	0.01	0.029	0.029	20	45	34.16	44.72	0.66	1.24	0.00	0.00
6	Yennehole	Yennehole	-	-	-	-	21	38	30.69	69.74	0.53	3.07	0.00	0.00
7	Addoor	Gurupur	-	-	-	-	38	91	43.31	50.00	1.27	1.87	0.00	0.00
8	Avershe	Sita	-	-	-	-	24	62	3.50	36.53	0.46	1.93	0.00	0.00
9	Bantwal	Netravathi	-	-	-	-	24	66	40.61	60.94	1.00	1.61	0.00	0.00
10	Erinjipuzha	Payaswani	0.28	0.28	0.036	0.036	16	30	21.28	28.81	0.24	0.38	-	-
11	Perumannu	Valapatanam	0.28	0.28	0.028	0.028	18	31	19.57	26.56	0.21	0.36	-	-
12	Kuttiyadi	Kuttiyadi	-	-	0.093	0.093	14	78	16.22	29.57	0.21	0.77	-	-
13	Kuniyil	Chaliyar	0.04	0.04	0.183	0.183	22	42	18.57	26.09	0.25	0.47	-	-
14	Karathodu	Kadalundi	-	-	-	-	20	40	28.17	33.86	0.4	0.68	-	-
15	Pulamanthole	Pulanthodu	0.01	0.01	0.064	0.064	22	26	25.35	36.36	0.36	0.60	-	-
16	Kumbidi	Bharathapuzha	-	-	-	-	48	62	17.22	27.54	0.34	0.56	-	-
17	Mankara	Bharathapuzha	0.03	0.03	0.106	0.106	98	142	14.29	30.38	0.34	1.07	-	-
18	Pudur	Bharathapuzha	0.27	0.27	0.023	0.023	132	200	12.91	23.14	0.36	0.83	-	-
19	Ambaramplayam	Bharathapuzha	0.28	0.28	36.00	36.00	32	172	17.28	24.52	0.25	0.88	-	-
20	Arangaly	Chalakudy	-	-	-	-	16	20	19.05	23.08	0.20	0.28	-	-
21	Neeleshwaram	Periyar	-	-	0.136	0.136	12	18	25.00	34.15	0.30	0.40	-	-
22	Vandiperiyar	Periyar	-	-	-	-	12	40	15.38	27.78	0.18	0.42	-	-
23	Ramangalam	Muvattupuzha	0.23	0.23	0.032	0.032	22	24	16.67	27.27	0.20	0.38	-	-
24	Kalampur	Kaliyar	-	-	-	-	16	20	23.53	24.44	0.28	0.31	-	-
25	Kidangoor	Meenachil	0.25	0.25	0.049	0.049	14	22	24.49	29.55	0.30	0.36	-	-
26	Kalloopara	Manimala	0.23	0.23	0.028	0.028	16	22	20.42	28.99	0.33	0.43	-	-
27	Malakkara	Pamba	0.28	0.08	0.036	0.036	12	18	22.73	29.73	0.25	0.32	-	-
28	Thumpamon	Achankovil	-	-	-	-	20	22	20.00	32.31	0.26	0.47	-	-
29	Pattazhy	Kallada	0.23	0.23	0.028	0.028	14	20	11.43	32.08	0.11	0.45	-	-
30	Ayilam	Vamanapuram	0.26	0.26	0.021	0.021	14	34	25.93	39.22	0.33	0.81	-	-
31	Ashramam	Pazhayar	-	-	-	-	64	64	33.50	33.50	0.87	0.87	-	-

Note : 1. All the ionic concentrations are expressed in mg./lit. unless mentioned otherwise.

2. (-) indicate that analysis of a particular parameter has not been carried out.

Source: Water Quality YearBook for 2004-05 (West Flowing River)

(Updated during September 2007)

Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

X Basin : Tapi														
Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year :2000-2001														
1	Ghala	Tapi	9.500	51.73	13.5	29.0	7.80	8.30	209	544	0.026	0.051	0.348	1.652
2	Sarankheda	Tapi	0.590	404.0	26.0	28.0	7.8	8.20	231	405	0.026	0.051	0.435	1.130
3	Gidhade	Tapi	1.150	10.32	25.5	29.0	7.8	8.20	231	314	0.026	0.051	0.696	1.043
4	Savkheda	Tapi	0.583	915.9	24.0	27.0	7.80	8.20	248	459	0.026	0.051	0.609	1.478
5	Burhanpur	Tapi	0.478	188.7	17.0	30.5	7.80	8.50	170	589	0.026	0.077	0.435	2.087
6	Dedtalai	Tapi	0.163	134.8	20.0	31.0	7.80	8.50	157	435	0.026	0.051	0.348	1.304
7	Gopal Kheda	Tapi	0.400	41.35	23.0	30.0	7.80	8.20	300	731	0.026	0.051	1.043	3.130
8	Lakhpuri	Tapi	0.080	10.80	18.0	30.0	7.70	8.00	231	1258	0.026	0.154	0.696	5.913
9	Malkheda	Tapi	0.243	5.343	26.0	27.0	7.90	87.20	287	486	0.026	0.051	0.783	1.870

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

X Basin : Tapi														
Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year :2000-2001														
1	Ghala	Tapi	1.522	1.680	0.395	0.641	0.000	0.007	0.004	0.013	0.000	0.003	0.000	0.067
2	Sarankheda	Tapi	1.522	1.600	0.395	0.559	0.001	0.013	0.004	0.011	0.000	0.003	0.000	0.000
3	Gidhade	Tapi	1.522	1.600	0.395	0.641	0.000	0.011	0.006	0.016	0.000	0.008	0.000	0.000
4	Savkheda	Tapi	1.522	1.677	0.395	0.724	0.000	0.011	0.010	0.018	0.000	0.004	0.000	0.000
5	Burhanpur	Tapi	1.440	1.788	0.395	0.763	0.000	0.020	0.005	0.018	0.000	0.010	0.000	0.067
6	Dedtalai	Tapi	1.440	1.677	0.313	0.724	0.000	0.013	0.003	0.011	0.000	0.002	0.000	0.067
7	Gopal Kheda	Tapi	1.522	1.919	0.559	1.056	0.000	0.002	0.004	0.016	0.000	0.007	0.000	0.000
8	Lakhpuri	Tapi	1.522	2.288	0.395	1.512	0.000	0.007	0.005	0.026	0.000	0.017	0.000	0.000
9	Malkheda	Tapi	1.522	1.839	0.477	0.707	0.000	0.004	0.010	0.016	0.000	0.001	0.000	0.000

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

X Basin : Tapi														
Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year :2000-2001														
1	Ghala	Tapi	1.738	2.426	0.338	1.183	0.005	0.012	0.175	0.310	-	-	0.001	0.003
2	Sarankheda	Tapi	1.803	2.131	0.338	0.901	0.005	0.011	0.184	0.260	-	-	0.001	0.002
3	Gidhade	Tapi	1.803	2.164	0.507	0.845	0.006	0.012	0.205	0.253	-	-	0.002	0.004
4	Savkheda	Tapi	1.869	2.328	0.451	1.070	0.006	0.016	0.226	0.476	-	-	0.002	0.004
5	Burhanpur	Tapi	1.672	2.787	0.338	1.465	0.006	0.020	0.205	0.427	-	-	0.001	0.005
6	Dedtalai	Tapi	1.672	2.361	0.366	1.099	0.004	0.016	0.101	0.268	-	-	0.001	0.005
7	Gopal Kheda	Tapi	2.066	3.180	0.845	2.197	0.009	0.016	0.212	0.427	-	-	0.002	0.007
8	Lakhpuri	Tapi	1.803	4.918	0.620	4.169	0.005	0.029	0.215	0.801	-	-	0.002	0.006
9	Malkheda	Tapi	1.967	2.590	0.620	1.352	0.007	0.013	0.215	0.466	-	-	0.003	0.005

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

X Basin : Tapi														
Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(2)	(3)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)
Year :2000-2001														
1	Ghala	Tapi	0.000	0.000	0.000	0.004	0.323	0.696	-	-	0.1	1.8	-	-
2	Sarankheda	Tapi	0.000	0.000	0.001	0.004	0.495	0.696	-	-	0.2	1.9	-	-
3	Gidhade	Tapi	0.000	0.001	0.001	0.003	0.412	0.799	-	-	0.2	1.0	-	-
4	Savkheda	Tapi	0.000	0.000	0.001	0.004	0.390	0.811	-	-	0.3	1.3	-	-
5	Burhanpur	Tapi	0.000	0.002	0.001	0.005	0.328	0.968	-	-	0.1	2.1	-	-
6	Dedtalai	Tapi	0.000	0.000	0.000	0.002	0.301	0.969	-	-	0.2	1.5	-	-
7	Gopal Kheda	Tapi	0.000	0.001	0.003	0.004	0.390	0.548	-	-	0.2	1.5	-	-
8	Lakhpuri	Tapi	0.000	0.004	0.002	0.010	0.416	0.758	-	-	0.1	1.5	-	-
9	Malkheda	Tapi	0.000	0.002	0.004	0.005	0.382	0.600	-	-	0.7	0.9	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

X Basin : Tapi														
Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year :2000-2001														
1	Ghala	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
2	Sarankheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
3	Gidhade	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
4	Savkheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
5	Burhanpur	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
6	Dedtalai	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
7	Gopal Kheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
8	Lakhpuri	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
9	Malkheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

X Basin : Tapi														
Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
Year :2000-2001														
1	Ghala	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
2	Sarankheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
3	Gidhade	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
4	Savkheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
5	Burhanpur	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
6	Dedtalai	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
7	Gopal Kheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
8	Lakhpuri	Tapi	-	-	-	-	-	-	-	-	-	-	-	-
9	Malkheda	Tapi	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

X Basin : Tapi														
Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year :2000-2001														
1	Ghala	Tapi	-	-	-	-	95.83	116.0	15.19	41.05	0.36	1.53	0.02	0.14
2	Sarankheda	Tapi	-	-	-	-	95.83	108.0	18.29	33.84	0.53	1.09	0.04	0.05
3	Gidhade	Tapi	-	-	-	-	95.83	112.1	26.37	31.52	0.71	0.99	-	-
4	Savkheda	Tapi	-	-	-	-	95.83	120.0	23.12	38.91	0.61	1.37	0.04	0.09
5	Burhanpur	Tapi	-	-	-	-	91.74	127.60	18.94	44.50	0.45	1.85	0.04	0.24
6	Dedtalai	Tapi	-	-	-	-	87.63	120.00	16.36	36.26	0.37	1.23	0.02	0.12
7	Gopal Kheda	Tapi	-	-	-	-	104.06	148.75	33.12	51.76	1.02	2.57	0.10	0.43
8	Lakhpuri	Tapi	-	-	-	-	95.83	190.0	26.37	60.72	0.71	4.29	0.05	1.17
9	Malkheda	Tapi	-	-	-	-	95.95	127.3	27.88	42.09	0.78	1.66	0.04	0.04

Source: Water Quality YearBook for 2004-05 (Tapi Basin)

(Updated during September 2007)

Note : 1. All the ionic concentrations are expressed in mg./lit. unless mentioned otherwise.

2. (-) indicate that analysis of a particular parameter has not been carried out.

Table No.3.3 : Site-wise Maximum/Minimum Value of Water Quality Parameters for Different River Basin.

XI Basin : Narmada

Sl. No.	Site Name	Name of the River/ Stream	Q (CumeCs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year : 2003-2004														
1	Chandwada	Orsang	0.585	282	21.0	29.0	7.80	8.52	220	388	0.026	0.026	0.783	0.957
2	Gurudeshwar	Narmada	3.058	5517.0	19.0	29.0	7.53	8.80	214	507	0.000	0.051	0.783	1.131
3	Rajghat	Narmada	30.3	4754	10.0	305.0	6.58	8.74	203	643	0.028	0.251	0.183	1.818
4	Mandaleshwar	Narmada	31.1	4150	17.0	29.5	8.14	8.72	169	533	0.028	0.120	0.183	0.735
5	Kogaon	Kundu	0.000	147.6	21.0	30.0	8.27	8.85	229.0	546	0.031	0.107	0.226	1.183
6	Mortaka	Narmada	50.07	2901	0.0	31.0	7.62	8.71	163	346	0.026	0.113	0.187	0.731
7	Handia	Narmada	59.8	4603	17.5	30.5	8.01	8.68	169	510	0.020	0.105	0.144	0.731
8	Chhidgaon	Ganjal	0.380	143.9	19.0	32.5	8.00	8.58	208	549	0.020	0.120	0.191	2.084
9	Hoshangabad	Narmada	10.00	4683	14.5	31.0	8.00	8.55	138	361	0.020	0.095	0.144	1.983
10	Sandia	Narmada	81.5	6294	18.0	31.0	7.91	8.45	137	528	0.020	0.100	0.126	1.013
11	Gadarwara	Sheekkar	0.283	1724	16.0	28.0	8.11	8.67	187	507	0.013	0.097	0.118	0.861
12	Barmanghat	Narmada	0.64	4721	20.0	32.0	8.06	8.53	138	309	0.010	0.123	0.115	0.961
13	Belkheri	Sherat	0.222	468.3	0.0	32.0	8.00	8.55	142	537	0.013	0.100	0.096	0.822
14	Patan	Hiran	0.710	183.8	14.8	28.3	7.68	8.69	136	630	0.046	0.125	0.96	1.453
15	Bamni	Banjar	0.300	654.9	0.00	29.3	7.61	8.45	67	333	0.020	0.113	0.100	0.561
16	Mohgaon	Burhner	0.000	338.6	0.00	34.0	0.00	8.50	0.00	337	0.000	0.130	0.000	0.683
17	Manot	Narmada	0.138	1738	0.00	33.2	0.00	8.59	0.00	321	0.000	0.107	0.000	0.731
18	Dindori	Narmada	0.503	234.5	11.5	27.5	8.01	8.60	150	380	0.002	0.105	0.139	0.613

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Table No.3.3 : Site-wise Maximum/Minimum Value of Water Quality Parameters for Different River Basin.

XI Basin : Narmada

Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year : 2003-2004														
1	Chandwada	Orsang	1.522	1.600	0.395	0.560	0.001	0.002	0.000	0.002	0.000	0.001	0.000	0.167
2	Gurudeshwar	Narmada	1.437	1.600	0.395	0.560	0.000	0.002	0.000	0.003	0.000	0.002	0.000	0.200
3	Rajghat	Narmada	0.998	2.924	0.716	2.296	-	-	NIL	NIL	NIL	NIL	0.000	0.657
4	Mandaleshwar	Narmada	0.848	2.270	0.403	1.877	-	-	NIL	NIL	NIL	NIL	0.000	1.030
5	Kogaon	Kundu	0.803	3.204	0.658	2.543	-	-	NIL	NIL	NIL	NIL	0.000	1.123
6	Mortaka	Narmada	0.773	2.365	0.527	1.539	-	-	NIL	NIL	NIL	NIL	0.000	0.750
7	Handia	Narmada	1.048	2.455	0.543	1.844	-	-	NIL	NIL	NIL	NIL	0.000	0.657
8	Chhidgaon	Ganjal	1.203	2.804	0.691	2.560	-	-	NIL	NIL	NIL	NIL	0.000	0.560
9	Hoshangabad	Narmada	0.778	2.405	0.741	1.942	-	-	NIL	NIL	NIL	NIL	0.000	0.897
10	Sandia	Narmada	0.669	2.804	0.058	2.181	-	-	NIL	NIL	NIL	NIL	0.000	0.750
11	Gadarwara	Sheekkar	0.803	2.899	0.379	2.494	-	-	NIL	NIL	NIL	NIL	0.000	0.657
12	Barmanghat	Narmada	0.803	1.667	0.403	1.399	-	-	NIL	NIL	NIL	NIL	0.000	0.480
13	Belkheri	Sherat	0.808	2.919	0.436	2.576	-	-	NIL	NIL	NIL	NIL	0.000	0.657
14	Patan	Hiran	0.728	3.149	0.560	2.823	-	-	NIL	NIL	NIL	NIL	0.000	0.563
15	Bamni	Banjar	0.409	2.046	0.379	1.728	-	-	-	-	NIL	NIL	0.000	0.570
16	Mohgaon	Burhner	0.000	1.612	0.000	1.679	-	-	NIL	NIL	NIL	NIL	0.000	0.560
17	Manot	Narmada	0.000	1.687	0.000	1.638	-	-	NIL	NIL	NIL	NIL	0.000	0.750
18	Dindori	Narmada	0.863	1.647	0.280	1.564	-	-	NIL	NIL	NIL	NIL	0.000	0.657

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Table No.3.3 : Site-wise Maximum/Minimum Value of Water Quality Parameters for Different River Basin.

XI Basin : Narmada

Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)

Year : 2003-2004

1	Chandwada	Orsang	1.639	1.803	0.732	0.958	0.009	0.019	0.179	0.225	-	-	0.003	0.004
2	Gurudeshwar	Narmada	1.295	1.885	0.282	1.580	0.003	0.022	0.142	0.393	-	-	0.001	0.003
3	Rajghat	Narmada	2.049	5.424	0.189	0.767	0.000	0.079	0.108	0.435	-	-	0.000	0.156
4	Mandaleshwar	Narmada	1.016	3.802	0.175	0.285	0.007	0.038	0.085	0.262	-	-	0.011	0.161
5	Kogaon	Kundu	2.425	5.310	0.203	0.443	0.015	0.074	0.094	0.479	-	-	0.045	0.397
6	Mortaka	Narmada	1.508	3.753	0.183	0.248	0.001	0.179	0.085	0.325	-	-	0.013	0.200
7	Handia	Narmada	1.475	4.818	0.172	0.251	0.005	0.000	0.092	0.291	-	-	0.010	0.200
8	Chhidgaon	Ganjal	2.278	5.900	0.186	0.420	0.002	0.221	0.123	0.354	-	-	0.024	0.242
9	Hoshangabad	Narmada	1.393	3.966	0.175	0.251	0.004	0.028	0.094	0.308	-	-	0.006	0.147
10	Sandia	Narmada	1.360	5.752	0.155	0.291	0.006	0.029	0.071	0.408	-	-	0.006	0.194
11	Gadarwara	Sheekkar	1.245	5.195	0.155	0.429	0.008	0.147	0.102	0.329	-	-	0.021	0.187
12	Barmanghat	Narmada	1.409	2.999	0.178	0.401	0.005	0.095	0.52	0.283	-	-	0.006	0.148
13	Belkheri	Sherat	1.557	5.900	0.172	0.392	0.006	0.153	0.037	0.344	-	-	0.021	0.129
14	Patan	Hiran	1.475	6.326	0.172	0.488	0.006	0.116	0.112	0.423	-	-	0.008	0.135
15	Bamni	Banjar	0.656	3.507	0.127	0.257	0.004	0.027	0.002	0.412	-	-	0.008	0.145
16	Mohgaon	Burhner	0.000	3.704	0.000	0.279	0.000	0.042	0.000	0.229	-	-	0.000	0.145
17	Manot	Narmada	0.000	2.999	0.000	0.228	0.000	0.027	0.000	0.235	-	-	0.000	0.161
18	Dindori	Narmada	1.672	3.540	0.172	0.268	0.003	0.018	0.077	0.367	-	-	0.011	0.29

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Table No.3.3 : Site-wise Maximum/Minimum Value of Water Quality Parameters for Different River Basin.

XI Basin : Narmada

Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
(1)	(2)	(3)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Year : 2003-2004														
1	Chandwada	Orsang	0.000	0.001	0.000	0.001	0.249	0.338	-	-	0.1	0.1	-	-
2	Gurudeshwar	Narmada	0.000	0.000	0.000	0.002	0.249	0.391	-	-	0.6	1.8	-	-
3	Rajghat	Narmada	0.000	0.004	0.000	0.005	0.486	1.598	6.2	8.7	0.6	4.2	-	-
4	Mandaleshwar	Narmada	0.000	0.003	0.000	0.005	0.258	0.988	5.5	8.3	0.4	2.4	-	-
5	Kogaon	Kundu	0.000	0.004	0.000	0.005	0.568	1.183	-	-	0.4	2.8	-	-
6	Mortaka	Narmada	0.000	0.004	0.000	0.004	0.252	1.598	-	-	0.8	2.0	-	-
7	Handia	Narmada	0.000	0.004	0.000	0.004	0.379	1.157	0.0	7.2	0.5	2.9	-	-
8	Chhidgaon	Ganjal	0.000	0.008	0.000	0.004	0.000	1.922	-	-	-	-	-	-
9	Hoshangabad	Narmada	0.000	0.003	0.000	0.006	0.252	1.257	5.8	8.9	0.6	2.5	-	-
10	Sandia	Narmada	0.000	0.002	0.000	0.004	0.231	1.291	5.2	8.6	-	-	-	-
11	Gadarwara	Sheekkar	0.000	0.004	0.000	0.003	0.284	1.367	-	-	0.7	2.6	-	-
12	Barmanghat	Narmada	0.000	0.004	0.000	0.006	0.284	0.831	0.0	12.2	0.8	2.2	-	-
13	Belkheri	Sherat	0.000	0.039	0.001	0.005	0.415	1.714	-	-	-	-	-	-
14	Patan	Hiran	0.000	0.005	0.001	0.004	0.042	2.093	-	-	0.8	2.7	-	-
15	Bamni	Banjar	0.000	0.004	0.000	0.008	0.174	0.944	-	-	-	-	-	-
16	Mohgaon	Burhner	0.000	0.002	0.000	0.004	0.000	1.459	-	-	-	-	-	-
17	Manot	Narmada	0.000	0.002	0.000	0.004	0.000	1.225	8.5	12.2	0.9	3.8	-	-
18	Dindori	Narmada	0.000	0.005	0.000	0.006	0.389	1.335	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Value of Water Quality Parameters for Different River Basin.

XI Basin : Narmada

Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)

Year : 2003-2004

1	Chandwada	Orsang	-	-	-	-	-	-	-	-	-	-	-	-
2	Gurudeshwar	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
3	Rajghat	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
4	Mandaleshwar	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
5	Kogaon	Kundu	-	-	-	-	-	-	-	-	-	-	-	-
6	Mortaka	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
7	Handia	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
8	Chhidgaon	Ganjal	-	-	-	-	-	-	-	-	-	-	-	-
9	Hoshangabad	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
10	Sandia	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
11	Gadarwara	Sheekkar	-	-	-	-	-	-	-	-	-	-	-	-
12	Barmanghat	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
13	Belkheri	Sherat	-	-	-	-	-	-	-	-	-	-	-	-
14	Patan	Hiran	-	-	-	-	-	-	-	-	-	-	-	-
15	Bamni	Banjar	-	-	-	-	-	-	-	-	-	-	-	-
16	Mohgaon	Burhner	-	-	-	-	-	-	-	-	-	-	-	-
17	Manot	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
18	Dindori	Narmada	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Value of Water Quality Parameters for Different River Basin.

XI Basin : Narmada

Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
Year : 2003-2004														
1	Chandwada	Orsang	-	-	-	-	-	-	-	-	-	-	-	-
2	Gurudeshwar	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
3	Rajghat	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
4	Mandaleswar	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
5	Kogaon	Kundu	-	-	-	-	-	-	-	-	-	-	-	-
6	Mortaka	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
7	Handia	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
8	Chhidgaon	Ganjal	-	-	-	-	-	-	-	-	-	-	-	-
9	Hoshangabad	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
10	Sandia	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
11	Gadarwara	Sheekkar	-	-	-	-	-	-	-	-	-	-	-	-
12	Barmanghat	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
13	Belkheri	Sherat	-	-	-	-	-	-	-	-	-	-	-	-
14	Patan	Hiran	-	-	-	-	-	-	-	-	-	-	-	-
15	Bamni	Banjar	-	-	-	-	-	-	-	-	-	-	-	-
16	Mohgaon	Burhner	-	-	-	-	-	-	-	-	-	-	-	-
17	Manot	Narmada	-	-	-	-	-	-	-	-	-	-	-	-
18	Dindori	Narmada	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Value of Water Quality Parameters for Different River Basin.

XI Basin : Narmada

Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)

Year : 2003-2004

1	Chandwada	Orsang	-	-	-	-	96	108	27.9	32.1	0.78	0.96	NIL	NIL
2	Gurudeshwar	Narmada	-	-	-	-	96	108	0.0	35.0	0.00	1.11	NIL	NIL
3	Rajghat	Narmada	-	-	-	-	99	247	7.3	33.7	0.18	1.41	0.03	2.46
4	Mandaleshwar	Narmada	-	-	-	-	78	196	7.5	22.8	0.18	0.72	NIL	3.61
5	Kogaon	Kundu	-	-	-	-	73	266	8.3	28.6	0.23	1.21	0.12	1.23
6	Mortaka	Narmada	-	-	-	-	77	187	7.2	23.0	0.19	0.67	0.01	0.60
7	Handia	Narmada	-	-	-	-	81	217	5.9	26.2	0.16	0.73	NIL	0.85
8	Chhidgaon	Ganjal	-	-	-	-	103	258	6.1	34.9	0.16	1.47	NIL	2.20
9	Hoshangabad	Narmada	-	-	-	-	76	180	5.9	41.8	0.15	1.70	NIL	1.13
10	Sandia	Narmada	-	-	-	-	48	246	6.5	20.8	0.14	0.73	0.04	1.77
11	Gadarwara	Sheekkar	-	-	-	-	60	255	5.5	20.9	0.14	0.68	NIL	1.63
12	Barmanghat	Narmada	-	-	-	-	60	150	5.3	36.0	0.11	1.05	NIL	0.77
13	Belkheri	Sherat	-	-	-	-	70	258	5.7	17.2	0.11	0.59	NIL	1.56
14	Patan	Hiran	-	-	-	-	73	290	4.4	32.7	0.08	1.21	NIL	1.85
15	Bamni	Banjar	-	-	-	-	31	173	4.7	26.1	0.11	0.64	NIL	0.70
16	Mohgaon	Burhner	-	-	-	-	0.0	147	0.0	19.3	0.00	0.58	NIL	0.50
17	Manot	Narmada	-	-	-	-	0.00	152	0.0	20.6	0.00	0.61	NIL	0.95
18	Dindori	Narmada	-	-	-	-	68	150	6.9	19.7	0.14	0.55	NIL	1.64

Source : Water Quality Year Book for 2003-2004. (Narmada Basin)

(Updated during September 2007)

Note : All the ionic concentrations are expressed in mg./lit., unless mentioned otherwise.

Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

XII Basin : Mahi, Sabarmati and Other West Flowing Rivers of Saurashtra & Kutch

Sl. No.	Site Name	Name of the River/ Stream	Q (Cumecs)		Temperature °C		pH		Sp.Conductance		Potassium		Sodium	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year :2000-2001														
1	Mataji	Mahi	0.155	22.77	26.0	30.0	7.7	8.20	209	352	0.26	0.26	0.435	0.870
2	Rangeli	Som	0.000	11.34	27.0	30.0	7.90	8.20	RD	442	0.026	0.051	0.783	1.391
3	Paderdibadi	Mahi	0.000	62.00	19.0	27.0	7.80	8.20	282	599	0.026	0.077	0.957	2.261
4	Khanpur	Mahi	3.720	31.12	15.5	30.0	7.80	8.20	282	949	0.026	0.103	0.957	3.391
6	Nabhoi	Sabarmati	0.000	550.0	22.0	27.5	7.40	8.20	648	3524	0.051	0.462	2.957	18.17
7	Yerli	Purna	0.379	212.1	23.0	26.5	7.80	8.20	248	1148	0.026	0.051	0.696	4.696
8	Dapuri	Girna	1.155	40.96	25.5	28.5	7.80	8.10	275	556	0.026	0.051	0.870	2.174

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

XII Basin : Mahi, Sabarmati and OtI

Sl. No.	Site Name	Name of the River/ Stream	Calcium		Magnesium		Aluminium		Iron		Ammonia(NH ₃)		Carbonate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Year :2000-2001														
1	Mataji	Mahi	1.440	1.600	0.477	0.641	0.000	0.004	0.000	0.003	0.000	0.001	0.000	0.000
2	Rangeli	Som	1.600	1.776	0.559	0.477	0.000	0.002	0.003	0.011	0.000	0.002	0.000	0.000
3	Paderdibadi	Mahi	1.522	1.680	0.477	0.806	0.000	0.004	0.004	0.012	0.000	0.003	0.000	0.000
4	Khanpur	Mahi	1.522	1.870	0.477	1.138	0.000	0.004	0.001	0.014	0.000	0.006	0.000	0.000
6	Nabhoi	Sabarmati	1.780	3.405	0.806	2.207	0.027	0.042	0.024	0.114	0.348	2.014	0.000	0.000
7	Yerli	Purna	1.522	2.020	0.477	1.303	0.000	0.004	0.006	0.014	0.000	0.007	0.000	0.000
8	Dapuri	Girna	1.522	1.780	0.477	0.715	0.000	0.004	0.006	0.017	0.001	0.004	0.000	0.000

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

XII Basin : Mahi, Sabarmati and OtI

Sl. No.	Site Name	Name of the River/ Stream	Bicarbonate		Chloride		Fluoride		Sulphate		Sulphite		Nitrate	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
Year :2000-2001														
1	Mataji	Mahi	1.77	2.197	0.394	0.732	0.004	0.008	0.173	0.214	RD	RD	0.001	0.002
2	Rangeli	Som	2.098	2.492	0.563	1.183	0.005	0.008	0.234	0.310	RD	RD	0.001	0.002
3	Paderdibadi	Mahi	2.033	2.820	0.732	1.634	0.004	0.015	0.176	0.281	-	-	0.001	0.003
4	Khanpur	Mahi	1.967	3.508	0.845	3.042	0.003	0.014	0.218	0.380	-	-	0.001	0.003
6	Nabhoi	Sabarmati	2.656	6.820	2.197	13.859	0.017	0.045	1.008	5.292	-	-	0.005	0.016
7	Yerli	Purna	1.934	4.230	0.507	3.606	0.005	0.017	0.218	0.601	-	-	0.002	0.004
8	Dapuri	Girna	1.902	2.590	0.676	1.577	0.007	0.017	0.256	0.388	-	-	0.002	0.006

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

XII Basin : Mahi, Sabarmati and OtI

Sl. No.	Site Name	Name of the River/ Stream	Nitrite		Phosphate		Silica (SiO ₃)		DO (ppm)		BOD (ppm)		Total Coliform (no.per 10 ml)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
			(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
(1)	(2)	(3)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Year :2000-2001														
1	Mataji	Mahi	0.000	0.000	0.001	0.004	0.247	0.391	RD	RD	0.4	1.6	RD	RD
2	Rangeli	Som	0.000	0.000	0.002	0.006	0.275	0.367	RD	RD	0.1	1.2	RD	RD
3	Paderdibadi	Mahi	0.000	0.001	0.001	0.006	0.285	0.377	-	-	0.2	0.8	-	-
4	Khanpur	Mahi	0.000	0.001	0.000	0.004	0.275	0.431	-	-	0.5	1.7	-	-
6	Nabhoi	Sabarmati	0.003	0.009	0.034	0.105	0.548	0.854	-	-	4.0	29.0	-	-
7	Yerli	Purna	0.000	0.002	0.001	0.005	0.378	0.654	-	-	0.2	2.4	-	-
8	Dapuri	Girna	0.000	0.001	0.001	0.004	0.381	0.548	-	-	0.5	0.8	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

XII Basin : Mahi, Sabarmati and OtI														
Sl. No.	Site Name	Name of the River/ Stream	Faecal Coliform (no.per 10 ml)		Total plate count (no.per 10 ml)		Phytoplankton (no.per ml)		Zooplankton (no.per litre)		Arsenic (ppm)		Boron (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
Year :2000-2001														
1	Mataji	Mahi	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD
2	Rangeli	Som	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD
3	Paderdibadi	Mahi	-	-	-	-	-	-	-	-	-	-	-	-
4	Khanpur	Mahi	-	-	-	-	-	-	-	-	-	-	-	-
6	Nabhoi	Sabarmati	-	-	-	-	-	-	RD	-	-	-	-	-
7	Yerli	Purna	-	-	-	-	-	-	-	-	-	-	-	-
8	Dapuri	Girna	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

XII Basin : Mahi, Sabarmati and OtI

Sl. No.	Site Name	Name of the River/ Stream	Cadmium (ppm)		Chromium (ppm)		Copper (ppm)		Cyanide (ppm)		Lead (ppm)		Manganese (ppm)	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
Year :2000-2001														
1	Mataji	Mahi	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD
2	Rangeli	Som	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD
3	Paderdibadi	Mahi	-	-	-	-	-	-	-	-	-	-	-	-
4	Khanpur	Mahi	-	-	-	-	-	-	-	-	-	-	-	-
6	Nabhoi	Sabarmati	RD	-	-	-	-	-	RD	-	-	-	-	-
7	Yerli	Purna	-	-	-	-	-	-	-	-	-	-	-	-
8	Dapuri	Girna	-	-	-	-	-	-	-	-	-	-	-	-

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Table No.3.3 : Site-wise Maximum/Minimum Values of Water Quality Parameters for Different River Basins.

XII Basin : Mahi, Sabarmati and Otl

Sl. No.	Site Name	Name of the River/ Stream	Mercury (ppm)		Zinc (ppm)		Hardness		Sodium %		SAR		RSC	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(1)	(2)	(3)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)
Year :2000-2001														
1	Mataji	Mahi	RD	RD	RD	RD	95.85	112.06	18.29	27.72	0.44	0.82	Nil	Nil
2	Rangeli	Som	RD	RD	RD	RD	103.84	120.89	27.13	39.09	0.77	1.43	Nil	0.10
3	Paderdibadi	Mahi	-	-	-	-	99.95	124.30	32.09	46.87	0.96	2.03	0.03	0.33
4	Khanpur	Mahi	-	-	-	-	99.95	150.42	32.09	55.91	0.96	3.19	0.05	0.56
6	Nabhoi	Sabarmati	-	-	-	-	129.29	277.18	52.85	76.21	7.44	11.01	0.07	1.37
7	Yerli	Purna	-	-	-	-	95.95	166.1	25.57	59.97	0.70	3.98	0.04	0.91
8	Dapuri	Girna	-	-	-	-	95.95	124.8	30.05	46.05	0.87	1.95	0.07	0.09

Source: Water Quality YearBook for 2004-05 (Mahi, Sabarmati & Other West Flowing Rivers of Saurashtra & Kutch) (Updated during Sept., 2007)

Note : 1. All the ionic concentrations are expressed in mg./lit. unless mentioned otherwise.

2. (-) indicate that analysis of a particular parameter has not been carried out.

SECTION-IV
LAND USE STATISTICS

SECTION – IV

LAND USE STATISTICS

Land use pattern is a fairly useful indicator in understanding the environmental set up, socio-economic status, infrastructural facilities and climatic conditions of an area. The land use pattern is an outcome of the interaction and interplay of the various physical conditions of the area. It gives not only the land coverage but also an insight into the nature of environmental degradation in the catchment basin. Hence it is considered very important in the environmental study of any area. Various Government Departments for their respective administrative units such as Blocks/Tehsils/Districts mostly compile the information. But information is not available for districts/areas under different basins. It may be possible to work out estimated district wise basin wise area but the available district wise information on land use pattern is also quite back dated and the latest available information relates to 1992-93, which has also already been included in the previous issue. In this issue we have confined our analysis at statewise basinwise information. As we have latest information available on basin area state wise for 1999-2000. The basin wise land utilisation has been estimated as sum total of estimated land use pattern in the area of state falling within a basin worked out in proportion to the area of the state falling in the particular basin to total state area. The data on state-wise land use pattern as published by the Directorate of Economics and Statistics, Department of Agriculture & Co-operation, Ministry of Agriculture has been used for the purpose.

The data has been classified into (i) forest area (ii) area not available for cultivation (iii) other uncultivated lands excluding fallow land (iv) fallow land (v) net area sown (vi) total cropped area and (vii) area sown more than once.

The non-classified river basins cover 163080.6 thousand hectares area (table 4.1) of the states. The west flowing river basin from Kanyakumari to Tapi has the highest total cropped area of about 68 % of its basin area followed by Godavari and Krishna basin with 63%. Similarly west flowing river basin from Kanyakumari to Tapi has highest net sown area of 55% followed by Krishna basin 52%.

Area under forests have been reported highest in Godavari Basin. However it can be seen that around 19% of areas of all

basins together are covered under uncultivated lands including fallow land. Among these basins the East flowing river basin has the highest of about 16% of its area still lying unutilised and if sufficient irrigation water is supplied and proper treatment of land is provided it can be brought under agricultural use.

The explanation, as per Ministry of Agriculture, Government of India, of the terms used in this publication is as under:

A Terms Used in the Publication

- i) Reporting Area for Land Utilisation Statistics** The Reporting area stands for the area for which data on land use classification of area are available. In areas where land utilization figures are based on land records, reporting area is the area according to village papers, i.e. the papers prepared by the village accountants. In some cases, the village papers may not be maintained in respect of the entire area of the State. For example, village papers are not prepared for forest areas for which no village paper exists but, for which ad-hoc estimates of classification of area etc. framed to complete the coverage.
- ii) Forest** This includes all lands classified as forest under any legal enactment dealing with forests or administered as forests, whether state-owned or private, and whether wooded or maintained as potential forest land. The area of crops raised in the forest and grazing lands or areas open for grazing within the forests remains included under the forest area.
- iii) Area under agricultural Uses** **Non-** This includes all lands occupied by buildings, roads and railways or under water, e.g. rivers and canals and other lands put to uses other than agricultural.

- iv) Barren and Un-culturable Land** This include all barren and unculturable land like mountains, deserts, etc. Land which cannot be brought under cultivation, except at an exorbitant cost, is classified as unculturable whether such land is in isolated blocks or within cultivated holdings.
- v) Permanent Pastures and other Grazing Lands** This includes all grazing lands whether they are permanent pastures and meadows or not. Village common grazing land is included under this head.
- vi) Land under Miscellaneous Tree Crops, etc.** This includes all cultivable land which is not included in 'Net area sown' but is put to some agricultural use. Lands under Casuring trees, thatching grasses, bamboo bushes and other groves for fuel, etc. which are not included under 'Orchards' are classified under this category.
- vii) Culturable Waste Land** This includes land available for cultivation, whether not taken up for cultivation or taken up for cultivation once but not cultivated during the last five years or more in succession including the current year for one reason or the other. Such lands may be either fallow or covered with shrubs and jungles which are not put to any use. They may be assessed or unassessed and may lie in isolated blocks or within cultivated holdings.
- viii) Fallow Lands other than Current Fallows** (4) This includes all lands, which were taken up for cultivation but are temporarily out of cultivation for a period of not less than one year and not more than five years.
- ix) Current Fallows** This represents cropped area, which

are kept fallow during the current year. For example, if any seeding area is not cropped against the same year it may be treated as current fallow.

- x) Net Area Sown** This represents the total area sown with crops and Orchards. Area sown more than once in the same year is counted only once.
- xi) Total Cropped Area** This represents the total area covered with crops, i.e. the sum total of areas covered by all the individual crops; areas sown with crops more than once during the year being counted as separate areas for each crop. It is also known as Gross Cropped Area.
- xii) Area Sown more than once** This represents the areas on which crops are cultivated more than once during the agricultural year. This is obtained by deducting 'Net Area Sown' from 'Total Cropped Area'.

B. DEFINITION OF SOME COMMONLY USED TERMS

- i) Total Cultivable Area** This consists of net area sown, current fallows, fallow lands other than current fallows, culturable waste and land under miscellaneous tree crops.
- ii) Total Cultivated Area** This consists of net area sown and current fallows.
- iii) Agriculture Land/ Total Culturable Land** Same as cultivable area.

Table No.4.1 Land Utilisation Pattern in different River Basins (as per Land Use Classification for 2003-2004).

(Area in hectare)

Sl. No.	Basin/River/State	State Area	Basin Area in the State	Reporting Area For Land Utilisation	Classification of Reporting Area					Total Cropped Area	Area Sown more than once
					Forest	Not available for Cultivation	Other uncultivated Lands Excluding Fallow Lands	Fallow Lands	Net Area Sown		
1	2	3	4	5	6	7	8	9	10	11	12
I	Basin : Mahanadi										
i)	Orissa	15571000	6558000	6558000	2448247	775791	554678	317560	2461724	3705853	1244129
ii)	Madhya Pradesh	30825000	7513600	7496781	2116483	865313	623269	297375	3642847	4823329	1180482
iii)	Maharashtra	30771000	23800	23790	4033	24093	1870	1996	13483	17163	3680
iv)	Jharkhand	7972000	63500	63484	16114	10881	3792	16146	14091	17803	3712
	Total	85139000	14158900	14142055	4584877	1676078	1183609	633077	6132145	8564148	2432003
II	Basin : Subernarekha										
i)	Orissa	15571000	1196400	1196400	446643	141530	101192	57934	449101	676072	226971
ii)	West Bengal	8875000	354700	353861	47720	65265	3917	16266	220693	387952	167299
iii)	Jharkhand	7972000	1368500	1368157	347275	234492	81712	347962	303672	383668	79995
	Total	32418000	2919600	2918417	841637	441287	186820	422161	973467	1447692	474265
III	Basin : Brahmani and Baitarni										
i)	Orissa	15571000	3474900	3474900	1297257	411070	293908	168266	1304399	1963628	659229
ii)	Madhya Pradesh	30825000	131600	131305	37070	15156	10917	5208	63804	84480	20676
iii)	Jharkhand	7972000	1575700	1575305	399855	269996	94083	400645	349650	441757	92107
	Total	54368000	5182200	5181510	1734182	696221	398908	574120	1717853	2489865	772012
V	Basin : Godavari										
i)	Andhra Pradesh	27507000	7320100	7302270	1649664	1254213	440159	1248890	2692579	3290812	598233
ii)	Karnataka	19179000	440500	437537	70534	48784	38310	53768	226164	262982	36840
iii)	Orissa	15571000	1775200	1775200	662722	210001	150147	85961	666370	1003146	336776
iv)	Chhattisgarh	13519000	6525500	6656309	3040953	501516	575368	231692	2306780	2754718	447937
v)	Maharashtra	30771000	15219900	15213470	2578940	15407360	1195987	1276115	8622186	10975580	2353394
	Total	106547000	31281200	31092740	8002813	17421873	2399971	2896426	14514080	18287237	3773180

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Table No.4.1 Land Utilisation Pattern in different River Basins (as per Land Use Classification for 2003-2004).

(Area in hectare)

Sl. No.	Basin/River/State	State Area	Basin Area in the State	Reporting Area For Land Utilisation	Classification of Reporting Area					Total Cropped Area	Area Sown more than once
					Forest	Not available for Cultivation	Other uncultivated Lands Excluding Fallow Lands	Fallow Lands	Net Area Sown		
1	2	3	4	5	6	7	8	9	10	11	12
VI	Basin : Krishna										
i)	Andhra Pradesh	27507000	7625200	7606627	1718421	1306488	458504	1300944	2804805	3427972	623167
ii)	Karnataka	19179000	11327100	11250913	1813730	1254432	985119	1382592	5815629	6762360	947321
iii)	Maharashtra	30771000	6942500	6939567	1176374	7028009	545545	582095	3932978	5006470	1073492
	Total	75657000	25894800	23044304	4708525	9588930	1989169	3265632	12553412	15196801	2643980
VII	Basin : Cauvery										
i)	Karnataka	19179000	3624000	3599625	580286	401344	315180	442348	1860656	2163554	303087
ii)	Tamil Nadu	13006000	4873000	4880868	795057	982768	290746	1055454	1756843	1991763	234920
iii)	Kerala	3886000	293000	292925	81582	32045	5881	8294	165124	222728	57680
	Total	36071000	8790000	8773417	1456924	1416156	611807	1506096	3782623	4378045	595687
VIII	East Flowing Rivers										
i)	Andhra Pradesh	27507000	11332800	11305196	2553969	1941742	681443	1933502	4168585	5094754	926169
ii)	Karnataka	19179000	1319300	1310426	211250	146107	114740	161035	677363	787632	110337
iii)	Orissa	15571000	2578000	2578000	962425	304969	218048	124835	967723	1456799	489077
iv)	Tamil Nadu	13006000	7692600	7705021	1255090	1551414	458977	1666158	2773382	3144230	370849
	Total	75263000	22922700	22898643	4982734	3944232	1473208	3885530	8587053	10483416	1896432
IX	West Flowing Rivers										
i)	Gujarat	19602000	966600	937309	91423	185065	139995	46402	474473	557760	83336
ii)	Karnataka	19179000	2509500	2492621	401829	277917	218252	306311	1288443	1498189	209877
iii)	Tamil Nadu	13006000	470200	470959	76716	94828	28054	101842	169519	192187	22668
iv)	Dadar & Nagar Haveli	49000	48900	48900	19959	3992	998	998	22953	29939	6986
v)	Daman & Diu	11000	9600	1745	-	-	-	-	1745	2618	873
vi)	Kerala	3886000	3592500	3591576	1000279	392901	72109	101692	2024595	2730892	707221
vii)	Maharashtra	30771000	3257300	3255924	551934	3297419	255960	273109	1845285	2348948	503664
viii)	Goa	370000	361000	352219	121959	36100	55614	-	137570	164889	26343
	Total	86874000	11215600	11151253	2264100	4288223	770981	830354	5964584	7525422	1560968

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Table No.4.1 Land Utilisation Pattern in different River Basins (as per Land Use Classification for 2003-2004).

(Area in hectare)

Sl. No.	Basin/River/State	State Area	Basin Area in the State	Reporting Area For Land Utilisation	Classification of Reporting Area					Total Cropped Area	Area Sown more than once
					Forest	Not available for Cultivation	Other uncultivated Lands Excluding Fallow Lands	Fallow Lands	Net Area Sown		
1	2	3	4	5	6	7	8	9	10	11	12
X	Basin : Narmada										
i)	Madhya Pradesh	30825000	8585900	8566681	2418536	988806	712219	339815	4162734	5511688	1348954
ii)	Maharashtra	30771000	153800	153735	26061	155694	12086	12895	87129	110910	23781
iii)	Gujarat	19602000	1139900	1105358	107814	218245	165094	54721	559541	657760	98277
	Total	81198000	9879600	9825774	2552411	1362746	889399	407432	4809404	6280358	1471013
XI	Basin : Tapi										
i)	Maharashtra	30771000	5150400	5148224	872711	5213836	404721	431836	2917740	3714126	796386
ii)	Madhya Pradesh	30825000	980400	978205	276166	112909	81326	38803	475331	629364	154033
iii)	Gujarat	19602000	383700	372073	36291	73463	55572	18420	188346	221408	33081
	Total	81198000	6514500	6498502	1185168	5400209	541619	489058	3581417	4564898	983501
XII	Basin : Mahi, Sabarmati & West Flowing Rivers between Saurashtra & Kutch										
i)	Rajasthan	34224000	21396900	21423158	1663661	2663	3919389	2303	10874757	13544368	2669611
iii)	Madhya Pradesh	30825000	669500	668001	188589	77104	55536	26498	324596	429783	105187
iii)	Gujarat	19602000	15766400	15288630	1491221	3019	2283482	756871	7739226	9097732	1359311
	Total	84651000	37832800	37379790	3343471	82785	6258407	785671	18938579	23071883	4134109
	Grand Total	225367000	56748700	166407904	34471673	40918532	16162279	15206498	77973198	97724868	19753648

Source : Land Use Classification for 2003-2004, Ministry of Agriculture.

(Updated during September, 2007)

Table 4.2 : Gross Area Irrigated by Sources in different States (As per land use classification for 2004-2005)

(Area in Hectare)

Sl. No.	State/ Union Territory/ Year	State Area	Basin Area in the State	Canals		Total Canals	Tanks	Wells		Other Sources	Grand Total
				Government	Private			Tube wells	Other wells		
1	2	3	4	5	6	7	8	9	10	11	12
I	Basin Mahanadi										
i)	Orissa	15571000	6558000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	Maharashtra	30771000	23800	984	-	984	-	-	1849	-	2833
iii)	Jharkhand	7972000	63500	11789	-	11789	1569	21530	892	2517	38298
iv)	Madhya Pradesh	30825000	7513600	253285	400	253685	30960	395132	605704	224023	1509504
	Total	85139000	14158900	266058	400	266458	32529	416662	608446	226540	1550635
II	Subernarekha										
i)	Orissa	15571000	1196400	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	West Bengal	8875000	354700	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	Jharkhand	7972000	1368500	254062	-	254062	33818	464006	19226	54246	825357
	Total	32418000	2919600	254062		254062	33818	464006	19226	54246	825357
III	Brahmani and Baitarni										
i)	Madhya Pradesh	30825000	131600	4436	7	4443	542	6921	10609	3924	26439
ii)	Jharkhand	7972000	1575700	292528	274762	-	274762	36573	501811	20793	58665
iii)	Orissa	15571000	3474900	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	54368000	5182200	296965	274769	4443	275304	43494	512420	24717	85104
V	Godavari										
i)	Andhra Pradesh	27507000	7320100	460492	-	460492	137027	465797	216349	47388	1327054
ii)	Karnataka	19179000	440500	26983	-	26983	4451	10973	23631	10389	76428
iii)	Orissa	15571000	1775200	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iv)	Chattisgarh	13519000	6525500	501573	793	502366	61309	782468	1199457	443626	2989225
v)	Maharashtra	30771000	15219900	629154	-	629154	-	-	1182632	-	1811787
	Total	106547000	31281200	1618203	793	1618996	202787	1259238	2622070	501404	6204494
VI	Krishna										
i)	Andhra Pradesh	27507000	7625200	479685	-	479685	142739	485211	225367	49364	1382365
ii)	Karnataka	19179000	11327100	693856	-	693856	114454	282166	607664	267154	1965295
iii)	Maharashtra	30771000	6942500	286986	-	286986	-	-	539453	-	826440
	Total	77457000	25894800	1460528		1460528	257193	767377	1372484	316517	4174100
VII	Cauvery										
i)	Karnataka	19179000	3624000	221993	-	221993	36618	90276	194417	85473	628778
ii)	Tamil Nadu	13006000	4873000	331326	262	331588	188872	146377	481252	8566	1156657
iii)	Kerala	3886000	293000								
	Total	36071000	8790000	553319	262	553581	225491	236654	675669	94040	1785434

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Table 4.2 : Gross Area Irrigated by Sources in different States (As per land use classification for 2004-2005)

(Area in Hectare)

Sl. No.	State/ Union Territory/ Year	State Area	Basin Area in the State	Canals		Total Canals	Tanks	Wells		Other Sources	Grand Total
				Government	Private			Tube wells	Other wells		
1	2	3	4	5	6	7	8	9	10	11	12
VIII	East Flowing Rivers										
i)	Andhra Pradesh	27507000	11332800	712923	-	712923	212143	721135	334947	73366	2054513
ii)	Karnataka	19179000	1319300	80815	-	80815	13331	32865	70776	31116	228904
iii)	Tamil Nadu	13006000	7692600	523037	414	523451	298157	231074	759713	13523	1825918
iv)	Orissa	15571000	2578000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	75263000	22922700	1316775	414	1317189	523631	985074	1165436	118004	4109334
IX	West Flowing Rivers										
i)	Gujarat	19602000	966600	35060	-	35060	1529	54883	96404	1529	189355
ii)	Karnataka	19179000	2509500	153723	-	153723	25357	62513	134627	59188	435408
iii)	Tamil Nadu	13006000	470200	31970	25	31995	18224	14124	46436	827	111607
iv)	Dadar & Nagar Haveli	49000	48900	2301	-	2301	-	220	1667	2794	6982
v)	Daman & Diu	11000	9600	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
vi)	Kerala	3886000	3592500	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
vii)	Maharashtra	30771000	3257300	134649	-	134649	-	-	253102	-	387751
viii)	Goa	370000	361000	6933	-	6933	-	-	32233	-	39167
	Total	86874000	11215600	364637	25	364662	45110	131740	564469	64337	1170269
X	Narmada										
i)	Madhya Pradesh	30825000	8585900	289433	457	289890	35378	451523	692147	255994	1724933
ii)	Maharashtra	30771000	153800	6358	-	6358	-	-	11951	-	18308
iii)	Gujarat	19602000	1139900	41346	-	41346	1803	64723	113688	1803	223305
	Total	81198000	9879600	337137	457	337594	37181	516247	817785	257797	1966546
XI	Tapi										
i)	Maharashtra	30771000	5150400	212905	-	212905	-	-	400202	-	613107
ii)	Madhya Pradesh	30825000	980400	33050	52	33102	4040	51558	79034	29231	196965
iii)	Gujarat	19602000	383700	13917	-	13917	607	21786	38268	607	75166
	Total	81198000	6514500	259872	52	259925	4647	73345	517504	29838	885238
XII	Mahi, Sabarmati & West Flowing Rivers between Saurashtra & Kutch										
i)	Rajasthan	34224000	21396900	1224118	-	1224118	53476	1245522	1863300	48256	4434672
ii)	Madhya Pradesh	30825000	669500	22569	36	22605	2759	35208	53971	19962	134505
iii)	Gujarat	19602000	15766400	571876	-	571876	24934	895215	1572458	24934	3088612
	Total	84651000	37832800	1818563	36	1818598	81169	2175945	3489728	93152	7657789
	Grand Total	225367000	56748700	8546118	277208	8256037	1718858	7069781	12365239	1780591	30414301

Source : Gross Area Irrigated by Sources in different States (As per land use classification for 2004-2005)

Note : "(m)" : Not available separately, "included under culturable waste".

: "(a)" : Below 500 hectares.

: "- " : Not available.

Remarks: Maharashtra, Bihar, Orissa , Kerala, Daman & Diu & Gujarat 2004-2005 Data is not available.

(Updated during September, 2007)

Table 4.3 : Net Area Irrigated by Sources in different States (As per land use classification for 2004-2005.

(Area in Hectare)											
Sl. No.	State/ Union Territory/ Year	State Area	Basin Area in the State	Canals		Total Canals	Tanks	Wells		Other Sources	Grand Total
				Government	Private			Tube-wells	Other wells		
1	2	3	4	5	6	7	8	9	10	11	12
I	Basin Mahanadi										
i)	Maharashtra	30771000	23800	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	Jharkhand	7972000	63500	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	Madhya Pradesh	30825000	7513600	244712	400	245112	30402	387034	586359	223750	1472657
iv)	Orissa .	15571000	6558000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	85139000	14158900	244712	400	245112	30402	387034	586359	223750	1472657
II	Subernarekha										
i)	Jharkhand	7972000	1368500	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	Orissa	15571000	1196400	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	West Bengal	8875000	354700	-	-	-	-	-	-	127171	127171
	Total	32418000	2919600	0	-	0	0	0	0	127171	127171
III	Brahmani and Baitarni										
i)	Madhya Pradesh	30825000	131600	4286	7	4293	532	6779	10270	3919	25793
ii)	Jharkhand	7972000	1575700	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	Orissa	15571000	3474900	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	54368000	5182200	4286	7	4293	532	6779	10270	3919	25793
IV	Godavari										
i)	Andhra Pradesh	27507000	7320100	358189	-	358189	126965	333845	172746	40949	1032694
ii)	Karnataka	19179000	440500	21786	-	21786	4058	9808	882168	8863	64777
iii)	Chhattisgarh	13519000	6525500	484596	793	485388	60203	766432	1161149	443085	2916258
iv)	Maharashtra	30771000	15219900	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
v)	Orissa	15571000	1775200	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	106547000	31281200	864571	793	865364	191226	1110085	2216063	492897	4013729
V	Krishna										
i)	Andhra Pradesh	27507000	7625200	373118	-	373118	132257	347760	179946	42656	1075736
ii)	Karnataka	19179000	11327100	560221	-	560221	104356	252200	882168	227902	1665687
iii)	Maharashtra	30771000	6942500	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	77457000	25894800	933339	-	933339	236613	599960	1062114	270558	2741423

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Table 4.3 : Net Area Irrigated by Sources in different States (As per land use classification for 2004-2005.

(Area in Hectare)											
Sl. No.	State/ Union Territory/ Year	State Area	Basin Area in the State	Canals		Total Canals	Tanks	Wells		Other Sources	Grand Total
				Govern- ment	Private			Tube-wells	Other wells		
1	2	3	4	5	6	7	8	9	10	11	12
VI	Cauvery										
i)	Karnataka	19179000	3624000	179237	-	179237	33388	80689	882168	72915	532921
ii)	Tamil Nadu	13006000	4873000	282226	210	282436	174356	118258	406432	6605	988087
iii)	Kerala	3886000	293000	7645	357	8002	3316	1171	8177	8993	29659
	Total	36071000	8790000	469109	566	469675	211060	200118	1296777	88513	1550667
VII	East Flowing Rivers										
i)	Andhra Pradesh	27507000	11332800	554539	-	554539	196564	516851	267442	63396	1598791
ii)	Karnataka	19179000	1319300	65251	-	65251	12155	29374	882168	26544	194007
iii)	Tamil Nadu	13006000	7692600	445527	560	753819	465355	315629	1084765	17630	2637198
iv)	Orissa	15571000	2578000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	75263000	22922700	1065316	560	1373609	674073	861854	2234375	107570	4429997
VIII	West Flowing Rivers										
i)	Gujarat	19602000	966600	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	Karnataka	19179000	2509500	124116	-	124116	23120	55874	882168	50491	369030
iii)	Tamil Nadu	13006000	470200	27232	560	753819	465355	315629	1084765	17630	2637198
iv)	Dadar & Nagar Haveli	49000	48900	2301	-	2301	-	220	1667	2794	6982
v)	Maharashtra	30771000	3257300	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
vi)	Goa	370000	361000	4015	-	4015	-	-	19140	-	23155
vii)	Kerala	3886000	3592500	93739	4372	98111	40661	14360	100254	110261	363647
viii)	Daman & Diu	11000	9600	-	-	-	-	-	873	-	873
	Total	86874000	11215600	251403	4932	982362	529136	386083	2088867	181177	3400884
X	Narmada										
i)	Madhya Pradesh	30825000	8585900	279636	457	280093	34740	442270	670041	255682	1682827
ii)	Maharashtra	30771000	153800	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	Gujarat	19602000	1139900	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	81198000	9879600	279636	457	280093	34740	442270	670041	255682	1682827
XI	Tapi										
i)	Maharashtra	30771000	5150400	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	Madhya Pradesh	30825000	980400	31931	52	31983	3967	50502	76510	29196	192157
iii)	Gujarat	19602000	383700	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	81198000	6514500	31931	52	31983	3967	50502	76510	29196	192157

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Table 4.3 : Net Area Irrigated by Sources in different States (As per land use classification for 2004-2005.

(Area in Hectare)											
Sl. No.	State/ Union Territory/ Year	State Area	Basin Area in the State	Canals		Total Canals	Tanks	Wells		Other Sources	Grand Total
				Government	Private			Tube-wells	Other wells		
1	2	3	4	5	6	7	8	9	10	11	12
XII	Mahi, Sabarmati & West Flowing Rivers beteen Saurashtra & Kutch										
i)	Rajasthan	34224000	21396900	911213	-	911213	51521	1055499	1612019	45900	3676152
iii)	Madhya Pradesh	30825000	669500	21805	36	21841	2709	34487	52248	19937	131221
iv)	Gujarat	19602000	15766400	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	84651000	37832800	933018	36	933054	54230	1089986	1664267	65837	3807374
	Grand Total	225367000	56748700	5045391	7751	6086901	1962013	5084168	11829133	1817074	23252522

Source : Net Area Irrigated classification for 2004-2005 (Ministry of Agriculture)

Note : "(m)" : Not available separately, "included under culturable waste".

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Remarks: Maharashtra, Bihar, Orissa, Gujrat & Jharkhand 2004-2005 Data is not available.

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				Government	Private			Tube-wells	Other wells		
1	2	3	4	5	6	7	8	9	10	11	12
I	Basin Mahanadi										
i)	Maharashtra	30771000	23800	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	Jharkhand	7972000	63500	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	Madhya Pradesh	30825000	7513600	244712	400	245112	30402	387034	586359	223750	1472657
iv)	Orissa .	15571000	6558000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	85139000	14158900	244712	400	245112	30402	387034	586359	223750	1472657
II	Subernarekha										
i)	Jharkhand	7972000	1368500	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
ii)	Orissa	15571000	1196400	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	West Bengal	8875000	354700	-	-	-	-	-	-	127171	127171
	Total	32418000	2919600	0	-	0	0	0	0	127171	127171
III	Brahmani and Baitarni										
i)	Madhya Pradesh	30825000	131600	4286	7	4293	532	6779	10270	3919	25793
ii)	Jharkhand	7972000	1575700	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
iii)	Orissa	15571000	3474900	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
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	Total	84651000	37832800	933018	36	933054	54230	1089986	1664267	65837	3807374
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GLOSSARY OF TERMS

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Active (usable) storage capacity	the total amount of reservoir capacity normally available for release from a reservoir below the maximum storage level. It is total or reservoir capacity minus inactive storage capacity. More specifically, it is the volume of water between the outlet works and the spillway crest.
Alluvium	sediments deposited by erosional processes, usually by streams.
Basin boundary	the topographic dividing line around the perimeter of a basin, beyond which overland flow (i.e., runoff) drains away into another basin.
Bed load	sand, silt, gravel, or soil and rock detritus carried by a stream on or immediately above its bed. The particles of this material have a density or grain size such as to preclude movement far above or for a long distance out of contact with the stream bed under natural conditions of flow.
Bed material	the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.
Biochemical Oxygen Demand (B.O.D.)	the measure of oxygen required for natural oxidation of organic matter with the aid of bacteria. The test is made by taking duplicate samples of water in two completely filled bottles, one of which is sealed and kept stored for 5 days. The dissolved oxygen content of the first sample gives the biochemical oxygen demand, or shortly B.O.D. value. The B.O.D. value of surface waters may be 1 to 10 p.p.m., and for deep well water it would be much less.
Coliform Index	the probable number of coliform organisms present in 100 ml. is known as coliform index. If out of 5 portions be isolated from one sample only, the number of coliforms would be considered to be 1 in 50 ml. or 2 in 100 ml., which would be the coliform index, assuming that the gas formation was due to one coliform only.

dam	any artificial barrier which impounds or diverts water. A dam is generally considered hydrologically significant if it is (i) One and one quarter feet (0.4 meters) or more in height from the natural bed of the stream and has a storage of at least 15 acre-feet, or (ii) has an impounding capacity of 50 acre-feet or more and is at least six feet (2 meters) above the natural bed of the stream.
Discharge	<p>the quantity of water flowing across a section of a channel in a unit time is called the discharge. It is measured in cubic feet or meters per second, briefly called cusecs and cumecs respectively and is equal to the area of section X average velocity. Common units are cubic feet per second (cfs), second-day feet (sdf), and cubic meter per second (cms). Two types of discharges are often measured and recorded:</p> <p>instantaneous discharge: the discharge at a particular instant of time.</p> <p>mean discharge: the arithmetic mean of individual discharges during a period of time.</p> <p>Discharges given are daily observed discharges commencing at 08.00 hrs.</p>
Drainage area	an area around a river rainfall of which flows into the river. Also known as watershed, catchment area, and
Drainage basin	A part of the earth's surface which is occupied by a drainage system which consists of a surface stream with all its tributaries and impounded bodies of water. Also known as watershed, catchment area, and drainage area.
Gross capacity	the maximum volume of water that can be stored in a reservoir.
Ground water	water within the earth that supplies wells and springs; water in the zone of saturation where all openings in rocks and soil are filled, the upper surface of which forms the water table. Also termed Phreatic water.
Ground water runoff	that part of the runoff which has passed into the ground, has become ground water, and has been discharged into a stream channel as spring, or seepage water.

Hardness	<p>hardness of water is generally caused by the presence of salts of calcium and magnesium. Hardness due to the presence of bicarbonates of calcium and magnesium is called temporary hardness. Permanent hardness is caused by the presence of sulphates and chlorides of these metals, and is not removable by boiling. The sum of these two hardness is called total hardness. It is expressed in terms of calcium carbonate. Since one gallon of water weighs 70,000 grains, degrees of hardness can be converted in p.p.m. by multiplying by 14.3. A water having 50 to 100 p.p.m. hardness is called soft water, one with 100 to 200 p.p.m. Moderately hard, and that with 200 to 300 p.p.m. hard. Hardness of 80 to 90 p.p.m. is considered to be the best.</p>
Headwater basin	<p>a basin at the headwaters of a river. All discharge of the river at this point is developed within the basin.</p>
Hydrogen-ion Concentration (pH)	<p>acidity and alkalinity determinations measure the amount of acid and alkali present, while the H-ion concentration determines the strength of the acid and alkali in water. An ion is an atom or a group of atoms that carries an electric charge.</p> <p>The H-ion concentration is expressed in terms of logarithm of the reciprocal of the H-ion concentration. This term is called the pH value (potential of Hydrogen). $\text{Log } 1/10^{-7} = 7$, so that pH value 7 denotes neutrality while values above 7, signify alkalinity and those below 7, acidity. The determination of pH value provides information concerning the corrosive character of water. Waters with pH between 7.4 and 8.4 are practically inactive.</p> <p>Waters with pH above 8.6 or 8.8 are likely to cause precipitation of calcium carbonate in the distribution system, while waters over-carbonate with CO₂ may dissolve the slight carbonate film on the inside of mains and start active corrosion, depending upon the pH value. When the pH of natural waters is below 7 it may be found necessary to add a small amount of soda ash or lime to the water before admittance to the mains, as otherwise corrosion may be caused.</p>

Hydrologic Cycle	Water is lost to the atmosphere as vapour from the earth, which is then precipitated back in the form of rain, snow, hail, dew, frost, etc. The process of evaporation and precipitation which combines for ever and thereby maintaining a balance between the two is called Hydrologic Cycle.
Hydrologic unit	a geographical area representing part or all of a surface drainage basin or distinct hydrologic feature such as a reservoir, lake, etc.
Hydrology	the applied science concerned with the waters of the earth, their occurrences, distribution, and circulation through the unending hydrologic cycle of: Precipitation, consequent runoff, infiltration, and storage; eventual evaporation; and so forth. It is concerned with the physical and chemical reaction of water with the rest of the earth, and its relation to the life of the earth.
Inactive storage Capacity	the portion of capacity below which the reservoir is not normally drawn, and which is provided for sedimentation, recreation, fish and wildlife, aesthetic reasons, or for the creation of a minimum controlled operational or power head in compliance with operating agreements or restrictions.
Inches of runoff	the volume of water from runoff of a given depth over the entire drainage.
Irrigated area	the gross farm area upon which water is artificially applied for the production of crops, with no reduction for access roads, canals, or farm buildings.
Irrigation efficiency	the percentage of water applied that can be accounted for in soil moisture increase for consumptive use.
Irrigation requirement	the quantity of water, exclusive of precipitation, that is required for crop production. It includes surface evaporation and other economically unavoidable wastes.

Live capacity	the minimum volume of water required for maintaining flow of water from the Reservoir. It is the total amount of storage capacity available in a reservoir for all purposes, from the dead storage level to the normal water or normal pool level surface level. Does not include surcharge, or dead storage, but does include inactive storage, active conservation storage and exclusive flood control storage.
Long term storage dams	reservoirs used for recreational use or storage of irrigation, municipal or industrial water. Because water is impounded on a "permanent" basis, the design of these dams is more complex than for tailings or flood control detention dams. A long term storage dam may include an impermeable core surrounded by shell materia, have many types of drains and filters, outlet works, with gates and valves, seepage collection boxes, and possibly several spillways. The capacity of the spillway is dependant upon the downstream hazard potential.
Mean annual rainfall	mean annual rainfall is usually worked out as a simple average of the total rainfall of various years.
Mean depth	the average depth of water in a stream channel or conduit. It is equal to the cross-sectional area divided by the surface width.
Moisture equivalent	the ratio of (1) the weight of water which the soil, after saturation, will retain against a centrifugal force 1,000 times the force of gravity, to (2) the weight of the soil when dry. The ratio is stated as a percentage.
Net rainfall	The portion of rainfall which reaches a stream channel or the concentration point as direct surface flow.
Normal year	the year during which the precipitation or stream flow approximates the average for a long period of record.
Peak discharge	rate of discharge of a volume of water passing a given location. (Usually in cubic feet per second.)
Point discharge	instantaneous rate of discharge, in contrast to the mean rate for an interval of time.
Point precipitation	precipitation at a particular site, in contrast to the mean precipitation over an area.
River Basin	drainage area of a river and its tributaries.
River gauge datum	the arbitrary zero datum elevation which all stage measurements are made from.

Runoff	water which is not absorbed by the soil and flows to lower ground, eventually draining into a stream, river, or other body of water. It is that part of precipitation that flows toward the streams on the surface of the ground or within the ground. Runoff is composed of baseflow and surface runoff.
Runoff/ potential	runoff/ potential of a river for a specified period at a site is the total volume of water flow/ passed from/ through the site during the specified period. It is the notional depth of water in mm over the catchment, equivalent to annual runoff (in M.Cum.)/ Catchment Area (km ²)* 1000 and calculated at the discharge measurement station.
Second-day feet	the volume of water represented by a flow of one cubic foot per second for 24 hours; equal to 84,000 cubic feet. This is used extensively as a unit of runoff volume. Often abbreviated as SDF.
Sediment storage capacity	the volume of a reservoir planned for the deposition of sediment.
Soil moisture	Water contained in the upper regions near the earth's surface.
Stage	the level of the water surface above an established "zero" plane or datum at a given location.
Surface runoff	the runoff that travels overland to the stream channel. Rain that falls on the stream channel is often lumped with this quantity.
Surface water	water that flows in streams and rivers and in natural lakes, in wetlands, and in reservoirs constructed by humans.
Temperature	the in-situ temperature in degree centigrade by thermometer is recorded in terms of water intended use, the treatment to remove impurities and its transport.

Coliform Group all waters contain bacteria, vast majority of which are perfectly harmless. One organism, bacillus Coli, found in the intestines of men and warm-blooded animals, which in itself is usually quite and may therefore be regarded as danger signal. The group of bacteria of intestinal origin is known as coliform group. The bacilli of this group ferment lactose with gas formation. Since organisms of the coliform group normally live longer in water than other bacteria, absence of such organisms indicates that the water is safe. Also this group is more resistant to treatment than pathogens, their existence or otherwise gives a useful indication of the efficiency of water treatment methods.

Gross reservoir capacity the total amount of storage capacity available in a reservoir for all purposes from the streambed to the normal water or normal water or normal pool surface level. It does not include surcharge, but does include dead storage.