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WATER YEAR BOOK Vol.-II, WATER QUALITY DATA

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कावेरी बेसिन
CAUVERY BASIN



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प्रस्तावना

जल लगभग सीमित मात्रा में उपलब्धता के साथ एक कीमती प्राकृतिक संसाधन है। स्वच्छ जल पूरी दुनिया में दिन-व-दिन एक दुर्लभ वस्तु बन गया है। यह योजना है कि जल संसाधनों का श्रेष्ठतम् उपयोग के लिए एक अच्छी तरह से विकसित डाटा बैंक हो और नियमित रूप से डाटा बैंक का अध्यतन किया जाना चाहिए। जल संसाधन बढ़ाने के अलावा, पानी की गुणवत्ता की निगरानी का काम भी किया जाना आवश्यक है। जल संसाधन, नदी विकास और गंगा संरक्षण मंत्रालय के अंतर्गत, केन्द्रीय जल आयोग, जल संसाधन क्षेत्र के शीर्ष मंत्रालय का निकाय होने के अतिरिक्त, भारत के विभिन्न नदी घाटियों का जल विज्ञानीय आकड़ा संग्रह का एक विशाल नेटवर्क प्रणाली बनाये रखा है।

आकड़ा के कम्प्यूटरीकरण के आगमन से जल वर्ष पुस्तक के प्रकाशन प्रारूप में बहुत परिवर्तन आया है। संसोधित प्रारूप के अनुसार, कावेरी बेसिन 2015-16 का जल वर्ष पुस्तक दो खण्डों में किया गया। प्रथम खण्ड में नदी धारा प्रवाह एवं निलम्बित तलछट आकड़े तथा द्वितीय खण्ड में जल गुणवत्ता आकड़े एवं प्रमुख नदियों के जल गुणवत्ता प्रचलन / परिवर्त्य दिये गये हैं। कावेरी बेसिन के अन्तर्गत जल गुणवत्ता की निगरानी, 35 जल विज्ञानीय प्रेक्षण स्थलों पर किया जाता है। जिसमें दक्षिणी नदियाँ मंडल, कोयम्बत्तूर 13 स्थलों, जल विज्ञानीय मंडल, चेन्नई 07 स्थलों, दक्षिण पश्चिमी नदियाँ मंडल, कोचिन 1 स्थल तथा कावेरी मंडल, बैंगलुरु 14 स्थलों की निगरानी उक्त मंडलों के अधीन किया जाता है। उक्त स्थलों से एकत्रित किये गये जल नमूनों का विश्लेषण मंडलीय प्रयोगशाला कोयम्बत्तूर, चेन्नई, कोचिन एवं बैंगलुरु द्वारा किया जाता है।

जल नमूना सीधे स्थलों से सम्बन्धित प्रयोगशालाओं में विश्लेषण हेतु भेजा जाता है। भौतिक, रासायनिक, जैविक तथा विषाक्त (पैरामीटर) प्राचल का विश्लेषण किया जाता है। तीन रासायनिक सूचकांकों (Indices) का आकड़ा गणितीय विधि से निकाला जाता है। सिंचाई की उपयुक्ता के लिये सैलिनिटी रेखाचित्र (विलकाक्स डायग्राम) के द्वारा जल का वर्गीकरण किया जाता है।

कावेरी बेसिन के जल ग्रहण क्षेत्र का आकड़ा इस प्रकाशन में प्रस्तुत किया गया है। यह जल संसाधन के योजनाकारों, प्रबन्धकों और जल के उपयोग कर्ताओं के लिये बहुत उपयोगी है। अनुसंधान एवं विकास संस्थानों, योजनाओं, पीने के जल की पूर्ति, सिंचाई, औद्योगिक एवं मल निपटान योजनाओं के लिये विशेष रूप से उपयोगी है।

इस परिमण्डल के अन्तर्गत दक्षिणी नदियाँ मण्डल-कोयम्बत्तूर, जल विज्ञानीय मण्डल-चेन्नई, दक्षिण पश्चिमी नदियाँ मण्डल-कोचिन एवं कावेरी मण्डल-बैंगलुरु के प्रयासों से इस पुस्तक का प्रकाशन हुआ। सभी प्रशंसा के पात्र हैं।

बैंगलुरु
अप्रैल, 2017

वृ. मोहन मुरलि

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अधीक्षण अभियंता
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PREFACE

Water is a precious natural resource with almost fixed quantum of availability. Fresh water has been becoming a scarce commodity day by day in whole world. It's planning and optimal utilization calls for a well developed Data Bank and maintenance of the Data Bank by regular updating is equally important. Besides quantifying the Water Resources, the work of monitoring the Quality of Water is also required to be done. Central Water Commission under the Union Ministry of Water Resources, River Development and Ganga Rejuvenation besides being an apex body on Water Resources Sector, has been maintaining a vast system of Hydrological Network in different River Basins of India.

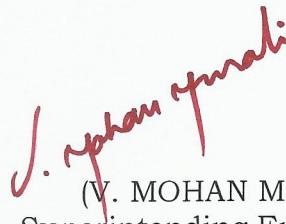
With the advent of computerization of the data, the format of publishing the Water Year Book has also undergone lot of changes. As per the revised format, the Water Year Book of Cauvery Basin for 2015-16 is published in Two Volumes, Volume-I containing the Stream Flow and Suspended Sediment Data and the Volume-II containing the Water Quality Data and trend/scenario of water quality of major rivers. The Volume-II is presented here. The Water Quality under the whole Cauvery Basin is being monitored at 35 Hydrological Observation Stations – 13 stations under SRD, Coimbatore, 07 stations under HD, Chennai, 01 station under SWRD, Kochi and 14 stations under CD, Bangalore. The Water samples collected at these Stations are being analysed at Divisional laboratories situated at Coimbatore, Chennai, Kochi and Bangalore.

The water samples received directly in the respective laboratories are analysed for parameters which include Physical, Chemical, Biological and Trace & Toxic elements. In addition to these parameters, three Chemical Indices are derived mathematically from the observed data. Waters are classified with the help of US Salinity Diagram (Wilcox Diagram) for its Irrigation suitability.

The Data presented in this publication is useful to the Water Resources Planners, Managers and Water Users in Catchment area of Cauvery Basin. The data may be especially useful for R&D institutions, planning, drinking water supply, irrigation, industrial and sewage disposal schemes. Soft copies of the publications will also be available to the user agencies.

The efforts made by the Southern Rivers Division – Coimbatore, Hydrology Division – Chennai, South Western Rivers Division – Kochi and Cauvery Division – Bangalore under this Region in bringing out this Book deserves appreciation.

Bengaluru,
April, 2017.


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1. INTRODUCTION

1.1 Scope

Water quality data of 35 stations in the Cauvery basin are presented in this volume, for the year 2015-2016. The parameters covered in the data are as under:

1.1.1 Physical

River Discharge, Colour, Odour, Temperature, pH, Electrical Conductivity and T.D.S.

1.1.2 Chemical

Potassium, Sodium, Calcium, Magnesium, Iron, Ammonium, Carbonate, Bi-carbonate, Chloride, Fluoride, Sulphate, Nitrate, Nitrite, Phosphate, Silicate, Total Alkalinity, Phenolphthalein Alkalinity and Boron.

1.1.3 Biological/Bacteriological

D.O., B.O.D and C.O.D.; Total Coliform and Fecal Coliform

1.1.4 Trace & Toxic

Arsenic, Cadmium, Chromium, Copper, Mercury, Nickel, Lead and Zinc.

1.1.5 Chemical Indices

Hardness Number, Sodium Percentage, Sodium Adsorption Ratio, Residual Sodium Carbonate and USSR Classification.

1.2 Observation Technique

1.2.1 River water samples:

At each station one litre of river water sample is collected at a point of maximum flow and depth in the cross section at a depth of 10 - 20 cm below the water surface in a polythene bottle with double screw cap.

The polythene bottles are labeled with the requisite details of the sampled water and sent through a special messenger to the respective water quality research laboratory for detailed analysis.

1.3 Sources of Information

The water quality stations for which data is presented in this volume include 13 stations under SRD, Coimbatore, 7 stations under HD, Chennai, 1 station under SWRD, Kochi and 14 stations under CD, Bangalore. The details of all the above mentioned stations are as follows:

Cauvery Basin

Sl. No.	Station Name	Station Code	Type of Station
1.	Puravidaiyanar at Gopurajapuram	CCA32D2	GDQ
2.	Nattar at Annavasal	CCA21G5	GDQ
3.	Nandalar at Nallathur	CCA12G3	GDQ
4.	Noolar at Menangudi	CCA23N4	GDQ
5.	Arasalar at Porakudi	CCA20G5	GDQ
6.	Vanjiyar at Peralam	CCA22S5	GDQ
7.	Thirumalairajanar at Thengudi	CCA31N6	GDSQ
8.	Cauvery at Musiri	CC000G4	GDSQ
9.	Amaravathy at Nallamaranpatty	CCD00D5	GDSQ
10.	Noyyal at Elunuthimangalam	CCF00A4	GDSQ
11.	Cauvery at Kodumudi	CC000I7	GDSQ
12.	Bhavani at Savandapur	CCG00E3	GDSQ
13.	Moyer at Thengumarahada	CCGI0E9	GDSQ
14.	Gandhayar at Gandhavayal	CCG20C8	GDSQ
15.	Bhavani at Nellithurai	CCG00Q8	GDSQ
16.	Cauvery at Urachikottai	CC000K5	GDSQ
17.	Sarabenga at Thevur	CCH00C3	GDQ
18.	Chittar at Sevanur	CCI00C4	GDQ
19.	Thoppaiyar at Thoppur	CCJ00I2	GDQ
20.	Palar at Kudlur	CCK00L9	GDSQ
21.	Chinnar at Hogenakkal	CCS00A9	GDQ
22.	Cauvery at Biligundulu	CC000N7	GDSQ
23.	Arkavathi at T.Bekuppe	T.BEKUPPE	GDSQ
24.	Shimsha at T.K.Halli	CCM00B9	GDSQ
25.	Cauvery at Kollegal	CC000R5	GDSQ
26.	Suvarnavathi at Bendrahalli	CCN00J5	GDQ
27.	Kabini at T.Narasipur	CCP00B1	GDSQ
28.	Kabini at Muthankera	CCP00T8	GDSQ
29.	Lakshmanthirtha at K.M.Vadi	CCQ00E9	GDQ
30.	Hemavathi at Akkihebbal	CCR00B7	GDSQ
31.	Hemavathi at M.H.Halli	CCR00M8	GDSQ
32.	Yagachi at Thimmanahalli	CCRIOF7	GDQ
33.	Hemavathi at Sakleshpur	CCR00U6	GDSQ
34.	Cauvery at Chunchunkatte	CC000V7	GDQ
35.	Cauvery at Kudige	CC000Y5	GDSQ

2. WATER QUALITY DATA

2.1 Explanatory Note

The explanatory note described here below is designed to assist in the interpretation of various parameters contained in the data presented subsequently.

- i) The water samples are collected at a regular frequency of once in a month from Trend / Flux stations and once in two months from Base line stations, usually on the first working day, from the main flowing portion of the stream. The Trace and Toxic elements are analysed once in a year during the month of May.
- ii) The collected water samples are neatly labeled and sent to the respective Divisional Laboratory for analysis.
- iii) Chemical indices namely Hardness number, Sodium Percentage, Sodium Adsorption Ratio and Residual Sodium Carbonates are computed as follows:

- a) Hardness number is by adding the total Calcium and Magnesium in the sample expressed as equivalent parts of Calcium Carbonate (CaCO_3)
- b) Sodium percentage (S.P) is given by

$$\text{S.P} = \frac{\text{Na}^+ \times 100}{[\text{Ca}^{2+} + \text{Mg}^{2+} + \text{Na}^+ + \text{K}^+]}$$

Ionic concentrations are in meq/L.

- c) Sodium Adsorption Ratio (SAR) is given by:

$$\text{S.A.R} = \frac{\text{Na}^+}{\sqrt{\frac{(\text{Ca}^{2+} + \text{Mg}^{2+})}{2}}}$$

Ionic concentrations are in meq/L.

d) Residual Sodium Carbonate (RSC) is given by

$$RSC = (CO_3^{2-} + HCO_3^-) - (Ca^{2+} + Mg^{2+})$$

Ionic concentrations are in meq/L.

- iv) Based on Electrical Conductance (E.C) and Sodium Adsorption Ratio (S.A.R), the water samples have been classified as per U.S. Salinity Laboratory standards using Wilcox diagram (Annexure – II)
- v) Water year is from 1st June of one calendar year to 31st May of the next calendar year.
- vi) Measuring authority refers to the field division responsible for the collection of water sample. The name of the division is abbreviated by taking first alphabet of each word followed by alphabets ‘D’ for division. For example “SOUTHERN RIVERS DIVISION” by “SRD” and “HYDROLOGY DIVISION” by “HD”.
- vii) The station code number is a unique seven column alphanumeric reference number which facilitates storage and retrieval of water quality data in data banks. The first column is the identifier of either an integral river basin or for convenience, a region having several continuous river catchment areas. This is followed by a column which identifies an independent river system which either have one or more outlets to the sea or crosses international border to enter into another country. The third, fourth and fifth column space denote first, second and third order tributaries respectively from the mouth upstream. The sixth and seventh column spaces indicate the location of the gauging station in one of the 225 slots earmarked on the river. The blank column spaces are filled by zero.

2.2. Method of presentation

In the succeeding pages station wise water quality data is presented comprising History sheet, Water Quality data sheet for 2015-16, Water Quality Summary for 2015-16 and Water Quality Seasonal Average for 2005-2016 (Decadal change). The serial of the water quality observation stations is arranged from the mouth of the river upstream, giving intense priority to an intermediate tributary station in similar fashion.

History sheet gives concise description of the water quality observation stations. Tables on the water quality analysis give the ionic concentrations of various parameters in mg/L. The samples are collected for water quality analysis once a month as already mentioned in para 2.1 above. Owing to shortage of infrastructure facilities all the parameters are not necessarily analyzed.

2.3. WATER QUALITY STATUS

2.3.1. RIVER WATER:

The river Cauvery originates at Talakaveri in Coorg District of Karnataka in Brahmagiri Range of hills in the Western Ghats at an elevation of 1341m (above MSL) and drains a total area of 81,155 Sq.Kms of which 34,273 Sq.Kms. lies in Karnataka, 43,856 Sq.Kms. in Tamil Nadu, 2,866 Sq.Kms. in Kerala and 160 Sq.Kms. in the Union Territory of Pondicherry. The total length of the river from the origin to its outfall into the sea is 800 Km. of which 320 Km is in Karnataka, 416 Km in Tamilnadu and 64 Km forming 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. This river basin in Tamilnadu receives good flow from the North East Monsoon.

The Cauvery river system consists of 21 principal tributaries each with Catchment Area exceeding 250 Sq.Kms. The largest among them are the Catchment Area of Shimsha lying wholly in Karnataka, the Amaravathi rising in Kerala but lying mostly in Tamil Nadu and the Kabini rising in both Kerala and Tamil Nadu but lying mostly in Karnataka. The Bhavani is the fourth largest and the second longest river. Bhavani River originates from Nilgiri hills of the Western Ghats, enters the Silent Valley National Park in Kerala and flows back towards Tamil Nadu. 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 Cauvery river system, the water quality status of the whole Cauvery Basin is divided into the water quality status of main river Cauvery; tributaries such as Hemavathi, Lakshmanirtha, Kabini, Suvarnavathi, Shimsha, Arkavathi, Chinnar, Palar, Thoppaiyar, Chittar, Sarabenga, Bhavani, and Amaravathi; Noyyal (the most polluted tributary) and the distributaries of Cauvery delta region.

2.3.2. The Water Quality Status of Main River Cauvery

There are 7 water quality stations on the main river Cauvery before it forms distributaries in the Cauvery delta of Karaikal region. They are in the order from its origin are **Kudige, Chunchunkatte, Kollegal, Biligundulu, Urachikottai, Kodumudi and Musiri.**

Cauvery river water is generally alkaline in nature, and the pH varied from 7.3 (Kudige) to 8.7 (Urachikottai & Musiri). It is observed that the ionic concentration is gradually increasing from the upstream to downstream. Electrical Conductivity (EC) values show variety of results. The minimum EC observed is 74 $\mu\text{mhos}/\text{cm}$ (Kudige) and the maximum is 892 $\mu\text{mhos}/\text{cm}$ (Kodumudi). The major cationic constituents are Sodium, Calcium, Magnesium and Potassium; their maximum values are 96.5 mg/L, 49.0 mg/L, 47.9 mg/L and 13.5 mg/L all at Kodumudi and their minimum values are 3.8 mg/L (Chunchunkatte), 6.0 mg/L (Kudige), 1.0 mg/L (Kollegal) and 0.7 mg/L (Kudige) respectively. Among the anionic constituents Bi-Carbonate is the major anion followed by Chloride and Sulphate; their maximum values are 322.0 mg/L (Kodumudi), 115.4 mg/L (Musiri) and 72.2 mg/L at (Kodumudi) and their minimum values are 28.0 mg/L (Urachikottai), 6.0 mg/L (Kudige) and 1.7 mg/L (Kudige) respectively. Carbonate is found only at 4 stations namely Billigundulu, Urachikottai, Kodumudi and Musiri and its maximum concentration observed is 41.1 mg/L (Kodumudi). Small quantities of Iron, Boron, Fluoride, Nitrate, Phosphate and Silicate are also found in water samples of this river except Kodumudi & Musiri where the concentration of Nitrate is high through out the year compare to the other sites of this river. Regarding biological parameters only DO, BOD and COD are analysed. All the parameters are within the tolerance limit and the water is classified as C₁S₁ (Kudige & Chunchunkatte), C₂S₁ (Kollegal, Biligundulu & Urachikottai) and C₃S₁ (Kodumudi & Musiri) category.

2.3.3. The Water Quality Status of Tributaries of Cauvery:

2.3.3.1. The Hemavathi

The Hemavathi rises in the Western Ghats and runs South-East. After a stream from the West joins it, it turns East, receiving the Yagachi from the North. It then winds round Holenarasipur and runs South to the Cauvery near Yedatore. There are four stations in this basin i.e. the site at **Sakeleshpur, M.H.Halli** and **Akkihebbal** in the main river, rest on the tributary Yagachi at **Thimmanahalli**.

The water of this river is slightly alkaline in nature and the pH varied from 6.7 (M.H.Halli) to 8.1 (Akkihebbal). The minimum Electrical Conductivity observed is 44 $\mu\text{mhos}/\text{cm}$ (Sakeleshpur) and the maximum is 420 $\mu\text{mhos}/\text{cm}$ (Akkihebbal). In this river water, the predominant cation is Calcium followed by Sodium, Magnesium and Potassium; their maximum values are 42.0 mg/L, 25.8 mg/L, 23.3 mg/L (Akkihebbal) and 3.5 mg/L all at Akkihebbal and their minimum values are 5.0 mg/L, 2.3 mg/L, 1.0 mg/L and 1.0 mg/L at Sakeleshpur respectively. Bicarbonate is the predominant anion followed by Chloride, Silicate and Sulphate; their maximum values are 236.0 mg/L (Akkihebbal), 40.1 mg/L (Thimmanahalli), 45.2 mg/L (Akkihebbal) and 13.3 mg/L (Thimmanahalli) and their minimum values are 13.0 mg/L, 4.3 mg/L, 9.3 mg/L and 1.4 mg/L all at Sakeleshpur respectively. Small quantities of Iron, Boron, Fluoride, Nitrate and Phosphate are also found in water samples of this river. Regarding biological parameters only DO and BOD are analysed. All the parameters are within the tolerance limit for all the stations. The water is classified as good water and it comes under C₁S₁ (Sakeleshpur & M.H.Halli) and C₂S₁ (Thimmanahalli & Akkihebbal) category.

2.3.3.2. The Lakshmanathirtha

The Lakshmanathirtha is a tributary of the Cauvery. It originates from Kodagu district and flows Eastward. It joins the river Cauvery just above the K.R. Sagar Reservoir. The catchment area of Lakhshmanathirtha river is 1690 Sq.Km and the length is 131 Km.

The only water quality station in this river is at **K.M. Vadí** and water is slightly alkaline in nature and the mean pH value is 7.3. The Electrical Conductivity varied from 152 to 632 $\mu\text{mhos}/\text{cm}$. Predominant cation is Calcium followed by Sodium, Magnesium and Potassium; their maximum values are 43.0 mg/L, 46.6 mg/L, 31.1 mg/L and 2.7 mg/L and their minimum values are 16.0 mg/L, 8.1 mg/L, 4.9 mg/L and 1.9 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 363.0 mg/L, 27.0 mg/L and 6.7 mg/L and their minimum values are 55.0 mg/L, 18.8 mg/L and 3.5 mg/L respectively. Small quantities of Iron, Boron, Fluoride, Nitrate and Phosphate are also found in water samples of this river. All parameters are within the tolerance limit and the water is classified as good water and it comes under C₂S₁ category.

2.3.3.3. The Kabini

The Kabini is an important tributary of the Cauvery. It is a perennial river, 150 to 200 M wide and has a course of about 240 Kms. It rises in the Western Ghats in North Wynad in Kerala State as two streams i.e., the Mannantoddypuzha and Panamarampuzha. About 16 Kms. below their confluence, the Kabini forms border between Kerala and Karnataka for about 12 Kms. before entering Karnataka State. It joins the Cauvery at Tirumakudalu Narasipur (T.Narasipur) and this confluence point is being considered as a spot of great sanctity. The confluence point is also called as “Triveni Sangama”. There are two water quality stations in this river system namely **Muthankera and T.Narasipur**.

The water of this river is slightly acidic in nature at site Muthankara with the mean pH value 7.1 and slightly alkaline at site T.Narasipur with the mean pH value 7.7. There is a huge difference in ionic concentrations of these two stations even though both are on the same river. The minimum and maximum Electrical Conductivity at Muthankera is 25 and 132 $\mu\text{mhos}/\text{cm}$ only; whereas, at T.Narasipur it is 135 and 575 $\mu\text{mhos}/\text{cm}$. The reason for the huge difference in ionic concentrations may be due to the Kabini Reservoir in between these two stations. The major cation is Calcium followed by Sodium, Magnesium and Potassium; their maximum values are 43.0 mg/L, 40.0 mg/L, 27.2 mg/L and 2.7 mg/L all at T.Narasipur respectively and their minimum values are 6.0 mg/L (Muthankera), 6.5 mg/L (T.Narasipur), 1.9 mg/L (Muthankera) and 0.2 mg/L (Muthankera) respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 325.0 mg/L, 23.4 mg/L and 8.3 mg/L respectively, all at T.Narasipur and their minimum values are 10.0 mg/L (Muthankera), 6.5 mg/L (Muthankera) and 3.4 mg/L (T.Narasipur) respectively. Small quantities of Iron, Boron, Fluoride, Nitrate and Phosphate are also found in water samples of this river. The water is classified as C₁S₁ (Muthankera) and C₂S₁ (T.Narasipur) category.

2.3.3.4. The Suvarnavathi

The Suvarnavathi is a tributary of the Cauvery. It originates from Nasrur Ghat range. The catchment area of Suvarnavathi river is 1787 Sq.Km and the length is 88 Km.

The only water quality station in this river is at **Bendrahalli** and water is slightly alkaline in nature and the mean pH is 7.6. The Electrical Conductivity varied from 366 to 834

$\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Calcium, Magnesium and Potassium; their maximum values are 87.8 mg/L, 69.0 mg/L, 20.4 mg/L and 5.8 mg/L and their minimum values are 36.1 mg/L, 22.0 mg/L, 11.7 mg/L and 3.3 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 432.0 mg/L, 43.7 mg/L and 29.3 mg/L and their minimum values are 164.0 mg/L, 29.5 mg/L and 7.1 mg/L respectively. Small quantities of Iron, Boron, Fluoride, Nitrate and Phosphate are also found in water samples of this river. The river water is classified as C₃S₁ category.

2.3.3.5. The Shimsha

The Shimsha river is a tributary of the Cauvery. It originates at an altitude of 914 m in the Devarayanadurga hill. After originating in the Tumkur district, the river takes a southernly course and enters the Mandya district. The catchment area of Shimsha river is 8469 Sq.Km and the length is 221 Km.

The only water quality station in this river is at **T.K.Halli** and water is slightly alkaline in nature. The pH is varying from 7.6 to 8.3. The Electrical Conductivity varied from 556 to 660 $\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Calcium, Magnesium and Potassium; their maximum values are 65.3 mg/L, 50.0 mg/L, 31.1 mg/L and 4.3 mg/L and their minimum values are 47.0 mg/L, 27.0 mg/L, 17.5 mg/L and 2.0 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 350.0 mg/L, 49.7 mg/L and 43.0 mg/L and their minimum values are 260.0 mg/L, 29.1 mg/L and 12.1 mg/L respectively. Boron, Carbonate, Fluoride and Nitrate are found within the limit. All parameters are within the tolerance limit. The water is classified as good water and it comes under C₂S₁ category.

2.3.3.6. The Arkavathi

The Arkavathi river is a tributary of the Cauvery. It originates at Nandihills of Chikkaballapur district. The catchment area of Arkavathi river is 4351 Sq.Km and the length is 161Km.

The only water quality station in this river is at **T.Bekuppe** and water is slightly alkaline in nature. The pH is varying from 7.1 to 8.2. The Electrical Conductivity varied from 1165 to 1471 $\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Calcium, Magnesium and

Potassium; their maximum values are 169.1mg/L, 110.0 mg/L, 44.7 mg/L and 17.8 mg/L; their minimum values are 129.6 mg/L, 64.0 mg/L, 18.5 mg/L and 12.2 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride, Sulphate and Nitrate; their maximum values are 523.0 mg/L, 218.3 mg/L, 49.3 and 16.8 mg/L; their minimum values are 299.0 mg/L, 158.0 mg/L, 17.8 and 3.52 mg/L respectively. Regarding biological parameters only DO and BOD are analysed. The BOD is high almost throughout the year. The Nitrate concentration is high almost throughout the year and maximum time it crossed the desirable limit. Boron, Fluoride and Phosphate are also found within the limit in water samples of this river. Small quantities of Trace and toxic elements viz., Chromium, Copper, Lead, Nickel and Zinc are also found within the limit in the water sample. The water is classified under C₃S₁ category.

2.3.3.7. The Chinnar

The Chinnar river is a tributary of the Cauvery.

The only water quality station in this river is at **Hogenakkal**. Water samples from this river are not collected during the year 2015 - 16 and hence Water Quality analysis is not done.

2.3.3.8. The Palar

The Palar river is a tributary of the Cauvery. It originates in Talagavara village in Kolar district. The catchment area of Palar river is 2813 Sq.Km and the length is 348 Km.

The only water quality station in this river is at **Kudlur** with the flow of only one month shows water is alkaline in nature and the pH value is 8.5. The Electrical Conductivity is 590 $\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Magnesium, Calcium and Potassium; their values are 60.0 mg/L, 34.5 mg/L, 21.0 mg/L and 5.4 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride, Sulphate and Nitrate; their values are 219.0 mg/L, 34.6 mg/L, 25.7 mg/L and 10.1 mg/L respectively. Small quantities of Boron, Fluoride, Phosphate and Silicate are also found in water samples of this river. All parameters are within the tolerance limit. The water is classified as good water and it comes under C₂S₁ category.

2.3.3.9. The Thoppaiyar

The Thoppaiyar river is a tributary of the Cauvery.

The only water quality station in this river is at **Thoppur** with the flow of only one month shows water is alkaline in nature and the pH value is 8.1. The Electrical Conductivity is 508 $\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Calcium, Magnesium and Potassium; their values are 38.2 mg/L, 32.0 mg/L, 28.7 mg/L and 6.2 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride, Sulphate and Nitrate; their values are 191.0 mg/L, 50.0 mg/L, 29.7 mg/L and 9.28 mg/L respectively. Small quantities of Boron, Fluoride, Phosphate and Silicate are also found in water samples of this river. All parameters are within the tolerance limit. The water is classified as good water and it comes under C₂S₁ category.

2.3.3.10. The Chittar

The Chittar river is a tributary of the Cauvery.

The only water quality station in this river is at **Sevanur**. The river water is alkaline in nature with the pH varies from 7.7 to 8.1. The Electrical Conductivity varies from 579 to 795 $\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Magnesium, Calcium and Potassium; their maximum values are 67.0 mg/L, 59.4 mg/L, 44.0 mg/L and 8.7 mg/L and their minimum values are 35.7 mg/L, 30.7 mg/L, 24.0 mg/L and 7.0 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride, Sulphate and Nitrate; their maximum values are 383.0 mg/L, 63.5 mg/L, 38.2 mg/L and 12.0 mg/L and their minimum values are 266.0 mg/L, 48.1 mg/L, 10.22 mg/L and 6.1 mg/L respectively. Small quantities of Iron, Ammonia, Boron, Fluoride and Silicate are also found in water samples. Regarding biological parameters only COD are analysed. The water is classified as C₃S₁ category.

2.3.3.11. The Sarabenga

The Sarabenga river is a tributary of the Cauvery.

The only water quality station in this river is at **Thevur**. The river water is alkaline in nature with the pH varies from 7.8 to 8.2. The Electrical Conductivity varies from 765 to 1050 $\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Magnesium, Calcium and Potassium; their maximum values are 95.5 mg/L, 75.7 mg/L, 47.0 mg/L and 8.0 mg/L and their minimum values are 81.0 mg/L, 31.6 mg/L, 25.0 mg/L and 4.7 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 383.0 mg/L,

147.4 mg/L and 92.0 mg/L and their minimum values are 336.0 mg/L, 59.6 mg/L and 14.3 mg/L respectively. Iron, Ammonia, Boron, Fluoride, Nitrate and Silicate are also found in water samples. Regarding biological parameters only COD are analysed. The water is classified as C₃S₁ category.

2.3.3.12. The Bhavani

The Bhavani is a 217-kilometer long perennial river and it originates from Nilgiri hills of the Western Ghats fed mostly by the southwest monsoon and supplemented by the northeast monsoon. Its watershed drains an area of 0.62 million hectares spread over Tamil Nadu (87%), Kerala (9%) and Karnataka (4%). The main river courses majorly through Coimbatore district and Erode district in Tamil Nadu. There are four stations in this basin i.e. the site at **Nellithurai** and **Savandapur** in the main river, rest on the tributaries viz., Moyar at **Thengumarahada**, Gandhayar at **Gandhavayal**.

The water of this river is slightly alkaline in nature and the pH varies in between 7.1 (Thengumarahada) to 8.9 (Nellithurai). The Electrical Conductivity varied from 47 (Nellithurai) to 529 (Savandapur) $\mu\text{mhos}/\text{cm}$. The major cation is Calcium followed by Sodium, Magnesium and Potassium; their maximum values are 53.0 mg/L (Gandhavayal), 34.4 mg/L (Savandapur), 38.1 mg/L (Gandhavayal) and 6.2 mg/L (Savandapur) and their minimum values are 5.0 mg/L (Nellithurai), 3.2 mg/L (Thengumarahada), 1.0 mg/L (Nellithurai) and 0.5 mg/L (Nellithurai) respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 269.0 mg/L (Gandhavayal), 63.7 mg/L (Thengumarahada) and 32.3 mg/L (Savandapur) and their minimum values are 9.0 mg/L (Gandhavayal), 5.5 mg/L (Nellithurai) and 2.1 mg/L (Thengumarahada) respectively. Iron, Boron, Fluoride, Nitrate, Phosphate and Silicate are also found within the limit in water samples. Regarding biological parameters only DO, BOD and COD are analysed. The water is classified as good and it comes under C₁S₁ (Thengumarahada) and C₂S₁ (Nellithurai, Gandhavayal & Savandapur) category.

2.3.3.13. The Amaravathi

The Amaravathi river is a tributary of the Cauvery. It originates at Anamalai hills in Tamil Nadu. The catchment area of Amaravathi river is 9080 Sq.Km and the length is 282 Km.

The only water quality station in this river is at **Nallamaranpatty**. The river water is alkaline in nature with the pH varies from 7.9 to 8.3. The Electrical Conductivity varies from 234 to 646 $\mu\text{mhos}/\text{cm}$. Predominant cation is Sodium followed by Calcium, Magnesium and Potassium; their maximum values are 64.3 mg/L, 51.0 mg/L, 21.1 mg/L and 6.8 mg/L and their minimum values are 13.8 mg/L, 25.0 mg/L, 7.7 mg/L and 3.8 mg/L respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 107.0 mg/L, 121.2 mg/L and 30.9 mg/L and their minimum values are 103.0 mg/L, 19.2 mg/L and 9.8 mg/L respectively. Small quantities of Fluoride, Nitrate, Phosphate and Silicate are also found in water samples. Regarding biological parameters DO, BOD & COD are analysed. The water is classified as C₂S₁ category.

2.3.4. The Noyyal

The Noyyal river is the **most polluted tributary** of the Cauvery river. It originates at Vellingiri hills in Western Ghats of Tamilnadu. The catchment area of Noyyal river is 3500 Sq.Km and the length is 180 Km.

The only one water quality station in this river is at **Elunuthimangalam**. The water at Elunuthimangalam is polluted because maximum water quality parameters are beyond the desirable limit. Generally, the water of this river is highly alkaline in nature. The pH at Noyyal varied from 8.0 to 8.9 and Electrical Conductivity varied from 1013 to 4995 $\mu\text{mhos}/\text{cm}$. The major cation is Sodium followed by Magnesium, Calcium and Potassium; their maximum values are 859.0 mg/L, 186.8 mg/L, 103.0 mg/L and 46.7 mg/L and their minimum values are 131.0 mg/L, 32.7 mg/L, 49.0 mg/L and 13.8 mg/L respectively. Chloride is the predominant anion followed by Bicarbonate and Sulphate; their maximum values are 1175.3 mg/L, 532.0 mg/L and 389.6 mg/L and their minimum values are 180.8 mg/L, 214.0 mg/L and 81.8 mg/L respectively. High quantities of Fluoride, Nitrate & Phosphate and small quantities of Iron, Ammonia, Carbonate & Silicate are also found in the water samples. Biological parameters D.O, B.O.D and C.O.D are analysed.

The reason for the un-usual values of water quality parameters is may be due to the dumping of industrial and agricultural wastes in the river. The water is classified into C₄S₂ which comes under high salinity hazard and medium sodium hazard as per the Wilcox Diagram.

2.3.5. The Distributaries of Cauvery Delta Region

There are 7 distributaries from the river Cauvery in delta region that contributes the flow to the Karaikal area which are Nandalar, Nattar, Vanjiyar, Noolar, Arasalar, Thirumalairajanar and Puravadaianar. All the distributaries in the region are non-perennial and flow is mainly due to the release of Cauvery water. For most of the months in the year, the flows available are the releases/regulated flows from upper regulators maintained by the Government of Tamil Nadu. There are 7 water quality stations on the 7 distributaries of Cauvery. They are **Nallathur, Annavasal, Peralam, Menangudi, Porakudi, Thengudi and Gopurajapuram.**

The water of this delta region is alkaline in nature and the pH varies in between 7.2 (Thengudi) to 8.5 (Menangudi). The Electrical Conductivity varied from 143 (Gopurajapuram) to 1350 (Nallathur) $\mu\text{mhos}/\text{cm}$. The major cation is Sodium followed by Calcium, Magnesium and Potassium; their maximum values are 204.5 mg/L (Nallathur), 43.0 mg/L (Nallathur), 32.4 mg/L (Nallathur) and 7.2 mg/L (Peralam) and their minimum values are 15.1 mg/L (Gopurajapuram), 8.0 mg/L (Gopurajapuram), 4.9 mg/L (Gopurajapuram) and 1.3 mg/L (Peralam) respectively. Bicarbonate is the predominant anion followed by Chloride and Sulphate; their maximum values are 362.0 mg/L (Nallathur), 264.3 mg/L (Nallathur) and 76.7 mg/L (Nallathur) and their minimum values are 50.0 mg/L (Gopurajapuram), 22.0 mg/L (Gopurajapuram) and 2.5 mg/L (Peralam) respectively. Carbonate, Fluoride, Nitrate and Phosphate are also found in the water samples. The water is classified as C_2S_1 (Annavasal, Peralam, Menangudi, Porakudi, Thengudi & Gopurajapuram) and C_3S_1 (Nallathur) category.

HISTORY SHEET

Water Year : 2015-2016

Site	: GOPURAJAPURAM	Code	: CCA32D2
State	: Tamil Nadu	District	Nagapattinam
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Puravidaiyanar
Division	: Hydrology Division, Chennai	Sub-Division	: Cauvery Delta SD, Karaikal
Drainage Area	: Sq. Km.	Bank	: Left
Latitude	: 10°51'05"	Longitude	: 79°48'00"
Zero of Gauge (m)	: 13.000 (m.s.l) -2.000 (m.s.l)	01/02/1998 01/06/1999	- 31/05/1999
	Opening Date	Closing Date	
Gauge	: 01/02/1998		
Discharge	: 01/02/1999		
Sediment	:		
Water Quality	: 01/10/2005		

Water Quality Datasheet for the period : 2015-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/09/2015	19/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.449	0.650
2	Colour_Cod (-)		Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		480	387
4	Odour_Code (-)		odour free	odour free
5	pH_FLD (pH units)		7.0	7.0
6	pH_GEN (pH units)		7.4	7.3
7	TDS (mg/L)		265	216
8	Temp (deg C)		30.0	29.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		141	115
3	Ca (mg/L)		19	23
4	Cl (mg/L)		74.3	57.8
5	CO ₃ (mg/L)		0.0	0.0
6	F (mg/L)		0.45	0.45
7	HCO ₃ (mg/L)		172	140
8	K (mg/L)		4.0	2.7
9	Mg (mg/L)		27.6	11.4
10	Na (mg/L)		45.2	43.8
11	NH ₃ -N (mg N/L)		0.06	0.06
12	NO ₂ +NO ₃ (mg N/L)		0.49	0.86
13	NO ₂ -N (mgN/L)		0.00	0.00
14	NO ₃ -N (mgN/L)		0.49	0.86
15	o-PO ₄ -P (mg P/L)		0.017	0.036
16	SO ₄ (mg/L)		18.7	15.0
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		0.9	2.2
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		47	57
2	HAR_Total (mgCaCO ₃ /L)		162	104
3	Na% (%)		37	47
4	RSC (-)		0.0	0.2
5	SAR (-)		1.6	1.9
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	08/12/2015	13/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	28.790	3.836	0.000
2	Colour_Cod (-)	Brown	Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	143	546	
4	Odour_Code (-)	odour free	odour free	
5	pH_FLD (pH units)	7.0	7.0	
6	pH_GEN (pH units)	7.7	7.8	
7	TDS (mg/L)	78	290	
8	Temp (deg C)	28.5	28.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	41	155	
3	Ca (mg/L)	8	29	
4	Cl (mg/L)	22.0	77.6	
5	CO ₃ (mg/L)	0.0	0.0	
6	F (mg/L)	0.21	0.37	
7	HCO ₃ (mg/L)	50	189	
8	K (mg/L)	1.9	4.3	
9	Mg (mg/L)	4.9	19.5	
10	Na (mg/L)	15.1	52.6	
11	NH ₃ -N (mg N/L)	0.04	0.06	
12	NO ₂ +NO ₃ (mg N/L)	0.17	0.33	
13	NO ₂ -N (mgN/L)	0.00	0.00	
14	NO ₃ -N (mgN/L)	0.17	0.33	
15	o-PO ₄ -P (mg P/L)	0.009	0.000	
16	SO ₄ (mg/L)	3.5	21.8	
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.6	1.3	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	20	73	
2	HAR_Total (mgCaCO ₃ /L)	40	155	
3	Na% (%)	44	42	
4	RSC (-)	0.0	0.0	
5	SAR (-)	1.0	1.8	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Gopurajapuram (CCA32D2)

Division : Hydrology Division, Chennai

Local River : Puravidaiyanar

River Water Summary

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	31.43	0.000	1.648
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	4	546	143	389
3	pH_FLD (pH units)	4	7.0	7.0	7
4	pH_GEN (pH units)	4	7.8	7.3	7.5
5	TDS (mg/L)	4	290	78	212
6	Temp (deg C)	4	30.0	28.5	29
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	4	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	4	155	41	113
3	Ca (mg/L)	4	29	8	20
4	Cl (mg/L)	4	77.6	22.0	57.9
5	CO ₃ (mg/L)	4	0.0	0.0	0
6	F (mg/L)	4	0.45	0.21	0.37
7	HCO ₃ (mg/L)	4	189	50	138
8	K (mg/L)	4	4.3	1.9	3.2
9	Mg (mg/L)	4	27.6	4.9	15.8
10	Na (mg/L)	4	52.6	15.1	39.2
11	NH ₃ -N (mg N/L)	4	0.06	0.04	0.05
12	NO ₂ +NO ₃ (mg N/L)	4	0.86	0.17	0.46
13	NO ₂ -N (mgN/L)	4	0.00	0.00	0
14	NO ₃ -N (mgN/L)	4	0.86	0.17	0.46
15	o-PO ₄ -P (mg P/L)	4	0.036	0.000	0.015
16	SO ₄ (mg/L)	4	21.8	3.5	14.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	4	2.2	0.9	1.5
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	4	73	20	49
2	HAR_Total (mgCaCO ₃ /L)	4	162	40	115
3	Na% (%)	4	47	37	42
4	RSC (-)	4	0.2	0.0	0.1
5	SAR (-)	4	1.9	1.0	1.6
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	3.88	2.568	3.602	Dry Bed	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	307				1120
3	pH_FLD (pH units)					7.0
4	pH_GEN (pH units)	7.6				7.9
5	TDS (mg/L)					
6	Temp (deg C)					26.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0				0.0
2	ALK-TOT (mgCaCO ₃ /L)	96				288
3	Ca (mg/L)	19				41
4	Cl (mg/L)	63.9				171.5
5	CO ₃ (mg/L)	0.0				0.0
6	F (mg/L)	0.32				0.36
7	HCO ₃ (mg/L)	117				352
8	K (mg/L)					4.0
9	Mg (mg/L)	8.7				24.3
10	Na (mg/L)	26.9				154.6
11	NH ₃ -N (mg N/L)	0.00				
12	NO ₂ +NO ₃ (mg N/L)	0.00				
13	NO ₂ -N (mgN/L)	0.00				
14	NO ₃ -N (mgN/L)	0.00				
15	o-PO ₄ -P (mg P/L)	0.010				
16	SO ₄ (mg/L)	8.4				49.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					
TRACE & TOXIC						
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	48				102
2	HAR_Total (mgCaCO ₃ /L)	84				203
3	Na% (%)					62
4	RSC (-)	0.2				1.7
5	SAR (-)	1.3				4.7
PESTICIDES						

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	Dry Bed	2.486	0.236	0.752	0.349
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		442	335	280	315
3	pH_FLD (pH units)		7.3	7.0	7.0	7.0
4	pH_GEN (pH units)		8.3	7.7	7.5	7.9
5	TDS (mg/L)			179	106	170
6	Temp (deg C)		27.0	30.0	25.0	31.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		12.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		158	122	78	110
3	Ca (mg/L)		20	28	23	24
4	Cl (mg/L)		46.3	51.9	25.5	42.5
5	CO ₃ (mg/L)		14.4	0.0	0.0	0.0
6	F (mg/L)		0.43	0.86	0.29	0.26
7	HCO ₃ (mg/L)		163	149	95	134
8	K (mg/L)		4.7	5.8	2.8	3.0
9	Mg (mg/L)		29.2	12.4	6.1	12.3
10	Na (mg/L)		35.3	37.3	13.8	24.6
11	NH ₃ -N (mg N/L)					
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)		0.91	0.12	0.84	0.76
15	o-PO ₄ -P (mg P/L)					
16	SO ₄ (mg/L)		11.4	13.3	8.2	5.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		1.7	2.7	1.6	1.9
TRACE & TOXIC						
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		50	71	58	59
2	HAR_Total (mgCaCO ₃ /L)		172	122	84	110
3	Na% (%)		30	39	26	32
4	RSC (-)		0.0	0.0	0.0	0.0
5	SAR (-)		1.2	1.5	0.7	1.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.09	0.399	2.938	5.357	11.86
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	480				178
3	pH_FLD (pH units)	7.0				7.0
4	pH_GEN (pH units)	7.3				6.8
5	TDS (mg/L)	265				
6	Temp (deg C)	30.0				28.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)	141	119			79
3	Ca (mg/L)	19	21			14
4	Cl (mg/L)	74.3	34.4			42.0
5	CO ₃ (mg/L)	0.0	0.0			0.0
6	F (mg/L)	0.45				
7	HCO ₃ (mg/L)	172	145			97
8	K (mg/L)	4.0				
9	Mg (mg/L)	27.6	11.7			10.2
10	Na (mg/L)	45.2	28.8			
11	NH ₃ -N (mg N/L)	0.06				
12	NO ₂ +NO ₃ (mg N/L)	0.49				
13	NO ₂ -N (mgN/L)	0.00				
14	NO ₃ -N (mgN/L)	0.49				
15	o-PO ₄ -P (mg P/L)	0.017				
16	SO ₄ (mg/L)	18.7				
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9				
TRACE & TOXIC						
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	47	52			34
2	HAR_Total (mgCaCO ₃ /L)	162	101			77
3	Na% (%)	37				
4	RSC (-)	0.0	0.4			0.1
5	SAR (-)	1.6	1.3			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	6.779	10.11	8.933	8.645	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	462	286	407	134	
3	pH_FLD (pH units)	7.0	7.0	7.0	6.0	
4	pH_GEN (pH units)	7.7	7.6	7.5	7.0	
5	TDS (mg/L)				71	
6	Temp (deg C)	25.7	28.0	25.5	23.0	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	215	110	113	45	
3	Ca (mg/L)	27	17	13	9	
4	Cl (mg/L)	71.4	41.2	60.7	20.3	
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	
6	F (mg/L)	0.37	0.29	0.27	0.27	
7	HCO ₃ (mg/L)	262	135	138	55	
8	K (mg/L)	5.9	4.0	3.9	2.3	
9	Mg (mg/L)	10.0	10.7	17.8	4.8	
10	Na (mg/L)	82.6	31.3	42.4	13.1	
11	NH ₃ -N (mg N/L)					
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)		0.31	0.45	0.26	
15	o-PO ₄ -P (mg P/L)					
16	SO ₄ (mg/L)	10.4	6.0	5.8	5.3	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.8	1.6	2.2	2.8	
TRACE & TOXIC						
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	68	43	33	24	
2	HAR_Total (mgCaCO ₃ /L)	110	87	108	43	
3	Na% (%)	61	42	45	38	
4	RSC (-)	2.1	0.5	0.1	0.0	
5	SAR (-)	3.5	1.4	1.8	0.9	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	1.046	8.318	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	332	359			
3	pH_FLD (pH units)	7.0	7.0			
4	pH_GEN (pH units)	7.5	7.6			
5	TDS (mg/L)	185	195			
6	Temp (deg C)	23.0	28.7			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			
2	ALK-TOT (mgCaCO ₃ /L)	115	104			
3	Ca (mg/L)	24	20			
4	Cl (mg/L)	47.3	52.5			
5	CO ₃ (mg/L)	0.0	0.0			
6	F (mg/L)	0.28	0.34			
7	HCO ₃ (mg/L)	140	127			
8	K (mg/L)	3.1	3.0			
9	Mg (mg/L)	12.3	11.9			
10	Na (mg/L)	34.6	37.2			
11	NH ₃ -N (mg N/L)		0.05			
12	NO ₂ +NO ₃ (mg N/L)		0.45			
13	NO ₂ -N (mgN/L)		0.00			
14	NO ₃ -N (mgN/L)	2.82	0.45			
15	o-PO ₄ -P (mg P/L)		0.015			
16	SO ₄ (mg/L)	8.5	13.4			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.6	1.7			
TRACE & TOXIC						
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	59	50			
2	HAR_Total (mgCaCO ₃ /L)	110	100			
3	Na% (%)	40	44			
4	RSC (-)	0.1	0.1			
5	SAR (-)	1.4	1.6			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NH ₃ -N (mg N/L)				
12	NO ₂ +NO ₃ (mg N/L)				
13	NO ₂ -N (mgN/L)				
14	NO ₃ -N (mgN/L)				
15	o-PO ₄ -P (mg P/L)				
16	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Gopurajapuram (CCA32D2)

Local River : Puravidaiyanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NH ₃ -N (mg N/L)				
12	NO ₂ +NO ₃ (mg N/L)				
13	NO ₂ -N (mgN/L)				
14	NO ₃ -N (mgN/L)				
15	o-PO ₄ -P (mg P/L)				
16	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: ANNAVASAL	Code	: CCA21G5
State	: Pondicherry	District	Karaikal
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Nattar
Division	: Hydrology Division, Chennai	Sub-Division	: Cauvery Delta SD, Karaikal
Drainage Area	: Sq. Km.	Bank	: Left
Latitude	: 10°58'30"	Longitude	: 79°45'14"
Zero of Gauge (m)	4.250 (m.s.l) 4.000 (m.s.l)	21/07/1998 01/12/1998	- 30/11/1998
Gauge	Opening Date	Closing Date	
Discharge	: 21/07/1998		
Sediment	: 01/02/1999		
Water Quality	: :		

Water Quality Datasheet for the period : 2015-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/09/2015	06/10/2015	23/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	2.632	2.975
2	Colour_Cod (-)		Light Green	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		426	311
4	Odour_Code (-)		odour free	odour free
5	pH_FLD (pH units)		7.0	7.0
6	pH_GEN (pH units)		8.0	7.6
7	TDS (mg/L)		227	167
8	Temp (deg C)		29.0	25.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		132	92
3	Ca (mg/L)		16	17
4	Cl (mg/L)		57.8	44.1
5	CO ₃ (mg/L)		0.0	0.0
6	F (mg/L)		0.41	0.26
7	HCO ₃ (mg/L)		161	112
8	K (mg/L)		3.7	3.4
9	Mg (mg/L)		23.5	10.5
10	Na (mg/L)		36.0	30.0
11	NH ₃ -N (mg N/L)		0.05	0.06
12	NO ₂ +NO ₃ (mg N/L)		0.36	0.21
13	NO ₂ -N (mgN/L)		0.00	0.00
14	NO ₃ -N (mgN/L)		0.35	0.20
15	o-PO ₄ -P (mg P/L)		0.019	0.016
16	SO ₄ (mg/L)		20.1	14.3
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		2.0	0.7
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		40	43
2	HAR_Total (mgCaCO ₃ /L)		138	87
3	Na% (%)		36	42
4	RSC (-)		0.0	0.1
5	SAR (-)		1.3	1.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	08/12/2015	18/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	3.564	5.046	0.215
2	Colour_Cod (-)	Light Brown	Green	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	241	384	
4	Odour_Code (-)	odour free	odour free	
5	pH_FLD (pH units)	7.0	7.0	
6	pH_GEN (pH units)	8.1	8.3	
7	TDS (mg/L)	128	206	
8	Temp (deg C)	25.0	26.0	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	14.1	
2	ALK-TOT (mgCaCO ₃ /L)	78	108	
3	Ca (mg/L)	16	23	
4	Cl (mg/L)	30.3	50.8	
5	CO ₃ (mg/L)	0.0	16.9	
6	F (mg/L)	0.25	0.38	
7	HCO ₃ (mg/L)	95	98	
8	K (mg/L)	4.4	3.7	
9	Mg (mg/L)	8.9	13.0	
10	Na (mg/L)	21.5	39.1	
11	NH ₃ -N (mg N/L)	0.04	0.04	
12	NO ₂ +NO ₃ (mg N/L)	0.18	0.29	
13	NO ₂ -N (mgN/L)	0.00	0.00	
14	NO ₃ -N (mgN/L)	0.18	0.29	
15	o-PO ₄ -P (mg P/L)	0.009	0.000	
16	SO ₄ (mg/L)	3.4	16.0	
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.3	2.0	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	40	57	
2	HAR_Total (mgCaCO ₃ /L)	77	111	
3	Na% (%)	36	43	
4	RSC (-)	0.0	0.0	
5	SAR (-)	1.1	1.6	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.306	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water Summary

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	8.156	0.000	0.493
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	4	426	241	341
3	pH_FLD (pH units)	4	7.0	7.0	7
4	pH_GEN (pH units)	4	8.3	7.6	8
5	TDS (mg/L)	4	227	128	182
6	Temp (deg C)	4	29.0	25.0	26.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	4	14.1	0.0	3.5
2	ALK-TOT (mgCaCO ₃ /L)	4	132	78	103
3	Ca (mg/L)	4	23	16	18
4	Cl (mg/L)	4	57.8	30.3	45.7
5	CO ₃ (mg/L)	4	16.9	0.0	4.2
6	F (mg/L)	4	0.41	0.25	0.32
7	HCO ₃ (mg/L)	4	161	95	116
8	K (mg/L)	4	4.4	3.4	3.8
9	Mg (mg/L)	4	23.5	8.9	14
10	Na (mg/L)	4	39.1	21.5	31.6
11	NH ₃ -N (mg N/L)	4	0.06	0.04	0.05
12	NO ₂ +NO ₃ (mg N/L)	4	0.36	0.18	0.26
13	NO ₂ -N (mgN/L)	4	0.00	0.00	0
14	NO ₃ -N (mgN/L)	4	0.35	0.18	0.26
15	o-PO ₄ -P (mg P/L)	4	0.019	0.000	0.011
16	SO ₄ (mg/L)	4	20.1	3.4	13.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	4	2.0	0.7	1.5
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	4	57	40	45
2	HAR_Total (mgCaCO ₃ /L)	4	138	77	103
3	Na% (%)	4	43	36	39
4	RSC (-)	4	0.1	0.0	0
5	SAR (-)	4	1.6	1.1	1.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water

Division : HD, Chennai

Sub-Division: Cauvery Delta SD,Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	1.085	1.029	1.413	1.157	0.247
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	296	595	249	392	324
3	pH_FLD (pH units)				7.0	7.0
4	pH_GEN (pH units)	7.6	7.3	7.5	7.6	7.4
5	TDS (mg/L)					
6	Temp (deg C)	30.5	28.6	24.8	28.0	26.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	84	147	94	145	151
3	Ca (mg/L)	27	25	26	27	24
4	Cl (mg/L)	30.4	37.8	24.2	56.7	39.1
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
6	F (mg/L)	0.23				0.28
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	102	180	115	177	184
9	K (mg/L)					4.5
10	Mg (mg/L)	5.1	17.3	11.7	17.8	13.1
11	Na (mg/L)	22.2	52.6	20.4		35.4
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)					
16	o-PO ₄ -P (mg P/L)	0.000				
17	SO ₄ (mg/L)	4.6	16.2	9.2	15.0	10.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	68	62	64	69	61
2	HAR_Total (mgCaCO ₃ /L)	89	134	113	143	116
3	Na% (%)					39
4	RSC (-)	0.3	0.5	0.0	0.2	0.7
5	SAR (-)	1.0	2.0	0.8		1.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water

Division : HD, Chennai

Sub-Division: Cauvery Delta SD,Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	0.208	0.694	0.092	0.317	0.569
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	481	451	439	198	256
3	pH_FLD (pH units)	7.0	7.5	7.0	8.0	7.0
4	pH_GEN (pH units)	7.9	8.2	7.3	7.8	7.5
5	TDS (mg/L)			234	106	140
6	Temp (deg C)	29.9	27.0	28.5	24.0	29.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	17.9	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	179	144	131	73	88
3	Ca (mg/L)	28	27	30	23	21
4	Cl (mg/L)	56.9	48.0	63.9	25.5	35.9
5	CO ₃ (mg/L)	0.0	21.6	0.0	0.0	0.0
6	F (mg/L)	0.28	0.41	0.83	0.34	0.31
7	Fe (mg/L)				0.0	
8	HCO ₃ (mg/L)	219	132	159	90	108
9	K (mg/L)	5.8	6.6	3.8	3.5	4.4
10	Mg (mg/L)	21.4	19.4	16.2	5.1	10.3
11	Na (mg/L)	45.8	34.7	36.1	13.6	22.5
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)	0.68	3.15	0.11	1.56	0.96
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	21.2	16.6	18.5	8.9	13.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	2.4	0.5	1.5	1.7
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)				0.21	
3	Cr ($\mu\text{g}/\text{L}$)				0.85	
4	Cu ($\mu\text{g}/\text{L}$)				2.64	
5	Hg ($\mu\text{g}/\text{L}$)				0.09	
6	Ni ($\mu\text{g}/\text{L}$)				10.45	
7	Pb ($\mu\text{g}/\text{L}$)				6.65	
8	Zn ($\mu\text{g}/\text{L}$)				3.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	69	68	75	58	52
2	HAR_Total (mgCaCO ₃ /L)	159	149	142	80	95
3	Na% (%)	38	33	35	26	33
4	RSC (-)	0.4	0.1	0.0	0.0	0.0
5	SAR (-)	1.6	1.2	1.3	0.7	1.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water

Division : HD, Chennai

Sub-Division: Cauvery Delta SD,Karaikal

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.526	1.551	1.646	0.72	2.443
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	426	574	443	483	481
3	pH_FLD (pH units)	7.0				7.0
4	pH_GEN (pH units)	8.0	7.6	7.4	7.7	7.3
5	TDS (mg/L)	227				
6	Temp (deg C)	29.0	28.0	26.3	23.8	26.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	132	167	166	140	171
3	Ca (mg/L)	16	29	30	32	30
4	Cl (mg/L)	57.8	66.2	54.3	56.0	74.4
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
6	F (mg/L)	0.41				
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	161	203	203	171	208
9	K (mg/L)	3.7				
10	Mg (mg/L)	23.5	22.3	17.1	15.7	19.4
11	Na (mg/L)	36.0	50.7	61.6	34.3	
12	NH ₃ -N (mg N/L)	0.05				
13	NO ₂ +NO ₃ (mg N/L)	0.35				
14	NO ₂ -N (mgN/L)	0.00				
15	NO ₃ -N (mgN/L)	0.35				
16	o-PO ₄ -P (mg P/L)	0.019				
17	SO ₄ (mg/L)	20.0	27.5	19.6	18.5	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.0				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	40	73	74	80	74
2	HAR_Total (mgCaCO ₃ /L)	138	166	145	146	155
3	Na% (%)	36				
4	RSC (-)	0.0	0.2	0.4	0.1	0.4
5	SAR (-)	1.3	1.7	2.3	1.3	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water

Division : HD, Chennai

Sub-Division: Cauvery Delta SD,Karaikal

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	0.722	2.883	1.859	0.847	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	564	542	478	368	
3	pH_FLD (pH units)	7.0	7.8	7.5	7.0	
4	pH_GEN (pH units)	7.9	8.1	8.0	7.6	
5	TDS (mg/L)				196	
6	Temp (deg C)	25.6	26.2	26.3	23.8	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	2.9	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	260	195	131	110	
3	Ca (mg/L)	28	28	26	23	
4	Cl (mg/L)	78.1	67.8	63.6	43.4	
5	CO ₃ (mg/L)	0.0	0.0	3.5	0.0	
6	F (mg/L)	0.35	0.39	0.30	0.57	
7	Fe (mg/L)			0.0		
8	HCO ₃ (mg/L)	317	238	153	134	
9	K (mg/L)	9.3	6.2	6.7	3.6	
10	Mg (mg/L)	18.0	22.4	15.6	11.4	
11	Na (mg/L)	95.3	52.8	44.8	29.6	
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)		0.55	0.52	0.25	
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	20.5	21.3	12.2	12.0	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.4	1.3	1.9	1.7	
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.99		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			1.09		
4	Cu ($\mu\text{g}/\text{L}$)			9.38		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			6.14		
7	Pb ($\mu\text{g}/\text{L}$)			0.87		
8	Zn ($\mu\text{g}/\text{L}$)			6.10		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	69	71	64	57	
2	HAR_Total (mgCaCO ₃ /L)	144	164	129	105	
3	Na% (%)	57	40	42	39	
4	RSC (-)	2.3	0.6	0.1	0.1	
5	SAR (-)	3.5	1.8	1.7	1.3	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water

Division : HD, Chennai

Sub-Division: Cauvery Delta SD,Karaikal

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	1.22	2.95	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	513	312			
3	pH_FLD (pH units)	7.3	7.0			
4	pH_GEN (pH units)	7.8	8.0			
5	TDS (mg/L)	275	167			
6	Temp (deg C)	25.0	25.3			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	4.7			
2	ALK-TOT (mgCaCO ₃ /L)	133	93			
3	Ca (mg/L)	29	19			
4	Cl (mg/L)	76.0	41.7			
5	CO ₃ (mg/L)	0.0	5.6			
6	F (mg/L)	0.28	0.30			
7	Fe (mg/L)	0.0				
8	HCO ₃ (mg/L)	163	102			
9	K (mg/L)	5.4	3.8			
10	Mg (mg/L)	15.4	10.8			
11	Na (mg/L)	57.4	30.2			
12	NH ₃ -N (mg N/L)	0.06	0.05			
13	NO ₂ +NO ₃ (mg N/L)	2.99	0.22			
14	NO ₂ -N (mgN/L)	0.00	0.00			
15	NO ₃ -N (mgN/L)	2.00	0.22			
16	o-PO ₄ -P (mg P/L)	0.013	0.008			
17	SO ₄ (mg/L)	21.5	11.2			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.6	1.3			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	0.25				
3	Cr ($\mu\text{g}/\text{L}$)	8.18				
4	Cu ($\mu\text{g}/\text{L}$)	3.53				
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	0.15				
7	Pb ($\mu\text{g}/\text{L}$)	0.36				
8	Zn ($\mu\text{g}/\text{L}$)	4.00				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	73	47			
2	HAR_Total (mgCaCO ₃ /L)	137	92			
3	Na% (%)	47	40			
4	RSC (-)	0.0	0.0			
5	SAR (-)	2.1	1.4			
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water

Division : HD, Chennai

Sub-Division: Cauvery Delta SD,Karaikal

S.No	Parameters	Summer Mar - May			
		2009	2010	2011	2012
	PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
	CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	Fe (mg/L)				
8	HCO ₃ (mg/L)				
9	K (mg/L)				
10	Mg (mg/L)				
11	Na (mg/L)				
12	NH ₃ -N (mg N/L)				
13	NO ₂ +NO ₃ (mg N/L)				
14	NO ₂ -N (mgN/L)				
15	NO ₃ -N (mgN/L)				
16	o-PO ₄ -P (mg P/L)				
17	SO ₄ (mg/L)				
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)				
	TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
	PESTICIDES				

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Annavasal (CCA21G5)

Local River : Nattar

River Water

Division : HD, Chennai

Sub-Division: Cauvery Delta SD,Karaikal

S.No	Parameters	Summer Mar - May			
		2013	2014	2015	2016
	PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	0.102
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
	CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	Fe (mg/L)				
8	HCO ₃ (mg/L)				
9	K (mg/L)				
10	Mg (mg/L)				
11	Na (mg/L)				
12	NH ₃ -N (mg N/L)				
13	NO ₂ +NO ₃ (mg N/L)				
14	NO ₂ -N (mgN/L)				
15	NO ₃ -N (mgN/L)				
16	o-PO ₄ -P (mg P/L)				
17	SO ₄ (mg/L)				
	BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)				
	TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
	PESTICIDES				

HISTORY SHEET

Water Year : 2015-2016			
Site	: NALLATHUR	Code	: CCA12G3
State	: Pondicherry	District	Karaikal
Basin	: Cauvery	Independent River	: Cauvery
Tributary	:	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Nandalar
Division	: Hydrology Division, Chennai	Sub-Division	: Cauvery Delta SD, Karaikal
Drainage Area	: Sq. Km.	Bank	: Right
Latitude	: 11°00'08"	Longitude	: 79°45'01"
Zero of Gauge (m)	: 0.000 (m.s.l)	01/06/2006	
	Opening Date	Closing Date	
Gauge	: 01/06/2006		
Discharge	: 01/06/2006		
Sediment	:		
Water Quality	: 01/09/2008		

Water Quality Datasheet for the period : 2015-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.067	0.000	Dry Bed
2	Colour_Cod (-)	Light Brown		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	1114		
4	Odour_Code (-)	odour free		
5	pH_FLD (pH units)	7.0		
6	pH_GEN (pH units)	7.9		
7	TDS (mg/L)	662		
8	Temp (deg C)	31.5		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	240		
3	Ca (mg/L)	21		
4	Cl (mg/L)	243.9		
5	CO ₃ (mg/L)	0.0		
6	F (mg/L)	0.72		
7	HCO ₃ (mg/L)	293		
8	K (mg/L)	4.5		
9	Mg (mg/L)	31.6		
10	Na (mg/L)	185.0		
11	NH ₃ -N (mg N/L)	0.12		
12	NO ₂ +NO ₃ (mg N/L)	0.80		
13	NO ₂ -N (mgN/L)	0.00		
14	NO ₃ -N (mgN/L)	0.80		
15	o-PO ₄ -P (mg P/L)	0.010		
16	SO ₄ (mg/L)	54.9		
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.6		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	53		
2	HAR_Total (mgCaCO ₃ /L)	185		
3	Na% (%)	68		
4	RSC (-)	1.1		
5	SAR (-)	5.9		
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/09/2015	30/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	0.058	0.289
2	Colour_Cod (-)		Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		1350	1100
4	Odour_Code (-)		odour free	odour free
5	pH_FLD (pH units)		7.0	7.0
6	pH_GEN (pH units)		7.7	7.6
7	TDS (mg/L)		785	605
8	Temp (deg C)		29.0	29.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		296	248
3	Ca (mg/L)		43	33
4	Cl (mg/L)		264.3	220.3
5	CO ₃ (mg/L)		0.0	0.0
6	F (mg/L)		0.86	0.78
7	HCO ₃ (mg/L)		362	303
8	K (mg/L)		6.8	4.4
9	Mg (mg/L)		32.4	24.3
10	Na (mg/L)		204.5	168.0
11	NH ₃ -N (mg N/L)		0.06	0.07
12	NO ₂ +NO ₃ (mg N/L)		1.26	0.71
13	NO ₂ -N (mgN/L)		0.01	0.00
14	NO ₃ -N (mgN/L)		1.25	0.71
15	o-PO ₄ -P (mg P/L)		0.190	0.005
16	SO ₄ (mg/L)		76.7	36.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		1.1	1.8
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		107	84
2	HAR_Total (mgCaCO ₃ /L)		242	185
3	Na% (%)		64	66
4	RSC (-)		1.1	1.3
5	SAR (-)		5.7	5.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	08/12/2015	04/01/2016	22/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	40.46	0.116	1.527
2	Colour_Cod (-)	Light Brown	Clear	Light Green
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	477	720	543
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	7.0	7.0	7.0
6	pH_GEN (pH units)	7.7	8.0	8.4
7	TDS (mg/L)	254	382	288
8	Temp (deg C)	25.0	26.0	25.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	18.7
2	ALK-TOT (mgCaCO ₃ /L)	115	165	89
3	Ca (mg/L)	24	35	22
4	Cl (mg/L)	77.1	117.7	104.3
5	CO ₃ (mg/L)	0.0	0.0	22.6
6	F (mg/L)	0.28	0.30	0.37
7	HCO ₃ (mg/L)	140	201	63
8	K (mg/L)	2.0	4.6	5.5
9	Mg (mg/L)	13.0	18.7	10.7
10	Na (mg/L)	55.1	90.9	71.8
11	NH ₃ -N (mg N/L)	0.04	0.05	0.03
12	NO ₂ +NO ₃ (mg N/L)	0.19	0.78	0.45
13	NO ₂ -N (mgN/L)	0.00	0.00	0.00
14	NO ₃ -N (mgN/L)	0.19	0.78	0.45
15	o-PO ₄ -P (mg P/L)	0.010	0.000	0.000
16	SO ₄ (mg/L)	22.5	29.0	32.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.0	1.1	1.5
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	60	87	56
2	HAR_Total (mgCaCO ₃ /L)	114	165	101
3	Na% (%)	51	54	59
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	2.3	3.1	3.1
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/03/2016	01/04/2016	17/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	1.91
2	Colour_Cod (-)			Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			768
4	Odour_Code (-)			odour free
5	pH_FLD (pH units)			7.0
6	pH_GEN (pH units)			7.5
7	TDS (mg/L)			428
8	Temp (deg C)			29.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			0.0
2	ALK-TOT (mgCaCO ₃ /L)			152
3	Ca (mg/L)			32
4	Cl (mg/L)			147.2
5	CO ₃ (mg/L)			0.0
6	F (mg/L)			0.56
7	HCO ₃ (mg/L)			186
8	K (mg/L)			4.4
9	Mg (mg/L)			15.6
10	Na (mg/L)			112.5
11	NH ₃ -N (mg N/L)			0.05
12	NO ₂ +NO ₃ (mg N/L)			0.69
13	NO ₂ -N (mgN/L)			0.00
14	NO ₃ -N (mgN/L)			0.69
15	o-PO ₄ -P (mg P/L)			0.238
16	SO ₄ (mg/L)			34.7
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			1.1
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			80
2	HAR_Total (mgCaCO ₃ /L)			145
3	Na% (%)			62
4	RSC (-)			0.2
5	SAR (-)			4.1
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water Summary

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	56.36	0.000	3.082
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	7	1350	477	867
3	pH_FLD (pH units)	7	7.0	7.0	7
4	pH_GEN (pH units)	7	8.4	7.5	7.8
5	TDS (mg/L)	7	785	254	486
6	Temp (deg C)	7	31.5	25.0	27.9
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	7	18.7	0.0	2.7
2	ALK-TOT (mgCaCO ₃ /L)	7	296	89	187
3	Ca (mg/L)	7	43	21	30
4	Cl (mg/L)	7	264.3	77.1	167.8
5	CO ₃ (mg/L)	7	22.6	0.0	3.2
6	F (mg/L)	7	0.86	0.28	0.55
7	HCO ₃ (mg/L)	7	362	63	221
8	K (mg/L)	7	6.8	2.0	4.6
9	Mg (mg/L)	7	32.4	10.7	20.9
10	Na (mg/L)	7	204.5	55.1	126.8
11	NH ₃ -N (mg N/L)	7	0.12	0.03	0.06
12	NO ₂ +NO ₃ (mg N/L)	7	1.26	0.19	0.7
13	NO ₂ -N (mgN/L)	7	0.01	0.00	0
14	NO ₃ -N (mgN/L)	7	1.25	0.19	0.69
15	o-PO ₄ -P (mg P/L)	7	0.238	0.000	0.065
16	SO ₄ (mg/L)	7	76.7	22.5	40.9
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	7	2.6	1.1	1.6
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	7	107	53	75
2	HAR_Total (mgCaCO ₃ /L)	7	242	101	162
3	Na% (%)	7	68	51	61
4	RSC (-)	7	1.3	0.0	0.5
5	SAR (-)	7	5.9	2.3	4.2
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	Dry Bed	Dry Bed	1.86	1.832	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				456	
3	pH_FLD (pH units)				7.0	
4	pH_GEN (pH units)				7.2	
5	TDS (mg/L)					
6	Temp (deg C)				26.0	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)				0.0	
2	ALK-TOT (mgCaCO ₃ /L)				200	
3	Ca (mg/L)				42	
4	Cl (mg/L)				43.8	
5	CO ₃ (mg/L)				0.0	
6	F (mg/L)					
7	Fe (mg/L)					
8	HCO ₃ (mg/L)				243	
9	K (mg/L)					
10	Mg (mg/L)					7.8
11	Na (mg/L)					
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)					
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)					
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)				104	
2	HAR_Total (mgCaCO ₃ /L)				136	
3	Na% (%)					
4	RSC (-)				1.3	
5	SAR (-)					
PESTICIDES						

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	0.919	0.261	0.615	0.167	0.1
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	598	1086	520	1006	552
3	pH_FLD (pH units)	7.0	7.0	7.0	7.0	7.0
4	pH_GEN (pH units)	7.9	7.7	7.6	7.9	7.8
5	TDS (mg/L)			277	536	302
6	Temp (deg C)	26.9	29.5	24.0	30.0	30.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	223	280	155	245	173
3	Ca (mg/L)	23	55	24	22	31
4	Cl (mg/L)	73.9	135.6	39.9	195.7	82.2
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
6	F (mg/L)	0.53	0.78	0.72	1.03	0.47
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	273	342	189	299	210
9	K (mg/L)	6.0	6.7	4.2	5.3	4.9
10	Mg (mg/L)	18.0	5.8	16.2	17.2	17.8
11	Na (mg/L)	86.0	154.3	42.0	184.0	62.6
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)	0.88	3.96	0.13	2.48	0.88
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	28.8	21.3	25.5	35.6	26.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.0	1.4	2.3	1.5	1.2
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	57	136	59	54	78
2	HAR_Total (mgCaCO ₃ /L)	132	161	126	126	152
3	Na% (%)	58	67	41	75	46
4	RSC (-)	1.8	2.4	0.6	2.4	0.4
5	SAR (-)	3.3	5.3	1.6	7.2	2.2
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.025	3.828	5.372	4.168	18.79
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1232	618			206
3	pH_FLD (pH units)	7.0				7.0
4	pH_GEN (pH units)	7.8	7.4			7.0
5	TDS (mg/L)	724				
6	Temp (deg C)	30.3	25.8			26.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)	268	192			100
3	Ca (mg/L)	32	31			19
4	Cl (mg/L)	254.1	57.5			47.7
5	CO ₃ (mg/L)	0.0	0.0			0.0
6	F (mg/L)	0.79				
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	327	235			122
9	K (mg/L)	5.7				
10	Mg (mg/L)	32.0	18.8			11.2
11	Na (mg/L)	194.8	72.3			
12	NH ₃ -N (mg N/L)	0.09				
13	NO ₂ +NO ₃ (mg N/L)	1.03				
14	NO ₂ -N (mgN/L)	0.00				
15	NO ₃ -N (mgN/L)	1.02	0.00			
16	o-PO ₄ -P (mg P/L)	0.100				
17	SO ₄ (mg/L)	65.8	28.3			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.8				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	80	78			48
2	HAR_Total (mgCaCO ₃ /L)	214	156			95
3	Na% (%)	66				
4	RSC (-)	1.1	0.7			0.1
5	SAR (-)	5.8	2.5			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	3.854	15.23	19.45	12.69	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	435	463	422	475	
3	pH_FLD (pH units)	7.0	7.0	7.0	7.0	
4	pH_GEN (pH units)	7.6	7.9	7.6	8.1	
5	TDS (mg/L)				253	
6	Temp (deg C)	25.9	24.6	26.5	25.8	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	6.1	
2	ALK-TOT (mgCaCO ₃ /L)	276	196	136	161	
3	Ca (mg/L)	29	24	11	24	
4	Cl (mg/L)	88.5	52.2	49.3	72.3	
5	CO ₃ (mg/L)	0.0	0.0	0.0	7.3	
6	F (mg/L)	0.40	0.34	0.30	0.66	
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	336	239	166	182	
9	K (mg/L)	7.7	4.5	4.2	3.6	
10	Mg (mg/L)	14.1	17.2	19.4	11.9	
11	Na (mg/L)	107.1	55.2	41.5	76.9	
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)		0.41	0.46	0.54	
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	13.1	10.3	5.9	15.5	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	0.7	2.2	2.6	
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	73	60	28	59	
2	HAR_Total (mgCaCO ₃ /L)	132	132	109	108	
3	Na% (%)	62	44	45	54	
4	RSC (-)	2.9	1.3	0.6	1.1	
5	SAR (-)	4.1	2.1	1.8	2.9	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	5.451	10.6	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	427	710			
3	pH_FLD (pH units)	7.5	7.0			
4	pH_GEN (pH units)	7.8	7.9			
5	TDS (mg/L)	228	382			
6	Temp (deg C)	26.5	26.4			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	4.7			
2	ALK-TOT (mgCaCO ₃ /L)	125	154			
3	Ca (mg/L)	22	29			
4	Cl (mg/L)	64.0	129.9			
5	CO ₃ (mg/L)	0.0	5.6			
6	F (mg/L)	0.33	0.43			
7	Fe (mg/L)	0.0				
8	HCO ₃ (mg/L)	153	177			
9	K (mg/L)	3.2	4.1			
10	Mg (mg/L)	11.3	16.7			
11	Na (mg/L)	48.0	96.5			
12	NH ₃ -N (mg N/L)		0.05			
13	NO ₂ +NO ₃ (mg N/L)		0.53			
14	NO ₂ -N (mgN/L)		0.00			
15	NO ₃ -N (mgN/L)	2.09	0.53			
16	o-PO ₄ -P (mg P/L)		0.004			
17	SO ₄ (mg/L)	7.6	30.0			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.0	1.6			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	1.37				
3	Cr ($\mu\text{g}/\text{L}$)	18.27				
4	Cu ($\mu\text{g}/\text{L}$)	14.33				
5	Ni ($\mu\text{g}/\text{L}$)	0.28				
6	Pb ($\mu\text{g}/\text{L}$)	0.48				
7	Zn ($\mu\text{g}/\text{L}$)	3.00				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	55	72			
2	HAR_Total (mgCaCO ₃ /L)	102	141			
3	Na% (%)	50	57			
4	RSC (-)	0.5	0.3			
5	SAR (-)	2.1	3.5			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	Fe (mg/L)				
8	HCO ₃ (mg/L)				
9	K (mg/L)				
10	Mg (mg/L)				
11	Na (mg/L)				
12	NH ₃ -N (mg N/L)				
13	NO ₂ +NO ₃ (mg N/L)				
14	NO ₂ -N (mgN/L)				
15	NO ₃ -N (mgN/L)				
16	o-PO ₄ -P (mg P/L)				
17	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Nallathur (CCA12G3)

Local River : Nandalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	Dry Bed	0.629	1.403	0.637
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		855	421	768
3	pH_FLD (pH units)		7.0	7.0	7.0
4	pH_GEN (pH units)		8.3	7.9	7.5
5	TDS (mg/L)		454	223	428
6	Temp (deg C)		27.0	30.0	29.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)		13.9	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		181	108	152
3	Ca (mg/L)		29	23	32
4	Cl (mg/L)		147.5	61.8	147.1
5	CO ₃ (mg/L)		16.7	0.0	0.0
6	F (mg/L)		0.65	0.39	0.56
7	Fe (mg/L)		0.1		
8	HCO ₃ (mg/L)		187	132	186
9	K (mg/L)		5.4	2.9	4.4
10	Mg (mg/L)		27.6	11.4	15.6
11	Na (mg/L)		104.0	46.1	112.5
12	NH ₃ -N (mg N/L)			0.08	0.05
13	NO ₂ +NO ₃ (mg N/L)			0.80	0.69
14	NO ₂ -N (mgN/L)			0.00	0.00
15	NO ₃ -N (mgN/L)		6.25	0.79	0.69
16	o-PO ₄ -P (mg P/L)			0.006	0.238
17	SO ₄ (mg/L)		35.0	22.0	34.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)		1.6	1.6	1.1
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)		2.78		
2	Cd ($\mu\text{g}/\text{L}$)		0.02		
3	Cr ($\mu\text{g}/\text{L}$)		0.94		
4	Cu ($\mu\text{g}/\text{L}$)		7.83		
5	Ni ($\mu\text{g}/\text{L}$)		6.91		
6	Pb ($\mu\text{g}/\text{L}$)		4.61		
7	Zn ($\mu\text{g}/\text{L}$)		12.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)		72	57	80
2	HAR_Total (mgCaCO ₃ /L)		187	104	145
3	Na% (%)		54	48	62
4	RSC (-)		0.0	0.1	0.2
5	SAR (-)		3.3	2.0	4.1
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: MENANGUDI	Code	: CCA23N4
State	: Tamil Nadu	District	Tiruvarur
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Noolar
Division	: Hydrology Division, Chennai	Sub-Division	: Cauvery Delta SD, Karaikal
Drainage Area	: Sq. Km.	Bank	: Left
Latitude	: 10°56'56"	Longitude	: 79°42'14"
Zero of Gauge (m)	: 4.280 (m.s.l) 4.000 (m.s.l)	08/08/1996 01/03/1997	- 28/02/1997
	Opening Date	Closing Date	
Gauge	: 08/08/1996		
Discharge	: 21/08/1996		
Sediment	:		
Water Quality	: 01/09/2005		

Water Quality Datasheet for the period : 2015-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/06/2015	01/07/2015	20/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	9.302
2	Colour_Cod (-)			Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			393
4	Odour_Code (-)			odour free
5	pH_FLD (pH units)			7.0
6	pH_GEN (pH units)			7.6
7	TDS (mg/L)			209
8	Temp (deg C)			28.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			0.0
2	ALK-TOT (mgCaCO ₃ /L)			118
3	Ca (mg/L)			29
4	Cl (mg/L)			52.3
5	CO ₃ (mg/L)			0.0
6	F (mg/L)			0.42
7	HCO ₃ (mg/L)			144
8	K (mg/L)			4.4
9	Mg (mg/L)			8.1
10	Na (mg/L)			37.9
11	NH ₃ -N (mg N/L)			0.02
12	NO ₂ +NO ₃ (mg N/L)			0.53
13	NO ₂ -N (mgN/L)			0.00
14	NO ₃ -N (mgN/L)			0.52
15	o-PO ₄ -P (mg P/L)			0.034
16	SO ₄ (mg/L)			17.7
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			1.3
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			73
2	HAR_Total (mgCaCO ₃ /L)			107
3	Na% (%)			42
4	RSC (-)			0.2
5	SAR (-)			1.6
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	05/09/2015	03/10/2015	03/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.827	4.579	0.481
2	Colour_Cod (-)	Green	Light Green	Light Green
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	474	407	475
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	7.0	7.0	7.0
6	pH_GEN (pH units)	7.2	8.1	7.3
7	TDS (mg/L)	281	216	272
8	Temp (deg C)	31.5	29.0	29.8
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	151	132	156
3	Ca (mg/L)	25	23	25
4	Cl (mg/L)	60.6	49.6	66.1
5	CO ₃ (mg/L)	0.0	0.0	0.0
6	F (mg/L)	0.44	0.43	0.46
7	HCO ₃ (mg/L)	184	161	191
8	K (mg/L)	4.4	3.5	4.2
9	Mg (mg/L)	19.5	15.4	18.7
10	Na (mg/L)	46.0	37.5	50.5
11	NH ₃ -N (mg N/L)	0.04	0.07	0.06
12	NO ₂ +NO ₃ (mg N/L)	0.42	0.31	0.34
13	NO ₂ -N (mgN/L)	0.00	0.00	0.00
14	NO ₃ -N (mgN/L)	0.42	0.31	0.34
15	o-PO ₄ -P (mg P/L)	0.030	0.019	0.033
16	SO ₄ (mg/L)	14.8	18.6	19.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.9	2.0	1.6
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	63	57	63
2	HAR_Total (mgCaCO ₃ /L)	145	121	141
3	Na% (%)	40	40	43
4	RSC (-)	0.1	0.2	0.3
5	SAR (-)	1.7	1.5	1.9
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/12/2015	18/01/2016	11/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	4.528	3.401	7.720
2	Colour_Cod (-)	Brown	Light Green	Light Green
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	361	432	559
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	7.0	7.0	7.0
6	pH_GEN (pH units)	7.9	8.5	8.5
7	TDS (mg/L)	201	229	307
8	Temp (deg C)	27.0	25.5	27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	18.7	18.7
2	ALK-TOT (mgCaCO ₃ /L)	120	108	94
3	Ca (mg/L)	21	23	27
4	Cl (mg/L)	52.3	65.6	107.0
5	CO ₃ (mg/L)	0.0	22.6	22.6
6	F (mg/L)	0.32	0.38	0.37
7	HCO ₃ (mg/L)	146	86	69
8	K (mg/L)	2.2	4.0	5.2
9	Mg (mg/L)	10.5	12.2	17.5
10	Na (mg/L)	40.0	49.5	65.0
11	NH ₃ -N (mg N/L)	0.04	0.05	0.03
12	NO ₂ +NO ₃ (mg N/L)	0.24	0.31	0.38
13	NO ₂ -N (mgN/L)	0.00	0.00	0.00
14	NO ₃ -N (mgN/L)	0.24	0.31	0.38
15	o-PO ₄ -P (mg P/L)	0.009	0.000	0.000
16	SO ₄ (mg/L)	6.6	19.8	30.8
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.6	2.2	0.9
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	53	57	68
2	HAR_Total (mgCaCO ₃ /L)	97	107	141
3	Na% (%)	47	49	49
4	RSC (-)	0.5	0.0	0.0
5	SAR (-)	1.8	2.1	2.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water Summary

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	12.89	0.000	1.088
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	7	559	361	443
3	pH_FLD (pH units)	7	7.0	7.0	7
4	pH_GEN (pH units)	7	8.5	7.2	7.9
5	TDS (mg/L)	7	307	201	245
6	Temp (deg C)	7	31.5	25.5	28.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	7	18.7	0.0	5.4
2	ALK-TOT (mgCaCO ₃ /L)	7	156	94	125
3	Ca (mg/L)	7	29	21	25
4	Cl (mg/L)	7	107.0	49.6	64.8
5	CO ₃ (mg/L)	7	22.6	0.0	6.5
6	F (mg/L)	7	0.46	0.32	0.4
7	HCO ₃ (mg/L)	7	191	69	140
8	K (mg/L)	7	5.2	2.2	4
9	Mg (mg/L)	7	19.5	8.1	14.5
10	Na (mg/L)	7	65.0	37.5	46.6
11	NH ₃ -N (mg N/L)	7	0.07	0.02	0.04
12	NO ₂ +NO ₃ (mg N/L)	7	0.53	0.24	0.36
13	NO ₂ -N (mgN/L)	7	0.00	0.00	0
14	NO ₃ -N (mgN/L)	7	0.52	0.24	0.36
15	o-PO ₄ -P (mg P/L)	7	0.034	0.000	0.018
16	SO ₄ (mg/L)	7	30.8	6.6	18.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	7	2.2	0.9	1.5
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	7	73	53	62
2	HAR_Total (mgCaCO ₃ /L)	7	145	97	123
3	Na% (%)	7	49	40	44
4	RSC (-)	7	0.5	0.0	0.2
5	SAR (-)	7	2.4	1.5	1.8
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	1.207	1.791	1.513	2.176	2.623
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	367			411	324
3	pH_FLD (pH units)				7.0	7.0
4	pH_GEN (pH units)	7.6			7.7	7.5
5	TDS (mg/L)					
6	Temp (deg C)	28.0			31.0	29.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0			0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	116			159	140
3	Ca (mg/L)	25			30	25
4	Cl (mg/L)	36.2			54.3	37.2
5	CO ₃ (mg/L)	0.0			0.0	0.0
6	F (mg/L)	0.25				0.30
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	141			194	171
9	K (mg/L)					4.8
10	Mg (mg/L)	9.2			16.5	13.1
11	Na (mg/L)	43.1				29.4
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)					
16	o-PO ₄ -P (mg P/L)	0.010				
17	SO ₄ (mg/L)	11.9			18.8	12.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	62			76	63
2	HAR_Total (mgCaCO ₃ /L)	100			145	118
3	Na% (%)					34
4	RSC (-)	0.3			0.3	0.5
5	SAR (-)	1.9				1.2
PESTICIDES						

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	3.021	5.311	1.405	1.527	3.899
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	560	441	454	323	271
3	pH_FLD (pH units)	7.5	7.2	7.0	7.0	7.0
4	pH_GEN (pH units)	7.9	8.4	7.7	8.1	8.2
5	TDS (mg/L)			242	171	144
6	Temp (deg C)	27.8	29.2	24.8	25.8	29.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	4.0	0.0	0.0	5.0
2	ALK-TOT (mgCaCO ₃ /L)	199	151	151	83	78
3	Ca (mg/L)	29	24	27	25	22
4	Cl (mg/L)	70.4	49.6	51.9	56.7	41.1
5	CO ₃ (mg/L)	0.0	4.8	0.0	0.0	6.0
6	F (mg/L)	0.45	0.44	0.85	0.27	0.29
7	Fe (mg/L)			0.0	0.0	
8	HCO ₃ (mg/L)	242	174	184	102	82
9	K (mg/L)	7.0	5.5	5.5	3.2	3.2
10	Mg (mg/L)	21.9	21.1	19.0	8.1	10.6
11	Na (mg/L)	60.6	38.3	37.4	35.7	23.9
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)	0.53	2.59	0.13	2.07	1.30
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	19.2	13.4	14.6	17.2	15.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.7	1.2	1.6	1.4	1.5
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			5.58	0.01	
2	Cd ($\mu\text{g}/\text{L}$)			0.94	0.50	
3	Cr ($\mu\text{g}/\text{L}$)			1.23	0.90	
4	Cu ($\mu\text{g}/\text{L}$)			33.06	2.09	
5	Hg ($\mu\text{g}/\text{L}$)				0.44	
6	Ni ($\mu\text{g}/\text{L}$)			1.07	13.40	
7	Pb ($\mu\text{g}/\text{L}$)				7.30	
8	Zn ($\mu\text{g}/\text{L}$)			1.47	3.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	74	60	69	63	54
2	HAR_Total (mgCaCO ₃ /L)	165	148	148	96	98
3	Na% (%)	43	34	35	40	34
4	RSC (-)	0.7	0.2	0.1	0.0	0.0
5	SAR (-)	2.1	1.3	1.3	1.6	1.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	2.942	3.592	0.991	1.339	5.232
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	425	581			234
3	pH_FLD (pH units)	7.0				7.0
4	pH_GEN (pH units)	7.6	7.6			7.3
5	TDS (mg/L)	235				
6	Temp (deg C)	29.7	26.5			28.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)	133	175			113
3	Ca (mg/L)	26	31			22
4	Cl (mg/L)	54.1	69.9			40.0
5	CO ₃ (mg/L)	0.0	0.0			0.0
6	F (mg/L)	0.43				
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	163	213			137
9	K (mg/L)	4.1				
10	Mg (mg/L)	14.3	23.9			10.7
11	Na (mg/L)	40.5	54.1			
12	NH ₃ -N (mg N/L)	0.05				
13	NO ₂ +NO ₃ (mg N/L)	0.42				
14	NO ₂ -N (mgN/L)	0.00				
15	NO ₃ -N (mgN/L)	0.42				
16	o-PO ₄ -P (mg P/L)	0.028				
17	SO ₄ (mg/L)	17.0	25.7			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.4				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	65	78			56
2	HAR_Total (mgCaCO ₃ /L)	124	178			101
3	Na% (%)	41				
4	RSC (-)	0.2	0.1			0.3
5	SAR (-)	1.6	1.8			
PESTICIDES						

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	2.179	5.633	3.532	3.047	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	568	453	449	249	
3	pH_FLD (pH units)	7.0	7.0	7.0	7.0	
4	pH_GEN (pH units)	7.6	8.1	8.3	7.8	
5	TDS (mg/L)				132	
6	Temp (deg C)	25.5	26.8	25.2	27.0	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	5.5	15.3	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	278	176	150	82	
3	Ca (mg/L)	29	27	20	16	
4	Cl (mg/L)	83.9	50.3	59.6	21.7	
5	CO ₃ (mg/L)	0.0	6.7	18.4	0.0	
6	F (mg/L)	0.39	0.37	0.30	0.44	
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	339	201	145	100	
9	K (mg/L)	7.7	4.6	3.7	2.0	
10	Mg (mg/L)	14.1	18.1	19.4	5.7	
11	Na (mg/L)	109.3	43.5	43.4	22.9	
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)		0.45	0.44	1.53	
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	14.3	13.9	3.4	4.9	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.4	1.4	1.8	2.5	
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	71	67	51	39	
2	HAR_Total (mgCaCO ₃ /L)	130	142	132	63	
3	Na% (%)	63	38	41	43	
4	RSC (-)	3.0	0.7	0.4	0.4	
5	SAR (-)	4.2	1.5	1.7	1.3	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	1.089	4.033	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	517	457			
3	pH_FLD (pH units)	7.0	7.0			
4	pH_GEN (pH units)	7.6	8.1			
5	TDS (mg/L)	275	252			
6	Temp (deg C)	26.0	27.3			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	9.4			
2	ALK-TOT (mgCaCO ₃ /L)	140	120			
3	Ca (mg/L)	27	24			
4	Cl (mg/L)	72.3	72.7			
5	CO ₃ (mg/L)	0.0	11.3			
6	F (mg/L)	0.33	0.38			
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	171	123			
9	K (mg/L)	3.5	3.9			
10	Mg (mg/L)	12.3	14.7			
11	Na (mg/L)	53.5	51.3			
12	NH ₃ -N (mg N/L)		0.04			
13	NO ₂ +NO ₃ (mg N/L)		0.32			
14	NO ₂ -N (mgN/L)		0.00			
15	NO ₃ -N (mgN/L)	2.31	0.32			
16	o-PO ₄ -P (mg P/L)		0.010			
17	SO ₄ (mg/L)	15.1	19.2			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.6			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	68	60			
2	HAR_Total (mgCaCO ₃ /L)	119	122			
3	Na% (%)	49	47			
4	RSC (-)	0.4	0.2			
5	SAR (-)	2.1	2.0			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	Fe (mg/L)				
8	HCO ₃ (mg/L)				
9	K (mg/L)				
10	Mg (mg/L)				
11	Na (mg/L)				
12	NH ₃ -N (mg N/L)				
13	NO ₂ +NO ₃ (mg N/L)				
14	NO ₂ -N (mgN/L)				
15	NO ₃ -N (mgN/L)				
16	o-PO ₄ -P (mg P/L)				
17	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Menangudi (CCA23N4)

Local River : Noolar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	0.396	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)			674	
3	pH_FLD (pH units)			7.0	
4	pH_GEN (pH units)			8.3	
5	TDS (mg/L)			343	
6	Temp (deg C)			27.5	
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)			18.7	
2	ALK-TOT (mgCaCO ₃ /L)			137	
3	Ca (mg/L)			16	
4	Cl (mg/L)			134.8	
5	CO ₃ (mg/L)			22.6	
6	F (mg/L)			0.51	
7	Fe (mg/L)				
8	HCO ₃ (mg/L)			121	
9	K (mg/L)			3.7	
10	Mg (mg/L)			12.2	
11	Na (mg/L)			106.0	
12	NH ₃ -N (mg N/L)			0.10	
13	NO ₂ +NO ₃ (mg N/L)			0.81	
14	NO ₂ -N (mgN/L)			0.00	
15	NO ₃ -N (mgN/L)			0.81	
16	o-PO ₄ -P (mg P/L)			0.002	
17	SO ₄ (mg/L)			19.4	
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)			1.5	
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)			40	
2	HAR_Total (mgCaCO ₃ /L)			91	
3	Na% (%)			71	
4	RSC (-)			0.9	
5	SAR (-)			4.9	
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: PORAKUDI	Code	: CCA20G5
State	: Tamil Nadu	District	Nagapattinam
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Arasalar
Division	: Hydrology Division, Chennai	Sub-Division	: Cauvery Delta SD, Karaikal
Drainage Area	: Sq. Km.	Bank	: Right
Latitude	: 10°54'14"	Longitude	: 79°42'26"
Zero of Gauge (m)	3.000 (m.s.l) 2.000 (m.s.l)	27/11/1997 01/06/1999	- 31/05/1999
	Opening Date	Closing Date	
Gauge	: 27/11/1997		
Discharge	: 01/02/1999		
Sediment	:		
Water Quality	: 01/09/2005		

Water Quality Datasheet for the period : 2015-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/06/2015	01/07/2015	23/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	08/09/2015	03/10/2015	09/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	1.377	0.175	26.32
2	Colour_Cod (-)	Clear	Clear	Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	416	373	448
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	7.0	8.5	7.0
6	pH_GEN (pH units)	7.5	8.0	7.6
7	TDS (mg/L)	232	197	268
8	Temp (deg C)	33.0	28.0	23.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	122	122	138
3	Ca (mg/L)	24	17	24
4	Cl (mg/L)	55.1	46.8	68.8
5	CO ₃ (mg/L)	0.0	0.0	0.0
6	F (mg/L)	0.41	0.40	0.43
7	HCO ₃ (mg/L)	149	149	168
8	K (mg/L)	3.9	3.0	3.6
9	Mg (mg/L)	13.8	22.7	13.8
10	Na (mg/L)	41.8	30.5	52.7
11	NH ₃ -N (mg N/L)	0.02	0.06	0.05
12	NO ₂ +NO ₃ (mg N/L)	0.49	0.27	0.62
13	NO ₂ -N (mgN/L)	0.01	0.00	0.00
14	NO ₃ -N (mgN/L)	0.48	0.27	0.62
15	o-PO ₄ -P (mg P/L)	0.008	0.005	0.069
16	SO ₄ (mg/L)	13.0	12.0	19.7
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.7	1.6	2.6
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	60	43	60
2	HAR_Total (mgCaCO ₃ /L)	118	138	118
3	Na% (%)	43	32	49
4	RSC (-)	0.1	0.0	0.4
5	SAR (-)	1.7	1.1	2.1
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	08/12/2015	19/01/2016	12/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	35.54	3.941	8.443
2	Colour_Cod (-)	Light Brown	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	320	674	515
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	7.0	7.0	7.0
6	pH_GEN (pH units)	8.0	8.5	8.5
7	TDS (mg/L)	171	358	283
8	Temp (deg C)	25.5	26.0	27.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	28.1	14.1
2	ALK-TOT (mgCaCO ₃ /L)	97	151	85
3	Ca (mg/L)	17	32	21
4	Cl (mg/L)	44.1	109.7	93.6
5	CO ₃ (mg/L)	0.0	33.9	16.9
6	F (mg/L)	0.27	0.38	0.34
7	HCO ₃ (mg/L)	118	115	69
8	K (mg/L)	2.7	3.6	5.2
9	Mg (mg/L)	9.7	16.2	10.7
10	Na (mg/L)	34.0	83.9	67.4
11	NH ₃ -N (mg N/L)	0.04	0.04	0.03
12	NO ₂ +NO ₃ (mg N/L)	0.18	0.28	0.32
13	NO ₂ -N (mgN/L)	0.00	0.00	0.00
14	NO ₃ -N (mgN/L)	0.18	0.28	0.32
15	o-PO ₄ -P (mg P/L)	0.010	0.000	0.000
16	SO ₄ (mg/L)	9.4	31.7	36.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.8	1.5	1.3
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	43	80	52
2	HAR_Total (mgCaCO ₃ /L)	84	148	97
3	Na% (%)	46	55	59
4	RSC (-)	0.3	0.1	0.0
5	SAR (-)	1.6	3.0	3.0
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water Summary

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	44.8	0.000	2.43
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	7	674	320	451
3	pH_FLD (pH units)	7	8.5	7.0	7.2
4	pH_GEN (pH units)	7	8.5	7.5	7.9
5	TDS (mg/L)	7	358	171	247
6	Temp (deg C)	7	33.0	23.5	27.9
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	7	28.1	0.0	6
2	ALK-TOT (mgCaCO ₃ /L)	7	151	85	120
3	Ca (mg/L)	7	32	17	23
4	Cl (mg/L)	7	109.7	44.1	67.6
5	CO ₃ (mg/L)	7	33.9	0.0	7.3
6	F (mg/L)	7	0.43	0.27	0.38
7	HCO ₃ (mg/L)	7	168	69	131
8	K (mg/L)	7	5.2	2.7	3.8
9	Mg (mg/L)	7	22.7	9.7	13.9
10	Na (mg/L)	7	83.9	30.5	50.4
11	NH ₃ -N (mg N/L)	7	0.06	0.02	0.04
12	NO ₂ +NO ₃ (mg N/L)	7	0.62	0.18	0.37
13	NO ₂ -N (mgN/L)	7	0.01	0.00	0
14	NO ₃ -N (mgN/L)	7	0.62	0.18	0.37
15	o-PO ₄ -P (mg P/L)	7	0.069	0.000	0.015
16	SO ₄ (mg/L)	7	36.5	9.4	20.5
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	7	2.6	0.7	1.6
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	7	80	43	58
2	HAR_Total (mgCaCO ₃ /L)	7	148	84	116
3	Na% (%)	7	59	32	47
4	RSC (-)	7	0.4	0.0	0.2
5	SAR (-)	7	3.0	1.1	2.1
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	2.273	2.109	0.036	0.492	2.024
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	510	496	409	217	228
3	pH_FLD (pH units)	7.3	7.0	7.0	7.3	8.0
4	pH_GEN (pH units)	7.9	8.4	7.7	7.5	7.8
5	TDS (mg/L)			216	115	131
6	Temp (deg C)	26.0	29.8	29.0	29.8	31.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	18.9	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	187	156	151	69	75
3	Ca (mg/L)	31	28	27	21	18
4	Cl (mg/L)	67.0	71.1	47.9	30.3	34.0
5	CO ₃ (mg/L)	0.0	22.8	0.0	0.0	0.0
6	F (mg/L)	0.42	0.46	0.84	0.23	0.29
7	HCO ₃ (mg/L)	228	144	184	85	92
8	K (mg/L)	6.0	5.8	7.3	2.9	2.8
9	Mg (mg/L)	21.1	21.9	17.1	5.7	10.8
10	Na (mg/L)	50.1	47.7	42.4	18.6	19.8
11	NH ₃ -N (mg N/L)					
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)	0.46	2.87	0.12	2.39	0.71
15	o-PO ₄ -P (mg P/L)					
16	SO ₄ (mg/L)	18.2	14.6	12.4	7.8	10.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.4	1.8	1.3	1.2	0.9
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cr ($\mu\text{g}/\text{L}$)					
3	Cu ($\mu\text{g}/\text{L}$)					
4	Ni ($\mu\text{g}/\text{L}$)					
5	Pb ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	78	69	67	51	45
2	HAR_Total (mgCaCO ₃ /L)	165	160	138	75	90
3	Na% (%)	39	38	39	34	32
4	RSC (-)	0.4	0.1	0.3	0.0	0.0
5	SAR (-)	1.7	1.6	1.6	0.9	0.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.31	3.652	4.953	4.866	21.9
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	400	585			267
3	pH_FLD (pH units)	7.5				7.0
4	pH_GEN (pH units)	7.7	7.5			7.0
5	TDS (mg/L)	215				
6	Temp (deg C)	31.0	23.8			30.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)	122	179			113
3	Ca (mg/L)	22	30			21
4	Cl (mg/L)	52.3	63.4			53.4
5	CO ₃ (mg/L)	0.0	0.0			0.0
6	F (mg/L)	0.41				
7	HCO ₃ (mg/L)	149	219			137
8	K (mg/L)	3.9				
9	Mg (mg/L)	15.7	22.8			12.1
10	Na (mg/L)	38.3	54.6			
11	NH ₃ -N (mg N/L)	0.03				
12	NO ₂ +NO ₃ (mg N/L)	0.40				
13	NO ₂ -N (mgN/L)	0.00				
14	NO ₃ -N (mgN/L)	0.39				
15	o-PO ₄ -P (mg P/L)	0.009				
16	SO ₄ (mg/L)	15.4	30.3			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cr ($\mu\text{g}/\text{L}$)					
3	Cu ($\mu\text{g}/\text{L}$)					
4	Ni ($\mu\text{g}/\text{L}$)					
5	Pb ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	56	76			52
2	HAR_Total (mgCaCO ₃ /L)	121	171			103
3	Na% (%)	40				
4	RSC (-)	0.1	0.2			0.2
5	SAR (-)	1.5	1.8			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	4.777	20.71	13.89	12.41	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	522	513	467	290	
3	pH_FLD (pH units)	7.0	7.3	7.0	7.0	
4	pH_GEN (pH units)	7.7	8.0	8.1	7.6	
5	TDS (mg/L)				155	
6	Temp (deg C)	25.7	25.3	28.8	23.0	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	6.3	11.5	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	254	174	145	90	
3	Ca (mg/L)	33	23	23	16	
4	Cl (mg/L)	75.2	71.1	69.6	37.6	
5	CO ₃ (mg/L)	0.0	7.6	13.8	0.0	
6	F (mg/L)	0.36	0.40	0.34	0.49	
7	HCO ₃ (mg/L)	310	197	149	110	
8	K (mg/L)	7.8	5.3	6.6	2.9	
9	Mg (mg/L)	15.9	21.4	17.7	6.7	
10	Na (mg/L)	86.1	54.0	49.6	32.1	
11	NH ₃ -N (mg N/L)					
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)		0.47	0.52	0.13	
15	o-PO ₄ -P (mg P/L)					
16	SO ₄ (mg/L)	14.2	18.4	11.6	8.5	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.6	1.6	2.0	2.3	
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.50		
2	Cr ($\mu\text{g}/\text{L}$)			0.86		
3	Cu ($\mu\text{g}/\text{L}$)			15.42		
4	Ni ($\mu\text{g}/\text{L}$)			4.84		
5	Pb ($\mu\text{g}/\text{L}$)			0.99		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	82	58	58	39	
2	HAR_Total (mgCaCO ₃ /L)	148	148	132	67	
3	Na% (%)	53	43	44	50	
4	RSC (-)	2.2	0.6	0.3	0.5	
5	SAR (-)	3.2	1.9	1.9	1.7	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	Dry Bed	18.56	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		489			
3	pH_FLD (pH units)		7.0			
4	pH_GEN (pH units)		8.1			
5	TDS (mg/L)		270			
6	Temp (deg C)		25.6			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		10.5			
2	ALK-TOT (mgCaCO ₃ /L)		117			
3	Ca (mg/L)		24			
4	Cl (mg/L)		79.1			
5	CO ₃ (mg/L)		12.7			
6	F (mg/L)		0.36			
7	HCO ₃ (mg/L)		117			
8	K (mg/L)		3.8			
9	Mg (mg/L)		12.6			
10	Na (mg/L)		59.5			
11	NH ₃ -N (mg N/L)		0.04			
12	NO ₂ +NO ₃ (mg N/L)		0.35			
13	NO ₂ -N (mgN/L)		0.00			
14	NO ₃ -N (mgN/L)		0.35			
15	o-PO ₄ -P (mg P/L)		0.020			
16	SO ₄ (mg/L)		24.3			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		1.8			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cr ($\mu\text{g}/\text{L}$)					
3	Cu ($\mu\text{g}/\text{L}$)					
4	Ni ($\mu\text{g}/\text{L}$)					
5	Pb ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		59			
2	HAR_Total (mgCaCO ₃ /L)		111			
3	Na% (%)		52			
4	RSC (-)		0.2			
5	SAR (-)		2.4			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NH ₃ -N (mg N/L)				
12	NO ₂ +NO ₃ (mg N/L)				
13	NO ₂ -N (mgN/L)				
14	NO ₃ -N (mgN/L)				
15	o-PO ₄ -P (mg P/L)				
16	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cr ($\mu\text{g}/\text{L}$)				
3	Cu ($\mu\text{g}/\text{L}$)				
4	Ni ($\mu\text{g}/\text{L}$)				
5	Pb ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Porakudi (CCA20G5)

Local River : Arasalar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	0.02	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)			342	
3	pH_FLD (pH units)			8.0	
4	pH_GEN (pH units)			7.8	
5	TDS (mg/L)			191	
6	Temp (deg C)			28.5	
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)			0.0	
2	ALK-TOT (mgCaCO ₃ /L)			99	
3	Ca (mg/L)			17	
4	Cl (mg/L)			50.5	
5	CO ₃ (mg/L)			0.0	
6	F (mg/L)			0.34	
7	HCO ₃ (mg/L)			121	
8	K (mg/L)			3.3	
9	Mg (mg/L)			11.4	
10	Na (mg/L)			38.4	
11	NH ₃ -N (mg N/L)			0.09	
12	NO ₂ +NO ₃ (mg N/L)			0.67	
13	NO ₂ -N (mgN/L)			0.00	
14	NO ₃ -N (mgN/L)			0.67	
15	o-PO ₄ -P (mg P/L)			0.004	
16	SO ₄ (mg/L)			16.0	
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)			1.5	
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cr ($\mu\text{g}/\text{L}$)				
3	Cu ($\mu\text{g}/\text{L}$)				
4	Ni ($\mu\text{g}/\text{L}$)				
5	Pb ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)			43	
2	HAR_Total (mgCaCO ₃ /L)			91	
3	Na% (%)			47	
4	RSC (-)			0.2	
5	SAR (-)			1.8	
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: PERALAM	Code	: CCA22S5
State	: Tamil Nadu	District	Tiruvarur
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Vanjiyar
Division	: Hydrology Division, Chennai	Sub-Division	: Cauvery Delta SD, Karaikal
Drainage Area	: Sq. Km.	Bank	: Right
Latitude	: 10°57'59"	Longitude	: 79°39'41"
Zero of Gauge (m)	: 6.000 (m.s.l)	01/02/1998	
	Opening Date	Closing Date	
Gauge	: 01/02/1998		
Discharge	: 01/02/1999		
Sediment	:		
Water Quality	: 01/09/2005		

Water Quality Datasheet for the period : 2015-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/06/2015	01/07/2015	19/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	0.279
2	Colour_Cod (-)			Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			407
4	Odour_Code (-)			odour free
5	pH_FLD (pH units)			7.0
6	pH_GEN (pH units)			7.6
7	TDS (mg/L)			226
8	Temp (deg C)			30.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			0.0
2	ALK-TOT (mgCaCO ₃ /L)			122
3	Ca (mg/L)			29
4	Cl (mg/L)			55.1
5	CO ₃ (mg/L)			0.0
6	F (mg/L)			0.43
7	HCO ₃ (mg/L)			149
8	K (mg/L)			7.2
9	Mg (mg/L)			8.9
10	Na (mg/L)			38.7
11	NH ₃ -N (mg N/L)			0.02
12	NO ₂ +NO ₃ (mg N/L)			0.65
13	NO ₂ -N (mgN/L)			0.00
14	NO ₃ -N (mgN/L)			0.65
15	o-PO ₄ -P (mg P/L)			0.113
16	SO ₄ (mg/L)			20.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			0.9
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			73
2	HAR_Total (mgCaCO ₃ /L)			111
3	Na% (%)			41
4	RSC (-)			0.2
5	SAR (-)			1.6
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	05/09/2015	05/10/2015	06/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.832	0.998	0.297
2	Colour_Cod (-)	Clear	Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	395	410	433
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	7.0	7.0	7.0
6	pH_GEN (pH units)	7.6	8.0	7.4
7	TDS (mg/L)	240	228	260
8	Temp (deg C)	31.0	30.0	27.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	127	132	133
3	Ca (mg/L)	23	19	23
4	Cl (mg/L)	57.8	57.8	68.8
5	CO ₃ (mg/L)	0.0	0.0	0.0
6	F (mg/L)	0.40	0.40	0.58
7	HCO ₃ (mg/L)	155	161	163
8	K (mg/L)	4.4	3.6	2.3
9	Mg (mg/L)	12.2	25.1	13.8
10	Na (mg/L)	44.6	35.0	52.8
11	NH ₃ -N (mg N/L)	0.01	0.06	0.06
12	NO ₂ +NO ₃ (mg N/L)	0.32	0.23	0.99
13	NO ₂ -N (mgN/L)	0.00	0.00	0.00
14	NO ₃ -N (mgN/L)	0.32	0.23	0.99
15	o-PO ₄ -P (mg P/L)	0.058	0.049	0.022
16	SO ₄ (mg/L)	13.7	18.9	8.0
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.1	1.6	1.3
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	57	47	57
2	HAR_Total (mgCaCO ₃ /L)	107	151	114
3	Na% (%)	46	33	50
4	RSC (-)	0.4	0.0	0.4
5	SAR (-)	1.9	1.2	2.2
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/12/2015	18/01/2016	09/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.942	2.446	0.493
2	Colour_Cod (-)	Light Brown	Light Green	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	209	556	591
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	7.0	7.0	7.0
6	pH_GEN (pH units)	7.7	8.0	8.5
7	TDS (mg/L)	119	295	328
8	Temp (deg C)	25.0	25.0	26.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	18.7
2	ALK-TOT (mgCaCO ₃ /L)	64	155	99
3	Ca (mg/L)	11	28	30
4	Cl (mg/L)	33.0	82.9	115.1
5	CO ₃ (mg/L)	0.0	0.0	22.6
6	F (mg/L)	0.30	0.43	0.35
7	HCO ₃ (mg/L)	79	189	75
8	K (mg/L)	1.3	4.0	5.0
9	Mg (mg/L)	5.7	14.6	16.5
10	Na (mg/L)	25.4	63.8	66.7
11	NH ₃ -N (mg N/L)	0.04	0.05	0.03
12	NO ₂ +NO ₃ (mg N/L)	0.21	0.33	0.27
13	NO ₂ -N (mgN/L)	0.00	0.00	0.00
14	NO ₃ -N (mgN/L)	0.20	0.33	0.27
15	o-PO ₄ -P (mg P/L)	0.007	0.003	0.000
16	SO ₄ (mg/L)	2.5	18.3	35.7
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.1	2.7	0.9
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	27	70	76
2	HAR_Total (mgCaCO ₃ /L)	50	131	145
3	Na% (%)	52	51	49
4	RSC (-)	0.3	0.5	0.0
5	SAR (-)	1.6	2.4	2.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_FLD (pH units)			
6	pH_GEN (pH units)			
7	TDS (mg/L)			
8	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	Ca (mg/L)			
4	Cl (mg/L)			
5	CO ₃ (mg/L)			
6	F (mg/L)			
7	HCO ₃ (mg/L)			
8	K (mg/L)			
9	Mg (mg/L)			
10	Na (mg/L)			
11	NH ₃ -N (mg N/L)			
12	NO ₂ +NO ₃ (mg N/L)			
13	NO ₂ -N (mgN/L)			
14	NO ₃ -N (mgN/L)			
15	o-PO ₄ -P (mg P/L)			
16	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water Summary

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	2.784	0.000	0.292
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	7	591	209	429
3	pH_FLD (pH units)	7	7.0	7.0	7
4	pH_GEN (pH units)	7	8.5	7.4	7.8
5	TDS (mg/L)	7	328	119	242
6	Temp (deg C)	7	31.0	25.0	27.9
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	7	18.7	0.0	2.7
2	ALK-TOT (mgCaCO ₃ /L)	7	155	64	119
3	Ca (mg/L)	7	30	11	23
4	Cl (mg/L)	7	115.1	33.0	67.2
5	CO ₃ (mg/L)	7	22.6	0.0	3.2
6	F (mg/L)	7	0.58	0.30	0.41
7	HCO ₃ (mg/L)	7	189	75	139
8	K (mg/L)	7	7.2	1.3	4
9	Mg (mg/L)	7	25.1	5.7	13.8
10	Na (mg/L)	7	66.7	25.4	46.7
11	NH ₃ -N (mg N/L)	7	0.06	0.01	0.04
12	NO ₂ +NO ₃ (mg N/L)	7	0.99	0.21	0.43
13	NO ₂ -N (mgN/L)	7	0.00	0.00	0
14	NO ₃ -N (mgN/L)	7	0.99	0.20	0.43
15	o-PO ₄ -P (mg P/L)	7	0.113	0.000	0.036
16	SO ₄ (mg/L)	7	35.7	2.5	16.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	7	2.7	0.9	1.4
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	7	76	27	58
2	HAR_Total (mgCaCO ₃ /L)	7	151	50	116
3	Na% (%)	7	52	33	46
4	RSC (-)	7	0.5	0.0	0.3
5	SAR (-)	7	2.4	1.2	1.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	0.832	1.189	1.485	1.399	0.604
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	333			370	311
3	pH_FLD (pH units)				7.0	7.0
4	pH_GEN (pH units)	7.8			7.7	7.5
5	TDS (mg/L)					
6	Temp (deg C)	25.8			30.0	27.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0			0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	92			154	148
3	Ca (mg/L)	25			23	24
4	Cl (mg/L)	35.7			55.3	41.9
5	CO ₃ (mg/L)	0.0			0.0	0.0
6	F (mg/L)	0.27				0.29
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	113			188	181
9	K (mg/L)					10.6
10	Mg (mg/L)	9.2			19.1	13.6
11	Na (mg/L)	27.5				32.5
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)					
16	o-PO ₄ -P (mg P/L)	0.010				
17	SO ₄ (mg/L)	4.7			13.8	11.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	62			59	61
2	HAR_Total (mgCaCO ₃ /L)	100			138	118
3	Na% (%)					35
4	RSC (-)	0.3			0.3	0.6
5	SAR (-)	1.2				1.3
PESTICIDES						

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	0.411	0.329	0.221	0.482	0.719
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	493	424	493	180	250
3	pH_FLD (pH units)	7.0	7.0	9.0	8.0	7.0
4	pH_GEN (pH units)	7.7	8.3	7.5	8.0	8.1
5	TDS (mg/L)			262	95	133
6	Temp (deg C)	27.0	26.5	26.8	28.5	30.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	12.0	0.0	0.0	5.0
2	ALK-TOT (mgCaCO ₃ /L)	167	134	163	64	78
3	Ca (mg/L)	26	34	33	18	20
4	Cl (mg/L)	62.8	51.3	48.9	25.5	38.3
5	CO ₃ (mg/L)	0.0	14.4	0.0	0.0	6.0
6	F (mg/L)	0.42	0.46	0.90	0.24	0.26
7	Fe (mg/L)			0.0	0.0	
8	HCO ₃ (mg/L)	203	134	199	78	82
9	K (mg/L)	6.3	5.6	6.3	2.8	3.1
10	Mg (mg/L)	20.9	12.6	20.0	5.1	10.0
11	Na (mg/L)	53.3	38.8	36.8	16.0	21.5
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)	0.47	4.03	0.14	1.44	0.65
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	18.5	14.8	19.5	6.4	11.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	2.0	2.2	1.3	1.2
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			14.67	1.23	
2	Cd ($\mu\text{g}/\text{L}$)			0.10	0.18	
3	Cr ($\mu\text{g}/\text{L}$)			1.16	0.72	
4	Cu ($\mu\text{g}/\text{L}$)			31.31	2.14	
5	Hg ($\mu\text{g}/\text{L}$)				0.49	
6	Ni ($\mu\text{g}/\text{L}$)			3.34	9.79	
7	Pb ($\mu\text{g}/\text{L}$)				2.00	
8	Zn ($\mu\text{g}/\text{L}$)			1.35	4.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	65	84	82	44	50
2	HAR_Total (mgCaCO ₃ /L)	153	137	166	65	92
3	Na% (%)	42	37	32	34	33
4	RSC (-)	0.3	0.0	0.1	0.0	0.0
5	SAR (-)	1.9	1.4	1.2	0.9	1.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.422	0.425	0.16	0.55	1.665
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	404	558			422
3	pH_FLD (pH units)	7.0				7.0
4	pH_GEN (pH units)	7.7	7.4			7.5
5	TDS (mg/L)	231				
6	Temp (deg C)	30.3	26.5			27.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)	127	155			174
3	Ca (mg/L)	24	30			26
4	Cl (mg/L)	56.9	60.5			53.9
5	CO ₃ (mg/L)	0.0	0.0			0.0
6	F (mg/L)	0.41				
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	155	189			212
9	K (mg/L)	5.1				
10	Mg (mg/L)	15.4	21.9			19.4
11	Na (mg/L)	39.4	49.5			
12	NH ₃ -N (mg N/L)	0.03				
13	NO ₂ +NO ₃ (mg N/L)	0.40				
14	NO ₂ -N (mgN/L)	0.00				
15	NO ₃ -N (mgN/L)	0.40				
16	o-PO ₄ -P (mg P/L)	0.073				
17	SO ₄ (mg/L)	17.5	25.0			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.2				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	59	75			66
2	HAR_Total (mgCaCO ₃ /L)	123	166			147
3	Na% (%)	40				
4	RSC (-)	0.2	0.2			0.6
5	SAR (-)	1.6	1.7			
PESTICIDES						

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	0.488	1.909	0.819	0.737	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	566	497	397	361	
3	pH_FLD (pH units)	7.0	7.5	6.7	7.0	
4	pH_GEN (pH units)	7.8	7.9	8.6	7.7	
5	TDS (mg/L)				193	
6	Temp (deg C)	26.1	25.3	25.3	23.0	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	8.3	0.0	9.6	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	266	193	121	120	
3	Ca (mg/L)	31	25	22	20	
4	Cl (mg/L)	90.3	61.0	56.1	39.1	
5	CO ₃ (mg/L)	10.0	0.0	11.5	0.0	
6	F (mg/L)	0.59	0.42	0.32	0.65	
7	Fe (mg/L)			0.0		
8	HCO ₃ (mg/L)	304	236	124	147	
9	K (mg/L)	8.7	5.4	6.7	2.8	
10	Mg (mg/L)	16.8	21.6	14.3	9.5	
11	Na (mg/L)	104.3	52.2	39.3	37.6	
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)		0.48	0.38	0.21	
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	17.1	16.4	9.4	10.0	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.5	1.7	2.3	
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.76		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			0.90		
4	Cu ($\mu\text{g}/\text{L}$)			5.31		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			5.35		
7	Pb ($\mu\text{g}/\text{L}$)			0.88		
8	Zn ($\mu\text{g}/\text{L}$)			7.40		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	79	61	56	49	
2	HAR_Total (mgCaCO ₃ /L)	148	152	116	89	
3	Na% (%)	59	42	41	49	
4	RSC (-)	2.4	0.9	0.1	0.6	
5	SAR (-)	3.8	1.8	1.6	1.8	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	0.277	1.044	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	464	447			
3	pH_FLD (pH units)	7.7	7.0			
4	pH_GEN (pH units)	7.8	7.9			
5	TDS (mg/L)	249	251			
6	Temp (deg C)	26.5	26.0			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	3.3	4.7			
2	ALK-TOT (mgCaCO ₃ /L)	128	113			
3	Ca (mg/L)	28	23			
4	Cl (mg/L)	71.4	75.0			
5	CO ₃ (mg/L)	4.0	5.6			
6	F (mg/L)	0.31	0.41			
7	Fe (mg/L)	0.0				
8	HCO ₃ (mg/L)	148	126			
9	K (mg/L)	4.4	3.1			
10	Mg (mg/L)	13.3	12.6			
11	Na (mg/L)	53.7	52.2			
12	NH ₃ -N (mg N/L)	0.05	0.04			
13	NO ₂ +NO ₃ (mg N/L)	2.28	0.45			
14	NO ₂ -N (mgN/L)	0.00	0.00			
15	NO ₃ -N (mgN/L)	1.68	0.45			
16	o-PO ₄ -P (mg P/L)	0.006	0.008			
17	SO ₄ (mg/L)	15.8	16.1			
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.7	1.5			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	0.33				
3	Cr ($\mu\text{g}/\text{L}$)	52.06				
4	Cu ($\mu\text{g}/\text{L}$)	3.87				
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	0.12				
7	Pb ($\mu\text{g}/\text{L}$)	0.07				
8	Zn ($\mu\text{g}/\text{L}$)	3.00				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	69	57			
2	HAR_Total (mgCaCO ₃ /L)	124	110			
3	Na% (%)	48	50			
4	RSC (-)	0.1	0.3			
5	SAR (-)	2.1	2.1			
PESTICIDES						

WQ Observation not done

WQ Observation not done

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_FLD (pH units)				
4	pH_GEN (pH units)				
5	TDS (mg/L)				
6	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	CO ₃ (mg/L)				
6	F (mg/L)				
7	Fe (mg/L)				
8	HCO ₃ (mg/L)				
9	K (mg/L)				
10	Mg (mg/L)				
11	Na (mg/L)				
12	NH ₃ -N (mg N/L)				
13	NO ₂ +NO ₃ (mg N/L)				
14	NO ₂ -N (mgN/L)				
15	NO ₃ -N (mgN/L)				
16	o-PO ₄ -P (mg P/L)				
17	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Peralam (CCA22S5)

Local River : Vanjiyar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	Dry Bed	Dry Bed	0.208	Dry Bed
2	EC_GEN ($\mu\text{mho}/\text{cm}$)			280	
3	pH_FLD (pH units)			7.0	
4	pH_GEN (pH units)			8.0	
5	TDS (mg/L)			157	
6	Temp (deg C)			26.0	
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)			0.0	
2	ALK-TOT (mgCaCO ₃ /L)			89	
3	Ca (mg/L)			15	
4	Cl (mg/L)			44.9	
5	CO ₃ (mg/L)			0.0	
6	F (mg/L)			0.32	
7	Fe (mg/L)				
8	HCO ₃ (mg/L)			109	
9	K (mg/L)			4.1	
10	Mg (mg/L)			9.7	
11	Na (mg/L)			33.6	
12	NH ₃ -N (mg N/L)			0.08	
13	NO ₂ +NO ₃ (mg N/L)			1.50	
14	NO ₂ -N (mgN/L)			0.01	
15	NO ₃ -N (mgN/L)			1.49	
16	o-PO ₄ -P (mg P/L)			0.028	
17	SO ₄ (mg/L)			11.9	
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)			1.1	
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)			37	
2	HAR_Total (mgCaCO ₃ /L)			77	
3	Na% (%)			47	
4	RSC (-)			0.3	
5	SAR (-)			1.7	
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: THENGUDI	Code	: CCA31N6
State	: Tamil Nadu	District	Tiruvarur
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Thirumalairajanar
Division	: Hydrology Division, Chennai	Sub-Division	: Cauvery Delta SD, Karaikal
Drainage Area	: Sq. Km.	Bank	: Right
Latitude	: 10°55'00"	Longitude	: 79°38'20"
Zero of Gauge (m)	: 5.000 (m.s.l)	06/03/1997	
	Opening Date	Closing Date	
Gauge	: 06/03/1997		
Discharge	: 02/07/1997		
Sediment	: 07/11/2003		
Water Quality	: 01/09/2005		

Water Quality Datasheet for the period : 2015-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/06/2015	01/07/2015	24/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.786
2	Colour_Cod (-)			Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)			650
4	EC_GEN ($\mu\text{mho}/\text{cm}$)			514
5	Odour_Code (-)			odour free
6	pH_FLD (pH units)			8.3
7	pH_GEN (pH units)			7.6
8	TDS (mg/L)			293
9	Temp (deg C)			30.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			0.0
2	ALK-TOT (mgCaCO ₃ /L)			155
3	Ca (mg/L)			27
4	Cl (mg/L)			88.1
5	CO ₃ (mg/L)			0.0
6	F (mg/L)			0.53
7	HCO ₃ (mg/L)			189
8	K (mg/L)			5.9
9	Mg (mg/L)			13.0
10	Na (mg/L)			70.0
11	NH ₃ -N (mg N/L)			0.02
12	NO ₂ +NO ₃ (mg N/L)			0.71
13	NO ₂ -N (mgN/L)			0.00
14	NO ₃ -N (mgN/L)			0.71
15	o-PO ₄ -P (mg P/L)			0.098
16	SO ₄ (mg/L)			24.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			1.8
2	DO (mg/L)			6.5
3	DO_SAT% (%)			86
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			67
2	HAR_Total (mgCaCO ₃ /L)			121
3	Na% (%)			54
4	RSC (-)			0.7
5	SAR (-)			2.8
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.948	0.524	8.811
2	Colour_Cod (-)	Clear	Light Brown	Light Brown
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	670	590	620
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	517	740	530
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.2	7.9	7.8
7	pH_GEN (pH units)	7.8	8.0	7.2
8	TDS (mg/L)	274	393	299
9	Temp (deg C)	30.0	28.0	27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	141	207	166
3	Ca (mg/L)	32	39	27
4	Cl (mg/L)	74.3	112.9	85.4
5	CO ₃ (mg/L)	0.0	0.0	0.0
6	F (mg/L)	0.45	0.62	0.55
7	HCO ₃ (mg/L)	172	253	202
8	K (mg/L)	1.2	3.5	3.5
9	Mg (mg/L)	13.8	20.3	17.0
10	Na (mg/L)	53.8	85.5	65.3
11	NH ₃ -N (mg N/L)	0.05	0.08	0.11
12	NO ₂ +NO ₃ (mg N/L)	0.75	0.57	0.37
13	NO ₂ -N (mgN/L)	0.00	0.00	0.00
14	NO ₃ -N (mgN/L)	0.75	0.57	0.37
15	o-PO ₄ -P (mg P/L)	0.091	0.037	0.005
16	SO ₄ (mg/L)	20.0	23.9	17.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.3	2.7	0.9
2	DO (mg/L)	6.4	4.7	4.9
3	DO_SAT% (%)	84	60	61
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	80	97	67
2	HAR_Total (mgCaCO ₃ /L)	138	181	138
3	Na% (%)	46	50	50
4	RSC (-)	0.1	0.5	0.6
5	SAR (-)	2.0	2.8	2.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/12/2015	04/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	18.100	3.327	2.355
2	Colour_Cod (-)	Light Brown	Light Brown	Light Brown
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	615	710	710
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	336	454	492
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.8	8.2	8.1
7	pH_GEN (pH units)	7.9	7.9	8.4
8	TDS (mg/L)	189	251	261
9	Temp (deg C)	26.5	25.5	26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	14.1
2	ALK-TOT (mgCaCO ₃ /L)	110	127	85
3	Ca (mg/L)	19	24	24
4	Cl (mg/L)	49.6	66.9	91.0
5	CO ₃ (mg/L)	0.0	0.0	16.9
6	F (mg/L)	0.33	0.43	0.34
7	HCO ₃ (mg/L)	135	155	69
8	K (mg/L)	2.8	5.3	4.0
9	Mg (mg/L)	9.7	13.8	13.6
10	Na (mg/L)	38.4	50.9	57.6
11	NH ₃ -N (mg N/L)	0.04	0.05	0.04
12	NO ₂ +NO ₃ (mg N/L)	0.25	0.31	0.27
13	NO ₂ -N (mgN/L)	0.01	0.00	0.00
14	NO ₃ -N (mgN/L)	0.24	0.31	0.27
15	o-PO ₄ -P (mg P/L)	0.009	0.000	0.000
16	SO ₄ (mg/L)	8.8	20.3	28.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.8	1.6	1.1
2	DO (mg/L)	4.7	5.0	4.7
3	DO_SAT% (%)	57	60	57
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	47	60	60
2	HAR_Total (mgCaCO ₃ /L)	87	118	117
3	Na% (%)	48	47	51
4	RSC (-)	0.5	0.2	0.0
5	SAR (-)	1.8	2.0	2.3
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water Analysis

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	01/03/2016	01/04/2016	18/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	1.812	0.000	2.029
2	Colour_Cod (-)	Light Brown		Light Brown
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	660		670
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	665		685
5	Odour_Code (-)	odour free		odour free
6	pH_FLD (pH units)	8.2		8.2
7	pH_GEN (pH units)	8.4		7.3
8	TDS (mg/L)	353		368
9	Temp (deg C)	28.5		27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	9.4		0.0
2	ALK-TOT (mgCaCO ₃ /L)	184		130
3	Ca (mg/L)	37		30
4	Cl (mg/L)	96.3		117.7
5	CO ₃ (mg/L)	11.3		0.0
6	F (mg/L)	0.42		0.62
7	HCO ₃ (mg/L)	201		159
8	K (mg/L)	4.3		4.4
9	Mg (mg/L)	22.4		20.4
10	Na (mg/L)	67.1		90.0
11	NH ₃ -N (mg N/L)	0.04		0.05
12	NO ₂ +NO ₃ (mg N/L)	0.25		1.22
13	NO ₂ -N (mgN/L)	0.00		0.01
14	NO ₃ -N (mgN/L)	0.25		1.22
15	o-PO ₄ -P (mg P/L)	0.000		0.190
16	SO ₄ (mg/L)	29.0		45.9
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.6		2.0
2	DO (mg/L)	5.1		4.6
3	DO_SAT% (%)	65		58
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	92		76
2	HAR_Total (mgCaCO ₃ /L)	185		161
3	Na% (%)	44		54
4	RSC (-)	0.0		0.0
5	SAR (-)	2.2		3.1
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water Summary

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	39.39	0.000	3.685
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	9	710	590	655
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	9	740	336	548
4	pH_FLD (pH units)	9	8.3	7.8	8.1
5	pH_GEN (pH units)	9	8.4	7.2	7.8
6	TDS (mg/L)	9	393	189	298
7	Temp (deg C)	9	30.0	25.5	27.6
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	9	14.1	0.0	2.6
2	ALK-TOT (mgCaCO ₃ /L)	9	207	85	145
3	Ca (mg/L)	9	39	19	29
4	Cl (mg/L)	9	117.7	49.6	86.9
5	CO ₃ (mg/L)	9	16.9	0.0	3.1
6	F (mg/L)	9	0.62	0.33	0.48
7	HCO ₃ (mg/L)	9	253	69	171
8	K (mg/L)	9	5.9	1.2	3.9
9	Mg (mg/L)	9	22.4	9.7	16
10	Na (mg/L)	9	90.0	38.4	64.3
11	NH ₃ -N (mg N/L)	9	0.11	0.02	0.05
12	NO ₂ +NO ₃ (mg N/L)	9	1.22	0.25	0.52
13	NO ₂ -N (mgN/L)	9	0.01	0.00	0
14	NO ₃ -N (mgN/L)	9	1.22	0.24	0.52
15	o-PO ₄ -P (mg P/L)	9	0.190	0.000	0.048
16	SO ₄ (mg/L)	9	45.9	8.8	24.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	9	2.7	0.9	1.7
2	DO (mg/L)	9	6.5	4.6	5.2
3	DO_SAT% (%)	9	86	57	65
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	9	97	47	72
2	HAR_Total (mgCaCO ₃ /L)	9	185	87	138
3	Na% (%)	9	54	44	49
4	RSC (-)	9	0.7	0.0	0.3
5	SAR (-)	9	3.1	1.8	2.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	13.15	3.971	3.816	5.981	0.841
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	380	489	349	492	364
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	366	701	329	501	419
4	pH_FLD (pH units)	7.8	7.9	7.5	7.2	7.1
5	pH_GEN (pH units)	7.5	7.4	7.4	7.6	7.8
6	TDS (mg/L)					
7	Temp (deg C)	30.3	28.4	29.5	29.3	28.7
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	85	170	120	173	163
3	Ca (mg/L)	22	27	29	32	23
4	Cl (mg/L)	41.2	47.2	31.8	63.3	62.2
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
6	F (mg/L)	0.27				0.58
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	103	207	147	211	198
9	K (mg/L)					7.6
10	Mg (mg/L)	9.5	19.6	11.5	20.6	12.6
11	Na (mg/L)	36.6	57.1	38.2		66.0
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)					
16	o-PO ₄ -P (mg P/L)	0.010				
17	SO ₄ (mg/L)	5.6	26.9	14.6	18.9	19.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	4.7		2.6	1.5	2.3
2	DO (mg/L)	5.6	8.5	7.3	7.5	5.2
3	DO_SAT% (%)	75	109	97	97	68
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	55	68	71	79	57
2	HAR_Total (mgCaCO ₃ /L)	94	150	119	165	110
3	Na% (%)					56
4	RSC (-)	0.2	0.4	0.1	0.2	1.1
5	SAR (-)	1.6	2.1	1.5		2.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	1.061	3.389	1.079	1.54	0.75
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	442	546	595	392	475
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	489	480	447	324	392
4	pH_FLD (pH units)	7.4	7.9	8.2	8.3	8.2
5	pH_GEN (pH units)	7.8	7.9	7.7	7.5	7.6
6	TDS (mg/L)			240	172	210
7	Temp (deg C)	29.0	27.8	26.0	29.5	28.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	188	171	141	86	133
3	Ca (mg/L)	25	27	27	23	25
4	Cl (mg/L)	65.4	55.6	95.9	50.1	42.5
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
6	F (mg/L)	0.49	0.47	1.13	0.28	0.35
7	Fe (mg/L)			0.0	0.0	
8	HCO ₃ (mg/L)	229	209	172	105	163
9	K (mg/L)	5.8	5.0	3.9	3.4	4.2
10	Mg (mg/L)	19.9	25.1	13.3	6.7	14.6
11	Na (mg/L)	54.9	43.0	79.9	34.5	32.7
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)	0.39	2.10	0.17	2.33	0.76
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	19.2	14.4	24.8	15.9	18.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.4	1.6	1.3	1.9
2	DO (mg/L)	4.5	4.6	8.1	5.2	5.5
3	DO_SAT% (%)	59	58	100	69	71
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			3.95	0.44	
2	Cd ($\mu\text{g}/\text{L}$)			0.11	0.26	
3	Cr ($\mu\text{g}/\text{L}$)			2.90	0.79	
4	Cu ($\mu\text{g}/\text{L}$)			29.37	2.39	
5	Ni ($\mu\text{g}/\text{L}$)			2.61	11.24	
6	Pb ($\mu\text{g}/\text{L}$)			0.13	2.46	
7	Zn ($\mu\text{g}/\text{L}$)			3.77	6.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	63	68	67	58	62
2	HAR_Total (mgCaCO ₃ /L)	146	173	122	87	122
3	Na% (%)	44	34	59	44	37
4	RSC (-)	0.8	0.1	0.4	0.1	0.2
5	SAR (-)	2.0	1.4	3.2	1.6	1.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.452	4.1	7.092	11.36	20.01
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	637	591	534	456	360
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	590	643	475	544	638
4	pH_FLD (pH units)	8.1	7.9	7.7	7.9	7.1
5	pH_GEN (pH units)	7.8	7.7	7.5	7.6	7.5
6	TDS (mg/L)	320				
7	Temp (deg C)	29.3	26.5	27.0	27.0	27.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	168	179	178	161	198
3	Ca (mg/L)	33	29	30	31	32
4	Cl (mg/L)	91.8	70.0	55.7	55.3	74.8
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
6	F (mg/L)	0.54				
7	Fe (mg/L)					
8	HCO ₃ (mg/L)	205	218	217	197	241
9	K (mg/L)	3.5				
10	Mg (mg/L)	15.7	24.5	18.1	21.7	23.8
11	Na (mg/L)	69.8	63.2	61.1	25.6	
12	NH ₃ -N (mg N/L)	0.05				
13	NO ₂ +NO ₃ (mg N/L)	0.68				
14	NO ₂ -N (mgN/L)	0.00				
15	NO ₃ -N (mgN/L)	0.68				
16	o-PO ₄ -P (mg P/L)	0.075				
17	SO ₄ (mg/L)	22.7	26.8	19.9	19.4	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.9	3.6		2.3	1.3
2	DO (mg/L)	5.8	7.3	7.0	5.3	6.2
3	DO_SAT% (%)	77	90	88	66	77
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	81	74	76	77	80
2	HAR_Total (mgCaCO ₃ /L)	147	176	151	167	179
3	Na% (%)	50				
4	RSC (-)	0.4	0.5	0.6	0.0	0.4
5	SAR (-)	2.5	2.1	2.2	0.9	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	12.94	24.51	10.16	11.13	1.439
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	338	464	533	566	774
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	628	523	489	526	579
4	pH_FLD (pH units)	7.2	7.8	8.3	8.3	8.1
5	pH_GEN (pH units)	8.0	7.8	7.8	7.7	7.8
6	TDS (mg/L)				280	310
7	Temp (deg C)	26.7	26.1	25.1	24.7	27.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	284	235	144	163	110
3	Ca (mg/L)	27	30	18	34	15
4	Cl (mg/L)	95.4	66.2	64.4	71.4	107.0
5	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
6	F (mg/L)	0.42	0.41	0.34	0.71	0.41
7	Fe (mg/L)	0.0		0.1		
8	HCO ₃ (mg/L)	347	286	176	199	134
9	K (mg/L)	7.1	5.1	5.8	4.7	3.2
10	Mg (mg/L)	22.4	22.1	19.0	13.3	20.6
11	Na (mg/L)	111.7	55.9	48.8	61.0	72.8
12	NH ₃ -N (mg N/L)					
13	NO ₂ +NO ₃ (mg N/L)					
14	NO ₂ -N (mgN/L)					
15	NO ₃ -N (mgN/L)		0.45	0.62	0.59	4.52
16	o-PO ₄ -P (mg P/L)					
17	SO ₄ (mg/L)	21.9	17.5	12.6	16.4	22.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.1	1.6	2.0	2.5
2	DO (mg/L)	5.4	5.0	4.5	7.5	5.3
3	DO_SAT% (%)	67	61	55	89	67
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.51		
2	Cd ($\mu\text{g}/\text{L}$)	0.02				
3	Cr ($\mu\text{g}/\text{L}$)	0.22		1.69		
4	Cu ($\mu\text{g}/\text{L}$)	6.73		8.04		
5	Ni ($\mu\text{g}/\text{L}$)	11.39		3.59		
6	Pb ($\mu\text{g}/\text{L}$)	0.01		0.89		
7	Zn ($\mu\text{g}/\text{L}$)	11.20				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	66	75	46	85	38
2	HAR_Total (mgCaCO ₃ /L)	159	167	125	141	123
3	Na% (%)	59	41	45	48	56
4	RSC (-)	2.5	1.4	0.4	0.5	0.0
5	SAR (-)	3.9	1.9	1.9	2.2	2.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	3.727	8.147	0.091	0.541	0.336
2	EC_FLD ($\mu\text{mho}/\text{cm}$)		664	703	645	517
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	587	453	810	627	631
4	pH_FLD (pH units)	8.3	8.0	8.0	8.0	7.3
5	pH_GEN (pH units)	7.9	7.8	7.8	7.7	8.2
6	TDS (mg/L)	320	250			
7	Temp (deg C)	25.5	26.3	27.0	26.5	26.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	1.2	3.5	0.0	0.0	5.2
2	ALK-TOT (mgCaCO ₃ /L)	158	122	188	213	242
3	Ca (mg/L)	32	23	37	32	29
4	Cl (mg/L)	90.9	73.2	99.0	78.2	73.4
5	CO ₃ (mg/L)	1.5	4.2	0.0	0.0	6.3
6	F (mg/L)	0.36	0.41			
7	Fe (mg/L)	0.0				
8	HCO ₃ (mg/L)	189	140	229	259	282
9	K (mg/L)	4.0	3.9			
10	Mg (mg/L)	16.9	13.5	27.2	4.9	21.4
11	Na (mg/L)	67.2	53.1	92.5	71.8	
12	NH ₃ -N (mg N/L)	0.08	0.06			
13	NO ₂ +NO ₃ (mg N/L)	2.80	0.30			
14	NO ₂ -N (mgN/L)	0.01	0.00			
15	NO ₃ -N (mgN/L)	2.19	0.30			
16	o-PO ₄ -P (mg P/L)	0.010	0.003			
17	SO ₄ (mg/L)	18.9	18.6		23.9	22.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.5	1.4			1.6
2	DO (mg/L)	4.9	4.8	7.2	6.7	6.1
3	DO_SAT% (%)	60	59	91	83	76
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	0.43				
3	Cr ($\mu\text{g}/\text{L}$)	1.90				
4	Cu ($\mu\text{g}/\text{L}$)	5.28				
5	Ni ($\mu\text{g}/\text{L}$)	5.83				
6	Pb ($\mu\text{g}/\text{L}$)	0.28				
7	Zn ($\mu\text{g}/\text{L}$)	7.10				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	81	58	92	80	73
2	HAR_Total (mgCaCO ₃ /L)	152	115	205	100	163
3	Na% (%)	49	49			
4	RSC (-)	0.2	0.3	0.0	2.3	1.6
5	SAR (-)	2.4	2.1	2.8	3.1	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	0.109	0.133	0.182	0.226
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	520	302	608	410
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	739	686	725	700
4	pH_FLD (pH units)	7.4	7.1	7.7	8.1
5	pH_GEN (pH units)	7.7	8.3	8.1	7.5
6	TDS (mg/L)				
7	Temp (deg C)	27.5	28.8	26.5	26.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	33.2	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	229	296	248	202
3	Ca (mg/L)	47	44	55	34
4	Cl (mg/L)	102.9	102.3	110.8	89.3
5	CO ₃ (mg/L)	0.0	40.0	0.0	0.0
6	F (mg/L)		0.43	0.51	0.38
7	Fe (mg/L)				
8	HCO ₃ (mg/L)	280	279	303	246
9	K (mg/L)		6.3	6.8	14.4
10	Mg (mg/L)	28.2	19.4	18.5	27.2
11	Na (mg/L)		104.5	82.7	65.4
12	NH ₃ -N (mg N/L)				
13	NO ₂ +NO ₃ (mg N/L)				
14	NO ₂ -N (mgN/L)				
15	NO ₃ -N (mgN/L)			0.64	1.45
16	o-PO ₄ -P (mg P/L)				
17	SO ₄ (mg/L)		25.6	20.6	25.0
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	2.6	1.1	0.6	2.0
2	DO (mg/L)	7.3	5.0	2.1	2.2
3	DO_SAT% (%)	92	63	26	27
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	118	110	136	84
2	HAR_Total (mgCaCO ₃ /L)	236	191	213	198
3	Na% (%)		53	45	40
4	RSC (-)	0.0	2.1	0.7	0.1
5	SAR (-)		3.3	2.5	2.0
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Thengudi (CCA31N6)

Local River : Thirumalairajanar

River Water

Division : Hydrology Division, Chennai

Sub-Division : Cauvery Delta SD, Karaikal

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	Dry Bed	0.01	0.191	1.28
2	EC_FLD ($\mu\text{mho}/\text{cm}$)		661	706	665
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		630	717	675
4	pH_FLD (pH units)		8.1	8.1	8.1
5	pH_GEN (pH units)		8.4	8.0	7.8
6	TDS (mg/L)		334	383	361
7	Temp (deg C)		27.0	28.0	27.8
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)		9.3	9.3	4.7
2	ALK-TOT (mgCaCO ₃ /L)		98	171	157
3	Ca (mg/L)		10	33	34
4	Cl (mg/L)		116.3	121.3	107.0
5	CO ₃ (mg/L)		11.2	11.2	5.6
6	F (mg/L)		0.42	0.54	0.52
7	Fe (mg/L)				
8	HCO ₃ (mg/L)		97	186	180
9	K (mg/L)		4.8	3.5	4.4
10	Mg (mg/L)		17.4	19.2	21.4
11	Na (mg/L)		83.4	90.2	78.5
12	NH ₃ -N (mg N/L)			0.12	0.04
13	NO ₂ +NO ₃ (mg N/L)			1.07	0.74
14	NO ₂ -N (mgN/L)			0.00	0.00
15	NO ₃ -N (mgN/L)		6.12	1.07	0.73
16	o-PO ₄ -P (mg P/L)			0.010	0.095
17	SO ₄ (mg/L)		28.7	28.7	37.5
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)		1.8	1.4	1.8
2	DO (mg/L)		5.2	4.7	4.8
3	DO_SAT% (%)		65	60	61
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)		25	82	84
2	HAR_Total (mgCaCO ₃ /L)		98	162	173
3	Na% (%)		64	54	49
4	RSC (-)		0.0	0.2	0.0
5	SAR (-)		3.7	3.1	2.6
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: MUSIRI	Code	: CC000G4
State	: Tamil Nadu	District	Thiruchirapalli
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Cauvery
Division	: SR Division, Coimbatore	Sub-Division	: Lower Cauvery SD, Trichi
Drainage Area	: 66243 Sq. Km.	Bank	: Left
Latitude	: 10°56'36"	Longitude	: 78°26'06"
Zero of Gauge (m)	: 82.000 (m.s.l)	26/02/1971	
	Opening Date	Closing Date	
Gauge	: 26/02/1971		
Discharge	: 01/06/1972		
Sediment	: 31/03/1973		
Water Quality	: 01/06/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	13.3	2.316	107.9
2	Colour_Cod (-)	Clear	Clear	Light Brown
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	729	633	519
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	729	633	519
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.0	8.3	8.1
7	pH_GEN (pH units)	8.0	8.3	8.1
8	TDS (mg/L)	424	367	296
9	Temp (deg C)	28.5	28.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	19.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	187	171	166
3	B (mg/L)	0.19	0.16	
4	Ca (mg/L)	17	33	33
5	Cl (mg/L)	109.9	89.5	65.7
6	CO ₃ (mg/L)	0.0	22.9	0.0
7	F (mg/L)	0.53	0.49	
8	Fe (mg/L)	0.080	0.000	0.050
9	HCO ₃ (mg/L)	228	163	203
10	K (mg/L)	8.3	6.7	5.7
11	Mg (mg/L)	40.4	29.8	22.1
12	Na (mg/L)	80.1	65.1	50.3
13	NH ₃ -N (mg N/L)	0.00	0.00	0.42
14	NO ₂ +NO ₃ (mg N/L)	1.39	1.41	1.75
15	NO ₂ -N (mgN/L)	0.00	0.00	0.06
16	NO ₃ -N (mgN/L)	1.39	1.41	1.69
17	o-PO ₄ -P (mg P/L)	0.020	0.010	0.010
18	SiO ₂ (mg/L)	18.8	17.8	16.5
19	SO ₄ (mg/L)	46.4	37.3	23.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.0	1.4	3.5
2	COD (mg/L)	14.7	5.3	13.7
3	DO (mg/L)	6.8	6.2	6.6
4	DO_SAT% (%)	87	79	84
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	44	83	83
2	HAR_Total (mgCaCO ₃ /L)	212	208	176
3	Na% (%)	44	40	38
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	2.4	2.0	1.7
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	420.6	404.7	29.45
2	Colour_Cod (-)	Light Brown	Light Brown	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	330	340	492
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	342	388	492
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.0	7.9	8.2
7	pH_GEN (pH units)	8.2	8.1	8.2
8	TDS (mg/L)	196	227	286
9	Temp (deg C)	28.5	28.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	116	130	157
3	B (mg/L)		0.02	0.09
4	Ca (mg/L)	29	32	35
5	Cl (mg/L)	40.6	44.2	61.6
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.070	0.000	0.010
9	HCO ₃ (mg/L)	141	159	191
10	K (mg/L)	4.1	4.5	5.6
11	Mg (mg/L)	13.5	16.3	19.2
12	Na (mg/L)	29.0	30.8	46.3
13	NH ₃ -N (mg N/L)	0.12	0.26	0.15
14	NO ₂ +NO ₃ (mg N/L)	1.15	1.48	2.59
15	NO ₂ -N (mgN/L)	0.00	0.01	0.02
16	NO ₃ -N (mgN/L)	1.15	1.47	2.57
17	o-PO ₄ -P (mg P/L)	0.040	0.020	0.040
18	SiO ₂ (mg/L)	12.0	16.9	19.3
19	SO ₄ (mg/L)	13.5	17.9	22.8
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.4	1.4	1.5
2	COD (mg/L)	4.6	9.1	10.9
3	DO (mg/L)	6.4	6.4	6.0
4	DO_SAT% (%)	82	82	77
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	71	79	87
2	HAR_Total (mgCaCO ₃ /L)	128	147	167
3	Na% (%)	32	31	37
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.1	1.1	1.6
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	8.377	437.6	123.8
2	Colour_Cod (-)	Clear	Light Brown	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	780	558	624
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	780	558	624
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.1	8.2	8.0
7	pH_GEN (pH units)	8.1	8.2	8.3
8	TDS (mg/L)	453	319	357
9	Temp (deg C)	27.5	27.5	22.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	22.9
2	ALK-TOT (mgCaCO ₃ /L)	203	207	207
3	B (mg/L)	0.13	0.17	0.09
4	Ca (mg/L)	32	24	27
5	Cl (mg/L)	115.4	55.5	69.4
6	CO ₃ (mg/L)	0.0	0.0	27.6
7	F (mg/L)	0.57	0.54	0.57
8	Fe (mg/L)	0.030	0.000	0.000
9	HCO ₃ (mg/L)	248	252	196
10	K (mg/L)	9.5	5.9	6.3
11	Mg (mg/L)	35.4	41.2	33.5
12	Na (mg/L)	94.0	42.1	60.1
13	NH ₃ -N (mg N/L)	0.09	0.61	0.49
14	NO ₂ +NO ₃ (mg N/L)	4.09	2.56	2.71
15	NO ₂ -N (mgN/L)	0.00	0.03	0.15
16	NO ₃ -N (mgN/L)	4.09	2.53	2.56
17	o-PO ₄ -P (mg P/L)	0.060	0.070	0.070
18	SiO ₂ (mg/L)	11.7	18.1	23.4
19	SO ₄ (mg/L)	58.2	27.4	32.3
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.5	1.7	3.2
2	COD (mg/L)	13.8	12.1	7.1
3	DO (mg/L)	6.7	6.8	6.2
4	DO_SAT% (%)	84	85	71
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	79	59	67
2	HAR_Total (mgCaCO ₃ /L)	227	231	207
3	Na% (%)	46	28	38
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	2.7	1.2	1.8
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	17.91	7.964	4.394
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	648	706	696
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	648	706	696
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.1	8.2	8.2
7	pH_GEN (pH units)	8.1	8.7	8.2
8	TDS (mg/L)	367	403	398
9	Temp (deg C)	25.0	29.0	30.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	191	191	187
3	B (mg/L)	0.15	0.16	0.15
4	Ca (mg/L)	46	44	22
5	Cl (mg/L)	89.2	94.6	96.4
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.48	0.47	0.47
8	Fe (mg/L)	0.000	0.000	0.030
9	HCO ₃ (mg/L)	233	233	228
10	K (mg/L)	6.5	7.7	7.6
11	Mg (mg/L)	22.9	26.7	38.1
12	Na (mg/L)	66.2	72.6	73.0
13	NH ₃ -N (mg N/L)	0.08	0.05	0.01
14	NO ₂ +NO ₃ (mg N/L)	3.05	6.14	2.57
15	NO ₂ -N (mgN/L)	0.00	0.00	0.00
16	NO ₃ -N (mgN/L)	3.05	6.14	2.57
17	o-PO ₄ -P (mg P/L)	0.030	0.040	0.030
18	SiO ₂ (mg/L)	19.4	20.7	14.8
19	SO ₄ (mg/L)	29.5	38.1	37.9
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.2	2.0	1.9
2	COD (mg/L)	6.2	13.8	16.0
3	DO (mg/L)	7.0	6.3	6.4
4	DO_SAT% (%)	85	82	85
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	114	110	55
2	HAR_Total (mgCaCO ₃ /L)	209	221	214
3	Na% (%)	40	41	42
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	2.0	2.1	2.2
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water Summary

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	683.9	1.476	144.3
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	12	780	330	588
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	780	342	593
4	pH_FLD (pH units)	12	8.3	7.9	8.1
5	pH_GEN (pH units)	12	8.7	8.0	8.2
6	TDS (mg/L)	12	453	196	341
7	Temp (deg C)	12	30.0	22.0	27.5
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	22.9	0.0	3.5
2	ALK-TOT (mgCaCO ₃ /L)	12	207	116	176
3	B (mg/L)	10	0.19	0.02	0.13
4	Ca (mg/L)	12	46	17	31
5	Cl (mg/L)	12	115.4	40.6	77.7
6	CO ₃ (mg/L)	12	27.6	0.0	4.2
7	F (mg/L)	8	0.57	0.47	0.51
8	Fe (mg/L)	12	0.080	0.000	0.022
9	HCO ₃ (mg/L)	12	252	141	206
10	K (mg/L)	12	9.5	4.1	6.5
11	Mg (mg/L)	12	41.2	13.5	28.3
12	Na (mg/L)	12	94.0	29.0	59.1
13	NH ₃ -N (mg N/L)	12	0.61	0.00	0.19
14	NO ₂ +NO ₃ (mg N/L)	12	6.14	1.15	2.57
15	NO ₂ -N (mgN/L)	12	0.15	0.00	0.02
16	NO ₃ -N (mgN/L)	12	6.14	1.15	2.55
17	o-PO ₄ -P (mg P/L)	12	0.070	0.010	0.037
18	SiO ₂ (mg/L)	12	23.4	11.7	17.5
19	SO ₄ (mg/L)	12	58.2	13.5	32.1
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	12	3.5	1.2	2
2	COD (mg/L)	12	16.0	4.6	10.6
3	DO (mg/L)	12	7.0	6.0	6.5
4	DO_SAT% (%)	12	87	71	82
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	114	44	78
2	HAR_Total (mgCaCO ₃ /L)	12	231	128	195
3	Na% (%)	12	46	28	38
4	RSC (-)	12	0.0	0.0	0
5	SAR (-)	12	2.7	1.1	1.8
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	434.5	378.2	355.9	459.8	359.4
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	500	515	468	529	512
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	542	432	498	514	489
4	pH_FLD (pH units)	8.2	8.1	8.2	8.2	8.2
5	pH_GEN (pH units)	8.0	8.4	8.1	8.3	8.1
6	TDS (mg/L)					
7	Temp (deg C)	28.9	26.9	26.2	26.8	26.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	1.2	9.5	6.4	4.4	4.0
2	ALK-TOT (mgCaCO ₃ /L)	124	139	136	159	147
3	B (mg/L)	0.24	0.35	0.27	0.26	0.22
4	Ca (mg/L)	29	22	27	29	28
5	Cl (mg/L)	84.6	43.4	62.1	59.9	68.0
6	CO ₃ (mg/L)	1.5	11.5	7.7	5.3	4.8
7	F (mg/L)	0.46	0.40	0.33	0.47	0.33
8	Fe (mg/L)	0.074	0.067	0.068	0.068	0.068
9	HCO ₃ (mg/L)	148	146	151	183	170
10	K (mg/L)	4.4	3.3	4.1	4.2	4.4
11	Mg (mg/L)	18.7	17.1	15.9	18.3	18.3
12	Na (mg/L)	62.2	42.2	53.1	52.6	51.7
13	NH ₃ -N (mg N/L)	51.00		0.06	0.07	0.11
14	NO ₂ +NO ₃ (mg N/L)	2.32	1.71	3.52	2.08	
15	NO ₂ -N (mgN/L)	0.04	0.02	0.11	0.01	
16	NO ₃ -N (mgN/L)	2.28	1.69	3.41	2.08	0.86
17	o-PO ₄ -P (mg P/L)				0.010	0.066
18	P-Tot (mgP/L)	0.027	0.019	0.018		
19	SiO ₂ (mg/L)	22.4	22.9	20.5	20.7	21.7
20	SO ₄ (mg/L)	15.5	19.8	25.1	22.5	36.4
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.2	1.5	1.0	0.9	1.6
2	COD (mg/L)					
3	DO (mg/L)	6.2	6.9	7.0	7.1	7.1
4	DO_SAT% (%)	80	86	87	89	88
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	73	55	68	71	69
2	HAR_Total (mgCaCO ₃ /L)	151	127	135	148	145
3	Na% (%)	42	39	41	42	39
4	RSC (-)	0.0	0.3	0.1	0.3	0.1
5	SAR (-)	2.0	1.6	1.9	1.9	1.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	193.8	400.2	103.6	340.8	212.8
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	458	358	488	239	525
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	434	348	480	226	531
4	pH_FLD (pH units)	7.7	7.8	8.2	7.9	8.1
5	pH_GEN (pH units)	8.2	7.8	8.3	7.9	8.1
6	TDS (mg/L)					284
7	Temp (deg C)	28.4	28.3	27.9	28.5	27.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	6.4	0.0	13.7	0.0	13.0
2	ALK-TOT (mgCaCO ₃ /L)	152	141	157	74	150
3	B (mg/L)	0.03				
4	Ca (mg/L)	29	30	34	18	32
5	Cl (mg/L)	67.1	55.4	71.2	25.2	75.7
6	CO ₃ (mg/L)	7.7	0.0	16.5	0.0	15.6
7	F (mg/L)	0.49	0.49	0.24	0.19	0.37
8	Fe (mg/L)	0.033			0.160	
9	HCO ₃ (mg/L)	170	172	157	90	151
10	K (mg/L)	4.7	3.7	4.5	2.3	5.3
11	Mg (mg/L)	17.9	16.5	15.4	11.3	21.0
12	Na (mg/L)	47.0	36.8	53.7	13.9	55.5
13	NH ₃ -N (mg N/L)	0.09			0.19	0.15
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	4.51	0.51	0.19	0.44	0.78
17	o-PO ₄ -P (mg P/L)	0.158				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	30.8				
20	SO ₄ (mg/L)	20.2	14.8	22.2	11.6	27.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.0	1.6	1.3	2.4	2.6
2	COD (mg/L)				6.2	9.5
3	DO (mg/L)	7.1	7.1	7.0	6.8	6.5
4	DO_SAT% (%)	91	91	89	87	82
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		22.61		0.26	
2	Cd ($\mu\text{g}/\text{L}$)		0.11		0.03	
3	Cr ($\mu\text{g}/\text{L}$)		5.20		5.79	
4	Cu ($\mu\text{g}/\text{L}$)		10.53		3.00	
5	Hg ($\mu\text{g}/\text{L}$)				0.16	
6	Ni ($\mu\text{g}/\text{L}$)		3.37		10.35	
7	Pb ($\mu\text{g}/\text{L}$)		2.29		4.78	
8	Zn ($\mu\text{g}/\text{L}$)		1.19		22.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	73	75	84	44	81
2	HAR_Total (mgCaCO ₃ /L)	147	144	148	91	169
3	Na% (%)	40	34	43	25	38
4	RSC (-)	0.1	0.1	0.2	0.0	0.0
5	SAR (-)	1.7	1.3	1.9	0.6	1.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	189.8	601.9	159	579.8	351.2
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	510	554	666	534	653
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	522	513	633	566	562
4	pH_FLD (pH units)	8.1	8.2	8.0	8.0	8.1
5	pH_GEN (pH units)	8.1	8.2	8.3	8.4	7.9
6	TDS (mg/L)	302				
7	Temp (deg C)	28.2	26.9	24.6	25.5	25.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	3.8	9.4	8.2	14.1	12.0
2	ALK-TOT (mgCaCO ₃ /L)	154	155	191	169	198
3	B (mg/L)	0.12	0.26	0.29	0.27	0.14
4	Ca (mg/L)	29	32	38	34	40
5	Cl (mg/L)	70.0	48.9	71.4	64.5	75.5
6	CO ₃ (mg/L)	4.6	11.3	9.9	17.0	14.4
7	F (mg/L)	0.51	0.44	0.58	0.37	0.59
8	Fe (mg/L)	0.040	0.072	0.067	0.065	0.066
9	HCO ₃ (mg/L)	179	166	213	171	213
10	K (mg/L)	5.9	4.2	5.6	4.6	7.4
11	Mg (mg/L)	24.4	20.6	21.9	19.8	22.8
12	Na (mg/L)	51.1	45.8	66.1	54.0	57.8
13	NH ₃ -N (mg N/L)	0.16		0.10	0.05	
14	NO ₂ +NO ₃ (mg N/L)	1.44	2.04	4.72	2.18	
15	NO ₂ -N (mgN/L)	0.01	0.02	0.38	0.02	
16	NO ₃ -N (mgN/L)	1.42	2.02	4.34	2.17	0.48
17	o-PO ₄ -P (mg P/L)	0.020				0.010
18	P-Tot (mgP/L)		0.031	0.016	0.035	
19	SiO ₂ (mg/L)	16.4	22.2	22.4	19.7	2.3
20	SO ₄ (mg/L)	27.7	24.0	40.0	26.6	32.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.1	1.5	1.3	1.4	1.3
2	COD (mg/L)	9.5				
3	DO (mg/L)	6.5	6.6	7.5	7.1	7.1
4	DO_SAT% (%)	83	83	90	86	86
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	72	81	96	85	100
2	HAR_Total (mgCaCO ₃ /L)	174	167	187	167	195
3	Na% (%)	37	36	42	38	38
4	RSC (-)	0.0	0.0	0.2	0.1	0.1
5	SAR (-)	1.7	1.5	2.1	1.7	1.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	141.3	227.5	292	29.61	181.7
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	612	597	430	557	421
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	603	553	426	566	430
4	pH_FLD (pH units)	8.6	7.9	7.9	8.0	8.2
5	pH_GEN (pH units)	8.1	8.3	8.0	8.0	8.2
6	TDS (mg/L)					
7	Temp (deg C)	27.1	28.0	26.5	25.8	26.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	7.0	17.9	6.5	0.0	2.0
2	ALK-TOT (mgCaCO ₃ /L)	201	184	174	180	160
3	B (mg/L)	0.13	0.21			
4	Ca (mg/L)	40	42	36	39	34
5	Cl (mg/L)	82.4	82.6	62.2	79.5	44.4
6	CO ₃ (mg/L)	8.4	21.6	7.9	0.0	2.4
7	F (mg/L)	0.64	0.61	0.31	0.23	0.36
8	Fe (mg/L)	0.125	0.000	0.050		
9	HCO ₃ (mg/L)	228	181	196	220	190
10	K (mg/L)	5.1	5.6	4.9	5.0	4.5
11	Mg (mg/L)	23.9	20.9	19.9	22.1	20.2
12	Na (mg/L)	62.0	61.5	45.1	54.2	31.7
13	NH ₃ -N (mg N/L)	0.05	0.00		0.05	0.28
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	1.75	4.22	0.48	0.43	0.09
17	o-PO ₄ -P (mg P/L)	0.041	0.134			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	23.5	21.8			
20	SO ₄ (mg/L)	45.7	31.8	25.4	26.5	25.4
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.0	0.9	1.0	1.1	2.8
2	COD (mg/L)				7.3	7.0
3	DO (mg/L)	7.0	7.3	7.1	6.5	6.7
4	DO_SAT% (%)	88	93	88	80	83
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.58		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			4.61		
4	Cu ($\mu\text{g}/\text{L}$)			13.92		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)			1.57		
8	Zn ($\mu\text{g}/\text{L}$)			14.90		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	100	105	91	97	86
2	HAR_Total (mgCaCO ₃ /L)	200	192	174	189	170
3	Na% (%)	39	40	35	38	28
4	RSC (-)	0.2	0.1	0.1	0.0	0.1
5	SAR (-)	1.9	1.9	1.5	1.7	1.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	121.3	149.8	21.42	8.516	10.67
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	537	614	894	644	836
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	537	614	773	680	851
4	pH_FLD (pH units)	7.9	8.1	8.3	7.7	8.3
5	pH_GEN (pH units)	8.0	8.2	8.3	7.9	8.5
6	TDS (mg/L)	303	354			
7	Temp (deg C)	24.1	26.3	28.2	28.5	25.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	5.7	9.2	4.0	18.8
2	ALK-TOT (mgCaCO ₃ /L)	168	193	205	181	195
3	B (mg/L)	0.06	0.12	0.31	0.25	0.34
4	Ca (mg/L)	31	29	33	33	38
5	Cl (mg/L)	67.5	75.5	100.8	86.7	124.6
6	CO ₃ (mg/L)	0.0	6.9	11.1	4.8	22.7
7	F (mg/L)	0.38	0.56	0.51	0.40	0.64
8	Fe (mg/L)	0.100	0.010	0.084	0.070	0.063
9	HCO ₃ (mg/L)	205	222	228	212	192
10	K (mg/L)	6.5	6.8	5.6	5.2	6.4
11	Mg (mg/L)	26.6	32.3	28.2	21.4	24.6
12	Na (mg/L)	50.8	60.6	84.2	77.0	97.9
13	NH ₃ -N (mg N/L)	0.18	0.34	0.14	0.05	0.05
14	NO ₂ +NO ₃ (mg N/L)	1.87	2.99	1.30	2.96	1.47
15	NO ₂ -N (mgN/L)	0.00	0.05	0.01	0.02	0.01
16	NO ₃ -N (mgN/L)	2.55	2.94	1.29	2.95	1.45
17	o-PO ₄ -P (mg P/L)	0.000	0.060			
18	P-Tot (mgP/L)			0.027	0.017	0.025
19	SiO ₂ (mg/L)	15.7	18.1	24.8	28.3	23.2
20	SO ₄ (mg/L)	28.8	35.1	39.5	28.7	52.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.5	2.0	1.3	1.4	0.6
2	COD (mg/L)	6.9	11.0			
3	DO (mg/L)	6.6	6.4	6.7	7.1	7.0
4	DO_SAT% (%)	79	79	86	91	85
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			21.92	10.87	5.03
2	Cd ($\mu\text{g}/\text{L}$)	0.73		15.00	2.00	0.73
3	Cr ($\mu\text{g}/\text{L}$)	13.41				
4	Cu ($\mu\text{g}/\text{L}$)	4.64		1.54		1.05
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	2.39		7.87		
7	Pb ($\mu\text{g}/\text{L}$)	4.92			1.53	2.29
8	Zn ($\mu\text{g}/\text{L}$)	2.06		11.00	7.00	9.00
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	76	73	83	81	96
2	HAR_Total (mgCaCO ₃ /L)	187	208	200	171	199
3	Na% (%)	36	37	47	49	51
4	RSC (-)	0.0	0.0	0.1	0.2	0.1
5	SAR (-)	1.6	1.8	2.6	2.6	3.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	8.091	20.65	25.39	39.75
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	575	601	605	417
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	575	524	605	417
4	pH_FLD (pH units)	8.4	8.3	8.5	8.3
5	pH_GEN (pH units)	8.4	8.3	8.4	8.1
6	TDS (mg/L)				
7	Temp (deg C)	27.2	27.3	28.7	28.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	15.9	9.3	26.6	5.8
2	ALK-TOT (mgCaCO ₃ /L)	189	166	199	143
3	B (mg/L)	0.13	0.18	0.06	
4	Ca (mg/L)	36	30	45	26
5	Cl (mg/L)	103.0	91.7	102.7	71.4
6	CO ₃ (mg/L)	19.2	11.2	32.0	7.0
7	F (mg/L)	0.51	0.53	0.43	0.48
8	Fe (mg/L)	0.063	0.053	0.012	0.010
9	HCO ₃ (mg/L)	192	180	177	160
10	K (mg/L)	5.4	5.0	5.7	5.3
11	Mg (mg/L)	24.6	22.4	16.2	18.1
12	Na (mg/L)	85.1	67.6	74.4	54.1
13	NH ₃ -N (mg N/L)	0.11	0.01	0.06	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)	0.27	1.27	1.03	0.19
17	o-PO ₄ -P (mg P/L)	0.017	0.017	0.000	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	21.8	30.1	29.4	
20	SO ₄ (mg/L)	53.3	43.1	30.1	23.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.3	1.2	1.1	1.1
2	COD (mg/L)				
3	DO (mg/L)	7.0	7.1	6.6	7.1
4	DO_SAT% (%)	88	90	85	92
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	20.63		0.84	0.89
2	Cd ($\mu\text{g}/\text{L}$)			6.90	0.15
3	Cr ($\mu\text{g}/\text{L}$)	2.24		2.85	4.00
4	Cu ($\mu\text{g}/\text{L}$)	2.41		5.03	2.98
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	9.29			2.40
7	Pb ($\mu\text{g}/\text{L}$)			1.19	4.71
8	Zn ($\mu\text{g}/\text{L}$)			14.89	325.00
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	89	75	114	66
2	HAR_Total (mgCaCO ₃ /L)	192	168	181	141
3	Na% (%)	48	46	46	44
4	RSC (-)	0.0	0.1	0.4	0.1
5	SAR (-)	2.7	2.3	2.4	2.0
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUSIRI (CC000G4)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	1.439	3.648	49.04	10.09
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	603	520	446	683
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	602	520	521	683
4	pH_FLD (pH units)	8.0	8.0	8.0	8.2
5	pH_GEN (pH units)	8.0	8.0	8.1	8.3
6	TDS (mg/L)		276	301	389
7	Temp (deg C)	27.3	28.2	26.7	28.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	6.4	7.7	0.0
2	ALK-TOT (mgCaCO ₃ /L)	195	168	150	189
3	B (mg/L)			0.04	0.15
4	Ca (mg/L)	35	32	18	37
5	Cl (mg/L)	85.9	66.7	71.5	93.4
6	CO ₃ (mg/L)	0.0	7.8	9.2	0.0
7	F (mg/L)	0.60	0.41	0.43	0.47
8	Fe (mg/L)	0.028	0.049	0.000	0.010
9	HCO ₃ (mg/L)	238	189	164	231
10	K (mg/L)	5.5	4.9	6.1	7.3
11	Mg (mg/L)	26.3	24.7	24.8	29.2
12	Na (mg/L)	62.8	51.1	54.3	70.6
13	NH ₃ -N (mg N/L)	0.23	0.71	0.24	0.05
14	NO ₂ +NO ₃ (mg N/L)			0.80	3.92
15	NO ₂ -N (mgN/L)			0.00	0.00
16	NO ₃ -N (mgN/L)	0.12	0.37	0.80	3.92
17	o-PO ₄ -P (mg P/L)			0.030	0.033
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)			18.7	18.3
20	SO ₄ (mg/L)	24.2	24.9	26.8	35.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.6	1.7	3.4	1.7
2	COD (mg/L)	8.5	7.8	11.7	12.0
3	DO (mg/L)	6.3	6.5	7.0	6.6
4	DO_SAT% (%)	79	83	87	84
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	0.62	3.34		
2	Cd ($\mu\text{g}/\text{L}$)	0.01	0.01		
3	Cr ($\mu\text{g}/\text{L}$)	0.44	0.79		
4	Cu ($\mu\text{g}/\text{L}$)	0.82	2.15		
5	Hg ($\mu\text{g}/\text{L}$)	0.25			
6	Ni ($\mu\text{g}/\text{L}$)	8.72	8.59		
7	Pb ($\mu\text{g}/\text{L}$)	1.27	1.41		
8	Zn ($\mu\text{g}/\text{L}$)	0.60	5.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	88	79	45	93
2	HAR_Total (mgCaCO ₃ /L)	198	182	149	215
3	Na% (%)	40	37	44	41
4	RSC (-)	0.0	0.0	0.1	0.0
5	SAR (-)	1.9	1.7	2.0	2.1
PESTICIDES					

HISTORY SHEET

		Water Year	: 2015-2016
Site	: NALLAMARANPATTY	Code	: CCD00D5
State	: Tamil Nadu	District	Karur
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Amaravathi	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Amaravathi
Division	: SR Division, Coimbatore	Sub-Division	: Lower Cauvery SD, Trichi
Drainage Area	: 9080 Sq. Km.	Bank	: Right
Latitude	: 10°52'51"	Longitude	: 77°59'05"
Zero of Gauge (m)	: 129.000 (m.s.l) 126.000 (m.s.l)	12/07/1977 01/06/2010	- 31/05/2010
	Opening Date	Closing Date	
Gauge	: 12/07/1977		
Discharge	: 23/01/1978		
Sediment	: 10/12/1978		
Water Quality	: 16/08/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name :NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water Analysis

Division :SR Division, Coimbatore

Sub-Division :Lower Cauvery SD, Trichi

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	Dry Bed	0.000
2	Colour_Cod (-)			
3	EC_FLD ($\mu\text{mho}/\text{cm}$)			
4	EC_GEN ($\mu\text{mho}/\text{cm}$)			
5	Odour_Code (-)			
6	pH_FLD (pH units)			
7	pH_GEN (pH units)			
8	TDS (mg/L)			
9	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
2	COD (mg/L)			
3	DO (mg/L)			
4	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water Analysis

Division :SR Division, Coimbatore

Sub-Division :Lower Cauvery SD, Trichi

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	21.080	Dry Bed
2	Colour_Cod (-)		Clear	
3	EC_FLD ($\mu\text{mho}/\text{cm}$)		234	
4	EC_GEN ($\mu\text{mho}/\text{cm}$)		234	
5	Odour_Code (-)		odour free	
6	pH_FLD (pH units)		7.9	
7	pH_GEN (pH units)		7.9	
8	TDS (mg/L)		136	
9	Temp (deg C)		29.0	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	
2	ALK-TOT (mgCaCO ₃ /L)		84	
3	B (mg/L)		0.00	
4	Ca (mg/L)		25	
5	Cl (mg/L)		19.2	
6	CO ₃ (mg/L)		0.0	
7	F (mg/L)			
8	Fe (mg/L)		0.000	
9	HCO ₃ (mg/L)		103	
10	K (mg/L)		3.8	
11	Mg (mg/L)		7.7	
12	Na (mg/L)		13.8	
13	NH ₃ -N (mg N/L)		0.28	
14	NO ₂ +NO ₃ (mg N/L)		1.26	
15	NO ₂ -N (mgN/L)		0.01	
16	NO ₃ -N (mgN/L)		1.25	
17	o-PO ₄ -P (mg P/L)		0.000	
18	SiO ₂ (mg/L)		16.5	
19	SO ₄ (mg/L)		9.8	
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		3.7	
2	COD (mg/L)		14.5	
3	DO (mg/L)		8.9	
4	DO_SAT% (%)		116	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		63	
2	HAR_Total (mgCaCO ₃ /L)		95	
3	Na% (%)		23	
4	RSC (-)		0.0	
5	SAR (-)		0.6	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water Analysis

Division :SR Division, Coimbatore

Sub-Division :Lower Cauvery SD, Trichi

S.No	Parameters	21/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	11.760	0.000	0.000
2	Colour_Cod (-)	Clear		
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	646		
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	646		
5	Odour_Code (-)	odour free		
6	pH_FLD (pH units)	8.3		
7	pH_GEN (pH units)	8.3		
8	TDS (mg/L)	369		
9	Temp (deg C)	25.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	26.7		
2	ALK-TOT (mgCaCO ₃ /L)	142		
3	B (mg/L)	0.02		
4	Ca (mg/L)	51		
5	Cl (mg/L)	121.2		
6	CO ₃ (mg/L)	32.2		
7	F (mg/L)	0.49		
8	Fe (mg/L)	0.020		
9	HCO ₃ (mg/L)	107		
10	K (mg/L)	6.8		
11	Mg (mg/L)	21.1		
12	Na (mg/L)	64.3		
13	NH ₃ -N (mg N/L)	0.17		
14	NO ₂ +NO ₃ (mg N/L)	3.65		
15	NO ₂ -N (mgN/L)	0.04		
16	NO ₃ -N (mgN/L)	3.61		
17	o-PO ₄ -P (mg P/L)	0.340		
18	SiO ₂ (mg/L)	19.0		
19	SO ₄ (mg/L)	30.9		
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	5.7		
2	COD (mg/L)	30.9		
3	DO (mg/L)	8.9		
4	DO_SAT% (%)	108		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	126		
2	HAR_Total (mgCaCO ₃ /L)	214		
3	Na% (%)	39		
4	RSC (-)	0.0		
5	SAR (-)	1.9		
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water Analysis

Division :SR Division, Coimbatore

Sub-Division :Lower Cauvery SD, Trichi

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_FLD ($\mu\text{mho}/\text{cm}$)			
4	EC_GEN ($\mu\text{mho}/\text{cm}$)			
5	Odour_Code (-)			
6	pH_FLD (pH units)			
7	pH_GEN (pH units)			
8	TDS (mg/L)			
9	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
2	COD (mg/L)			
3	DO (mg/L)			
4	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

Division : SR Division, Coimbatore

River Water Summary

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	672	0.000	11.32
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	2	646	234	440
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	2	646	234	440
4	pH_FLD (pH units)	2	8.3	7.9	8.1
5	pH_GEN (pH units)	2	8.3	7.9	8.1
6	TDS (mg/L)	2	369	136	253
7	Temp (deg C)	2	29.0	25.0	27
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	2	26.7	0.0	13.3
2	ALK-TOT (mgCaCO ₃ /L)	2	142	84	113
3	B (mg/L)	2	0.02	0.00	0.01
4	Ca (mg/L)	2	51	25	38
5	Cl (mg/L)	2	121.2	19.2	70.2
6	CO ₃ (mg/L)	2	32.2	0.0	16.1
7	F (mg/L)	1	0.49	0.49	0.49
8	Fe (mg/L)	2	0.020	0.000	0.01
9	HCO ₃ (mg/L)	2	107	103	105
10	K (mg/L)	2	6.8	3.8	5.3
11	Mg (mg/L)	2	21.1	7.7	14.4
12	Na (mg/L)	2	64.3	13.8	39.1
13	NH ₃ -N (mg N/L)	2	0.28	0.17	0.22
14	NO ₂ +NO ₃ (mg N/L)	2	3.65	1.26	2.45
15	NO ₂ -N (mgN/L)	2	0.04	0.01	0.02
16	NO ₃ -N (mgN/L)	2	3.61	1.25	2.43
17	o-PO ₄ -P (mg P/L)	2	0.340	0.000	0.17
18	SiO ₂ (mg/L)	2	19.0	16.5	17.7
19	SO ₄ (mg/L)	2	30.9	9.8	20.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	2	5.7	3.7	4.7
2	COD (mg/L)	2	30.9	14.5	22.7
3	DO (mg/L)	2	8.9	8.9	8.9
4	DO_SAT% (%)	2	116	108	112
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	2	126	63	95
2	HAR_Total (mgCaCO ₃ /L)	2	214	95	155
3	Na% (%)	2	39	23	31
4	RSC (-)	2	0.0	0.0	0
5	SAR (-)	2	1.9	0.6	1.3
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	1.179	3.741	0.000	1.375	0.522
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	354			385	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	353	255		271	262
4	pH_FLD (pH units)	8.5			8.0	
5	pH_GEN (pH units)	8.2	8.6		8.7	8.3
6	TDS (mg/L)					
7	Temp (deg C)	28.5	25.3		26.0	26.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	7.4	5.4		13.1	0.0
2	ALK-TOT (mgCaCO ₃ /L)	117	90		105	102
3	B (mg/L)	0.15	0.34		0.26	0.16
4	Ca (mg/L)	25	20		19	22
5	Cl (mg/L)	30.5	21.0		21.1	19.0
6	CO ₃ (mg/L)	8.9	6.6		15.8	0.0
7	F (mg/L)	0.50	0.47		0.47	0.33
8	Fe (mg/L)	0.066	0.065		0.062	0.310
9	HCO ₃ (mg/L)	125	97		97	125
10	K (mg/L)	4.0	2.5		3.5	2.3
11	Mg (mg/L)	11.1	8.1		8.8	11.6
12	Na (mg/L)	31.5	20.6		27.2	22.0
13	NH ₃ -N (mg N/L)	0.07	0.06		0.06	0.13
14	NO ₂ +NO ₃ (mg N/L)	0.99	1.19		0.77	
15	NO ₂ -N (mgN/L)	0.11	0.03		0.02	
16	NO ₃ -N (mgN/L)	0.88	1.17		0.76	0.06
17	o-PO ₄ -P (mg P/L)				0.010	0.050
18	P-Tot (mgP/L)	0.024	0.018			
19	SiO ₂ (mg/L)	18.9	19.9		19.8	17.2
20	SO ₄ (mg/L)	15.3	12.2		13.3	10.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.0			1.8	
2	COD (mg/L)					
3	DO (mg/L)	7.7			9.0	
4	DO_SAT% (%)	99			111	
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	62	49		48	56
2	HAR_Total (mgCaCO ₃ /L)	109	83		85	104
3	Na% (%)	37	34		40	31
4	RSC (-)	0.2	0.1		0.4	0.0
5	SAR (-)	1.3	1.0		1.3	0.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	0.000	0.000	0.000	1.243	1.202
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				214	108
3	EC_GEN ($\mu\text{mho}/\text{cm}$)				214	146
4	pH_FLD (pH units)				7.9	7.7
5	pH_GEN (pH units)				7.9	7.7
6	TDS (mg/L)					77
7	Temp (deg C)				27.5	27.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)				0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)				86	54
3	B (mg/L)					
4	Ca (mg/L)				27	14
5	Cl (mg/L)				20.1	15.0
6	CO ₃ (mg/L)				0.0	0.0
7	F (mg/L)				0.32	0.20
8	Fe (mg/L)					
9	HCO ₃ (mg/L)				105	66
10	K (mg/L)				3.5	2.2
11	Mg (mg/L)				6.7	6.5
12	Na (mg/L)				14.0	8.5
13	NH ₃ -N (mg N/L)				0.11	0.06
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)				0.01	0.41
17	o-PO ₄ -P (mg P/L)					
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)					
20	SO ₄ (mg/L)				14.3	6.3
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)				4.3	1.4
2	COD (mg/L)				17.8	2.2
3	DO (mg/L)				8.8	8.8
4	DO_SAT% (%)				111	111
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)				67	35
2	HAR_Total (mgCaCO ₃ /L)				95	62
3	Na% (%)				24	22
4	RSC (-)				0.0	0.0
5	SAR (-)				0.6	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	4.216	35.380	7.470	12.750	14.580
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	234	571	628	599	593
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	234	542	669	603	563
4	pH_FLD (pH units)	7.9	8.0	8.2	7.8	8.1
5	pH_GEN (pH units)	7.9	8.3	8.7	8.3	8.3
6	TDS (mg/L)	136				
7	Temp (deg C)	29.0	25.5	26.0	24.7	21.7
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	15.0	12.8	6.7	14.6
2	ALK-TOT (mgCaCO ₃ /L)	84	161	205	136	166
3	B (mg/L)	0.00	0.27	0.32	0.28	0.03
4	Ca (mg/L)	25	30	43	35	34
5	Cl (mg/L)	19.2	52.0	73.4	96.3	85.6
6	CO ₃ (mg/L)	0.0	18.1	15.4	8.1	17.6
7	F (mg/L)		0.62	0.52	0.52	0.80
8	Fe (mg/L)	0.000	0.076	0.062	0.063	0.089
9	HCO ₃ (mg/L)	103	160	219	150	167
10	K (mg/L)	3.8	4.5	6.0	4.6	3.7
11	Mg (mg/L)	7.7	22.1	25.3	19.6	23.1
12	Na (mg/L)	13.8	50.9	62.5	55.4	72.2
13	NH ₃ -N (mg N/L)	0.28	0.21		0.06	
14	NO ₂ +NO ₃ (mg N/L)	1.26	2.09		2.37	
15	NO ₂ -N (mgN/L)	0.01	0.02		0.03	
16	NO ₃ -N (mgN/L)	1.25	2.07		2.35	0.39
17	o-PO ₄ -P (mg P/L)	0.000				0.010
18	P-Tot (mgP/L)		0.028	0.039	0.019	
19	SiO ₂ (mg/L)	16.5	21.7	28.7	20.0	2.5
20	SO ₄ (mg/L)	9.8	34.6	48.2	21.5	44.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	3.7	2.1	2.2	1.8	1.1
2	COD (mg/L)	14.5				
3	DO (mg/L)	8.9	8.2	8.4	8.1	8.0
4	DO_SAT% (%)	116	100	104	97	91
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	63	75	108	88	84
2	HAR_Total (mgCaCO ₃ /L)	95	167	214	170	180
3	Na% (%)	23	39	38	37	44
4	RSC (-)	0.0	0.2	0.0	0.1	0.0
5	SAR (-)	0.6	1.7	1.9	1.7	2.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	8.412	37.280	49.490	0.000	0.000
2	EC_FLD ($\mu\text{mho}/\text{cm}$)		483	518		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	491	569	518		
4	pH_FLD (pH units)		8.3	7.9		
5	pH_GEN (pH units)	8.5	8.3	7.9		
6	TDS (mg/L)					
7	Temp (deg C)	22.8	24.3	25.1		
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	21.7	15.9	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	192	164	128		
3	B (mg/L)	0.14	0.12			
4	Ca (mg/L)	38	38	36		
5	Cl (mg/L)	53.0	122.2	102.3		
6	CO ₃ (mg/L)	26.1	19.2	0.0		
7	F (mg/L)	0.64	0.64	0.34		
8	Fe (mg/L)	0.055	0.014	0.090		
9	HCO ₃ (mg/L)	181	161	156		
10	K (mg/L)	4.3	5.3	4.8		
11	Mg (mg/L)	21.4	20.4	18.7		
12	Na (mg/L)	48.5	76.1	61.1		
13	NH ₃ -N (mg N/L)	0.07	0.03			
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	0.88	3.46	1.80		
17	o-PO ₄ -P (mg P/L)	0.017	0.069			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	23.4	23.6			
20	SO ₄ (mg/L)	50.8	33.6	22.0		
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.3	1.6		
2	COD (mg/L)					
3	DO (mg/L)		8.1	8.1		
4	DO_SAT% (%)		97	98		
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.42		
2	Cd ($\mu\text{g}/\text{L}$)			0.17		
3	Cr ($\mu\text{g}/\text{L}$)			3.11		
4	Cu ($\mu\text{g}/\text{L}$)			13.01		
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)			4.90		
7	Zn ($\mu\text{g}/\text{L}$)			8.80		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	95	95	91		
2	HAR_Total (mgCaCO ₃ /L)	184	180	169		
3	Na% (%)	36	47	43		
4	RSC (-)	0.2	0.1	0.0		
5	SAR (-)	1.5	2.6	2.0		
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	11.950	2.939	0.000	0.000	2.720
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	395	646			866
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	395	646			866
4	pH_FLD (pH units)	7.7	8.3			6.8
5	pH_GEN (pH units)	7.8	8.3			8.6
6	TDS (mg/L)	224	369			
7	Temp (deg C)	26.5	25.0			25.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	26.7			17.3
2	ALK-TOT (mgCaCO ₃ /L)	126	142			174
3	B (mg/L)		0.02			0.31
4	Ca (mg/L)	25	51			35
5	Cl (mg/L)	43.9	121.2			148.5
6	CO ₃ (mg/L)	0.0	32.2			20.9
7	F (mg/L)	0.24	0.49			0.73
8	Fe (mg/L)	0.016	0.020			0.070
9	HCO ₃ (mg/L)	153	107			170
10	K (mg/L)	4.7	6.8			6.5
11	Mg (mg/L)	21.3	21.1			29.2
12	Na (mg/L)	31.1	64.3			93.0
13	NH ₃ -N (mg N/L)	0.18	0.17			0.05
14	NO ₂ +NO ₃ (mg N/L)	0.06	3.65			1.36
15	NO ₂ -N (mgN/L)	0.00	0.04			0.00
16	NO ₃ -N (mgN/L)	1.44	3.61			1.36
17	o-PO ₄ -P (mg P/L)	0.000	0.340			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	17.0	19.0			29.5
20	SO ₄ (mg/L)	25.3	30.9			36.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.6	5.7			0.8
2	COD (mg/L)	9.3	30.9			
3	DO (mg/L)	8.4	8.9			8.5
4	DO_SAT% (%)	104	108			103
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	0.56				
3	Cr ($\mu\text{g}/\text{L}$)	21.12				
4	Cu ($\mu\text{g}/\text{L}$)	11.91				
5	Ni ($\mu\text{g}/\text{L}$)	0.81				
6	Pb ($\mu\text{g}/\text{L}$)	2.52				
7	Zn ($\mu\text{g}/\text{L}$)	2.50				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	61	126			88
2	HAR_Total (mgCaCO ₃ /L)	150	214			210
3	Na% (%)	30	39			48
4	RSC (-)	0.0	0.0			0.0
5	SAR (-)	1.1	1.9			2.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Summer Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.000	0.000
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)				
4	pH_FLD (pH units)				
5	pH_GEN (pH units)				
6	TDS (mg/L)				
7	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	B (mg/L)				
4	Ca (mg/L)				
5	Cl (mg/L)				
6	CO ₃ (mg/L)				
7	F (mg/L)				
8	Fe (mg/L)				
9	HCO ₃ (mg/L)				
10	K (mg/L)				
11	Mg (mg/L)				
12	Na (mg/L)				
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)				
17	o-PO ₄ -P (mg P/L)				
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)				
20	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
2	COD (mg/L)				
3	DO (mg/L)				
4	DO_SAT% (%)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NALLAMARANPATTY(CCD00D5)

Local River : Amaravathi

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD,Trichi

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.000	0.000
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)				
4	pH_FLD (pH units)				
5	pH_GEN (pH units)				
6	TDS (mg/L)				
7	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	B (mg/L)				
4	Ca (mg/L)				
5	Cl (mg/L)				
6	CO ₃ (mg/L)				
7	F (mg/L)				
8	Fe (mg/L)				
9	HCO ₃ (mg/L)				
10	K (mg/L)				
11	Mg (mg/L)				
12	Na (mg/L)				
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)				
17	o-PO ₄ -P (mg P/L)				
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)				
20	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
2	COD (mg/L)				
3	DO (mg/L)				
4	DO_SAT% (%)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

HISTORY SHEET

		Water Year : 2015-2016
Site	: ELUNUTHIMANGALAM	Code
State	: Tamil Nadu	District
Basin	: Cauvery	Independent River : Cauvery
Tributary	: Noyyal	Sub Tributary : -
Sub-Sub Tributary	: -	Local River : Noyyal
Division	: SR Division, Coimbatore	Sub-Division : Lower Cauvery SD, Trichi
Drainage Area	: 3386 Sq. Km.	Bank : Left
Latitude	: 11°01'54"	Longitude : 77°53'15"
Zero of Gauge (m)	: 129.000 (m.s.l)	27/11/1997
	Opening Date	Closing Date
Gauge	: 27/11/1997	
Discharge	: 07/08/1998	
Sediment	: 01/03/2013	
Water Quality	: 03/10/2000	

Water Quality Datasheet for the period : 2015-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	2.299	42.050	1.530
2	Colour_Cod (-)	Light Green	Light Brown	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	3091	1013	4984
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	3091	1013	4984
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.3	8.0	8.5
7	pH_GEN (pH units)	8.3	8.0	8.5
8	TDS (mg/L)	1799	589	2842
9	Temp (deg C)	27.0	29.0	27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	37.9	0.0	19.2
2	ALK-TOT (mgCaCO ₃ /L)	350	175	425
3	B (mg/L)	0.31	0.10	
4	Ca (mg/L)	62	51	59
5	Cl (mg/L)	642.8	181.0	1175.3
6	CO ₃ (mg/L)	45.7	0.0	23.2
7	F (mg/L)	0.89	0.40	
8	Fe (mg/L)	0.060	0.000	0.030
9	HCO ₃ (mg/L)	335	214	472
10	K (mg/L)	29.8	13.8	44.6
11	Mg (mg/L)	111.7	32.7	132.8
12	Na (mg/L)	452.0	131.0	859.0
13	NH ₃ -N (mg N/L)	0.76	1.10	0.57
14	NO ₂ +NO ₃ (mg N/L)	8.81	4.77	9.36
15	NO ₂ -N (mgN/L)	0.25	0.00	0.01
16	NO ₃ -N (mgN/L)	8.56	4.77	9.35
17	o-PO ₄ -P (mg P/L)	1.250	0.750	0.500
18	SiO ₂ (mg/L)	30.5	18.0	36.7
19	SO ₄ (mg/L)	308.3	83.1	360.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	4.1	2.7	5.7
2	COD (mg/L)	32.6	24.2	52.2
3	DO (mg/L)	5.1	6.0	5.7
4	DO_SAT% (%)	64	78	72
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	155	127	147
2	HAR_Total (mgCaCO ₃ /L)	620	263	700
3	Na% (%)	60	51	71
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	7.9	3.5	14.2
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	1.015	4.717	82.840
2	Colour_Cod (-)	Light Green	Light Brown	Light Brown
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	4995	3761	1069
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	4995	3761	1069
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.9	8.3	8.0
7	pH_GEN (pH units)	8.9	8.3	8.0
8	TDS (mg/L)	2849	2184	622
9	Temp (deg C)	28.5	28.5	26.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	57.7	61.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	448	459	237
3	B (mg/L)		0.34	0.23
4	Ca (mg/L)	76	103	51
5	Cl (mg/L)	1157.9	771.3	180.8
6	CO ₃ (mg/L)	69.6	73.5	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.050	0.080	0.050
9	HCO ₃ (mg/L)	405	411	290
10	K (mg/L)	46.7	37.2	15.8
11	Mg (mg/L)	107.8	90.0	39.3
12	Na (mg/L)	839.0	591.0	136.5
13	NH ₃ -N (mg N/L)	0.08	0.25	0.18
14	NO ₂ +NO ₃ (mg N/L)	10.55	18.81	7.82
15	NO ₂ -N (mgN/L)	0.45	0.01	0.02
16	NO ₃ -N (mgN/L)	10.10	18.80	7.80
17	o-PO ₄ -P (mg P/L)	0.970	1.750	0.440
18	SiO ₂ (mg/L)	39.5	55.9	28.3
19	SO ₄ (mg/L)	356.8	389.6	81.8
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	5.1	3.7	4.4
2	COD (mg/L)	45.8	35.4	40.0
3	DO (mg/L)	5.1	3.7	6.6
4	DO_SAT% (%)	65	47	81
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	190	257	126
2	HAR_Total (mgCaCO ₃ /L)	640	632	290
3	Na% (%)	72	66	49
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	14.5	10.3	3.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	22.010	35.640	2.641
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	1801	829	2805
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	1801	2829	2805
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.4	8.5	8.4
7	pH_GEN (pH units)	8.4	8.5	8.4
8	TDS (mg/L)	1046	1620	1589
9	Temp (deg C)	26.5	26.5	26.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	30.5	38.1	45.7
2	ALK-TOT (mgCaCO ₃ /L)	337	513	452
3	B (mg/L)	0.27	0.33	0.39
4	Ca (mg/L)	57	49	66
5	Cl (mg/L)	317.4	516.9	513.4
6	CO ₃ (mg/L)	36.8	45.9	55.1
7	F (mg/L)	1.07	1.00	1.27
8	Fe (mg/L)	0.020	0.030	0.000
9	HCO ₃ (mg/L)	336	532	439
10	K (mg/L)	20.0	19.8	25.0
11	Mg (mg/L)	75.7	186.8	102.5
12	Na (mg/L)	242.0	302.5	372.0
13	NH ₃ -N (mg N/L)	0.08	0.81	0.70
14	NO ₂ +NO ₃ (mg N/L)	12.40	6.90	11.70
15	NO ₂ -N (mgN/L)	0.00	0.02	0.00
16	NO ₃ -N (mgN/L)	12.40	6.88	11.70
17	o-PO ₄ -P (mg P/L)	1.750	0.570	1.300
18	SiO ₂ (mg/L)	30.3	50.5	58.6
19	SO ₄ (mg/L)	153.0	307.8	229.3
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.9	2.3	3.9
2	COD (mg/L)	17.0	20.2	30.4
3	DO (mg/L)	6.1	6.8	5.4
4	DO_SAT% (%)	75	84	67
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	142	122	166
2	HAR_Total (mgCaCO ₃ /L)	457	901	593
3	Na% (%)	52	42	57
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	4.9	4.4	6.7
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	2.625	0.000	0.000
2	Colour_Cod (-)	Light Green		
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	4060		
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	4060		
5	Odour_Code (-)	odour free		
6	pH_FLD (pH units)	8.9		
7	pH_GEN (pH units)	8.9		
8	TDS (mg/L)	2352		
9	Temp (deg C)	27.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	93.1		
2	ALK-TOT (mgCaCO ₃ /L)	437		
3	B (mg/L)	0.63		
4	Ca (mg/L)	99		
5	Cl (mg/L)	871.6		
6	CO ₃ (mg/L)	112.2		
7	F (mg/L)	1.52		
8	Fe (mg/L)	0.000		
9	HCO ₃ (mg/L)	306		
10	K (mg/L)	36.1		
11	Mg (mg/L)	95.3		
12	Na (mg/L)	643.0		
13	NH ₃ -N (mg N/L)	0.03		
14	NO ₂ +NO ₃ (mg N/L)	20.20		
15	NO ₂ -N (mgN/L)	0.00		
16	NO ₃ -N (mgN/L)	20.20		
17	o-PO ₄ -P (mg P/L)	1.050		
18	SiO ₂ (mg/L)	46.3		
19	SO ₄ (mg/L)	347.5		
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	3.7		
2	COD (mg/L)	15.2		
3	DO (mg/L)	3.7		
4	DO_SAT% (%)	46		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	248		
2	HAR_Total (mgCaCO ₃ /L)	645		
3	Na% (%)	67		
4	RSC (-)	0.0		
5	SAR (-)	11.1		
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

Division : SR Division, Coimbatore

River Water Summary

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	101.4	0.000	14.86
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	10	4995	829	2841
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	10	4995	1013	3041
4	pH_FLD (pH units)	10	8.9	8.0	8.4
5	pH_GEN (pH units)	10	8.9	8.0	8.4
6	TDS (mg/L)	10	2849	589	1749
7	Temp (deg C)	10	29.0	26.5	27.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	10	93.1	0.0	38.3
2	ALK-TOT (mgCaCO ₃ /L)	10	513	175	383
3	B (mg/L)	8	0.63	0.10	0.33
4	Ca (mg/L)	10	103	49	67
5	Cl (mg/L)	10	1175.3	180.8	632.8
6	CO ₃ (mg/L)	10	112.2	0.0	46.2
7	F (mg/L)	6	1.52	0.40	1.02
8	Fe (mg/L)	10	0.080	0.000	0.032
9	HCO ₃ (mg/L)	10	532	214	374
10	K (mg/L)	10	46.7	13.8	28.9
11	Mg (mg/L)	10	186.8	32.7	97.5
12	Na (mg/L)	10	859.0	131.0	456.8
13	NH ₃ -N (mg N/L)	10	1.10	0.03	0.46
14	NO ₂ +NO ₃ (mg N/L)	10	20.20	4.77	11.13
15	NO ₂ -N (mgN/L)	10	0.45	0.00	0.08
16	NO ₃ -N (mgN/L)	10	20.20	4.77	11.06
17	o-PO ₄ -P (mg P/L)	10	1.750	0.440	1.033
18	SiO ₂ (mg/L)	10	58.6	18.0	39.4
19	SO ₄ (mg/L)	10	389.6	81.8	261.8
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	10	5.7	1.9	3.7
2	COD (mg/L)	10	52.2	15.2	31.3
3	DO (mg/L)	10	6.8	3.7	5.4
4	DO_SAT% (%)	10	84	46	68
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	10	257	122	168
2	HAR_Total (mgCaCO ₃ /L)	10	901	263	574
3	Na% (%)	10	72	42	59
4	RSC (-)	10	0.0	0.0	0
5	SAR (-)	10	14.5	3.5	8.1
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

River Water

Division : SR Division, Coimbatore

Local River : Noyyal

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	3.106	1.350	4.549	2.618	1.612
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	8041	8546	4940	5864	7332
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	7971	7257	4342	6242	7232
4	pH_FLD (pH units)	8.4	8.6	8.4	8.5	8.5
5	pH_GEN (pH units)	8.2	8.6	8.3	8.7	8.5
6	TDS (mg/L)					
7	Temp (deg C)	27.9	27.5	27.9	21.6	27.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	13.5	45.1	28.7	62.5	76.7
2	ALK-TOT (mgCaCO ₃ /L)	243	478	356	554	645
3	B (mg/L)	0.37	0.61	0.47	0.63	0.49
4	Ca (mg/L)	116	106	94	100	123
5	Cl (mg/L)	2471.9	1926.0	1099.2	1697.7	2128.1
6	CO ₃ (mg/L)	16.3	54.4	34.6	75.3	92.4
7	F (mg/L)	0.99	1.43	1.17	1.27	1.01
8	Fe (mg/L)	0.118	0.095	0.101	0.106	0.201
9	HCO ₃ (mg/L)	263	473	364	523	599
10	K (mg/L)	47.0	40.3	27.0	44.3	46.2
11	Mg (mg/L)	119.1	108.3	74.2	93.8	103.5
12	Na (mg/L)	1530.9	1363.4	792.2	1169.2	1443.5
13	NH ₃ -N (mg N/L)	0.13	0.08	0.08	0.44	0.17
14	NO ₂ +NO ₃ (mg N/L)	10.65	12.69	15.74	16.89	
15	NO ₂ -N (mgN/L)	0.34	0.31	0.19	1.11	
16	NO ₃ -N (mgN/L)	10.30	12.37	15.55	15.78	9.00
17	o-PO ₄ -P (mg P/L)				0.856	0.987
18	P-Tot (mgP/L)	0.170	0.557	0.610		
19	SiO ₂ (mg/L)	35.6	46.4	36.6	37.2	56.0
20	SO ₄ (mg/L)	267.9	381.3	233.6	244.6	463.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.5	5.2	1.9	3.0	2.5
2	COD (mg/L)					
3	DO (mg/L)	6.4	6.2	6.1	6.3	6.4
4	DO_SAT% (%)	82	79	77	71	80
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	291	265	234	249	308
2	HAR_Total (mgCaCO ₃ /L)	787	716	543	640	739
3	Na% (%)	78	77	73	77	79
4	RSC (-)	0.0	0.0	0.0	0.4	0.0
5	SAR (-)	23.4	21.2	14.1	20.4	22.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

River Water

Division : SR Division, Coimbatore

Local River : Noyyal

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	1.358	0.929	0.167	2.902	0.892
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	5178	2990	3210	2198	1872
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	5178	2990	3210	2198	1872
4	pH_FLD (pH units)	8.4	8.1	8.8	8.5	7.4
5	pH_GEN (pH units)	8.7	8.6	8.8	8.5	7.4
6	TDS (mg/L)					998
7	Temp (deg C)	27.8	25.8	29.0	25.0	29.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	131.5	45.4	39.3	27.3	0.0
2	ALK-TOT (mgCaCO ₃ /L)	634	354	394	306	215
3	B (mg/L)	0.37				
4	Ca (mg/L)	118	68	45	80	45
5	Cl (mg/L)	1597.1	885.8	787.0	539.9	411.9
6	CO ₃ (mg/L)	158.4	54.7	47.3	32.9	0.0
7	F (mg/L)	1.52	1.21	0.52	0.81	0.50
8	Fe (mg/L)	0.128				
9	HCO ₃ (mg/L)	452	321	385	306	263
10	K (mg/L)	46.9	28.7	31.0	22.9	22.5
11	Mg (mg/L)	99.7	91.8	86.5	53.7	45.8
12	Na (mg/L)	1185.2	578.2	517.0	401.0	316.0
13	NH ₃ -N (mg N/L)	0.16			0.31	0.02
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mg N/L)					
16	NO ₃ -N (mgN/L)	20.78	4.39	1.58	2.52	9.42
17	o-PO ₄ -P (mg P/L)	1.634				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	57.0				
20	SO ₄ (mg/L)	489.5	223.1	211.0	161.3	143.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	3.4	4.0	4.5	4.3	5.5
2	COD (mg/L)				30.0	14.5
3	DO (mg/L)	6.1	5.9	5.8	5.8	5.8
4	DO_SAT% (%)	77	71	75	70	75
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	295	169	112	201	112
2	HAR_Total (mgCaCO ₃ /L)	710	552	473	425	303
3	Na% (%)	76	68	69	66	68
4	RSC (-)	0.4	0.0	0.0	0.0	0.0
5	SAR (-)	19.4	10.8	10.4	8.5	7.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	10.320	8.549	12.060	11.170	7.857
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	3569	3284	2853	2624	2644
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	3569	3313	2990	2594	2494
4	pH_FLD (pH units)	8.4	8.3	8.4	8.5	8.5
5	pH_GEN (pH units)	8.4	8.5	8.4	8.5	8.4
6	TDS (mg/L)	2053				
7	Temp (deg C)	28.0	26.6	26.5	23.6	20.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	35.2	37.6	26.2	24.2	32.3
2	ALK-TOT (mgCaCO ₃ /L)	372	317	358	336	395
3	B (mg/L)	0.25	0.43	0.57	0.43	0.16
4	Ca (mg/L)	70	88	92	81	88
5	Cl (mg/L)	785.7	800.6	655.6	566.4	626.6
6	CO ₃ (mg/L)	42.4	45.2	31.6	29.2	38.9
7	F (mg/L)	0.64	0.94	1.30	1.22	1.35
8	Fe (mg/L)	0.044	0.105	0.097	0.093	0.128
9	HCO ₃ (mg/L)	367	295	373	351	403
10	K (mg/L)	34.4	22.0	20.0	17.5	19.2
11	Mg (mg/L)	95.0	86.1	71.0	69.0	69.4
12	Na (mg/L)	574.4	498.8	471.3	369.4	408.5
13	NH ₃ -N (mg N/L)	0.55	0.09	0.11	0.06	
14	NO ₂ +NO ₃ (mg N/L)	10.46	8.50	11.37	7.03	
15	NO ₂ -N (mgN/L)	0.14	0.26	0.15	0.05	
16	NO ₃ -N (mgN/L)	10.32	8.24	11.22	6.98	6.07
17	o-PO ₄ -P (mg P/L)	1.044				0.913
18	P-Tot (mgP/L)		0.367	0.619	0.519	
19	SiO ₂ (mg/L)	36.1	40.5	33.7	32.6	2.4
20	SO ₄ (mg/L)	299.7	153.6	228.8	155.0	201.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	4.2	2.9	2.3	3.1	1.9
2	COD (mg/L)	38.0				
3	DO (mg/L)	5.1	7.1	6.5	6.6	6.2
4	DO_SAT% (%)	65	89	80	78	68
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	175	220	230	202	220
2	HAR_Total (mgCaCO ₃ /L)	571	578	526	490	510
3	Na% (%)	64	62	62	61	60
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	10.1	9.0	8.6	7.2	7.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	9.292	13.430	21.050	0.323	2.143
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	2642	2385	1425	3340	1805
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	2244	2385	1425	3340	1805
4	pH_FLD (pH units)	8.4	8.4	8.1	8.1	8.5
5	pH_GEN (pH units)	8.4	8.4	8.3	8.4	8.7
6	TDS (mg/L)					
7	Temp (deg C)	27.5	26.4	24.9	25.3	27.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	48.2	41.8	29.5	39.6	43.0
2	ALK-TOT (mgCaCO ₃ /L)	393	390	277	354	356
3	B (mg/L)	0.38	0.42			
4	Ca (mg/L)	85	90	82	131	69
5	Cl (mg/L)	496.7	623.6	347.1	782.0	370.0
6	CO ₃ (mg/L)	58.1	50.4	35.5	47.8	51.8
7	F (mg/L)	1.08	1.18	0.91	0.18	0.94
8	Fe (mg/L)	0.174	0.000	0.090		
9	HCO ₃ (mg/L)	362	373	266	335	329
10	K (mg/L)	17.1	19.4	13.5	29.0	14.7
11	Mg (mg/L)	56.8	73.4	42.8	84.6	53.9
12	Na (mg/L)	327.5	397.0	221.0	492.0	266.2
13	NH ₃ -N (mg N/L)	0.06	0.03			0.14
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	6.32	9.19	3.63	2.85	2.72
17	o-PO ₄ -P (mg P/L)	0.760	0.790			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	44.7	39.8			
20	SO ₄ (mg/L)	174.7	173.3	104.7	238.9	100.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.8	1.6	3.3	5.0	3.6
2	COD (mg/L)				43.1	17.9
3	DO (mg/L)	6.2	5.9	5.8	6.1	5.9
4	DO_SAT% (%)	77	72	70	74	75
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.81		
2	Cd ($\mu\text{g}/\text{L}$)			0.47		
3	Cr ($\mu\text{g}/\text{L}$)			7.00		
4	Cu ($\mu\text{g}/\text{L}$)			17.56		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			5.22		
7	Pb ($\mu\text{g}/\text{L}$)			16.82		
8	Zn ($\mu\text{g}/\text{L}$)			17.90		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	213	224	205	329	173
2	HAR_Total (mgCaCO ₃ /L)	450	530	384	681	397
3	Na% (%)	61	61	53	60	57
4	RSC (-)	0.1	0.0	0.0	0.0	0.0
5	SAR (-)	6.8	7.4	4.8	8.2	5.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

River Water

Division : SR Division, Coimbatore

Local River : Noyyal

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	13.550	35.780	1.901	1.684	3.236
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	2113	1626	7745	5717	4628
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	2118	2126	7692	6730	4805
4	pH_FLD (pH units)	8.2	8.3	8.6	8.6	8.5
5	pH_GEN (pH units)	8.4	8.3	8.6	8.5	8.5
6	TDS (mg/L)	1200	1219			
7	Temp (deg C)	26.8	26.5	30.0	28.8	24.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	24.9	28.6	56.4	37.3	50.1
2	ALK-TOT (mgCaCO ₃ /L)	340	385	526	545	495
3	B (mg/L)	0.15	0.31	0.51	0.42	0.57
4	Ca (mg/L)	72	56	108	100	106
5	Cl (mg/L)	415.1	382.1	1978.6	1799.4	1172.7
6	CO ₃ (mg/L)	30.0	34.4	67.9	44.9	60.3
7	F (mg/L)	0.62	1.11	1.05	1.32	1.28
8	Fe (mg/L)	0.031	0.025	0.110	0.117	0.090
9	HCO ₃ (mg/L)	354	399	503	573	481
10	K (mg/L)	20.5	20.1	48.5	43.5	30.6
11	Mg (mg/L)	69.3	101.1	120.5	103.3	80.6
12	Na (mg/L)	301.5	263.3	1315.7	1277.7	813.3
13	NH ₃ -N (mg N/L)	0.26	0.44	0.17	0.11	0.07
14	NO ₂ +NO ₃ (mg N/L)	7.62	9.70	14.69	18.94	13.45
15	NO ₂ -N (mgN/L)	0.07	0.01	0.21	0.32	0.04
16	NO ₃ -N (mgN/L)	8.22	9.69	14.48	18.62	12.94
17	o-PO ₄ -P (mg P/L)	0.725	1.015			
18	P-Tot (mgP/L)			0.684	0.691	0.522
19	SiO ₂ (mg/L)	37.9	41.9	54.8	40.5	39.8
20	SO ₄ (mg/L)	152.9	193.0	308.7	290.1	241.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.5	3.1	6.2	3.9	2.4
2	COD (mg/L)	16.3	26.9			
3	DO (mg/L)	6.3	6.2	6.6	6.5	6.5
4	DO_SAT% (%)	79	77	87	84	76
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			96.49		23.69
2	Cd ($\mu\text{g}/\text{L}$)	8.68		24.00		39.40
3	Cr ($\mu\text{g}/\text{L}$)	3.18		8.87		
4	Cu ($\mu\text{g}/\text{L}$)	8.08		1.22		26.15
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	38.46		116.97		
7	Pb ($\mu\text{g}/\text{L}$)	18.09				20.98
8	Zn ($\mu\text{g}/\text{L}$)	2.45		23.00		19.00
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	180	139	269	249	264
2	HAR_Total (mgCaCO ₃ /L)	469	560	771	679	600
3	Na% (%)	57	50	77	79	72
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	6.0	4.9	20.7	21.4	14.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	1.502	5.750	3.593	1.923
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	5125	4733	2730	1950
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	4772	4733	2713	1950
4	pH_FLD (pH units)	8.5	8.4	8.2	8.1
5	pH_GEN (pH units)	8.6	8.8	8.4	8.4
6	TDS (mg/L)				
7	Temp (deg C)	29.3	28.5	25.7	27.9
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	66.4	98.3	47.8	24.7
2	ALK-TOT (mgCaCO ₃ /L)	611	552	396	267
3	B (mg/L)	0.86	0.75	0.48	
4	Ca (mg/L)	109	109	90	43
5	Cl (mg/L)	1399.3	1182.2	681.1	565.6
6	CO ₃ (mg/L)	80.0	118.4	57.6	29.8
7	F (mg/L)	1.23	1.13	0.97	0.89
8	Fe (mg/L)	0.238	0.467	0.091	0.010
9	HCO ₃ (mg/L)	583	433	366	265
10	K (mg/L)	38.4	37.6	22.4	21.6
11	Mg (mg/L)	84.9	123.9	73.9	64.8
12	Na (mg/L)	1137.7	917.0	445.3	380.3
13	NH ₃ -N (mg N/L)	0.12	0.01	0.06	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)	9.60	5.71	5.74	2.78
17	o-PO ₄ -P (mg P/L)	1.164	1.234	1.185	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	30.2	81.1	39.1	
20	SO ₄ (mg/L)	475.3	521.1	179.3	154.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	3.4	2.9	5.0	3.8
2	COD (mg/L)				
3	DO (mg/L)	6.4	6.0	5.9	5.8
4	DO_SAT% (%)	83	77	72	74
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	212.01		0.88	0.60
2	Cd ($\mu\text{g}/\text{L}$)			0.10	0.03
3	Cr ($\mu\text{g}/\text{L}$)	8.84		6.46	13.62
4	Cu ($\mu\text{g}/\text{L}$)	18.08		4.20	4.87
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	126.30			7.60
7	Pb ($\mu\text{g}/\text{L}$)	5.16		0.28	15.17
8	Zn ($\mu\text{g}/\text{L}$)			20.14	30.00
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	272	274	224	108
2	HAR_Total (mgCaCO ₃ /L)	625	790	532	378
3	Na% (%)	78	71	62	67
4	RSC (-)	0.8	0.0	0.0	0.0
5	SAR (-)	19.8	14.4	8.2	8.6
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : ELUNUTHIMANGALAM (CCF00A4)

Local River : Noyyal

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.000	0.000	1.828	0.875
2	EC_FLD ($\mu\text{mho}/\text{cm}$)			4031	4060
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			3648	4060
4	pH_FLD (pH units)			8.5	8.9
5	pH_GEN (pH units)			8.5	8.9
6	TDS (mg/L)			2098	2352
7	Temp (deg C)			27.0	27.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)			56.9	93.1
2	ALK-TOT (mgCaCO ₃ /L)			427	437
3	B (mg/L)			0.30	0.63
4	Ca (mg/L)			64	99
5	Cl (mg/L)			808.7	871.6
6	CO ₃ (mg/L)			68.5	112.2
7	F (mg/L)			1.14	1.52
8	Fe (mg/L)			0.057	0.000
9	HCO ₃ (mg/L)			382	306
10	K (mg/L)			33.1	36.1
11	Mg (mg/L)			89.3	95.3
12	Na (mg/L)			611.7	643.0
13	NH ₃ -N (mg N/L)			0.11	0.03
14	NO ₂ +NO ₃ (mg N/L)			8.10	20.20
15	NO ₂ -N (mgN/L)			0.13	0.00
16	NO ₃ -N (mgN/L)			7.97	20.20
17	o-PO ₄ -P (mg P/L)			0.913	1.050
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)			40.9	46.3
20	SO ₄ (mg/L)			253.1	347.5
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)			5.0	3.7
2	COD (mg/L)			34.0	15.2
3	DO (mg/L)			5.6	3.7
4	DO_SAT% (%)			70	46
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)			160	248
2	HAR_Total (mgCaCO ₃ /L)			532	645
3	Na% (%)			70	67
4	RSC (-)			0.0	0.0
5	SAR (-)			11.5	11.1
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016			
Site	KODUMUDI	Code	CC000I7
State	: Tamil Nadu	District	Erode
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Cauvery
Division	: SR Division, Coimbatore	Sub-Division	: Lower Cauvery SD, Trichi
Drainage Area	: 53233 Sq. Km.	Bank	: Right
Latitude	: 11°04'52"	Longitude	: 77°53'25"
Zero of Gauge (m)	121.000 (m.s.l) 121.570 (m.s.l)	05/05/1971 01/06/1987	- 31/05/1987
		Opening Date	Closing Date
Gauge	: 05/05/1971		
Discharge	: 21/06/1971		
Sediment	: 11/07/1972		
Water Quality	: 01/06/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	51.47	6.328	211.50
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	710	644	436
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	710	644	436
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.2	8.4	7.9
7	pH_GEN (pH units)	8.2	8.4	7.9
8	TDS (mg/L)	412	376	249
9	Temp (deg C)	26.5	29.0	27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	34.1	0.0
2	ALK-TOT (mgCaCO ₃ /L)	202	194	151
3	B (mg/L)	0.17	0.10	
4	Ca (mg/L)	22	29	30
5	Cl (mg/L)	101.7	91.5	46.4
6	CO ₃ (mg/L)	0.0	41.1	0.0
7	F (mg/L)	0.52	0.51	
8	Fe (mg/L)	0.020	0.010	0.000
9	HCO ₃ (mg/L)	246	153	184
10	K (mg/L)	9.1	7.6	4.8
11	Mg (mg/L)	35.6	25.6	22.1
12	Na (mg/L)	77.9	70.7	34.5
13	NH ₃ -N (mg N/L)	0.00	0.05	0.88
14	NO ₂ +NO ₃ (mg N/L)	2.34	1.57	1.91
15	NO ₂ -N (mgN/L)	0.36	0.10	0.00
16	NO ₃ -N (mgN/L)	1.98	1.47	1.91
17	o-PO ₄ -P (mg P/L)	0.130	0.040	0.030
18	SiO ₂ (mg/L)	22.4	19.0	12.1
19	SO ₄ (mg/L)	36.1	30.4	19.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	5.1	2.7	2.1
2	COD (mg/L)	17.9	16.8	11.9
3	DO (mg/L)	6.7	6.8	4.3
4	DO_SAT% (%)	83	88	54
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	56	71	75
2	HAR_Total (mgCaCO ₃ /L)	204	178	168
3	Na% (%)	44	45	30
4	RSC (-)	0.0	0.4	0.0
5	SAR (-)	2.4	2.3	1.2
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	569.8	443.00	175.20
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	305	352	521
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	305	352	521
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.4	7.6	7.7
7	pH_GEN (pH units)	7.4	7.6	7.7
8	TDS (mg/L)	176	205	298
9	Temp (deg C)	27.5	27.5	25.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	112	122	161
3	B (mg/L)		0.00	0.07
4	Ca (mg/L)	24	28	41
5	Cl (mg/L)	32.9	38.5	59.6
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.020	0.050	0.040
9	HCO ₃ (mg/L)	137	149	196
10	K (mg/L)	3.8	4.3	8.1
11	Mg (mg/L)	15.4	14.4	20.1
12	Na (mg/L)	25.1	28.0	45.6
13	NH ₃ -N (mg N/L)	0.08	0.17	0.17
14	NO ₂ +NO ₃ (mg N/L)	1.74	2.49	4.99
15	NO ₂ -N (mgN/L)	0.14	0.06	0.07
16	NO ₃ -N (mgN/L)	1.60	2.43	4.92
17	o-PO ₄ -P (mg P/L)	0.060	0.040	0.090
18	SiO ₂ (mg/L)	13.4	18.5	18.2
19	SO ₄ (mg/L)	10.2	16.4	30.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.2	1.2	2.7
2	COD (mg/L)	4.6	10.9	20.9
3	DO (mg/L)	5.9	4.9	6.6
4	DO_SAT% (%)	74	62	80
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	60	71	103
2	HAR_Total (mgCaCO ₃ /L)	124	131	186
3	Na% (%)	30	31	34
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.0	1.1	1.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	368.20	435.40	36.04
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	892	450	571
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	892	450	571
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.2	8.1	8.0
7	pH_GEN (pH units)	8.2	8.1	8.0
8	TDS (mg/L)	518	254	324
9	Temp (deg C)	24.0	24.0	24.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	264	176	199
3	B (mg/L)	0.13	0.12	0.08
4	Ca (mg/L)	32	30	28
5	Cl (mg/L)	100.0	41.6	57.2
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.81	0.50	0.53
8	Fe (mg/L)	0.070	0.000	0.000
9	HCO ₃ (mg/L)	322	215	243
10	K (mg/L)	13.5	4.6	6.0
11	Mg (mg/L)	47.9	26.8	32.6
12	Na (mg/L)	96.5	31.8	50.6
13	NH ₃ -N (mg N/L)	0.09	0.67	0.60
14	NO ₂ +NO ₃ (mg N/L)	8.69	2.50	3.11
15	NO ₂ -N (mgN/L)	0.00	0.09	0.02
16	NO ₃ -N (mgN/L)	8.69	2.41	3.09
17	o-PO ₄ -P (mg P/L)	0.370	0.070	0.110
18	SiO ₂ (mg/L)	28.0	19.9	24.4
19	SO ₄ (mg/L)	72.2	18.7	24.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.5	1.9	1.6
2	COD (mg/L)	21.3	16.2	9.1
3	DO (mg/L)	5.5	6.6	5.2
4	DO_SAT% (%)	65	78	62
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	79	75	71
2	HAR_Total (mgCaCO ₃ /L)	279	187	207
3	Na% (%)	42	27	34
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	2.5	1.0	1.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water Analysis

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	1.237	23.50	43.54
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	603	606	611
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	603	606	611
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.0	8.0	8.2
7	pH_GEN (pH units)	8.0	8.0	8.2
8	TDS (mg/L)	344	345	350
9	Temp (deg C)	25.0	27.0	30.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	187	179	194
3	B (mg/L)	0.17	0.11	0.12
4	Ca (mg/L)	49	44	28
5	Cl (mg/L)	72.8	71.0	71.0
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.54	0.48	0.49
8	Fe (mg/L)	0.000	0.000	0.010
9	HCO ₃ (mg/L)	228	219	237
10	K (mg/L)	6.4	6.6	6.2
11	Mg (mg/L)	20.0	21.9	32.4
12	Na (mg/L)	54.4	54.3	58.3
13	NH ₃ -N (mg N/L)	0.06	0.07	0.03
14	NO ₂ +NO ₃ (mg N/L)	2.59	5.50	4.83
15	NO ₂ -N (mgN/L)	0.01	0.00	0.00
16	NO ₃ -N (mgN/L)	2.58	5.50	4.83
17	o-PO ₄ -P (mg P/L)	0.090	0.080	0.120
18	SiO ₂ (mg/L)	25.5	23.8	16.9
19	SO ₄ (mg/L)	31.6	32.9	27.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.7	2.0	4.0
2	COD (mg/L)	8.9	12.8	36.2
3	DO (mg/L)	5.8	5.3	6.4
4	DO_SAT% (%)	70	67	85
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	122	110	71
2	HAR_Total (mgCaCO ₃ /L)	205	201	206
3	Na% (%)	36	36	37
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.7	1.7	1.8
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water Summary

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	903	0.000	165.3
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	12	892	305	558
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	892	305	558
4	pH_FLD (pH units)	12	8.4	7.4	8
5	pH_GEN (pH units)	12	8.4	7.4	8
6	TDS (mg/L)	12	518	176	321
7	Temp (deg C)	12	30.0	24.0	26.4
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	34.1	0.0	2.8
2	ALK-TOT (mgCaCO ₃ /L)	12	264	112	179
3	B (mg/L)	10	0.17	0.00	0.11
4	Ca (mg/L)	12	49	22	32
5	Cl (mg/L)	12	101.7	32.9	65.3
6	CO ₃ (mg/L)	12	41.1	0.0	3.4
7	F (mg/L)	8	0.81	0.48	0.55
8	Fe (mg/L)	12	0.070	0.000	0.018
9	HCO ₃ (mg/L)	12	322	137	211
10	K (mg/L)	12	13.5	3.8	6.8
11	Mg (mg/L)	12	47.9	14.4	26.2
12	Na (mg/L)	12	96.5	25.1	52.3
13	NH ₃ -N (mg N/L)	12	0.88	0.00	0.24
14	NO ₂ +NO ₃ (mg N/L)	12	8.69	1.57	3.52
15	NO ₂ -N (mgN/L)	12	0.36	0.00	0.07
16	NO ₃ -N (mgN/L)	12	8.69	1.47	3.45
17	o-PO ₄ -P (mg P/L)	12	0.370	0.030	0.102
18	SiO ₂ (mg/L)	12	28.0	12.1	20.2
19	SO ₄ (mg/L)	12	72.2	10.2	29.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	12	5.1	1.2	2.5
2	COD (mg/L)	12	36.2	4.6	15.6
3	DO (mg/L)	12	6.8	4.3	5.8
4	DO_SAT% (%)	12	88	54	72
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	122	56	80
2	HAR_Total (mgCaCO ₃ /L)	12	279	124	190
3	Na% (%)	12	45	27	36
4	RSC (-)	12	0.4	0.0	0
5	SAR (-)	12	2.5	1.0	1.6
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	340.4	436.3	341.5	414.1	343.2
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	443	388	395	440	468
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	445	383	372	405	425
4	pH_FLD (pH units)	8.2	8.0	8.0	7.9	8.0
5	pH_GEN (pH units)	7.9	8.1	8.0	8.1	7.9
6	TDS (mg/L)					
7	Temp (deg C)	30.1	28.8	28.2	29.6	28.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	3.9	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	120	135	123	147	147
3	B (mg/L)	0.24	0.34	0.27	0.25	0.40
4	Ca (mg/L)	28	23	25	27	28
5	Cl (mg/L)	60.9	30.2	34.4	34.8	51.6
6	CO ₃ (mg/L)	0.0	4.7	0.0	0.0	0.0
7	F (mg/L)	0.45	0.50	0.36	0.41	0.33
8	Fe (mg/L)	0.075	0.069	0.070	0.071	0.064
9	HCO ₃ (mg/L)	146	155	150	180	179
10	K (mg/L)	3.9	3.0	3.4	3.2	4.0
11	Mg (mg/L)	14.2	15.4	12.6	14.2	17.3
12	Na (mg/L)	41.9	32.0	34.5	35.6	40.9
13	NH ₃ -N (mg N/L)			0.05	0.08	0.14
14	NO ₂ +NO ₃ (mg N/L)	2.11	2.00	3.20	1.83	
15	NO ₂ -N (mgN/L)	0.02	0.03	0.03	0.01	
16	NO ₃ -N (mgN/L)	2.09	1.98	3.17	1.82	0.95
17	o-PO ₄ -P (mg P/L)				0.010	0.064
18	P-Tot (mgP/L)	0.029	0.026	0.021		
19	SiO ₂ (mg/L)	21.3	23.2	19.5	19.0	18.1
20	SO ₄ (mg/L)	13.9	14.0	15.4	14.1	25.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.2	2.0	0.8	1.2	1.1
2	COD (mg/L)					
3	DO (mg/L)	6.7	6.5	6.3	6.5	6.8
4	DO_SAT% (%)	89	84	81	85	88
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	70	57	63	67	69
2	HAR_Total (mgCaCO ₃ /L)	129	121	115	126	141
3	Na% (%)	38	34	36	37	36
4	RSC (-)	0.1	0.3	0.2	0.5	0.1
5	SAR (-)	1.5	1.2	1.3	1.4	1.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	197.2	463.3	142.3	319.2	289.9
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	375	284	418	441	441
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	375	284	417	441	441
4	pH_FLD (pH units)	8.0	7.7	7.9	8.0	8.0
5	pH_GEN (pH units)	7.9	7.7	8.0	8.1	8.0
6	TDS (mg/L)					237
7	Temp (deg C)	29.3	29.6	29.5	26.8	27.2
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	4.0	4.4	0.0	5.0	9.2
2	ALK-TOT (mgCaCO ₃ /L)	152	113	147	116	134
3	B (mg/L)	0.50				
4	Ca (mg/L)	30	25	33	22	27
5	Cl (mg/L)	57.6	37.8	58.6	69.4	60.7
6	CO ₃ (mg/L)	4.8	5.3	0.0	6.0	11.1
7	F (mg/L)	0.54	0.38	0.23	0.27	0.36
8	Fe (mg/L)	0.110			0.082	
9	HCO ₃ (mg/L)	176	127	180	129	141
10	K (mg/L)	4.1	3.1	4.0	4.0	4.7
11	Mg (mg/L)	18.1	12.1	13.8	13.3	15.8
12	Na (mg/L)	39.2	27.4	43.9	50.6	46.5
13	NH ₃ -N (mg N/L)	0.06			0.25	0.17
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	4.79	0.68	0.29	0.49	0.79
17	o-PO ₄ -P (mg P/L)	0.127				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	30.2				
20	SO ₄ (mg/L)	15.8	12.1	18.3	21.3	20.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.5	1.9	1.5	2.6	2.5
2	COD (mg/L)				12.7	9.7
3	DO (mg/L)	6.4	6.4	6.2	6.5	6.4
4	DO_SAT% (%)	84	84	82	81	80
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			24.78	0.79	
2	Cd ($\mu\text{g}/\text{L}$)			0.13	0.01	
3	Cr ($\mu\text{g}/\text{L}$)			0.12	4.70	
4	Cu ($\mu\text{g}/\text{L}$)			8.59	2.34	
5	Hg ($\mu\text{g}/\text{L}$)				0.04	
6	Ni ($\mu\text{g}/\text{L}$)			5.28	12.92	
7	Pb ($\mu\text{g}/\text{L}$)			4.07	4.59	
8	Zn ($\mu\text{g}/\text{L}$)			5.74	10.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	76	62	82	55	68
2	HAR_Total (mgCaCO ₃ /L)	152	112	139	110	134
3	Na% (%)	35	34	41	33	39
4	RSC (-)	0.1	0.1	0.2	0.2	0.1
5	SAR (-)	1.4	1.1	1.6	1.6	1.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	256.4	615.2	283.8	401.1	258.7
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	489	418	498	534	635
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	489	470	520	494	541
4	pH_FLD (pH units)	7.9	8.0	8.2	8.1	8.2
5	pH_GEN (pH units)	7.9	8.2	8.0	8.2	7.9
6	TDS (mg/L)	284				
7	Temp (deg C)	27.5	28.5	27.4	27.4	27.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	6.8	6.6	0.0	5.1	0.0
2	ALK-TOT (mgCaCO ₃ /L)	156	153	176	174	218
3	B (mg/L)	0.09	0.26	0.30	0.26	0.09
4	Ca (mg/L)	27	31	37	34	44
5	Cl (mg/L)	62.2	37.7	40.3	43.1	49.5
6	CO ₃ (mg/L)	8.2	7.9	0.0	6.1	0.0
7	F (mg/L)	0.52	0.43	0.49	0.39	0.73
8	Fe (mg/L)	0.020	0.077	0.068	0.067	0.165
9	HCO ₃ (mg/L)	174	170	215	200	266
10	K (mg/L)	5.9	3.9	4.9	4.2	4.5
11	Mg (mg/L)	22.6	19.1	18.5	17.7	19.9
12	Na (mg/L)	47.2	39.4	44.4	43.9	51.3
13	NH ₃ -N (mg N/L)	0.24	0.09	0.10	0.05	
14	NO ₂ +NO ₃ (mg N/L)	2.01	2.38	3.55	2.27	
15	NO ₂ -N (mgN/L)	0.13	0.02	0.08	0.02	
16	NO ₃ -N (mgN/L)	1.88	2.37	3.47	2.25	0.30
17	o-PO ₄ -P (mg P/L)	0.060				0.010
18	P-Tot (mgP/L)		0.027	0.028	0.023	
19	SiO ₂ (mg/L)	17.1	25.1	22.7	20.9	2.6
20	SO ₄ (mg/L)	22.5	21.4	32.9	22.9	33.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.5	2.4	1.7	1.7	1.3
2	COD (mg/L)	12.4				
3	DO (mg/L)	5.7	6.9	6.3	6.6	6.3
4	DO_SAT% (%)	72	89	80	83	79
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	67	77	92	86	111
2	HAR_Total (mgCaCO ₃ /L)	161	157	169	160	194
3	Na% (%)	36	34	35	35	36
4	RSC (-)	0.1	0.1	0.2	0.3	0.5
5	SAR (-)	1.6	1.4	1.5	1.5	1.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	158	156.1	192.2	33.47	237.7
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	536	541	441	473	386
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	484	541	441	473	386
4	pH_FLD (pH units)	7.9	7.9	8.0	8.0	7.9
5	pH_GEN (pH units)	8.2	8.1	7.8	8.0	8.1
6	TDS (mg/L)					
7	Temp (deg C)	26.6	27.1	27.3	26.1	27.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	5.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	184	219	164	162	146
3	B (mg/L)	0.33	0.15			
4	Ca (mg/L)	38	46	40	34	32
5	Cl (mg/L)	47.6	73.5	59.8	60.2	39.9
6	CO ₃ (mg/L)	0.0	6.0	0.0	0.0	0.0
7	F (mg/L)	0.64	0.64	0.41	0.21	0.35
8	Fe (mg/L)	0.107	0.045	0.050		
9	HCO ₃ (mg/L)	224	255	200	198	178
10	K (mg/L)	4.5	6.4	5.8	4.2	3.7
11	Mg (mg/L)	18.2	25.3	18.7	19.7	19.2
12	Na (mg/L)	41.9	56.2	43.9	42.4	26.3
13	NH ₃ -N (mg N/L)	0.04	0.00		0.14	0.37
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	1.58	5.30	0.44	0.26	0.36
17	o-PO ₄ -P (mg P/L)	0.043	0.176			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	24.5	26.2			
20	SO ₄ (mg/L)	36.1	34.1	26.1	19.0	18.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.1	0.7	2.0	2.3
2	COD (mg/L)				9.2	7.3
3	DO (mg/L)	6.4	6.4	6.3	6.4	6.3
4	DO_SAT% (%)	80	80	79	78	79
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.34		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			1.22		
4	Cu ($\mu\text{g}/\text{L}$)			17.82		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)			1.36		
8	Zn ($\mu\text{g}/\text{L}$)			5.90		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	94	114	99	85	81
2	HAR_Total (mgCaCO ₃ /L)	170	220	177	167	161
3	Na% (%)	34	35	34	35	26
4	RSC (-)	0.3	0.1	0.0	0.0	0.1
5	SAR (-)	1.4	1.6	1.4	1.4	0.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	92.6	253.7	80.43	74.74	94.47
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	521	609	646	552	560
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	504	609	620	545	628
4	pH_FLD (pH units)	7.7	8.0	8.2	8.1	7.9
5	pH_GEN (pH units)	7.9	8.0	8.2	8.0	8.1
6	TDS (mg/L)	286	349			
7	Temp (deg C)	24.8	24.4	30.2	29.5	29.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	171	200	197	175	210
3	B (mg/L)	0.00	0.10	0.25	0.26	0.28
4	Ca (mg/L)	30	33	32	30	45
5	Cl (mg/L)	54.6	64.6	55.2	56.5	69.6
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.32	0.61	0.56	0.44	0.65
8	Fe (mg/L)	0.031	0.027	0.092	0.071	0.070
9	HCO ₃ (mg/L)	209	244	241	213	256
10	K (mg/L)	7.0	8.1	4.5	4.4	5.9
11	Mg (mg/L)	28.2	31.8	23.7	17.2	20.1
12	Na (mg/L)	40.6	56.1	56.3	57.4	67.4
13	NH ₃ -N (mg N/L)	0.22	0.38	0.11	0.05	0.05
14	NO ₂ +NO ₃ (mg N/L)	2.52	4.82	1.42	3.14	1.88
15	NO ₂ -N (mgN/L)	0.03	0.05	0.01	0.02	0.06
16	NO ₃ -N (mgN/L)	3.55	4.78	1.41	3.12	1.82
17	o-PO ₄ -P (mg P/L)	0.020	0.160			
18	P-Tot (mgP/L)			0.036	0.020	0.075
19	SiO ₂ (mg/L)	17.7	22.6	26.8	27.1	24.8
20	SO ₄ (mg/L)	26.8	36.3	22.6	18.9	39.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.2	2.2	1.8	0.7	1.0
2	COD (mg/L)	6.0	16.9			
3	DO (mg/L)	6.2	6.0	6.3	6.3	6.6
4	DO_SAT% (%)	75	71	84	82	86
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			23.20	9.58	6.83
2	Cd ($\mu\text{g}/\text{L}$)	0.59		10.00	2.00	0.73
3	Cr ($\mu\text{g}/\text{L}$)	19.45				
4	Cu ($\mu\text{g}/\text{L}$)	4.73				1.04
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	8.48		5.59		
7	Pb ($\mu\text{g}/\text{L}$)	1.19			2.16	2.25
8	Zn ($\mu\text{g}/\text{L}$)	3.05		10.00	9.00	7.00
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	75	82	79	76	114
2	HAR_Total (mgCaCO ₃ /L)	192	215	177	148	197
3	Na% (%)	31	34	40	45	41
4	RSC (-)	0.0	0.0	0.4	0.6	0.3
5	SAR (-)	1.3	1.6	1.8	2.1	2.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	85.49	106.9	109.7	94.79
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	482	546	524	358
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	482	473	506	358
4	pH_FLD (pH units)	8.1	8.0	7.9	7.8
5	pH_GEN (pH units)	8.2	8.2	8.2	8.0
6	TDS (mg/L)				
7	Temp (deg C)	30.3	28.7	30.0	30.2
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	4.0	6.6	0.0
2	ALK-TOT (mgCaCO ₃ /L)	188	168	189	133
3	B (mg/L)	0.21	0.39	0.00	
4	Ca (mg/L)	38	28	43	25
5	Cl (mg/L)	58.7	67.1	79.1	53.5
6	CO ₃ (mg/L)	0.0	4.8	8.0	0.0
7	F (mg/L)	0.50	0.56	0.43	0.41
8	Fe (mg/L)	0.041	0.111	0.000	0.010
9	HCO ₃ (mg/L)	229	196	215	162
10	K (mg/L)	4.6	4.0	5.4	4.3
11	Mg (mg/L)	20.4	21.7	16.5	18.8
12	Na (mg/L)	62.1	50.1	56.8	38.4
13	NH ₃ -N (mg N/L)	0.07	0.00	0.01	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)	0.85	1.43	1.84	0.39
17	o-PO ₄ -P (mg P/L)	0.067	0.021	0.000	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	26.1	25.0	33.2	
20	SO ₄ (mg/L)	40.0	31.4	22.7	16.5
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.1	0.8	1.2	1.0
2	COD (mg/L)				
3	DO (mg/L)	6.7	6.4	6.5	6.3
4	DO_SAT% (%)	87	83	86	83
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	1.14		0.83	0.76
2	Cd ($\mu\text{g}/\text{L}$)			0.04	0.01
3	Cr ($\mu\text{g}/\text{L}$)	2.98		3.46	4.32
4	Cu ($\mu\text{g}/\text{L}$)	3.17		2.99	3.98
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	8.70			0.78
7	Pb ($\mu\text{g}/\text{L}$)			0.04	4.08
8	Zn ($\mu\text{g}/\text{L}$)			28.36	91.00
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	95	71	107	61
2	HAR_Total (mgCaCO ₃ /L)	180	161	176	140
3	Na% (%)	42	40	40	37
4	RSC (-)	0.2	0.2	0.3	0.0
5	SAR (-)	2.0	1.7	1.9	1.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KODUMUDI (CC000I7)

Local River : Cauvery

River Water

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	70.96	38.34	87.78	22.76
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	655	569	539	607
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	659	588	506	607
4	pH_FLD (pH units)	7.9	8.2	8.0	8.1
5	pH_GEN (pH units)	8.0	8.2	7.9	8.1
6	TDS (mg/L)		286	290	346
7	Temp (deg C)	27.8	27.3	26.8	27.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	7.7	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	195	175	156	187
3	B (mg/L)			0.01	0.13
4	Ca (mg/L)	35	31	20	40
5	Cl (mg/L)	103.1	78.7	61.5	71.6
6	CO ₃ (mg/L)	0.0	9.3	0.0	0.0
7	F (mg/L)	0.57	0.43	0.48	0.50
8	Fe (mg/L)	0.016	0.050	0.000	0.003
9	HCO ₃ (mg/L)	238	194	191	228
10	K (mg/L)	6.1	5.2	5.5	6.4
11	Mg (mg/L)	22.9	29.3	25.7	24.8
12	Na (mg/L)	74.6	54.1	46.9	55.7
13	NH ₃ -N (mg N/L)	0.30	0.36	0.14	0.05
14	NO ₂ +NO ₃ (mg N/L)			2.04	4.31
15	NO ₂ -N (mgN/L)			0.00	0.00
16	NO ₃ -N (mgN/L)	0.19	0.48	2.04	4.30
17	o-PO ₄ -P (mg P/L)			0.040	0.097
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)			19.3	22.0
20	SO ₄ (mg/L)	29.1	26.0	24.3	30.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	3.4	5.8	3.2	2.9
2	COD (mg/L)	13.2	20.6	13.1	19.3
3	DO (mg/L)	6.3	6.3	6.3	5.8
4	DO_SAT% (%)	80	80	77	74
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	1.59	4.67		
2	Cd ($\mu\text{g}/\text{L}$)	0.01	0.04		
3	Cr ($\mu\text{g}/\text{L}$)	0.44	1.93		
4	Cu ($\mu\text{g}/\text{L}$)	1.72	1.84		
5	Hg ($\mu\text{g}/\text{L}$)	0.21			
6	Ni ($\mu\text{g}/\text{L}$)	12.48	8.78		
7	Pb ($\mu\text{g}/\text{L}$)	1.36	0.54		
8	Zn ($\mu\text{g}/\text{L}$)	1.10	5.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	88	78	49	101
2	HAR_Total (mgCaCO ₃ /L)	183	200	156	204
3	Na% (%)	46	37	39	36
4	RSC (-)	0.3	0.0	0.0	0.0
5	SAR (-)	2.4	1.7	1.6	1.7
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016			
Site	: SAVANDAPUR	Code	: CCG00E3
State	: Tamil Nadu	District	: Erode
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Bhavani	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Bhavani
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 5776 Sq. Km.	Bank	: Right
Latitude	: 11°31'17"	Longitude	: 77°30'36"
Zero of Gauge (m)	: 180.000 (m.s.l) 179.000 (m.s.l)	25/06/1977 01/06/1985	- 31/05/1985
	Opening Date	Closing Date	
Gauge	: 25/06/1977		
Discharge	: 17/07/1978		
Sediment	: 24/04/1979		
Water Quality	: 02/04/1979		

Water Quality Datasheet for the period : 2015-2016

Station Name : SAVANDAPUR(CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	8.489	19.42	15.94
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	380	265	178
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	360	265	178
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.9	7.7	7.8
7	pH_GEN (pH units)	7.9	7.5	7.6
8	TDS (mg/L)	209	153	101
9	Temp (deg C)	28.5	31.0	29.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	118	88	58
3	B (mg/L)	0.11	0.00	
4	Ca (mg/L)	11	22	17
5	Cl (mg/L)	32.6	28.5	21.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.28	0.20	
8	Fe (mg/L)	0.010	0.000	0.010
9	HCO ₃ (mg/L)	144	107	71
10	K (mg/L)	5.8	4.7	3.4
11	Mg (mg/L)	27.9	10.6	4.8
12	Na (mg/L)	24.6	21.1	15.0
13	NH ₃ -N (mg N/L)	0.31	0.03	0.55
14	NO ₂ +NO ₃ (mg N/L)	1.66	2.70	1.37
15	NO ₂ -N (mgN/L)	0.45	0.00	0.00
16	NO ₃ -N (mgN/L)	1.21	2.70	1.37
17	o-PO ₄ -P (mg P/L)	0.090	0.030	0.040
18	SiO ₂ (mg/L)	17.7	11.6	10.6
19	SO ₄ (mg/L)	25.9	17.8	8.0
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.6	4.1	1.8
2	COD (mg/L)	15.8	18.9	9.2
3	DO (mg/L)	3.8	9.1	8.2
4	DO_SAT% (%)	49	122	107
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	28	56	44
2	HAR_Total (mgCaCO ₃ /L)	144	100	64
3	Na% (%)	26	30	33
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.9	0.9	0.8
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SAVANDAPUR(CCG00E3)

Division : SR Division, Coimbatore

Local River : Bhavani

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	22.69	19.29	14.28
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	278	305	424
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	278	305	424
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.7	7.8	7.7
7	pH_GEN (pH units)	7.5	7.7	7.7
8	TDS (mg/L)	159	178	246
9	Temp (deg C)	29.5	29.5	29.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	104	111	153
3	B (mg/L)		0.08	0.08
4	Ca (mg/L)	29	27	41
5	Cl (mg/L)	25.1	23.1	30.8
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.040	0.010	0.010
9	HCO ₃ (mg/L)	127	135	187
10	K (mg/L)	3.8	5.2	3.7
11	Mg (mg/L)	10.6	14.4	21.1
12	Na (mg/L)	18.1	17.0	20.6
13	NH ₃ -N (mg N/L)	0.18	0.23	0.22
14	NO ₂ +NO ₃ (mg N/L)	1.67	3.52	4.33
15	NO ₂ -N (mgN/L)	0.01	0.08	0.01
16	NO ₃ -N (mgN/L)	1.66	3.44	4.32
17	o-PO ₄ -P (mg P/L)	0.010	0.070	0.030
18	SiO ₂ (mg/L)	11.3	18.3	20.4
19	SO ₄ (mg/L)	14.9	17.9	20.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.2	2.0	1.9
2	COD (mg/L)	8.2	5.5	12.7
3	DO (mg/L)	8.1	7.4	7.6
4	DO_SAT% (%)	105	96	99
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	71	67	103
2	HAR_Total (mgCaCO ₃ /L)	116	127	190
3	Na% (%)	25	22	19
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.7	0.7	0.7
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SAVANDAPUR(CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	31.40	3.875	20.52
2	Colour_Cod (-)	Light Brown	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	485	529	451
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	485	529	451
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.8	7.8	7.7
7	pH_GEN (pH units)	8.1	7.7	7.5
8	TDS (mg/L)	283	303	258
9	Temp (deg C)	28.0	26.5	27.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	130	203	153
3	B (mg/L)	0.05	0.11	0.11
4	Ca (mg/L)	28	33	33
5	Cl (mg/L)	48.1	45.1	41.6
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.42	0.48	0.41
8	Fe (mg/L)	0.010	0.010	0.000
9	HCO ₃ (mg/L)	159	248	187
10	K (mg/L)	6.2	5.2	4.9
11	Mg (mg/L)	25.9	36.4	24.0
12	Na (mg/L)	34.4	32.3	28.9
13	NH ₃ -N (mg N/L)	0.06	0.73	0.55
14	NO ₂ +NO ₃ (mg N/L)	7.22	4.36	3.82
15	NO ₂ -N (mgN/L)	0.01	0.03	0.04
16	NO ₃ -N (mgN/L)	7.21	4.33	3.78
17	o-PO ₄ -P (mg P/L)	0.300	0.040	0.100
18	SiO ₂ (mg/L)	14.6	24.0	25.3
19	SO ₄ (mg/L)	32.3	28.8	22.8
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.1	1.7	4.3
2	COD (mg/L)	10.6	9.1	14.2
3	DO (mg/L)	7.3	7.0	7.5
4	DO_SAT% (%)	93	86	94
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	71	83	83
2	HAR_Total (mgCaCO ₃ /L)	179	235	183
3	Na% (%)	29	23	25
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.1	0.9	0.9
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SAVANDAPUR(CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	14.79	16.27	5.28
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	417	374	431
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	417	413	431
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.7	7.7	7.7
7	pH_GEN (pH units)	7.8	7.8	7.8
8	TDS (mg/L)	237	233	248
9	Temp (deg C)	27.5	31.0	31.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	142	138	157
3	B (mg/L)	0.17	0.11	0.14
4	Ca (mg/L)	42	52	24
5	Cl (mg/L)	41.9	41.9	32.8
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.40	0.28	0.33
8	Fe (mg/L)	0.000	0.000	0.000
9	HCO ₃ (mg/L)	173	169	192
10	K (mg/L)	3.9	2.2	3.3
11	Mg (mg/L)	15.3	10.5	27.6
12	Na (mg/L)	27.2	25.1	24.4
13	NH ₃ -N (mg N/L)	0.08	0.14	0.00
14	NO ₂ +NO ₃ (mg N/L)	3.29	3.88	3.80
15	NO ₂ -N (mgN/L)	0.02	0.00	0.00
16	NO ₃ -N (mgN/L)	3.27	3.88	3.80
17	o-PO ₄ -P (mg P/L)	0.080	0.040	0.050
18	SiO ₂ (mg/L)	22.5	19.1	16.7
19	SO ₄ (mg/L)	20.9	15.6	17.4
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.9	1.6	1.9
2	COD (mg/L)	7.1	8.5	13.8
3	DO (mg/L)	6.9	7.2	6.9
4	DO_SAT% (%)	87	97	93
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	106	130	59
2	HAR_Total (mgCaCO ₃ /L)	170	173	174
3	Na% (%)	25	24	23
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.9	0.8	0.8
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : SAVANDAPUR (CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	138	2.302	14.93
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	12	529	178	376
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	529	178	378
4	pH_FLD (pH units)	12	7.9	7.7	7.7
5	pH_GEN (pH units)	12	8.1	7.5	7.7
6	TDS (mg/L)	12	303	101	217
7	Temp (deg C)	12	31.5	26.5	29.1
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	12	203	58	130
3	B (mg/L)	10	0.17	0.00	0.1
4	Ca (mg/L)	12	52	11	30
5	Cl (mg/L)	12	48.1	21.3	34.4
6	CO ₃ (mg/L)	12	0.0	0.0	0
7	F (mg/L)	8	0.48	0.20	0.35
8	Fe (mg/L)	12	0.040	0.000	0.008
9	HCO ₃ (mg/L)	12	248	71	158
10	K (mg/L)	12	6.2	2.2	4.4
11	Mg (mg/L)	12	36.4	4.8	19.1
12	Na (mg/L)	12	34.4	15.0	24.1
13	NH ₃ -N (mg N/L)	12	0.73	0.00	0.26
14	NO ₂ +NO ₃ (mg N/L)	12	7.22	1.37	3.47
15	NO ₂ -N (mgN/L)	12	0.45	0.00	0.05
16	NO ₃ -N (mgN/L)	12	7.21	1.21	3.41
17	o-PO ₄ -P (mg P/L)	12	0.300	0.010	0.073
18	SiO ₂ (mg/L)	12	25.3	10.6	17.7
19	SO ₄ (mg/L)	12	32.3	8.0	20.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	12	4.3	1.1	2.1
2	COD (mg/L)	12	18.9	5.5	11.1
3	DO (mg/L)	12	9.1	3.8	7.3
4	DO_SAT% (%)	12	122	49	94
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	130	28	75
2	HAR_Total (mgCaCO ₃ /L)	12	235	64	154
3	Na% (%)	12	33	19	25
4	RSC (-)	12	0.0	0.0	0
5	SAR (-)	12	1.1	0.7	0.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAVANDAPUR (CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	13.66	14.22	29.99	19.86	22.83
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	367	357	387	380	293
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	365	332	275	369	261
4	pH_FLD (pH units)	7.7	7.9	7.8	7.8	7.4
5	pH_GEN (pH units)	7.4	7.9	7.7	7.9	7.5
6	TDS (mg/L)					
7	Temp (deg C)	28.0	28.5	28.8	29.2	29.2
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	119	128	101	145	111
2	B (mg/L)	0.20	0.26	0.23	0.22	0.11
3	Ca (mg/L)	38	32	27	36	29
4	Cl (mg/L)	26.2	20.3	16.7	22.1	20.5
5	F (mg/L)	0.35	0.40	0.24	0.33	0.26
6	Fe (mg/L)	0.070	0.067	0.070	0.064	0.116
7	HCO ₃ (mg/L)	146	156	123	177	135
8	K (mg/L)	2.8	2.3	2.1	2.6	2.3
9	Mg (mg/L)	13.1	12.6	10.1	12.6	11.7
10	Na (mg/L)	19.1	16.5	14.3	20.4	14.7
11	NH ₃ -N (mg N/L)			0.04	0.05	0.13
12	NO ₂ +NO ₃ (mg N/L)	1.34	2.33	2.76	1.97	
13	NO ₂ -N (mgN/L)	0.02	0.02	0.02	0.01	
14	NO ₃ -N (mgN/L)	1.32	2.32	2.74	1.96	0.93
15	o-PO ₄ -P (mg P/L)				0.010	0.110
16	P-Tot (mgP/L)	0.023	0.014	0.012		
17	SiO ₂ (mg/L)	19.1	18.1	18.0	19.0	18.1
18	SO ₄ (mg/L)	20.6	13.3	14.7	17.9	20.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	1.0	0.6	0.8	1.1
2	COD (mg/L)					
3	DO (mg/L)	5.7	6.5	7.5	6.7	6.6
4	DO_SAT% (%)	72	83	97	88	87
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	96	80	67	89	72
2	HAR_Total (mgCaCO ₃ /L)	150	133	109	142	121
3	Na% (%)	21	21	23	23	21
4	RSC (-)	0.0	0.0	0.0	0.1	0.0
5	SAR (-)	0.7	0.6	0.6	0.7	0.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAVANDAPUR (CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	13.91	21.73	12.8	9.948	11.76
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	335	258	279	264	277
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	307	252	254	243	287
4	pH_FLD (pH units)	7.8	7.7	7.8	7.7	7.8
5	pH_GEN (pH units)	7.5	7.8	7.6	7.6	7.7
6	TDS (mg/L)					154
7	Temp (deg C)	28.0	28.7	29.8	28.8	29.1
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	123	100	92	87	104
2	B (mg/L)	0.06				
3	Ca (mg/L)	36	35	32	26	23
4	Cl (mg/L)	30.5	24.6	23.5	24.6	28.0
5	F (mg/L)	0.42	0.34	0.17	0.20	0.24
6	Fe (mg/L)	0.074			0.195	
7	HCO ₃ (mg/L)	150	122	112	106	127
8	K (mg/L)	2.4	2.4	2.2	2.3	3.5
9	Mg (mg/L)	14.3	7.6	7.6	9.7	14.2
10	Na (mg/L)	16.6	15.0	14.7	13.8	19.7
11	NH ₃ -N (mg N/L)	0.04			0.20	0.15
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)	4.77	0.71	0.28	0.37	1.30
15	o-PO ₄ -P (mg P/L)	0.122				
16	P-Tot (mgP/L)					
17	SiO ₂ (mg/L)	23.1				
18	SO ₄ (mg/L)	16.6	14.4	17.2	13.4	14.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	1.6	1.3	1.6	1.1
2	COD (mg/L)				12.6	9.2
3	DO (mg/L)	7.0	7.2	5.9	6.1	6.8
4	DO_SAT% (%)	91	93	78	79	88
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			16.33	7.69	
2	Cd ($\mu\text{g}/\text{L}$)			1.93	0.03	
3	Cr ($\mu\text{g}/\text{L}$)			0.04	28.10	
4	Cu ($\mu\text{g}/\text{L}$)			11.84	2.74	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			7.51	11.76	
7	Pb ($\mu\text{g}/\text{L}$)			1.84	3.92	
8	Zn ($\mu\text{g}/\text{L}$)			2.68	10.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	90	87	79	64	58
2	HAR_Total (mgCaCO ₃ /L)	149	118	111	104	118
3	Na% (%)	20	22	23	22	26
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.6	0.6	0.6	0.6	0.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAVANDAPUR (CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	17.17	29.29	49.93	25.36	19.32
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	281	400	418	363	446
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	277	398	385	387	374
4	pH_FLD (pH units)	7.8	7.7	7.9	8.2	7.9
5	pH_GEN (pH units)	7.7	7.8	7.9	7.9	7.9
6	TDS (mg/L)	160				
7	Temp (deg C)	29.6	25.5	24.6	27.3	26.0
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	96	135	143	141	161
2	B (mg/L)	0.06	0.22	0.25	0.22	0.05
3	Ca (mg/L)	21	33	36	34	40
4	Cl (mg/L)	26.1	29.2	27.2	27.1	26.3
5	F (mg/L)	0.24	0.37	0.35	0.24	0.41
6	Fe (mg/L)	0.014	0.076	0.067	0.065	0.069
7	HCO ₃ (mg/L)	117	164	175	172	196
8	K (mg/L)	4.6	2.8	3.9	2.5	1.7
9	Mg (mg/L)	13.7	16.7	14.6	13.6	15.1
10	Na (mg/L)	19.2	25.8	24.6	24.5	24.7
11	NH ₃ -N (mg N/L)	0.26	0.13		0.05	
12	NO ₂ +NO ₃ (mg N/L)	2.18	3.03	3.97	2.77	
13	NO ₂ -N (mgN/L)	0.11	0.02	0.02	0.01	
14	NO ₃ -N (mgN/L)	2.08	3.01	3.96	2.76	0.22
15	o-PO ₄ -P (mg P/L)	0.048				0.010
16	P-Tot (mgP/L)		0.025	0.040	0.024	
17	SiO ₂ (mg/L)	13.9	20.2	24.0	20.3	2.4
18	SO ₄ (mg/L)	16.9	18.2	19.7	21.6	26.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.1	2.2	1.2	0.8	0.9
2	COD (mg/L)	11.5				
3	DO (mg/L)	7.3	6.0	6.3	7.8	7.4
4	DO_SAT% (%)	96	73	76	98	92
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	53	83	91	86	101
2	HAR_Total (mgCaCO ₃ /L)	110	152	152	143	164
3	Na% (%)	27	27	25	27	24
4	RSC (-)	0.0	0.0	0.0	0.1	0.1
5	SAR (-)	0.8	0.9	0.9	0.9	0.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAVANDAPUR (CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	16.39	14.07	16.89	4.352	13.59
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	388	307	356	348	273
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	350	307	387	449	268
4	pH_FLD (pH units)	7.7	7.9	7.7	7.8	7.8
5	pH_GEN (pH units)	7.7	8.0	7.6	7.6	7.8
6	TDS (mg/L)					
7	Temp (deg C)	26.1	26.9	26.6	26.5	26.9
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	150	198	146	161	106
2	B (mg/L)	0.21	0.19			
3	Ca (mg/L)	38	48	42	45	28
4	Cl (mg/L)	25.6	59.5	43.3	46.2	24.4
5	F (mg/L)	0.40	0.56	0.40	0.14	0.21
6	Fe (mg/L)	0.183	0.000	0.070		
7	HCO ₃ (mg/L)	183	242	178	197	129
8	K (mg/L)	2.5	4.4	3.5	4.6	2.4
9	Mg (mg/L)	13.9	23.6	14.3	16.8	14.0
10	Na (mg/L)	22.2	37.1	29.1	30.4	14.1
11	NH ₃ -N (mg N/L)	0.04	0.01		0.06	0.15
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)	1.43	7.01	0.70	0.52	0.69
15	o-PO ₄ -P (mg P/L)	0.100	0.078			
16	P-Tot (mgP/L)					
17	SiO ₂ (mg/L)	24.5	30.5			
18	SO ₄ (mg/L)	27.0	32.9	27.0	25.9	16.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	0.8	1.2	1.2	1.1
2	COD (mg/L)				8.3	5.4
3	DO (mg/L)	5.3	7.4	7.0	5.9	6.8
4	DO_SAT% (%)	64	92	89	74	85
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.48		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			1.11		
4	Cu ($\mu\text{g}/\text{L}$)			12.88		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			1.84		
7	Pb ($\mu\text{g}/\text{L}$)			1.25		
8	Zn ($\mu\text{g}/\text{L}$)			9.20		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	94	120	104	112	70
2	HAR_Total (mgCaCO ₃ /L)	152	218	164	182	128
3	Na% (%)	24	26	27	26	19
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.8	1.1	1.0	1.0	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAVANDAPUR (CCG00E3)

Division : SR Division, Coimbatore

Local River : Bhavani

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	15.83	17.52	16.15	21.51	17.21
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	515	472	310	308	287
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	515	472	303	265	264
4	pH_FLD (pH units)	7.9	7.7	7.9	7.9	7.9
5	pH_GEN (pH units)	8.0	7.7	7.8	7.8	7.6
6	TDS (mg/L)	290	273			
7	Temp (deg C)	27.0	27.9	27.7	29.5	28.7
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	178	160	112	93	95
2	B (mg/L)	0.00	0.09	0.31	0.24	0.26
3	Ca (mg/L)	35	34	27	21	22
4	Cl (mg/L)	46.1	41.4	23.8	20.6	18.7
5	F (mg/L)	0.44	0.44	0.32	0.29	0.28
6	Fe (mg/L)	0.039	0.007	0.090	0.066	0.060
7	HCO ₃ (mg/L)	217	195	137	113	115
8	K (mg/L)	5.7	5.0	2.7	2.4	2.9
9	Mg (mg/L)	29.9	26.8	11.3	9.4	9.7
10	Na (mg/L)	33.7	29.1	17.7	17.1	16.9
11	NH ₃ -N (mg N/L)	0.19	0.39	0.12	0.05	0.05
12	NO ₂ +NO ₃ (mg N/L)	3.50	4.93	1.43	2.15	1.55
13	NO ₂ -N (mgN/L)	0.03	0.02	0.01	0.01	0.01
14	NO ₃ -N (mgN/L)	5.80	4.91	1.42	2.14	1.54
15	o-PO ₄ -P (mg P/L)	0.025	0.118			
16	P-Tot (mgP/L)			0.008	0.010	0.719
17	SiO ₂ (mg/L)	18.9	21.1	21.5	15.4	17.6
18	SO ₄ (mg/L)	27.5	26.1	11.7	11.3	14.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	2.3	0.8	0.8	0.7
2	COD (mg/L)	9.0	11.7			
3	DO (mg/L)	6.8	7.4	7.1	6.6	7.3
4	DO_SAT% (%)	85	93	89	87	94
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			15.71	9.07	4.99
2	Cd ($\mu\text{g}/\text{L}$)	0.55		10.00	3.00	0.57
3	Cr ($\mu\text{g}/\text{L}$)	8.25				
4	Cu ($\mu\text{g}/\text{L}$)	3.19		1.90		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	0.79			3.17	
7	Pb ($\mu\text{g}/\text{L}$)	1.25			4.52	
8	Zn ($\mu\text{g}/\text{L}$)	2.30		13.00	2.00	7.00
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	88	85	68	53	55
2	HAR_Total (mgCaCO ₃ /L)	213	197	115	93	95
3	Na% (%)	25	24	25	28	26
4	RSC (-)	0.0	0.0	0.0	0.1	0.0
5	SAR (-)	1.0	0.9	0.7	0.8	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAVANDAPUR (CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	14.53	21.24	14.65	13.78
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	260	280	298	199
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	232	235	291	199
4	pH_FLD (pH units)	7.9	7.6	7.9	7.8
5	pH_GEN (pH units)	7.7	7.4	7.9	7.6
6	TDS (mg/L)				
7	Temp (deg C)	29.0	27.0	29.8	29.1
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	101	99	120	85
2	B (mg/L)	0.09	0.28	0.00	
3	Ca (mg/L)	25	27	31	18
4	Cl (mg/L)	25.1	25.5	41.1	19.9
5	F (mg/L)	0.25	0.32	0.21	0.38
6	Fe (mg/L)	0.075	0.026	0.000	0.020
7	HCO ₃ (mg/L)	123	120	146	103
8	K (mg/L)	2.5	2.8	3.3	2.8
9	Mg (mg/L)	12.6	9.1	12.6	10.0
10	Na (mg/L)	17.7	17.1	22.3	14.2
11	NH ₃ -N (mg N/L)	0.07	0.01	0.05	
12	NO ₂ +NO ₃ (mg N/L)				
13	NO ₂ -N (mgN/L)				
14	NO ₃ -N (mgN/L)	0.80	1.21	1.78	0.27
15	o-PO ₄ -P (mg P/L)	0.012	0.013	0.000	
16	P-Tot (mgP/L)				
17	SiO ₂ (mg/L)	17.8	19.4	26.8	
18	SO ₄ (mg/L)	18.1	20.1	14.9	11.1
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.1	0.9	1.1	1.2
2	COD (mg/L)				
3	DO (mg/L)	6.4	5.5	7.2	6.4
4	DO_SAT% (%)	84	71	94	83
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	8.13		1.16	0.04
2	Cd ($\mu\text{g}/\text{L}$)			0.03	0.07
3	Cr ($\mu\text{g}/\text{L}$)			2.43	2.28
4	Cu ($\mu\text{g}/\text{L}$)	1.47		2.23	1.98
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	10.24			2.54
7	Pb ($\mu\text{g}/\text{L}$)	1.25		0.01	4.18
8	Zn ($\mu\text{g}/\text{L}$)			13.75	1200.00
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	61	68	77	45
2	HAR_Total (mgCaCO ₃ /L)	114	106	130	87
3	Na% (%)	25	27	27	26
4	RSC (-)	0.0	0.1	0.0	0.0
5	SAR (-)	0.7	0.7	0.9	0.7
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAVANDAPUR (CCG00E3)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	2.265	2.885	17.77	12.11
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	391	310	352	407
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	392	308	325	420
4	pH_FLD (pH units)	7.8	7.8	7.8	7.7
5	pH_GEN (pH units)	7.7	7.7	7.9	7.8
6	TDS (mg/L)		149	187	239
7	Temp (deg C)	29.7	25.7	28.2	30.0
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	127	109	121	146
2	B (mg/L)			0.03	0.14
3	Ca (mg/L)	37	29	16	39
4	Cl (mg/L)	47.3	32.7	30.9	38.8
5	F (mg/L)	0.44	0.21	0.27	0.34
6	Fe (mg/L)	0.002	0.047	0.003	0.000
7	HCO ₃ (mg/L)	155	133	147	178
8	K (mg/L)	4.1	3.3	3.4	3.1
9	Mg (mg/L)	12.0	12.5	22.6	17.8
10	Na (mg/L)	29.9	21.7	21.6	25.6
11	NH ₃ -N (mg N/L)	0.29	0.13	0.09	0.07
12	NO ₂ +NO ₃ (mg N/L)			2.00	3.66
13	NO ₂ -N (mgN/L)			0.01	0.01
14	NO ₃ -N (mgN/L)	0.10	0.38	2.00	3.65
15	o-PO ₄ -P (mg P/L)			0.013	0.057
16	P-Tot (mgP/L)				
17	SiO ₂ (mg/L)			17.0	19.4
18	SO ₄ (mg/L)	22.5	14.0	12.7	17.9
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.3	2.2	1.3	1.8
2	COD (mg/L)	9.3	9.3	13.1	9.8
3	DO (mg/L)	6.0	6.5	6.8	7.0
4	DO_SAT% (%)	79	80	86	92
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	4.84	4.27		
2	Cd ($\mu\text{g}/\text{L}$)	0.09	0.05		
3	Cr ($\mu\text{g}/\text{L}$)	0.32	0.75		
4	Cu ($\mu\text{g}/\text{L}$)	0.79	1.45		
5	Hg ($\mu\text{g}/\text{L}$)	0.26			
6	Ni ($\mu\text{g}/\text{L}$)	5.62	8.07		
7	Pb ($\mu\text{g}/\text{L}$)	2.02	0.80		
8	Zn ($\mu\text{g}/\text{L}$)	1.25	4.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	92	73	39	98
2	HAR_Total (mgCaCO ₃ /L)	142	125	133	172
3	Na% (%)	30	27	26	24
4	RSC (-)	0.0	0.0	0.0	0.0
5	SAR (-)	1.1	0.9	0.8	0.9
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016			
Site	: THENGUMARAHADA	Code	: CCGI0E9
State	: Tamil Nadu	District	Nilgiris
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Bhavani	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Moyar
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 1370 Sq. Km.	Bank	: Right
Latitude	: 11°34'22"	Longitude	: 76°55'09"
Zero of Gauge (m)	: 336.650 (m.s.l)	23/10/1978	
	Opening Date	Closing Date	
Gauge	: 23/10/1978		
Discharge	: 01/06/1979		
Sediment	: 01/06/2002		
Water Quality	: 01/06/1979		

Water Quality Datasheet for the period : 2015-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division :SR Division, Coimbatore

Local River :Moyer

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	8.089	6.12	5.70
2	Colour_Cod (-)	Light Brown	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	117	82	173
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	177	82	173
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.4	8.2	8.0
7	pH_GEN (pH units)	7.4	8.2	8.0
8	TDS (mg/L)	103	47	99
9	Temp (deg C)	22.0	24.0	23.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	34	19	58
3	B (mg/L)	0.04	0.05	
4	Ca (mg/L)	13	13	25
5	Cl (mg/L)	32.6	14.2	17.4
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.12	0.07	
8	Fe (mg/L)	0.130	0.010	0.000
9	HCO ₃ (mg/L)	42	23	71
10	K (mg/L)	3.1	1.0	1.6
11	Mg (mg/L)	9.6	1.9	5.8
12	Na (mg/L)	8.6	3.2	6.1
13	NH ₃ -N (mg N/L)	0.03	0.06	0.51
14	NO ₂ +NO ₃ (mg N/L)	2.19	1.26	3.84
15	NO ₂ -N (mgN/L)	0.06	0.01	0.00
16	NO ₃ -N (mgN/L)	2.13	1.25	3.84
17	o-PO ₄ -P (mg P/L)	0.060	0.020	0.020
18	SiO ₂ (mg/L)	9.7	10.1	8.7
19	SO ₄ (mg/L)	10.3	2.9	5.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.3	1.4	0.4
2	COD (mg/L)	5.3	12.6	3.7
3	DO (mg/L)	6.2	7.1	7.2
4	DO_SAT% (%)	71	84	84
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	32	32	64
2	HAR_Total (mgCaCO ₃ /L)	72	40	88
3	Na% (%)	20	15	13
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.2	0.3
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division :SR Division, Coimbatore

Local River :Moyer

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	6.838	12.52	8.248
2	Colour_Cod (-)	Clear	Light Brown	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	138	144	195
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	138	144	195
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.0	7.3	7.3
7	pH_GEN (pH units)	8.0	7.3	7.3
8	TDS (mg/L)	78	84	114
9	Temp (deg C)	25.5	24.0	23.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	31	31	46
3	B (mg/L)		0.01	0.06
4	Ca (mg/L)	19	17	22
5	Cl (mg/L)	23.2	19.2	30.8
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.070	0.150	0.020
9	HCO ₃ (mg/L)	38	37	56
10	K (mg/L)	1.8	3.3	2.2
11	Mg (mg/L)	2.9	3.8	8.6
12	Na (mg/L)	7.0	7.4	8.6
13	NH ₃ -N (mg N/L)	0.20	0.16	0.15
14	NO ₂ +NO ₃ (mg N/L)	2.18	3.16	4.02
15	NO ₂ -N (mgN/L)	0.01	0.00	0.03
16	NO ₃ -N (mgN/L)	2.17	3.16	3.99
17	o-PO ₄ -P (mg P/L)	0.020	0.030	0.010
18	SiO ₂ (mg/L)	10.7	14.1	13.1
19	SO ₄ (mg/L)	6.2	11.8	7.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.4	1.2	2.7
2	COD (mg/L)	5.5	7.3	20.9
3	DO (mg/L)	7.1	7.6	6.9
4	DO_SAT% (%)	86	90	80
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	48	43	55
2	HAR_Total (mgCaCO ₃ /L)	60	59	91
3	Na% (%)	20	20	17
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division :SR Division, Coimbatore

Local River :Moyer

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	14.44	5.437	3.895
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	96	151	213
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	96	221	213
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.8	6.9	6.9
7	pH_GEN (pH units)	7.8	7.6	7.2
8	TDS (mg/L)	55	126	122
9	Temp (deg C)	22.5	21.0	20.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	11	54	50
3	B (mg/L)	0.01	0.08	0.02
4	Ca (mg/L)	13	21	28
5	Cl (mg/L)	17.3	29.5	38.2
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.11	0.12	0.10
8	Fe (mg/L)	0.030	0.070	0.000
9	HCO ₃ (mg/L)	14	65	61
10	K (mg/L)	1.9	2.0	1.6
11	Mg (mg/L)	1.9	10.5	6.7
12	Na (mg/L)	5.2	9.1	8.2
13	NH ₃ -N (mg N/L)	0.08	0.25	0.49
14	NO ₂ +NO ₃ (mg N/L)	2.55	2.84	2.23
15	NO ₂ -N (mgN/L)	0.10	0.02	0.00
16	NO ₃ -N (mgN/L)	2.45	2.82	2.23
17	o-PO ₄ -P (mg P/L)	0.350	0.020	0.020
18	SiO ₂ (mg/L)	5.4	16.6	11.5
19	SO ₄ (mg/L)	7.1	8.4	5.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.8	1.5	1.6
2	COD (mg/L)	5.3	11.1	13.2
3	DO (mg/L)	6.5	6.8	6.4
4	DO_SAT% (%)	74	76	70
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	32	51	71
2	HAR_Total (mgCaCO ₃ /L)	40	95	99
3	Na% (%)	21	17	15
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division :SR Division, Coimbatore

Local River :Moyer

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	7.933	10.11	3.74
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	244	238	136
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	244	238	136
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.2	7.2	7.0
7	pH_GEN (pH units)	7.1	7.2	7.3
8	TDS (mg/L)	140	135	78
9	Temp (deg C)	21.0	24.0	26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	26	22	22
3	B (mg/L)	0.06	0.09	0.06
4	Ca (mg/L)	36	30	16
5	Cl (mg/L)	63.7	63.7	29.1
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.01	0.01	0.05
8	Fe (mg/L)	0.000	0.000	0.000
9	HCO ₃ (mg/L)	32	27	27
10	K (mg/L)	1.3	0.7	1.5
11	Mg (mg/L)	4.8	7.6	4.8
12	Na (mg/L)	9.9	7.7	6.2
13	NH ₃ -N (mg N/L)	0.19	0.19	0.09
14	NO ₂ +NO ₃ (mg N/L)	2.67	1.72	2.41
15	NO ₂ -N (mgN/L)	0.00	0.00	0.00
16	NO ₃ -N (mgN/L)	2.67	1.72	2.41
17	o-PO ₄ -P (mg P/L)	0.020	0.010	0.040
18	SiO ₂ (mg/L)	5.3	3.3	2.7
19	SO ₄ (mg/L)	4.3	4.3	2.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.4	1.4	1.1
2	COD (mg/L)	11.6	12.8	7.5
3	DO (mg/L)	7.2	7.6	7.2
4	DO_SAT% (%)	81	90	89
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	90	75	39
2	HAR_Total (mgCaCO ₃ /L)	110	106	59
3	Na% (%)	16	14	18
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.3	0.4
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division : SR Division, Coimbatore

Local River : Moyar

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	38.30	1.638	8.635
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	12	244	82	161
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	244	82	171
4	pH_FLD (pH units)	12	8.2	6.9	7.4
5	pH_GEN (pH units)	12	8.2	7.1	7.5
6	TDS (mg/L)	12	140	47	98
7	Temp (deg C)	12	26.0	20.0	23
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	12	58	11	34
3	B (mg/L)	10	0.09	0.01	0.05
4	Ca (mg/L)	12	36	13	21
5	Cl (mg/L)	12	63.7	14.2	31.6
6	CO ₃ (mg/L)	12	0.0	0.0	0
7	F (mg/L)	8	0.12	0.01	0.07
8	Fe (mg/L)	12	0.150	0.000	0.04
9	HCO ₃ (mg/L)	12	71	14	41
10	K (mg/L)	12	3.3	0.7	1.8
11	Mg (mg/L)	12	10.5	1.9	5.8
12	Na (mg/L)	12	9.9	3.2	7.3
13	NH ₃ -N (mg N/L)	12	0.51	0.03	0.2
14	NO ₂ +NO ₃ (mg N/L)	12	4.02	1.26	2.59
15	NO ₂ -N (mgN/L)	12	0.10	0.00	0.02
16	NO ₃ -N (mgN/L)	12	3.99	1.25	2.57
17	o-PO ₄ -P (mg P/L)	12	0.350	0.010	0.052
18	SiO ₂ (mg/L)	12	16.6	2.7	9.3
19	SO ₄ (mg/L)	12	11.8	2.1	6.3
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	12	2.7	0.4	1.3
2	COD (mg/L)	12	20.9	3.7	9.7
3	DO (mg/L)	12	7.6	6.2	7
4	DO_SAT% (%)	12	90	70	81
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	90	32	53
2	HAR_Total (mgCaCO ₃ /L)	12	110	40	77
3	Na% (%)	12	21	13	17
4	RSC (-)	12	0.0	0.0	0
5	SAR (-)	12	0.4	0.2	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division : SR Division, Coimbatore

Local River : Moyar

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	36.46	9.416	24.41	17.33	8.793
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	158	116	119	151	156
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	143	125	127	137	142
4	pH_FLD (pH units)	7.1	7.1	7.4	7.3	7.4
5	pH_GEN (pH units)	6.9	7.3	7.4	7.5	7.4
6	TDS (mg/L)					
7	Temp (deg C)	23.5	24.6	23.8	23.9	25.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	26	28	26	34	40
3	B (mg/L)	0.15	0.18	0.11	0.11	0.16
4	Ca (mg/L)	14	13	13	13	15
5	Cl (mg/L)	25.5	17.7	18.1	16.1	22.1
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.25	0.19	0.14	0.07	0.17
8	Fe (mg/L)	0.074	0.071	0.070	0.069	0.153
9	HCO ₃ (mg/L)	32	35	32	42	49
10	K (mg/L)	1.9	2.0	1.9	1.8	1.7
11	Mg (mg/L)	6.7	3.9	3.7	4.3	5.8
12	Na (mg/L)	4.8	5.5	5.4	5.8	5.6
13	NH ₃ -N (mg N/L)			0.04	0.05	0.15
14	NO ₂ +NO ₃ (mg N/L)	1.87	1.79	2.30	1.90	
15	NO ₂ -N (mgN/L)	0.02	0.01	0.05	0.02	
16	NO ₃ -N (mgN/L)	1.85	1.78	2.25	1.88	1.53
17	o-PO ₄ -P (mg P/L)				0.013	0.050
18	P-Tot (mgP/L)	0.014	0.011	0.010		
19	SiO ₂ (mg/L)	8.3	9.8	9.2	7.7	7.8
20	SO ₄ (mg/L)	4.0	4.4	6.0	5.7	2.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.9	2.1	0.8	1.2	1.1
2	COD (mg/L)					
3	DO (mg/L)	8.4	6.8	7.1	7.2	7.2
4	DO_SAT% (%)	98	82	84	84	87
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	34	32	33	33	38
2	HAR_Total (mgCaCO ₃ /L)	62	48	48	51	63
3	Na% (%)	15	19	19	20	16
4	SAR (-)	0.3	0.3	0.3	0.4	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Local River : Moyar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	12.04	7.969	3.972	12.3	12.97
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	143	127	163	111	149
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	127	127	140	112	149
4	pH_FLD (pH units)	7.6	7.7	7.2	7.3	7.1
5	pH_GEN (pH units)	7.4	7.3	7.3	7.4	7.2
6	TDS (mg/L)					80
7	Temp (deg C)	24.3	25.0	24.4	23.7	21.4
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	44	40	41	24	29
3	B (mg/L)	0.06				
4	Ca (mg/L)	15	17	17	12	17
5	Cl (mg/L)	12.3	17.6	23.5	17.0	30.3
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.24	0.19	0.11	0.08	0.06
8	Fe (mg/L)	0.301			0.085	
9	HCO ₃ (mg/L)	54	49	50	29	36
10	K (mg/L)	2.2	1.9	2.3	1.2	1.9
11	Mg (mg/L)	4.9	3.7	5.4	4.1	5.3
12	Na (mg/L)	5.0	5.0	5.7	3.0	6.9
13	NH ₃ -N (mg N/L)	0.06			0.18	0.14
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	3.00	0.67	0.50	0.74	1.15
17	o-PO ₄ -P (mg P/L)	0.192				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	11.7				
20	SO ₄ (mg/L)	6.9	4.4	4.1	5.0	6.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.8	1.4	2.0	0.9	1.0
2	COD (mg/L)				6.0	5.7
3	DO (mg/L)	7.6	7.3	6.8	7.4	10.6
4	DO_SAT% (%)	91	88	81	87	86
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			2.71	3.19	
2	Cd ($\mu\text{g}/\text{L}$)			0.14	0.00	
3	Cr ($\mu\text{g}/\text{L}$)			3.61	1.77	
4	Cu ($\mu\text{g}/\text{L}$)			11.38	1.50	
5	Hg ($\mu\text{g}/\text{L}$)				0.44	
6	Ni ($\mu\text{g}/\text{L}$)			2.41	9.59	
7	Pb ($\mu\text{g}/\text{L}$)			1.08	0.93	
8	Zn ($\mu\text{g}/\text{L}$)			1.24	9.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	38	42	42	29	42
2	HAR_Total (mgCaCO ₃ /L)	58	58	64	46	65
3	Na% (%)	15	15	16	12	19
4	SAR (-)	0.3	0.3	0.3	0.2	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division : SR Division, Coimbatore

Local River : Moyar

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	7.852	17.31	10.72	6.914	7.64
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	131	218	130	139	183
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	143	244	159	182	176
4	pH_FLD (pH units)	7.8	7.4	7.3	7.4	7.5
5	pH_GEN (pH units)	7.8	7.4	7.3	7.5	7.4
6	TDS (mg/L)	82				
7	Temp (deg C)	23.7	21.3	21.3	22.3	21.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	35	63	35	43	50
3	B (mg/L)	0.03	0.06	0.12	0.15	0.07
4	Ca (mg/L)	17	20	18	19	22
5	Cl (mg/L)	21.3	27.9	24.9	23.3	28.8
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.10	0.31	0.14	0.18	0.18
8	Fe (mg/L)	0.072	0.078	0.100	0.065	0.469
9	HCO ₃ (mg/L)	42	77	43	53	62
10	K (mg/L)	2.2	1.4	1.5	1.5	1.4
11	Mg (mg/L)	4.8	11.2	5.1	5.6	7.4
12	Na (mg/L)	6.5	13.9	4.8	6.5	8.5
13	NH ₃ -N (mg N/L)	0.19	0.08		0.04	
14	NO ₂ +NO ₃ (mg N/L)	2.53	2.43	2.35	2.76	
15	NO ₂ -N (mgN/L)	0.02	0.02	0.05	0.01	
16	NO ₃ -N (mgN/L)	2.51	2.41	2.31	2.75	1.30
17	o-PO ₄ -P (mg P/L)	0.030				0.010
18	P-Tot (mgP/L)		0.014	0.003	0.048	
19	SiO ₂ (mg/L)	10.6	13.3	11.0	9.5	0.6
20	SO ₄ (mg/L)	7.3	11.0	4.9	4.9	6.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	1.2	1.2	2.2	1.7
2	COD (mg/L)	6.9				
3	DO (mg/L)	7.0	7.8	7.2	7.2	7.2
4	DO_SAT% (%)	83	88	81	83	82
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	44	49	46	47	56
2	HAR_Total (mgCaCO ₃ /L)	64	95	67	70	86
3	Na% (%)	17	24	13	16	17
4	SAR (-)	0.4	0.6	0.3	0.3	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division : SR Division, Coimbatore

Local River : Moyar

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	10.9	13.37	10.43	22.14	9.082
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	167	145	129	269	153
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	143	143	130	267	158
4	pH_FLD (pH units)	7.7	7.6	7.4	7.2	7.3
5	pH_GEN (pH units)	7.7	7.7	7.2	7.2	7.5
6	TDS (mg/L)					
7	Temp (deg C)	23.4	21.6	22.1	21.8	21.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	43	44	41	47	39
3	B (mg/L)	0.14	0.09			
4	Ca (mg/L)	18	19	17	33	16
5	Cl (mg/L)	23.0	18.2	20.5	54.8	22.6
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.27	0.06	0.14	0.06	0.07
8	Fe (mg/L)	0.160	0.010	0.070		
9	HCO ₃ (mg/L)	53	54	49	57	47
10	K (mg/L)	1.2	2.2	1.2	2.0	1.1
11	Mg (mg/L)	5.1	3.6	5.1	8.3	5.8
12	Na (mg/L)	5.0	5.5	4.1	9.1	6.6
13	NH ₃ -N (mg N/L)	0.08	0.00		0.16	0.19
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	1.17	3.12	0.37	1.32	1.29
17	o-PO ₄ -P (mg P/L)	0.027	0.090			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	12.4	9.1			
20	SO ₄ (mg/L)	1.0	5.7	3.1	9.8	3.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.8	1.3	0.7	1.4	0.9
2	COD (mg/L)				7.3	3.4
3	DO (mg/L)	7.1	7.3	7.7	7.7	6.6
4	DO_SAT% (%)	83	82	88	88	74
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.55		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			0.65		
4	Cu ($\mu\text{g}/\text{L}$)			14.05		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)			0.99		
8	Zn ($\mu\text{g}/\text{L}$)			1.30		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	45	48	42	83	39
2	HAR_Total (mgCaCO ₃ /L)	66	63	63	118	63
3	Na% (%)	14	15	12	15	18
4	SAR (-)	0.3	0.3	0.2	0.4	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division : SR Division, Coimbatore

Local River : Moyar

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	9.848	8.005	8.311	5.139	10.33
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	158	164	197	172	164
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	158	181	189	200	169
4	pH_FLD (pH units)	7.5	7.2	7.5	7.4	7.3
5	pH_GEN (pH units)	7.6	7.5	7.4	7.2	7.5
6	TDS (mg/L)	90	104			
7	Temp (deg C)	21.3	21.6	24.8	24.5	24.4
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	1.9	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	37	40	36	32	34
3	B (mg/L)	0.00	0.04	0.13	0.17	0.17
4	Ca (mg/L)	15	21	20	24	18
5	Cl (mg/L)	29.2	28.9	33.1	39.6	31.4
6	CO ₃ (mg/L)	2.3	0.0	0.0	0.0	0.0
7	F (mg/L)	0.09	0.11	0.19	0.16	
8	Fe (mg/L)	0.021	0.030	0.093	0.070	0.073
9	HCO ₃ (mg/L)	40	49	43	39	41
10	K (mg/L)	1.3	1.9	1.5	1.7	1.3
11	Mg (mg/L)	7.8	6.9	6.2	4.5	5.8
12	Na (mg/L)	6.6	7.8	8.5	7.1	5.1
13	NH ₃ -N (mg N/L)	0.18	0.24	0.14		0.03
14	NO ₂ +NO ₃ (mg N/L)	1.91	2.91	1.54	2.40	1.80
15	NO ₂ -N (mgN/L)	0.02	0.04	0.01	0.01	0.01
16	NO ₃ -N (mgN/L)	1.93	2.87	1.53	2.39	1.79
17	o-PO ₄ -P (mg P/L)	0.000	0.100			
18	P-Tot (mgP/L)			0.014	0.010	
19	SiO ₂ (mg/L)	6.7	11.7	11.3	10.1	8.1
20	SO ₄ (mg/L)	3.3	7.0	5.9	3.1	4.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.2	1.6	1.0	0.6	1.0
2	COD (mg/L)	7.9	12.6			
3	DO (mg/L)	7.2	6.7	7.4	7.3	7.1
4	DO_SAT% (%)	81	75	89	88	84
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			10.71	5.46	3.64
2	Cd ($\mu\text{g}/\text{L}$)	0.56		9.00	1.00	0.58
3	Cr ($\mu\text{g}/\text{L}$)	9.72				
4	Cu ($\mu\text{g}/\text{L}$)	3.44				
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	0.42		1.12		
7	Pb ($\mu\text{g}/\text{L}$)	0.95				1.38
8	Zn ($\mu\text{g}/\text{L}$)	2.30		9.00	4.00	7.00
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	38	52	49	59	45
2	HAR_Total (mgCaCO ₃ /L)	71	81	75	78	70
3	Na% (%)	18	17	19	16	14
4	SAR (-)	0.3	0.4	0.4	0.4	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division : SR Division, Coimbatore

Local River : Moyar

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	6.594	8.958	5.391	4.917
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	188	159	142	156
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	155	119	153	136
4	pH_FLD (pH units)	7.1	7.6	7.5	7.0
5	pH_GEN (pH units)	7.1	7.3	7.5	7.1
6	TDS (mg/L)				
7	Temp (deg C)	24.0	25.7	24.2	23.5
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	31	35	39	37
3	B (mg/L)	0.11	0.64	0.00	
4	Ca (mg/L)	24	17	19	17
5	Cl (mg/L)	43.5	20.5	23.8	29.4
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.11	0.26	0.11	0.24
8	Fe (mg/L)	0.057	0.678	0.000	0.030
9	HCO ₃ (mg/L)	38	42	47	45
10	K (mg/L)	1.3	1.6	1.6	2.5
11	Mg (mg/L)	4.6	2.6	3.9	5.5
12	Na (mg/L)	5.9	4.6	6.5	5.9
13	NH ₃ -N (mg N/L)	0.11	0.02	0.03	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)	0.93	1.03	1.82	0.52
17	o-PO ₄ -P (mg P/L)	0.018	0.012	0.000	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	5.1	5.9	7.6	
20	SO ₄ (mg/L)	1.1	2.8	4.3	3.0
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.4	1.8	1.5	1.7
2	COD (mg/L)				
3	DO (mg/L)	7.9	6.9	6.7	7.7
4	DO_SAT% (%)	93	84	80	90
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.36	0.12
2	Cd ($\mu\text{g}/\text{L}$)			0.01	0.15
3	Cr ($\mu\text{g}/\text{L}$)			5.63	3.50
4	Cu ($\mu\text{g}/\text{L}$)	1.55		2.57	2.98
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	11.91			3.10
7	Pb ($\mu\text{g}/\text{L}$)	1.01		0.71	4.31
8	Zn ($\mu\text{g}/\text{L}$)			31.39	126.00
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	60	43	48	43
2	HAR_Total (mgCaCO ₃ /L)	79	54	64	66
3	Na% (%)	14	15	17	16
4	SAR (-)	0.3	0.3	0.4	0.3
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THENGUMARAHADA(CCGI0E9)

Division : SR Division, Coimbatore

Local River : Moyar

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	5.216	7.132	8.44	7.26
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	230	158	182	206
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	224	172	180	206
4	pH_FLD (pH units)	7.1	7.4	7.4	7.1
5	pH_GEN (pH units)	7.1	7.4	7.5	7.2
6	TDS (mg/L)		82	104	118
7	Temp (deg C)	24.8	23.3	23.0	23.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	27	39	37	24
3	B (mg/L)			0.00	0.07
4	Ca (mg/L)	30	20	13	27
5	Cl (mg/L)	61.6	34.0	36.6	52.2
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.22	0.05	0.08	0.02
8	Fe (mg/L)	0.001	0.052	0.017	0.000
9	HCO ₃ (mg/L)	32	48	45	29
10	K (mg/L)	1.2	1.9	1.7	1.2
11	Mg (mg/L)	8.1	5.2	11.3	5.7
12	Na (mg/L)	5.6	8.1	7.3	7.9
13	NH ₃ -N (mg N/L)	0.23	0.68	0.15	0.15
14	NO ₂ +NO ₃ (mg N/L)			1.85	2.27
15	NO ₂ -N (mgN/L)			0.01	0.00
16	NO ₃ -N (mgN/L)	0.49	1.21	1.84	2.27
17	o-PO ₄ -P (mg P/L)			0.040	0.023
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)			5.2	3.8
20	SO ₄ (mg/L)	1.5	1.9	3.4	3.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	0.6	1.1	1.2	1.3
2	COD (mg/L)	3.7	9.1	6.2	10.6
3	DO (mg/L)	7.5	6.7	6.8	7.3
4	DO_SAT% (%)	90	78	79	87
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	4.50	1.39		
2	Cd ($\mu\text{g}/\text{L}$)	0.05	0.14		
3	Cr ($\mu\text{g}/\text{L}$)	0.29	1.46		
4	Cu ($\mu\text{g}/\text{L}$)	0.81	22.27		
5	Hg ($\mu\text{g}/\text{L}$)	0.52			
6	Ni ($\mu\text{g}/\text{L}$)	3.86	6.81		
7	Pb ($\mu\text{g}/\text{L}$)	1.14	0.88		
8	Zn ($\mu\text{g}/\text{L}$)	1.07	8.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	75	49	32	68
2	HAR_Total (mgCaCO ₃ /L)	109	70	79	92
3	Na% (%)	11	19	17	16
4	SAR (-)	0.2	0.4	0.4	0.4
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016			
Site	GANDHAVAYAL	Code	: CCG20C8
State	: Tamil Nadu	District	Coimbatore
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Bhavani	Sub Tributary	: Gandhayar
Sub-Sub Tributary	: -	Local River	: Gandhayar
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 90.71 Sq. Km.	Bank	: Right
Latitude	: 11°22'27"	Longitude	: 76°59'32"
Zero of Gauge (m)	: 92.000 (m.s.l)	15/03/2013	
	Opening Date	Closing Date	
Gauge	: 15/03/2013		
Discharge	: 15/03/2013		
Sediment	:		
Water Quality	: 01/04/2013		

Water Quality Datasheet for the period : 2015-2016

Station Name :GANDHAVAYAL(CCG20C8)

Local River :Gandhayar

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	1.759	0.814	0.437
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	129	173	184
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.5	7.9	7.9
6	TDS (mg/L)	75	100	105
7	Temp (deg C)	22.0	24.0	24.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	38	57	62
3	B (mg/L)	0.04	0.04	
4	Ca (mg/L)	11	21	19
5	Cl (mg/L)	14.2	16.3	17.4
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.09	0.11	
8	Fe (mg/L)	0.140	0.000	0.010
9	HCO ₃ (mg/L)	46	70	75
10	K (mg/L)	2.2	2.7	2.6
11	Mg (mg/L)	4.8	4.8	8.7
12	Na (mg/L)	9.4	9.9	9.4
13	NH ₃ -N (mg N/L)	0.02	0.00	0.39
14	NO ₂ +NO ₃ (mg N/L)	1.87	2.67	2.77
15	NO ₂ -N (mgN/L)	0.01	0.00	0.05
16	NO ₃ -N (mgN/L)	1.86	2.67	2.72
17	o-PO ₄ -P (mg P/L)	0.020	0.010	0.010
18	SiO ₂ (mg/L)	16.8	18.0	17.5
19	SO ₄ (mg/L)	5.6	4.7	6.3
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)	3.2	10.5	5.5
2	DO (mg/L)	0.0		
3	DO_SAT% (%)	0		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	28	52	48
2	HAR_Total (mgCaCO ₃ /L)	48	72	84
3	Na% (%)	29	22	19
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.6	0.5	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :GANDHAVAYAL(CCG20C8)

Local River :Gandhayar

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.146	7.25	10.49
2	Colour_Cod (-)	Clear	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	216	104	93
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.6	8.8	8.1
6	TDS (mg/L)	124	60	54
7	Temp (deg C)	24.0	22.0	20.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	7.6	0.0
2	ALK-TOT (mgCaCO ₃ /L)	77	23	19
3	B (mg/L)		0.00	0.03
4	Ca (mg/L)	22	11	9
5	Cl (mg/L)	17.4	9.6	11.5
6	CO ₃ (mg/L)	0.0	9.2	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.050	0.020	0.030
9	HCO ₃ (mg/L)	94	9	23
10	K (mg/L)	2.7	2.9	2.6
11	Mg (mg/L)	7.7	2.9	2.9
12	Na (mg/L)	11.5	6.8	6.7
13	NH ₃ -N (mg N/L)	0.11	0.26	0.19
14	NO ₂ +NO ₃ (mg N/L)	2.18	3.47	2.68
15	NO ₂ -N (mgN/L)	0.00	0.01	0.01
16	NO ₃ -N (mgN/L)	2.18	3.46	2.67
17	o-PO ₄ -P (mg P/L)	0.010	0.030	0.010
18	SiO ₂ (mg/L)	11.3	18.2	18.0
19	SO ₄ (mg/L)	8.1	8.5	7.9
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)	6.4	4.5	12.7
2	DO (mg/L)			
3	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	56	28	24
2	HAR_Total (mgCaCO ₃ /L)	88	40	36
3	Na% (%)	22	26	27
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.5	0.5	0.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :GANDHAVAYAL(CCG20C8)

Local River :Gandhayar

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	8.057	1.596	0.986
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	119	154	190
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.9	7.5	7.8
6	TDS (mg/L)	68	88	109
7	Temp (deg C)	21.0	22.0	22.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	27	54	69
3	B (mg/L)	0.00	0.01	0.02
4	Ca (mg/L)	11	13	24
5	Cl (mg/L)	13.5	12.1	13.9
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.09	0.13	0.22
8	Fe (mg/L)	0.060	0.010	0.000
9	HCO ₃ (mg/L)	33	65	84
10	K (mg/L)	1.5	1.1	1.9
11	Mg (mg/L)	4.8	8.6	4.8
12	Na (mg/L)	7.3	7.0	10.6
13	NH ₃ -N (mg N/L)	0.09	0.12	0.35
14	NO ₂ +NO ₃ (mg N/L)	3.47	1.43	1.90
15	NO ₂ -N (mgN/L)	0.00	0.00	0.00
16	NO ₃ -N (mgN/L)	3.47	1.43	1.90
17	o-PO ₄ -P (mg P/L)	0.150	0.020	0.030
18	SiO ₂ (mg/L)	8.7	16.3	29.0
19	SO ₄ (mg/L)	6.3	6.4	6.8
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)	5.3	4.1	11.1
2	DO (mg/L)			
3	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	28	32	59
2	HAR_Total (mgCaCO ₃ /L)	48	68	79
3	Na% (%)	24	18	22
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.5	0.4	0.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :GANDHAVAYAL(CCG20C8)

Local River :Gandhayar

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.235	0.082	0.049
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	167	502	525
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	8.4	7.6	7.9
6	TDS (mg/L)	95	286	297
7	Temp (deg C)	24.0	25.0	26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	14.9	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	60	191	221
3	B (mg/L)	0.04	0.06	0.09
4	Ca (mg/L)	20	53	36
5	Cl (mg/L)	14.6	34.6	25.5
6	CO ₃ (mg/L)	17.9	0.0	0.0
7	F (mg/L)	0.05	0.20	0.20
8	Fe (mg/L)	0.000	0.030	0.000
9	HCO ₃ (mg/L)	36	233	269
10	K (mg/L)	1.8	2.6	5.3
11	Mg (mg/L)	5.7	25.7	38.1
12	Na (mg/L)	8.4	18.5	17.6
13	NH ₃ -N (mg N/L)	0.21	0.10	0.00
14	NO ₂ +NO ₃ (mg N/L)	3.08	5.12	7.10
15	NO ₂ -N (mgN/L)	0.00	0.02	0.00
16	NO ₃ -N (mgN/L)	3.08	5.10	7.10
17	o-PO ₄ -P (mg P/L)	0.110	0.040	0.030
18	SiO ₂ (mg/L)	30.8	39.1	26.4
19	SO ₄ (mg/L)	7.4	23.3	16.8
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)	4.5	6.4	3.2
2	DO (mg/L)			
3	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	51	134	90
2	HAR_Total (mgCaCO ₃ /L)	75	241	249
3	Na% (%)	19	14	13
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.5	0.5
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : GANDHAVAYAL(CCG20C8)

Local River : Gandhayar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	36.77	0.000	1.838
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	525	93	213
3	pH_GEN (pH units)	12	8.8	7.5	7.9
4	TDS (mg/L)	12	297	54	122
5	Temp (deg C)	12	26.0	20.0	23
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	14.9	0.0	1.9
2	ALK-TOT (mgCaCO ₃ /L)	12	221	19	75
3	B (mg/L)	10	0.09	0.00	0.03
4	Ca (mg/L)	12	53	9	21
5	Cl (mg/L)	12	34.6	9.6	16.7
6	CO ₃ (mg/L)	12	17.9	0.0	2.3
7	F (mg/L)	8	0.22	0.05	0.14
8	Fe (mg/L)	12	0.140	0.000	0.029
9	HCO ₃ (mg/L)	12	269	9	87
10	K (mg/L)	12	5.3	1.1	2.5
11	Mg (mg/L)	12	38.1	2.9	10
12	Na (mg/L)	12	18.5	6.7	10.3
13	NH ₃ -N (mg N/L)	12	0.39	0.00	0.15
14	NO ₂ +NO ₃ (mg N/L)	12	7.10	1.43	3.14
15	NO ₂ -N (mgN/L)	12	0.05	0.00	0.01
16	NO ₃ -N (mgN/L)	12	7.10	1.43	3.14
17	o-PO ₄ -P (mg P/L)	12	0.150	0.010	0.039
18	SiO ₂ (mg/L)	12	39.1	8.7	20.8
19	SO ₄ (mg/L)	12	23.3	4.7	9
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)	12	12.7	3.2	6.4
2	DO (mg/L)	1	0.0	0.0	0
3	DO_SAT% (%)	1	0	0	0
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	134	24	52
2	HAR_Total (mgCaCO ₃ /L)	12	249	36	94
3	Na% (%)	12	29	13	21
4	RSC (-)	12	0.0	0.0	0
5	SAR (-)	12	0.6	0.4	0.5
PESTICIDES					

Water Quality Seasonal Average for the period: 2013-2016

Station Name : GANDHAVAYAL(CCG20C8)

Local River : Gandhayar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood			Winter	
		Jun - Oct			Nov - Feb	
		2013	2014	2015	2013-2014	2014-2015
PHYSICAL						
1	Q (cumec)	0.168	1.863	2.081	3.014	3.013
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	256	205	161	161	129
3	pH_GEN (pH units)	7.8	7.8	7.9	7.7	7.8
4	TDS (mg/L)		111	93		73
5	Temp (deg C)	26.0	23.0	23.2	23.5	20.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	1.5	0.0	1.9
2	ALK-TOT (mgCaCO ₃ /L)	111	79	51	60	41
3	B (mg/L)			0.03		0.00
4	Ca (mg/L)	27	20	17	15	12
5	Cl (mg/L)	18.3	19.4	15.0	12.4	13.2
6	CO ₃ (mg/L)	0.0	0.0	1.8	0.0	2.3
7	F (mg/L)	0.18	0.13	0.10	0.11	0.07
8	Fe (mg/L)			0.044		0.044
9	HCO ₃ (mg/L)	136	96	59	73	46
10	K (mg/L)	2.5	2.5	2.6	1.8	1.4
11	Mg (mg/L)	14.6	9.8	5.8	8.2	5.3
12	Na (mg/L)	10.1	10.9	9.4	7.2	8.0
13	NH ₃ -N (mg N/L)	0.16	0.14	0.15	0.10	0.17
14	NO ₂ +NO ₃ (mg N/L)			2.59	2.27	1.92
15	NO ₂ -N (mgN/L)			0.01	0.01	0.00
16	NO ₃ -N (mgN/L)	0.35	1.25	2.58	1.05	2.13
17	o-PO ₄ -P (mg P/L)			0.016		0.000
18	SiO ₂ (mg/L)			16.4		18.2
19	SO ₄ (mg/L)	7.9	6.4	6.6	7.7	3.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					1.3
2	COD (mg/L)	13.5	6.1	6.0	6.4	7.8
3	DO (mg/L)			0.0		
4	DO_SAT% (%)			0		
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					2.27
3	Cr ($\mu\text{g}/\text{L}$)					7.77
4	Cu ($\mu\text{g}/\text{L}$)					1.30
5	Ni ($\mu\text{g}/\text{L}$)					0.26
6	Pb ($\mu\text{g}/\text{L}$)					1.12
7	Zn ($\mu\text{g}/\text{L}$)					2.30
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	67	50	42	37	30
2	HAR_Total (mgCaCO ₃ /L)	127	90	66	71	52
3	Na% (%)	16	22	24	19	25
4	SAR (-)	0.4	0.5	0.5	0.4	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2013-2016

Station Name : GANDHAVAYAL(CCG20C8)

Local River : Gandhayar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Winter		Summer	
		Nov - Feb		Mar - May	
		2015-2016	2014	2015	2016
PHYSICAL					
1	Q (cumec)	5.283	0.16	2.22	0.122
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	139	228	143	398
3	pH_GEN (pH units)	7.8	7.4	7.7	7.9
4	TDS (mg/L)	80	121	82	226
5	Temp (deg C)	21.3	22.7	22.2	25.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	2.6	5.0
2	ALK-TOT (mgCaCO ₃ /L)	42	86	42	157
3	B (mg/L)	0.01		0.02	0.06
4	Ca (mg/L)	14	22	12	37
5	Cl (mg/L)	12.8	21.4	16.1	24.9
6	CO ₃ (mg/L)	0.0	0.0	3.1	6.0
7	F (mg/L)	0.15	0.13	0.08	0.15
8	Fe (mg/L)	0.025	0.054	0.023	0.010
9	HCO ₃ (mg/L)	51	105	45	179
10	K (mg/L)	1.8	2.6	2.4	3.2
11	Mg (mg/L)	5.3	11.2	6.7	23.2
12	Na (mg/L)	7.9	11.3	9.1	14.8
13	NH ₃ -N (mg N/L)	0.19	0.11	0.16	0.10
14	NO ₂ +NO ₃ (mg N/L)	2.37		2.39	5.10
15	NO ₂ -N (mgN/L)	0.00		0.01	0.01
16	NO ₃ -N (mgN/L)	2.37	1.28	2.38	5.09
17	o-PO ₄ -P (mg P/L)	0.053		0.030	0.060
18	SiO ₂ (mg/L)	18.0		15.3	32.1
19	SO ₄ (mg/L)	6.8	8.3	5.5	15.8
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
2	COD (mg/L)	8.3	8.3	6.5	4.7
3	DO (mg/L)				
4	DO_SAT% (%)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)		0.47		
2	Cd ($\mu\text{g}/\text{L}$)		0.02		
3	Cr ($\mu\text{g}/\text{L}$)		1.81		
4	Cu ($\mu\text{g}/\text{L}$)		7.47		
5	Ni ($\mu\text{g}/\text{L}$)		9.01		
6	Pb ($\mu\text{g}/\text{L}$)		0.13		
7	Zn ($\mu\text{g}/\text{L}$)		9.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	36	56	29	92
2	HAR_Total (mgCaCO ₃ /L)	57	102	57	188
3	Na% (%)	23	19	25	16
4	SAR (-)	0.5	0.5	0.5	0.5
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016			
Site	: NELLITHURAI	Code	: CCG00Q8
State	: Tamil Nadu	District	Coimbatore
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Bhavani	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Bhavani
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 1475 Sq. Km.	Bank	: Right
Latitude	: 11°17'16"	Longitude	: 76°53'28"
Zero of Gauge (m)	: 300.000 (m.s.l) 299.000 (m.s.l) 301.000 (m.s.l)	23/05/1978 01/06/1983 01/06/1990	- 31/05/1983 - 31/05/1990
	Opening Date	Closing Date	
Gauge	: 23/05/1978		
Discharge	: 01/06/1979		
Sediment	: 01/07/2002		
Water Quality	: 01/06/1979		

Water Quality Datasheet for the period : 2015-2016

Station Name : NELLITHURAI(CCG00Q8)

Local River :Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	4.753	4.685	101.00
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	119	77	69
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	119	91	71
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.5	7.5	7.5
7	pH_GEN (pH units)	7.5	7.5	7.5
8	TDS (mg/L)	69	53	41
9	Temp (deg C)	23.0	22.0	23.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	30	19	19
3	B (mg/L)	0.05	0.00	
4	Ca (mg/L)	8	8	8
5	Cl (mg/L)	14.2	12.2	9.7
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.13	0.08	
8	Fe (mg/L)	0.060	0.000	0.030
9	HCO ₃ (mg/L)	37	23	24
10	K (mg/L)	1.8	1.5	1.1
11	Mg (mg/L)	3.9	1.9	1.9
12	Na (mg/L)	10.9	7.3	5.7
13	NH ₃ -N (mg N/L)	0.00	0.05	0.38
14	NO ₂ +NO ₃ (mg N/L)	1.07	1.56	1.18
15	NO ₂ -N (mgN/L)	0.01	0.01	0.00
16	NO ₃ -N (mgN/L)	1.06	1.55	1.18
17	o-PO ₄ -P (mg P/L)	0.030	0.010	0.010
18	SiO ₂ (mg/L)	9.2	11.5	8.4
19	SO ₄ (mg/L)	7.7	4.5	4.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.6	1.2	0.4
2	COD (mg/L)	2.1	9.5	1.8
3	DO (mg/L)	5.5	8.1	8.1
4	DO_SAT% (%)	64	93	95
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	20	20	20
2	HAR_Total (mgCaCO ₃ /L)	36	28	28
3	Na% (%)	38	35	30
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.8	0.6	0.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : NELLITHURAI(CCG00Q8)

Local River :Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	176.60	5.583	8.405
2	Colour_Cod (-)	Clear	Clear	Light Brown
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	72	106	246
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	47	103	246
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	7.5	7.5	7.5
7	pH_GEN (pH units)	7.7	7.4	7.5
8	TDS (mg/L)	27	60	143
9	Temp (deg C)	25.5	21.5	21.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	12	27	61
3	B (mg/L)		0.00	0.05
4	Ca (mg/L)	5	11	25
5	Cl (mg/L)	5.8	13.5	36.6
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.020	0.110	0.220
9	HCO ₃ (mg/L)	14	33	75
10	K (mg/L)	0.7	1.6	5.1
11	Mg (mg/L)	1.0	1.9	5.8
12	Na (mg/L)	3.7	8.8	19.7
13	NH ₃ -N (mg N/L)	0.11	0.14	0.17
14	NO ₂ +NO ₃ (mg N/L)	0.71	1.34	3.25
15	NO ₂ -N (mgN/L)	0.00	0.00	0.02
16	NO ₃ -N (mgN/L)	0.71	1.34	3.23
17	o-PO ₄ -P (mg P/L)	0.010	0.000	0.040
18	SiO ₂ (mg/L)	4.1	12.7	17.3
19	SO ₄ (mg/L)	3.7	5.6	19.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.8	0.2	1.1
2	COD (mg/L)	3.7	0.9	9.1
3	DO (mg/L)	7.7	8.1	7.4
4	DO_SAT% (%)	93	91	83
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	12	28	63
2	HAR_Total (mgCaCO ₃ /L)	16	36	87
3	Na% (%)	32	34	31
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.6	0.9
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : NELLITHURAI(CCG00Q8)

Local River :Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
	PHYSICAL			
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_FLD ($\mu\text{mho}/\text{cm}$)			
4	EC_GEN ($\mu\text{mho}/\text{cm}$)			
5	Odour_Code (-)			
6	pH_FLD (pH units)			
7	pH_GEN (pH units)			
8	TDS (mg/L)			
9	Temp (deg C)			
	CHEMICAL			
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
	BIOLOGICAL/BACTERIOLOGICAL			
1	BOD ₃₋₂₇ (mg/L)			
2	COD (mg/L)			
3	DO (mg/L)			
4	DO_SAT% (%)			
	TRACE & TOXIC			
	CHEMICAL INDICES			
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
	PESTICIDES			

Water Quality Datasheet for the period : 2015-2016

Station Name : NELLITHURAI(CCG00Q8)

Local River :Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	3.263	2.961
2	Colour_Cod (-)		Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)		69	68
4	EC_GEN ($\mu\text{mho}/\text{cm}$)		81	61
5	Odour_Code (-)		odour free	odour free
6	pH_FLD (pH units)		7.6	7.5
7	pH_GEN (pH units)		7.7	7.5
8	TDS (mg/L)		47	35
9	Temp (deg C)		22.5	24.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		22	19
3	B (mg/L)		0.08	0.03
4	Ca (mg/L)		8	8
5	Cl (mg/L)		9.1	5.5
6	CO ₃ (mg/L)		0.0	0.0
7	F (mg/L)		0.00	0.07
8	Fe (mg/L)		0.000	0.000
9	HCO ₃ (mg/L)		27	23
10	K (mg/L)		0.5	0.7
11	Mg (mg/L)		2.9	1.0
12	Na (mg/L)		5.5	4.0
13	NH ₃ -N (mg N/L)		0.16	0.00
14	NO ₂ +NO ₃ (mg N/L)		0.96	0.52
15	NO ₂ -N (mgN/L)		0.00	0.00
16	NO ₃ -N (mgN/L)		0.96	0.52
17	o-PO ₄ -P (mg P/L)		0.020	0.030
18	SiO ₂ (mg/L)		4.8	3.6
19	SO ₄ (mg/L)		4.8	3.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		0.6	1.7
2	COD (mg/L)		3.2	6.4
3	DO (mg/L)		8.1	7.9
4	DO_SAT% (%)		93	94
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		20	20
2	HAR_Total (mgCaCO ₃ /L)		32	24
3	Na% (%)		27	26
4	RSC (-)		0.0	0.0
5	SAR (-)		0.4	0.4
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	647.8	0.000	38.31
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	12	325	65	127
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	325	47	136
4	pH_FLD (pH units)	12	7.6	7.4	7.5
5	pH_GEN (pH units)	12	8.9	7.4	7.7
6	TDS (mg/L)	12	190	27	79
7	Temp (deg C)	12	25.5	17.5	22.1
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	15.2	0.0	1.3
2	ALK-TOT (mgCaCO ₃ /L)	12	96	12	38
3	B (mg/L)	10	0.08	0.00	0.04
4	Ca (mg/L)	12	27	5	12
5	Cl (mg/L)	12	36.6	5.5	16.3
6	CO ₃ (mg/L)	12	18.4	0.0	1.5
7	F (mg/L)	8	0.31	0.00	0.14
8	Fe (mg/L)	12	0.220	0.000	0.043
9	HCO ₃ (mg/L)	12	117	14	43
10	K (mg/L)	12	5.1	0.5	1.9
11	Mg (mg/L)	12	14.4	1.0	4.6
12	Na (mg/L)	12	26.4	3.7	10.7
13	NH ₃ -N (mg N/L)	12	0.38	0.00	0.13
14	NO ₂ +NO ₃ (mg N/L)	12	5.71	0.52	1.71
15	NO ₂ -N (mgN/L)	12	0.02	0.00	0.01
16	NO ₃ -N (mgN/L)	12	5.71	0.52	1.71
17	o-PO ₄ -P (mg P/L)	12	0.290	0.000	0.042
18	SiO ₂ (mg/L)	12	17.3	3.6	10.4
19	SO ₄ (mg/L)	12	20.2	3.5	8.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	12	2.3	0.2	1
2	COD (mg/L)	12	9.5	0.9	4.5
3	DO (mg/L)	12	8.2	5.5	7.7
4	DO_SAT% (%)	12	95	64	88
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	67	12	30
2	HAR_Total (mgCaCO ₃ /L)	12	123	16	49
3	Na% (%)	12	38	25	32
4	RSC (-)	12	0.0	0.0	0
5	SAR (-)	12	1.0	0.4	0.6
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	166.8	144.8	172.3	61.99	29.93
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	74	62	66	71	67
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	71	58	71	59	69
4	pH_FLD (pH units)	7.2	7.4	8.0	8.0	7.7
5	pH_GEN (pH units)	7.1	7.4	7.6	7.6	7.9
6	TDS (mg/L)					
7	Temp (deg C)	21.8	21.8	22.7	23.0	25.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	18	16	22	19	28
3	B (mg/L)	0.13	0.15	0.11	0.10	0.20
4	Ca (mg/L)	6	4	5	4	6
5	Cl (mg/L)	10.1	7.1	5.7	5.0	6.9
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.28	0.16	0.13	0.08	0.13
8	Fe (mg/L)	0.075	0.080	0.070	0.071	0.081
9	HCO ₃ (mg/L)	22	19	26	24	35
10	K (mg/L)	0.8	0.7	1.0	0.8	0.9
11	Mg (mg/L)	3.3	3.1	2.9	2.9	2.7
12	Na (mg/L)	3.0	2.8	4.2	3.5	3.8
13	NH ₃ -N (mg N/L)	0.06	0.05	0.04	0.05	0.09
14	NO ₂ +NO ₃ (mg N/L)	0.57	0.66	1.36	0.91	
15	NO ₂ -N (mgN/L)	0.01	0.01	0.03	0.01	
16	NO ₃ -N (mgN/L)	0.56	0.66	1.33	0.90	0.64
17	o-PO ₄ -P (mg P/L)				0.010	0.018
18	P-Tot (mgP/L)	0.013	0.011	0.010		
19	SiO ₂ (mg/L)	7.0	7.2	8.4	5.6	8.2
20	SO ₄ (mg/L)	2.2	2.3	3.7	3.4	1.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	1.0	0.5	0.6	0.9
2	COD (mg/L)					
3	DO (mg/L)	7.5	7.8	7.8	8.1	8.0
4	DO_SAT% (%)	85	88	90	94	97
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	16	10	14	10	16
2	HAR_Total (mgCaCO ₃ /L)	29	23	26	23	27
3	Na% (%)	18	21	25	26	23
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.2	0.3	0.4	0.3	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	122.1	57.1	37.99	69.57	86.38
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	121	67	51	64	51
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	62	55	47	52	48
4	pH_FLD (pH units)	7.5	7.6	7.4	7.6	7.7
5	pH_GEN (pH units)	7.3	7.9	7.5	7.5	7.5
6	TDS (mg/L)					26
7	Temp (deg C)	23.5	23.7	24.7	22.2	23.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.9	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	22	20	17	17	18
3	B (mg/L)	0.11				
4	Ca (mg/L)	5	6	4	5	4
5	Cl (mg/L)	7.1	6.3	5.3	5.5	4.9
6	CO ₃ (mg/L)	0.0	1.1	0.0	0.0	0.0
7	F (mg/L)	0.34	0.18	0.16	0.08	0.06
8	Fe (mg/L)	0.063			0.073	
9	HCO ₃ (mg/L)	26	22	21	21	22
10	K (mg/L)	0.9	0.9	0.8	0.8	0.9
11	Mg (mg/L)	2.7	1.6	1.6	2.1	1.7
12	Na (mg/L)	4.4	3.8	3.2	3.0	3.4
13	NH ₃ -N (mg N/L)	0.06			0.17	0.21
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	1.60	0.32	0.15	0.26	0.22
17	o-PO ₄ -P (mg P/L)	0.130				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	5.7				
20	SO ₄ (mg/L)	1.9	1.6	1.0	2.5	1.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.7	0.6	0.6	0.8	0.5
2	COD (mg/L)				4.0	2.5
3	DO (mg/L)	8.1	7.9	7.9	7.8	7.8
4	DO_SAT% (%)	94	93	95	89	90
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			10.47	4.68	
2	Cd ($\mu\text{g}/\text{L}$)			0.14	0.01	
3	Cr ($\mu\text{g}/\text{L}$)				2.76	
4	Cu ($\mu\text{g}/\text{L}$)			18.49	2.04	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			1.76	7.61	
7	Pb ($\mu\text{g}/\text{L}$)			1.45	2.50	
8	Zn ($\mu\text{g}/\text{L}$)			1.28	6.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	13	16	11	12	11
2	HAR_Total (mgCaCO ₃ /L)	24	23	18	21	18
3	Na% (%)	27	27	27	23	28
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	0.3	0.3	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	58.52	3.269	33.28	2.545	30.04
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	89	168	304	81	112
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	86	182	303	130	115
4	pH_FLD (pH units)	7.5	7.5	8.0	8.2	7.7
5	pH_GEN (pH units)	7.5	7.7	7.9	7.7	7.8
6	TDS (mg/L)	50				
7	Temp (deg C)	23.1	21.0	22.3	22.0	21.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	21	47	95	42	46
3	B (mg/L)	0.02	0.10	0.12	0.13	0.04
4	Ca (mg/L)	8	12	20	9	10
5	Cl (mg/L)	11.1	22.6	28.6	11.4	13.9
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.10	0.33	0.20	0.18	0.20
8	Fe (mg/L)	0.044	0.077	0.137	0.067	0.184
9	HCO ₃ (mg/L)	26	57	116	52	56
10	K (mg/L)	1.3	1.3	2.9	1.2	1.7
11	Mg (mg/L)	2.1	8.9	13.1	5.6	5.7
12	Na (mg/L)	7.3	11.0	25.0	9.1	7.1
13	NH ₃ -N (mg N/L)	0.14	0.05		0.05	
14	NO ₂ +NO ₃ (mg N/L)	1.17	1.61	2.16	1.60	
15	NO ₂ -N (mgN/L)	0.00	0.01	0.04	0.01	
16	NO ₃ -N (mgN/L)	1.17	1.60	2.12	1.59	0.80
17	o-PO ₄ -P (mg P/L)	0.012				0.010
18	P-Tot (mgP/L)		0.018	0.003	0.017	
19	SiO ₂ (mg/L)	9.2	12.2	20.8	10.3	1.2
20	SO ₄ (mg/L)	5.1	9.2	19.7	4.8	3.3
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.6	1.1	0.9	0.7	1.0
2	COD (mg/L)	3.6				
3	DO (mg/L)	7.5	7.9	8.0	8.0	8.2
4	DO_SAT% (%)	87	89	91	91	94
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	20	31	51	23	26
2	HAR_Total (mgCaCO ₃ /L)	29	68	106	46	49
3	Na% (%)	34	23	31	29	23
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.6	0.5	1.0	0.6	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	28.35	142.6	85	36.8	68.95
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	90	114	95	90	86
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	116	117	111	100	78
4	pH_FLD (pH units)	7.6	7.5	7.5	7.5	7.5
5	pH_GEN (pH units)	8.0	7.9	7.5	7.4	7.6
6	TDS (mg/L)					
7	Temp (deg C)	23.0	22.4	21.6	22.8	22.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	2.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	48	56	44	34	33
3	B (mg/L)	0.16	0.12			
4	Ca (mg/L)	10	16	11	8	9
5	Cl (mg/L)	12.4	12.4	14.2	9.7	7.5
6	CO ₃ (mg/L)	2.4	0.0	0.0	0.0	0.0
7	F (mg/L)	0.30	0.21	0.31	0.08	0.08
8	Fe (mg/L)	0.133	0.000	0.080		
9	HCO ₃ (mg/L)	54	68	53	41	40
10	K (mg/L)	1.1	1.7	1.4	1.4	0.7
11	Mg (mg/L)	4.4	3.6	5.1	5.1	3.6
12	Na (mg/L)	7.6	8.0	8.6	5.3	4.1
13	NH ₃ -N (mg N/L)	0.07	0.03		0.13	0.12
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	0.71	2.06	0.32	0.39	0.29
17	o-PO ₄ -P (mg P/L)	0.015	0.043			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	16.4	15.8			
20	SO ₄ (mg/L)	1.1	5.3	4.3	3.9	2.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.3	1.1	0.6	0.6	0.6
2	COD (mg/L)				4.4	2.4
3	DO (mg/L)	7.6	7.9	8.0	7.9	8.0
4	DO_SAT% (%)	88	91	91	91	91
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.61		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			1.47		
4	Cu ($\mu\text{g}/\text{L}$)			8.94		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)			1.05		
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	26	41	27	19	22
2	HAR_Total (mgCaCO ₃ /L)	44	56	48	40	37
3	Na% (%)	27	23	27	22	19
4	RSC (-)	0.1	0.0	0.0	0.0	0.0
5	SAR (-)	0.5	0.5	0.5	0.4	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	52.86	2.101	2.928	2.622	2.951
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	112	219	138	122	108
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	117	244	135	104	108
4	pH_FLD (pH units)	7.6	7.5	7.5	7.8	8.1
5	pH_GEN (pH units)	7.7	7.9	7.9	7.9	7.9
6	TDS (mg/L)	66	141			
7	Temp (deg C)	22.3	20.1	21.9	22.6	23.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	3.8	1.3	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	37	70	45	36	36
3	B (mg/L)	0.00	0.05	0.15	0.11	0.14
4	Ca (mg/L)	10	20	10	6	7
5	Cl (mg/L)	14.6	29.1	13.6	9.6	10.3
6	CO ₃ (mg/L)	0.0	4.6	1.6	0.0	0.0
7	F (mg/L)	0.09	0.25	0.23	0.18	0.06
8	Fe (mg/L)	0.165	0.075	0.091	0.073	0.070
9	HCO ₃ (mg/L)	46	76	51	44	44
10	K (mg/L)	1.5	3.3	1.2	0.9	1.2
11	Mg (mg/L)	4.9	9.6	7.5	5.5	5.5
12	Na (mg/L)	9.5	19.1	5.9	6.3	6.3
13	NH ₃ -N (mg N/L)	0.13	0.16	0.12		0.03
14	NO ₂ +NO ₃ (mg N/L)	1.00	3.00	1.06	1.29	1.11
15	NO ₂ -N (mgN/L)	0.00	0.01	0.01	0.01	0.01
16	NO ₃ -N (mgN/L)	1.35	2.99	1.06	1.28	1.10
17	o-PO ₄ -P (mg P/L)	0.000	0.092			
18	P-Tot (mgP/L)			0.022	0.010	
19	SiO ₂ (mg/L)	9.7	15.7	7.9	7.5	8.4
20	SO ₄ (mg/L)	4.3	14.6	4.0	3.3	4.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.0	1.5	0.9	0.8	0.2
2	COD (mg/L)	6.0	5.3			
3	DO (mg/L)	7.8	7.6	7.9	8.3	8.2
4	DO_SAT% (%)	89	84	90	95	95
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			8.86	4.58	3.20
2	Cd ($\mu\text{g}/\text{L}$)	0.50		8.00	2.00	0.60
3	Cr ($\mu\text{g}/\text{L}$)	11.79				
4	Cu ($\mu\text{g}/\text{L}$)	3.27				
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	2.39			1.73	
7	Pb ($\mu\text{g}/\text{L}$)	1.08		1.05		1.45
8	Zn ($\mu\text{g}/\text{L}$)	2.71		16.00	1.00	7.00
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	24	50	24	16	19
2	HAR_Total (mgCaCO ₃ /L)	44	90	55	39	42
3	Na% (%)	31	31	19	25	24
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.6	0.9	0.3	0.4	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	2.81	2.984	3.447	47.22
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	77	71	240	51
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	68	80	279	51
4	pH_FLD (pH units)	7.9	7.7	7.5	7.5
5	pH_GEN (pH units)	7.8	7.4	7.9	7.6
6	TDS (mg/L)				
7	Temp (deg C)	24.0	24.5	23.7	23.1
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	33	27	93	19
3	B (mg/L)	0.02	0.32	0.00	
4	Ca (mg/L)	7	7	22	4
5	Cl (mg/L)	10.6	8.5	39.1	6.3
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.14	0.32	0.32	0.29
8	Fe (mg/L)	0.097	0.106	0.036	0.020
9	HCO ₃ (mg/L)	40	33	114	23
10	K (mg/L)	1.0	0.8	3.0	0.9
11	Mg (mg/L)	4.2	2.9	11.0	2.3
12	Na (mg/L)	5.3	4.7	22.8	3.8
13	NH ₃ -N (mg N/L)	0.09	0.01	0.00	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)	0.28	0.62	2.04	0.17
17	o-PO ₄ -P (mg P/L)	0.010	0.010	0.000	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	6.8	5.9	26.4	
20	SO ₄ (mg/L)	1.1	1.2	13.3	1.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.0	0.5	1.3	0.8
2	COD (mg/L)				
3	DO (mg/L)	8.1	7.7	8.1	7.8
4	DO_SAT% (%)	96	92	95	91
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.42	0.72
2	Cd ($\mu\text{g}/\text{L}$)			0.01	0.01
3	Cr ($\mu\text{g}/\text{L}$)			1.89	4.12
4	Cu ($\mu\text{g}/\text{L}$)	1.48		2.40	1.02
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				0.58
7	Pb ($\mu\text{g}/\text{L}$)	1.65		0.02	3.54
8	Zn ($\mu\text{g}/\text{L}$)			10.97	38.00
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	19	17	56	11
2	HAR_Total (mgCaCO ₃ /L)	36	29	102	20
3	Na% (%)	24	25	32	28
4	RSC (-)	0.0	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	1.0	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : NELLITHURAI (CCG00Q8)

Local River : Bhavani

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	3.139	39.83	3.467	2.075
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	82	40	68	67
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	75	40	75	74
4	pH_FLD (pH units)	7.5	7.7	8.0	7.6
5	pH_GEN (pH units)	7.6	7.9	8.1	7.6
6	TDS (mg/L)		17	46	43
7	Temp (deg C)	23.8	22.7	21.7	23.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	3.3	0.0
2	ALK-TOT (mgCaCO ₃ /L)	32	15	21	21
3	B (mg/L)			0.00	0.05
4	Ca (mg/L)	7	4	6	8
5	Cl (mg/L)	7.2	4.4	8.4	7.9
6	CO ₃ (mg/L)	0.0	0.0	4.0	0.0
7	F (mg/L)	0.31	0.04	0.07	0.06
8	Fe (mg/L)	0.011	0.050	0.017	0.000
9	HCO ₃ (mg/L)	39	18	17	26
10	K (mg/L)	0.8	0.4	1.0	0.8
11	Mg (mg/L)	3.6	1.8	3.1	1.9
12	Na (mg/L)	4.3	2.4	5.1	5.4
13	NH ₃ -N (mg N/L)	0.26	0.11	0.09	0.07
14	NO ₂ +NO ₃ (mg N/L)			0.37	0.91
15	NO ₂ -N (mgN/L)			0.00	0.00
16	NO ₃ -N (mgN/L)	0.10	0.13	0.36	0.90
17	o-PO ₄ -P (mg P/L)			0.037	0.023
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)			5.4	5.2
20	SO ₄ (mg/L)	1.7	1.1	3.2	4.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	0.6	0.7	1.3	1.0
2	COD (mg/L)	3.2	2.7	4.4	5.0
3	DO (mg/L)	8.0	8.1	8.1	8.1
4	DO_SAT% (%)	95	93	92	93
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	6.62	6.57		
2	Cd ($\mu\text{g}/\text{L}$)	0.06	0.02		
3	Cr ($\mu\text{g}/\text{L}$)	0.04	8.23		
4	Cu ($\mu\text{g}/\text{L}$)	0.84	2.56		
5	Hg ($\mu\text{g}/\text{L}$)	0.23			
6	Ni ($\mu\text{g}/\text{L}$)	4.04	8.10		
7	Pb ($\mu\text{g}/\text{L}$)	1.35	2.18		
8	Zn ($\mu\text{g}/\text{L}$)	1.45	4.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	17	9	14	20
2	HAR_Total (mgCaCO ₃ /L)	32	17	27	28
3	Na% (%)	22	25	30	29
4	RSC (-)	0.0	0.0	0.0	0.0
5	SAR (-)	0.3	0.3	0.4	0.4
PESTICIDES					

HISTORY SHEET

		Water Year	: 2015-2016
Site	: URACHIKOTTAI	Code	: CC000K5
State	: Tamil Nadu	District	Erode
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Cauvery
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 44100 Sq. Km.	Bank	: Right
Latitude	: 11°28'40"	Longitude	: 77°42'00"
Zero of Gauge (m)	: 155.000 (m.s.l) 154.000 (m.s.l)	01/06/1978 01/06/1985	- 31/05/1985
	Opening Date	Closing Date	
Gauge	: 01/06/1978		
Discharge	: 06/08/1979		
Sediment	: 04/01/2001		
Water Quality	: 01/06/1979		

Water Quality Datasheet for the period : 2015-2016

Station Name :URACHIKOTTAI(CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	04/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	66.19	39.35	221.4
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	427	393	321
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	427	393	321
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.0	8.1	8.1
7	pH_GEN (pH units)	8.0	8.3	8.0
8	TDS (mg/L)	248	229	184
9	Temp (deg C)	31.0	30.0	29.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	11.4	0.0
2	ALK-TOT (mgCaCO ₃ /L)	145	149	116
3	B (mg/L)	0.12	0.04	
4	Ca (mg/L)	21	25	29
5	Cl (mg/L)	40.7	40.7	32.9
6	CO ₃ (mg/L)	0.0	13.7	0.0
7	F (mg/L)	0.48	0.45	
8	Fe (mg/L)	0.050	0.000	0.050
9	HCO ₃ (mg/L)	177	153	141
10	K (mg/L)	4.0	4.5	3.8
11	Mg (mg/L)	28.9	21.2	10.6
12	Na (mg/L)	30.3	31.0	24.8
13	NH ₃ -N (mg N/L)	0.01	0.00	0.71
14	NO ₂ +NO ₃ (mg N/L)	1.32	1.52	1.37
15	NO ₂ -N (mgN/L)	0.08	0.00	0.00
16	NO ₃ -N (mgN/L)	1.24	1.52	1.37
17	o-PO ₄ -P (mg P/L)	0.050	0.040	0.110
18	SiO ₂ (mg/L)	18.6	18.7	12.1
19	SO ₄ (mg/L)	31.9	15.7	11.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	4.4	4.5	2.5
2	COD (mg/L)	11.6	31.6	12.8
3	DO (mg/L)	7.2	7.0	7.2
4	DO_SAT% (%)	97	93	94
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	52	64	71
2	HAR_Total (mgCaCO ₃ /L)	172	152	116
3	Na% (%)	27	30	31
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.0	1.1	1.0
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :URACHIKOTTAI(CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	553.8	367.3	59.98
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	138	306	415
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	138	306	415
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.0	7.7	8.0
7	pH_GEN (pH units)	8.4	7.7	8.0
8	TDS (mg/L)	79	178	242
9	Temp (deg C)	29.5	29.5	30.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	7.7	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	39	107	138
3	B (mg/L)		0.02	0.07
4	Ca (mg/L)	14	24	36
5	Cl (mg/L)	21.3	32.7	46.2
6	CO ₃ (mg/L)	9.3	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.020	0.050	0.030
9	HCO ₃ (mg/L)	28	131	168
10	K (mg/L)	1.9	3.7	4.2
11	Mg (mg/L)	1.9	14.4	17.2
12	Na (mg/L)	13.7	24.2	32.1
13	NH ₃ -N (mg N/L)	0.23	0.18	0.33
14	NO ₂ +NO ₃ (mg N/L)	1.07	2.65	4.16
15	NO ₂ -N (mgN/L)	0.00	0.00	0.15
16	NO ₃ -N (mgN/L)	1.07	2.65	4.01
17	o-PO ₄ -P (mg P/L)	0.030	0.050	0.060
18	SiO ₂ (mg/L)	12.7	17.1	21.1
19	SO ₄ (mg/L)	4.9	12.3	24.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.2	3.5	2.7
2	COD (mg/L)	2.8	11.8	12.7
3	DO (mg/L)	7.2	6.8	7.1
4	DO_SAT% (%)	94	88	94
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	36	59	91
2	HAR_Total (mgCaCO ₃ /L)	44	119	163
3	Na% (%)	39	30	29
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.9	1.0	1.1
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :URACHIKOTTAI(CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	23/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	75.52	439.1	63.19
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	590	421	468
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	547	441	468
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.0	8.0	8.0
7	pH_GEN (pH units)	8.3	8.3	8.4
8	TDS (mg/L)	311	253	267
9	Temp (deg C)	27.0	27.0	27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	30.5	15.2	22.9
2	ALK-TOT (mgCaCO ₃ /L)	199	180	180
3	B (mg/L)	0.14	0.16	0.17
4	Ca (mg/L)	39	35	22
5	Cl (mg/L)	51.9	34.7	39.9
6	CO ₃ (mg/L)	36.8	18.4	27.6
7	F (mg/L)	0.62	0.48	0.51
8	Fe (mg/L)	0.010	0.000	0.000
9	HCO ₃ (mg/L)	168	182	163
10	K (mg/L)	5.5	3.9	4.0
11	Mg (mg/L)	24.0	24.0	31.6
12	Na (mg/L)	44.0	28.7	30.7
13	NH ₃ -N (mg N/L)	0.08	0.71	0.69
14	NO ₂ +NO ₃ (mg N/L)	4.76	2.35	2.10
15	NO ₂ -N (mgN/L)	0.02	0.01	0.00
16	NO ₃ -N (mgN/L)	4.74	2.34	2.10
17	o-PO ₄ -P (mg P/L)	0.270	0.090	0.040
18	SiO ₂ (mg/L)	18.0	19.7	21.0
19	SO ₄ (mg/L)	38.2	18.7	20.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		5.1	3.2
2	COD (mg/L)	20.2	7.1	6.1
3	DO (mg/L)	7.4	7.2	7.0
4	DO_SAT% (%)	93	90	88
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	99	87	55
2	HAR_Total (mgCaCO ₃ /L)	199	187	187
3	Na% (%)	32	25	26
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.4	0.9	1.0
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name :URACHIKOTTAI(CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water Analysis

S.No	Parameters	09/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	59.55	58.86	39.89
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	430	476	486
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	430	476	486
5	Odour_Code (-)	odour free	odour free	odour free
6	pH_FLD (pH units)	8.7	7.9	8.3
7	pH_GEN (pH units)	8.7	7.9	8.3
8	TDS (mg/L)	240	272	273
9	Temp (deg C)	28.0	31.0	32.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	18.6	0.0	11.2
2	ALK-TOT (mgCaCO ₃ /L)	138	164	161
3	B (mg/L)	0.14	0.12	0.09
4	Ca (mg/L)	27	33	28
5	Cl (mg/L)	43.7	43.7	43.7
6	CO ₃ (mg/L)	22.4	0.0	13.5
7	F (mg/L)	0.48	0.44	0.46
8	Fe (mg/L)	0.000	0.000	0.000
9	HCO ₃ (mg/L)	123	201	169
10	K (mg/L)	4.6	4.4	4.5
11	Mg (mg/L)	22.9	22.9	25.7
12	Na (mg/L)	33.8	36.3	38.2
13	NH ₃ -N (mg N/L)	0.05	0.05	0.13
14	NO ₂ +NO ₃ (mg N/L)	6.22	5.14	7.30
15	NO ₂ -N (mgN/L)	0.01	0.00	0.00
16	NO ₃ -N (mgN/L)	6.21	5.14	7.30
17	o-PO ₄ -P (mg P/L)	0.060	0.070	0.060
18	SiO ₂ (mg/L)	20.8	19.5	15.1
19	SO ₄ (mg/L)	22.6	22.8	19.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	5.6	5.3	5.1
2	COD (mg/L)	10.7	16.0	21.3
3	DO (mg/L)	7.4	7.2	7.0
4	DO_SAT% (%)	95	97	96
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	67	83	71
2	HAR_Total (mgCaCO ₃ /L)	162	178	178
3	Na% (%)	31	30	31
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	1.2	1.2	1.3
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	565.9	0.000	150.3
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	12	590	138	406
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	547	138	404
4	pH_FLD (pH units)	12	8.7	7.7	8.1
5	pH_GEN (pH units)	12	8.7	7.7	8.2
6	TDS (mg/L)	12	311	79	231
7	Temp (deg C)	12	32.5	27.0	29.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	30.5	0.0	9.8
2	ALK-TOT (mgCaCO ₃ /L)	12	199	39	143
3	B (mg/L)	10	0.17	0.02	0.11
4	Ca (mg/L)	12	39	14	28
5	Cl (mg/L)	12	51.9	21.3	39.3
6	CO ₃ (mg/L)	12	36.8	0.0	11.8
7	F (mg/L)	8	0.62	0.44	0.49
8	Fe (mg/L)	12	0.050	0.000	0.018
9	HCO ₃ (mg/L)	12	201	28	150
10	K (mg/L)	12	5.5	1.9	4.1
11	Mg (mg/L)	12	31.6	1.9	20.4
12	Na (mg/L)	12	44.0	13.7	30.6
13	NH ₃ -N (mg N/L)	12	0.71	0.00	0.26
14	NO ₂ +NO ₃ (mg N/L)	12	7.30	1.07	3.33
15	NO ₂ -N (mgN/L)	12	0.15	0.00	0.02
16	NO ₃ -N (mgN/L)	12	7.30	1.07	3.31
17	o-PO ₄ -P (mg P/L)	12	0.270	0.030	0.078
18	SiO ₂ (mg/L)	12	21.1	12.1	17.9
19	SO ₄ (mg/L)	12	38.2	4.9	20.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	11	5.6	2.2	4
2	COD (mg/L)	12	31.6	2.8	13.7
3	DO (mg/L)	12	7.4	6.8	7.1
4	DO_SAT% (%)	12	97	88	93
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	99	36	69
2	HAR_Total (mgCaCO ₃ /L)	12	199	44	155
3	Na% (%)	12	39	25	30
4	RSC (-)	12	0.0	0.0	0
5	SAR (-)	12	1.4	0.9	1.1
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	349.9	584.2	400.1	345	330.9
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	254	290	183	320	295
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	271	298	202	328	258
4	pH_FLD (pH units)	8.1	8.3	8.0	8.1	8.1
5	pH_GEN (pH units)	8.0	8.1	8.0	8.1	8.1
6	TDS (mg/L)					
7	Temp (deg C)	27.1	28.0	25.2	25.6	27.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.5	0.0	1.9	0.0
2	ALK-TOT (mgCaCO ₃ /L)	91	114	72	128	104
3	B (mg/L)	0.15	0.29	0.24	0.20	0.17
4	Ca (mg/L)	20	20	17	22	18
5	Cl (mg/L)	22.0	20.9	15.1	24.3	24.5
6	CO ₃ (mg/L)	0.0	0.6	0.0	2.3	0.0
7	F (mg/L)	0.50	0.41	0.30	0.37	0.28
8	Fe (mg/L)	0.073	0.071	0.070	0.064	0.302
9	HCO ₃ (mg/L)	111	138	87	151	127
10	K (mg/L)	2.4	2.3	1.9	2.3	2.3
11	Mg (mg/L)	11.5	12.2	8.4	12.6	13.4
12	Na (mg/L)	20.1	22.9	13.1	25.7	19.3
13	NH ₃ -N (mg N/L)		0.06	0.05	0.06	0.08
14	NO ₂ +NO ₃ (mg N/L)	1.05	1.69	2.49	1.66	
15	NO ₂ -N (mgN/L)	0.02	0.03	0.04	0.07	
16	NO ₃ -N (mgN/L)	1.03	1.66	2.45	1.59	1.02
17	o-PO ₄ -P (mg P/L)				0.010	0.247
18	P-Tot (mgP/L)	0.018	0.014	0.012		
19	SiO ₂ (mg/L)	15.8	19.6	13.6	18.7	16.3
20	SO ₄ (mg/L)	11.3	10.7	5.6	5.8	2.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.2	1.3	1.3	1.1
2	COD (mg/L)					
3	DO (mg/L)	6.6	6.9	7.6	7.8	8.3
4	DO_SAT% (%)	83	88	94	95	105
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	51	51	41	54	45
2	HAR_Total (mgCaCO ₃ /L)	99	102	77	107	100
3	Na% (%)	29	31	26	34	29
4	RSC (-)	0.0	0.3	0.0	0.4	0.1
5	SAR (-)	0.8	1.0	0.7	1.1	0.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	206	401.6	130.8	328.6	298.7
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	283	248	314	186	293
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	318	244	318	186	300
4	pH_FLD (pH units)	8.0	7.8	8.0	7.8	8.2
5	pH_GEN (pH units)	8.0	7.8	8.0	7.7	8.1
6	TDS (mg/L)					160
7	Temp (deg C)	26.5	29.0	30.0	27.1	26.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	5.0	0.0	0.0	0.0	7.6
2	ALK-TOT (mgCaCO ₃ /L)	140	103	120	65	108
3	B (mg/L)	0.14				
4	Ca (mg/L)	24	22	29	13	22
5	Cl (mg/L)	43.2	27.5	36.8	18.0	32.0
6	CO ₃ (mg/L)	6.0	0.0	0.0	0.0	9.1
7	F (mg/L)	0.50	0.40	0.20	0.16	0.31
8	Fe (mg/L)	0.030			0.248	
9	HCO ₃ (mg/L)	159	126	146	80	113
10	K (mg/L)	3.0	2.5	2.5	1.9	3.0
11	Mg (mg/L)	17.7	11.4	10.5	10.7	14.6
12	Na (mg/L)	29.7	19.5	27.5	10.4	23.6
13	NH ₃ -N (mg N/L)	0.07			0.17	0.17
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	5.33	0.56	0.20	0.60	0.58
17	o-PO ₄ -P (mg P/L)	0.132				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	21.4				
20	SO ₄ (mg/L)	9.8	7.6	12.0	8.9	12.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.7	2.5	2.1	1.2	2.1
2	COD (mg/L)				8.5	10.5
3	DO (mg/L)	8.4	8.1	6.6	7.3	7.1
4	DO_SAT% (%)	104	105	88	91	88
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			25.46	1.54	
2	Cd ($\mu\text{g}/\text{L}$)			0.11	0.00	
3	Cr ($\mu\text{g}/\text{L}$)			0.67	4.48	
4	Cu ($\mu\text{g}/\text{L}$)			7.44	2.68	
5	Hg ($\mu\text{g}/\text{L}$)				0.11	
6	Ni ($\mu\text{g}/\text{L}$)			2.42	8.11	
7	Pb ($\mu\text{g}/\text{L}$)			4.98	4.88	
8	Zn ($\mu\text{g}/\text{L}$)			2.40	12.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	60	55	73	33	56
2	HAR_Total (mgCaCO ₃ /L)	134	103	117	77	117
3	Na% (%)	32	29	34	23	30
4	RSC (-)	0.1	0.1	0.1	0.0	0.0
5	SAR (-)	1.1	0.8	1.1	0.5	0.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	249.6	605.9	232.2	344.1	176
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	317	354	390	333	279
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	317	384	414	342	356
4	pH_FLD (pH units)	8.0	8.0	7.8	8.3	8.5
5	pH_GEN (pH units)	8.1	8.1	8.1	8.4	8.1
6	TDS (mg/L)	184				
7	Temp (deg C)	29.9	25.9	25.2	25.2	24.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	3.8	9.1	4.0	11.9	3.0
2	ALK-TOT (mgCaCO ₃ /L)	111	127	157	136	165
3	B (mg/L)	0.06	0.26	0.26	0.23	0.23
4	Ca (mg/L)	23	28	30	26	33
5	Cl (mg/L)	33.6	22.8	26.9	21.0	28.1
6	CO ₃ (mg/L)	4.6	11.0	4.8	14.3	3.6
7	F (mg/L)	0.47	0.57	0.42	0.39	0.51
8	Fe (mg/L)	0.034	0.076	0.069	0.067	0.127
9	HCO ₃ (mg/L)	126	132	182	137	194
10	K (mg/L)	3.6	2.7	2.6	2.1	1.3
11	Mg (mg/L)	15.4	15.6	17.5	12.8	17.9
12	Na (mg/L)	24.8	28.3	30.0	25.5	29.2
13	NH ₃ -N (mg N/L)	0.22		0.05	0.05	
14	NO ₂ +NO ₃ (mg N/L)	1.59	2.18	1.94	1.74	
15	NO ₂ -N (mgN/L)	0.02	0.02	0.01	0.01	
16	NO ₃ -N (mgN/L)	1.57	2.16	1.94	1.73	0.25
17	o-PO ₄ -P (mg P/L)	0.056				0.010
18	P-Tot (mgP/L)		0.025	0.005	0.027	
19	SiO ₂ (mg/L)	15.8	19.2	21.4	16.6	2.3
20	SO ₄ (mg/L)	15.2	24.3	23.3	10.5	14.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	3.4	1.4	1.3	1.1	1.3
2	COD (mg/L)	14.1				
3	DO (mg/L)	7.1	6.9	8.2	8.2	7.8
4	DO_SAT% (%)	93	85	99	99	92
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	56	69	76	64	82
2	HAR_Total (mgCaCO ₃ /L)	120	134	149	117	156
3	Na% (%)	32	31	30	31	29
4	RSC (-)	0.0	0.0	0.2	0.4	0.2
5	SAR (-)	1.0	1.1	1.1	1.0	1.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	85.21	72.51	75.01	25.04	214.8
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	340	338	301	307	341
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	386	338	311	314	319
4	pH_FLD (pH units)	8.1	8.2	7.6	8.2	8.0
5	pH_GEN (pH units)	8.2	8.0	7.7	8.2	8.2
6	TDS (mg/L)					
7	Temp (deg C)	25.5	25.5	25.8	28.0	26.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	5.3	0.0	0.0	7.9	2.6
2	ALK-TOT (mgCaCO ₃ /L)	169	154	129	121	137
3	B (mg/L)	0.12	0.28			
4	Ca (mg/L)	31	34	34	30	30
5	Cl (mg/L)	30.3	39.7	37.8	32.2	26.3
6	CO ₃ (mg/L)	6.4	0.0	0.0	9.6	3.1
7	F (mg/L)	0.53	0.44	0.17	0.08	0.31
8	Fe (mg/L)	0.103	0.000	0.100		
9	HCO ₃ (mg/L)	193	188	158	129	161
10	K (mg/L)	2.5	2.3	2.5	2.4	2.2
11	Mg (mg/L)	19.4	19.0	12.2	12.6	15.9
12	Na (mg/L)	29.1	30.1	26.8	22.6	18.3
13	NH ₃ -N (mg N/L)	0.09	0.01			0.07
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	1.72	3.62	0.56	0.11	0.13
17	o-PO ₄ -P (mg P/L)	0.040	0.076			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	24.8	19.8			
20	SO ₄ (mg/L)	22.9	14.4	12.9	11.8	14.4
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	1.1	1.3	2.3	2.0
2	COD (mg/L)				13.7	6.7
3	DO (mg/L)	7.5	8.4	7.6	7.5	7.4
4	DO_SAT% (%)	92	103	93	95	92
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.45		
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)			1.07		
4	Cu ($\mu\text{g}/\text{L}$)			15.05		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)			1.14		
8	Zn ($\mu\text{g}/\text{L}$)			5.00		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	77	86	84	74	75
2	HAR_Total (mgCaCO ₃ /L)	158	165	135	127	141
3	Na% (%)	28	28	30	27	22
4	RSC (-)	0.2	0.0	0.0	0.0	0.0
5	SAR (-)	1.0	1.0	1.0	0.9	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	213.4	159.5	9.633	53.17	17.08
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	366	474	483	394	338
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	366	468	472	407	355
4	pH_FLD (pH units)	7.9	8.0	7.9	8.0	8.5
5	pH_GEN (pH units)	8.1	8.3	8.3	8.2	8.4
6	TDS (mg/L)	207	268			
7	Temp (deg C)	27.4	27.8	29.3	26.8	26.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	17.2	5.9	4.0	13.0
2	ALK-TOT (mgCaCO ₃ /L)	128	174	181	150	139
3	B (mg/L)	0.03	0.13	0.27	0.23	0.32
4	Ca (mg/L)	24	33	28	25	24
5	Cl (mg/L)	36.2	43.2	29.8	26.9	23.8
6	CO ₃ (mg/L)	0.0	20.7	7.1	4.8	15.6
7	F (mg/L)	0.34	0.54	0.62	0.51	0.41
8	Fe (mg/L)	0.046	0.010	0.093	0.074	0.070
9	HCO ₃ (mg/L)	156	170	207	173	138
10	K (mg/L)	3.5	4.4	3.1	2.6	2.2
11	Mg (mg/L)	17.8	24.2	18.0	17.3	14.6
12	Na (mg/L)	27.3	33.9	40.0	32.6	28.7
13	NH ₃ -N (mg N/L)	0.17	0.45	0.06	0.05	0.03
14	NO ₂ +NO ₃ (mg N/L)	2.08	3.34	1.15	2.41	0.85
15	NO ₂ -N (mgN/L)	0.01	0.05	0.03	0.01	0.04
16	NO ₃ -N (mgN/L)	2.32	3.30	1.12	2.39	0.81
17	o-PO ₄ -P (mg P/L)	0.010	0.115			
18	P-Tot (mgP/L)			0.030	0.014	0.060
19	SiO ₂ (mg/L)	15.4	20.0	26.7	20.0	16.5
20	SO ₄ (mg/L)	16.2	25.4	15.9	16.1	20.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.9	3.7	2.9	1.6	
2	COD (mg/L)	8.6	11.5			
3	DO (mg/L)	7.4	7.2	6.8	6.7	
4	DO_SAT% (%)	93	91	88	83	
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			18.72	9.45	
2	Cd ($\mu\text{g}/\text{L}$)	0.84		8.00	4.00	
3	Cr ($\mu\text{g}/\text{L}$)	5.74				
4	Cu ($\mu\text{g}/\text{L}$)	5.82				
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	5.35		6.69	3.18	
7	Pb ($\mu\text{g}/\text{L}$)	1.17		2.69		
8	Zn ($\mu\text{g}/\text{L}$)	2.25		9.00	3.00	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	61	83	70	63	60
2	HAR_Total (mgCaCO ₃ /L)	135	184	145	135	121
3	Na% (%)	30	28	37	34	34
4	RSC (-)	0.0	0.0	0.7	0.3	0.4
5	SAR (-)	1.0	1.1	1.4	1.2	1.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	71.42	42.7	27.07	61.26
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	362	280	422	274
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	382	342	422	271
4	pH_FLD (pH units)	8.5	8.2	8.2	7.8
5	pH_GEN (pH units)	8.3	8.2	8.1	8.0
6	TDS (mg/L)				
7	Temp (deg C)	27.0	28.8	29.5	29.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	7.9	8.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	173	144	160	112
3	B (mg/L)	0.21	0.01	0.11	
4	Ca (mg/L)	30	27	32	19
5	Cl (mg/L)	34.6	36.5	49.6	32.5
6	CO ₃ (mg/L)	9.5	9.6	0.0	0.0
7	F (mg/L)	0.53	0.66	0.47	0.41
8	Fe (mg/L)	0.001	0.159	0.000	0.010
9	HCO ₃ (mg/L)	192	156	195	137
10	K (mg/L)	2.9	2.3	2.9	2.5
11	Mg (mg/L)	21.4	16.5	18.5	14.3
12	Na (mg/L)	38.5	29.9	33.8	23.6
13	NH ₃ -N (mg N/L)	0.14	0.01	0.00	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)	0.79	0.73	0.64	0.29
17	o-PO ₄ -P (mg P/L)	0.014	0.024	0.000	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	17.4	24.6	24.6	
20	SO ₄ (mg/L)	32.9	26.3	15.4	10.9
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	3.9	1.9	2.1	2.0
2	COD (mg/L)				
3	DO (mg/L)	7.8	7.3	8.5	6.6
4	DO_SAT% (%)	94	94	111	86
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	9.76			0.40
2	Cd ($\mu\text{g}/\text{L}$)				0.42
3	Cr ($\mu\text{g}/\text{L}$)				3.32
4	Cu ($\mu\text{g}/\text{L}$)	3.05			2.98
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	9.28			3.58
7	Pb ($\mu\text{g}/\text{L}$)				5.08
8	Zn ($\mu\text{g}/\text{L}$)				232.00
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	74	68	80	47
2	HAR_Total (mgCaCO ₃ /L)	163	137	157	106
3	Na% (%)	34	32	32	32
4	RSC (-)	0.2	0.2	0.1	0.1
5	SAR (-)	1.3	1.1	1.2	1.0
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : URACHIKOTTAI (CC000K5)

Local River : Cauvery

Division :SR Division, Coimbatore

Sub-Division : Middle Cauvery SD,Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	43.04	63.43	121	52.77
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	454	410	385	464
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	454	405	376	464
4	pH_FLD (pH units)	8.0	8.0	8.1	8.3
5	pH_GEN (pH units)	8.4	8.0	7.9	8.3
6	TDS (mg/L)		219	216	262
7	Temp (deg C)	28.0	27.7	30.3	30.5
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	23.8	5.1	0.0	9.9
2	ALK-TOT (mgCaCO ₃ /L)	179	159	133	155
3	B (mg/L)			0.05	0.12
4	Ca (mg/L)	34	30	15	29
5	Cl (mg/L)	47.3	39.7	35.2	43.7
6	CO ₃ (mg/L)	28.7	6.2	0.0	12.0
7	F (mg/L)	0.74	0.41	0.40	0.46
8	Fe (mg/L)	0.008	0.050	0.020	0.000
9	HCO ₃ (mg/L)	160	181	162	164
10	K (mg/L)	2.5	3.0	4.1	4.5
11	Mg (mg/L)	25.3	23.8	23.9	23.8
12	Na (mg/L)	33.3	29.5	26.6	36.1
13	NH ₃ -N (mg N/L)	0.39	0.22	0.16	0.08
14	NO ₂ +NO ₃ (mg N/L)			1.59	6.22
15	NO ₂ -N (mgN/L)			0.01	0.00
16	NO ₃ -N (mgN/L)	0.09	0.43	1.57	6.22
17	o-PO ₄ -P (mg P/L)			0.030	0.063
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)			17.9	18.4
20	SO ₄ (mg/L)	20.6	18.6	17.6	21.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	3.0	4.7	4.3	5.3
2	COD (mg/L)	9.4	11.3	11.0	16.0
3	DO (mg/L)	8.2	7.2	7.2	7.2
4	DO_SAT% (%)	105	91	95	96
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	2.19	3.04		
2	Cd ($\mu\text{g}/\text{L}$)	0.01	0.03		
3	Cr ($\mu\text{g}/\text{L}$)	0.20	0.73		
4	Cu ($\mu\text{g}/\text{L}$)	0.58	1.44		
5	Hg ($\mu\text{g}/\text{L}$)	0.29			
6	Ni ($\mu\text{g}/\text{L}$)	8.72	8.95		
7	Pb ($\mu\text{g}/\text{L}$)	1.55	0.61		
8	Zn ($\mu\text{g}/\text{L}$)	1.90	4.00		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	84	74	38	73
2	HAR_Total (mgCaCO ₃ /L)	190	173	137	173
3	Na% (%)	27	27	29	31
4	RSC (-)	0.0	0.0	0.0	0.0
5	SAR (-)	1.1	1.0	1.0	1.2
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: THEVUR	Code	: CCH00C3
State	: Tamil Nadu	District	Salem
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Sarabenga	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Sarabenga
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 1248 Sq. Km.	Bank	: Left
Latitude	: 11°31'38"	Longitude	: 77°45'03"
Zero of Gauge (m)	: 168.000 (m.s.l)	07/01/1998	
	Opening Date	Closing Date	
Gauge	: 07/01/1998		
Discharge	: 24/09/1999		
Sediment	:		
Water Quality	: 01/10/2001		

Water Quality Datasheet for the period : 2015-2016

Station Name : THEVUR(CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THEVUR(CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	1.057
2	Colour_Cod (-)			Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			765
4	Odour_Code (-)			odour free
5	pH_GEN (pH units)			7.9
6	TDS (mg/L)			446
7	Temp (deg C)			29.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			0.0
2	ALK-TOT (mgCaCO ₃ /L)			291
3	B (mg/L)			0.18
4	Ca (mg/L)			47
5	Cl (mg/L)			59.6
6	CO ₃ (mg/L)			0.0
7	F (mg/L)			
8	Fe (mg/L)			0.030
9	HCO ₃ (mg/L)			355
10	K (mg/L)			6.8
11	Mg (mg/L)			31.6
12	Na (mg/L)			81.0
13	NH ₃ -N (mg N/L)			0.20
14	NO ₂ +NO ₃ (mg N/L)			6.29
15	NO ₂ -N (mgN/L)			0.03
16	NO ₃ -N (mgN/L)			6.26
17	o-PO ₄ -P (mg P/L)			0.080
18	SiO ₂ (mg/L)			29.9
19	SO ₄ (mg/L)			14.3
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)			16.3
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			118
2	HAR_Total (mgCaCO ₃ /L)			250
3	Na% (%)			41
4	RSC (-)			0.9
5	SAR (-)			2.2
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THEVUR(CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	1.793	1.036	0.200
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	813	1050	991
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)		8.0	7.8
6	TDS (mg/L)	467	603	560
7	Temp (deg C)	27.5	27.0	26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	276	310	314
3	B (mg/L)	0.12	0.18	0.10
4	Ca (mg/L)	25	36	32
5	Cl (mg/L)	65.4	147.4	83.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	1.02	0.69	1.16
8	Fe (mg/L)	0.010	0.000	0.000
9	HCO ₃ (mg/L)	336	378	383
10	K (mg/L)	6.1	4.7	8.0
11	Mg (mg/L)	46.0	75.7	59.4
12	Na (mg/L)	91.0	84.6	95.5
13	NH ₃ -N (mg N/L)	0.09	0.56	0.65
14	NO ₂ +NO ₃ (mg N/L)	8.72	3.25	4.11
15	NO ₂ -N (mgN/L)	0.00	0.01	0.01
16	NO ₃ -N (mgN/L)	8.72	3.24	4.10
17	o-PO ₄ -P (mg P/L)	0.190	0.020	0.040
18	SiO ₂ (mg/L)	22.0	21.7	13.8
19	SO ₄ (mg/L)	67.2	43.1	92.0
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)	6.4	13.2	19.2
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	63	91	79
2	HAR_Total (mgCaCO ₃ /L)	255	406	326
3	Na% (%)	43	31	38
4	RSC (-)	0.5	0.0	0.0
5	SAR (-)	2.5	1.8	2.3
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THEVUR(CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	5.798	0.000	0.315
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	4	1050	765	905
3	pH_GEN (pH units)	4	8.2	7.8	8
4	TDS (mg/L)	4	603	446	519
5	Temp (deg C)	4	29.0	26.0	27.4
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	4	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	4	314	276	298
3	B (mg/L)	4	0.18	0.10	0.15
4	Ca (mg/L)	4	47	25	35
5	Cl (mg/L)	4	147.4	59.6	88.9
6	CO ₃ (mg/L)	4	0.0	0.0	0
7	F (mg/L)	3	1.16	0.69	0.96
8	Fe (mg/L)	4	0.030	0.000	0.01
9	HCO ₃ (mg/L)	4	383	336	363
10	K (mg/L)	4	8.0	4.7	6.4
11	Mg (mg/L)	4	75.7	31.6	53.2
12	Na (mg/L)	4	95.5	81.0	88
13	NH ₃ -N (mg N/L)	4	0.65	0.09	0.38
14	NO ₂ +NO ₃ (mg N/L)	4	8.72	3.25	5.59
15	NO ₂ -N (mgN/L)	4	0.03	0.00	0.01
16	NO ₃ -N (mgN/L)	4	8.72	3.24	5.58
17	o-PO ₄ -P (mg P/L)	4	0.190	0.020	0.082
18	SiO ₂ (mg/L)	4	29.9	13.8	21.9
19	SO ₄ (mg/L)	4	92.0	14.3	54.1
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)	4	19.2	6.4	13.8
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	4	118	63	88
2	HAR_Total (mgCaCO ₃ /L)	4	406	250	309
3	Na% (%)	4	43	31	38
4	RSC (-)	4	0.9	0.0	0.3
5	SAR (-)	4	2.5	1.8	2.2
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	0.234	0.351	0.131	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	734	711	763		
3	pH_GEN (pH units)	7.7	7.9	8.0		
4	TDS (mg/L)					
5	Temp (deg C)	28.3	30.5	27.5		
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	236	245	283		
2	B (mg/L)	0.24	0.34	0.27		
3	Ca (mg/L)	43	44	53		
4	Cl (mg/L)	52.6	49.9	50.0		
5	F (mg/L)	0.89	0.99	0.73		
6	Fe (mg/L)	0.073	0.075	0.070		
7	HCO ₃ (mg/L)	288	299	345		
8	K (mg/L)	5.1	6.6	5.3		
9	Mg (mg/L)	31.8	26.7	28.2		
10	Na (mg/L)	65.9	64.5	77.4		
11	NH ₃ -N (mg N/L)		0.16	0.06		
12	NO ₂ +NO ₃ (mg N/L)	2.37	4.79	5.34		
13	NO ₂ -N (mgN/L)	0.02	0.09	0.18		
14	NO ₃ -N (mgN/L)	2.35	4.70	5.16		
15	o-PO ₄ -P (mg P/L)					
16	P-Tot (mgP/L)	0.037	0.103	0.072		
17	SiO ₂ (mg/L)	27.3	30.8	33.5		
18	SO ₄ (mg/L)	35.5	38.9	49.2		
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	107	110	132		
2	HAR_Total (mgCaCO ₃ /L)	240	222	250		
3	Na% (%)	37	38	40		
4	RSC (-)	0.2	0.5	0.7		
5	SAR (-)	1.9	1.9	2.1		
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	0.075	0.385	0.000	0.041	0.192
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	676	618		570	452
3	pH_GEN (pH units)	7.6			7.8	7.7
4	TDS (mg/L)					241
5	Temp (deg C)	30.0	28.5		30.0	28.0
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	300	245		207	150
2	B (mg/L)	0.03				
3	Ca (mg/L)	43	30		33	26
4	Cl (mg/L)	62.8	67.7		57.5	35.6
5	F (mg/L)	1.06	1.35		0.16	0.59
6	Fe (mg/L)	0.000				
7	HCO ₃ (mg/L)	366	299		253	183
8	K (mg/L)	3.7	5.0		4.9	6.6
9	Mg (mg/L)	32.1	32.6		33.5	21.5
10	Na (mg/L)	71.5	73.8		44.5	36.2
11	NH ₃ -N (mg N/L)	0.00			0.16	0.01
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)	6.26	4.35		0.45	2.97
15	o-PO ₄ -P (mg P/L)	2.329				
16	P-Tot (mgP/L)					
17	SiO ₂ (mg/L)	33.8				
18	SO ₄ (mg/L)	29.1	36.0		41.9	39.3
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)				17.0	16.7
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	108	76		83	66
2	HAR_Total (mgCaCO ₃ /L)	242	212		222	155
3	Na% (%)	39	43		30	33
4	RSC (-)	1.2	0.7		0.0	0.0
5	SAR (-)	2.0	2.2		1.3	1.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.000	16.910	1.436	0.171	0.787
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		628	860	734	837
3	pH_GEN (pH units)		7.9	8.0	8.2	7.9
4	TDS (mg/L)					
5	Temp (deg C)		28.8	27.8	27.0	27.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)		213	316	199	298
2	B (mg/L)		0.31	0.32	0.31	0.17
3	Ca (mg/L)		33	55	24	56
4	Cl (mg/L)		41.5	56.0	32.8	64.0
5	F (mg/L)		0.74	1.11	0.87	0.81
6	Fe (mg/L)		0.075	0.067	0.070	
7	HCO ₃ (mg/L)		260	386	243	364
8	K (mg/L)		5.3	9.0	4.8	5.8
9	Mg (mg/L)		24.2	31.8	13.6	34.3
10	Na (mg/L)		65.5	84.9	76.4	60.0
11	NH ₃ -N (mg N/L)			0.06	0.05	
12	NO ₂ +NO ₃ (mg N/L)		2.46	6.18	5.34	
13	NO ₂ -N (mgN/L)		0.02	0.01	0.02	
14	NO ₃ -N (mgN/L)		2.44	6.17	5.32	8.38
15	o-PO ₄ -P (mg P/L)					
16	P-Tot (mgP/L)		0.049	0.030	0.079	
17	SiO ₂ (mg/L)		23.6	32.5	27.3	
18	SO ₄ (mg/L)		24.6	55.8	41.8	28.2
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		84	136	60	140
2	HAR_Total (mgCaCO ₃ /L)		184	269	117	283
3	Na% (%)		43	40	58	31
4	RSC (-)		0.6	1.0	1.7	0.3
5	SAR (-)		2.1	2.3	3.1	1.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	0.590	2.857	1.530	0.000	0.490
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	735	629	651		679
3	pH_GEN (pH units)	7.9	8.0	7.6		8.1
4	TDS (mg/L)					
5	Temp (deg C)		26.6	25.8		27.8
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	324	265	245		262
2	B (mg/L)	0.34	0.17			
3	Ca (mg/L)	50	50	42		56
4	Cl (mg/L)	64.3	71.0	72.4		58.1
5	F (mg/L)	1.14	1.01	1.19		0.91
6	Fe (mg/L)	0.123	0.000	0.080		
7	HCO ₃ (mg/L)	395	323	299		319
8	K (mg/L)	4.1	5.3	5.5		3.9
9	Mg (mg/L)	36.5	26.3	25.3		30.4
10	Na (mg/L)	76.7	68.3	79.7		48.4
11	NH ₃ -N (mg N/L)	0.06	0.04			0.14
12	NO ₂ +NO ₃ (mg N/L)					
13	NO ₂ -N (mgN/L)					
14	NO ₃ -N (mgN/L)	2.50	5.13	4.24		1.83
15	o-PO ₄ -P (mg P/L)	0.095	0.613			
16	P-Tot (mgP/L)					
17	SiO ₂ (mg/L)	39.4	33.3			
18	SO ₄ (mg/L)	65.0	39.0	40.6		48.1
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					10.7
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		0.70			
2	Cd ($\mu\text{g}/\text{L}$)		0.02			
3	Cr ($\mu\text{g}/\text{L}$)		4.98			
4	Cu ($\mu\text{g}/\text{L}$)		11.33			
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)		2.56			
7	Zn ($\mu\text{g}/\text{L}$)		26.30			
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	126	124	106		141
2	HAR_Total (mgCaCO ₃ /L)	278	234	212		268
3	Na% (%)	37	38	44		28
4	RSC (-)	1.0	0.7	0.7		0.1
5	SAR (-)	2.0	1.9	2.4		1.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	0.739	1.022	0.000	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	704	905			
3	pH_GEN (pH units)	8.0	8.0			
4	TDS (mg/L)	397	519			
5	Temp (deg C)	27.0	27.4			
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	241	298			
2	B (mg/L)	0.00	0.15			
3	Ca (mg/L)	43	35			
4	Cl (mg/L)	53.3	88.9			
5	F (mg/L)	0.79	0.96			
6	Fe (mg/L)	0.023	0.010			
7	HCO ₃ (mg/L)	294	363			
8	K (mg/L)	5.3	6.4			
9	Mg (mg/L)	29.3	53.2			
10	Na (mg/L)	67.8	88.0			
11	NH ₃ -N (mg N/L)	0.20	0.38			
12	NO ₂ +NO ₃ (mg N/L)	4.02	5.59			
13	NO ₂ -N (mgN/L)	0.00	0.01			
14	NO ₃ -N (mgN/L)	4.94	5.58			
15	o-PO ₄ -P (mg P/L)	0.000	0.082			
16	P-Tot (mgP/L)					
17	SiO ₂ (mg/L)	27.5	21.9			
18	SO ₄ (mg/L)	45.0	54.1			
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)	16.9	13.8			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	0.81				
3	Cr ($\mu\text{g}/\text{L}$)	1.60				
4	Cu ($\mu\text{g}/\text{L}$)	0.95				
5	Ni ($\mu\text{g}/\text{L}$)	0.07				
6	Pb ($\mu\text{g}/\text{L}$)	0.83				
7	Zn ($\mu\text{g}/\text{L}$)	0.01				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	109	88			
2	HAR_Total (mgCaCO ₃ /L)	231	309			
3	Na% (%)	39	38			
4	RSC (-)	0.3	0.3			
5	SAR (-)	2.0	2.2			
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.131	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)			743	
3	pH_GEN (pH units)			7.8	
4	TDS (mg/L)				
5	Temp (deg C)			29.5	
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)			292	
2	B (mg/L)				
3	Ca (mg/L)			61	
4	Cl (mg/L)			81.8	
5	F (mg/L)			1.03	
6	Fe (mg/L)				
7	HCO ₃ (mg/L)			356	
8	K (mg/L)			5.2	
9	Mg (mg/L)			22.4	
10	Na (mg/L)			83.0	
11	NH ₃ -N (mg N/L)				
12	NO ₂ +NO ₃ (mg N/L)				
13	NO ₂ -N (mgN/L)				
14	NO ₃ -N (mgN/L)			1.87	
15	o-PO ₄ -P (mg P/L)				
16	P-Tot (mgP/L)				
17	SiO ₂ (mg/L)				
18	SO ₄ (mg/L)			61.8	
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.09	
2	Cd ($\mu\text{g}/\text{L}$)			0.04	
3	Cr ($\mu\text{g}/\text{L}$)			22.13	
4	Cu ($\mu\text{g}/\text{L}$)			3.50	
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)			0.23	
7	Zn ($\mu\text{g}/\text{L}$)			49.70	
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)			152	
2	HAR_Total (mgCaCO ₃ /L)			245	
3	Na% (%)			42	
4	RSC (-)			1.0	
5	SAR (-)			2.3	
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THEVUR (CCH00C3)

Local River : Sarabenga

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_GEN (pH units)				
4	TDS (mg/L)				
5	Temp (deg C)				
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)				
2	B (mg/L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	F (mg/L)				
6	Fe (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NH ₃ -N (mg N/L)				
12	NO ₂ +NO ₃ (mg N/L)				
13	NO ₂ -N (mgN/L)				
14	NO ₃ -N (mgN/L)				
15	o-PO ₄ -P (mg P/L)				
16	P-Tot (mgP/L)				
17	SiO ₂ (mg/L)				
18	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: SEVANUR	Code	: CCI00C4
State	: Tamil Nadu	District	: Erode
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Chittar	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Chittar
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 258 Sq. Km.	Bank	: Right
Latitude	: 11°33'07"	Longitude	: 77°43'55"
Zero of Gauge (m)	: 170.000 (m.s.l)	27/11/1997	
	Opening Date	Closing Date	
Gauge	: 27/11/1997		
Discharge	: 20/09/1999		
Sediment	:		
Water Quality	: 01/10/2001		

Water Quality Datasheet for the period : 2015-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
	PHYSICAL			
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
	CHEMICAL			
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
	BIOLOGICAL/BACTERIOLOGICAL			
1	COD (mg/L)			
	TRACE & TOXIC			
	CHEMICAL INDICES			
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
	PESTICIDES			

Water Quality Datasheet for the period : 2015-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	0.358	0.430
2	Colour_Cod (-)		Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		579	758
4	Odour_Code (-)		odour free	odour free
5	pH_GEN (pH units)		7.7	7.8
6	TDS (mg/L)		338	441
7	Temp (deg C)		29.0	28.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		218	302
3	B (mg/L)		0.06	0.11
4	Ca (mg/L)		44	44
5	Cl (mg/L)		48.1	59.6
6	CO ₃ (mg/L)		0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)		0.030	0.010
9	HCO ₃ (mg/L)		266	369
10	K (mg/L)		7.0	8.7
11	Mg (mg/L)		30.7	42.1
12	Na (mg/L)		35.7	67.0
13	NH ₃ -N (mg N/L)		0.18	0.17
14	NO ₂ +NO ₃ (mg N/L)		6.16	12.02
15	NO ₂ -N (mgN/L)		0.06	0.02
16	NO ₃ -N (mgN/L)		6.10	12.00
17	o-PO ₄ -P (mg P/L)		0.090	0.070
18	SiO ₂ (mg/L)		31.4	40.1
19	SO ₄ (mg/L)		28.5	10.2
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)		11.8	13.6
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		111	111
2	HAR_Total (mgCaCO ₃ /L)		238	286
3	Na% (%)		24	33
4	RSC (-)		0.0	0.4
5	SAR (-)		1.0	1.7
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.408	0.413	0.000
2	Colour_Cod (-)	Clear	Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	698	795	
4	Odour_Code (-)	odour free	odour free	
5	pH_GEN (pH units)	8.1	7.7	
6	TDS (mg/L)	410	456	
7	Temp (deg C)	27.0	25.0	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	230	314	
3	B (mg/L)	0.04	0.09	
4	Ca (mg/L)	24	28	
5	Cl (mg/L)	63.5	57.2	
6	CO ₃ (mg/L)	0.0	0.0	
7	F (mg/L)	0.69	0.54	
8	Fe (mg/L)	0.020	0.000	
9	HCO ₃ (mg/L)	280	383	
10	K (mg/L)	7.8	8.0	
11	Mg (mg/L)	51.7	59.4	
12	Na (mg/L)	53.0	61.5	
13	NH ₃ -N (mg N/L)	0.10	0.43	
14	NO ₂ +NO ₃ (mg N/L)	11.20	6.49	
15	NO ₂ -N (mgN/L)	0.00	0.12	
16	NO ₃ -N (mgN/L)	11.20	6.37	
17	o-PO ₄ -P (mg P/L)	0.310	0.040	
18	SiO ₂ (mg/L)	21.6	24.9	
19	SO ₄ (mg/L)	38.2	30.0	
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)	5.3	7.1	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	59	71	
2	HAR_Total (mgCaCO ₃ /L)	275	319	
3	Na% (%)	29	29	
4	RSC (-)	0.0	0.0	
5	SAR (-)	1.4	1.5	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
	PHYSICAL			
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
	CHEMICAL			
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
	BIOLOGICAL/BACTERIOLOGICAL			
1	COD (mg/L)			
	TRACE & TOXIC			
	CHEMICAL INDICES			
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
	PESTICIDES			

Water Quality Summary for the period : 2015-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	22.97	0.000	0.220
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	4	795	579	708
3	pH_GEN (pH units)	4	8.1	7.7	7.8
4	TDS (mg/L)	4	456	338	411
5	Temp (deg C)	4	29.0	25.0	27.4
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	4	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	4	314	218	266
3	B (mg/L)	4	0.11	0.04	0.08
4	Ca (mg/L)	4	44	24	35
5	Cl (mg/L)	4	63.5	48.1	57.1
6	CO ₃ (mg/L)	4	0.0	0.0	0
7	F (mg/L)	2	0.69	0.54	0.62
8	Fe (mg/L)	4	0.030	0.000	0.015
9	HCO ₃ (mg/L)	4	383	266	325
10	K (mg/L)	4	8.7	7.0	7.9
11	Mg (mg/L)	4	59.4	30.7	46
12	Na (mg/L)	4	67.0	35.7	54.3
13	NH ₃ -N (mg N/L)	4	0.43	0.10	0.22
14	NO ₂ +NO ₃ (mg N/L)	4	12.02	6.16	8.97
15	NO ₂ -N (mgN/L)	4	0.12	0.00	0.05
16	NO ₃ -N (mgN/L)	4	12.00	6.10	8.92
17	o-PO ₄ -P (mg P/L)	4	0.310	0.040	0.128
18	SiO ₂ (mg/L)	4	40.1	21.6	29.5
19	SO ₄ (mg/L)	4	38.2	10.2	26.7
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)	4	13.6	5.3	9.5
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	4	111	59	88
2	HAR_Total (mgCaCO ₃ /L)	4	319	238	279
3	Na% (%)	4	33	24	29
4	RSC (-)	4	0.4	0.0	0.1
5	SAR (-)	4	1.7	1.0	1.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	0.139	0.409	0.097	0.000	0.123
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	589	697	638		711
3	pH_GEN (pH units)	7.7	7.9	7.8		7.7
4	TDS (mg/L)					
5	Temp (deg C)	28.0	27.8	28.0		
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0		0.0
2	ALK-TOT (mgCaCO ₃ /L)	200	259	253		288
3	B (mg/L)	0.21	0.41	0.28		0.30
4	Ca (mg/L)	38	52	46		64
5	Cl (mg/L)	33.5	38.7	38.3		67.8
6	CO ₃ (mg/L)	0.0	0.0	0.0		0.0
7	F (mg/L)	0.69	0.87	0.69		0.82
8	Fe (mg/L)	0.076	0.080	0.070		0.305
9	HCO ₃ (mg/L)	244	316	308		351
10	K (mg/L)	5.8	5.4	6.6		6.9
11	Mg (mg/L)	28.6	27.2	31.1		33.1
12	Na (mg/L)	35.1	44.4	45.7		60.7
13	NH ₃ -N (mg N/L)			0.05		0.13
14	NO ₂ +NO ₃ (mg N/L)	2.87	6.52	6.38		
15	NO ₂ -N (mgN/L)	0.04	0.03	0.16		
16	NO ₃ -N (mgN/L)	2.83	6.49	6.22		2.33
17	o-PO ₄ -P (mg P/L)					0.090
18	P-Tot (mgP/L)	0.016	0.054	0.028		
19	SiO ₂ (mg/L)	30.6	34.1	45.2		50.1
20	SO ₄ (mg/L)	17.8	14.1	23.6		38.6
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	96	130	114		160
2	HAR_Total (mgCaCO ₃ /L)	215	244	244		298
3	Na% (%)	26	28	28		30
4	RSC (-)	0.0	0.3	0.2		0.1
5	SAR (-)	1.0	1.2	1.3		1.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	0.015	0.095	0.000	0.125	0.117
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		440		561	463
3	pH_GEN (pH units)		7.6		7.7	7.9
4	TDS (mg/L)					248
5	Temp (deg C)		28.8		28.8	29.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		0.0		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		217		203	173
3	B (mg/L)					
4	Ca (mg/L)		48		44	20
5	Cl (mg/L)		53.5		52.1	39.3
6	CO ₃ (mg/L)		0.0		0.0	0.0
7	F (mg/L)		0.92		0.33	0.45
8	Fe (mg/L)					
9	HCO ₃ (mg/L)		265		248	211
10	K (mg/L)		6.2		5.5	4.8
11	Mg (mg/L)		22.8		29.9	34.6
12	Na (mg/L)		46.4		31.8	32.7
13	NH ₃ -N (mg N/L)				0.14	0.05
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)		7.32		2.13	4.22
17	o-PO ₄ -P (mg P/L)					
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)					
20	SO ₄ (mg/L)		22.0		26.9	22.6
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)				11.7	13.3
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		120		109	50
2	HAR_Total (mgCaCO ₃ /L)		215		234	194
3	Na% (%)		31		22	26
4	RSC (-)		0.1		0.0	0.0
5	SAR (-)		1.4		0.9	1.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.072	0.481	0.959	0.527	0.477
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	579	677	738	711	792
3	pH_GEN (pH units)	7.7	7.9	8.0	8.0	7.9
4	TDS (mg/L)	338				
5	Temp (deg C)	29.0		25.9	13.8	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	218	227	293	293	299
3	B (mg/L)	0.06	0.32	0.33	0.30	0.17
4	Ca (mg/L)	44	41	55	55	62
5	Cl (mg/L)	48.1	51.7	45.1	40.9	47.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)		0.65	0.82	0.75	1.47
8	Fe (mg/L)	0.030	0.078	0.076	0.070	0.127
9	HCO ₃ (mg/L)	266	276	357	358	365
10	K (mg/L)	7.0	6.3	6.5	5.3	5.3
11	Mg (mg/L)	30.6	35.7	32.3	31.4	32.4
12	Na (mg/L)	35.7	46.6	57.8	50.7	55.3
13	NH ₃ -N (mg N/L)	0.18	0.08	0.07	0.05	
14	NO ₂ +NO ₃ (mg N/L)	6.16	5.47	8.18	5.92	
15	NO ₂ -N (mgN/L)	0.06	0.02	0.27	0.01	
16	NO ₃ -N (mgN/L)	6.10	5.45	7.91	5.91	3.37
17	o-PO ₄ -P (mg P/L)	0.090				0.010
18	P-Tot (mgP/L)		0.051	0.020	0.062	
19	SiO ₂ (mg/L)	31.4	27.1	45.3	31.0	2.0
20	SO ₄ (mg/L)	28.5	31.8	18.5	28.2	51.9
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)	11.8				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	111	101	137	136	154
2	HAR_Total (mgCaCO ₃ /L)	238	250	272	267	289
3	Na% (%)	24	29	31	29	29
4	RSC (-)	0.0	0.0	0.5	0.6	0.3
5	SAR (-)	1.0	1.3	1.5	1.3	1.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	0.470	0.366	0.472	0.000	0.351
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	674	689	598		622
3	pH_GEN (pH units)	7.9	8.0	7.5		7.9
4	TDS (mg/L)					
5	Temp (deg C)		26.1	26.5		26.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	9.0	0.0		0.0
2	ALK-TOT (mgCaCO ₃ /L)	319	283	242		252
3	B (mg/L)	0.42	0.15			
4	Ca (mg/L)	62	67	51		64
5	Cl (mg/L)	44.8	67.7	60.6		46.7
6	CO ₃ (mg/L)	0.0	10.8	0.0		0.0
7	F (mg/L)	0.87	0.80	0.76		0.64
8	Fe (mg/L)	0.252	0.000	0.050		
9	HCO ₃ (mg/L)	389	323	295		308
10	K (mg/L)	5.4	5.0	5.7		4.4
11	Mg (mg/L)	32.3	27.8	26.0		26.2
12	Na (mg/L)	49.2	55.3	55.4		33.3
13	NH ₃ -N (mg N/L)	0.05	0.02			0.12
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	4.19	9.56	5.31		3.47
17	o-PO ₄ -P (mg P/L)	0.050	0.423			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	43.6	48.5			
20	SO ₄ (mg/L)	38.0	26.5	25.3		21.8
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					12.8
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.50		
2	Cd ($\mu\text{g}/\text{L}$)			0.07		
3	Cr ($\mu\text{g}/\text{L}$)			4.11		
4	Cu ($\mu\text{g}/\text{L}$)			18.40		
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)			3.31		
7	Zn ($\mu\text{g}/\text{L}$)			21.90		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	154	168	126		160
2	HAR_Total (mgCaCO ₃ /L)	289	284	235		269
3	Na% (%)	27	29	33		21
4	RSC (-)	0.6	0.2	0.2		0.0
5	SAR (-)	1.3	1.4	1.6		0.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		2006
		2014-2015	2015-2016			
PHYSICAL						
1	Q (cumec)	0.360	0.313	0.000	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	671	750			
3	pH_GEN (pH units)	8.0	7.9			
4	TDS (mg/L)	376	436			
5	Temp (deg C)	26.8	26.8			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			
2	ALK-TOT (mgCaCO ₃ /L)	255	282			
3	B (mg/L)	0.00	0.08			
4	Ca (mg/L)	46	32			
5	Cl (mg/L)	50.1	60.1			
6	CO ₃ (mg/L)	0.0	0.0			
7	F (mg/L)	0.74	0.62			
8	Fe (mg/L)	0.020	0.010			
9	HCO ₃ (mg/L)	311	344			
10	K (mg/L)	6.6	8.2			
11	Mg (mg/L)	36.2	51.1			
12	Na (mg/L)	46.4	60.5			
13	NH ₃ -N (mg N/L)	0.25	0.24			
14	NO ₂ +NO ₃ (mg N/L)	7.47	9.90			
15	NO ₂ -N (mgN/L)	0.03	0.05			
16	NO ₃ -N (mgN/L)	8.97	9.86			
17	o-PO ₄ -P (mg P/L)	0.000	0.140			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	31.8	28.9			
20	SO ₄ (mg/L)	26.1	26.1			
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)	7.5	8.7			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	4.16				
3	Cr ($\mu\text{g}/\text{L}$)	4.51				
4	Cu ($\mu\text{g}/\text{L}$)	1.35				
5	Ni ($\mu\text{g}/\text{L}$)	0.11				
6	Pb ($\mu\text{g}/\text{L}$)	2.24				
7	Zn ($\mu\text{g}/\text{L}$)	0.01				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	115	80			
2	HAR_Total (mgCaCO ₃ /L)	266	293			
3	Na% (%)	27	30			
4	RSC (-)	0.0	0.1			
5	SAR (-)	1.2	1.5			
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	0.069	0.000	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	911			
3	pH_GEN (pH units)	7.9			
4	TDS (mg/L)				
5	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0			
2	ALK-TOT (mgCaCO ₃ /L)	355			
3	B (mg/L)	0.22			
4	Ca (mg/L)	58			
5	Cl (mg/L)	62.0			
6	CO ₃ (mg/L)	0.0			
7	F (mg/L)	0.96			
8	Fe (mg/L)	0.075			
9	HCO ₃ (mg/L)	434			
10	K (mg/L)	7.4			
11	Mg (mg/L)	36.9			
12	Na (mg/L)	85.6			
13	NH ₃ -N (mg N/L)	0.09			
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)	2.97			
17	o-PO ₄ -P (mg P/L)	0.026			
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	15.3			
20	SO ₄ (mg/L)	42.4			
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	25.03			
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)	4.76			
4	Cu ($\mu\text{g}/\text{L}$)	9.18			
5	Ni ($\mu\text{g}/\text{L}$)	22.33			
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	144			
2	HAR_Total (mgCaCO ₃ /L)	298			
3	Na% (%)	38			
4	RSC (-)	1.2			
5	SAR (-)	2.2			
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SEVANUR (CCI00C4)

Local River : Chittar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_GEN (pH units)				
4	TDS (mg/L)				
5	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	B (mg/L)				
4	Ca (mg/L)				
5	Cl (mg/L)				
6	CO ₃ (mg/L)				
7	F (mg/L)				
8	Fe (mg/L)				
9	HCO ₃ (mg/L)				
10	K (mg/L)				
11	Mg (mg/L)				
12	Na (mg/L)				
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)				
17	o-PO ₄ -P (mg P/L)				
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)				
20	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: THOPPUR	Code	: CCJ00I2
State	: Tamil Nadu	District	: Salem
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Thoppaiyar	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Thoppaiyar
Division	: SR Division, Coimbatore	Sub-Division	: Lower Cauvery SD, Trichi
Drainage Area	: 362 Sq. Km.	Bank	: Left
Latitude	: 11°56'18"	Longitude	: 78°03'26"
Zero of Gauge (m)	: 320.000 (m.s.l)	08/01/1998	
	Opening Date	Closing Date	
Gauge	: 08/01/1998		
Discharge	: 21/10/1999		
Sediment	:		
Water Quality	: 01/11/2001		

Water Quality Datasheet for the period : 2015-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	Dry Bed	Dry Bed	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water Analysis

S.No	Parameters	04/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	3.756	0.000	0.000
2	Colour_Cod (-)	Light Green		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	508		
4	Odour_Code (-)	odour free		
5	pH_GEN (pH units)	8.1		
6	TDS (mg/L)	296		
7	Temp (deg C)	24.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	157		
3	B (mg/L)	0.01		
4	Ca (mg/L)	32		
5	Cl (mg/L)	50.0		
6	CO ₃ (mg/L)	0.0		
7	F (mg/L)	0.59		
8	Fe (mg/L)	0.020		
9	HCO ₃ (mg/L)	191		
10	K (mg/L)	6.2		
11	Mg (mg/L)	28.7		
12	Na (mg/L)	38.2		
13	NH ₃ -N (mg N/L)	0.10		
14	NO ₂ +NO ₃ (mg N/L)	9.29		
15	NO ₂ -N (mgN/L)	0.01		
16	NO ₃ -N (mgN/L)	9.28		
17	o-PO ₄ -P (mg P/L)	0.390		
18	SiO ₂ (mg/L)	5.7		
19	SO ₄ (mg/L)	29.7		
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)	9.6		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	79		
2	HAR_Total (mgCaCO ₃ /L)	199		
3	Na% (%)	29		
4	RSC (-)	0.0		
5	SAR (-)	1.2		
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	Dry Bed
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	COD (mg/L)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	3.981	0.000	0.120
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1	508	508	508
3	pH_GEN (pH units)	1	8.1	8.1	8.1
4	TDS (mg/L)	1	296	296	296
5	Temp (deg C)	1	24.0	24.0	24
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	1	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	1	157	157	157
3	B (mg/L)	1	0.01	0.01	0.01
4	Ca (mg/L)	1	32	32	32
5	Cl (mg/L)	1	50.0	50.0	50
6	CO ₃ (mg/L)	1	0.0	0.0	0
7	F (mg/L)	1	0.59	0.59	0.59
8	Fe (mg/L)	1	0.020	0.020	0.02
9	HCO ₃ (mg/L)	1	191	191	191
10	K (mg/L)	1	6.2	6.2	6.2
11	Mg (mg/L)	1	28.7	28.7	28.7
12	Na (mg/L)	1	38.2	38.2	38.2
13	NH ₃ -N (mg N/L)	1	0.10	0.10	0.1
14	NO ₂ +NO ₃ (mg N/L)	1	9.29	9.29	9.29
15	NO ₂ -N (mgN/L)	1	0.01	0.01	0.01
16	NO ₃ -N (mgN/L)	1	9.28	9.28	9.28
17	o-PO ₄ -P (mg P/L)	1	0.390	0.390	0.39
18	SiO ₂ (mg/L)	1	5.7	5.7	5.7
19	SO ₄ (mg/L)	1	29.7	29.7	29.7
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)	1	9.6	9.6	9.6
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	1	79	79	79
2	HAR_Total (mgCaCO ₃ /L)	1	199	199	199
3	Na% (%)	1	29	29	29
4	RSC (-)	1	0.0	0.0	0
5	SAR (-)	1	1.2	1.2	1.2
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)		0.016	0.046	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		1460	1060		
3	pH_GEN (pH units)		7.9	7.9		
4	TDS (mg/L)					
5	Temp (deg C)		29.0	28.0		
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0		
2	ALK-TOT (mgCaCO ₃ /L)		427	342		
3	B (mg/L)		0.36	0.32		
4	Ca (mg/L)		52	46		
5	Cl (mg/L)		153.8	91.3		
6	CO ₃ (mg/L)		0.0	0.0		
7	F (mg/L)		1.60	1.13		
8	Fe (mg/L)		0.070	0.070		
9	HCO ₃ (mg/L)		521	418		
10	K (mg/L)		5.3	4.1		
11	Mg (mg/L)		70.5	52.5		
12	Na (mg/L)		153.2	115.2		
13	NH ₃ -N (mg N/L)			0.08		
14	NO ₂ +NO ₃ (mg N/L)		16.17	8.25		
15	NO ₂ -N (mgN/L)		0.37	0.45		
16	NO ₃ -N (mgN/L)		15.80	7.80		
17	o-PO ₄ -P (mg P/L)					
18	P-Tot (mgP/L)		0.069	0.024		
19	SiO ₂ (mg/L)		36.2	48.3		
20	SO ₄ (mg/L)		85.8	85.7		
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Pb ($\mu\text{g}/\text{L}$)					
6	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		130	116		
2	HAR_Total (mgCaCO ₃ /L)		424	335		
3	Na% (%)		44	43		
4	RSC (-)		0.1	0.2		
5	SAR (-)		3.3	2.8		
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	0.008	0.085	0.000	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1275	1186			
3	pH_GEN (pH units)	7.8	7.7			
4	TDS (mg/L)					
5	Temp (deg C)	26.3	26.8			
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			
2	ALK-TOT (mgCaCO ₃ /L)	400	401			
3	B (mg/L)	0.11				
4	Ca (mg/L)	64	43			
5	Cl (mg/L)	165.2	148.0			
6	CO ₃ (mg/L)	0.0	0.0			
7	F (mg/L)	1.18	1.59			
8	Fe (mg/L)	0.009				
9	HCO ₃ (mg/L)	488	490			
10	K (mg/L)	2.8	5.0			
11	Mg (mg/L)	81.2	71.4			
12	Na (mg/L)	117.5	141.0			
13	NH ₃ -N (mg N/L)	0.24				
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	19.55	6.69			
17	o-PO ₄ -P (mg P/L)	0.725				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	49.0				
20	SO ₄ (mg/L)	107.5	105.7			
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Pb ($\mu\text{g}/\text{L}$)					
6	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	160	107			
2	HAR_Total (mgCaCO ₃ /L)	499	405			
3	Na% (%)	35	43			
4	RSC (-)	0.0	0.1			
5	SAR (-)	2.3	3.1			
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.000	2.486	0.028	0.048	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		698	1460	1440	
3	pH_GEN (pH units)		8.2	8.0	8.5	
4	TDS (mg/L)					
5	Temp (deg C)		25.0	27.0	28.0	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0	40.0	
2	ALK-TOT (mgCaCO ₃ /L)		242	444	466	
3	B (mg/L)		0.30	0.41	0.31	
4	Ca (mg/L)		38	51	51	
5	Cl (mg/L)		48.8	113.7	110.2	
6	CO ₃ (mg/L)		0.0	0.0	48.2	
7	F (mg/L)		0.73	3.79	1.26	
8	Fe (mg/L)		0.080	0.056	0.070	
9	HCO ₃ (mg/L)		295	541	471	
10	K (mg/L)		3.9	4.8	3.5	
11	Mg (mg/L)		37.4	67.1	66.1	
12	Na (mg/L)		55.7	150.0	160.5	
13	NH ₃ -N (mg N/L)		0.06		0.06	
14	NO ₂ +NO ₃ (mg N/L)		5.43	15.16	14.03	
15	NO ₂ -N (mgN/L)		0.02	0.01	0.03	
16	NO ₃ -N (mgN/L)		5.40	15.15	14.00	
17	o-PO ₄ -P (mg P/L)					
18	P-Tot (mgP/L)		0.023	0.035	0.032	
19	SiO ₂ (mg/L)		27.0	57.8	29.4	
20	SO ₄ (mg/L)		28.2	123.1	111.4	
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Pb ($\mu\text{g}/\text{L}$)					
6	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		94	128	128	
2	HAR_Total (mgCaCO ₃ /L)		250	408	404	
3	Na% (%)		32	44	46	
4	RSC (-)		0.2	0.8	1.3	
5	SAR (-)		1.5	3.2	3.5	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	0.000	0.501	0.100	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		1202	1074		
3	pH_GEN (pH units)		8.1	7.8		
4	TDS (mg/L)					
5	Temp (deg C)		25.3	25.0		
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0		
2	ALK-TOT (mgCaCO ₃ /L)		428	378		
3	B (mg/L)		0.28			
4	Ca (mg/L)		60	40		
5	Cl (mg/L)		147.9	129.1		
6	CO ₃ (mg/L)		0.0	0.0		
7	F (mg/L)		1.16	1.25		
8	Fe (mg/L)		0.000	0.070		
9	HCO ₃ (mg/L)		522	461		
10	K (mg/L)		3.6	4.0		
11	Mg (mg/L)		70.2	63.4		
12	Na (mg/L)		122.7	125.9		
13	NH ₃ -N (mg N/L)		0.04			
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)		14.38	4.22		
17	o-PO ₄ -P (mg P/L)		0.545			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)		51.5			
20	SO ₄ (mg/L)		98.5	91.7		
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.86		
2	Cd ($\mu\text{g}/\text{L}$)			0.15		
3	Cr ($\mu\text{g}/\text{L}$)			4.78		
4	Cu ($\mu\text{g}/\text{L}$)			27.31		
5	Pb ($\mu\text{g}/\text{L}$)			4.25		
6	Zn ($\mu\text{g}/\text{L}$)			12.10		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		149	101		
2	HAR_Total (mgCaCO ₃ /L)		442	366		
3	Na% (%)		38	43		
4	RSC (-)		0.5	0.4		
5	SAR (-)		2.5	2.9		
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	0.000	0.939	0.000	0.000	0.204
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		508			1243
3	pH_GEN (pH units)		8.1			8.0
4	TDS (mg/L)		296			
5	Temp (deg C)		24.0			25.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)		157			409
3	B (mg/L)		0.01			0.29
4	Ca (mg/L)		32			49
5	Cl (mg/L)		50.0			103.0
6	CO ₃ (mg/L)		0.0			0.0
7	F (mg/L)		0.59			1.18
8	Fe (mg/L)		0.020			0.077
9	HCO ₃ (mg/L)		191			499
10	K (mg/L)		6.2			4.8
11	Mg (mg/L)		28.7			58.8
12	Na (mg/L)		38.2			133.3
13	NH ₃ -N (mg N/L)		0.10			0.05
14	NO ₂ +NO ₃ (mg N/L)		9.29			8.45
15	NO ₂ -N (mgN/L)		0.01			0.03
16	NO ₃ -N (mgN/L)		9.28			8.42
17	o-PO ₄ -P (mg P/L)		0.390			
18	P-Tot (mgP/L)					0.133
19	SiO ₂ (mg/L)		5.7			40.0
20	SO ₄ (mg/L)		29.7			103.0
BIOLOGICAL/BACTERIOLOGICAL						
1	COD (mg/L)		9.6			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					14.33
2	Cd ($\mu\text{g}/\text{L}$)					0.84
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					3.33
5	Pb ($\mu\text{g}/\text{L}$)					
6	Zn ($\mu\text{g}/\text{L}$)					11.00
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		79			122
2	HAR_Total (mgCaCO ₃ /L)		199			367
3	Na% (%)		29			44
4	RSC (-)		0.0			0.9
5	SAR (-)		1.2			3.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.162	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)			1089	980
3	pH_GEN (pH units)			8.0	8.1
4	TDS (mg/L)				
5	Temp (deg C)			25.0	
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)			0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)			397	337
3	B (mg/L)			0.00	
4	Ca (mg/L)			50	27
5	Cl (mg/L)			129.0	132.2
6	CO ₃ (mg/L)			0.0	0.0
7	F (mg/L)			1.12	0.44
8	Fe (mg/L)			0.000	
9	HCO ₃ (mg/L)			485	412
10	K (mg/L)			3.6	3.5
11	Mg (mg/L)			65.8	64.2
12	Na (mg/L)			111.5	119.0
13	NH ₃ -N (mg N/L)			0.00	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)			10.62	2.87
17	o-PO ₄ -P (mg P/L)			0.000	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)			41.0	
20	SO ₄ (mg/L)			81.4	95.6
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.08	
2	Cd ($\mu\text{g}/\text{L}$)			0.01	
3	Cr ($\mu\text{g}/\text{L}$)			5.84	
4	Cu ($\mu\text{g}/\text{L}$)			4.18	
5	Pb ($\mu\text{g}/\text{L}$)			0.34	
6	Zn ($\mu\text{g}/\text{L}$)			66.04	
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)			124	68
2	HAR_Total (mgCaCO ₃ /L)			398	336
3	Na% (%)			38	43
4	RSC (-)			0.2	0.1
5	SAR (-)			2.4	2.8
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THOPPUR (CCJ00I2)

Local River : Thoppaiyar

Division : SR Division, Coimbatore

Sub-Division : Lower Cauvery SD, Trichi

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.000	0.000
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_GEN (pH units)				
4	TDS (mg/L)				
5	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	B (mg/L)				
4	Ca (mg/L)				
5	Cl (mg/L)				
6	CO ₃ (mg/L)				
7	F (mg/L)				
8	Fe (mg/L)				
9	HCO ₃ (mg/L)				
10	K (mg/L)				
11	Mg (mg/L)				
12	Na (mg/L)				
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)				
17	o-PO ₄ -P (mg P/L)				
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)				
20	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	COD (mg/L)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Pb ($\mu\text{g}/\text{L}$)				
6	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: KUDLUR	Code	: CCK00L9
State	: Karnataka	District	Chamarajanagara
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Palar	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Palar
Division	: SR Division, Coimbatore	Sub-Division	: Middle Cauvery SD, Coimbatore
Drainage Area	: 709 Sq. Km.	Bank	: Right
Latitude	: 11°50'26"	Longitude	: 77°27'46"
Zero of Gauge (m)	: 433.000 (m.s.l)	09/01/1998	
	Opening Date	Closing Date	
Gauge	: 09/01/1998		
Discharge	: 06/03/1999		
Sediment	: 01/03/2013		
Water Quality	: 02/02/2001		

Water Quality Datasheet for the period : 2015-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_FLD ($\mu\text{mho}/\text{cm}$)			
4	EC_GEN ($\mu\text{mho}/\text{cm}$)			
5	Odour_Code (-)			
6	pH_FLD (pH units)			
7	pH_GEN (pH units)			
8	TDS (mg/L)			
9	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
2	COD (mg/L)			
3	DO (mg/L)			
4	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/09/2015	01/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_FLD ($\mu\text{mho}/\text{cm}$)			
4	EC_GEN ($\mu\text{mho}/\text{cm}$)			
5	Odour_Code (-)			
6	pH_FLD (pH units)			
7	pH_GEN (pH units)			
8	TDS (mg/L)			
9	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
2	COD (mg/L)			
3	DO (mg/L)			
4	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	2.052	0.000	0.000
2	Colour_Cod (-)	Brown		
3	EC_FLD ($\mu\text{mho}/\text{cm}$)	590		
4	EC_GEN ($\mu\text{mho}/\text{cm}$)	590		
5	Odour_Code (-)	odour free		
6	pH_FLD (pH units)	7.8		
7	pH_GEN (pH units)	8.5		
8	TDS (mg/L)	339		
9	Temp (deg C)	23.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	22.9		
2	ALK-TOT (mgCaCO ₃ /L)	226		
3	B (mg/L)	0.04		
4	Ca (mg/L)	21		
5	Cl (mg/L)	34.6		
6	CO ₃ (mg/L)	27.6		
7	F (mg/L)	0.97		
8	Fe (mg/L)	0.020		
9	HCO ₃ (mg/L)	219		
10	K (mg/L)	5.4		
11	Mg (mg/L)	34.5		
12	Na (mg/L)	60.0		
13	NH ₃ -N (mg N/L)	0.09		
14	NO ₂ +NO ₃ (mg N/L)	10.10		
15	NO ₂ -N (mgN/L)	0.00		
16	NO ₃ -N (mgN/L)	10.10		
17	o-PO ₄ -P (mg P/L)	0.200		
18	SiO ₂ (mg/L)	5.6		
19	SO ₄ (mg/L)	25.7		
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.9		
2	COD (mg/L)	18.1		
3	DO (mg/L)	7.7		
4	DO_SAT% (%)	89		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	51		
2	HAR_Total (mgCaCO ₃ /L)	195		
3	Na% (%)	39		
4	RSC (-)	0.7		
5	SAR (-)	1.9		
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_FLD ($\mu\text{mho}/\text{cm}$)			
4	EC_GEN ($\mu\text{mho}/\text{cm}$)			
5	Odour_Code (-)			
6	pH_FLD (pH units)			
7	pH_GEN (pH units)			
8	TDS (mg/L)			
9	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)			
15	NO ₂ -N (mgN/L)			
16	NO ₃ -N (mgN/L)			
17	o-PO ₄ -P (mg P/L)			
18	SiO ₂ (mg/L)			
19	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
2	COD (mg/L)			
3	DO (mg/L)			
4	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	21.29	0.000	0.368
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	1	590	590	590
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	1	590	590	590
4	pH_FLD (pH units)	1	7.8	7.8	7.8
5	pH_GEN (pH units)	1	8.5	8.5	8.5
6	TDS (mg/L)	1	339	339	339
7	Temp (deg C)	1	23.0	23.0	23
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	1	22.9	22.9	22.9
2	ALK-TOT (mgCaCO ₃ /L)	1	226	226	226
3	B (mg/L)	1	0.04	0.04	0.04
4	Ca (mg/L)	1	21	21	21
5	Cl (mg/L)	1	34.6	34.6	34.6
6	CO ₃ (mg/L)	1	27.6	27.6	27.6
7	F (mg/L)	1	0.97	0.97	0.97
8	Fe (mg/L)	1	0.020	0.020	0.02
9	HCO ₃ (mg/L)	1	219	219	219
10	K (mg/L)	1	5.4	5.4	5.4
11	Mg (mg/L)	1	34.5	34.5	34.5
12	Na (mg/L)	1	60.0	60.0	60
13	NH ₃ -N (mg N/L)	1	0.09	0.09	0.09
14	NO ₂ +NO ₃ (mg N/L)	1	10.10	10.10	10.1
15	NO ₂ -N (mgN/L)	1	0.00	0.00	0
16	NO ₃ -N (mgN/L)	1	10.10	10.10	10.1
17	o-PO ₄ -P (mg P/L)	1	0.200	0.200	0.2
18	SiO ₂ (mg/L)	1	5.6	5.6	5.6
19	SO ₄ (mg/L)	1	25.7	25.7	25.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1	1.9	1.9	1.9
2	COD (mg/L)	1	18.1	18.1	18.1
3	DO (mg/L)	1	7.7	7.7	7.7
4	DO_SAT% (%)	1	89	89	89
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	1	51	51	51
2	HAR_Total (mgCaCO ₃ /L)	1	195	195	195
3	Na% (%)	1	39	39	39
4	RSC (-)	1	0.7	0.7	0.7
5	SAR (-)	1	1.9	1.9	1.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	0.000	0.132	0.140	4.140	0.699
2	EC_FLD ($\mu\text{mho}/\text{cm}$)		972			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	913	1036	786	705	653
4	pH_FLD (pH units)		8.3			
5	pH_GEN (pH units)	8.5	8.3	8.4	8.4	8.1
6	TDS (mg/L)					
7	Temp (deg C)		21.8	25.0	21.4	
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	27.2	27.8	27.3	0.0
2	ALK-TOT (mgCaCO ₃ /L)	350	414	333	314	312
3	B (mg/L)	0.23	0.37	0.32	0.26	0.30
4	Ca (mg/L)	48	28	34	34	38
5	Cl (mg/L)	56.3	45.5	33.2	30.3	34.4
6	CO ₃ (mg/L)	0.0	32.8	33.5	32.9	0.0
7	F (mg/L)	1.30	0.89	0.78	1.11	0.85
8	Fe (mg/L)	0.081	0.083	0.080	0.074	0.238
9	HCO ₃ (mg/L)	427	439	338	316	380
10	K (mg/L)	6.4	6.1	6.2	5.3	5.9
11	Mg (mg/L)	39.9	60.8	38.9	33.1	38.1
12	Na (mg/L)	91.6	103.0	84.1	70.8	59.7
13	NH ₃ -N (mg N/L)		0.17	0.06	0.10	0.11
14	NO ₂ +NO ₃ (mg N/L)	2.16	6.12	7.33	3.23	
15	NO ₂ -N (mgN/L)	0.04	0.01	0.03	0.01	
16	NO ₃ -N (mgN/L)	2.12	6.11	7.30	3.23	2.38
17	o-PO ₄ -P (mg P/L)				0.011	0.067
18	P-Tot (mgP/L)	0.026	0.027	0.028		
19	SiO ₂ (mg/L)	48.0	31.4	36.1	35.7	41.2
20	SO ₄ (mg/L)	26.8	29.8	20.4	22.0	31.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)			0.4	1.0	1.4
2	COD (mg/L)					
3	DO (mg/L)					
4	DO_SAT% (%)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	120	70	84	84	95
2	HAR_Total (mgCaCO ₃ /L)	286	323	246	222	254
3	Na% (%)	41	41	42	40	33
4	RSC (-)	1.3	1.9	1.8	1.9	1.2
5	SAR (-)	2.4	2.5	2.3	2.0	1.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	1.679	0.419	0.000	0.000	1.832
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					226
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	385	792			226
4	pH_FLD (pH units)					7.8
5	pH_GEN (pH units)	8.0	8.4			7.6
6	TDS (mg/L)					121
7	Temp (deg C)	26.5	26.6			25.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	57.6			0.0
2	ALK-TOT (mgCaCO ₃ /L)	217	336			92
3	B (mg/L)	0.33				
4	Ca (mg/L)	28	29			17
5	Cl (mg/L)	37.0	71.8			15.9
6	CO ₃ (mg/L)	0.0	69.4			0.0
7	F (mg/L)	0.71	1.49			0.48
8	Fe (mg/L)	0.061				
9	HCO ₃ (mg/L)	265	268			112
10	K (mg/L)	5.7	5.5			5.5
11	Mg (mg/L)	24.5	43.4			11.3
12	Na (mg/L)	44.7	105.5			14.7
13	NH ₃ -N (mg N/L)	0.06				0.13
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	5.44	2.95			1.03
17	o-PO ₄ -P (mg P/L)	0.274				
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	33.4				
20	SO ₄ (mg/L)	19.5	40.6			11.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.6	1.1			1.6
2	COD (mg/L)					22.6
3	DO (mg/L)					6.3
4	DO_SAT% (%)					77
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	69	71			43
2	HAR_Total (mgCaCO ₃ /L)	171	252			90
3	Na% (%)	32	47			25
4	RSC (-)	1.0	1.7			0.0
5	SAR (-)	1.4	2.9			0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KUDLUR (CCK00L9)

Division : SR Division, Coimbatore

Local River : Palar

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	0.000	22.750	2.789	1.004	1.169
2	EC_FLD ($\mu\text{mho}/\text{cm}$)		493	808		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		792	838	789	674
4	pH_FLD (pH units)		8.2	8.4		
5	pH_GEN (pH units)		8.4	8.4	8.6	8.3
6	TDS (mg/L)					
7	Temp (deg C)		21.0	18.3	21.7	21.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		25.7	38.8	32.2	15.7
2	ALK-TOT (mgCaCO ₃ /L)		310	368	357	314
3	B (mg/L)		0.31	0.31	0.31	0.24
4	Ca (mg/L)		40	36	36	31
5	Cl (mg/L)		32.3	37.4	31.2	35.2
6	CO ₃ (mg/L)		31.0	46.8	38.8	19.0
7	F (mg/L)		0.85	0.57	1.02	1.24
8	Fe (mg/L)		0.083	0.082	0.070	0.066
9	HCO ₃ (mg/L)		315	354	357	345
10	K (mg/L)		4.6	5.3	4.8	4.1
11	Mg (mg/L)		38.2	46.2	42.3	40.1
12	Na (mg/L)		73.2	83.9	76.1	70.4
13	NH ₃ -N (mg N/L)			0.06	0.05	
14	NO ₂ +NO ₃ (mg N/L)		6.36	6.76	5.10	
15	NO ₂ -N (mgN/L)		0.02	0.03	0.03	
16	NO ₃ -N (mgN/L)		6.34	6.73	5.07	2.29
17	o-PO ₄ -P (mg P/L)					0.010
18	P-Tot (mgP/L)		0.034	0.013	0.021	
19	SiO ₂ (mg/L)		28.3	41.0	36.5	5.8
20	SO ₄ (mg/L)		30.5	24.3	19.7	32.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)				0.8	0.9
2	COD (mg/L)					
3	DO (mg/L)					
4	DO_SAT% (%)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)		99	90	91	77
2	HAR_Total (mgCaCO ₃ /L)		259	283	267	244
3	Na% (%)		37	39	38	38
4	RSC (-)		1.1	1.8	1.8	1.5
5	SAR (-)		1.9	2.2	2.0	2.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KUDLUR (CCK00L9)

Division : SR Division, Coimbatore

Local River : Palar

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	0.404	6.533	1.331	0.350	0.000
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	810	619	581	535	
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	8.3	8.4	8.4	8.5	
6	TDS (mg/L)					
7	Temp (deg C)		23.0	26.3		
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	12.0	30.9	32.7	27.7	
2	ALK-TOT (mgCaCO ₃ /L)	400	337	250	231	
3	B (mg/L)	0.76	0.19			
4	Ca (mg/L)	43	35	30	40	
5	Cl (mg/L)	39.2	51.2	51.2	34.4	
6	CO ₃ (mg/L)	14.4	37.2	39.4	33.4	
7	F (mg/L)	1.34	1.06	0.95	0.17	
8	Fe (mg/L)	0.207	0.000	0.070		
9	HCO ₃ (mg/L)	459	336	224	214	
10	K (mg/L)	5.4	6.3	4.6	5.3	
11	Mg (mg/L)	41.4	44.5	27.2	24.3	
12	Na (mg/L)	86.2	72.6	72.7	42.7	
13	NH ₃ -N (mg N/L)	0.05	0.00			
14	NO ₂ +NO ₃ (mg N/L)					
15	NO ₂ -N (mgN/L)					
16	NO ₃ -N (mgN/L)	4.21	6.05	1.38	0.71	
17	o-PO ₄ -P (mg P/L)	0.010	0.259			
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	53.8	43.2			
20	SO ₄ (mg/L)	53.4	28.1	23.0	21.1	
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.5	1.3	1.0	1.6	
2	COD (mg/L)				15.7	
3	DO (mg/L)					
4	DO_SAT% (%)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.84		
2	Cd ($\mu\text{g}/\text{L}$)			0.19		
3	Cr ($\mu\text{g}/\text{L}$)			5.84		
4	Cu ($\mu\text{g}/\text{L}$)			17.81		
5	Ni ($\mu\text{g}/\text{L}$)			0.33		
6	Pb ($\mu\text{g}/\text{L}$)			8.72		
7	Zn ($\mu\text{g}/\text{L}$)			16.00		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	107	87	75	100	
2	HAR_Total (mgCaCO ₃ /L)	279	272	189	201	
3	Na% (%)	40	34	45	31	
4	RSC (-)	2.5	1.3	1.3	0.6	
5	SAR (-)	2.3	1.8	2.3	1.3	
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KUDLUR (CCK00L9)

Division : SR Division, Coimbatore

Local River : Palar

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	1.392	0.513	0.331	0.086	1.487
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	712	590	1065		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	712	590	1065		490
4	pH_FLD (pH units)	8.6	7.8	8.3		
5	pH_GEN (pH units)	8.6	8.5	8.3		8.3
6	TDS (mg/L)	401	339			
7	Temp (deg C)	23.3	23.0			24.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	29.4	22.9	13.7		17.3
2	ALK-TOT (mgCaCO ₃ /L)	290	226	459		226
3	B (mg/L)	0.00	0.04	0.42		0.27
4	Ca (mg/L)	25	21	28		24
5	Cl (mg/L)	42.6	34.6	55.5		17.8
6	CO ₃ (mg/L)	35.4	27.6	16.5		20.9
7	F (mg/L)	0.79	0.97	1.13		0.86
8	Fe (mg/L)	0.011	0.020	0.095		0.070
9	HCO ₃ (mg/L)	282	219	526		233
10	K (mg/L)	5.4	5.4	5.9		4.6
11	Mg (mg/L)	43.3	34.5	63.2		24.3
12	Na (mg/L)	75.4	60.0	108.7		47.2
13	NH ₃ -N (mg N/L)	0.17	0.09			0.04
14	NO ₂ +NO ₃ (mg N/L)	6.55	10.10	6.88		2.00
15	NO ₂ -N (mgN/L)	0.00	0.00	0.00		0.01
16	NO ₃ -N (mgN/L)	6.93	10.10	6.88		1.99
17	o-PO ₄ -P (mg P/L)	0.000	0.200			
18	P-Tot (mgP/L)			0.032		0.032
19	SiO ₂ (mg/L)	28.8	5.6	30.3		30.1
20	SO ₄ (mg/L)	39.7	25.7	29.1		11.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.2	1.9			2.5
2	COD (mg/L)	11.2	18.1			
3	DO (mg/L)	7.3	7.7			
4	DO_SAT% (%)	86	89			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			33.00		
2	Cd ($\mu\text{g}/\text{L}$)	0.05		15.00		
3	Cr ($\mu\text{g}/\text{L}$)	3.10		2.09		
4	Cu ($\mu\text{g}/\text{L}$)	1.62		1.82		
5	Ni ($\mu\text{g}/\text{L}$)	0.07		8.87		
6	Pb ($\mu\text{g}/\text{L}$)	4.89				
7	Zn ($\mu\text{g}/\text{L}$)	0.00		15.00		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	61	51	70		60
2	HAR_Total (mgCaCO ₃ /L)	242	195	333		161
3	Na% (%)	39	39	41		38
4	RSC (-)	1.0	0.7	2.6		1.3
5	SAR (-)	2.1	1.9	2.6		1.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	0.000	0.184	2.366	0.000
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		586	860	
4	pH_FLD (pH units)				
5	pH_GEN (pH units)		8.0	8.7	
6	TDS (mg/L)				
7	Temp (deg C)			24.7	
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)		0.0	42.5	
2	ALK-TOT (mgCaCO ₃ /L)		180	432	
3	B (mg/L)		0.06	0.02	
4	Ca (mg/L)		34	37	
5	Cl (mg/L)		48.4	68.6	
6	CO ₃ (mg/L)		0.0	51.2	
7	F (mg/L)		1.00	1.09	
8	Fe (mg/L)		0.396	0.000	
9	HCO ₃ (mg/L)		220	423	
10	K (mg/L)		6.4	5.3	
11	Mg (mg/L)		23.3	53.5	
12	Na (mg/L)		63.4	108.2	
13	NH ₃ -N (mg N/L)		0.00	0.00	
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)		3.23	3.47	
17	o-PO ₄ -P (mg P/L)		0.000	0.000	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)		66.6	44.8	
20	SO ₄ (mg/L)		50.2	37.1	
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)		1.2	2.5	
2	COD (mg/L)				
3	DO (mg/L)				
4	DO_SAT% (%)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			0.94	
2	Cd ($\mu\text{g}/\text{L}$)			0.02	
3	Cr ($\mu\text{g}/\text{L}$)			5.00	
4	Cu ($\mu\text{g}/\text{L}$)			6.38	
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)			0.07	
7	Zn ($\mu\text{g}/\text{L}$)			42.97	
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)		84	92	
2	HAR_Total (mgCaCO ₃ /L)		181	315	
3	Na% (%)		42	42	
4	RSC (-)		0.0	2.4	
5	SAR (-)		2.1	2.6	
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : KUDLUR (CCK00L9)

Local River : Palar

Division : SR Division, Coimbatore

Sub-Division : Middle Cauvery SD, Coimbatore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.000	0.000	0.000	0.000
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)				
4	pH_FLD (pH units)				
5	pH_GEN (pH units)				
6	TDS (mg/L)				
7	Temp (deg C)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)				
2	ALK-TOT (mgCaCO ₃ /L)				
3	B (mg/L)				
4	Ca (mg/L)				
5	Cl (mg/L)				
6	CO ₃ (mg/L)				
7	F (mg/L)				
8	Fe (mg/L)				
9	HCO ₃ (mg/L)				
10	K (mg/L)				
11	Mg (mg/L)				
12	Na (mg/L)				
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)				
15	NO ₂ -N (mgN/L)				
16	NO ₃ -N (mgN/L)				
17	o-PO ₄ -P (mg P/L)				
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)				
20	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				
2	COD (mg/L)				
3	DO (mg/L)				
4	DO_SAT% (%)				
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: HOGENAKKAL	Code	: CCS00A9
State	: Tamil Nadu	District	Dharmapuri
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Chinnar	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Chinnar
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 1636 Sq. Km.	Bank	: Left
Latitude	: 12° 07' 16"	Longitude	: 77° 46' 55"
Zero of Gauge (m)	: 252.000 (m.s.l)	05/10/1996	
	Opening Date	Closing Date	
Gauge	: 05/10/1996		
Discharge	: 05/10/1996		
Sediment	:		
Water Quality	: 01/11/2004		

Note: Water samples were not collected during the Water Year 2015-2016.

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Hogenakkal (CCS00A9)

Local River : Chinnar

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
	PHYSICAL					
1	Q (cumec)	No flow	No flow	No flow	No flow	No flow
2	EC_GEN ($\mu\text{mho}/\text{cm}$)					
3	pH_GEN (pH units)					
4	Temp (deg C)					
	CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)					
2	B (mg/L)					
3	Ca (mg/L)					
4	Cl (mg/L)					
5	F (mg/L)					
6	Fe (mg/L)					
7	HCO ₃ (mg/L)					
8	K (mg/L)					
9	Mg (mg/L)					
10	Na (mg/L)					
11	NO ₂ +NO ₃ (mg N/L)					
12	NO ₂ -N (mgN/L)					
13	NO ₃ -N (mgN/L)					
14	o-PO ₄ -P (mg P/L)					
15	SiO ₂ (mg/L)					
16	SO ₄ (mg/L)					
	BIOLOGICAL/BACTERIOLOGICAL					
	TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
	CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)					
2	HAR_Total (mgCaCO ₃ /L)					
3	Na% (%)					
4	SAR (-)					
	PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Hogenakkal (CCS00A9)

Local River : Chinnar

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
	PHYSICAL					
1	Q (cumec)	No flow	No flow	No flow	No flow	No flow
2	EC_GEN ($\mu\text{mho}/\text{cm}$)					
3	pH_GEN (pH units)					
4	Temp (deg C)					
	CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)					
2	B (mg/L)					
3	Ca (mg/L)					
4	Cl (mg/L)					
5	F (mg/L)					
6	Fe (mg/L)					
7	HCO ₃ (mg/L)					
8	K (mg/L)					
9	Mg (mg/L)					
10	Na (mg/L)					
11	NO ₂ +NO ₃ (mg N/L)					
12	NO ₂ -N (mgN/L)					
13	NO ₃ -N (mgN/L)					
14	o-PO ₄ -P (mg P/L)					
15	SiO ₂ (mg/L)					
16	SO ₄ (mg/L)					
	BIOLOGICAL/BACTERIOLOGICAL					
	TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
	CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)					
2	HAR_Total (mgCaCO ₃ /L)					
3	Na% (%)					
4	SAR (-)					
	PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Hogenakkal (CCS00A9)

Local River : Chinnar

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)			111.9		
2	EC_GEN ($\mu\text{mho}/\text{cm}$)			344		
3	pH_GEN (pH units)			8.1		
4	Temp (deg C)			27.5		
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)			89		
2	B (mg/L)			0.15		
3	Ca (mg/L)			20		
4	Cl (mg/L)			43.5		
5	F (mg/L)			0.27		
6	Fe (mg/L)			0.1		
7	HCO ₃ (mg/L)			109		
8	K (mg/L)			4.9		
9	Mg (mg/L)			11.0		
10	Na (mg/L)			36.5		
11	NO ₂ +NO ₃ (mg N/L)			0.23		
12	NO ₂ -N (mgN/L)			0.00		
13	NO ₃ -N (mgN/L)			0.23		
14	o-PO ₄ -P (mg P/L)			0.125		
15	SiO ₂ (mg/L)			11.1		
16	SO ₄ (mg/L)			11.9		
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)	No flow				
2	Cd ($\mu\text{g}/\text{L}$)	No flow				
3	Cr ($\mu\text{g}/\text{L}$)	No flow				
4	Cu ($\mu\text{g}/\text{L}$)	No flow				
5	Ni ($\mu\text{g}/\text{L}$)	No flow				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)			49		
2	HAR_Total (mgCaCO ₃ /L)			95		
3	Na% (%)			44		
4	SAR (-)			1.6		
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Hogenakkal (CCS00A9)

Local River : Chinnar

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
	PHYSICAL					
1	Q (cumec)	No flow				
2	EC_GEN ($\mu\text{mho}/\text{cm}$)					
3	pH_GEN (pH units)					
4	Temp (deg C)					
	CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)					
2	B (mg/L)					
3	Ca (mg/L)					
4	Cl (mg/L)					
5	F (mg/L)					
6	Fe (mg/L)					
7	HCO ₃ (mg/L)					
8	K (mg/L)					
9	Mg (mg/L)					
10	Na (mg/L)					
11	NO ₂ +NO ₃ (mg N/L)					
12	NO ₂ -N (mgN/L)					
13	NO ₃ -N (mgN/L)					
14	o-PO ₄ -P (mg P/L)					
15	SiO ₂ (mg/L)					
16	SO ₄ (mg/L)					
	BIOLOGICAL/BACTERIOLOGICAL					
	TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
	CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)					
2	HAR_Total (mgCaCO ₃ /L)					
3	Na% (%)					
4	SAR (-)					
	PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Hogenakkal (CCS00A9)

Local River : Chinnar

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)			0.458		
2	EC_GEN ($\mu\text{mho}/\text{cm}$)			460		
3	pH_GEN (pH units)			8.0		
4	Temp (deg C)			29.0		
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)			101		
2	B (mg/L)			0.06		
3	Ca (mg/L)			25		
4	Cl (mg/L)			57.8		
5	F (mg/L)			0.23		
6	Fe (mg/L)			5.1		
7	HCO ₃ (mg/L)			124		
8	K (mg/L)			2.7		
9	Mg (mg/L)			17.2		
10	Na (mg/L)			48.9		
11	NO ₂ +NO ₃ (mg N/L)			8.32		
12	NO ₂ -N (mgN/L)			4.10		
13	NO ₃ -N (mgN/L)			4.22		
14	o-PO ₄ -P (mg P/L)			2.621		
15	SiO ₂ (mg/L)			4.5		
16	SO ₄ (mg/L)			10.5		
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			24.1		
2	Cd ($\mu\text{g}/\text{L}$)			0.0		
3	Cr ($\mu\text{g}/\text{L}$)			5.4		
4	Cu ($\mu\text{g}/\text{L}$)			3.2		
5	Ni ($\mu\text{g}/\text{L}$)			11.1		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)			63		
2	HAR_Total (mgCaCO ₃ /L)			135		
3	Na% (%)			43		
4	SAR (-)			1.8		
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Hogenakkal (CCS00A9)

Local River : Chinnar

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
	PHYSICAL				
1	Q (cumec)				
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_GEN (pH units)				
4	Temp (deg C)				
	CHEMICAL				
1	ALK-TOT (mgCaCO ₃ /L)				
2	B (mg/L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	F (mg/L)				
6	Fe (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NO ₂ +NO ₃ (mg N/L)				
12	NO ₂ -N (mgN/L)				
13	NO ₃ -N (mgN/L)				
14	o-PO ₄ -P (mg P/L)				
15	SiO ₂ (mg/L)				
16	SO ₄ (mg/L)				
	BIOLOGICAL/BACTERIOLOGICAL				
	TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	SAR (-)				
	PESTICIDES				

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Hogenakkal (CCS00A9)

Local River : Chinnar

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
	PHYSICAL				
1	Q (cumec)				
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_GEN (pH units)				
4	Temp (deg C)				
	CHEMICAL				
1	ALK-TOT (mgCaCO ₃ /L)				
2	B (mg/L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	F (mg/L)				
6	Fe (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NO ₂ +NO ₃ (mg N/L)				
12	NO ₂ -N (mgN/L)				
13	NO ₃ -N (mgN/L)				
14	o-PO ₄ -P (mg P/L)				
15	SiO ₂ (mg/L)				
16	SO ₄ (mg/L)				
	BIOLOGICAL/BACTERIOLOGICAL				
	TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	SAR (-)				
	PESTICIDES				

HISTORY SHEET

Water Year : 2015-2016

Site	: BILIGUNDULU	Code	: CC000N7
State	: Tamil Nadu	District	Dharmapuri
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Cauvery
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 36682 Sq. Km.	Bank	: Left
Latitude	: 12° 10' 56"	Longitude	: 77° 43' 26"
Zero of Gauge (m)	: 255.000 (m.s.l)	01/07/1971	
	Opening Date	Closing Date	
Gauge	: 01/07/1971		
Discharge	: 30/08/1971		
Sediment	: 01/06/1972		
Water Quality	: 01/06/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	135.8	572.8	286.1
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	439	179	167
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	8.1	7.9	7.7
6	TDS (mg/L)			
7	Temp (deg C)	29.0	27.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	165	54	62
3	B (mg/L)	0.09	0.09	1.17
4	Ca (mg/L)	30	16	14
5	Cl (mg/L)	41.2	22.0	15.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.30	0.13	0.40
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	201	66	75
10	K (mg/L)	4.0	2.2	1.5
11	Mg (mg/L)	18.5	7.8	6.8
12	Na (mg/L)	31.9	7.3	7.4
13	NO ₂ +NO ₃ (mg N/L)	0.92	0.42	0.50
14	NO ₂ -N (mgN/L)	0.00	0.01	0.01
15	NO ₃ -N (mgN/L)	0.92	0.41	0.49
16	o-PO ₄ -P (mg P/L)	0.155	0.072	0.124
17	SiO ₂ (mg/L)	20.8	10.2	13.8
18	SO ₄ (mg/L)	12.0	3.4	4.7
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			1.0
2	DO (mg/L)	6.3	5.7	6.9
3	DO_SAT% (%)	82	71	88
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	76	40	36
2	HAR_Total (mgCaCO ₃ /L)	153	72	64
3	Na% (%)	31	18	20
4	RSC (-)	0.3	0.0	0.0
5	SAR (-)	1.1	0.4	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	228.3	207.1	149.0
2	Colour_Cod (-)	Clear	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	310	370	440
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.8	7.9	8.2
6	TDS (mg/L)			
7	Temp (deg C)	28.0	28.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	95	137	181
3	B (mg/L)	1.86	0.32	0.31
4	Ca (mg/L)	24	27	40
5	Cl (mg/L)	27.3	29.1	33.4
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.48	0.30	0.40
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	116	167	221
10	K (mg/L)	2.3	2.1	1.6
11	Mg (mg/L)	9.7	14.6	14.6
12	Na (mg/L)	23.4	25.6	31.4
13	NO ₂ +NO ₃ (mg N/L)	1.19	1.37	1.06
14	NO ₂ -N (mgN/L)	0.10	0.01	0.00
15	NO ₃ -N (mgN/L)	1.09	1.36	1.06
16	o-PO ₄ -P (mg P/L)	0.227	0.568	0.238
17	SiO ₂ (mg/L)	30.8	17.9	21.4
18	SO ₄ (mg/L)	11.1	8.9	6.9
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.3	0.8	1.0
2	DO (mg/L)	6.5	6.4	6.6
3	DO_SAT% (%)	83	82	85
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	60	68	100
2	HAR_Total (mgCaCO ₃ /L)	101	129	161
3	Na% (%)	33	30	30
4	RSC (-)	0.0	0.2	0.4
5	SAR (-)	1.0	1.0	1.1
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	202.8	50.74	15.97
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	574	566	589
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	8.3	8.4	8.4
6	TDS (mg/L)		271	281
7	Temp (deg C)	28.0	28.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	15.4	0.0
2	ALK-TOT (mgCaCO ₃ /L)	235	231	232
3	B (mg/L)	0.30	0.22	0.35
4	Ca (mg/L)	48	43	29
5	Cl (mg/L)	43.0	39.4	53.6
6	CO ₃ (mg/L)	0.0	18.6	0.0
7	F (mg/L)	0.44	0.53	0.59
8	Fe (mg/L)	0.2	0.1	0.1
9	HCO ₃ (mg/L)	287	244	284
10	K (mg/L)	2.2	2.6	3.8
11	Mg (mg/L)	21.4	22.4	26.2
12	Na (mg/L)	43.3	46.5	54.9
13	NO ₂ +NO ₃ (mg N/L)	1.64	1.06	0.77
14	NO ₂ -N (mgN/L)	0.01	0.00	0.01
15	NO ₃ -N (mgN/L)	1.63	1.06	0.76
16	o-PO ₄ -P (mg P/L)	0.279	0.289	0.155
17	SiO ₂ (mg/L)	26.9	22.7	21.0
18	SO ₄ (mg/L)	9.6	14.5	9.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.2	2.6	2.6
2	DO (mg/L)	7.1	7.1	8.5
3	DO_SAT% (%)	91	91	109
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			0.5
2	Cd ($\mu\text{g}/\text{L}$)			0.0
3	Cr ($\mu\text{g}/\text{L}$)			0.0
4	Cu ($\mu\text{g}/\text{L}$)			0.1
5	Ni ($\mu\text{g}/\text{L}$)			0.3
6	Pb ($\mu\text{g}/\text{L}$)			2.6
7	Zn ($\mu\text{g}/\text{L}$)			0.4
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	120	108	72
2	HAR_Total (mgCaCO ₃ /L)	209	201	181
3	Na% (%)	31	33	39
4	RSC (-)	0.5	0.6	1.1
5	SAR (-)	1.3	1.4	1.8
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	36.42	14.22	17.98
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	647	517	539
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	8.3	8.1	8.0
6	TDS (mg/L)	309	245	256
7	Temp (deg C)	28.0	28.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	11.5	23.7	0.0
2	ALK-TOT (mgCaCO ₃ /L)	228	176	171
3	B (mg/L)	0.36	0.16	0.22
4	Ca (mg/L)	42	34	30
5	Cl (mg/L)	63.9	56.4	67.8
6	CO ₃ (mg/L)	13.8	28.5	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.1	0.1	0.0
9	HCO ₃ (mg/L)	250	157	208
10	K (mg/L)	3.6	3.5	3.7
11	Mg (mg/L)	20.4	18.5	22.4
12	Na (mg/L)	58.0	47.3	51.6
13	NO ₂ +NO ₃ (mg N/L)	1.18	1.64	1.26
14	NO ₂ -N (mgN/L)	0.03	0.01	0.01
15	NO ₃ -N (mgN/L)	1.15	1.63	1.25
16	o-PO ₄ -P (mg P/L)	0.072	0.041	0.000
17	SiO ₂ (mg/L)	28.2	16.4	25.2
18	SO ₄ (mg/L)	20.2	10.9	11.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.8	1.7	1.8
2	DO (mg/L)	6.2	6.4	6.4
3	DO_SAT% (%)	79	81	81
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			5.8
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			0.6
4	Cu ($\mu\text{g}/\text{L}$)			0.6
5	Ni ($\mu\text{g}/\text{L}$)			5.6
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			4.6
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	104	84	76
2	HAR_Total (mgCaCO ₃ /L)	189	161	169
3	Na% (%)	40	39	39
4	RSC (-)	0.8	0.3	0.1
5	SAR (-)	1.8	1.6	1.7
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHICAL					
1	Q (cumec)	366	1061	5.469	137.9
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	647	167	445
3	pH_GEN (pH units)	12	8.4	7.7	8.1
4	TDS (mg/L)	5	309	245	272
5	Temp (deg C)	12	29.0	27.0	28
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	23.7	0.0	4.2
2	ALK-TOT (mgCaCO ₃ /L)	12	235	54	164
3	B (mg/L)	12	1.86	0.09	0.45
4	Ca (mg/L)	12	48	14	31
5	Cl (mg/L)	12	67.8	15.3	41
6	CO ₃ (mg/L)	12	28.5	0.0	5.1
7	F (mg/L)	9	0.59	0.13	0.40
8	Fe (mg/L)	12	0.2	0.0	0.1
9	HCO ₃ (mg/L)	12	287	66	190
10	K (mg/L)	12	4.0	1.5	2.8
11	Mg (mg/L)	12	26.2	6.8	16.9
12	Na (mg/L)	12	58.0	7.3	35.7
13	NO ₂ +NO ₃ (mg N/L)	12	1.64	0.42	1.09
14	NO ₂ -N (mgN/L)	12	0.10	0.00	0.02
15	NO ₃ -N (mgN/L)	12	1.63	0.41	1.07
16	o-PO ₄ -P (mg P/L)	12	0.568	0.000	0.185
17	SiO ₂ (mg/L)	12	30.8	10.2	21.3
18	SO ₄ (mg/L)	12	20.2	3.4	10.2
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	10	2.6	0.8	1.5
2	DO (mg/L)	12	8.5	5.7	6.7
3	DO_SAT% (%)	12	109	71	85
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	2	5.8	0.5	3.2
2	Cd ($\mu\text{g}/\text{L}$)	1	0.0	0.0	0
3	Cr ($\mu\text{g}/\text{L}$)	2	0.6	0.0	0.3
4	Cu ($\mu\text{g}/\text{L}$)	2	0.6	0.1	0.3
5	Ni ($\mu\text{g}/\text{L}$)	2	5.6	0.3	3
6	Pb ($\mu\text{g}/\text{L}$)	1	2.6	2.6	2.6
7	Zn ($\mu\text{g}/\text{L}$)	2	4.6	0.4	2.5
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	120	36	79
2	HAR_Total (mgCaCO ₃ /L)	12	209	64	149
3	Na% (%)	12	40	18	32
4	RSC (-)	12	1.1	0.0	0.4
5	SAR (-)	12	1.8	0.4	1.2
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	414.6	367.4	482.9	385	238
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	366	282	350	354	383
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	8.1	7.3	8.1	8.2	8.3
6	TDS (mg/L)					
7	Temp (deg C)	26.3	28.2	26.9	26.5	25.7
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	5.8
2	ALK-TOT (mgCaCO ₃ /L)	101	101	77	119	135
3	B (mg/L)	0.12	0.00	0.00	0.31	0.05
4	Ca (mg/L)	19	23	18	24	28
5	Cl (mg/L)	42.4	25.6	57.2	33.1	32.8
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	7.0
7	F (mg/L)	0.78	0.72	0.24	0.32	0.33
8	Fe (mg/L)	0.0	0.1	0.2	0.1	0.1
9	HCO ₃ (mg/L)	123	123	94	145	151
10	K (mg/L)	11.6	5.7	13.4	4.0	3.7
11	Mg (mg/L)	9.9	12.4	7.9	12.5	13.8
12	Na (mg/L)	34.7	18.2	38.9	26.7	33.9
13	NH ₃ -N (mg N/L)		0.37			
14	NO ₂ +NO ₃ (mg N/L)	0.23	1.57	1.02	1.77	1.60
15	NO ₂ -N (mgN/L)	0.07	1.36	0.01	0.14	0.04
16	NO ₃ -N (mgN/L)	0.16	0.21	1.01	1.64	1.56
17	o-PO ₄ -P (mg P/L)	0.089	0.003	0.025	0.019	0.184
18	P-Tot (mgP/L)				0.019	
19	SiO ₂ (mg/L)	12.0	14.8	15.8	16.9	16.9
20	SO ₄ (mg/L)	4.7	2.0	16.3	7.3	7.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	0.8	1.3	0.7	1.1
2	DO (mg/L)	6.9	7.4	5.5	6.0	6.8
3	DO_SAT% (%)	85	95	69	75	83
TRACE & TOXIC						
1	Ag ($\mu\text{g}/\text{L}$)					
2	As ($\mu\text{g}/\text{L}$)					
3	Cd ($\mu\text{g}/\text{L}$)					
4	Cr ($\mu\text{g}/\text{L}$)					
5	Cu ($\mu\text{g}/\text{L}$)					
6	Hg ($\mu\text{g}/\text{L}$)					
7	Mn (mg/L)					
8	Ni ($\mu\text{g}/\text{L}$)					
9	Pb ($\mu\text{g}/\text{L}$)					
10	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	49	56	46	61	70
2	HAR_Total (mgCaCO ₃ /L)	90	108	79	113	128
3	Na% (%)	43	34	48	31	32
4	RSC (-)	0.2	0.0	0.0	0.1	0.2
5	SAR (-)	1.6	1.1	2.0	1.1	1.2
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	273	364	118.2	453.5	273
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	335	338	370	274	282
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	8.1	7.9	8.2	7.7	8.0
6	TDS (mg/L)					
7	Temp (deg C)	25.7	27.7	27.4	26.3	28.6
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	7.7	0.0	5.0	0.0	2.8
2	ALK-TOT (mgCaCO ₃ /L)	160	133	145	74	98
3	B (mg/L)	0.04	0.00		0.03	0.13
4	Ca (mg/L)	27	27	28	24	23
5	Cl (mg/L)	25.0	25.6	30.0	27.4	29.0
6	CO ₃ (mg/L)	7.4	0.0	6.0	0.0	3.4
7	F (mg/L)	1.77	0.48	0.35	0.18	0.30
8	Fe (mg/L)	0.0	0.0		0.2	0.1
9	HCO ₃ (mg/L)	155	156	164	110	112
10	K (mg/L)	2.4	2.5	1.9	1.9	3.4
11	Mg (mg/L)	13.8	11.9	14.1	7.6	11.1
12	Na (mg/L)	26.4	25.4	27.9	21.7	19.0
13	NH ₃ -N (mg N/L)					
14	NO ₂ +NO ₃ (mg N/L)	1.05	1.50	1.20	1.55	1.40
15	NO ₂ -N (mgN/L)	0.02	0.01	0.02	0.03	0.06
16	NO ₃ -N (mgN/L)	0.99	1.49	1.17	1.52	1.34
17	o-PO ₄ -P (mg P/L)	0.054	0.072		0.052	0.043
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	15.8	15.3		14.3	11.4
20	SO ₄ (mg/L)	6.2	5.5	7.3	12.8	8.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		1.8	0.6	1.0	1.6
2	DO (mg/L)	6.4	6.8	6.4	6.8	6.1
3	DO_SAT% (%)	78	86	81	84	79
TRACE & TOXIC						
1	Ag ($\mu\text{g}/\text{L}$)			3.0		
2	As ($\mu\text{g}/\text{L}$)			2.9	3.0	
3	Cd ($\mu\text{g}/\text{L}$)				0.1	
4	Cr ($\mu\text{g}/\text{L}$)				0.9	
5	Cu ($\mu\text{g}/\text{L}$)			9.3	0.5	
6	Hg ($\mu\text{g}/\text{L}$)					
7	Mn (mg/L)					
8	Ni ($\mu\text{g}/\text{L}$)			2.1	7.6	
9	Pb ($\mu\text{g}/\text{L}$)				7.2	
10	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	66	66	71	60	58
2	HAR_Total (mgCaCO ₃ /L)	124	116	130	92	105
3	Na% (%)	31	32	32	29	28
4	RSC (-)	0.3	0.3	0.3	0.1	0.1
5	SAR (-)	1.0	1.0	1.1	0.9	0.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	286	427.3	203.7	151.6	182.6
2	EC_FLD ($\mu\text{mho}/\text{cm}$)			399		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	293	357	240	451	438
4	pH_FLD (pH units)			8.2		
5	pH_GEN (pH units)	7.9	8.2	8.2	8.0	8.3
6	TDS (mg/L)					
7	Temp (deg C)	28.0	25.8	25.5	25.4	23.7
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	3.9
2	ALK-TOT (mgCaCO ₃ /L)	102	102	57	127	197
3	B (mg/L)	0.71	0.16	0.00	0.00	0.15
4	Ca (mg/L)	22	15	11	27	34
5	Cl (mg/L)	27.0	40.5	35.8	64.7	25.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	4.7
7	F (mg/L)	1.03	0.54	0.80	0.02	0.36
8	Fe (mg/L)	0.1	0.1	0.1	0.3	0.1
9	HCO ₃ (mg/L)	125	124	70	155	231
10	K (mg/L)	2.4	14.1	10.4	6.3	2.0
11	Mg (mg/L)	11.5	12.2	7.5	15.7	17.5
12	Na (mg/L)	19.1	33.8	24.0	44.4	32.4
13	NH ₃ -N (mg N/L)			0.00		
14	NO ₂ +NO ₃ (mg N/L)	0.88	0.11	0.69	0.42	0.58
15	NO ₂ -N (mgN/L)	0.03	0.00	0.00	0.00	0.01
16	NO ₃ -N (mgN/L)	0.85	0.11	0.69	0.42	0.57
17	o-PO ₄ -P (mg P/L)	0.229	0.121	0.000	0.028	0.049
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	18.7	12.8	16.7	12.1	20.3
20	SO ₄ (mg/L)	8.0	10.1	4.6	0.2	7.4
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.0	1.2	1.0	1.0	1.7
2	DO (mg/L)	6.3	6.9	8.3	6.2	7.1
3	DO_SAT% (%)	81	84	101	75	83
TRACE & TOXIC						
1	Ag ($\mu\text{g}/\text{L}$)					
2	As ($\mu\text{g}/\text{L}$)					
3	Cd ($\mu\text{g}/\text{L}$)					
4	Cr ($\mu\text{g}/\text{L}$)					
5	Cu ($\mu\text{g}/\text{L}$)					
6	Hg ($\mu\text{g}/\text{L}$)					
7	Mn (mg/L)					
8	Ni ($\mu\text{g}/\text{L}$)					
9	Pb ($\mu\text{g}/\text{L}$)					
10	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	56	38	28	68	86
2	HAR_Total (mgCaCO ₃ /L)	104	88	59	133	159
3	Na% (%)	26	41	43	41	31
4	RSC (-)	0.1	0.3	0.0	0.1	0.8
5	SAR (-)	0.8	1.6	1.4	1.7	1.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	117.8	198	177.3	151	104.4
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	406	465	428	473	459
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	8.3	8.4	7.9	8.3	8.3
6	TDS (mg/L)					
7	Temp (deg C)	23.5	24.9	26.5	24.9	25.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	13.5	18.2	0.0	4.0	3.2
2	ALK-TOT (mgCaCO ₃ /L)	177	188	184	195	194
3	B (mg/L)	0.08	0.07	0.04		0.04
4	Ca (mg/L)	33	34	34	40	32
5	Cl (mg/L)	24.8	26.3	27.5	29.0	28.0
6	CO ₃ (mg/L)	16.3	21.9	0.0	4.8	3.8
7	F (mg/L)	2.21	0.38		0.48	0.44
8	Fe (mg/L)	0.1	0.0	0.3		0.0
9	HCO ₃ (mg/L)	183	185	225	228	229
10	K (mg/L)	1.8	2.0	2.1	2.3	6.3
11	Mg (mg/L)	16.3	18.2	18.0	16.0	14.3
12	Na (mg/L)	32.1	33.2	30.5	35.3	44.5
13	NH ₃ -N (mg N/L)		0.00			
14	NO ₂ +NO ₃ (mg N/L)	0.55	0.93	1.24	1.40	1.51
15	NO ₂ -N (mgN/L)	0.01	0.04	0.01	0.01	0.01
16	NO ₃ -N (mgN/L)	0.54	0.89	1.24	1.39	1.50
17	o-PO ₄ -P (mg P/L)	0.028	0.036	0.052		0.101
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	20.3	19.1	17.3		21.6
20	SO ₄ (mg/L)	6.3	7.2	6.7	7.4	8.3
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.7	1.0	0.6	0.8	1.0
2	DO (mg/L)	7.1	7.3	7.1	7.0	6.7
3	DO_SAT% (%)	83	87	88	84	82
TRACE & TOXIC						
1	Ag ($\mu\text{g}/\text{L}$)					
2	As ($\mu\text{g}/\text{L}$)			0.5	0.0	
3	Cd ($\mu\text{g}/\text{L}$)			0.3	0.0	
4	Cr ($\mu\text{g}/\text{L}$)			2.8	0.4	
5	Cu ($\mu\text{g}/\text{L}$)			30.4	0.1	
6	Hg ($\mu\text{g}/\text{L}$)					
7	Mn (mg/L)					
8	Ni ($\mu\text{g}/\text{L}$)			1.9	7.8	
9	Pb ($\mu\text{g}/\text{L}$)			0.4		
10	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	83	85	85	101	79
2	HAR_Total (mgCaCO ₃ /L)	151	161	160	168	139
3	Na% (%)	31	31	29	31	39
4	RSC (-)	0.5	0.6	0.5	0.6	1.1
5	SAR (-)	1.1	1.1	1.1	1.2	1.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	100.5	104.6	47.96	52.67	94.31
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	475	542	343	278	425
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	8.3	8.3	7.9	8.0	8.2
6	TDS (mg/L)		276			
7	Temp (deg C)	27.5	28.0	26.8	27.5	26.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	3.4	3.9	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	200	220	104	84	123
3	B (mg/L)	0.24	0.30	0.03	0.00	0.00
4	Ca (mg/L)	43	40	15	16	29
5	Cl (mg/L)	28.8	42.3	42.1	37.4	58.7
6	CO ₃ (mg/L)	4.1	4.7	0.0	0.0	0.0
7	F (mg/L)	0.43	0.49	0.35	0.63	0.05
8	Fe (mg/L)	0.1	0.1	0.0	0.0	0.1
9	HCO ₃ (mg/L)	236	259	127	102	151
10	K (mg/L)	5.5	2.5	7.2	15.7	1.5
11	Mg (mg/L)	16.5	21.1	13.9	8.4	16.2
12	Na (mg/L)	30.8	44.0	35.2	26.3	38.2
13	NH ₃ -N (mg N/L)				0.00	
14	NO ₂ +NO ₃ (mg N/L)	1.38	1.13	0.31	0.21	0.12
15	NO ₂ -N (mgN/L)	0.01	0.01	0.00	0.00	0.00
16	NO ₃ -N (mgN/L)	1.37	1.13	0.31	0.21	0.12
17	o-PO ₄ -P (mg P/L)	0.018	0.240	0.003	0.004	0.062
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	13.2	23.0	9.2	20.4	20.0
20	SO ₄ (mg/L)	11.1	10.0	2.7	5.8	1.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.0	1.8	1.1	1.5	1.6
2	DO (mg/L)	7.0	7.3	7.4	6.5	6.8
3	DO_SAT% (%)	88	94	92	83	85
TRACE & TOXIC						
1	Ag ($\mu\text{g}/\text{L}$)					
2	As ($\mu\text{g}/\text{L}$)		0.5	17.7	8.4	12.9
3	Cd ($\mu\text{g}/\text{L}$)	0.1	0.0	0.0	4.0	1.0
4	Cr ($\mu\text{g}/\text{L}$)	2.6	0.0	4.8	2.4	
5	Cu ($\mu\text{g}/\text{L}$)	7.5	0.1	4.0	4.2	4.0
6	Hg ($\mu\text{g}/\text{L}$)					
7	Mn (mg/L)					
8	Ni ($\mu\text{g}/\text{L}$)	3.6	0.3	6.4		
9	Pb ($\mu\text{g}/\text{L}$)	6.2	2.6		7.7	1.5
10	Zn ($\mu\text{g}/\text{L}$)	16.8	0.4		275.0	64.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	107	100	37	41	72
2	HAR_Total (mgCaCO ₃ /L)	176	188	95	75	139
3	Na% (%)	26	33	42	39	36
4	RSC (-)	0.5	0.7	0.2	0.2	0.0
5	SAR (-)	1.0	1.4	1.6	1.4	1.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	44.45	71.35	68.96	66.63
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	480	438	533	438
4	pH_FLD (pH units)				
5	pH_GEN (pH units)	8.4	8.3	8.3	8.1
6	TDS (mg/L)				
7	Temp (deg C)	26.3	26.8	27.8	27.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12.9	6.5	11.5	0.0
2	ALK-TOT (mgCaCO ₃ /L)	192	181	195	180
3	B (mg/L)	0.10	0.12	0.10	
4	Ca (mg/L)	32	32	35	32
5	Cl (mg/L)	34.4	30.2	37.2	32.9
6	CO ₃ (mg/L)	15.5	7.8	13.8	0.0
7	F (mg/L)	0.35	0.43	0.63	0.41
8	Fe (mg/L)	0.1	0.1	0.0	
9	HCO ₃ (mg/L)	202	205	210	220
10	K (mg/L)	3.1	2.4	4.2	2.4
11	Mg (mg/L)	19.8	18.8	19.8	18.0
12	Na (mg/L)	43.9	35.9	41.7	31.0
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)	0.58	0.48	1.35	1.37
15	NO ₂ -N (mgN/L)	0.00	0.00	0.12	0.01
16	NO ₃ -N (mgN/L)	0.57	0.48	1.08	1.35
17	o-PO ₄ -P (mg P/L)	0.052	0.021	0.114	
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	20.6	19.6	20.5	
20	SO ₄ (mg/L)	5.8	7.2	10.3	7.3
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.4	1.5		0.4
2	DO (mg/L)	6.2	6.4	6.2	5.7
3	DO_SAT% (%)	76	80	79	72
TRACE & TOXIC					
1	Ag ($\mu\text{g}/\text{L}$)				
2	As ($\mu\text{g}/\text{L}$)			1.5	0.9
3	Cd ($\mu\text{g}/\text{L}$)			0.0	0.2
4	Cr ($\mu\text{g}/\text{L}$)			1.7	4.2
5	Cu ($\mu\text{g}/\text{L}$)	4.7		3.5	7.1
6	Hg ($\mu\text{g}/\text{L}$)				
7	Mn (mg/L)				
8	Ni ($\mu\text{g}/\text{L}$)	1.1			5.1
9	Pb ($\mu\text{g}/\text{L}$)			0.5	4.2
10	Zn ($\mu\text{g}/\text{L}$)				57.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	80	80	87	79
2	HAR_Total (mgCaCO ₃ /L)	162	158	169	154
3	Na% (%)	36	33	34	30
4	RSC (-)	0.6	0.5	0.5	0.5
5	SAR (-)	1.5	1.2	1.4	1.1
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Biligundulu (CC000N7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	21.81	33.12	46.91	22.87
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	435	455	513	568
4	pH_FLD (pH units)				
5	pH_GEN (pH units)	8.2	8.2	8.3	8.1
6	TDS (mg/L)				270
7	Temp (deg C)	26.0	28.3	27.7	28.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	4.1	0.0	10.0	11.7
2	ALK-TOT (mgCaCO ₃ /L)	164	185	195	192
3	B (mg/L)	0.00	0.09	0.35	0.25
4	Ca (mg/L)	28	37	38	35
5	Cl (mg/L)	38.0	32.8	48.0	62.7
6	CO ₃ (mg/L)	4.9	0.0	12.1	14.1
7	F (mg/L)		0.55	0.49	
8	Fe (mg/L)	0.0	0.0	0.1	0.1
9	HCO ₃ (mg/L)	190	225	213	205
10	K (mg/L)	2.9	2.6	4.6	3.6
11	Mg (mg/L)	17.2	16.2	19.8	20.4
12	Na (mg/L)	34.6	35.6	40.0	52.3
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)	1.18	1.31	0.62	1.36
15	NO ₂ -N (mgN/L)	0.00	0.03	0.01	0.02
16	NO ₃ -N (mgN/L)	1.18	1.28	0.61	1.34
17	o-PO ₄ -P (mg P/L)	0.031	0.041	0.014	0.038
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	19.3	15.1	14.1	23.3
20	SO ₄ (mg/L)	9.0	8.6	9.9	14.1
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.1	0.8	1.8	1.4
2	DO (mg/L)	6.4	4.9	5.4	6.3
3	DO_SAT% (%)	80	63	69	81
TRACE & TOXIC					
1	Ag ($\mu\text{g}/\text{L}$)				
2	As ($\mu\text{g}/\text{L}$)	7.2	2.9		5.8
3	Cd ($\mu\text{g}/\text{L}$)	0.0	0.0		
4	Cr ($\mu\text{g}/\text{L}$)	0.4	1.0		0.6
5	Cu ($\mu\text{g}/\text{L}$)	2.3	1.6		0.6
6	Hg ($\mu\text{g}/\text{L}$)				
7	Mn (mg/L)				
8	Ni ($\mu\text{g}/\text{L}$)	3.4	10.5		5.6
9	Pb ($\mu\text{g}/\text{L}$)	4.1	1.5		
10	Zn ($\mu\text{g}/\text{L}$)	59.7	9.0		4.6
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	69	92	95	88
2	HAR_Total (mgCaCO ₃ /L)	141	159	177	173
3	Na% (%)	34	32	32	39
4	RSC (-)	0.5	0.5	0.4	0.4
5	SAR (-)	1.3	1.2	1.3	1.7
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: T. BEKUPPE	Code	: T. BEKUPPE
State	: Karnataka	District	Bangalore Rural
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Arkavathi	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Arkavathi
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 3500 Sq. Km.	Bank	: Left
Latitude	: 12° 30' 29"	Longitude	: 77°25'39"
Zero of Gauge (m)	: 604.000 (m.s.l) 600.000 (m.s.l)	11/11/2003 01/06/2005	- 31/05/2005
	Opening Date	Closing Date	
Gauge	: 11/11/2003		
Discharge	: 24/11/2003		
Sediment	: 26/03/2013		
Water Quality	: 01/12/2003		

Water Quality Datasheet for the period : 2015-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	9.273	7.538	6.705
2	Colour_Cod (-)	Light Brown	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	1242	1272	1312
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.7	8.2	7.5
6	TDS (mg/L)			
7	Temp (deg C)	26.0	24.5	25.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	316	347	332
3	B (mg/L)	0.16	0.29	2.05
4	Ca (mg/L)	67	75	64
5	Cl (mg/L)	177.9	188.5	191.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.46	0.48	0.42
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	385	423	405
10	K (mg/L)	17.1	16.5	17.7
11	Mg (mg/L)	31.1	30.1	39.9
12	Na (mg/L)	136.1	129.6	138.6
13	NO ₂ +NO ₃ (mg N/L)	6.18	11.81	15.34
14	NO ₂ -N (mgN/L)	2.66	0.30	0.12
15	NO ₃ -N (mgN/L)	3.52	11.50	15.22
16	o-PO ₄ -P (mg P/L)	1.901	3.007	5.405
17	SiO ₂ (mg/L)	27.1	27.0	37.4
18	SO ₄ (mg/L)	17.8	18.5	43.3
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			11.8
2	DO (mg/L)	2.7	4.5	3.7
3	DO_SAT% (%)	34	54	45
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	168	188	160
2	HAR_Total (mgCaCO ₃ /L)	298	314	326
3	Na% (%)	48	46	47
4	RSC (-)	0.4	0.7	0.2
5	SAR (-)	3.4	3.2	3.3
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	7.857	9.713	9.608
2	Colour_Cod (-)	Light Brown	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	1197	1165	1259
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.4	7.4	7.8
6	TDS (mg/L)			
7	Temp (deg C)	24.5	25.5	25.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	245	308	327
3	B (mg/L)	2.09	0.36	0.45
4	Ca (mg/L)	86	67	75
5	Cl (mg/L)	168.3	158.0	190.6
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.84	0.48	0.49
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	299	376	399
10	K (mg/L)	15.5	16.8	17.8
11	Mg (mg/L)	24.3	24.3	27.2
12	Na (mg/L)	139.6	132.5	138.1
13	NO ₂ +NO ₃ (mg N/L)	17.09	14.29	16.12
14	NO ₂ -N (mgN/L)	0.29	1.38	0.63
15	NO ₃ -N (mgN/L)	16.80	12.91	15.48
16	o-PO ₄ -P (mg P/L)	0.878	0.796	0.930
17	SiO ₂ (mg/L)	51.2	29.2	68.6
18	SO ₄ (mg/L)	49.3	41.3	27.4
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	6.1	9.0	10.3
2	DO (mg/L)	3.0	2.4	
3	DO_SAT% (%)	35	30	
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	215	168	188
2	HAR_Total (mgCaCO ₃ /L)	316	269	301
3	Na% (%)	48	50	48
4	RSC (-)	0.0	0.8	0.6
5	SAR (-)	3.4	3.5	3.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	River Water Analysis	
		01/01/2016	01/02/2016
		A	A
	PHYSICAL		
1	Q (cumec)	5.942	5.959
2	Colour_Cod (-)	Light Brown	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	1363	1455
4	Odour_Code (-)	odour free	odour free
5	pH_GEN (pH units)	8.0	7.6
6	TDS (mg/L)	665	710
7	Temp (deg C)	23.0	23.5
	CHEMICAL		
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	405	421
3	B (mg/L)	0.49	0.42
4	Ca (mg/L)	85	85
5	Cl (mg/L)	174.3	205.9
6	CO ₃ (mg/L)	0.0	0.0
7	F (mg/L)	0.63	0.68
8	Fe (mg/L)	0.2	0.0
9	HCO ₃ (mg/L)	494	513
10	K (mg/L)	15.1	14.6
11	Mg (mg/L)	32.1	31.1
12	Na (mg/L)	138.6	164.9
13	NO ₂ +NO ₃ (mg N/L)	10.11	12.68
14	NO ₂ -N (mgN/L)	0.12	2.17
15	NO ₃ -N (mgN/L)	9.99	10.51
16	o-PO ₄ -P (mg P/L)	0.300	5.301
17	SiO ₂ (mg/L)	34.0	55.0
18	SO ₄ (mg/L)	35.7	35.0
	BIOLOGICAL/BACTERIOLOGICAL		
1	BOD ₃₋₂₇ (mg/L)	13.9	5.9
2	DO (mg/L)	3.9	3.8
3	DO_SAT% (%)	46	44
	TRACE & TOXIC		
1	As ($\mu\text{g}/\text{L}$)		0.3
2	Cd ($\mu\text{g}/\text{L}$)		0.0
3	Cr ($\mu\text{g}/\text{L}$)		0.6
4	Cu ($\mu\text{g}/\text{L}$)		0.2
5	Ni ($\mu\text{g}/\text{L}$)		2.0
6	Pb ($\mu\text{g}/\text{L}$)		11.8
7	Zn ($\mu\text{g}/\text{L}$)		1.4
	CHEMICAL INDICES		
1	HAR_Ca (mgCaCO ₃ /L)	212	212
2	HAR_Total (mgCaCO ₃ /L)	346	342
3	Na% (%)	45	50
4	RSC (-)	1.2	1.6
5	SAR (-)	3.3	3.9
	PESTICIDES		

Water samples are not collected for the month December 2015

Water Quality Datasheet for the period : 2015-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	4.258	2.853	3.142
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	1471	1469	1401
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.4	7.4	7.1
6	TDS (mg/L)	718	716	692
7	Temp (deg C)	25.0	27.0	25.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	411	429	378
3	B (mg/L)	0.38	0.10	0.17
4	Ca (mg/L)	96	86	110
5	Cl (mg/L)	218.3	203.8	215.5
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.1	0.1	0.2
9	HCO ₃ (mg/L)	501	523	461
10	K (mg/L)	14.0	12.2	14.3
11	Mg (mg/L)	44.7	37.9	18.5
12	Na (mg/L)	144.1	167.6	169.1
13	NO ₂ +NO ₃ (mg N/L)	13.96	19.95	5.15
14	NO ₂ -N (mgN/L)	2.26	3.26	0.59
15	NO ₃ -N (mgN/L)	11.70	16.69	4.55
16	o-PO ₄ -P (mg P/L)	2.300	1.447	1.901
17	SiO ₂ (mg/L)	32.9	35.8	39.3
18	SO ₄ (mg/L)	27.9	24.1	35.9
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	10.2	5.9	7.7
2	DO (mg/L)	1.8	2.7	4.6
3	DO_SAT% (%)	22	34	55
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			7.0
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			0.7
4	Cu ($\mu\text{g}/\text{L}$)			0.8
5	Ni ($\mu\text{g}/\text{L}$)			0.6
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			8.1
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	240	216	276
2	HAR_Total (mgCaCO ₃ /L)	426	374	353
3	Na% (%)	42	48	50
4	RSC (-)	0.0	1.1	0.5
5	SAR (-)	3.0	3.8	3.9
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water Summary

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHICAL					
1	Q (cumec)	366	30.36	2.559	8.945
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	11	1471	1165	1328
3	pH_GEN (pH units)	11	8.2	7.1	7.6
4	TDS (mg/L)	5	718	665	700
5	Temp (deg C)	11	27.0	23.0	25
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	11	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	11	429	245	356
3	B (mg/L)	11	2.09	0.10	0.63
4	Ca (mg/L)	11	110	64	82
5	Cl (mg/L)	11	218.3	158.0	190.2
6	CO ₃ (mg/L)	11	0.0	0.0	0
7	F (mg/L)	8	0.84	0.42	0.56
8	Fe (mg/L)	11	0.2	0.0	0.1
9	HCO ₃ (mg/L)	11	523	299	435
10	K (mg/L)	11	17.8	12.2	15.6
11	Mg (mg/L)	11	44.7	18.5	31
12	Na (mg/L)	11	169.1	129.6	145.3
13	NO ₂ +NO ₃ (mg N/L)	11	19.95	5.15	12.97
14	NO ₂ -N (mgN/L)	11	3.26	0.12	1.25
15	NO ₃ -N (mgN/L)	11	16.80	3.52	11.72
16	o-PO ₄ -P (mg P/L)	11	5.405	0.300	2.197
17	SiO ₂ (mg/L)	11	68.6	27.0	39.8
18	SO ₄ (mg/L)	11	49.3	17.8	32.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	9	13.9	5.9	9
2	DO (mg/L)	10	4.6	1.8	3.3
3	DO_SAT% (%)	10	55	22	40
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	2	7.0	0.9	4
2	Cd ($\mu\text{g}/\text{L}$)	1	0.0	0.0	0
3	Cr ($\mu\text{g}/\text{L}$)	2	0.7	0.6	0.7
4	Cu ($\mu\text{g}/\text{L}$)	2	0.8	0.2	0.5
5	Ni ($\mu\text{g}/\text{L}$)	2	2.0	0.6	1.3
6	Pb ($\mu\text{g}/\text{L}$)	1	11.8	11.8	11.8
7	Zn ($\mu\text{g}/\text{L}$)	2	8.1	1.4	4.8
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	11	276	160	204
2	HAR_Total (mgCaCO ₃ /L)	11	426	269	333
3	Na% (%)	11	50	42	47
4	RSC (-)	11	1.6	0.0	0.6
5	SAR (-)	11	3.9	3.0	3.5
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)				9.048	8.066
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				882	877
3	pH_GEN (pH units)				7.7	7.6
4	TDS (mg/L)					
5	Temp (deg C)				25.5	26.9
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)				0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)				243	242
3	B (mg/L)				0.37	0.18
4	Ca (mg/L)				53	55
5	Cl (mg/L)				114.9	103.0
6	CO ₃ (mg/L)				0.0	0.0
7	F (mg/L)				0.51	0.52
8	Fe (mg/L)				0.1	0.1
9	HCO ₃ (mg/L)				297	295
10	K (mg/L)				13.1	11.7
11	Mg (mg/L)				22.7	21.2
12	Na (mg/L)				87.4	87.8
13	NO ₂ +NO ₃ (mg N/L)				8.23	7.66
14	NO ₂ -N (mgN/L)				0.31	0.34
15	NO ₃ -N (mgN/L)				7.92	7.32
16	o-PO ₄ -P (mg P/L)				1.054	1.174
17	SiO ₂ (mg/L)				33.8	25.4
18	SO ₄ (mg/L)				19.9	19.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)				2.3	2.8
2	DO (mg/L)				4.3	4.8
3	DO_SAT% (%)				53	61
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)				134	138
2	HAR_Total (mgCaCO ₃ /L)				228	226
3	Na% (%)				44	44
4	RSC (-)				0.3	0.4
5	SAR (-)				2.5	2.5
PESTICIDES						

Water Quality observation suspended because of Rationalization of H.O. net work.

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	6.785	11.38	4.109	25.2	6.67
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1102	1043	1326	1211	1302
3	pH_GEN (pH units)	7.7	7.4	7.5	7.4	7.7
4	TDS (mg/L)					
5	Temp (deg C)	26.4	25.7	25.6	25.2	25.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	2.8
2	ALK-TOT (mgCaCO ₃ /L)	313	307	351	333	352
3	B (mg/L)	0.18	0.13		0.03	0.32
4	Ca (mg/L)	66	61	77	72	71
5	Cl (mg/L)	136.4	127.4	187.6	164.3	182.0
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	3.4
7	F (mg/L)	0.38	0.79	0.54	0.47	0.43
8	Fe (mg/L)	0.0	0.0		0.1	0.1
9	HCO ₃ (mg/L)	382	374	428	406	422
10	K (mg/L)	13.4	14.5	17.5	14.2	25.3
11	Mg (mg/L)	27.0	25.3	29.5	24.5	32.7
12	Na (mg/L)	111.3	108.1	152.2	145.7	138.1
13	NO ₂ +NO ₃ (mg N/L)	13.26	10.55	16.26	16.24	17.04
14	NO ₂ -N (mgN/L)	0.58	0.73	2.38	1.18	0.54
15	NO ₃ -N (mgN/L)	12.68	9.83	13.88	15.05	16.51
16	o-PO ₄ -P (mg P/L)	1.806	1.690		1.263	0.798
17	SiO ₂ (mg/L)	30.6	28.9		30.9	20.4
18	SO ₄ (mg/L)	21.5	24.9	37.1	24.1	31.3
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		11.3	6.6	9.2	12.6
2	DO (mg/L)	2.9	2.7	2.3	2.9	2.4
3	DO_SAT% (%)	36	33	28	36	29
TRACE & TOXIC						
1	As (µg/L)			1.6	3.0	
2	Cd (µg/L)				3.0	
3	Cr (µg/L)			11.9	3.2	
4	Cu (µg/L)			13.1	1.0	
5	Ni (µg/L)			8.8	15.7	
6	Pb (µg/L)				0.0	
7	Zn (µg/L)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	164	154	192	181	178
2	HAR_Total (mgCaCO ₃ /L)	276	259	315	283	314
3	Na% (%)	45	46	50	51	46
4	RSC (-)	0.8	1.0	0.8	1.2	0.8
5	SAR (-)	2.9	2.9	3.7	3.8	3.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood	Winter				
		Jun - Oct	Nov - Feb				
			2015	2005-2006	20062007	2007-2008	2008-2009
PHYSICAL							
1	Q (cumec)	8.217				5.694	7.55
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1238				877	1122
3	pH_GEN (pH units)	7.6				7.8	7.6
4	TDS (mg/L)						
5	Temp (deg C)	25.1				20.8	20.4
CHEMICAL							
1	Alk-Phen (mgCaCO ₃ /L)	0.0				0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	310				274	321
3	B (mg/L)	0.99				0.01	0.22
4	Ca (mg/L)	72				52	70
5	Cl (mg/L)	176.8				93.4	134.2
6	CO ₃ (mg/L)	0.0				0.0	0.0
7	F (mg/L)	0.53				0.45	0.63
8	Fe (mg/L)	0.1				0.3	0.1
9	HCO ₃ (mg/L)	378				334	392
10	K (mg/L)	16.7				11.0	13.4
11	Mg (mg/L)	29.9				36.4	29.6
12	Na (mg/L)	135.3				71.0	119.8
13	NO ₂ +NO ₃ (mg N/L)	12.94				0.35	11.34
14	NO ₂ -N (mgN/L)	0.95				0.00	0.61
15	NO ₃ -N (mgN/L)	11.99				0.35	10.73
16	o-PO ₄ -P (mg P/L)	2.397				1.219	1.310
17	SiO ₂ (mg/L)	34.4				13.9	36.8
18	SO ₄ (mg/L)	34.1				12.8	26.8
BIOLOGICAL/BACTERIOLOGICAL							
1	BOD ₃₋₂₇ (mg/L)	9.0				1.8	1.1
2	DO (mg/L)	3.3				4.3	3.4
3	DO_SAT% (%)	39				48	37
TRACE & TOXIC							
1	As ($\mu\text{g}/\text{L}$)						
2	Cd ($\mu\text{g}/\text{L}$)						
3	Cr ($\mu\text{g}/\text{L}$)						
4	Cu ($\mu\text{g}/\text{L}$)						
5	Ni ($\mu\text{g}/\text{L}$)						
6	Pb ($\mu\text{g}/\text{L}$)						
7	Zn ($\mu\text{g}/\text{L}$)						
CHEMICAL INDICES							
1	HAR_Ca (mgCaCO ₃ /L)	180				131	175
2	HAR_Total (mgCaCO ₃ /L)	305				283	299
3	Na% (%)	48				34	45
4	RSC (-)	0.4				0.2	0.5
5	SAR (-)	3.4				1.9	3.0
PESTICIDES							

Water Quality observation suspended because of Rationalization of H.O. net work.

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	5.773	6.074	8.19	6.851	6.965
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1131	1153	1189	1364	1333
3	pH_GEN (pH units)	7.6	7.6	7.3	7.5	7.6
4	TDS (mg/L)					
5	Temp (deg C)	23.8	24.1	24.1	24.0	22.9
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	325	342	337	358	370
3	B (mg/L)	0.19	0.19	0.00		0.11
4	Ca (mg/L)	71	71	72	80	74
5	Cl (mg/L)	140.6	148.3	154.6	170.3	184.0
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.54	0.57		0.61	0.56
8	Fe (mg/L)	1.2	0.0	0.3		0.1
9	HCO ₃ (mg/L)	396	417	415	437	459
10	K (mg/L)	12.2	13.5	14.7	15.4	12.1
11	Mg (mg/L)	28.9	29.6	28.2	31.1	23.3
12	Na (mg/L)	121.9	124.1	129.3	157.3	184.6
13	NO ₂ +NO ₃ (mg N/L)	8.62	8.63	16.14	18.87	11.91
14	NO ₂ -N (mgN/L)	0.48	0.26	2.59	2.13	1.20
15	NO ₃ -N (mgN/L)	8.13	8.37	13.55	16.74	10.71
16	o-PO ₄ -P (mg P/L)	1.393	1.240	1.442		0.907
17	SiO ₂ (mg/L)	32.6	34.0	24.2		32.0
18	SO ₄ (mg/L)	26.1	37.5	31.3	44.9	26.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	5.4	10.5	10.8	8.6	9.2
2	DO (mg/L)	3.9	3.2	3.9	2.7	3.0
3	DO_SAT% (%)	46	38	46	32	35
TRACE & TOXIC						
1	As (µg/L)			0.5	7.5	
2	Cd (µg/L)			0.3	0.0	
3	Cr (µg/L)			5.6	0.2	
4	Cu (µg/L)			63.9	0.9	
5	Ni (µg/L)			5.1	1.3	
6	Pb (µg/L)			1.1		
7	Zn (µg/L)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	177	178	180	201	185
2	HAR_Total (mgCaCO ₃ /L)	297	301	297	331	282
3	Na% (%)	46	46	47	49	57
4	RSC (-)	0.6	0.9	0.9	0.6	1.9
5	SAR (-)	3.1	3.1	3.3	3.8	4.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	5.509	7.17			4.527
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1300	1359			839
3	pH_GEN (pH units)	7.9	7.8			7.7
4	TDS (mg/L)		688			
5	Temp (deg C)	24.5	24.0			26.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)	366	384			231
3	B (mg/L)	0.43	0.45			0.01
4	Ca (mg/L)	83	82			43
5	Cl (mg/L)	181.0	190.3			101.3
6	CO ₃ (mg/L)	0.0	0.0			0.0
7	F (mg/L)	0.45	0.60			0.87
8	Fe (mg/L)	0.2	0.1			0.3
9	HCO ₃ (mg/L)	447	469			281
10	K (mg/L)	43.0	15.8			5.3
11	Mg (mg/L)	29.9	30.1			35.6
12	Na (mg/L)	128.0	147.2			74.9
13	NO ₂ +NO ₃ (mg N/L)	14.19	12.97			0.12
14	NO ₂ -N (mgN/L)	0.66	0.98			0.00
15	NO ₃ -N (mgN/L)	13.53	11.99			0.12
16	o-PO ₄ -P (mg P/L)	2.106	2.177			0.544
17	SiO ₂ (mg/L)	25.9	52.5			23.0
18	SO ₄ (mg/L)	37.4	32.7			25.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	10.5	10.0			2.9
2	DO (mg/L)	3.2	3.9			4.4
3	DO_SAT% (%)	38	45			55
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		0.9			11.9
2	Cd ($\mu\text{g}/\text{L}$)	2.4	0.0			1.0
3	Cr ($\mu\text{g}/\text{L}$)	1.5	0.6			
4	Cu ($\mu\text{g}/\text{L}$)	5.5	0.2			14.8
5	Ni ($\mu\text{g}/\text{L}$)	13.4	2.0			
6	Pb ($\mu\text{g}/\text{L}$)	23.8	11.8			1.6
7	Zn ($\mu\text{g}/\text{L}$)	10.8	1.4			35.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	208	204			107
2	HAR_Total (mgCaCO ₃ /L)	333	330			255
3	Na% (%)	42	48			42
4	RSC (-)	0.8	1.1			0.0
5	SAR (-)	3.0	3.5			2.1
PESTICIDES						

Water Quality observation suspended because of Rationalization of H.O. net work.

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	5.007	5.007	5.914	4.292
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1240	1179	1330	1436
3	pH_GEN (pH units)	7.7	7.5	7.5	7.4
4	TDS (mg/L)				
5	Temp (deg C)	23.5	25.2	23.2	25.5
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	345	315	338	396
3	B (mg/L)	0.16	0.81	0.23	
4	Ca (mg/L)	75	68	74	82
5	Cl (mg/L)	166.9	152.1	162.4	204.6
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.77	0.64	0.51	0.58
8	Fe (mg/L)	0.1	0.1	0.0	
9	HCO ₃ (mg/L)	420	385	437	484
10	K (mg/L)	14.3	13.5	16.1	17.6
11	Mg (mg/L)	31.8	27.5	30.8	33.5
12	Na (mg/L)	145.0	126.7	135.1	164.2
13	NO ₂ +NO ₃ (mg N/L)	11.53	10.86	10.49	19.21
14	NO ₂ -N (mgN/L)	0.19	0.14	0.16	4.59
15	NO ₃ -N (mgN/L)	11.34	10.71	10.33	14.63
16	o-PO ₄ -P (mg P/L)	1.698	1.846	2.310	
17	SiO ₂ (mg/L)	35.9	39.3	45.0	
18	SO ₄ (mg/L)	16.5	23.2	34.8	30.1
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	3.8	8.1		12.2
2	DO (mg/L)	2.7	3.7	2.5	3.3
3	DO_SAT% (%)	31	44	29	40
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.6	0.4
2	Cd ($\mu\text{g}/\text{L}$)			0.0	0.7
3	Cr ($\mu\text{g}/\text{L}$)	2.0		4.6	24.1
4	Cu ($\mu\text{g}/\text{L}$)	12.5		3.5	14.6
5	Ni ($\mu\text{g}/\text{L}$)	9.9			1.5
6	Pb ($\mu\text{g}/\text{L}$)			0.1	5.2
7	Zn ($\mu\text{g}/\text{L}$)				46.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	188	171	184	206
2	HAR_Total (mgCaCO ₃ /L)	320	285	312	346
3	Na% (%)	48	47	47	49
4	RSC (-)	0.5	0.6	1.0	1.1
5	SAR (-)	3.5	3.3	3.3	3.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T. BEKUPPE (T. BEKUPPE)

Local River : Arkavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	2.293	3.765	6.342	3.418
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	1518	1497	1450	1447
3	pH_GEN (pH units)	7.5	7.6	7.7	7.3
4	TDS (mg/L)				709
5	Temp (deg C)	25.8	24.3	25.0	25.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	390	433	388	406
3	B (mg/L)	0.00	0.32	0.49	0.22
4	Ca (mg/L)	86	90	84	98
5	Cl (mg/L)	215.3	199.2	213.0	212.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)		0.69	0.57	
8	Fe (mg/L)	0.1	0.1	0.1	0.1
9	HCO ₃ (mg/L)	475	528	474	495
10	K (mg/L)	17.6	16.8	26.1	13.5
11	Mg (mg/L)	40.8	34.7	35.6	33.7
12	Na (mg/L)	182.3	176.8	154.9	160.2
13	NO ₂ +NO ₃ (mg N/L)	20.80	13.90	21.70	13.02
14	NO ₂ -N (mgN/L)	1.90	0.11	1.56	2.04
15	NO ₃ -N (mgN/L)	18.90	13.79	20.14	10.98
16	o-PO ₄ -P (mg P/L)	6.609	1.285	0.403	1.883
17	SiO ₂ (mg/L)	36.1	76.6	46.9	36.0
18	SO ₄ (mg/L)	38.6	22.9	31.4	29.3
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	5.9	11.3	14.2	7.9
2	DO (mg/L)	2.7	2.9	3.1	3.0
3	DO_SAT% (%)	33	35	37	37
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	2.2	0.4		7.0
2	Cd ($\mu\text{g}/\text{L}$)	0.5	0.0		
3	Cr ($\mu\text{g}/\text{L}$)	2.7	0.8		0.7
4	Cu ($\mu\text{g}/\text{L}$)	3.5	3.4		0.8
5	Ni ($\mu\text{g}/\text{L}$)	11.8	11.0		0.6
6	Pb ($\mu\text{g}/\text{L}$)	12.9	1.5		
7	Zn ($\mu\text{g}/\text{L}$)	5.3	10.0		8.1
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	214	224	209	244
2	HAR_Total (mgCaCO ₃ /L)	384	368	358	384
3	Na% (%)	50	50	46	47
4	RSC (-)	0.4	1.3	0.7	0.6
5	SAR (-)	4.1	4.0	3.6	3.6
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: T.K.HALLI	Code	: CCM00B9
State	: Karnataka	District	Mandya
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Shimsa	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Shimsa
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 7890 Sq. Km.	Bank	: Left
Latitude	: 12° 25' 00"	Longitude	: 77° 10' 33"
Zero of Gauge (m)	: 580.000 (m.s.l)	12/06/1978	
	Opening Date	Closing Date	
Gauge	: 12/06/1978		
Discharge	: 12/06/1978		
Sediment	: 01/06/1985		
Water Quality	: 02/06/1979		

Water Quality Datasheet for the period : 2015-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	42.28	0.000	0.000
2	Colour_Cod (-)	Clear		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	647		
4	Odour_Code (-)	odour free		
5	pH_GEN (pH units)	7.9		
6	TDS (mg/L)			
7	Temp (deg C)	30.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	260		
3	B (mg/L)	0.10		
4	Ca (mg/L)	48		
5	Cl (mg/L)	46.9		
6	CO ₃ (mg/L)	0.0		
7	F (mg/L)			
8	Fe (mg/L)	0.1		
9	HCO ₃ (mg/L)	317		
10	K (mg/L)	4.3		
11	Mg (mg/L)	25.3		
12	Na (mg/L)	53.0		
13	NO ₂ +NO ₃ (mg N/L)	0.56		
14	NO ₂ -N (mgN/L)	0.01		
15	NO ₃ -N (mgN/L)	0.55		
16	o-PO ₄ -P (mg P/L)	0.093		
17	SiO ₂ (mg/L)	23.5		
18	SO ₄ (mg/L)	15.4		
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
2	DO (mg/L)	4.0		
3	DO_SAT% (%)	53		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	120		
2	HAR_Total (mgCaCO ₃ /L)	225		
3	Na% (%)	33		
4	RSC (-)	0.7		
5	SAR (-)	1.5		
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	10.68	26.44	85.58
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	614	575	556
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.7	7.6	7.8
6	TDS (mg/L)			
7	Temp (deg C)	29.0	27.0	25.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	213	225	230
3	B (mg/L)	1.89	0.39	0.30
4	Ca (mg/L)	46	27	45
5	Cl (mg/L)	39.1	39.4	35.9
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	1.03	0.49	0.48
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	260	274	281
10	K (mg/L)	4.2	2.7	2.1
11	Mg (mg/L)	21.4	31.1	18.5
12	Na (mg/L)	55.8	47.6	47.8
13	NO ₂ +NO ₃ (mg N/L)	1.30	1.19	1.42
14	NO ₂ -N (mgN/L)	0.06	0.01	0.01
15	NO ₃ -N (mgN/L)	1.25	1.18	1.40
16	o-PO ₄ -P (mg P/L)	0.403	0.548	0.403
17	SiO ₂ (mg/L)	24.9	25.6	23.8
18	SO ₄ (mg/L)	43.0	12.1	14.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.0	0.6	1.4
2	DO (mg/L)	3.4	5.1	4.2
3	DO_SAT% (%)	44	64	51
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	116	68	112
2	HAR_Total (mgCaCO ₃ /L)	205	198	189
3	Na% (%)	37	34	35
4	RSC (-)	0.2	0.6	0.8
5	SAR (-)	1.7	1.5	1.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	15.25	2.768	0.000
2	Colour_Cod (-)	Clear	Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	583	630	
4	Odour_Code (-)	odour free	odour free	
5	pH_GEN (pH units)	7.7	8.2	
6	TDS (mg/L)		302	
7	Temp (deg C)	25.0	25.0	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	253	287	
3	B (mg/L)	0.20	0.25	
4	Ca (mg/L)	46	50	
5	Cl (mg/L)	34.1	29.1	
6	CO ₃ (mg/L)	0.0	0.0	
7	F (mg/L)	0.46	0.49	
8	Fe (mg/L)	0.2	0.1	
9	HCO ₃ (mg/L)	309	350	
10	K (mg/L)	2.0	3.5	
11	Mg (mg/L)	17.5	22.4	
12	Na (mg/L)	47.0	53.2	
13	NO ₂ +NO ₃ (mg N/L)	0.91	0.69	
14	NO ₂ -N (mgN/L)	0.01	0.00	
15	NO ₃ -N (mgN/L)	0.90	0.69	
16	o-PO ₄ -P (mg P/L)	0.331	0.207	
17	SiO ₂ (mg/L)	20.4	20.7	
18	SO ₄ (mg/L)	12.5	15.9	
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.0	1.2	
2	DO (mg/L)	5.7	7.7	
3	DO_SAT% (%)	69	93	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	116	124	
2	HAR_Total (mgCaCO ₃ /L)	189	217	
3	Na% (%)	35	34	
4	RSC (-)	1.3	1.4	
5	SAR (-)	1.5	1.6	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NO ₂ +NO ₃ (mg N/L)			
14	NO ₂ -N (mgN/L)			
15	NO ₃ -N (mgN/L)			
16	o-PO ₄ -P (mg P/L)			
17	SiO ₂ (mg/L)			
18	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			
2	DO (mg/L)			
3	DO_SAT% (%)			
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHICAL					
1	Q (cumec)	366	449.2	0.000	13.08
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	7	660	556	609
3	pH_GEN (pH units)	7	8.3	7.6	7.9
4	TDS (mg/L)	1	302	302	302
5	Temp (deg C)	7	30.0	25.0	27
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	7	17.9	0.0	2.6
2	ALK-TOT (mgCaCO ₃ /L)	7	287	213	248
3	B (mg/L)	7	1.89	0.10	0.47
4	Ca (mg/L)	7	50	27	43
5	Cl (mg/L)	7	49.7	29.1	39.2
6	CO ₃ (mg/L)	7	21.6	0.0	3.1
7	F (mg/L)	6	1.03	0.46	0.58
8	Fe (mg/L)	7	0.2	0.1	0.1
9	HCO ₃ (mg/L)	7	350	260	296
10	K (mg/L)	7	4.3	2.0	3
11	Mg (mg/L)	7	31.1	17.5	23.7
12	Na (mg/L)	7	65.3	47.0	52.8
13	NO ₂ +NO ₃ (mg N/L)	7	1.42	0.48	0.93
14	NO ₂ -N (mgN/L)	7	0.06	0.00	0.02
15	NO ₃ -N (mgN/L)	7	1.40	0.46	0.92
16	o-PO ₄ -P (mg P/L)	7	0.548	0.010	0.285
17	SiO ₂ (mg/L)	7	25.6	20.4	23.3
18	SO ₄ (mg/L)	7	43.0	12.1	19.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	5	1.4	0.6	1
2	DO (mg/L)	7	7.7	3.4	4.9
3	DO_SAT% (%)	7	93	44	61
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	7	124	68	106
2	HAR_Total (mgCaCO ₃ /L)	7	225	189	205
3	Na% (%)	7	40	33	36
4	RSC (-)	7	1.4	0.2	0.9
5	SAR (-)	7	2.0	1.5	1.6
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	38.31	9.691	27.93	25.76	14.28
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	294	305	360	557	580
3	pH_GEN (pH units)	7.9	7.9	8.0	8.1	8.0
4	TDS (mg/L)					
5	Temp (deg C)	25.3	23.8	24.0	25.4	26.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	67	88	111	182	221
3	B (mg/L)	0.00	0.00	0.08	0.34	0.09
4	Ca (mg/L)	21	18	26	32	32
5	Cl (mg/L)	46.0	41.2	42.2	61.9	39.3
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.33	0.92	0.04	0.34	0.43
8	Fe (mg/L)	0.2	0.3	0.0	0.1	0.1
9	HCO ₃ (mg/L)	82	107	136	222	270
10	K (mg/L)	4.9	8.6	0.5	4.5	3.3
11	Mg (mg/L)	5.4	11.2	12.1	20.0	21.6
12	Na (mg/L)	38.3	28.5	32.5	50.9	62.3
13	NO ₂ +NO ₃ (mg N/L)	2.26	0.37	0.01	0.60	0.62
14	NO ₂ -N (mgN/L)	1.13	0.00	0.00	0.02	0.02
15	NO ₃ -N (mgN/L)	1.13	0.37	0.01	0.58	0.61
16	o-PO ₄ -P (mg P/L)	0.003	0.017	0.000	0.010	0.066
17	SiO ₂ (mg/L)	12.7	6.3	11.6	20.0	17.5
18	SO ₄ (mg/L)	11.4	7.0	0.3	12.2	18.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.8	0.9	2.2	1.5	1.2
2	DO (mg/L)	5.8	7.9	6.2	4.9	5.3
3	DO_SAT% (%)	70	94	74	59	65
TRACE & TOXIC						
1	As (µg/L)					
2	Cd (µg/L)					
3	Cr (µg/L)					
4	Cu (µg/L)					
5	Ni (µg/L)					
6	Pb (µg/L)					
7	Zn (µg/L)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	52	45	65	80	80
2	HAR_Total (mgCaCO ₃ /L)	74	92	115	163	170
3	Na% (%)	53	41	38	40	43
4	RSC (-)	0.0	0.1	0.0	0.5	1.1
5	SAR (-)	2.1	1.4	1.3	1.7	2.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	44.47	37.57	7.475	13.34	28.3
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	542	567	661	625	620
3	pH_GEN (pH units)	8.0	7.6	7.8	7.6	7.7
4	TDS (mg/L)					
5	Temp (deg C)	27.2	26.3	27.8	26.8	29.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	3.1	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	228	230	264	237	217
3	B (mg/L)	0.07	0.07		0.05	0.18
4	Ca (mg/L)	38	41	41	55	51
5	Cl (mg/L)	31.1	34.4	43.1	29.8	44.5
6	CO ₃ (mg/L)	3.7	0.0	0.0	0.0	0.0
7	F (mg/L)	0.50	0.66	0.60	0.55	0.53
8	Fe (mg/L)	0.0	0.0		0.0	0.1
9	HCO ₃ (mg/L)	270	283	322	289	264
10	K (mg/L)	2.9	3.8	3.8	3.5	8.1
11	Mg (mg/L)	21.4	20.6	24.0	17.0	19.4
12	Na (mg/L)	48.7	49.8	66.3	57.5	52.2
13	NO ₂ +NO ₃ (mg N/L)	0.86	2.08	1.37	2.23	1.88
14	NO ₂ -N (mgN/L)	0.02	0.01	0.02	0.03	0.04
15	NO ₃ -N (mgN/L)	0.84	2.07	1.35	2.20	1.84
16	o-PO ₄ -P (mg P/L)	0.058	0.109		0.072	0.065
17	SiO ₂ (mg/L)	20.3	22.2		11.2	14.5
18	SO ₄ (mg/L)	10.5	14.5	12.4	35.1	31.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		0.9	1.4	1.3	1.1
2	DO (mg/L)	5.7	5.1	5.0	3.3	3.4
3	DO_SAT% (%)	71	64	64	41	44
TRACE & TOXIC						
1	As (µg/L)					
2	Cd (µg/L)					
3	Cr (µg/L)			6.5		
4	Cu (µg/L)			34.0		
5	Ni (µg/L)			2.8		
6	Pb (µg/L)					
7	Zn (µg/L)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	94	103	103	138	128
2	HAR_Total (mgCaCO ₃ /L)	184	185	203	209	209
3	Na% (%)	36	36	41	37	34
4	RSC (-)	0.9	0.9	1.2	0.6	0.2
5	SAR (-)	1.6	1.6	2.0	1.7	1.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	19.85	51.07	22.09	35.76	23.94
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	624	398	319	322	522
3	pH_GEN (pH units)	7.8	8.1	8.2	8.2	8.0
4	TDS (mg/L)					
5	Temp (deg C)	28.5	24.8	25.0	23.5	24.4
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	4.5	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	241	95	91	103	221
3	B (mg/L)	0.64	0.00	0.00	0.00	0.16
4	Ca (mg/L)	39	20	24	26	39
5	Cl (mg/L)	43.8	46.2	34.0	36.0	31.2
6	CO ₃ (mg/L)	5.4	0.0	0.0	0.0	0.0
7	F (mg/L)	0.69	0.50	0.36	0.11	0.47
8	Fe (mg/L)	0.1	0.0	0.2	0.3	0.1
9	HCO ₃ (mg/L)	283	116	112	126	269
10	K (mg/L)	3.4	6.5	7.0	1.8	2.2
11	Mg (mg/L)	27.0	11.9	11.9	10.0	19.0
12	Na (mg/L)	55.4	39.4	26.2	25.7	47.2
13	NO ₂ +NO ₃ (mg N/L)	0.88	0.18	0.28	0.01	0.60
14	NO ₂ -N (mgN/L)	0.02	0.09	0.00	0.00	0.02
15	NO ₃ -N (mgN/L)	0.86	0.09	0.28	0.01	0.57
16	o-PO ₄ -P (mg P/L)	0.264	0.280	0.000	0.043	0.054
17	SiO ₂ (mg/L)	24.5	25.4	1.8	14.6	20.1
18	SO ₄ (mg/L)	23.5	16.6	24.7	0.1	10.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.8	1.4	1.1	1.1	1.6
2	DO (mg/L)	4.1	6.5	8.6	4.9	6.1
3	DO_SAT% (%)	53	78	104	57	73
TRACE & TOXIC						
1	As (µg/L)					
2	Cd (µg/L)					
3	Cr (µg/L)					
4	Cu (µg/L)					
5	Ni (µg/L)					
6	Pb (µg/L)					
7	Zn (µg/L)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	98	49	61	65	97
2	HAR_Total (mgCaCO ₃ /L)	210	99	111	107	176
3	Na% (%)	36	45	32	34	37
4	RSC (-)	0.6	0.0	0.1	0.0	0.9
5	SAR (-)	1.7	1.7	1.1	1.1	1.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	18.41	28.37	31.45	61.31	16.84
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	505	507	510	539	567
3	pH_GEN (pH units)	8.0	8.0	7.5	7.7	7.7
4	TDS (mg/L)					
5	Temp (deg C)	24.3	24.4	21.3	23.8	26.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	220	217	223	229	241
3	B (mg/L)	0.10	0.08	0.00		0.08
4	Ca (mg/L)	38	38	40	46	40
5	Cl (mg/L)	30.1	31.0	31.0	30.8	29.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.45	0.48		0.51	0.49
8	Fe (mg/L)	0.0	0.0	0.3		0.1
9	HCO ₃ (mg/L)	268	265	268	279	294
10	K (mg/L)	2.0	2.4	3.2	3.3	6.0
11	Mg (mg/L)	19.4	19.9	17.5	17.2	15.3
12	Na (mg/L)	48.0	44.5	43.4	44.1	61.0
13	NO ₂ +NO ₃ (mg N/L)	0.59	0.85	1.43	1.44	1.66
14	NO ₂ -N (mgN/L)	0.03	0.00	0.03	0.02	0.01
15	NO ₃ -N (mgN/L)	0.56	0.84	1.40	1.42	1.65
16	o-PO ₄ -P (mg P/L)	0.028	0.052	0.083		0.098
17	SiO ₂ (mg/L)	18.8	18.7	17.1		23.6
18	SO ₄ (mg/L)	10.2	8.9	10.1	12.4	20.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	1.1	0.6	1.1	0.9
2	DO (mg/L)	6.1	5.6	5.6	5.0	4.8
3	DO_SAT% (%)	73	67	64	59	59
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.0		
2	Cd ($\mu\text{g}/\text{L}$)			0.3		
3	Cr ($\mu\text{g}/\text{L}$)			2.6		
4	Cu ($\mu\text{g}/\text{L}$)			40.9		
5	Ni ($\mu\text{g}/\text{L}$)			2.6		
6	Pb ($\mu\text{g}/\text{L}$)			0.4		
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	95	95	100	115	99
2	HAR_Total (mgCaCO ₃ /L)	176	178	175	186	163
3	Na% (%)	37	35	35	34	44
4	RSC (-)	0.9	0.8	1.0	0.9	1.6
5	SAR (-)	1.6	1.5	1.4	1.4	2.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	9.253	34.53	2.62	2.168	6.116
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	566	590	334	380	472
3	pH_GEN (pH units)	8.0	7.9	7.4	8.2	7.9
4	TDS (mg/L)		302			
5	Temp (deg C)	25.4	25.0	25.8	25.5	25.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	2.2	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	239	257	99	99	153
3	B (mg/L)	0.27	0.25	0.00	0.00	0.05
4	Ca (mg/L)	46	47	23	33	34
5	Cl (mg/L)	30.4	33.0	49.1	45.2	49.9
6	CO ₃ (mg/L)	2.7	0.0	0.0	0.0	0.0
7	F (mg/L)	0.41	0.47	0.50	0.86	0.65
8	Fe (mg/L)	0.0	0.1	0.0	0.0	0.2
9	HCO ₃ (mg/L)	287	313	121	121	187
10	K (mg/L)	6.5	2.5	7.6	6.6	1.6
11	Mg (mg/L)	22.1	19.4	11.5	10.3	18.6
12	Na (mg/L)	40.5	49.4	39.5	35.5	32.9
13	NO ₂ +NO ₃ (mg N/L)	1.77	1.00	0.19	0.00	0.46
14	NO ₂ -N (mgN/L)	0.12	0.01	0.10	0.00	0.00
15	NO ₃ -N (mgN/L)	1.64	0.99	0.09	0.00	0.46
16	o-PO ₄ -P (mg P/L)	0.065	0.313	0.091	0.000	0.072
17	SiO ₂ (mg/L)	13.4	21.6	6.9	8.3	17.6
18	SO ₄ (mg/L)	18.8	14.4	14.4	27.1	0.4
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.5	1.2	1.7	1.4	2.4
2	DO (mg/L)	5.4	5.9	6.7	5.7	3.9
3	DO_SAT% (%)	66	71	81	69	47
TRACE & TOXIC						
1	As (µg/L)			20.2		4.5
2	Cd (µg/L)	0.1		0.0		1.2
3	Cr (µg/L)	4.7		3.5		
4	Cu (µg/L)	4.0		4.1		
5	Ni (µg/L)	5.3		8.9		
6	Pb (µg/L)	3.5				3.1
7	Zn (µg/L)	8.3				35.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	116	117	58	82	84
2	HAR_Total (mgCaCO ₃ /L)	208	198	106	125	161
3	Na% (%)	29	35	43	37	29
4	RSC (-)	0.7	1.2	0.0	0.0	0.0
5	SAR (-)	1.2	1.5	1.7	1.4	1.2
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	1.274	13.97	10.31	6.75
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	709	567	634	668
3	pH_GEN (pH units)	8.0	7.9	7.9	7.5
4	TDS (mg/L)				
5	Temp (deg C)	25.8	27.7	26.7	23.5
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	279	231	225	271
3	B (mg/L)	0.13	0.10	0.12	
4	Ca (mg/L)	33	34	39	42
5	Cl (mg/L)	47.1	34.0	37.6	42.1
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.63	0.60	0.67	0.57
8	Fe (mg/L)	0.1	0.1	0.0	
9	HCO ₃ (mg/L)	340	281	284	330
10	K (mg/L)	4.8	3.7	5.4	5.2
11	Mg (mg/L)	27.5	23.7	21.7	24.8
12	Na (mg/L)	85.4	58.1	56.2	62.0
13	NO ₂ +NO ₃ (mg N/L)	0.73	0.70	1.34	1.67
14	NO ₂ -N (mgN/L)	0.00	0.02	0.01	0.01
15	NO ₃ -N (mgN/L)	0.72	0.68	1.32	1.67
16	o-PO ₄ -P (mg P/L)	0.014	0.059	0.103	
17	SiO ₂ (mg/L)	25.5	24.7	18.4	
18	SO ₄ (mg/L)	22.6	12.1	17.5	22.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	2.4	1.8		1.2
2	DO (mg/L)	4.2	4.2	5.0	3.7
3	DO_SAT% (%)	51	53	62	42
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	23.8		1.7	0.9
2	Cd ($\mu\text{g}/\text{L}$)				0.2
3	Cr ($\mu\text{g}/\text{L}$)	3.5		3.0	5.5
4	Cu ($\mu\text{g}/\text{L}$)	5.0		5.3	10.0
5	Ni ($\mu\text{g}/\text{L}$)	2.2			3.5
6	Pb ($\mu\text{g}/\text{L}$)			0.2	4.4
7	Zn ($\mu\text{g}/\text{L}$)				11.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	83	85	97	106
2	HAR_Total (mgCaCO ₃ /L)	197	184	188	209
3	Na% (%)	48	40	39	39
4	RSC (-)	1.7	1.0	0.9	1.3
5	SAR (-)	2.7	1.9	1.8	1.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.K.Halli (CCM00B9)

Local River : Shimsa

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)		6.354		
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		709		
3	pH_GEN (pH units)		7.7		
4	TDS (mg/L)				
5	Temp (deg C)		31.0		
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)		0.0		
2	ALK-TOT (mgCaCO ₃ /L)		291		
3	B (mg/L)		0.18		
4	Ca (mg/L)		43		
5	Cl (mg/L)		43.3		
6	CO ₃ (mg/L)		0.0		
7	F (mg/L)		0.61		
8	Fe (mg/L)		0.1		
9	HCO ₃ (mg/L)		355		
10	K (mg/L)		3.0		
11	Mg (mg/L)		17.5		
12	Na (mg/L)		77.3		
13	NO ₂ +NO ₃ (mg N/L)		2.41		
14	NO ₂ -N (mgN/L)		0.08		
15	NO ₃ -N (mgN/L)		2.33		
16	o-PO ₄ -P (mg P/L)		0.041		
17	SiO ₂ (mg/L)		20.8		
18	SO ₄ (mg/L)		19.2		
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)		0.8		
2	DO (mg/L)		1.4		
3	DO_SAT% (%)		19		
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)		0.5		
2	Cd ($\mu\text{g}/\text{L}$)		0.0		
3	Cr ($\mu\text{g}/\text{L}$)		1.1		
4	Cu ($\mu\text{g}/\text{L}$)		4.8		
5	Ni ($\mu\text{g}/\text{L}$)		11.4		
6	Pb ($\mu\text{g}/\text{L}$)		0.9		
7	Zn ($\mu\text{g}/\text{L}$)		8.0		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)		108		
2	HAR_Total (mgCaCO ₃ /L)		181		
3	Na% (%)		48		
4	RSC (-)		2.2		
5	SAR (-)		2.5		
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: KOLLEGAL	Code	: CC000R5
State	: Karnataka	District	Chamarajanagara
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Cauvery
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 21082 Sq. Km.	Bank	: Right
Latitude	: 12° 11' 21"	Longitude	: 77° 06' 00"
Zero of Gauge (m)	: 622.000 (m.s.l)	25/01/1971	
	Opening Date	Closing Date	
Gauge	: 25/01/1971		
Discharge	: 06/02/1971		
Sediment	: 15/03/1972		
Water Quality	: 01/06/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	68.96		197.5
2	Colour_Cod (-)	Light Brown		Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	375		148
4	Odour_Code (-)	odour free		odour free
5	pH_GEN (pH units)	8.0		7.5
6	TDS (mg/L)			
7	Temp (deg C)	28.0		26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0		0.0
2	ALK-TOT (mgCaCO ₃ /L)	152		52
3	B (mg/L)	0.04		1.25
4	Ca (mg/L)	34		16
5	Cl (mg/L)	31.2		11.0
6	CO ₃ (mg/L)	0.0		0.0
7	F (mg/L)	0.27		0.13
8	Fe (mg/L)	0.1		0.1
9	HCO ₃ (mg/L)	185		64
10	K (mg/L)	1.9		1.5
11	Mg (mg/L)	14.6		3.9
12	Na (mg/L)	22.7		6.4
13	NO ₂ +NO ₃ (mg N/L)	0.57		0.57
14	NO ₂ -N (mgN/L)	0.01		0.01
15	NO ₃ -N (mgN/L)	0.56		0.56
16	o-PO ₄ -P (mg P/L)	0.062		0.362
17	SiO ₂ (mg/L)	20.3		13.0
18	SO ₄ (mg/L)	6.2		10.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			1.6
2	DO (mg/L)	6.7		5.5
3	DO_SAT% (%)	86		68
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	84		40
2	HAR_Total (mgCaCO ₃ /L)	145		56
3	Na% (%)	25		19
4	RSC (-)	0.2		0.0
5	SAR (-)	0.8		0.4
PESTICIDES				

Water sample not collected

Water Quality Datasheet for the period : 2015-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	184.7	136.0	94.25
2	Colour_Cod (-)	Clear	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	259	316	390
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.5	7.4	7.9
6	TDS (mg/L)			
7	Temp (deg C)	27.5	27.0	27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	91	123	155
3	B (mg/L)	1.97	0.34	0.33
4	Ca (mg/L)	22	43	34
5	Cl (mg/L)	15.6	20.9	33.4
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.42	0.27	0.48
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	111	150	189
10	K (mg/L)	1.6	1.7	1.7
11	Mg (mg/L)	9.7	1.0	16.5
12	Na (mg/L)	15.7	18.1	23.6
13	NO ₂ +NO ₃ (mg N/L)	1.72	1.29	1.01
14	NO ₂ -N (mgN/L)	0.04	0.01	0.00
15	NO ₃ -N (mgN/L)	1.68	1.28	1.01
16	o-PO ₄ -P (mg P/L)	0.351	0.486	0.393
17	SiO ₂ (mg/L)	26.1	19.5	20.9
18	SO ₄ (mg/L)	7.2	6.5	6.5
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.3	1.1	0.4
2	DO (mg/L)	5.0	4.9	5.2
3	DO_SAT% (%)	63	61	66
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	56	108	84
2	HAR_Total (mgCaCO ₃ /L)	97	112	153
3	Na% (%)	26	26	25
4	RSC (-)	0.0	0.2	0.1
5	SAR (-)	0.7	0.7	0.8
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	180.4	24.27	0.000
2	Colour_Cod (-)	Light Brown	Light Brown	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	454	476	
4	Odour_Code (-)	odour free	chlorinous	
5	pH_GEN (pH units)	7.9	8.2	
6	TDS (mg/L)		227	
7	Temp (deg C)	26.0	24.0	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	203	215	
3	B (mg/L)	0.15	0.26	
4	Ca (mg/L)	46	40	
5	Cl (mg/L)	22.7	24.9	
6	CO ₃ (mg/L)	0.0	0.0	
7	F (mg/L)	0.38	0.44	
8	Fe (mg/L)	0.1	0.2	
9	HCO ₃ (mg/L)	247	263	
10	K (mg/L)	1.4	2.0	
11	Mg (mg/L)	17.5	21.4	
12	Na (mg/L)	25.3	30.7	
13	NO ₂ +NO ₃ (mg N/L)	0.87	0.56	
14	NO ₂ -N (mgN/L)	0.03	0.00	
15	NO ₃ -N (mgN/L)	0.84	0.56	
16	o-PO ₄ -P (mg P/L)	0.279	0.289	
17	SiO ₂ (mg/L)	24.9	25.2	
18	SO ₄ (mg/L)	6.7	7.1	
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.6	1.0	
2	DO (mg/L)	5.5	7.3	
3	DO_SAT% (%)	68	87	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	116	100	
2	HAR_Total (mgCaCO ₃ /L)	189	189	
3	Na% (%)	22	26	
4	RSC (-)	0.3	0.6	
5	SAR (-)	0.8	1.0	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Analysis

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	28.32	0.000	0.000
2	Colour_Cod (-)	Clear		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	415		
4	Odour_Code (-)	odour free		
5	pH_GEN (pH units)	7.7		
6	TDS (mg/L)	197		
7	Temp (deg C)	27.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	167		
3	B (mg/L)	0.38		
4	Ca (mg/L)	35		
5	Cl (mg/L)	30.2		
6	CO ₃ (mg/L)	0.0		
7	F (mg/L)			
8	Fe (mg/L)	0.0		
9	HCO ₃ (mg/L)	204		
10	K (mg/L)	2.4		
11	Mg (mg/L)	17.5		
12	Na (mg/L)	24.6		
13	NO ₂ +NO ₃ (mg N/L)	0.73		
14	NO ₂ -N (mgN/L)	0.01		
15	NO ₃ -N (mgN/L)	0.71		
16	o-PO ₄ -P (mg P/L)	0.041		
17	SiO ₂ (mg/L)	19.9		
18	SO ₄ (mg/L)	8.4		
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.2		
2	DO (mg/L)	6.0		
3	DO_SAT% (%)	75		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	88		
2	HAR_Total (mgCaCO ₃ /L)	161		
3	Na% (%)	25		
4	RSC (-)	0.1		
5	SAR (-)	0.8		
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water Summary

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	806.8	0.000	100.6
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	8	476	148	354
3	pH_GEN (pH units)	8	8.2	7.4	7.8
4	TDS (mg/L)	2	227	197	212
5	Temp (deg C)	8	28.0	24.0	26.6
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	8	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	8	215	52	145
3	B (mg/L)	8	1.97	0.04	0.59
4	Ca (mg/L)	8	46	16	34
5	Cl (mg/L)	8	33.4	11.0	23.7
6	CO ₃ (mg/L)	8	0.0	0.0	0
7	F (mg/L)	7	0.48	0.13	0.34
8	Fe (mg/L)	8	0.2	0.0	0.1
9	HCO ₃ (mg/L)	8	263	64	177
10	K (mg/L)	8	2.4	1.4	1.8
11	Mg (mg/L)	8	21.4	1.0	12.8
12	Na (mg/L)	8	30.7	6.4	20.9
13	NO ₂ +NO ₃ (mg N/L)	8	1.72	0.56	0.92
14	NO ₂ -N (mgN/L)	8	0.04	0.00	0.02
15	NO ₃ -N (mgN/L)	8	1.68	0.56	0.9
16	o-PO ₄ -P (mg P/L)	8	0.486	0.041	0.283
17	SiO ₂ (mg/L)	8	26.1	13.0	21.2
18	SO ₄ (mg/L)	8	10.2	6.2	7.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	7	1.6	0.4	1
2	DO (mg/L)	8	7.3	4.9	5.8
3	DO_SAT% (%)	8	87	61	72
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	8	116	40	85
2	HAR_Total (mgCaCO ₃ /L)	8	189	56	138
3	Na% (%)	8	26	19	24
4	RSC (-)	8	0.6	0.0	0.2
5	SAR (-)	8	1.0	0.4	0.8
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	300.1	332.6	744.6	694.1	224.3
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	327	278	405	278	268
3	pH_GEN (pH units)	7.8	7.5	7.9	8.0	8.0
4	TDS (mg/L)					
5	Temp (deg C)	25.4	25.7	25.0	26.3	25.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	1.1
2	ALK-TOT (mgCaCO ₃ /L)	80	64	119	109	113
3	B (mg/L)	0.05	0.00	0.06	0.29	0.07
4	Ca (mg/L)	16	12	20	23	23
5	Cl (mg/L)	45.1	56.4	58.1	17.3	16.3
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	1.4
7	F (mg/L)	1.08	0.23	0.09	0.16	0.23
8	Fe (mg/L)	0.0	0.1	0.2	0.1	0.1
9	HCO ₃ (mg/L)	98	78	145	133	135
10	K (mg/L)	7.5	14.3	12.5	1.7	1.5
11	Mg (mg/L)	8.4	6.0	10.7	11.7	11.3
12	Na (mg/L)	36.3	37.4	41.7	13.0	18.1
13	NH ₃ -N (mg N/L)		0.31			
14	NO ₂ +NO ₃ (mg N/L)	0.59	0.20	0.67	0.45	0.58
15	NO ₂ -N (mgN/L)	0.00	0.00	0.00	0.01	0.01
16	NO ₃ -N (mgN/L)	0.59	0.20	0.67	0.44	0.57
17	o-PO ₄ -P (mg P/L)	0.291	0.011	0.320	0.031	0.031
18	SiO ₂ (mg/L)	15.1	23.1	3.2	16.9	15.8
19	SO ₄ (mg/L)	5.0	2.5	0.6	5.8	4.4
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.7	1.6	2.0	0.8	1.2
2	DO (mg/L)	5.1	7.5	5.5	5.1	5.9
3	DO_SAT% (%)	62	92	66	63	71
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	39	29	50	58	57
2	HAR_Total (mgCaCO ₃ /L)	74	54	94	106	104
3	Na% (%)	50	51	45	21	27
4	RSC (-)	0.2	0.3	0.5	0.1	0.2
5	SAR (-)	2.1	2.3	1.9	0.6	0.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	302.6	475.1	109.8	479.2	188.9
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	274	261	316	191	236
3	pH_GEN (pH units)	7.7	7.3	7.9	7.3	7.6
4	TDS (mg/L)					
5	Temp (deg C)	23.1	23.5	26.0	24.5	27.2
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	3.1	0.0	1.6	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	125	107	132	74	89
3	B (mg/L)	0.04	0.01		0.02	0.18
4	Ca (mg/L)	25	23	27	18	22
5	Cl (mg/L)	17.7	16.1	19.0	12.0	16.7
6	CO ₃ (mg/L)	3.7	0.0	2.0	0.0	0.0
7	F (mg/L)	0.45	0.27	0.29	0.17	0.25
8	Fe (mg/L)	0.2	0.0		0.1	0.2
9	HCO ₃ (mg/L)	145	131	157	90	109
10	K (mg/L)	1.6	1.8	1.7	1.7	2.6
11	Mg (mg/L)	12.2	9.9	12.2	6.6	8.0
12	Na (mg/L)	18.8	15.1	19.8	12.8	14.6
13	NH ₃ -N (mg N/L)					
14	NO ₂ +NO ₃ (mg N/L)	0.80	1.14	1.09	1.51	1.67
15	NO ₂ -N (mgN/L)	0.04	0.01	0.02	0.03	0.04
16	NO ₃ -N (mgN/L)	0.77	1.13	1.08	1.48	1.63
17	$\text{o-PO}_4\text{-P}$ (mg P/L)	0.033	0.031		0.085	0.064
18	SiO ₂ (mg/L)	15.9	14.5		11.0	9.2
19	SO ₄ (mg/L)	4.7	5.5	5.7	7.4	5.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		1.0	0.7	1.4	1.9
2	DO (mg/L)	5.1	4.7	5.7	5.5	5.4
3	DO_SAT% (%)	59	55	70	66	67
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)				1.3	
2	Cd ($\mu\text{g}/\text{L}$)				0.6	
3	Cr ($\mu\text{g}/\text{L}$)			4.2	1.0	
4	Cu ($\mu\text{g}/\text{L}$)			13.1	0.9	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			1.6	10.4	
7	Pb ($\mu\text{g}/\text{L}$)				4.0	
8	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	62	57	68	44	55
2	HAR_Total (mgCaCO ₃ /L)	113	98	119	71	88
3	Na% (%)	26	24	26	26	28
4	RSC (-)	0.2	0.2	0.3	0.1	0.1
5	SAR (-)	0.7	0.6	0.8	0.6	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	146.8	312.3	168	186	136.3
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	275	368	290	387	397
3	pH_GEN (pH units)	7.6	7.9	8.0	8.2	8.1
4	TDS (mg/L)					
5	Temp (deg C)	27.1	23.0	25.8	24.0	25.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	1.9
2	ALK-TOT (mgCaCO ₃ /L)	104	134	69	118	175
3	B (mg/L)	0.90	0.02	0.00	0.04	0.18
4	Ca (mg/L)	29	29	15	26	32
5	Cl (mg/L)	19.7	29.7	50.1	43.0	22.2
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	2.3
7	F (mg/L)	0.27	0.40	0.64	0.59	0.29
8	Fe (mg/L)	0.1	0.0	0.0	0.1	0.1
9	HCO ₃ (mg/L)	127	164	84	144	209
10	K (mg/L)	1.7	17.8	11.3	1.3	1.8
11	Mg (mg/L)	7.3	12.6	7.7	13.6	17.0
12	Na (mg/L)	15.7	23.8	35.9	32.7	28.5
13	NH ₃ -N (mg N/L)			0.00		
14	NO ₂ +NO ₃ (mg N/L)	1.04	1.05	0.19	0.08	0.56
15	NO ₂ -N (mgN/L)	0.02	0.22	0.00	0.00	0.01
16	NO ₃ -N (mgN/L)	1.02	0.83	0.19	0.08	0.55
17	$\text{o-PO}_4\text{-P}$ (mg P/L)	0.315	0.153	0.000	0.016	0.057
18	SiO ₂ (mg/L)	19.7	0.3	11.1	11.6	18.9
19	SO ₄ (mg/L)	7.5	3.9	10.1	0.3	5.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.3	1.5	1.7	1.0	1.6
2	DO (mg/L)	5.5	6.3	7.5	6.3	7.0
3	DO_SAT% (%)	69	73	92	74	84
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	72	74	37	65	81
2	HAR_Total (mgCaCO ₃ /L)	102	126	69	122	152
3	Na% (%)	24	26	58	35	29
4	RSC (-)	0.1	0.2	0.0	0.0	0.5
5	SAR (-)	0.7	0.9	3.4	1.2	1.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	82.59	127.3	101.8	108.7	77.6
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	361	395	382	383	405
3	pH_GEN (pH units)	8.1	8.0	7.6	7.8	7.9
4	TDS (mg/L)					
5	Temp (deg C)	23.8	20.4	24.6	22.0	24.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	3.9	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	163	174	167	165	179
3	B (mg/L)	0.06	0.07	0.00		0.04
4	Ca (mg/L)	32	32	32	35	33
5	Cl (mg/L)	19.9	21.3	20.9	21.4	20.7
6	CO ₃ (mg/L)	4.7	0.0	0.0	0.0	0.0
7	F (mg/L)	0.33	1.52		0.38	0.58
8	Fe (mg/L)	0.0	0.0	0.3		0.1
9	HCO ₃ (mg/L)	190	212	203	201	218
10	K (mg/L)	1.6	1.8	1.8	1.9	6.1
11	Mg (mg/L)	15.6	16.5	15.6	13.9	12.4
12	Na (mg/L)	25.4	26.1	25.1	23.9	35.9
13	NH ₃ -N (mg N/L)					
14	NO ₂ +NO ₃ (mg N/L)	0.59	0.98	1.20	1.37	1.50
15	NO ₂ -N (mgN/L)	0.02	0.05	0.01	0.01	0.01
16	NO ₃ -N (mgN/L)	0.57	0.93	1.19	1.36	1.49
17	o-PO ₄ -P (mg P/L)	0.021	0.036	0.036		0.090
18	SiO ₂ (mg/L)	19.6	18.3	17.7		19.2
19	SO ₄ (mg/L)	5.2	5.9	6.0	5.4	7.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.8	1.3	0.8	0.9	1.1
2	DO (mg/L)	6.6	6.8	6.0	6.1	6.4
3	DO_SAT% (%)	77	75	72	69	76
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.4		
2	Cd ($\mu\text{g}/\text{L}$)			0.1		
3	Cr ($\mu\text{g}/\text{L}$)			2.8		
4	Cu ($\mu\text{g}/\text{L}$)			29.6		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			3.1		
7	Pb ($\mu\text{g}/\text{L}$)			0.3		
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	79	81	80	87	83
2	HAR_Total (mgCaCO ₃ /L)	144	149	145	145	135
3	Na% (%)	28	27	27	26	35
4	RSC (-)	0.4	0.5	0.5	0.4	0.9
5	SAR (-)	0.9	0.9	0.9	0.9	1.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	79.32	99.63	71.47	53.26	64.98
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	395	440	440	300	365
3	pH_GEN (pH units)	8.1	8.0	8.0	8.1	8.0
4	TDS (mg/L)		227			
5	Temp (deg C)	25.8	25.7	27.8	26.6	26.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	2.2	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	165	191	150	103	115
3	B (mg/L)	0.23	0.25	0.04	0.00	0.04
4	Ca (mg/L)	39	40	33	20	26
5	Cl (mg/L)	23.9	27.0	43.1	32.0	39.4
6	CO ₃ (mg/L)	2.7	0.0	0.0	0.0	0.0
7	F (mg/L)	0.33	0.43	0.16	1.00	0.07
8	Fe (mg/L)	0.1	0.1	0.0	0.0	0.1
9	HCO ₃ (mg/L)	196	233	183	126	140
10	K (mg/L)	5.2	1.7	10.3	7.7	1.5
11	Mg (mg/L)	15.1	18.5	14.8	14.6	13.7
12	Na (mg/L)	20.8	26.5	35.2	21.9	29.3
13	NH ₃ -N (mg N/L)				0.00	
14	NO ₂ +NO ₃ (mg N/L)	1.26	0.81	1.12	0.01	0.94
15	NO ₂ -N (mgN/L)	0.01	0.01	0.00	0.00	0.00
16	NO ₃ -N (mgN/L)	1.25	0.80	1.12	0.01	0.94
17	$\text{o-PO}_4\text{-P}$ (mg P/L)	0.036	0.320	0.021	0.000	0.070
18	SiO ₂ (mg/L)	13.8	23.7	9.6	3.1	2.4
19	SO ₄ (mg/L)	7.9	6.8	3.2	6.8	0.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	0.7	1.6	2.8	1.5
2	DO (mg/L)	6.5	6.0	7.8	7.3	7.3
3	DO_SAT% (%)	80	74	100	91	92
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			18.5	9.0	11.7
2	Cd ($\mu\text{g}/\text{L}$)	0.0		0.0	4.0	1.1
3	Cr ($\mu\text{g}/\text{L}$)	0.5		3.7		
4	Cu ($\mu\text{g}/\text{L}$)	1.8		3.2	3.5	2.4
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	3.5				
7	Pb ($\mu\text{g}/\text{L}$)	1.4		3.5	9.7	
8	Zn ($\mu\text{g}/\text{L}$)	9.8			1141.0	32.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	97	100	83	49	64
2	HAR_Total (mgCaCO ₃ /L)	160	177	145	110	121
3	Na% (%)	21	24	33	30	36
4	RSC (-)	0.1	0.3	0.1	0.0	0.0
5	SAR (-)	0.7	0.9	1.3	0.9	1.2
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	34.31	34.01	37.75	28.28
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	397	374	451	390
3	pH_GEN (pH units)	8.0	8.0	7.8	7.7
4	TDS (mg/L)				
5	Temp (deg C)	26.0	25.2	21.0	25.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	2.6	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	165	162	169	164
3	B (mg/L)	0.13	0.10	0.08	
4	Ca (mg/L)	31	33	34	32
5	Cl (mg/L)	23.5	20.5	27.2	24.5
6	CO ₃ (mg/L)	3.1	0.0	0.0	0.0
7	F (mg/L)	0.25	0.35	0.28	0.35
8	Fe (mg/L)	0.1	0.0	0.0	
9	HCO ₃ (mg/L)	194	197	206	200
10	K (mg/L)	2.0	1.8	2.8	2.1
11	Mg (mg/L)	17.5	15.9	17.2	15.6
12	Na (mg/L)	27.9	24.1	28.6	24.3
13	NH ₃ -N (mg N/L)		0.00		
14	NO ₂ +NO ₃ (mg N/L)	0.58	0.50	1.50	1.55
15	NO ₂ -N (mgN/L)	0.00	0.01	0.01	0.01
16	NO ₃ -N (mgN/L)	0.58	0.49	1.28	1.54
17	o-PO ₄ -P (mg P/L)	0.014	0.034	0.072	
18	SiO ₂ (mg/L)	18.0	20.0	20.3	
19	SO ₄ (mg/L)	6.6	6.0	8.0	7.5
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.4	0.8		0.9
2	DO (mg/L)	5.1	6.5	5.7	6.3
3	DO_SAT% (%)	62	79	64	78
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	24.4		1.5	1.5
2	Cd ($\mu\text{g}/\text{L}$)			0.0	0.1
3	Cr ($\mu\text{g}/\text{L}$)	2.1		0.9	5.8
4	Cu ($\mu\text{g}/\text{L}$)	17.9		4.5	11.0
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				7.2
7	Pb ($\mu\text{g}/\text{L}$)	1.8		0.2	3.9
8	Zn ($\mu\text{g}/\text{L}$)				82.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	77	81	84	80
2	HAR_Total (mgCaCO ₃ /L)	150	147	156	145
3	Na% (%)	29	26	28	27
4	RSC (-)	0.3	0.3	0.3	0.4
5	SAR (-)	1.0	0.9	1.0	0.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kollegal (CC000R5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)		18.53	23.85	28.32
2	EC_GEN ($\mu\text{mho}/\text{cm}$)		397	401	415
3	pH_GEN (pH units)		7.8	8.0	7.7
4	TDS (mg/L)				197
5	Temp (deg C)		26.8	27.0	27.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		168	167	167
3	B (mg/L)		0.06	0.35	0.38
4	Ca (mg/L)		32	37	35
5	Cl (mg/L)		22.9	27.7	30.2
6	CO ₃ (mg/L)		0.0	0.0	0.0
7	F (mg/L)		0.41	0.38	
8	Fe (mg/L)		0.0	0.1	0.0
9	HCO ₃ (mg/L)		205	204	204
10	K (mg/L)		3.0	3.1	2.4
11	Mg (mg/L)		15.1	14.9	17.5
12	Na (mg/L)		26.1	24.2	24.6
13	NH ₃ -N (mg N/L)			0.00	
14	NO ₂ +NO ₃ (mg N/L)		1.13	0.74	0.73
15	NO ₂ -N (mgN/L)		0.01	0.02	0.01
16	NO ₃ -N (mgN/L)		1.11	0.72	0.71
17	o-PO ₄ -P (mg P/L)		0.052	0.007	0.041
18	SiO ₂ (mg/L)		14.7	15.2	19.9
19	SO ₄ (mg/L)		9.4	8.8	8.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)		1.8	0.5	1.2
2	DO (mg/L)		5.2	5.4	6.0
3	DO_SAT% (%)		64	67	75
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)		80	93	88
2	HAR_Total (mgCaCO ₃ /L)		143	155	161
3	Na% (%)		28	25	25
4	RSC (-)		0.5	0.3	0.1
5	SAR (-)		1.0	0.8	0.8
PESTICIDES					

No Flow / Dry Bed

HISTORY SHEET

Water Year : 2015-2016

Site	: BENDRAHALLI	Code	: CCN00J5
State	: Karnataka	District	Chamarajanagara
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Suvarnavathi	Sub Tributary	: -
Sub-Sub Tributary	:	Local River	: Suvarnavathi
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 1900 Sq. Km.	Bank	: Right
Latitude	: 12° 09' 13"	Longitude	: 77° 04' 48"
Zero of Gauge (m)	: 631.000 (m.s.l)	03/02/2004	
	Opening Date	Closing Date	
Gauge	: 03/02/2004		
Discharge	: 18/08/2005		
Sediment	:		
Water Quality	: 01/04/2008		

Water Quality Datasheet for the period : 2015-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	2.174	0.000	0.000
2	Colour_Cod (-)	Light Brown		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	366		
4	Odour_Code (-)	odour free		
5	pH_GEN (pH units)	7.5		
6	TDS (mg/L)			
7	Temp (deg C)	21.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	134		
3	B (mg/L)	0.11		
4	Ca (mg/L)	22		
5	Cl (mg/L)	31.2		
6	CO ₃ (mg/L)	0.0		
7	F (mg/L)	0.36		
8	Fe (mg/L)	0.1		
9	HCO ₃ (mg/L)	164		
10	K (mg/L)	5.6		
11	Mg (mg/L)	11.7		
12	Na (mg/L)	36.1		
13	NO ₂ +NO ₃ (mg N/L)	1.19		
14	NO ₂ -N (mgN/L)	0.01		
15	NO ₃ -N (mgN/L)	1.18		
16	o-PO ₄ -P (mg P/L)	0.103		
17	SiO ₂ (mg/L)	20.1		
18	SO ₄ (mg/L)	12.5		
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	56		
2	HAR_Total (mgCaCO ₃ /L)	105		
3	Na% (%)	41		
4	RSC (-)	0.6		
5	SAR (-)	1.5		
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.927	2.75	2.17
2	Colour_Cod (-)	Light Brown	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	528	491	465
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.5	7.3	7.7
6	TDS (mg/L)			
7	Temp (deg C)	16.5	16.5	16.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	194	189	181
3	B (mg/L)	1.90	0.30	0.23
4	Ca (mg/L)	37	35	34
5	Cl (mg/L)	29.5	33.4	38.0
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.65	0.29	0.30
8	Fe (mg/L)	0.2	0.1	0.0
9	HCO ₃ (mg/L)	236	231	221
10	K (mg/L)	3.8	3.9	3.3
11	Mg (mg/L)	16.5	13.6	15.6
12	Na (mg/L)	53.6	43.6	44.1
13	NO ₂ +NO ₃ (mg N/L)	3.04	3.64	2.23
14	NO ₂ -N (mgN/L)	0.01	0.30	0.04
15	NO ₃ -N (mgN/L)	3.03	3.33	2.19
16	o-PO ₄ -P (mg P/L)	0.207	0.589	0.382
17	SiO ₂ (mg/L)	23.5	22.6	21.6
18	SO ₄ (mg/L)	15.0	12.7	7.1
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	92	88	84
2	HAR_Total (mgCaCO ₃ /L)	161	145	149
3	Na% (%)	41	39	39
4	RSC (-)	0.7	0.9	0.7
5	SAR (-)	1.8	1.6	1.6
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.584	0.000
2	Colour_Cod (-)		Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		834	
4	Odour_Code (-)		odour free	
5	pH_GEN (pH units)		7.9	
6	TDS (mg/L)		401	
7	Temp (deg C)		16.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	
2	ALK-TOT (mgCaCO ₃ /L)		354	
3	B (mg/L)		0.36	
4	Ca (mg/L)		69	
5	Cl (mg/L)		43.7	
6	CO ₃ (mg/L)		0.0	
7	F (mg/L)		0.42	
8	Fe (mg/L)		0.1	
9	HCO ₃ (mg/L)		432	
10	K (mg/L)		5.8	
11	Mg (mg/L)		20.4	
12	Na (mg/L)		87.8	
13	NO ₂ +NO ₃ (mg N/L)		3.59	
14	NO ₂ -N (mgN/L)		0.01	
15	NO ₃ -N (mgN/L)		3.57	
16	o-PO ₄ -P (mg P/L)		0.434	
17	SiO ₂ (mg/L)		49.2	
18	SO ₄ (mg/L)		29.3	
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		172	
2	HAR_Total (mgCaCO ₃ /L)		257	
3	Na% (%)		42	
4	RSC (-)		2.0	
5	SAR (-)		2.4	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NO ₂ +NO ₃ (mg N/L)			
14	NO ₂ -N (mgN/L)			
15	NO ₃ -N (mgN/L)			
16	o-PO ₄ -P (mg P/L)			
17	SiO ₂ (mg/L)			
18	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

Division : Cauvery Division, Bangalore

River Water Summary

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	17.83	0.000	1.019
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	6	834	366	542
3	pH_GEN (pH units)	6	7.9	7.3	7.6
4	TDS (mg/L)	1	401	401	401
5	Temp (deg C)	6	25.0	16.5	18.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	6	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	6	354	134	216
3	B (mg/L)	6	1.90	0.11	0.57
4	Ca (mg/L)	6	69	22	40
5	Cl (mg/L)	6	43.7	29.5	34.7
6	CO ₃ (mg/L)	6	0.0	0.0	0
7	F (mg/L)	6	0.65	0.29	0.39
8	Fe (mg/L)	6	0.2	0.0	0.1
9	HCO ₃ (mg/L)	6	432	164	264
10	K (mg/L)	6	5.8	3.3	4.5
11	Mg (mg/L)	6	20.4	11.7	16
12	Na (mg/L)	6	87.8	36.1	52.7
13	NO ₂ +NO ₃ (mg N/L)	6	3.64	1.19	2.6
14	NO ₂ -N (mgN/L)	6	0.30	0.01	0.07
15	NO ₃ -N (mgN/L)	6	3.57	1.18	2.53
16	o-PO ₄ -P (mg P/L)	6	0.589	0.103	0.32
17	SiO ₂ (mg/L)	6	49.2	20.1	29.7
18	SO ₄ (mg/L)	6	29.3	7.1	14.3
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	6	172	56	101
2	HAR_Total (mgCaCO ₃ /L)	6	257	105	167
3	Na% (%)	6	42	36	40
4	RSC (-)	6	2.0	0.6	1
5	SAR (-)	6	2.4	1.5	1.8
PESTICIDES					

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2008	2009	2010	2011	2012
PHYSICAL						
1	Q (cumec)	0.87	0.642	3.174	1.084	0.533
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	652	662	350	556	443
3	pH_GEN (pH units)	7.8	7.8	7.7	7.4	7.5
4	TDS (mg/L)					
5	Temp (deg C)	25.8	23.6	21.8	16.3	24.0
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	205	278	145	195	174
2	B (mg/L)	0.32	0.10		0.06	
3	Ca (mg/L)	33	42	23	38	30
4	Cl (mg/L)	83.5	38.5	19.2	33.4	26.6
5	F (mg/L)	0.11	0.36	0.27	0.42	0.34
6	Fe (mg/L)	0.2	0.1	0.1	0.1	
7	HCO ₃ (mg/L)	247	339	177	280	212
8	K (mg/L)	15.0	5.6	3.7	4.4	3.9
9	Mg (mg/L)	19.2	21.4	12.2	16.1	9.7
10	Na (mg/L)	63.2	75.0	34.2	58.3	50.2
11	NO ₂ +NO ₃ (mg N/L)	0.94	1.22	1.65	2.48	3.22
12	NO ₂ -N (mgN/L)	0.01	0.05	0.01	0.07	0.22
13	NO ₃ -N (mgN/L)	0.93	1.17	1.64	2.41	3.00
14	o-PO ₄ -P (mg P/L)	0.041	0.095	0.052	0.049	
15	SiO ₂ (mg/L)	18.3	25.7	19.4	30.7	
16	SO ₄ (mg/L)	15.2	15.3	7.0	15.6	19.7
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					0.7
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					0.7
4	Cu ($\mu\text{g}/\text{L}$)					41.1
5	Ni ($\mu\text{g}/\text{L}$)					2.9
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	83	104	58	95	76
2	HAR_Total (mgCaCO ₃ /L)	163	193	109	162	117
3	Na% (%)	42	44	40	43	47
4	RSC (-)	0.8	1.7	0.7	1.4	1.2
5	SAR (-)	2.1	2.3	1.4	2.0	2.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood			Winter	
		Jun - Oct			Nov - Feb	
		2013	2014	2015	2008-2009	2009-2010
PHYSICAL						
1	Q (cumec)	2.491	2.079	1.463	2.023	1.051
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	428	426	489	668	649
3	pH_GEN (pH units)	7.5	7.4	7.5	7.8	7.7
4	TDS (mg/L)					
5	Temp (deg C)	23.8	24.0	19.8	22.2	21.9
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	182	162	191	287	298
2	B (mg/L)	0.04	0.04	0.70	0.13	0.10
3	Ca (mg/L)	32	32	35	48	46
4	Cl (mg/L)	23.8	23.6	31.7	36.2	36.5
5	F (mg/L)	0.31	0.12	0.40	0.30	0.34
6	Fe (mg/L)	0.1	0.2	0.1	0.1	0.0
7	HCO ₃ (mg/L)	222	198	233	350	345
8	K (mg/L)	2.4	6.7	4.4	4.2	4.5
9	Mg (mg/L)	9.2	13.6	15.1	21.1	20.4
10	Na (mg/L)	51.2	36.5	46.0	70.6	73.0
11	NO ₂ +NO ₃ (mg N/L)	3.12	4.74	2.44	0.76	1.74
12	NO ₂ -N (mgN/L)	0.04	0.01	0.09	0.01	0.02
13	NO ₃ -N (mgN/L)	3.08	4.73	2.35	0.75	1.72
14	o-PO ₄ -P (mg P/L)	0.052	0.052	0.276	0.079	0.189
15	SiO ₂ (mg/L)	12.7	13.9	26.8	33.6	33.0
16	SO ₄ (mg/L)	8.2	12.7	12.4	11.9	12.4
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	80	80	87	120	115
2	HAR_Total (mgCaCO ₃ /L)	118	137	150	208	200
3	Na% (%)	48	35	40	42	43
4	RSC (-)	1.3	0.5	0.8	1.6	1.7
5	SAR (-)	2.1	1.4	1.6	2.1	2.2
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
PHYSICAL						
1	Q (cumec)	1.929	1.465	1.231	1.236	3.283
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	624	687	506	610	543
3	pH_GEN (pH units)	7.7	7.1	7.5	7.5	7.9
4	TDS (mg/L)					
5	Temp (deg C)	16.8	17.6	22.5	21.8	21.3
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	271	293	216	263	229
2	B (mg/L)	0.11	0.00		0.02	0.16
3	Ca (mg/L)	43	46	38	46	37
4	Cl (mg/L)	37.7	41.2	26.9	34.9	33.4
5	F (mg/L)	0.33		0.42	0.35	0.29
6	Fe (mg/L)	0.2	0.0		0.1	0.1
7	HCO ₃ (mg/L)	330	357	263	321	280
8	K (mg/L)	4.8	4.6	3.0	3.5	8.0
9	Mg (mg/L)	19.8	19.4	14.6	10.7	15.2
10	Na (mg/L)	64.5	76.0	47.4	72.4	51.1
11	NO ₂ +NO ₃ (mg N/L)	2.42	3.19	2.05	3.05	2.30
12	NO ₂ -N (mgN/L)	0.07	0.04	0.05	0.02	0.02
13	NO ₃ -N (mgN/L)	2.35	3.15	2.00	3.03	2.28
14	o-PO ₄ -P (mg P/L)	0.055	0.036		0.103	0.021
15	SiO ₂ (mg/L)	32.2	26.5		17.9	16.3
16	SO ₄ (mg/L)	17.1	14.6	9.2	13.0	10.7
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		0.9			
2	Cd ($\mu\text{g}/\text{L}$)		0.3			0.1
3	Cr ($\mu\text{g}/\text{L}$)		5.5			2.0
4	Cu ($\mu\text{g}/\text{L}$)		49.4			7.1
5	Ni ($\mu\text{g}/\text{L}$)		3.9			0.0
6	Pb ($\mu\text{g}/\text{L}$)		1.0			1.7
7	Zn ($\mu\text{g}/\text{L}$)					0.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	109	116	96	116	93
2	HAR_Total (mgCaCO ₃ /L)	191	197	157	161	157
3	Na% (%)	41	45	39	48	37
4	RSC (-)	1.6	1.9	1.2	2.1	1.5
5	SAR (-)	2.0	2.3	1.6	2.5	1.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter	Summer			
		Nov - Feb	Mar - May			
		2015-2016	2009	2010	2011	2012
PHYSICAL						
1	Q (cumec)	1.377	0.597	0.022	0.685	0.029
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	650	895	973	901	1004
3	pH_GEN (pH units)	7.8	7.9	7.7	7.5	7.6
4	TDS (mg/L)	401				
5	Temp (deg C)	16.5	23.8	22.0	14.3	15.0
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	268	377	396	353	428
2	B (mg/L)	0.30	0.12	0.22	0.17	
3	Ca (mg/L)	51	55	58	55	55
4	Cl (mg/L)	40.8	54.8	59.7	50.4	70.1
5	F (mg/L)	0.36	0.39	0.34	0.56	0.41
6	Fe (mg/L)	0.1	0.2	0.1	0.0	
7	HCO ₃ (mg/L)	326	460	483	430	522
8	K (mg/L)	4.5	8.5	11.2	5.3	14.2
9	Mg (mg/L)	18.0	26.6	28.2	28.2	27.7
10	Na (mg/L)	66.0	113.7	122.5	92.7	123.6
11	NO ₂ +NO ₃ (mg N/L)	2.91	1.18	1.95	3.44	3.36
12	NO ₂ -N (mgN/L)	0.03	0.00	0.01	0.03	0.09
13	NO ₃ -N (mgN/L)	2.88	1.18	1.93	3.41	3.27
14	o-PO ₄ -P (mg P/L)	0.408	0.072	0.072	0.052	
15	SiO ₂ (mg/L)	35.4	38.8	53.9	52.2	
16	SO ₄ (mg/L)	18.2	21.8	19.4	18.2	17.7
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		32.0		1.5	
2	Cd ($\mu\text{g}/\text{L}$)				0.0	
3	Cr ($\mu\text{g}/\text{L}$)		3.2		3.8	
4	Cu ($\mu\text{g}/\text{L}$)		15.4		6.5	
5	Ni ($\mu\text{g}/\text{L}$)		30.0			
6	Pb ($\mu\text{g}/\text{L}$)		2.1		0.6	
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	128	139	144	139	138
2	HAR_Total (mgCaCO ₃ /L)	203	249	261	256	253
3	Na% (%)	40	49	49	44	50
4	RSC (-)	1.3	2.6	2.7	2.0	3.5
5	SAR (-)	2.0	3.1	3.3	2.5	3.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Bendrahalli (CCN00J5)

Local River : Suvarnavathi

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
	PHYSICAL				
1	Q (cumec)				
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_GEN (pH units)				
4	TDS (mg/L)				
5	Temp (deg C)				
	CHEMICAL				
1	ALK-TOT (mgCaCO ₃ /L)				
2	B (mg/L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	F (mg/L)				
6	Fe (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NO ₂ +NO ₃ (mg N/L)				
12	NO ₂ -N (mgN/L)				
13	NO ₃ -N (mgN/L)				
14	o-PO ₄ -P (mg P/L)				
15	SiO ₂ (mg/L)				
16	SO ₄ (mg/L)				
	BIOLOGICAL/BACTERIOLOGICAL				
	TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
	PESTICIDES				

HISTORY SHEET

Water Year : 2015-2016

Site	: T.NARSIPUR	Code	: CCP00B1
State	: Karnataka	District	Mysore
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Kabini	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Kabini
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 7000 Sq. Km.	Bank	: Right
Latitude	: 12° 13' 48"	Longitude	: 76° 53' 39"
Zero of Gauge (m)	: 635.000 (m.s.l)	01/02/1971	
	Opening Date	Closing Date	
Gauge	: 01/02/1971		
Discharge	: 12/03/1971		
Sediment	: 20/03/1972		
Water Quality	: 01/06/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	24.68	166.0	73.46
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	298	135	150
4	Odour_Code (-)	odour free	aromatic	odour free
5	pH_GEN (pH units)	7.8	7.6	7.4
6	TDS (mg/L)			
7	Temp (deg C)	26.0	26.5	26.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	121	50	57
3	B (mg/L)	0.05	0.16	1.20
4	Ca (mg/L)	27	11	13
5	Cl (mg/L)	23.4	12.1	11.0
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.30	0.29	0.40
8	Fe (mg/L)	0.2	0.2	0.2
9	HCO ₃ (mg/L)	148	60	69
10	K (mg/L)	1.8	2.2	1.7
11	Mg (mg/L)	12.6	5.8	6.8
12	Na (mg/L)	16.3	6.5	7.2
13	NO ₂ +NO ₃ (mg N/L)	0.57	0.81	0.07
14	NO ₂ -N (mgN/L)	0.01	0.01	0.01
15	NO ₃ -N (mgN/L)	0.56	0.80	0.06
16	o-PO ₄ -P (mg P/L)	0.052	0.031	0.083
17	SiO ₂ (mg/L)	21.3	9.8	14.2
18	SO ₄ (mg/L)	4.8	3.4	5.9
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			0.4
2	DO (mg/L)	5.9	5.5	6.1
3	DO_SAT% (%)	72	68	75
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	68	28	32
2	HAR_Total (mgCaCO ₃ /L)	121	52	60
3	Na% (%)	22	21	20
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.6	0.4	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		B	A	A
PHYSICAL				
1	Q (cumec)	60.15	99.62	110.0
2	Colour_Cod (-)	Clear	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	303	347	354
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.4	7.5	7.7
6	TDS (mg/L)			
7	Temp (deg C)	26.0	26.5	26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	111	141	146
3	B (mg/L)	1.80	0.30	0.32
4	Ca (mg/L)	26	30	30
5	Cl (mg/L)	17.8	20.9	21.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.57	0.29	0.40
8	Fe (mg/L)	0.2	0.1	0.1
9	HCO ₃ (mg/L)	135	172	178
10	K (mg/L)	1.9	1.7	2.3
11	Mg (mg/L)	11.7	13.6	13.6
12	Na (mg/L)	18.2	18.7	22.7
13	NO ₂ +NO ₃ (mg N/L)	1.23	1.74	1.08
14	NO ₂ -N (mgN/L)	0.18	0.07	0.00
15	NO ₃ -N (mgN/L)	1.05	1.67	1.08
16	o-PO ₄ -P (mg P/L)	0.258	0.548	0.279
17	SiO ₂ (mg/L)	18.4	25.3	20.5
18	SO ₄ (mg/L)	6.9	6.1	6.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.1	1.7	1.8
2	DO (mg/L)	5.0	5.3	4.8
3	DO_SAT% (%)	62	65	59
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	64	76	76
2	HAR_Total (mgCaCO ₃ /L)	113	133	133
3	Na% (%)	26	23	27
4	RSC (-)	0.0	0.2	0.3
5	SAR (-)	0.7	0.7	0.9
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	70.62	18.41	0.000
2	Colour_Cod (-)	Light Brown	Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	409	575	
4	Odour_Code (-)	odour free	odour free	
5	pH_GEN (pH units)	7.9	8.2	
6	TDS (mg/L)		274	
7	Temp (deg C)	23.5	24.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	189	267	
3	B (mg/L)	0.32	0.26	
4	Ca (mg/L)	37	43	
5	Cl (mg/L)	20.2	20.9	
6	CO ₃ (mg/L)	0.0	0.0	
7	F (mg/L)	0.34	0.53	
8	Fe (mg/L)	0.1	0.2	
9	HCO ₃ (mg/L)	230	325	
10	K (mg/L)	1.4	2.7	
11	Mg (mg/L)	19.4	27.2	
12	Na (mg/L)	21.0	40.0	
13	NO ₂ +NO ₃ (mg N/L)	1.13	1.39	
14	NO ₂ -N (mgN/L)	0.01	0.00	
15	NO ₃ -N (mgN/L)	1.12	1.39	
16	o-PO ₄ -P (mg P/L)	0.331	0.372	
17	SiO ₂ (mg/L)	23.4	31.9	
18	SO ₄ (mg/L)	4.3	8.3	
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.4	1.0	
2	DO (mg/L)	5.7	7.5	
3	DO_SAT% (%)	67	89	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	92	108	
2	HAR_Total (mgCaCO ₃ /L)	173	221	
3	Na% (%)	21	28	
4	RSC (-)	0.3	0.9	
5	SAR (-)	0.7	1.2	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	19.25	0.000	0.000
2	Colour_Cod (-)	Clear		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	216		
4	Odour_Code (-)	odour free		
5	pH_GEN (pH units)	7.8		
6	TDS (mg/L)	102		
7	Temp (deg C)	26.0		
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	80		
3	B (mg/L)	0.36		
4	Ca (mg/L)	19		
5	Cl (mg/L)	19.9		
6	CO ₃ (mg/L)	0.0		
7	F (mg/L)			
8	Fe (mg/L)	0.0		
9	HCO ₃ (mg/L)	97		
10	K (mg/L)	1.7		
11	Mg (mg/L)	7.8		
12	Na (mg/L)	12.9		
13	NO ₂ +NO ₃ (mg N/L)	0.49		
14	NO ₂ -N (mgN/L)	0.01		
15	NO ₃ -N (mgN/L)	0.48		
16	o-PO ₄ -P (mg P/L)	0.010		
17	SiO ₂ (mg/L)	18.7		
18	SO ₄ (mg/L)	5.9		
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.6		
2	DO (mg/L)	5.6		
3	DO_SAT% (%)	69		
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	48		
2	HAR_Total (mgCaCO ₃ /L)	80		
3	Na% (%)	25		
4	RSC (-)	0.0		
5	SAR (-)	0.6		
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

Division : Cauvery Division, Bangalore

River Water Summary

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	388.4	0.000	47.97
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	9	575	135	310
3	pH_GEN (pH units)	9	8.2	7.4	7.7
4	TDS (mg/L)	2	274	102	188
5	Temp (deg C)	9	26.5	23.5	25.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	9	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	9	267	50	129
3	B (mg/L)	9	1.80	0.05	0.53
4	Ca (mg/L)	9	43	11	26
5	Cl (mg/L)	9	23.4	11.0	18.6
6	CO ₃ (mg/L)	9	0.0	0.0	0
7	F (mg/L)	8	0.57	0.29	0.39
8	Fe (mg/L)	9	0.2	0.0	0.2
9	HCO ₃ (mg/L)	9	325	60	157
10	K (mg/L)	9	2.7	1.4	1.9
11	Mg (mg/L)	9	27.2	5.8	13.2
12	Na (mg/L)	9	40.0	6.5	18.2
13	NO ₂ +NO ₃ (mg N/L)	9	1.74	0.07	0.95
14	NO ₂ -N (mgN/L)	9	0.18	0.00	0.04
15	NO ₃ -N (mgN/L)	9	1.67	0.06	0.91
16	o-PO ₄ -P (mg P/L)	9	0.548	0.010	0.218
17	SiO ₂ (mg/L)	9	31.9	9.8	20.4
18	SO ₄ (mg/L)	9	8.3	3.4	5.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	7	1.8	0.4	1
2	DO (mg/L)	9	7.5	4.8	5.7
3	DO_SAT% (%)	9	89	59	70
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	9	108	28	66
2	HAR_Total (mgCaCO ₃ /L)	9	221	52	121
3	Na% (%)	9	28	20	24
4	RSC (-)	9	0.9	0.0	0.2
5	SAR (-)	9	1.2	0.4	0.7
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	183	179.7	380.6	204.4	104
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	290	273	343	264	253
3	pH_GEN (pH units)	7.6	7.8	8.0	7.9	7.9
4	TDS (mg/L)					
5	Temp (deg C)	25.3	23.3	24.3	27.6	26.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	74	80	62	98	110
3	B (mg/L)	0.06	0.00	0.07	0.26	0.04
4	Ca (mg/L)	12	16	13	21	21
5	Cl (mg/L)	43.7	39.3	74.0	19.9	13.6
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.46	0.35	0.19	0.22	0.21
8	Fe (mg/L)	0.1	0.4	0.2	0.2	0.1
9	HCO ₃ (mg/L)	91	98	75	120	134
10	K (mg/L)	12.8	10.3	1.6	2.0	1.7
11	Mg (mg/L)	6.1	8.0	6.2	11.1	11.3
12	Na (mg/L)	35.9	29.6	52.8	15.3	15.9
13	NO ₂ +NO ₃ (mg N/L)	0.06	0.00	0.14	0.54	0.68
14	NO ₂ -N (mgN/L)	0.00	0.00	0.00	0.01	0.02
15	NO ₃ -N (mgN/L)	0.06	0.00	0.14	0.53	0.65
16	o-PO ₄ -P (mg P/L)	0.141	0.003	0.062	0.010	0.062
17	SiO ₂ (mg/L)	14.2	2.0	3.9	21.3	17.0
18	SO ₄ (mg/L)	1.5	5.0	0.2	4.0	4.3
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	2.2	1.9	1.4	1.0
2	DO (mg/L)	5.4	6.6	5.7	5.5	5.7
3	DO_SAT% (%)	65	77	68	69	71
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	31	39	31	53	53
2	HAR_Total (mgCaCO ₃ /L)	56	72	57	99	100
3	Na% (%)	52	43	66	24	25
4	RSC (-)	0.4	0.2	0.1	0.1	0.2
5	SAR (-)	2.3	1.6	3.1	0.7	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	118.2	226.9	71.09	195.3	83.04
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	271	232	223	194	210
3	pH_GEN (pH units)	7.7	7.3	7.7	7.3	7.4
4	TDS (mg/L)					
5	Temp (deg C)	27.0	26.8	26.7	25.9	25.9
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	112	96	89	78	76
3	B (mg/L)	0.04	0.06		0.03	0.15
4	Ca (mg/L)	20	19	17	17	19
5	Cl (mg/L)	16.9	13.8	13.6	11.0	16.8
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.20	0.25	0.19	0.18	0.21
8	Fe (mg/L)	0.0	0.1		0.3	0.2
9	HCO ₃ (mg/L)	136	117	109	95	92
10	K (mg/L)	1.8	1.8	1.8	1.7	2.3
11	Mg (mg/L)	12.8	9.7	9.2	7.8	8.9
12	Na (mg/L)	15.2	14.4	14.4	11.8	10.7
13	NO ₂ +NO ₃ (mg N/L)	0.84	1.18	1.06	1.61	1.57
14	NO ₂ -N (mgN/L)	0.02	0.01	0.01	0.06	0.06
15	NO ₃ -N (mgN/L)	0.78	1.17	1.05	1.56	1.52
16	o-PO ₄ -P (mg P/L)	0.033	0.023		0.054	0.043
17	SiO ₂ (mg/L)	15.8	16.1		12.3	10.9
18	SO ₄ (mg/L)	4.2	4.6	4.4	6.1	5.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		0.8	0.9	0.3	1.5
2	DO (mg/L)	5.4	5.4	5.9	5.5	5.6
3	DO_SAT% (%)	67	67	74	67	69
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)				6.2	
2	Cd ($\mu\text{g}/\text{L}$)				0.1	
3	Cr ($\mu\text{g}/\text{L}$)			9.0	0.8	
4	Cu ($\mu\text{g}/\text{L}$)			38.5	0.4	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			1.3	9.1	
7	Pb ($\mu\text{g}/\text{L}$)				0.0	
8	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	51	46	44	43	46
2	HAR_Total (mgCaCO ₃ /L)	105	87	82	75	84
3	Na% (%)	24	25	27	24	23
4	RSC (-)	0.2	0.2	0.2	0.1	0.0
5	SAR (-)	0.6	0.6	0.7	0.6	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	84.78	100.4	52.41	60.48	44.68
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	247	328	374	368	432
3	pH_GEN (pH units)	7.5	8.0	8.1	8.2	8.0
4	TDS (mg/L)					
5	Temp (deg C)	26.3	22.5	23.3	23.8	24.0
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	1.0
2	ALK-TOT (mgCaCO ₃ /L)	96	115	111	103	198
3	B (mg/L)	0.70	0.03	0.00	0.03	0.12
4	Ca (mg/L)	21	22	27	19	33
5	Cl (mg/L)	17.0	26.1	46.2	47.9	19.2
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	1.2
7	F (mg/L)	1.08	2.20	0.31	0.08	0.32
8	Fe (mg/L)	0.2	0.2	0.3	0.0	0.1
9	HCO ₃ (mg/L)	117	140	135	126	239
10	K (mg/L)	1.9	12.8	10.1	1.2	2.0
11	Mg (mg/L)	10.1	11.6	12.4	14.6	20.9
12	Na (mg/L)	13.4	21.2	34.1	33.5	29.3
13	NO ₂ +NO ₃ (mg N/L)	0.88	0.03	0.00	0.13	0.53
14	NO ₂ -N (mgN/L)	0.06	0.00	0.00	0.06	0.01
15	NO ₃ -N (mgN/L)	0.83	0.03	0.00	0.07	0.53
16	o-PO ₄ -P (mg P/L)	0.194	0.054	0.000	0.041	0.072
17	SiO ₂ (mg/L)	17.8	7.1	1.1	2.9	22.1
18	SO ₄ (mg/L)	5.4	2.1	14.8	3.1	5.3
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	1.6	1.2	1.4	1.4
2	DO (mg/L)	5.5	6.0	7.6	6.0	6.3
3	DO_SAT% (%)	68	70	88	71	74
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	54	56	68	48	82
2	HAR_Total (mgCaCO ₃ /L)	96	105	120	109	169
3	Na% (%)	22	28	36	41	27
4	RSC (-)	0.0	0.2	0.0	0.0	0.6
5	SAR (-)	0.6	0.9	1.4	1.4	1.0
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	34.46	65.99	43.5	32.64	41.32
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	435	450	463	400	404
3	pH_GEN (pH units)	8.1	8.0	7.5	7.8	7.7
4	TDS (mg/L)					
5	Temp (deg C)	25.0	26.1	25.4	24.6	26.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	202	207	216	173	178
3	B (mg/L)	0.05	0.05	0.00		0.02
4	Ca (mg/L)	33	34	34	32	37
5	Cl (mg/L)	21.8	22.8	24.0	20.4	20.8
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.39	0.41		0.46	0.39
8	Fe (mg/L)	0.0	0.1	0.0		0.1
9	HCO ₃ (mg/L)	247	252	254	211	218
10	K (mg/L)	2.0	2.3	2.3	2.2	1.6
11	Mg (mg/L)	21.1	21.6	20.7	17.0	13.6
12	Na (mg/L)	32.2	31.1	34.1	25.5	31.9
13	NO ₂ +NO ₃ (mg N/L)	0.70	1.04	1.70	1.63	1.74
14	NO ₂ -N (mgN/L)	0.01	0.03	0.03	0.02	0.01
15	NO ₃ -N (mgN/L)	0.69	1.01	1.67	1.61	1.72
16	o-PO ₄ -P (mg P/L)	0.049	0.049	0.047		0.134
17	SiO ₂ (mg/L)	24.9	24.0	21.8		18.2
18	SO ₄ (mg/L)	5.0	6.3	6.0	5.0	5.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.0	0.7	0.6	0.6	1.0
2	DO (mg/L)	6.3	5.6	5.9	5.7	6.1
3	DO_SAT% (%)	77	69	72	68	75
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)				3.8	
2	Cd ($\mu\text{g}/\text{L}$)				0.0	
3	Cr ($\mu\text{g}/\text{L}$)				0.4	
4	Cu ($\mu\text{g}/\text{L}$)				0.4	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)				24.3	
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	83	84	84	81	92
2	HAR_Total (mgCaCO ₃ /L)	171	174	170	152	149
3	Na% (%)	28	27	30	26	32
4	RSC (-)	0.6	0.7	0.8	0.4	0.6
5	SAR (-)	1.1	1.0	1.1	0.9	1.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	31.89	66.35	38.34	13.69	47.34
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	426	446	357	308	356
3	pH_GEN (pH units)	8.0	7.9	7.9	7.8	7.7
4	TDS (mg/L)		274			
5	Temp (deg C)	24.7	24.7	26.2	24.3	20.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	133	201	152	99	93
3	B (mg/L)	0.21	0.30	0.03	0.00	0.01
4	Ca (mg/L)	30	37	31	26	20
5	Cl (mg/L)	19.1	20.8	40.6	29.4	55.4
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.34	0.42	2.22	1.10	0.08
8	Fe (mg/L)	0.2	0.1	0.2	0.0	0.1
9	HCO ₃ (mg/L)	162	245	186	121	113
10	K (mg/L)	3.9	2.1	8.7	6.3	2.0
11	Mg (mg/L)	13.3	20.1	15.0	10.3	11.3
12	Na (mg/L)	14.5	27.9	33.3	20.2	37.9
13	NO ₂ +NO ₃ (mg N/L)	1.63	1.20	0.07	0.00	0.07
14	NO ₂ -N (mgN/L)	0.01	0.00	0.00	0.00	0.00
15	NO ₃ -N (mgN/L)	1.62	1.20	0.07	0.00	0.07
16	o-PO ₄ -P (mg P/L)	0.007	0.327	0.214	3.023	0.070
17	SiO ₂ (mg/L)	14.6	25.3	20.0	16.9	4.4
18	SO ₄ (mg/L)	5.8	6.2	3.2	7.0	0.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.2	1.1	1.2	1.1	1.6
2	DO (mg/L)	6.2	6.0	6.4	5.8	7.4
3	DO_SAT% (%)	74	72	79	68	80
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			17.6	6.8	9.5
2	Cd ($\mu\text{g}/\text{L}$)	0.0		0.0	3.0	0.9
3	Cr ($\mu\text{g}/\text{L}$)	0.3		4.2		
4	Cu ($\mu\text{g}/\text{L}$)	5.0		4.0	2.2	3.1
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	0.1				
7	Pb ($\mu\text{g}/\text{L}$)	0.7		2.6	1.4	1.3
8	Zn ($\mu\text{g}/\text{L}$)	7.0		0.2	73.0	29.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	76	92	77	65	50
2	HAR_Total (mgCaCO ₃ /L)	131	176	139	107	97
3	Na% (%)	19	25	32	27	42
4	RSC (-)	0.1	0.5	0.3	0.0	0.0
5	SAR (-)	0.6	0.9	1.2	0.8	1.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	11.87	17.82	17.95	21.07
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	349	357	472	353
3	pH_GEN (pH units)	7.9	8.0	7.8	7.6
4	TDS (mg/L)				
5	Temp (deg C)	26.8	28.0	28.7	26.8
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	149	147	179	144
3	B (mg/L)	0.10	0.08	0.08	
4	Ca (mg/L)	26	27	32	27
5	Cl (mg/L)	17.9	21.2	26.6	15.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.23	0.28	0.56	0.30
8	Fe (mg/L)	0.2	0.1	0.0	
9	HCO ₃ (mg/L)	182	180	219	176
10	K (mg/L)	2.0	2.4	2.7	2.3
11	Mg (mg/L)	16.2	15.6	19.4	15.2
12	Na (mg/L)	24.4	25.5	31.2	22.9
13	NO ₂ +NO ₃ (mg N/L)	0.42	0.61	1.22	1.93
14	NO ₂ -N (mgN/L)	0.00	0.01	0.03	0.03
15	NO ₃ -N (mgN/L)	0.42	0.60	1.09	1.90
16	o-PO ₄ -P (mg P/L)	0.021	0.055	0.062	
17	SiO ₂ (mg/L)	19.4	19.8	26.8	
18	SO ₄ (mg/L)	6.4	5.6	9.7	9.1
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.8	1.0		2.4
2	DO (mg/L)	5.5	5.9	5.7	5.3
3	DO_SAT% (%)	69	75	73	65
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	1.7		1.6	1.2
2	Cd ($\mu\text{g}/\text{L}$)			0.1	0.1
3	Cr ($\mu\text{g}/\text{L}$)			1.5	3.7
4	Cu ($\mu\text{g}/\text{L}$)	3.7		4.1	11.1
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	10.8			2.7
7	Pb ($\mu\text{g}/\text{L}$)			0.5	3.9
8	Zn ($\mu\text{g}/\text{L}$)				30.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	65	68	80	67
2	HAR_Total (mgCaCO ₃ /L)	133	133	161	130
3	Na% (%)	28	29	29	27
4	RSC (-)	0.3	0.3	0.4	0.3
5	SAR (-)	0.9	1.0	1.1	0.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : T.Narasipur (CCP00B1)

Local River : Kabini

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	9.845		12.27	19.25
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	401		353	216
3	pH_GEN (pH units)	8.1		7.8	7.8
4	TDS (mg/L)				102
5	Temp (deg C)	26.5		27.5	26.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	153		146	80
3	B (mg/L)	0.00		0.37	0.36
4	Ca (mg/L)	26		26	19
5	Cl (mg/L)	32.3		24.7	19.9
6	CO ₃ (mg/L)	0.0		0.0	0.0
7	F (mg/L)			0.32	
8	Fe (mg/L)	0.0		0.1	0.0
9	HCO ₃ (mg/L)	187		178	97
10	K (mg/L)	3.4		4.9	1.7
11	Mg (mg/L)	15.6		15.9	7.8
12	Na (mg/L)	33.4		20.5	12.9
13	NO ₂ +NO ₃ (mg N/L)	0.98		0.72	0.49
14	NO ₂ -N (mgN/L)	0.00		0.01	0.01
15	NO ₃ -N (mgN/L)	0.98		0.71	0.48
16	o-PO ₄ -P (mg P/L)	0.021		0.017	0.010
17	SiO ₂ (mg/L)	17.4		14.1	18.7
18	SO ₄ (mg/L)	8.6		6.7	5.9
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.0		2.1	0.6
2	DO (mg/L)	4.9		5.1	5.6
3	DO_SAT% (%)	61		65	69
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)				
7	Pb ($\mu\text{g}/\text{L}$)				
8	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	66		65	48
2	HAR_Total (mgCaCO ₃ /L)	131		131	80
3	Na% (%)	34		25	25
4	RSC (-)	0.5		0.3	0.0
5	SAR (-)	1.2		0.8	0.6
PESTICIDES					

No flow / Dry bed condition

HISTORY SHEET

Water Year : 2015-2016

Site	: MUTHANKERA	Code	: CCP00T8
State	: Kerala	District	: Wynad
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Kabini	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Kabini
Division	: SWR Division, Cochin	Sub-Division	: Chaliyar SD, Calicut
Drainage Area	: 1260 Sq. Km.	Bank	: Right
Latitude	: 11°48'30"	Longitude	: 76°05'02"
Zero of Gauge (m)	: 705.000 (m.s.l)	01/06/1973	
	Opening Date	Closing Date	
Gauge	: 01/06/1973		
Discharge	: 01/06/1973		
Sediment	: 15/02/1974		
Water Quality	: 01/06/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water Analysis

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	01/06/2015	01/08/2015	01/10/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.768	71.40	101.7
2	Colour_Cod (-)	Clear	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	111	25	55
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	6.8	6.8	6.9
6	pH_GEN (pH units)	7.9	7.2	6.0
7	Temp (deg C)	28.5	24.5	25.0
CHEMICAL				
1	Ca (mg/L)	6	6	6
2	Cl (mg/L)	9.1	6.5	15.6
3	Fe (mg/L)			
4	HCO3 (mg/L)	16	32	37
5	K (mg/L)			
6	Mg (mg/L)	2.0	1.9	1.9
7	Na (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	1.6	0.6	0.4
2	DO (mg/L)	6.4	5.6	6.4
3	DO_SAT% (%)	82	67	77
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	16	16	16
2	HAR_Total (mgCaCO3/L)	24	24	24
3	Na% (%)			
4	SAR (-)			
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water Analysis

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	01/12/2015	01/02/2016	01/04/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	23.88	9.215	2.544
2	Colour_Cod (-)	Light Brown	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	42	115	132
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_FLD (pH units)	6.8	6.4	6.2
6	pH_GEN (pH units)	7.5	7.4	6.4
7	Temp (deg C)	25.0	25.0	28.5
CHEMICAL				
1	Ca (mg/L)	6	6	11
2	Cl (mg/L)	15.6	15.6	19.6
3	Fe (mg/L)		0.0	
4	HCO3 (mg/L)	34	50	10
5	K (mg/L)	0.2	0.5	0.4
6	Mg (mg/L)	1.9	7.8	3.8
7	Na (mg/L)	12.6	16.6	16.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD3-27 (mg/L)	0.6	1.8	1.4
2	DO (mg/L)	7.0	6.6	7.8
3	DO_SAT% (%)	85	80	100
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO3/L)	16	16	27
2	HAR_Total (mgCaCO3/L)	24	48	43
3	Na% (%)	54	43	45
4	SAR (-)	1.1	1.0	1.1
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water Summary

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	792.7	0.752	55.95
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	6	132	25	80
3	pH_FLD (pH units)	6	6.9	6.2	6.6
4	pH_GEN (pH units)	6	7.9	6.0	7.1
5	Temp (deg C)	6	28.5	24.5	26.1
CHEMICAL					
1	Ca (mg/L)	6	11	6	7
2	Cl (mg/L)	6	19.6	6.5	13.7
3	Fe (mg/L)	1	0.0	0.0	0
4	HCO3 (mg/L)	6	50	10	30
5	K (mg/L)	3	0.5	0.2	0.4
6	Mg (mg/L)	6	7.8	1.9	3.2
7	Na (mg/L)	3	16.6	12.6	15.3
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD3-27 (mg/L)	6	1.8	0.4	1.1
2	DO (mg/L)	6	7.8	5.6	6.6
3	DO_SAT% (%)	6	100	67	82
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO3/L)	6	27	16	18
2	HAR_Total (mgCaCO3/L)	6	48	24	31
3	Na% (%)	3	54	43	47
4	SAR (-)	3	1.1	1.0	1.1
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	313.8				65.17
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	58				75
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	74			69	78
4	pH_FLD (pH units)	7.6				
5	pH_GEN (pH units)	6.9			7.0	7.3
6	TDS (mg/L)	54			49	49
7	Temp (deg C)	26.0			26.0	25.7
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0			0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	27			20	25
3	B (mg/L)	0.15			0.07	0.08
4	Ca (mg/L)	5			5	6
5	Cl (mg/L)	9.7			8.8	8.8
6	CO ₃ (mg/L)	0.0			0.0	0.0
7	F (mg/L)	0.19			0.08	0.12
8	Fe (mg/L)				0.0	0.0
9	HCO ₃ (mg/L)	33			24	30
10	K (mg/L)	2.1			1.1	1.8
11	Mg (mg/L)	2.8			2.5	2.8
12	Na (mg/L)	5.7			4.6	5.5
13	NH ₃ -N (mg N/L)				0.05	0.15
14	NO ₂ +NO ₃ (mg N/L)	1.57			0.15	
15	NO ₂ -N (mgN/L)	0.52			0.03	
16	NO ₃ -N (mgN/L)	1.05			0.16	
17	o-PO ₄ -P (mg P/L)				0.036	0.072
18	P-Tot (mgP/L)	0.029			0.010	
19	SiO ₂ (mg/L)	7.9			23.2	29.1
20	SO ₄ (mg/L)	3.2			1.7	1.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.5			0.5	0.4
2	COD (mg/L)	3.5			3.7	2.7
3	DO (mg/L)	6.0			6.0	7.0
4	DO_SAT% (%)	73			73	83
5	FCol-MPN (MPN/100mL)					900
6	Tcol-MPN (MPN/100mL)					1600
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	13			13	16
2	HAR_Total (mgCaCO ₃ /L)	24			23	28
3	Na% (%)	31			29	28
4	RSC (-)	0.1			0.0	0.0
5	SAR (-)	0.5			0.4	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	101.2	74.65	37.44	259.1	292.1
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	78	90			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	80	86	81	70	69
4	pH_FLD (pH units)	6.5	6.5	6.4	6.2	6.8
5	pH_GEN (pH units)	6.9	6.5	7.0	6.8	7.0
6	TDS (mg/L)	50	57	50	44	45
7	Temp (deg C)	26.0	26.0	25.0	23.5	24.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	26	27	26	24	
3	B (mg/L)	0.06	0.23	0.08	0.03	
4	Ca (mg/L)	6	7	7	6	6
5	Cl (mg/L)	9.0	9.5	9.5	8.9	9.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	
7	F (mg/L)	0.15	0.05	0.03	0.36	
8	Fe (mg/L)	0.4	0.1	0.1	0.1	
9	HCO ₃ (mg/L)	32	33	32	29	27
10	K (mg/L)	1.7	1.5	1.6	1.5	2.2
11	Mg (mg/L)	2.9	2.9	3.8	2.4	7.0
12	Na (mg/L)	5.3	5.5	5.5	5.6	4.2
13	NH ₃ -N (mg N/L)	0.21	0.19	0.04		
14	NO ₂ +NO ₃ (mg N/L)	0.15	0.43	1.73	0.26	
15	NO ₂ -N (mgN/L)	0.01	0.06	0.01	0.02	
16	NO ₃ -N (mgN/L)	0.23	0.37	1.72	0.24	
17	o-PO ₄ -P (mg P/L)	0.106	0.069	0.173	0.100	
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	39.2	15.6	12.1	9.7	
20	SO ₄ (mg/L)		1.3	0.9	1.0	0.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	1.3	0.7	1.1	1.5
2	COD (mg/L)	7.2	7.9	4.8	7.0	
3	DO (mg/L)	6.7	6.8	6.6	5.5	5.6
4	DO_SAT% (%)	82	83	79	65	67
5	FCol-MPN (MPN/100mL)	500	280	503	1250	
6	Tcol-MPN (MPN/100mL)	1600	1600	907	1600	545
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.0	5.1	
2	Cd ($\mu\text{g}/\text{L}$)			0.1	0.0	
3	Cr ($\mu\text{g}/\text{L}$)			1.0	1.0	
4	Cu ($\mu\text{g}/\text{L}$)			3.3	0.7	
5	Hg ($\mu\text{g}/\text{L}$)				0.3	
6	Ni ($\mu\text{g}/\text{L}$)			1.7	6.2	
7	Pb ($\mu\text{g}/\text{L}$)			3.5	1.5	
8	Zn ($\mu\text{g}/\text{L}$)			30.5	19.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	16	19	18	15	15
2	HAR_Total (mgCaCO ₃ /L)	28	31	34	25	44
3	Na% (%)	27	26	25	30	19
4	RSC (-)	0.0	0.0	0.0	0.0	
5	SAR (-)	0.4	0.4	0.4	0.5	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUTHANKERA (CCP00T8)

Division : SWR Division, Cochin

Local River : Kabini

River Water

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	57.95	13.22			
2	EC_FLD ($\mu\text{mho}/\text{cm}$)		82			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	64	88			78
4	pH_FLD (pH units)	6.8	6.1			
5	pH_GEN (pH units)	7.0	7.4			7.2
6	TDS (mg/L)		63			61
7	Temp (deg C)	26.0	24.3			24.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)		0.0			0.0
2	ALK-TOT (mgCaCO ₃ /L)		24			28
3	B (mg/L)		0.04			0.12
4	Ca (mg/L)	6	7			6
5	Cl (mg/L)	10.4	12.2			9.2
6	CO ₃ (mg/L)		0.0			0.0
7	F (mg/L)		0.06			0.05
8	Fe (mg/L)					0.2
9	HCO ₃ (mg/L)	28	29			34
10	K (mg/L)		1.5			1.4
11	Mg (mg/L)	1.9	4.1			3.4
12	Na (mg/L)		6.0			5.9
13	NH ₃ -N (mg N/L)					
14	NO ₂ +NO ₃ (mg N/L)		1.60			
15	NO ₂ -N (mgN/L)		0.11			
16	NO ₃ -N (mgN/L)		1.49			0.32
17	o-PO ₄ -P (mg P/L)					0.095
18	P-Tot (mgP/L)		0.120			
19	SiO ₂ (mg/L)		18.3			22.6
20	SO ₄ (mg/L)		1.0			1.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	0.6			1.0
2	COD (mg/L)		3.3			8.4
3	DO (mg/L)	6.1	6.7			7.2
4	DO_SAT% (%)	75	80			86
5	FCol-MPN (MPN/100mL)					900
6	Tcol-MPN (MPN/100mL)					1600
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	16	18			14
2	HAR_Total (mgCaCO ₃ /L)	24	35			28
3	Na% (%)		26			30
4	RSC (-)		0.0			0.0
5	SAR (-)		0.4			0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	16.88	20.5	16.25	8.338	4.714
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	61	62	91		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	76	56	91	74	90
4	pH_FLD (pH units)		6.5	6.8	6.8	6.4
5	pH_GEN (pH units)	6.7	6.9	7.0	6.8	7.2
6	TDS (mg/L)	44	34	62	48	62
7	Temp (deg C)	25.0	23.3	24.3	23.8	23.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	24	19	33	22	33
3	B (mg/L)	0.12	0.34	0.28	0.13	0.06
4	Ca (mg/L)	6	6	9	8	6
5	Cl (mg/L)	8.8	5.7	9.9	9.5	10.3
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.29	0.13	0.41	0.24	0.16
8	Fe (mg/L)	0.0	0.1	1.1	0.1	
9	HCO ₃ (mg/L)	29	23	41	26	40
10	K (mg/L)	1.1	0.8	1.7	1.4	1.6
11	Mg (mg/L)	2.7	1.5	2.5	1.5	5.1
12	Na (mg/L)	6.2	3.3	6.7	5.3	6.5
13	NH ₃ -N (mg N/L)	0.18	0.05	0.04	0.10	
14	NO ₂ +NO ₃ (mg N/L)		0.52	2.91	1.21	0.47
15	NO ₂ -N (mgN/L)		0.05	0.01	0.06	0.01
16	NO ₃ -N (mgN/L)		0.47	2.22	1.15	0.46
17	o-PO ₄ -P (mg P/L)	0.018	0.084	0.104	0.344	
18	P-Tot (mgP/L)					
19	SiO ₂ (mg/L)	29.0	14.6	11.7	16.7	9.3
20	SO ₄ (mg/L)		1.2	1.0	0.9	1.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.3	0.7	0.8	0.4	1.1
2	COD (mg/L)	3.0	5.3	5.5	5.4	5.8
3	DO (mg/L)	7.0	7.1	6.7	5.8	7.4
4	DO_SAT% (%)	84	83	80	69	86
5	FCol-MPN (MPN/100mL)	1600	1600	1600	240	1600
6	Tcol-MPN (MPN/100mL)	1600	1600	1600	500	1600
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.3		
2	Cd ($\mu\text{g}/\text{L}$)			0.2		
3	Cr ($\mu\text{g}/\text{L}$)			2.2		
4	Cu ($\mu\text{g}/\text{L}$)			36.9		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			3.9		
7	Pb ($\mu\text{g}/\text{L}$)			0.2		
8	Zn ($\mu\text{g}/\text{L}$)			9.2		
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	14	14	22	20	14
2	HAR_Total (mgCaCO ₃ /L)	25	20	32	26	35
3	Na% (%)	34	25	30	29	28
4	RSC (-)	0.0	0.0	0.1	0.0	0.0
5	SAR (-)	0.5	0.3	0.5	0.5	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	13.96	16.55	6.277		
2	EC_FLD ($\mu\text{mho}/\text{cm}$)			110		
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	75	79	125		
4	pH_FLD (pH units)	6.9	6.6	6.1		
5	pH_GEN (pH units)	7.4	7.5	7.3		
6	TDS (mg/L)	44		89		
7	Temp (deg C)	23.0	25.0	30.5		
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)			0.0		
2	ALK-TOT (mgCaCO ₃ /L)			44		
3	B (mg/L)			0.04		
4	Ca (mg/L)	6	6	10		
5	Cl (mg/L)	7.6	15.6	20.6		
6	CO ₃ (mg/L)			0.0		
7	F (mg/L)			0.30		
8	Fe (mg/L)	0.0	0.0			
9	HCO ₃ (mg/L)	35	42	54		
10	K (mg/L)		0.3	2.8		
11	Mg (mg/L)	3.3	4.9	3.9		
12	Na (mg/L)		14.6	11.0		
13	NH ₃ -N (mg N/L)					
14	NO ₂ +NO ₃ (mg N/L)			1.01		
15	NO ₂ -N (mgN/L)			0.18		
16	NO ₃ -N (mgN/L)			0.83		
17	o-PO ₄ -P (mg P/L)					
18	P-Tot (mgP/L)			0.122		
19	SiO ₂ (mg/L)			17.0		
20	SO ₄ (mg/L)	0.7		1.0		
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.6	1.2	2.0		
2	COD (mg/L)			8.6		
3	DO (mg/L)	6.1	6.8	5.6		
4	DO_SAT% (%)	71	82	74		
5	FCol-MPN (MPN/100mL)					
6	Tcol-MPN (MPN/100mL)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			8.2		
2	Cd ($\mu\text{g}/\text{L}$)	0.1		7.0		
3	Cr ($\mu\text{g}/\text{L}$)	4.4		0.8		
4	Cu ($\mu\text{g}/\text{L}$)	6.5		1.3		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	2.1		1.8		
7	Pb ($\mu\text{g}/\text{L}$)	3.1		3.2		
8	Zn ($\mu\text{g}/\text{L}$)	9.5				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	16	16	26		
2	HAR_Total (mgCaCO ₃ /L)	30	36	42		
3	Na% (%)		48	34		
4	RSC (-)			0.0		
5	SAR (-)		1.1	0.7		
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)		4.498	8.064	4.245
2	EC_FLD ($\mu\text{mho}/\text{cm}$)		59	95	91
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	119	104	114	115
4	pH_FLD (pH units)			7.1	7.0
5	pH_GEN (pH units)	6.3	7.0	8.9	6.7
6	TDS (mg/L)	83	61	74	78
7	Temp (deg C)	29.0	28.5	27.0	25.0
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	5.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	37	36	34	40
3	B (mg/L)	0.09		0.14	0.29
4	Ca (mg/L)	9	4	9	11
5	Cl (mg/L)	9.9	10.6	14.2	10.7
6	CO ₃ (mg/L)	0.0	0.0	6.0	0.0
7	F (mg/L)	0.19	0.28	0.18	0.07
8	Fe (mg/L)	0.0	0.0	0.4	0.1
9	HCO ₃ (mg/L)	46	44	29	49
10	K (mg/L)	3.5	3.2	4.2	2.0
11	Mg (mg/L)	3.9	4.9	4.4	3.5
12	Na (mg/L)	6.9	6.2	7.6	7.3
13	NH ₃ -N (mg N/L)	0.07	0.10	0.09	0.12
14	NO ₂ +NO ₃ (mg N/L)	0.36		0.38	2.51
15	NO ₂ -N (mgN/L)	0.04		0.04	0.09
16	NO ₃ -N (mgN/L)	0.32	0.21	0.34	2.42
17	o-PO ₄ -P (mg P/L)	0.040		0.143	0.095
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	16.4	28.7	22.0	12.0
20	SO ₄ (mg/L)	1.2	1.0	1.0	0.9
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	0.8	0.4		1.6
2	COD (mg/L)	6.4	3.2	6.2	12.6
3	DO (mg/L)	5.4	7.2	7.0	4.8
4	DO_SAT% (%)	70	93	88	58
5	FCol-MPN (MPN/100mL)	1600	900		900
6	Tcol-MPN (MPN/100mL)	1600	1600		1600
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	12.5		1.2	
2	Cd ($\mu\text{g}/\text{L}$)			0.0	0.1
3	Cr ($\mu\text{g}/\text{L}$)	2.0		1.0	0.8
4	Cu ($\mu\text{g}/\text{L}$)	1.0		7.4	3.6
5	Hg ($\mu\text{g}/\text{L}$)			0.0	
6	Ni ($\mu\text{g}/\text{L}$)	8.2			0.9
7	Pb ($\mu\text{g}/\text{L}$)	1.0		0.1	4.3
8	Zn ($\mu\text{g}/\text{L}$)			12.6	0.1
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	22	10	22	28
2	HAR_Total (mgCaCO ₃ /L)	38	30	40	43
3	Na% (%)	26	28	27	26
4	RSC (-)	0.0	0.1	0.0	0.0
5	SAR (-)	0.5	0.5	0.5	0.5
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : MUTHANKERA (CCP00T8)

Local River : Kabini

River Water

Division : SWR Division, Cochin

Sub-Division : Chaliyar SD, Calicut

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	1.664	4.828	4.904	2.544
2	EC_FLD ($\mu\text{mho}/\text{cm}$)	7			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	110	110	112	132
4	pH_FLD (pH units)	6.0	6.4	7.2	6.2
5	pH_GEN (pH units)	7.1	7.1	7.6	6.4
6	TDS (mg/L)	77	79	44	
7	Temp (deg C)	29.0	29.0	25.0	28.5
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0		
2	ALK-TOT (mgCaCO ₃ /L)	34	36		
3	B (mg/L)	0.08	0.16		
4	Ca (mg/L)	9	8	6	11
5	Cl (mg/L)	8.5	13.4	3.9	19.5
6	CO ₃ (mg/L)	0.0	0.0		
7	F (mg/L)	0.46	0.09		
8	Fe (mg/L)	0.1	0.0		
9	HCO ₃ (mg/L)	42	44	18	10
10	K (mg/L)	3.5	3.8		0.4
11	Mg (mg/L)	3.5	5.0	2.8	3.8
12	Na (mg/L)	6.0	8.4		16.6
13	NH ₃ -N (mg N/L)				
14	NO ₂ +NO ₃ (mg N/L)	1.21	0.99		
15	NO ₂ -N (mgN/L)	0.01	0.00		
16	NO ₃ -N (mgN/L)	1.20	0.99		
17	o-PO ₄ -P (mg P/L)	0.090	0.100		
18	P-Tot (mgP/L)				
19	SiO ₂ (mg/L)	15.2	12.1		
20	SO ₄ (mg/L)	1.1	1.0		
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	0.6	0.4	0.2	1.4
2	COD (mg/L)	3.0	2.8		
3	DO (mg/L)	5.9	6.1	5.4	7.8
4	DO_SAT% (%)	77	79	65	100
5	FCol-MPN (MPN/100mL)	280	300		
6	Tcol-MPN (MPN/100mL)	350	500		
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)		1.7		
2	Cd ($\mu\text{g}/\text{L}$)		0.0		
3	Cr ($\mu\text{g}/\text{L}$)		1.4		
4	Cu ($\mu\text{g}/\text{L}$)		1.1		
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)		1.6		
7	Pb ($\mu\text{g}/\text{L}$)		0.2		
8	Zn ($\mu\text{g}/\text{L}$)		1.0		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	22	21	16	27
2	HAR_Total (mgCaCO ₃ /L)	37	42	28	43
3	Na% (%)	24	28		45
4	RSC (-)	0.0	0.0		
5	SAR (-)	0.4	0.6		1.1
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: K.M.VADI	Code	: CCQ00E9
State	: Karnataka	District	Mysore
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Lakhshmanthirtha	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Lakhshmanthirtha
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 1330 Sq. Km.	Bank	: Left
Latitude	: 12° 20' 46"	Longitude	: 76° 17' 16"
Zero of Gauge (m)	: 766.500 (m.s.l) 765.000 (m.s.l)	16/02/1978 01/06/1986	- 31/05/1986
	Opening Date	Closing Date	
Gauge	: 16/02/1978		
Discharge	: 26/06/1979		
Sediment	:		
Water Quality	: 01/07/1979		

Water Quality Datasheet for the period : 2015-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	52.88	
2	Colour_Cod (-)		Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		152	
4	Odour_Code (-)		odour free	
5	pH_GEN (pH units)		6.9	
6	TDS (mg/L)			
7	Temp (deg C)		23.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	
2	ALK-TOT (mgCaCO ₃ /L)		45	
3	B (mg/L)		0.10	
4	Ca (mg/L)		16	
5	Cl (mg/L)		19.9	
6	CO ₃ (mg/L)		0.0	
7	F (mg/L)		0.11	
8	Fe (mg/L)		0.5	
9	HCO ₃ (mg/L)		55	
10	K (mg/L)		2.5	
11	Mg (mg/L)		4.9	
12	Na (mg/L)		8.1	
13	NO ₂ +NO ₃ (mg N/L)		0.95	
14	NO ₂ -N (mgN/L)		0.04	
15	NO ₃ -N (mgN/L)		0.91	
16	o-PO ₄ -P (mg P/L)		0.021	
17	SiO ₂ (mg/L)		13.0	
18	SO ₄ (mg/L)		4.6	
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		40	
2	HAR_Total (mgCaCO ₃ /L)		60	
3	Na% (%)		22	
4	RSC (-)		0.0	
5	SAR (-)		0.5	
PESTICIDES				

Water sample not collected.

Water Quality Datasheet for the period : 2015-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)		5.189	32.27
2	Colour_Cod (-)	Clear	Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	259	387	
4	Odour_Code (-)	odour free	odour free	
5	pH_GEN (pH units)	7.3	7.4	
6	TDS (mg/L)			
7	Temp (deg C)	25.5	25.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	106	168	
3	B (mg/L)	0.29	0.27	
4	Ca (mg/L)	16	27	
5	Cl (mg/L)	18.8	23.8	
6	CO ₃ (mg/L)	0.0	0.0	
7	F (mg/L)	0.27	0.38	
8	Fe (mg/L)	0.2	0.3	
9	HCO ₃ (mg/L)	129	205	
10	K (mg/L)	1.9	2.7	
11	Mg (mg/L)	15.6	19.4	
12	Na (mg/L)	10.5	26.5	
13	NO ₂ +NO ₃ (mg N/L)	0.97	1.18	
14	NO ₂ -N (mgN/L)	0.06	0.00	
15	NO ₃ -N (mgN/L)	0.91	1.18	
16	o-PO ₄ -P (mg P/L)	0.424	0.465	
17	SiO ₂ (mg/L)	17.3	22.8	
18	SO ₄ (mg/L)	3.5	6.3	
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	40	68	
2	HAR_Total (mgCaCO ₃ /L)	105	149	
3	Na% (%)	18	28	
4	RSC (-)	0.0	0.4	
5	SAR (-)	0.4	0.9	
PESTICIDES				

Water sample not collected.

Water Quality Datasheet for the period : 2015-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.166	0.000
2	Colour_Cod (-)		Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		632	
4	Odour_Code (-)		odour free	
5	pH_GEN (pH units)		7.8	
6	TDS (mg/L)		303	
7	Temp (deg C)		25.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	
2	ALK-TOT (mgCaCO ₃ /L)		297	
3	B (mg/L)		0.28	
4	Ca (mg/L)		43	
5	Cl (mg/L)		27.0	
6	CO ₃ (mg/L)		0.0	
7	F (mg/L)		0.57	
8	Fe (mg/L)		0.1	
9	HCO ₃ (mg/L)		363	
10	K (mg/L)		2.4	
11	Mg (mg/L)		31.1	
12	Na (mg/L)		46.6	
13	NO ₂ +NO ₃ (mg N/L)		0.70	
14	NO ₂ -N (mgN/L)		0.00	
15	NO ₃ -N (mgN/L)		0.70	
16	o-PO ₄ -P (mg P/L)		0.568	
17	SiO ₂ (mg/L)		31.4	
18	SO ₄ (mg/L)		6.7	
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		108	
2	HAR_Total (mgCaCO ₃ /L)		238	
3	Na% (%)		30	
4	RSC (-)		1.2	
5	SAR (-)		1.3	
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NO ₂ +NO ₃ (mg N/L)			
14	NO ₂ -N (mgN/L)			
15	NO ₃ -N (mgN/L)			
16	o-PO ₄ -P (mg P/L)			
17	SiO ₂ (mg/L)			
18	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

River Water Summary

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	352.7	0.000	7.602
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	4	632	152	358
3	pH_GEN (pH units)	4	7.8	6.9	7.3
4	TDS (mg/L)	1	303	303	303
5	Temp (deg C)	4	25.5	23.5	25
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	4	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	4	297	45	154
3	B (mg/L)	4	0.29	0.10	0.24
4	Ca (mg/L)	4	43	16	26
5	Cl (mg/L)	4	27.0	18.8	22.4
6	CO ₃ (mg/L)	4	0.0	0.0	0
7	F (mg/L)	4	0.57	0.11	0.33
8	Fe (mg/L)	4	0.5	0.1	0.3
9	HCO ₃ (mg/L)	4	363	55	188
10	K (mg/L)	4	2.7	1.9	2.4
11	Mg (mg/L)	4	31.1	4.9	17.7
12	Na (mg/L)	4	46.6	8.1	22.9
13	NO ₂ +NO ₃ (mg N/L)	4	1.18	0.70	0.95
14	NO ₂ -N (mgN/L)	4	0.06	0.00	0.02
15	NO ₃ -N (mgN/L)	4	1.18	0.70	0.92
16	o-PO ₄ -P (mg P/L)	4	0.568	0.021	0.369
17	SiO ₂ (mg/L)	4	31.4	13.0	21.1
18	SO ₄ (mg/L)	4	6.7	3.5	5.3
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	4	108	40	64
2	HAR_Total (mgCaCO ₃ /L)	4	238	60	138
3	Na% (%)	4	30	18	24
4	RSC (-)	4	1.2	0.0	0.4
5	SAR (-)	4	1.3	0.4	0.8
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	53.84			104.8	11
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	417			189	281
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.4			7.5	7.5
6	TDS (mg/L)					
7	Temp (deg C)	23.5			23.3	23.7
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	107			65	113
2	B (mg/L)	0.00				0.06
3	Ca (mg/L)	16			15	20
4	Cl (mg/L)	57.8			16.1	21.2
5	F (mg/L)	0.20			0.07	0.18
6	Fe (mg/L)	0.0				0.2
7	HCO ₃ (mg/L)	130			79	138
8	K (mg/L)	3.6			2.0	1.9
9	Mg (mg/L)	13.2			7.8	13.3
10	Na (mg/L)	51.9			11.0	19.8
11	NO ₂ +NO ₃ (mg N/L)	0.63			0.78	0.84
12	NO ₂ -N (mgN/L)	0.00			0.03	0.06
13	NO ₃ -N (mgN/L)	0.63			0.75	0.78
14	o-PO ₄ -P (mg P/L)	0.000				0.017
15	SiO ₂ (mg/L)	27.3				15.6
16	SO ₄ (mg/L)	6.0			4.1	4.8
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	40			37	49
2	HAR_Total (mgCaCO ₃ /L)	95			70	105
3	Na% (%)	53			25	28
4	RSC (-)	0.2			0.0	0.2
5	SAR (-)	2.3			0.6	0.8
PESTICIDES						

Water Quality monitoring suspended as per rationalisation of sites.

Water Quality Seasonal Average for the period: 2005-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	21.54	35.81	24.35	45.34	56.27
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				122	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	226	202	111	169	288
4	pH_FLD (pH units)				7.0	
5	pH_GEN (pH units)	7.4	7.0	7.0	7.0	7.1
6	TDS (mg/L)					
7	Temp (deg C)	24.4	23.6	24.0	24.5	25.0
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	93	89	34	63	113
2	B (mg/L)	0.02	0.02		0.03	0.11
3	Ca (mg/L)	16	15	10	13	25
4	Cl (mg/L)	18.3	16.1	11.2	10.6	16.3
5	F (mg/L)	0.21	0.06	0.55	0.30	0.18
6	Fe (mg/L)	0.4	0.2	0.0	0.5	0.2
7	HCO ₃ (mg/L)	105	96	41	76	138
8	K (mg/L)	1.8	1.5	1.3	1.7	2.2
9	Mg (mg/L)	10.0	8.3	4.6	6.1	12.6
10	Na (mg/L)	14.0	13.6	4.9	12.5	14.0
11	NO ₂ +NO ₃ (mg N/L)	1.01	1.29	0.95	1.47	2.53
12	NO ₂ -N (mgN/L)	0.09	0.01	0.02	0.05	0.05
13	NO ₃ -N (mgN/L)	0.92	1.27	0.93	1.42	2.48
14	o-PO ₄ -P (mg P/L)	0.026	0.010		0.075	0.052
15	SiO ₂ (mg/L)	15.0	14.0		11.6	11.8
16	SO ₄ (mg/L)	4.2	3.6	4.4	7.4	7.1
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)				5.1	
2	Cd ($\mu\text{g}/\text{L}$)				0.0	
3	Cr ($\mu\text{g}/\text{L}$)				1.5	
4	Cu ($\mu\text{g}/\text{L}$)				0.9	
5	Ni ($\mu\text{g}/\text{L}$)				11.3	
6	Pb ($\mu\text{g}/\text{L}$)				0.9	
7	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	39	37	25	33	63
2	HAR_Total (mgCaCO ₃ /L)	81	71	44	58	115
3	Na% (%)	26	26	19	26	21
4	RSC (-)	0.2	0.2	0.0	0.2	0.1
5	SAR (-)	0.6	0.6	0.3	0.6	0.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	29.03	4.602			1.291
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	206	385			251
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.1	7.9			7.6
6	TDS (mg/L)					
7	Temp (deg C)	24.5	24.3			21.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	75	100			117
2	B (mg/L)	0.19	0.00			1.27
3	Ca (mg/L)	16	19			19
4	Cl (mg/L)	19.3	52.5			15.6
5	F (mg/L)	0.19	0.03			0.23
6	Fe (mg/L)	0.3	0.1			0.1
7	HCO ₃ (mg/L)	92	122			142
8	K (mg/L)	2.2	5.8			1.6
9	Mg (mg/L)	10.2	10.0			10.7
10	Na (mg/L)	9.3	45.9			18.9
11	NO ₂ +NO ₃ (mg N/L)	0.96	1.64			0.52
12	NO ₂ -N (mgN/L)	0.05	0.00			0.00
13	NO ₃ -N (mgN/L)	0.91	1.63			0.52
14	o-PO ₄ -P (mg P/L)	0.222	0.000			0.041
15	SiO ₂ (mg/L)	15.1	0.3			16.9
16	SO ₄ (mg/L)	4.0	4.2			2.8
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	40	47			48
2	HAR_Total (mgCaCO ₃ /L)	83	89			93
3	Na% (%)	20	51			30
4	RSC (-)	0.0	0.2			0.5
5	SAR (-)	0.5	2.1			0.9
PESTICIDES						

Water Quality monitoring suspended as per rationalisation of sites.

Water Quality Seasonal Average for the period: 2005-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	2.26	3.094	3.489	4.029	0.934
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	441	488	495	417	412
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.7	7.6	7.1	7.5	7.5
6	TDS (mg/L)					
7	Temp (deg C)	24.2	22.6	24.0	23.0	23.3
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	235	214	216	164	217
2	B (mg/L)	0.07	0.08	0.00		0.03
3	Ca (mg/L)	27	33	34	35	39
4	Cl (mg/L)	25.2	29.7	31.4	23.8	27.0
5	F (mg/L)	0.19	0.35			0.49
6	Fe (mg/L)	0.0	0.2	0.0		0.1
7	HCO ₃ (mg/L)	206	261	263	200	265
8	K (mg/L)	1.5	2.2	2.9	3.0	1.7
9	Mg (mg/L)	19.8	24.3	20.9	10.7	15.2
10	Na (mg/L)	29.1	36.3	36.4	30.6	43.0
11	NO ₂ +NO ₃ (mg N/L)	0.69	1.18	1.62	1.42	1.88
12	NO ₂ -N (mgN/L)	0.00	0.04	0.01	0.01	0.05
13	NO ₃ -N (mgN/L)	0.69	1.13	1.60	1.40	1.83
14	o-PO ₄ -P (mg P/L)	0.014	0.026	0.021		0.072
15	SiO ₂ (mg/L)	24.9	22.2	19.2		25.6
16	SO ₄ (mg/L)	4.2	8.6	5.4	4.8	6.6
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	67	83	84	88	97
2	HAR_Total (mgCaCO ₃ /L)	149	184	171	133	161
3	Na% (%)	27	29	31	33	37
4	RSC (-)	0.5	0.6	0.9	0.6	1.1
5	SAR (-)	1.0	1.1	1.2	1.2	1.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	0.786	16.22			1.577
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	488	510			570
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.9	7.6			7.8
6	TDS (mg/L)		303			
7	Temp (deg C)	24.5	25.5			24.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	212	233			165
2	B (mg/L)	0.27	0.28			0.00
3	Ca (mg/L)	37	35			39
4	Cl (mg/L)	26.3	25.4			66.0
5	F (mg/L)	0.38	0.47			0.53
6	Fe (mg/L)	0.1	0.2			0.2
7	HCO ₃ (mg/L)	259	284			202
8	K (mg/L)	6.0	2.5			1.2
9	Mg (mg/L)	23.6	25.3			19.1
10	Na (mg/L)	28.6	36.6			49.0
11	NO ₂ +NO ₃ (mg N/L)	1.57	0.94			0.04
12	NO ₂ -N (mgN/L)	0.01	0.00			0.00
13	NO ₃ -N (mgN/L)	1.56	0.94			0.04
14	o-PO ₄ -P (mg P/L)	0.028	0.517			0.703
15	SiO ₂ (mg/L)	15.6	27.1			2.8
16	SO ₄ (mg/L)	7.8	6.5			4.2
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)	0.3				
3	Cr ($\mu\text{g}/\text{L}$)	1.9				
4	Cu ($\mu\text{g}/\text{L}$)	7.4				
5	Ni ($\mu\text{g}/\text{L}$)	2.0				
6	Pb ($\mu\text{g}/\text{L}$)	2.6				
7	Zn ($\mu\text{g}/\text{L}$)	10.3				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	93	88			98
2	HAR_Total (mgCaCO ₃ /L)	191	193			177
3	Na% (%)	24	29			37
4	RSC (-)	0.4	0.8			0.0
5	SAR (-)	0.9	1.1			1.6
PESTICIDES						

Water Quality monitoring suspended as per rationalisation of sites.

Water Quality Seasonal Average for the period: 2005-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)				
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)				
4	pH_FLD (pH units)				
5	pH_GEN (pH units)				
6	TDS (mg/L)				
7	Temp (deg C)				
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)				
2	B (mg/L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	F (mg/L)				
6	Fe (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NO ₂ +NO ₃ (mg N/L)				
12	NO ₂ -N (mgN/L)				
13	NO ₃ -N (mgN/L)				
14	o-PO ₄ -P (mg P/L)				
15	SiO ₂ (mg/L)				
16	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					
		No flow / Dry Bed			

Water Quality Seasonal Average for the period: 2005-2016

Station Name : K.M.Vadi (CCQ00E9)

Local River : Lakhshmanthirtha

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

River Water

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
	PHYSICAL				
1	Q (cumec)				
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)				
4	pH_FLD (pH units)				
5	pH_GEN (pH units)				
6	TDS (mg/L)				
7	Temp (deg C)				
	CHEMICAL				
1	ALK-TOT (mgCaCO ₃ /L)				
2	B (mg/L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	F (mg/L)				
6	Fe (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NO ₂ +NO ₃ (mg N/L)				
12	NO ₂ -N (mgN/L)				
13	NO ₃ -N (mgN/L)				
14	o-PO ₄ -P (mg P/L)				
15	SiO ₂ (mg/L)				
16	SO ₄ (mg/L)				
	BIOLOGICAL/BACTERIOLOGICAL				
	TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
	CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
	PESTICIDES				

HISTORY SHEET

Water Year : 2015-2016

Site	: AKKIHEBBAL	Code	: CCR00B7
State	: Karnataka	District	Mandyā
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Hemavathi	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Hemavathi
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 5236 Sq. Km.	Bank	: Right
Latitude	: 12° 36' 10"	Longitude	: 76° 24' 03"
Zero of Gauge (m)	: 745.000 (m.s.l)	04/08/1998	
	Opening Date	Closing Date	
Gauge	: 04/08/1998		
Discharge	: 23/01/2002		
Sediment	: 26/03/2013		
Water Quality	: 02/09/2002		

Water Quality Datasheet for the period : 2015-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	5.982	1.663	2.642
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	380	409	405
4	Odour_Code (-)	aromatic	aromatic	aromatic
5	pH_GEN (pH units)	7.9	8.1	7.7
6	TDS (mg/L)			
7	Temp (deg C)	26.0	27.0	26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	160	171	171
3	B (mg/L)	0.08	0.05	1.45
4	Ca (mg/L)	37	37	34
5	Cl (mg/L)	25.6	29.8	21.7
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.21	0.27	0.21
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	195	209	208
10	K (mg/L)	1.9	1.8	2.3
11	Mg (mg/L)	16.5	17.5	18.5
12	Na (mg/L)	18.6	22.6	21.5
13	NO ₂ +NO ₃ (mg N/L)	0.70	0.42	0.29
14	NO ₂ -N (mgN/L)	0.15	0.00	0.00
15	NO ₃ -N (mgN/L)	0.55	0.42	0.29
16	o-PO ₄ -P (mg P/L)	0.010	0.021	0.062
17	SiO ₂ (mg/L)	18.1	21.5	29.2
18	SO ₄ (mg/L)	7.2	6.5	9.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			0.4
2	DO (mg/L)	6.3	7.8	5.9
3	DO_SAT% (%)	78	98	72
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	92	92	84
2	HAR_Total (mgCaCO ₃ /L)	161	165	161
3	Na% (%)	20	23	22
4	RSC (-)	0.0	0.1	0.2
5	SAR (-)	0.6	0.8	0.7
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	5.634	47.54	51.86
2	Colour_Cod (-)	Clear	Clear	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	280	253	306
4	Odour_Code (-)	aromatic	aromatic	aromatic
5	pH_GEN (pH units)	7.5	7.5	7.6
6	TDS (mg/L)			
7	Temp (deg C)	26.0	26.0	26.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	103	101	124
3	B (mg/L)	1.10	0.34	0.34
4	Ca (mg/L)	27	24	26
5	Cl (mg/L)	17.8	18.8	23.8
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.44	0.19	0.30
8	Fe (mg/L)	0.1	0.1	0.1
9	HCO ₃ (mg/L)	125	124	151
10	K (mg/L)	1.7	1.3	1.7
11	Mg (mg/L)	10.7	10.7	12.6
12	Na (mg/L)	9.9	8.8	15.8
13	NO ₂ +NO ₃ (mg N/L)	0.88	0.80	0.60
14	NO ₂ -N (mgN/L)	0.07	0.01	0.00
15	NO ₃ -N (mgN/L)	0.81	0.78	0.60
16	o-PO ₄ -P (mg P/L)	0.248	0.207	0.258
17	SiO ₂ (mg/L)	45.2	16.3	17.4
18	SO ₄ (mg/L)	5.3	3.8	4.3
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.9	0.4	0.6
2	DO (mg/L)	6.0	5.3	5.8
3	DO_SAT% (%)	73	65	72
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	68	60	64
2	HAR_Total (mgCaCO ₃ /L)	113	105	117
3	Na% (%)	16	15	23
4	RSC (-)	0.0	0.0	0.2
5	SAR (-)	0.4	0.4	0.6
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	22.65	2.536	2.511
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	418	387	414
4	Odour_Code (-)	aromatic	odour free	odour free
5	pH_GEN (pH units)	7.9	8.1	7.8
6	TDS (mg/L)		184	196
7	Temp (deg C)	25.0	23.0	22.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	194	179	170
3	B (mg/L)	0.28	0.20	0.30
4	Ca (mg/L)	40	42	37
5	Cl (mg/L)	18.1	16.7	33.0
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.21	0.30	0.42
8	Fe (mg/L)	0.2	0.2	0.0
9	HCO ₃ (mg/L)	236	219	207
10	K (mg/L)	1.1	1.7	1.9
11	Mg (mg/L)	18.5	14.6	17.5
12	Na (mg/L)	20.1	20.5	22.6
13	NO ₂ +NO ₃ (mg N/L)	0.92	0.59	0.57
14	NO ₂ -N (mgN/L)	0.03	0.08	0.01
15	NO ₃ -N (mgN/L)	0.90	0.50	0.56
16	o-PO ₄ -P (mg P/L)	0.238	0.227	0.300
17	SiO ₂ (mg/L)	21.5	22.2	25.1
18	SO ₄ (mg/L)	4.8	6.0	6.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.0	0.6	1.4
2	DO (mg/L)	5.9	7.7	7.1
3	DO_SAT% (%)	72	90	82
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			0.4
2	Cd ($\mu\text{g}/\text{L}$)			0.0
3	Cr ($\mu\text{g}/\text{L}$)			0.1
4	Cu ($\mu\text{g}/\text{L}$)			0.3
5	Ni ($\mu\text{g}/\text{L}$)			1.4
6	Pb ($\mu\text{g}/\text{L}$)			0.6
7	Zn ($\mu\text{g}/\text{L}$)			3.1
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	100	104	92
2	HAR_Total (mgCaCO ₃ /L)	177	165	165
3	Na% (%)	20	21	23
4	RSC (-)	0.4	0.3	0.1
5	SAR (-)	0.7	0.7	0.8
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	2.112	0.809	0.020
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	412	420	418
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.6	7.7	7.1
6	TDS (mg/L)	195	199	198
7	Temp (deg C)	27.0	30.0	31.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	163	190	167
3	B (mg/L)	0.39	0.09	0.05
4	Ca (mg/L)	42	30	30
5	Cl (mg/L)	30.2	19.5	30.9
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.0	0.1	0.0
9	HCO ₃ (mg/L)	199	232	203
10	K (mg/L)	1.9	2.9	3.5
11	Mg (mg/L)	14.6	23.3	21.4
12	Na (mg/L)	21.0	24.0	25.8
13	NO ₂ +NO ₃ (mg N/L)	0.74	1.40	1.74
14	NO ₂ -N (mgN/L)	0.04	0.01	0.01
15	NO ₃ -N (mgN/L)	0.70	1.39	1.72
16	o-PO ₄ -P (mg P/L)	0.000	0.062	0.000
17	SiO ₂ (mg/L)	34.1	29.7	35.9
18	SO ₄ (mg/L)	7.1	6.2	6.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.4	1.2	1.2
2	DO (mg/L)	6.0	4.1	2.0
3	DO_SAT% (%)	75	54	27
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			3.6
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			0.6
4	Cu ($\mu\text{g}/\text{L}$)			0.5
5	Ni ($\mu\text{g}/\text{L}$)			0.9
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			5.9
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	104	76	76
2	HAR_Total (mgCaCO ₃ /L)	165	173	165
3	Na% (%)	22	23	25
4	RSC (-)	0.0	0.4	0.1
5	SAR (-)	0.7	0.8	0.9
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

Division : Cauvery Division, Bangalore

River Water Summary

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHICAL					
1	Q (cumec)	366	159.2	0.000	16.91
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	420	253	375
3	pH_GEN (pH units)	12	8.1	7.1	7.7
4	TDS (mg/L)	5	199	184	194
5	Temp (deg C)	12	31.0	22.0	26.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	12	194	101	158
3	B (mg/L)	12	1.45	0.05	0.39
4	Ca (mg/L)	12	42	24	34
5	Cl (mg/L)	12	33.0	16.7	23.8
6	CO ₃ (mg/L)	12	0.0	0.0	0
7	F (mg/L)	9	0.44	0.19	0.28
8	Fe (mg/L)	12	0.2	0.0	0.1
9	HCO ₃ (mg/L)	12	236	124	192
10	K (mg/L)	12	3.5	1.1	2
11	Mg (mg/L)	12	23.3	10.7	16.4
12	Na (mg/L)	12	25.8	8.8	19.3
13	NO ₂ +NO ₃ (mg N/L)	12	1.74	0.29	0.81
14	NO ₂ -N (mgN/L)	12	0.15	0.00	0.04
15	NO ₃ -N (mgN/L)	12	1.72	0.29	0.77
16	o-PO ₄ -P (mg P/L)	12	0.300	0.000	0.136
17	SiO ₂ (mg/L)	12	45.2	16.3	26.3
18	SO ₄ (mg/L)	12	9.1	3.8	6.1
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	10	1.4	0.4	0.8
2	DO (mg/L)	12	7.8	2.0	5.8
3	DO_SAT% (%)	12	98	27	71
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	2	3.6	0.4	2
2	Cd ($\mu\text{g}/\text{L}$)	1	0.0	0.0	0
3	Cr ($\mu\text{g}/\text{L}$)	2	0.6	0.1	0.4
4	Cu ($\mu\text{g}/\text{L}$)	2	0.5	0.3	0.4
5	Ni ($\mu\text{g}/\text{L}$)	2	1.4	0.9	1.1
6	Pb ($\mu\text{g}/\text{L}$)	1	0.6	0.6	0.6
7	Zn ($\mu\text{g}/\text{L}$)	2	5.9	3.1	4.5
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	104	60	84
2	HAR_Total (mgCaCO ₃ /L)	12	177	105	153
3	Na% (%)	12	25	15	21
4	RSC (-)	12	0.4	0.0	0.1
5	SAR (-)	12	0.9	0.4	0.7
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	275.6	19.76	98.27	72.4	56.01
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	377	259	242	247	253
3	pH_GEN (pH units)	7.8	8.0	7.8	7.9	7.9
4	TDS (mg/L)					
5	Temp (deg C)	25.7	25.7	25.4	25.5	25.2
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	103	76	51	98	108
3	B (mg/L)	0.00	0.00	0.02	0.29	0.04
4	Ca (mg/L)	23	15	16	23	23
5	Cl (mg/L)	45.3	32.1	27.7	14.8	15.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.37	0.53	0.20	0.12	0.17
8	Fe (mg/L)	0.1	1.7	0.2	0.1	0.1
9	HCO ₃ (mg/L)	126	93	62	120	132
10	K (mg/L)	14.0	9.3	2.1	1.3	1.5
11	Mg (mg/L)	12.2	9.2	8.8	9.9	10.9
12	Na (mg/L)	37.8	24.4	20.4	11.2	14.8
13	NO ₂ +NO ₃ (mg N/L)	1.74	0.93	0.55	0.48	0.57
14	NO ₂ -N (mgN/L)	0.00	0.00	0.00	0.02	0.01
15	NO ₃ -N (mgN/L)	1.74	0.93	0.55	0.47	0.56
16	o-PO ₄ -P (mg P/L)	0.025	0.183	0.253	0.000	0.019
17	SiO ₂ (mg/L)	4.5	13.3	13.6	15.8	15.0
18	SO ₄ (mg/L)	14.2	7.1	22.9	3.1	3.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					1.6
2	DO (mg/L)					5.6
3	DO_SAT% (%)					68
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	57	37	41	57	58
2	HAR_Total (mgCaCO ₃ /L)	107	76	78	98	103
3	Na% (%)	40	42	37	20	23
4	RSC (-)	0.1	0.1	0.0	0.1	0.1
5	SAR (-)	1.6	1.5	1.1	0.5	0.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	71.14	54.42	21.34	373.1	7.665
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	287	237	265	249	319
3	pH_GEN (pH units)	7.9	7.4	7.7	7.6	7.9
4	TDS (mg/L)					
5	Temp (deg C)	25.7	25.9	26.8	26.3	26.8
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	1.8
2	ALK-TOT (mgCaCO ₃ /L)	120	97	106	101	131
3	B (mg/L)	0.05	0.00		0.02	0.25
4	Ca (mg/L)	25	21	25	24	29
5	Cl (mg/L)	18.1	14.9	18.1	15.3	19.2
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	2.2
7	F (mg/L)	0.14	0.21	0.20	0.12	0.19
8	Fe (mg/L)	0.0	0.0		0.2	0.1
9	HCO ₃ (mg/L)	147	118	130	123	156
10	K (mg/L)	1.5	1.4	1.8	1.9	2.7
11	Mg (mg/L)	11.5	9.1	8.6	9.5	14.0
12	Na (mg/L)	16.8	12.1	15.4	13.5	15.8
13	NO ₂ +NO ₃ (mg N/L)	0.66	0.95	1.06	1.41	1.52
14	NO ₂ -N (mgN/L)	0.00	0.01	0.01	0.02	0.04
15	NO ₃ -N (mgN/L)	0.66	0.94	1.05	1.39	1.49
16	o-PO ₄ -P (mg P/L)	0.006	0.005		0.221	0.027
17	SiO ₂ (mg/L)	16.0	14.6		15.3	13.2
18	SO ₄ (mg/L)	4.2	3.5	3.1	6.5	6.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		0.8	0.7	1.1	1.9
2	DO (mg/L)	5.9	5.5	5.9	6.5	6.2
3	DO_SAT% (%)	72	67	74	80	77
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.7	4.2	
2	Cd ($\mu\text{g}/\text{L}$)				0.1	
3	Cr ($\mu\text{g}/\text{L}$)			2.6	2.3	
4	Cu ($\mu\text{g}/\text{L}$)			17.6	0.9	
5	Ni ($\mu\text{g}/\text{L}$)			1.5	9.2	
6	Pb ($\mu\text{g}/\text{L}$)				0.0	
7	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	63	53	62	59	74
2	HAR_Total (mgCaCO ₃ /L)	111	91	98	99	132
3	Na% (%)	25	22	25	24	20
4	RSC (-)	0.2	0.1	0.2	0.1	0.1
5	SAR (-)	0.7	0.5	0.7	0.6	0.6
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	12.69	44.73	32.99	47.09	36.37
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	345	440	311	353	341
3	pH_GEN (pH units)	7.7	8.0	8.1	8.1	7.9
4	TDS (mg/L)					
5	Temp (deg C)	26.2	21.8	23.3	23.1	23.1
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	141	110	47	64	153
3	B (mg/L)	0.60	0.03	0.00	0.04	0.11
4	Ca (mg/L)	32	26	20	20	31
5	Cl (mg/L)	22.7	57.3	37.5	42.9	16.9
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.26	0.13	0.15	0.17	0.18
8	Fe (mg/L)	0.1	0.1	1.4	0.2	0.1
9	HCO ₃ (mg/L)	172	134	57	78	187
10	K (mg/L)	1.8	21.8	7.6	2.3	1.7
11	Mg (mg/L)	14.8	11.1	13.4	14.7	15.3
12	Na (mg/L)	16.3	48.1	26.4	29.7	19.0
13	NO ₂ +NO ₃ (mg N/L)	0.62	1.78	14.29	0.68	0.54
14	NO ₂ -N (mgN/L)	0.05	0.00	0.00	0.00	0.01
15	NO ₃ -N (mgN/L)	0.57	1.78	14.29	0.68	0.53
16	o-PO ₄ -P (mg P/L)	0.110		0.000	0.362	0.044
17	SiO ₂ (mg/L)	26.1	4.2	1.3	19.1	18.6
18	SO ₄ (mg/L)	6.4	24.3	12.2	39.5	3.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.6				
2	DO (mg/L)	6.2				
3	DO_SAT% (%)	77				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	79	65	50	50	77
2	HAR_Total (mgCaCO ₃ /L)	141	111	106	111	141
3	Na% (%)	19	41	28	36	23
4	RSC (-)	0.1	0.1	0.0	0.0	0.3
5	SAR (-)	0.6	2.0	1.1	1.2	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	49.69	33.84	45.79	19.51	17.13
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	276	322	293	327	336
3	pH_GEN (pH units)	7.9	8.0	7.3	7.7	7.9
4	TDS (mg/L)					
5	Temp (deg C)	24.4	23.6	24.0	23.0	24.3
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	123	138	127	141	153
3	B (mg/L)	0.06	0.04			0.08
4	Ca (mg/L)	26	28	25	34	28
5	Cl (mg/L)	15.5	18.9	16.8	18.3	14.7
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	1.00	0.25		0.27	0.28
8	Fe (mg/L)	0.1	0.0	0.1		0.0
9	HCO ₃ (mg/L)	150	168	155	172	187
10	K (mg/L)	1.3	1.6	1.4	1.5	1.4
11	Mg (mg/L)	11.9	12.9	12.6	12.2	12.4
12	Na (mg/L)	16.5	19.1	17.0	16.9	22.2
13	NO ₂ +NO ₃ (mg N/L)	0.46	0.67	0.89	1.07	1.24
14	NO ₂ -N (mgN/L)	0.01	0.02	0.00	0.01	0.04
15	NO ₃ -N (mgN/L)	0.44	0.64	0.89	1.05	1.20
16	o-PO ₄ -P (mg P/L)	0.142	0.010	0.005		0.052
17	SiO ₂ (mg/L)	17.0	15.4	12.8		19.9
18	SO ₄ (mg/L)	3.3	5.1	3.8	4.3	3.7
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.5	0.8	0.6	0.4	0.8
2	DO (mg/L)	6.1	6.5	6.1	5.8	6.4
3	DO_SAT% (%)	72	77	72	67	76
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.3	8.0	
2	Cd ($\mu\text{g}/\text{L}$)			0.3	0.0	
3	Cr ($\mu\text{g}/\text{L}$)			3.1	0.4	
4	Cu ($\mu\text{g}/\text{L}$)			47.6	29.7	
5	Ni ($\mu\text{g}/\text{L}$)			2.8	7.5	
6	Pb ($\mu\text{g}/\text{L}$)			0.3		
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	64	70	62	84	71
2	HAR_Total (mgCaCO ₃ /L)	114	124	115	135	123
3	Na% (%)	24	25	24	21	28
4	RSC (-)	0.2	0.3	0.3	0.1	0.6
5	SAR (-)	0.7	0.7	0.7	0.6	0.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	18.54	19.89	6.404		19.43
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	337	381	531		311
3	pH_GEN (pH units)	8.1	7.9	7.8		7.8
4	TDS (mg/L)		190			
5	Temp (deg C)	23.8	24.0	25.5		27.5
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0		0.0
2	ALK-TOT (mgCaCO ₃ /L)	144	167	104		70
3	B (mg/L)	0.24	0.28			0.07
4	Ca (mg/L)	34	36	30		21
5	Cl (mg/L)	17.9	22.9	78.3		33.6
6	CO ₃ (mg/L)	0.0	0.0	0.0		0.0
7	F (mg/L)	0.26	0.31	0.29		0.29
8	Fe (mg/L)	0.1	0.1	0.2		0.3
9	HCO ₃ (mg/L)	176	203	127		86
10	K (mg/L)	3.9	1.6	8.0		1.4
11	Mg (mg/L)	14.1	15.8	16.7		11.5
12	Na (mg/L)	15.4	19.8	65.1		24.6
13	NO ₂ +NO ₃ (mg N/L)	1.09	0.67	1.67		0.73
14	NO ₂ -N (mgN/L)	0.01	0.03	0.00		0.00
15	NO ₃ -N (mgN/L)	1.09	0.64	1.67		0.73
16	o-PO ₄ -P (mg P/L)	0.021	0.256			0.424
17	SiO ₂ (mg/L)	12.7	21.6	12.2		26.7
18	SO ₄ (mg/L)	5.5	5.3	45.4		26.6
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	0.9			
2	DO (mg/L)	7.0	6.6			
3	DO_SAT% (%)	83	79			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		0.4	21.4		7.6
2	Cd ($\mu\text{g}/\text{L}$)	0.1	0.0	0.0		1.0
3	Cr ($\mu\text{g}/\text{L}$)	2.6	0.1	8.3		
4	Cu ($\mu\text{g}/\text{L}$)	2.6	0.3	2.4		3.0
5	Ni ($\mu\text{g}/\text{L}$)	0.9	1.4	7.8		
6	Pb ($\mu\text{g}/\text{L}$)	1.0	0.6			1.6
7	Zn ($\mu\text{g}/\text{L}$)	9.8	3.1			32.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	85	90	75		53
2	HAR_Total (mgCaCO ₃ /L)	144	156	144		101
3	Na% (%)	18	22	47		33
4	RSC (-)	0.0	0.2	0.0		0.0
5	SAR (-)	0.6	0.7	2.4		1.1
PESTICIDES						

Samples not collected

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	5.163	6.436	26.21	5.573
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	365	306	339	289
3	pH_GEN (pH units)	7.8	7.8	7.5	7.3
4	TDS (mg/L)				
5	Temp (deg C)	25.7	25.7	25.3	26.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	158	128	130	126
3	B (mg/L)	0.09	0.07	0.06	
4	Ca (mg/L)	33	26	28	24
5	Cl (mg/L)	18.5	19.9	17.3	17.2
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.22	0.20	0.24	0.21
8	Fe (mg/L)	0.1	0.1	0.1	
9	HCO ₃ (mg/L)	193	156	159	153
10	K (mg/L)	1.8	1.8	1.6	2.0
11	Mg (mg/L)	15.9	13.3	12.6	11.5
12	Na (mg/L)	21.2	18.1	18.5	16.5
13	NO ₂ +NO ₃ (mg N/L)	0.55	0.56	0.73	1.19
14	NO ₂ -N (mgN/L)	0.00	0.01	0.02	0.00
15	NO ₃ -N (mgN/L)	0.55	0.55	0.71	1.19
16	o-PO ₄ -P (mg P/L)	0.014	0.014	0.016	
17	SiO ₂ (mg/L)	19.9	17.7	16.0	
18	SO ₄ (mg/L)	5.1	3.4	5.5	3.0
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)		0.6		0.5
2	DO (mg/L)		5.2	5.6	4.8
3	DO_SAT% (%)		63	68	61
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.6	0.8
2	Cd ($\mu\text{g}/\text{L}$)				0.2
3	Cr ($\mu\text{g}/\text{L}$)			0.9	2.8
4	Cu ($\mu\text{g}/\text{L}$)			3.5	6.8
5	Ni ($\mu\text{g}/\text{L}$)	12.9			0.9
6	Pb ($\mu\text{g}/\text{L}$)			0.5	3.6
7	Zn ($\mu\text{g}/\text{L}$)				20.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	83	65	69	61
2	HAR_Total (mgCaCO ₃ /L)	149	121	122	109
3	Na% (%)	24	24	25	25
4	RSC (-)	0.2	0.2	0.2	0.4
5	SAR (-)	0.8	0.7	0.7	0.7
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Akkihebbal (CCR00B7)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.957	1.535	2.752	0.98
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	341	405	415	417
3	pH_GEN (pH units)	8.0	7.7	7.8	7.4
4	TDS (mg/L)				197
5	Temp (deg C)	25.7	26.8	27.7	29.3
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	133	180	173	174
3	B (mg/L)	0.00	0.10	0.33	0.18
4	Ca (mg/L)	30	34	36	34
5	Cl (mg/L)	22.5	20.5	25.4	26.9
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)		0.28	0.38	
8	Fe (mg/L)	0.1	0.1	0.1	0.0
9	HCO ₃ (mg/L)	163	220	211	212
10	K (mg/L)	2.8	2.0	3.9	2.8
11	Mg (mg/L)	14.9	15.9	17.8	19.8
12	Na (mg/L)	16.5	22.6	19.9	23.6
13	NO ₂ +NO ₃ (mg N/L)	1.04	1.14	0.67	1.29
14	NO ₂ -N (mgN/L)	0.00	0.03	0.01	0.02
15	NO ₃ -N (mgN/L)	1.04	1.11	0.66	1.27
16	o-PO ₄ -P (mg P/L)	0.017	0.041	0.021	0.021
17	SiO ₂ (mg/L)	20.2	18.0	13.7	33.2
18	SO ₄ (mg/L)	5.6	5.7	6.7	6.5
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.1	1.6	0.9	0.9
2	DO (mg/L)	5.6	6.2	5.3	4.0
3	DO_SAT% (%)	68	78	66	52
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	4.5	2.7		3.6
2	Cd ($\mu\text{g}/\text{L}$)	0.2	0.0		
3	Cr ($\mu\text{g}/\text{L}$)	0.2	0.5		0.6
4	Cu ($\mu\text{g}/\text{L}$)	1.1	2.8		0.5
5	Ni ($\mu\text{g}/\text{L}$)	2.9	9.3		0.9
6	Pb ($\mu\text{g}/\text{L}$)	3.5	1.7		
7	Zn ($\mu\text{g}/\text{L}$)	0.3	16.0		5.9
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	75	85	91	85
2	HAR_Total (mgCaCO ₃ /L)	137	151	165	168
3	Na% (%)	20	24	20	23
4	RSC (-)	0.1	0.6	0.2	0.1
5	SAR (-)	0.6	0.8	0.7	0.8
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: M.H. HALLI	Code	: CCR00M8
State	: Karnataka	District	Hassan
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Hemavathi	Sub Tributary	: -
Sub-Sub Tributary	: -	Local River	: Hemavathi
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 3050 Sq. Km.	Bank	: Left
Latitude	: 12° 49' 08"	Longitude	: 76° 08' 00"
Zero of Gauge (m)	: 838.000 (m.s.l)	04/10/1977	
	Opening Date	Closing Date	
Gauge	: 04/10/1977		
Discharge	: 16/10/1978		
Sediment	: 01/06/1994		
Water Quality	: 01/12/1980		

Water Quality Datasheet for the period : 2015-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/07/2015	01/09/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	21.79	15.46
2	Colour_Cod (-)		Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		151	177
4	Odour_Code (-)		odour free	odour free
5	pH_GEN (pH units)		6.8	6.8
6	TDS (mg/L)			
7	Temp (deg C)		27.0	26.5
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)		51	66
3	B (mg/L)		1.67	0.27
4	Ca (mg/L)		14	14
5	Cl (mg/L)		15.6	9.6
6	CO ₃ (mg/L)		0.0	0.0
7	F (mg/L)		0.29	0.17
8	Fe (mg/L)		0.1	0.1
9	HCO ₃ (mg/L)		63	81
10	K (mg/L)		1.4	1.5
11	Mg (mg/L)		5.8	8.7
12	Na (mg/L)		6.1	7.1
13	NO ₂ +NO ₃ (mg N/L)		0.80	0.63
14	NO ₂ -N (mgN/L)		0.06	0.00
15	NO ₃ -N (mgN/L)		0.74	0.63
16	o-PO ₄ -P (mg P/L)		0.796	0.899
17	SiO ₂ (mg/L)		30.7	15.4
18	SO ₄ (mg/L)		3.7	3.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		0.7	1.0
2	DO (mg/L)		3.2	5.2
3	DO_SAT% (%)		40	64
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		36	36
2	HAR_Total (mgCaCO ₃ /L)		60	72
3	Na% (%)		18	17
4	RSC (-)		0.0	0.0
5	SAR (-)		0.3	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/01/2016	01/03/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	6.757	5.695	0.000
2	Colour_Cod (-)	Clear	Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	167	157	
4	Odour_Code (-)	odour free	odour free	
5	pH_GEN (pH units)	6.9	6.7	
6	TDS (mg/L)	80	75	
7	Temp (deg C)	26.0	26.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	67	49	
3	B (mg/L)	0.18	0.34	
4	Ca (mg/L)	18	16	
5	Cl (mg/L)	10.3	18.1	
6	CO ₃ (mg/L)	0.0	0.0	
7	F (mg/L)	0.15		
8	Fe (mg/L)	0.2	0.0	
9	HCO ₃ (mg/L)	81	60	
10	K (mg/L)	1.5	1.4	
11	Mg (mg/L)	4.9	5.8	
12	Na (mg/L)	6.9	6.3	
13	NO ₂ +NO ₃ (mg N/L)	0.55	0.53	
14	NO ₂ -N (mgN/L)	0.00	0.00	
15	NO ₃ -N (mgN/L)	0.55	0.53	
16	o-PO ₄ -P (mg P/L)	0.207	0.000	
17	SiO ₂ (mg/L)	20.0	14.3	
18	SO ₄ (mg/L)	3.5	3.6	
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	1.1	0.8	
2	DO (mg/L)	3.0	5.4	
3	DO_SAT% (%)	36	66	
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	44	40	
2	HAR_Total (mgCaCO ₃ /L)	64	64	
3	Na% (%)	19	17	
4	RSC (-)	0.1	0.0	
5	SAR (-)	0.4	0.3	
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

Division : Cauvery Division, Bangalore

River Water Summary

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHICAL					
1	Q (cumec)	366	174.5	0.000	14.33
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	4	177	151	163
3	pH_GEN (pH units)	4	6.9	6.7	6.8
4	TDS (mg/L)	2	80	75	78
5	Temp (deg C)	4	27.0	26.0	26.5
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	4	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	4	67	49	58
3	B (mg/L)	4	1.67	0.18	0.61
4	Ca (mg/L)	4	18	14	16
5	Cl (mg/L)	4	18.1	9.6	13.4
6	CO ₃ (mg/L)	4	0.0	0.0	0
7	F (mg/L)	3	0.29	0.15	0.2
8	Fe (mg/L)	4	0.2	0.0	0.1
9	HCO ₃ (mg/L)	4	81	60	71
10	K (mg/L)	4	1.5	1.4	1.4
11	Mg (mg/L)	4	8.7	4.9	6.3
12	Na (mg/L)	4	7.1	6.1	6.6
13	NO ₂ +NO ₃ (mg N/L)	4	0.80	0.53	0.63
14	NO ₂ -N (mgN/L)	4	0.06	0.00	0.01
15	NO ₃ -N (mgN/L)	4	0.74	0.53	0.61
16	o-PO ₄ -P (mg P/L)	4	0.899	0.000	0.475
17	SiO ₂ (mg/L)	4	30.7	14.3	20.1
18	SO ₄ (mg/L)	4	3.7	3.5	3.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	4	1.1	0.7	0.9
2	DO (mg/L)	4	5.4	3.0	4.2
3	DO_SAT% (%)	4	66	36	52
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	4	44	36	39
2	HAR_Total (mgCaCO ₃ /L)	4	72	60	65
3	Na% (%)	4	19	17	18
4	RSC (-)	4	0.1	0.0	0
5	SAR (-)	4	0.4	0.3	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	45.53	28.73	37.04	197.3	22.66
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	322	237	111	162	143
3	pH_GEN (pH units)	7.3	7.5	7.5	7.8	7.6
4	TDS (mg/L)					
5	Temp (deg C)	22.8	23.0	24.0	25.8	24.5
6	TS (mg/L)					
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	58	66	30	49	52
3	B (mg/L)	0.00	0.00	0.00		0.02
4	Ca (mg/L)	12	16	8	14	12
5	Cl (mg/L)	58.2	26.2	14.9	17.4	12.7
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.72	0.09	0.29	0.06	0.11
8	Fe (mg/L)	0.4	0.4	0.2		0.1
9	HCO ₃ (mg/L)	70	81	37	59	63
10	K (mg/L)	2.2	6.5	2.5	2.0	1.4
11	Mg (mg/L)	6.7	7.9	2.9	4.9	5.3
12	Na (mg/L)	47.0	19.1	9.7	12.3	7.9
13	NO ₂ +NO ₃ (mg N/L)	0.13	0.00	0.06	0.57	0.55
14	NO ₂ -N (mgN/L)	0.00	0.00	0.00	0.01	0.00
15	NO ₃ -N (mgN/L)	0.13	0.00	0.06	0.56	0.55
16	o-PO ₄ -P (mg P/L)	0.000	0.000	0.165		0.005
17	SiO ₂ (mg/L)	1.1	6.0	2.4		10.6
18	SO ₄ (mg/L)	8.4	8.4	0.6	2.9	2.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.7	1.0	2.1	0.6	0.8
2	DO (mg/L)	5.8	6.7	6.0	4.9	5.8
3	DO_SAT% (%)	67	78	71	60	69
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	29	39	20	34	30
2	HAR_Total (mgCaCO ₃ /L)	57	72	31	54	52
3	Na% (%)	65	35	38	34	24
4	RSC (-)	0.1	0.0	0.0	0.0	0.0
5	SAR (-)	3.2	1.0	0.8	0.8	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	13.33	50.9	39	15.29	96.43
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	192	121	134	176	120
3	pH_GEN (pH units)	7.5	6.8	7.0	7.0	7.1
4	TDS (mg/L)					
5	Temp (deg C)	24.8	26.3	26.0	26.0	26.0
6	TS (mg/L)					
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	74	44	44	64	37
3	B (mg/L)		0.01		0.01	0.01
4	Ca (mg/L)	18	11	12	16	11
5	Cl (mg/L)	17.2	10.8	14.0	12.1	11.9
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.12	0.15	0.12	0.19	0.42
8	Fe (mg/L)	0.1	0.0		0.1	0.1
9	HCO ₃ (mg/L)	90	54	54	77	45
10	K (mg/L)	1.5	1.3	1.4	1.4	1.4
11	Mg (mg/L)	6.8	4.4	5.1	6.8	4.9
12	Na (mg/L)	9.6	5.6	6.3	8.3	5.0
13	NO ₂ +NO ₃ (mg N/L)	0.64	0.78	0.74	1.54	1.01
14	NO ₂ -N (mgN/L)	0.00	0.07	0.01	0.06	0.06
15	NO ₃ -N (mgN/L)	0.64	0.71	0.74	1.49	0.95
16	o-PO ₄ -P (mg P/L)	0.016	0.016		0.072	0.057
17	SiO ₂ (mg/L)	11.5	11.6		8.1	10.8
18	SO ₄ (mg/L)	3.6	2.7	4.0	8.9	4.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		0.4	0.8	1.5	0.5
2	DO (mg/L)	5.8	5.2	5.4	5.9	5.3
3	DO_SAT% (%)	70	64	66	73	64
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)				0.0	
2	Cd ($\mu\text{g}/\text{L}$)				0.0	
3	Cr ($\mu\text{g}/\text{L}$)			9.2	1.4	
4	Cu ($\mu\text{g}/\text{L}$)			9.4	1.0	
5	Ni ($\mu\text{g}/\text{L}$)			0.3	8.9	
6	Pb ($\mu\text{g}/\text{L}$)				0.9	
7	Zn ($\mu\text{g}/\text{L}$)				3.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	46	28	29	40	28
2	HAR_Total (mgCaCO ₃ /L)	74	46	50	68	48
3	Na% (%)	21	20	21	21	18
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.5	0.4	0.4	0.4	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	21.79	10.19	5.456	15.29	22.78
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	151	317	262	206	121
3	pH_GEN (pH units)	6.8	7.7	7.3	7.7	8.2
4	TDS (mg/L)					
5	Temp (deg C)	27.0	23.0	24.9	25.0	25.5
6	TS (mg/L)			55		
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	3.6
2	ALK-TOT (mgCaCO ₃ /L)	51	89	92	46	39
3	B (mg/L)	1.67	0.00	0.00	0.00	0.10
4	Ca (mg/L)	14	17	21	10	10
5	Cl (mg/L)	15.6	48.0	23.6	34.5	12.4
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	4.3
7	F (mg/L)	0.28	0.76	0.17	0.06	0.11
8	Fe (mg/L)	0.1	0.3	0.0	0.2	0.1
9	HCO ₃ (mg/L)	63	108	113	56	39
10	K (mg/L)	1.4	4.9	8.5	2.7	1.6
11	Mg (mg/L)	5.8	9.8	10.5	4.7	3.4
12	Na (mg/L)	6.1	40.1	17.2	25.5	6.9
13	NO ₂ +NO ₃ (mg N/L)	0.80	0.14	0.00	0.06	0.48
14	NO ₂ -N (mgN/L)	0.06	0.00	0.00	0.00	0.03
15	NO ₃ -N (mgN/L)	0.74	0.14	0.00	0.06	0.45
16	o-PO ₄ -P (mg P/L)	0.796	0.000	0.000	0.076	0.026
17	SiO ₂ (mg/L)	30.7	4.6	1.9	5.8	10.6
18	SO ₄ (mg/L)	3.7	6.0	11.7	4.5	1.3
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.7	0.8	1.1	1.5	2.5
2	DO (mg/L)	3.2	6.2	7.9	5.7	6.3
3	DO_SAT% (%)	40	71	95	69	77
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	36	41	54	26	26
2	HAR_Total (mgCaCO ₃ /L)	60	82	97	45	40
3	Na% (%)	18	49	26	54	26
4	RSC (-)	0.0	0.1	0.0	0.1	0.0
5	SAR (-)	0.3	1.9	0.8	1.7	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	29.22	21.72	23.62	7.858	12.42
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	108	165	151	158	189
3	pH_GEN (pH units)	7.4	7.5	7.0	7.1	7.1
4	TDS (mg/L)					
5	Temp (deg C)	24.3	25.3	26.0	25.8	26.0
6	TS (mg/L)					
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	39	38	55	54	77
3	B (mg/L)	0.04	0.04	0.00		0.02
4	Ca (mg/L)	10	15	14	14	21
5	Cl (mg/L)	11.7	13.8	11.5	13.1	13.8
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.10	0.11		0.15	0.17
8	Fe (mg/L)	0.0	0.0	0.0		0.1
9	HCO ₃ (mg/L)	48	75	67	66	93
10	K (mg/L)	1.3	1.4	1.3	1.3	1.0
11	Mg (mg/L)	4.4	6.3	5.8	6.3	5.8
12	Na (mg/L)	5.5	6.8	6.5	7.0	8.5
13	NO ₂ +NO ₃ (mg N/L)	0.58	0.77	1.02	0.94	1.33
14	NO ₂ -N (mgN/L)	0.01	0.00	0.01	0.01	0.06
15	NO ₃ -N (mgN/L)	0.57	0.77	1.01	0.93	1.28
16	o-PO ₄ -P (mg P/L)	0.010	0.005	0.010		0.010
17	SiO ₂ (mg/L)	12.2	11.6	11.1		18.8
18	SO ₄ (mg/L)	1.6	3.4	2.8	3.5	2.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	0.8	1.0	0.6	1.0
2	DO (mg/L)	6.5	5.9	6.2	5.9	6.6
3	DO_SAT% (%)	77	72	77	72	81
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.3	0.3	
2	Cd ($\mu\text{g}/\text{L}$)			0.9	0.0	
3	Cr ($\mu\text{g}/\text{L}$)			1.0	0.4	
4	Cu ($\mu\text{g}/\text{L}$)			21.8	1.2	
5	Ni ($\mu\text{g}/\text{L}$)			1.4	5.9	
6	Pb ($\mu\text{g}/\text{L}$)			31.8		
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	24	37	34	34	52
2	HAR_Total (mgCaCO ₃ /L)	42	63	58	60	76
3	Na% (%)	22	19	19	20	19
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	0.4	0.4	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	12.36	11.11	12.18	12.09	18.04
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	180	172	398	203	190
3	pH_GEN (pH units)	7.5	6.8	7.7	7.6	7.7
4	TDS (mg/L)		80			
5	Temp (deg C)	26.5	26.3	23.5	29.0	25.0
6	TS (mg/L)					
CHEMICAL						
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	68	67	104	47	40
3	B (mg/L)	0.16	0.23	0.01	0.00	0.04
4	Ca (mg/L)	18	16	18	10	12
5	Cl (mg/L)	11.9	9.9	49.0	24.2	23.5
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0	0.0
7	F (mg/L)	0.16	0.16	0.90	0.63	0.58
8	Fe (mg/L)	0.0	0.1	0.4	0.0	0.2
9	HCO ₃ (mg/L)	83	81	127	58	48
10	K (mg/L)	2.9	1.5	4.8	4.4	3.8
11	Mg (mg/L)	6.8	6.8	13.3	8.1	6.2
12	Na (mg/L)	6.6	7.0	41.4	18.5	16.4
13	NO ₂ +NO ₃ (mg N/L)	1.51	0.59	0.16	0.00	0.49
14	NO ₂ -N (mgN/L)	0.01	0.00	0.00	0.00	0.00
15	NO ₃ -N (mgN/L)	1.50	0.59	0.16	0.00	0.49
16	o-PO ₄ -P (mg P/L)	0.057	0.553	0.000	0.000	0.920
17	SiO ₂ (mg/L)	11.4	17.7	8.0	7.4	9.8
18	SO ₄ (mg/L)	6.7	3.5	6.2	15.1	20.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.9	1.0	1.1	0.9	1.4
2	DO (mg/L)	5.6	4.1	6.9	6.9	7.0
3	DO_SAT% (%)	69	50	81	89	85
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			10.7	4.2	6.6
2	Cd ($\mu\text{g}/\text{L}$)	0.1			4.0	1.0
3	Cr ($\mu\text{g}/\text{L}$)	0.5		4.1		
4	Cu ($\mu\text{g}/\text{L}$)	4.1		3.1	3.4	3.0
5	Ni ($\mu\text{g}/\text{L}$)	2.1				
6	Pb ($\mu\text{g}/\text{L}$)	2.9			17.0	9.6
7	Zn ($\mu\text{g}/\text{L}$)	8.3			81.0	41.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	46	40	44	25	29
2	HAR_Total (mgCaCO ₃ /L)	74	68	100	59	55
3	Na% (%)	16	18	46	39	34
4	RSC (-)	0.0	0.0	0.1	0.0	0.1
5	SAR (-)	0.3	0.4	1.8	1.1	1.1
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	7.115	15.59	19.44	5.138
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	136	149	202	149
3	pH_GEN (pH units)	7.4	7.5	7.2	6.8
4	TDS (mg/L)				
5	Temp (deg C)	25.3	25.5	25.3	25.8
6	TS (mg/L)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	50	55	74	49
3	B (mg/L)	0.07	0.03	0.04	
4	Ca (mg/L)	12	14	18	11
5	Cl (mg/L)	13.3	15.4	16.9	16.2
6	CO ₃ (mg/L)	0.0	0.0	0.0	0.0
7	F (mg/L)	0.09	0.09	0.17	0.11
8	Fe (mg/L)	0.1	0.0	0.0	
9	HCO ₃ (mg/L)	61	67	91	60
10	K (mg/L)	1.6	1.6	1.5	1.5
11	Mg (mg/L)	4.9	5.3	7.8	6.3
12	Na (mg/L)	8.0	8.2	8.1	7.8
13	NO ₂ +NO ₃ (mg N/L)	0.55	0.34	0.62	0.90
14	NO ₂ -N (mgN/L)	0.06	0.02	0.01	0.03
15	NO ₃ -N (mgN/L)	0.50	0.32	0.62	0.87
16	o-PO ₄ -P (mg P/L)	0.031	0.010	0.005	
17	SiO ₂ (mg/L)	12.3	12.7	12.7	
18	SO ₄ (mg/L)	1.8	1.8	3.9	2.4
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.7	1.5		0.2
2	DO (mg/L)	5.8	5.7	4.5	4.4
3	DO_SAT% (%)	70	70	55	54
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.3	1.0
2	Cd ($\mu\text{g}/\text{L}$)				0.1
3	Cr ($\mu\text{g}/\text{L}$)			1.1	10.2
4	Cu ($\mu\text{g}/\text{L}$)	1.7		3.5	13.9
5	Ni ($\mu\text{g}/\text{L}$)				0.2
6	Pb ($\mu\text{g}/\text{L}$)			0.1	5.6
7	Zn ($\mu\text{g}/\text{L}$)				64.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	30	34	46	28
2	HAR_Total (mgCaCO ₃ /L)	50	56	78	54
3	Na% (%)	25	24	18	23
4	RSC (-)	0.0	0.0	0.0	0.0
5	SAR (-)	0.5	0.5	0.4	0.5
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : M.H.Halli (CCR00M8)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	11.44		11.9	5.695
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	135		258	157
3	pH_GEN (pH units)	7.1		7.5	6.7
4	TDS (mg/L)				75
5	Temp (deg C)	26.8		26.0	26.5
6	TS (mg/L)				
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	0.0		0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	46		50	49
3	B (mg/L)	0.00		0.36	0.34
4	Ca (mg/L)	14		14	16
5	Cl (mg/L)	13.5		16.7	18.1
6	CO ₃ (mg/L)	0.0		0.0	0.0
7	F (mg/L)			0.16	
8	Fe (mg/L)	0.1		0.1	0.0
9	HCO ₃ (mg/L)	56		61	60
10	K (mg/L)	1.4		2.6	1.4
11	Mg (mg/L)	3.4		4.9	5.8
12	Na (mg/L)	7.6		8.0	6.3
13	NO ₂ +NO ₃ (mg N/L)	0.82		0.63	0.53
14	NO ₂ -N (mgN/L)	0.02		0.01	0.00
15	NO ₃ -N (mgN/L)	0.80		0.62	0.53
16	o-PO ₄ -P (mg P/L)	0.078		0.010	0.000
17	SiO ₂ (mg/L)	11.3		5.4	14.3
18	SO ₄ (mg/L)	2.6		3.6	3.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	0.7		0.9	0.8
2	DO (mg/L)	4.0		3.8	5.4
3	DO_SAT% (%)	49		47	66
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	5.6			
2	Cd ($\mu\text{g}/\text{L}$)	0.0			
3	Cr ($\mu\text{g}/\text{L}$)	0.3			
4	Cu ($\mu\text{g}/\text{L}$)	2.3			
5	Ni ($\mu\text{g}/\text{L}$)	0.8			
6	Pb ($\mu\text{g}/\text{L}$)	4.9			
7	Zn ($\mu\text{g}/\text{L}$)	11.1			
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	34		36	40
2	HAR_Total (mgCaCO ₃ /L)	48		56	64
3	Na% (%)	25		23	17
4	RSC (-)	0.0		0.0	0.0
5	SAR (-)	0.5		0.5	0.3
PESTICIDES					

No Flow / Dry Bed

HISTORY SHEET

Water Year : 2015-2016

Site	: THIMMANAHALLI	Code	: CCRI0F7
State	: Karnataka	District	Hassan
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Yagachi	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Yagachi
Division	: Cauvery Division, Bangalore	Sub-Division	: SWRSD - III Mangalore
Drainage Area	: 1010 Sq. Km.	Bank	: Left
Latitude	: 12° 58' 57"	Longitude	: 76° 02' 71"
Zero of Gauge (m)	: 8.000 (m.s.l) 902.425 (m.s.l)	09/12/1998 01/06/2000	- 31/05/2000
Gauge	: 09/12/1998	Opening Date	Closing Date
Discharge	: 29/06/2000		
Sediment	:		
Water Quality	: 02/09/2002		

Water Quality Datasheet for the period : 2015-2016

Station Name : THIMMANAHALLI (CCRIOF7)

Local River : Yagachi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	4.999	3.122	5.737
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	219	247	266
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.4	8.0	7.3
6	TDS (mg/L)			
7	Temp (deg C)	24.0	23.0	24.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	69	77	95
3	B (mg/L)	0.04	0.02	0.39
4	Ca (mg/L)	21	19	24
5	Cl (mg/L)	23.4	29.8	26.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.25	0.15	0.17
8	Fe (mg/L)	0.4	0.5	0.0
9	HCO ₃ (mg/L)	84	93	116
10	K (mg/L)	2.2	2.5	1.7
11	Mg (mg/L)	4.9	9.7	6.8
12	Na (mg/L)	15.0	18.2	19.1
13	NO ₂ +NO ₃ (mg N/L)	0.34	0.97	0.66
14	NO ₂ -N (mgN/L)	0.00	0.01	0.00
15	NO ₃ -N (mgN/L)	0.34	0.95	0.66
16	o-PO ₄ -P (mg P/L)	0.000	0.052	0.041
17	SiO ₂ (mg/L)	15.6	15.1	15.5
18	SO ₄ (mg/L)	5.8	13.3	7.1
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	52	48	60
2	HAR_Total (mgCaCO ₃ /L)	72	89	88
3	Na% (%)	30	30	32
4	RSC (-)	0.0	0.0	0.1
5	SAR (-)	0.8	0.8	0.9
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THIMMANAHALLI (CCRIOF7)

Local River : Yagachi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	5.883	8.599	35.01
2	Colour_Cod (-)	Clear	Clear	Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	243	244	198
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.3	7.2	7.3
6	TDS (mg/L)			
7	Temp (deg C)	26.0	25.0	25.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	79	84	62
3	B (mg/L)	0.41	0.29	0.31
4	Ca (mg/L)	19	22	14
5	Cl (mg/L)	21.7	27.0	26.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.44	0.21	0.25
8	Fe (mg/L)	0.2	0.1	0.1
9	HCO ₃ (mg/L)	96	102	76
10	K (mg/L)	1.9	1.6	4.4
11	Mg (mg/L)	7.8	7.8	7.8
12	Na (mg/L)	16.8	16.6	12.5
13	NO ₂ +NO ₃ (mg N/L)	0.87	0.63	0.90
14	NO ₂ -N (mgN/L)	0.00	0.01	0.00
15	NO ₃ -N (mgN/L)	0.87	0.62	0.90
16	o-PO ₄ -P (mg P/L)	0.186	0.238	0.196
17	SiO ₂ (mg/L)	18.0		13.0
18	SO ₄ (mg/L)	5.7	4.8	6.1
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	48	56	36
2	HAR_Total (mgCaCO ₃ /L)	80	88	68
3	Na% (%)	31	29	27
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.8	0.8	0.7
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THIMMANAHALLI (CCRIOF7)

Local River : Yagachi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	4.56	1.129	1.01
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	287	302	317
4	Odour_Code (-)	aromatic	odour free	odour free
5	pH_GEN (pH units)	7.7	7.8	7.4
6	TDS (mg/L)		144	150
7	Temp (deg C)	24.0	22.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	101	108	114
3	B (mg/L)	0.22	0.19	0.28
4	Ca (mg/L)	26	29	27
5	Cl (mg/L)	31.6	33.4	33.0
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.18	0.25	0.25
8	Fe (mg/L)	0.3	0.0	0.1
9	HCO ₃ (mg/L)	124	131	140
10	K (mg/L)	1.7	2.4	3.4
11	Mg (mg/L)	9.7	7.8	8.7
12	Na (mg/L)	17.4	20.2	21.6
13	NO ₂ +NO ₃ (mg N/L)	0.57	0.41	0.55
14	NO ₂ -N (mgN/L)	0.01	0.00	0.01
15	NO ₃ -N (mgN/L)	0.56	0.41	0.53
16	o-PO ₄ -P (mg P/L)	0.114	0.103	0.103
17	SiO ₂ (mg/L)	11.1	12.8	13.7
18	SO ₄ (mg/L)	2.9	4.0	4.3
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			1.0
2	Cd ($\mu\text{g}/\text{L}$)			0.0
3	Cr ($\mu\text{g}/\text{L}$)			0.0
4	Cu ($\mu\text{g}/\text{L}$)			0.5
5	Ni ($\mu\text{g}/\text{L}$)			0.3
6	Pb ($\mu\text{g}/\text{L}$)			0.6
7	Zn ($\mu\text{g}/\text{L}$)			1.2
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	64	72	68
2	HAR_Total (mgCaCO ₃ /L)	105	104	104
3	Na% (%)	26	29	30
4	RSC (-)	0.0	0.1	0.2
5	SAR (-)	0.7	0.9	0.9
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : THIMMANAHALLI (CCRIOF7)

Local River : Yagachi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.564	0.572	0.000
2	Colour_Cod (-)	Clear	Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	331	321	
4	Odour_Code (-)	odour free	odour free	
5	pH_GEN (pH units)	7.3	7.3	
6	TDS (mg/L)	157	152	
7	Temp (deg C)	26.0	27.0	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	
2	ALK-TOT (mgCaCO ₃ /L)	110	105	
3	B (mg/L)	0.34	0.13	
4	Ca (mg/L)	32	29	
5	Cl (mg/L)	40.1	32.7	
6	CO ₃ (mg/L)	0.0	0.0	
7	F (mg/L)			
8	Fe (mg/L)	0.1	0.1	
9	HCO ₃ (mg/L)	135	128	
10	K (mg/L)	3.9	3.5	
11	Mg (mg/L)	7.8	8.7	
12	Na (mg/L)	22.9	23.7	
13	NO ₂ +NO ₃ (mg N/L)	0.55	1.19	
14	NO ₂ -N (mgN/L)	0.00	0.01	
15	NO ₃ -N (mgN/L)	0.55	1.18	
16	o-PO ₄ -P (mg P/L)	0.021	0.010	
17	SiO ₂ (mg/L)	20.0	17.9	
18	SO ₄ (mg/L)	6.3	4.4	
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cd ($\mu\text{g}/\text{L}$)			
3	Cr ($\mu\text{g}/\text{L}$)			
4	Cu ($\mu\text{g}/\text{L}$)			
5	Ni ($\mu\text{g}/\text{L}$)			
6	Pb ($\mu\text{g}/\text{L}$)			
7	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	80	72	
2	HAR_Total (mgCaCO ₃ /L)	112	108	
3	Na% (%)	30	31	
4	RSC (-)	0.0	0.0	
5	SAR (-)	0.9	1.0	
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : THIMMANAHALLI (CCR10F7)

Local River : Yagachi

River Water Summary

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHICAL					
1	Q (cumec)	366	35.01	0.000	3.351
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	11	331	198	270
3	pH_GEN (pH units)	11	8.0	7.2	7.4
4	TDS (mg/L)	4	157	144	151
5	Temp (deg C)	11	28.0	22.0	24.9
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	11	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	11	114	62	91
3	B (mg/L)	11	0.41	0.02	0.24
4	Ca (mg/L)	11	32	14	24
5	Cl (mg/L)	11	40.1	21.7	29.6
6	CO ₃ (mg/L)	11	0.0	0.0	0
7	F (mg/L)	9	0.44	0.15	0.24
8	Fe (mg/L)	11	0.5	0.0	0.2
9	HCO ₃ (mg/L)	11	140	76	111
10	K (mg/L)	11	4.4	1.6	2.7
11	Mg (mg/L)	11	9.7	4.9	8
12	Na (mg/L)	11	23.7	12.5	18.6
13	NO ₂ +NO ₃ (mg N/L)	11	1.19	0.34	0.69
14	NO ₂ -N (mgN/L)	11	0.01	0.00	0.01
15	NO ₃ -N (mgN/L)	11	1.18	0.34	0.69
16	o-PO ₄ -P (mg P/L)	11	0.238	0.000	0.097
17	SiO ₂ (mg/L)	10	20.0	11.1	15.3
18	SO ₄ (mg/L)	11	13.3	2.9	5.9
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	1	1.0	1.0	1
2	Cd ($\mu\text{g}/\text{L}$)	1	0.0	0.0	0
3	Cr ($\mu\text{g}/\text{L}$)	1	0.0	0.0	0
4	Cu ($\mu\text{g}/\text{L}$)	1	0.5	0.5	0.5
5	Ni ($\mu\text{g}/\text{L}$)	1	0.3	0.3	0.3
6	Pb ($\mu\text{g}/\text{L}$)	1	0.6	0.6	0.6
7	Zn ($\mu\text{g}/\text{L}$)	1	1.2	1.2	1.2
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	11	80	36	60
2	HAR_Total (mgCaCO ₃ /L)	11	112	68	93
3	Na% (%)	11	32	26	30
4	RSC (-)	11	0.2	0.0	0
5	SAR (-)	11	1.0	0.7	0.8
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THIMMANAHALLI (CCRI0F7)

Local River : Yagachi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	10.04	11.9	48.02	28.26	13.99
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	361	284	277	208	204
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.4	7.5	7.5	7.7	7.7
6	TDS (mg/L)					
7	Temp (deg C)	23.8	24.2	26.0	25.7	19.9
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	100	81	57	71	72
2	B (mg/L)	0.01	0.00	0.03	0.30	0.03
3	Ca (mg/L)	15	22	15	17	18
4	Cl (mg/L)	40.8	26.1	49.9	19.5	18.7
5	F (mg/L)	0.27	0.26	0.08	0.15	0.17
6	Fe (mg/L)	0.1	0.2	0.2	0.2	0.2
7	HCO ₃ (mg/L)	122	99	70	87	88
8	K (mg/L)	22.3	3.8	2.0	2.6	2.4
9	Mg (mg/L)	12.6	10.8	8.1	6.4	6.2
10	Na (mg/L)	34.6	20.2	31.8	13.7	14.4
11	NO ₂ +NO ₃ (mg N/L)	1.54	1.38	1.00	0.63	0.70
12	NO ₂ -N (mgN/L)	0.00	0.00	0.00	0.01	0.02
13	NO ₃ -N (mgN/L)	1.54	1.38	1.00	0.62	0.68
14	o-PO ₄ -P (mg P/L)	0.000	0.010	0.444	0.000	0.008
15	SiO ₂ (mg/L)	13.8	13.7	17.7	13.6	13.4
16	SO ₄ (mg/L)	16.6	12.2	3.2	3.1	4.0
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	38	54	37	43	44
2	HAR_Total (mgCaCO ₃ /L)	91	99	71	70	70
3	Na% (%)	37	31	48	29	30
4	RSC (-)	0.3	0.0	0.0	0.1	0.1
5	SAR (-)	1.6	0.9	1.6	0.7	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THIMMANAHALLI (CCRI0F7)

Local River : Yagachi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	37.83	8.519	3.328	35.68	5.914
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				291	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	220	236	253	245	269
4	pH_FLD (pH units)				7.1	
5	pH_GEN (pH units)	7.6	7.3	7.6	7.4	7.4
6	TDS (mg/L)					
7	Temp (deg C)	23.2	25.8	25.7	24.1	26.7
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	77	79	86	83	90
2	B (mg/L)	0.03	0.00		0.02	0.12
3	Ca (mg/L)	19	20	21	23	24
4	Cl (mg/L)	21.9	21.9	24.9	24.8	30.2
5	F (mg/L)	0.15	0.28	0.22	0.18	0.24
6	Fe (mg/L)	0.3	0.1		0.7	0.2
7	HCO ₃ (mg/L)	95	100	104	101	110
8	K (mg/L)	2.0	2.3	1.9	2.6	2.9
9	Mg (mg/L)	7.2	7.0	7.0	6.8	9.5
10	Na (mg/L)	15.2	17.3	18.9	19.0	15.8
11	NO ₂ +NO ₃ (mg N/L)	0.64	0.91	1.01	1.38	1.19
12	NO ₂ -N (mgN/L)	0.01	0.00	0.01	0.03	0.01
13	NO ₃ -N (mgN/L)	0.64	0.90	0.99	1.35	1.18
14	o-PO ₄ -P (mg P/L)	0.010	0.003		0.062	0.027
15	SiO ₂ (mg/L)	12.8	13.9		12.8	9.9
16	SO ₄ (mg/L)	4.3	5.3	3.6	9.7	6.1
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			3.3	1.0	
2	Cd ($\mu\text{g}/\text{L}$)			0.4	0.2	
3	Cr ($\mu\text{g}/\text{L}$)			2.8	0.7	
4	Cu ($\mu\text{g}/\text{L}$)			11.3	1.4	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			1.2	14.4	
7	Pb ($\mu\text{g}/\text{L}$)				4.0	
8	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	46	50	53	58	59
2	HAR_Total (mgCaCO ₃ /L)	76	79	82	86	99
3	Na% (%)	29	32	33	32	25
4	RSC (-)	0.1	0.1	0.1	0.1	0.0
5	SAR (-)	0.8	0.9	0.9	0.9	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THIMMANAHALLI (CCRIOF7)

Local River : Yagachi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	5.668	5.281	3.398	8.369	5.632
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	244	462	246	247	255
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.4	7.6	7.8	7.8	7.7
6	TDS (mg/L)					
7	Temp (deg C)	24.4	25.5	24.0	25.5	21.3
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	81	114	50	43	93
2	B (mg/L)	0.23	0.00	0.00	0.01	0.08
3	Ca (mg/L)	21	22	13	9	23
4	Cl (mg/L)	25.6	71.1	35.1	51.5	22.5
5	F (mg/L)	0.24	0.21	0.25	0.10	0.12
6	Fe (mg/L)	0.2	0.1	0.1	0.2	0.1
7	HCO ₃ (mg/L)	98	140	61	53	114
8	K (mg/L)	2.0	11.8	4.8	1.8	2.2
9	Mg (mg/L)	7.4	12.8	6.6	4.5	6.8
10	Na (mg/L)	17.1	61.2	26.3	37.7	17.9
11	NO ₂ +NO ₃ (mg N/L)	0.69	1.09	1.12	0.49	0.52
12	NO ₂ -N (mgN/L)	0.01	0.00	0.00	0.00	0.01
13	NO ₃ -N (mgN/L)	0.69	1.09	1.12	0.49	0.51
14	o-PO ₄ -P (mg P/L)	0.103	0.000	0.110	0.486	0.039
15	SiO ₂ (mg/L)	16.1	11.1	6.9	10.6	17.0
16	SO ₄ (mg/L)	7.3	15.6	11.4	2.3	3.8
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	53	54	33	22	58
2	HAR_Total (mgCaCO ₃ /L)	84	108	61	41	86
3	Na% (%)	30	52	46	65	30
4	RSC (-)	0.0	0.2	0.0	0.1	0.1
5	SAR (-)	0.8	2.6	1.4	2.5	0.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THIMMANAHALLI (CCRI0F7)

Local River : Yagachi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	6.08	7.453	5.152	3.12	2.918
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	223	229	243	298	272
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.7	7.6	7.1	7.6	7.5
6	TDS (mg/L)					
7	Temp (deg C)	20.3	17.5	23.0	22.1	23.8
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	81	83	88	102	99
2	B (mg/L)	0.02	0.04	0.00		0.02
3	Ca (mg/L)	20	20	21	27	25
4	Cl (mg/L)	21.3	21.3	23.9	31.9	27.6
5	F (mg/L)	0.18	0.58		0.44	0.29
6	Fe (mg/L)	0.1	0.1	0.0		0.1
7	HCO ₃ (mg/L)	98	101	104	124	120
8	K (mg/L)	1.9	2.6	2.0	2.3	2.2
9	Mg (mg/L)	6.8	7.3	7.3	8.3	8.5
10	Na (mg/L)	16.4	14.8	17.2	21.3	19.5
11	NO ₂ +NO ₃ (mg N/L)	0.51	0.66	1.11	1.14	1.05
12	NO ₂ -N (mgN/L)	0.01	0.02	0.00	0.01	0.00
13	NO ₃ -N (mgN/L)	0.49	0.63	1.11	1.13	1.05
14	o-PO ₄ -P (mg P/L)	0.010	0.005	0.005		0.036
15	SiO ₂ (mg/L)	14.8	13.2	12.3		13.5
16	SO ₄ (mg/L)	3.7	5.1	4.0	4.1	4.3
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.2	4.1	
2	Cd ($\mu\text{g}/\text{L}$)			0.5		
3	Cr ($\mu\text{g}/\text{L}$)			2.2	0.3	
4	Cu ($\mu\text{g}/\text{L}$)			32.8		
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			3.0	8.6	
7	Pb ($\mu\text{g}/\text{L}$)			0.2		
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	49	49	53	68	62
2	HAR_Total (mgCaCO ₃ /L)	77	79	83	102	97
3	Na% (%)	31	28	31	31	30
4	RSC (-)	0.1	0.1	0.1	0.1	0.1
5	SAR (-)	0.8	0.7	0.8	0.9	0.9
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THIMMANAHALLI (CCRIOF7)

Local River : Yagachi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	3.64	10.43	1.168	0.955	4.824
2	EC_FLD ($\mu\text{mho}/\text{cm}$)					
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	259	276	387	255	216
4	pH_FLD (pH units)					
5	pH_GEN (pH units)	7.7	7.5	7.5	7.8	7.8
6	TDS (mg/L)		147			
7	Temp (deg C)	24.4	24.8	26.0	26.0	27.3
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	90	96	98	57	73
2	B (mg/L)	0.10	0.25	0.00	0.00	0.04
3	Ca (mg/L)	24	24	19	13	15
4	Cl (mg/L)	28.3	31.1	55.0	35.7	19.7
5	F (mg/L)	0.19	0.23	0.17	0.20	0.43
6	Fe (mg/L)	0.1	0.1	0.1	0.1	0.2
7	HCO ₃ (mg/L)	109	118	120	69	89
8	K (mg/L)	5.9	3.0	7.8	4.1	1.0
9	Mg (mg/L)	8.7	8.5	13.0	9.3	9.5
10	Na (mg/L)	15.2	17.9	46.5	25.6	14.4
11	NO ₂ +NO ₃ (mg N/L)	0.98	0.61	1.31	1.20	0.28
12	NO ₂ -N (mgN/L)	0.01	0.01	0.00	0.00	0.01
13	NO ₃ -N (mgN/L)	0.97	0.60	1.31	1.20	0.27
14	o-PO ₄ -P (mg P/L)	0.010	0.129	0.000	0.000	0.048
15	SiO ₂ (mg/L)	12.3	12.7	10.6	1.6	5.8
16	SO ₄ (mg/L)	5.0	4.3	15.1	11.5	1.9
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		1.0	17.2	6.7	8.4
2	Cd ($\mu\text{g}/\text{L}$)	0.1	0.0	0.0	6.0	1.0
3	Cr ($\mu\text{g}/\text{L}$)	4.0	0.0	4.0		
4	Cu ($\mu\text{g}/\text{L}$)	3.3	0.5	5.3	4.7	3.9
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	7.0	0.3	3.5		
7	Pb ($\mu\text{g}/\text{L}$)	0.9	0.6		2.5	1.8
8	Zn ($\mu\text{g}/\text{L}$)	9.6	1.2		23.0	33.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	61	60	48	33	37
2	HAR_Total (mgCaCO ₃ /L)	97	95	102	72	77
3	Na% (%)	24	28	47	44	26
4	RSC (-)	0.0	0.1	0.1	0.0	0.0
5	SAR (-)	0.7	0.8	2.0	1.4	0.7
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THIMMANAHALLI (CCRI0F7)

Local River : Yagachi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	1.897	3.181	4.112	1.154
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	228	249	254	246
4	pH_FLD (pH units)				
5	pH_GEN (pH units)	7.8	7.6	7.4	7.3
6	TDS (mg/L)				
7	Temp (deg C)	21.8	21.7	20.0	27.0
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	82	86	81	84
2	B (mg/L)	0.05	0.04	0.04	
3	Ca (mg/L)	19	20	19	19
4	Cl (mg/L)	20.4	25.7	22.5	25.7
5	F (mg/L)	0.10	0.18	0.21	0.32
6	Fe (mg/L)	0.2	0.1	0.0	
7	HCO ₃ (mg/L)	100	105	99	103
8	K (mg/L)	2.1	2.8	3.2	2.5
9	Mg (mg/L)	7.1	8.1	7.5	7.9
10	Na (mg/L)	18.0	19.0	16.5	17.8
11	NO ₂ +NO ₃ (mg N/L)	0.51	0.54	0.72	1.27
12	NO ₂ -N (mgN/L)	0.00	0.02	0.01	0.01
13	NO ₃ -N (mgN/L)	0.51	0.52	0.71	1.26
14	o-PO ₄ -P (mg P/L)	0.010	0.007	0.010	
15	SiO ₂ (mg/L)	15.7	17.5	18.6	
16	SO ₄ (mg/L)	3.3	2.8	4.9	4.9
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.5	2.1
2	Cd ($\mu\text{g}/\text{L}$)			0.0	0.2
3	Cr ($\mu\text{g}/\text{L}$)			1.7	2.5
4	Cu ($\mu\text{g}/\text{L}$)	3.2		4.3	8.9
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	11.1			1.5
7	Pb ($\mu\text{g}/\text{L}$)			0.6	3.8
8	Zn ($\mu\text{g}/\text{L}$)				18.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	48	51	48	47
2	HAR_Total (mgCaCO ₃ /L)	78	84	79	80
3	Na% (%)	33	32	30	32
4	RSC (-)	0.1	0.0	0.0	0.1
5	SAR (-)	0.9	0.9	0.8	0.9
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : THIMMANAHALLI (CCRI0F7)

Local River : Yagachi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	0.289	1.094	1.067	0.568
2	EC_FLD ($\mu\text{mho}/\text{cm}$)				
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	350	243	298	326
4	pH_FLD (pH units)				
5	pH_GEN (pH units)	7.6	7.1	7.5	7.3
6	TDS (mg/L)				155
7	Temp (deg C)	24.0	26.2	25.0	26.5
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	105	88	100	108
2	B (mg/L)	0.00	0.09	0.36	0.23
3	Ca (mg/L)	31	19	28	30
4	Cl (mg/L)	39.4	22.1	36.8	36.4
5	F (mg/L)		0.26	0.23	
6	Fe (mg/L)	0.1	0.1	0.2	0.1
7	HCO ₃ (mg/L)	129	107	121	131
8	K (mg/L)	4.8	2.8	4.6	3.7
9	Mg (mg/L)	8.7	7.5	7.5	8.3
10	Na (mg/L)	25.2	18.6	19.6	23.3
11	NO ₂ +NO ₃ (mg N/L)	1.32	1.34	0.52	0.87
12	NO ₂ -N (mgN/L)	0.00	0.01	0.01	0.00
13	NO ₃ -N (mgN/L)	1.32	1.33	0.51	0.86
14	o-PO ₄ -P (mg P/L)	0.176	0.034	0.007	0.016
15	SiO ₂ (mg/L)	20.5	13.8	8.6	18.9
16	SO ₄ (mg/L)	9.8	6.4	5.7	5.4
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	7.8	2.5		
2	Cd ($\mu\text{g}/\text{L}$)	0.2	0.7		
3	Cr ($\mu\text{g}/\text{L}$)		0.5		
4	Cu ($\mu\text{g}/\text{L}$)	1.8	0.3		
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	3.5	9.2		
7	Pb ($\mu\text{g}/\text{L}$)	3.9	0.2		
8	Zn ($\mu\text{g}/\text{L}$)	4.2	17.0		
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	78	47	69	76
2	HAR_Total (mgCaCO ₃ /L)	114	78	100	110
3	Na% (%)	31	34	29	31
4	RSC (-)	0.0	0.2	0.1	0.0
5	SAR (-)	1.0	0.9	0.9	1.0
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: SAKLESHPUR	Code	: CCR00U6
State	: Karnataka	District	Hassan
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: Hemavathi	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Hemavathi
Division	: Cauvery Division, Bangalore	Sub-Division	: SWRSD - III Mangalore
Drainage Area	: 617 Sq. Km.	Bank	: Right
Latitude	: 12° 56' 37"	Longitude	: 75° 47' 37"
Zero of Gauge (m)	: 882.000 (m.s.l) 882.470 (m.s.l)	02/08/1999 01/06/2009	- 31/05/2009
	Opening Date	Closing Date	
Gauge	: 02/08/1999		
Discharge	: 05/04/2002		
Sediment	: 30/09/2013		
Water Quality	: 02/09/2002		

Water Quality Datasheet for the period : 2015-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	3.957	73.07	60.91
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	108	73	69
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.3	7.5	7.1
6	TDS (mg/L)			
7	Temp (deg C)	25.5	24.0	24.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	35	23	19
3	B (mg/L)	0.04	0.06	0.39
4	Ca (mg/L)	6	6	6
5	Cl (mg/L)	11.7	7.8	8.9
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.06	0.04	0.06
8	Fe (mg/L)	0.1	0.1	0.3
9	HCO ₃ (mg/L)	42	27	23
10	K (mg/L)	1.8	1.3	1.3
11	Mg (mg/L)	5.8	2.4	1.9
12	Na (mg/L)	5.5	4.3	4.1
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)	0.46	0.80	0.53
15	NO ₂ -N (mgN/L)	0.01	0.00	0.01
16	NO ₃ -N (mgN/L)	0.45	0.80	0.52
17	o-PO ₄ -P (mg P/L)	0.000	0.000	0.031
18	SiO ₂ (mg/L)	17.7	11.8	12.7
19	SO ₄ (mg/L)	3.4	1.7	3.1
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)			1.4
2	DO (mg/L)	6.3	7.3	6.7
3	DO_SAT% (%)	76	86	79
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cr ($\mu\text{g}/\text{L}$)			
3	Cu ($\mu\text{g}/\text{L}$)			
4	Ni ($\mu\text{g}/\text{L}$)			
5	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	16	16	16
2	HAR_Total (mgCaCO ₃ /L)	40	26	24
3	Na% (%)	22	25	26
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	24.03	87.24	113.6
2	Colour_Cod (-)	Clear	Brown	Dark Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	72	44	74
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.0	7.0	7.2
6	TDS (mg/L)			
7	Temp (deg C)	25.0	25.0	23.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	18	11	18
3	B (mg/L)	1.67	0.24	0.25
4	Ca (mg/L)	6	5	5
5	Cl (mg/L)	9.9	4.3	12.1
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.11	0.06	0.08
8	Fe (mg/L)	0.2	0.4	0.4
9	HCO ₃ (mg/L)	22	13	22
10	K (mg/L)	1.1	1.2	2.1
11	Mg (mg/L)	2.4	1.0	2.9
12	Na (mg/L)	4.8	2.3	5.4
13	NH ₃ -N (mg N/L)	0.00		
14	NO ₂ +NO ₃ (mg N/L)	0.84	0.77	0.77
15	NO ₂ -N (mgN/L)	0.00	0.01	0.00
16	NO ₃ -N (mgN/L)	0.84	0.76	0.77
17	o-PO ₄ -P (mg P/L)	0.124	0.186	0.134
18	SiO ₂ (mg/L)	14.8	9.3	9.6
19	SO ₄ (mg/L)	2.9	3.9	2.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	2.5	2.3	2.2
2	DO (mg/L)	5.8	5.6	5.8
3	DO_SAT% (%)	70	68	68
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cr ($\mu\text{g}/\text{L}$)			
3	Cu ($\mu\text{g}/\text{L}$)			
4	Ni ($\mu\text{g}/\text{L}$)			
5	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	14	12	12
2	HAR_Total (mgCaCO ₃ /L)	24	16	24
3	Na% (%)	29	22	31
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.3	0.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	15.80	6.961	3.886
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	87	133	90
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.5	7.4	7.2
6	TDS (mg/L)		63	42
7	Temp (deg C)	24.0	23.0	25.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	28	31	26
3	B (mg/L)	0.15	0.19	0.20
4	Ca (mg/L)	5	10	6
5	Cl (mg/L)	9.2	22.7	10.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.80	0.08	0.08
8	Fe (mg/L)	0.2	0.1	0.1
9	HCO ₃ (mg/L)	34	38	32
10	K (mg/L)	1.0	1.7	1.3
11	Mg (mg/L)	4.9	2.9	4.9
12	Na (mg/L)	4.4	14.3	4.8
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)	0.74	0.92	0.68
15	NO ₂ -N (mgN/L)	0.01	0.00	0.01
16	NO ₃ -N (mgN/L)	0.73	0.92	0.67
17	$\text{o-PO}_4\text{-P}$ (mg P/L)	0.217	0.186	0.238
18	SiO ₂ (mg/L)	13.0	18.6	15.8
19	SO ₄ (mg/L)	1.4	2.6	2.9
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.8	2.6	1.2
2	DO (mg/L)	6.7		6.9
3	DO_SAT% (%)	80		84
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cr ($\mu\text{g}/\text{L}$)			
3	Cu ($\mu\text{g}/\text{L}$)			
4	Ni ($\mu\text{g}/\text{L}$)			
5	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	12	24	16
2	HAR_Total (mgCaCO ₃ /L)	32	36	36
3	Na% (%)	22	45	22
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.3	1.0	0.3
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	01/03/2016	01/04/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	1.135	0.123	0.306
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	91	102	91
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.2	7.1	6.9
6	TDS (mg/L)	42	48	43
7	Temp (deg C)	25.0	26.0	28.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	27	38	20
3	B (mg/L)	0.35	0.13	0.02
4	Ca (mg/L)	8	6	8
5	Cl (mg/L)	9.9	8.5	13.5
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)			
8	Fe (mg/L)	0.0	0.1	0.1
9	HCO ₃ (mg/L)	32	46	25
10	K (mg/L)	1.3	1.3	1.4
11	Mg (mg/L)	3.9	4.9	2.9
12	Na (mg/L)	4.5	6.3	6.2
13	NH ₃ -N (mg N/L)			
14	NO ₂ +NO ₃ (mg N/L)	0.43	0.67	1.06
15	NO ₂ -N (mgN/L)	0.00	0.00	0.00
16	NO ₃ -N (mgN/L)	0.43	0.67	1.06
17	o-PO ₄ -P (mg P/L)	0.000	0.041	0.000
18	SiO ₂ (mg/L)	17.4	15.5	18.0
19	SO ₄ (mg/L)	4.2	1.7	2.3
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.4	1.6	0.6
2	DO (mg/L)			5.2
3	DO_SAT% (%)			66
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			6.0
2	Cr ($\mu\text{g}/\text{L}$)			0.4
3	Cu ($\mu\text{g}/\text{L}$)			4.3
4	Ni ($\mu\text{g}/\text{L}$)			0.7
5	Zn ($\mu\text{g}/\text{L}$)			4.9
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	20	16	20
2	HAR_Total (mgCaCO ₃ /L)	36	36	32
3	Na% (%)	21	27	29
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.3	0.5	0.5
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water Summary

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PHYSICAL					
1	Q (cumec)	366	360.2	0.103	24.61
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	12	133	44	86
3	pH_GEN (pH units)	12	7.5	6.9	7.2
4	TDS (mg/L)	5	63	42	48
5	Temp (deg C)	12	28.0	23.0	24.8
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	12	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	12	38	11	24
3	B (mg/L)	12	1.67	0.02	0.31
4	Ca (mg/L)	12	10	5	6
5	Cl (mg/L)	12	22.7	4.3	10.7
6	CO ₃ (mg/L)	12	0.0	0.0	0
7	F (mg/L)	9	0.80	0.04	0.15
8	Fe (mg/L)	12	0.4	0.0	0.2
9	HCO ₃ (mg/L)	12	46	13	30
10	K (mg/L)	12	2.1	1.0	1.4
11	Mg (mg/L)	12	5.8	1.0	3.4
12	Na (mg/L)	12	14.3	2.3	5.6
13	NH ₃ -N (mg N/L)	1	0.00	0.00	0
14	NO ₂ +NO ₃ (mg N/L)	12	1.06	0.43	0.72
15	NO ₂ -N (mgN/L)	12	0.01	0.00	0.01
16	NO ₃ -N (mgN/L)	12	1.06	0.43	0.72
17	o-PO ₄ -P (mg P/L)	12	0.238	0.000	0.096
18	SiO ₂ (mg/L)	12	18.6	9.3	14.5
19	SO ₄ (mg/L)	12	4.2	1.4	2.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	10	2.6	0.4	1.5
2	DO (mg/L)	9	7.3	5.2	6.3
3	DO_SAT% (%)	9	86	66	75
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	1	6.0	6.0	6
2	Cr ($\mu\text{g}/\text{L}$)	1	0.4	0.4	0.3
3	Cu ($\mu\text{g}/\text{L}$)	1	4.3	4.3	4.3
4	Ni ($\mu\text{g}/\text{L}$)	1	0.7	0.7	0.7
5	Zn ($\mu\text{g}/\text{L}$)	1	4.9	4.9	4.9
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	12	24	12	16
2	HAR_Total (mgCaCO ₃ /L)	12	40	16	30
3	Na% (%)	12	45	21	27
4	RSC (-)	12	0.0	0.0	0
5	SAR (-)	12	1.0	0.3	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	137.1	141.7	342.3	51.26	50.19
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	412	209	61	81	68
3	pH_GEN (pH units)	7.2	6.8	6.8	7.5	7.3
4	TDS (mg/L)					
5	Temp (deg C)	22.6	22.5	22.5	23.3	23.0
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	90	24	14	27	22
2	B (mg/L)	0.03	0.00	0.00	0.29	0.02
3	Ca (mg/L)	18	11	4	7	5
4	Cl (mg/L)	62.7	26.7	9.9	6.6	6.2
5	F (mg/L)	1.29	1.09	0.21	0.03	0.06
6	Fe (mg/L)	7.2	0.2	0.1	0.2	0.3
7	HCO ₃ (mg/L)	110	29	17	33	27
8	K (mg/L)	2.1	7.1	0.5	1.3	1.2
9	Mg (mg/L)	14.3	6.5	1.1	3.3	2.9
10	Na (mg/L)	52.3	20.3	7.0	4.1	4.0
11	NO ₂ +NO ₃ (mg N/L)	3.65	6.79	0.02	0.53	0.58
12	NO ₂ -N (mgN/L)	0.00	0.00	0.00	0.01	0.01
13	NO ₃ -N (mgN/L)	3.65	6.79	0.02	0.52	0.57
14	o-PO ₄ -P (mg P/L)	0.386	0.000	0.050	0.000	0.006
15	SiO ₂ (mg/L)	6.8	2.7	10.6	15.5	12.6
16	SO ₄ (mg/L)	13.7	10.6	2.3	2.9	3.4
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)					
2	DO (mg/L)					
3	DO_SAT% (%)					
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	46	27	11	17	14
2	HAR_Total (mgCaCO ₃ /L)	105	54	15	31	26
3	Na% (%)	50	42	50	22	24
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	2.3	1.3	0.8	0.3	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	83.98	75.47	69.33	175.6	129.9
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	67	71	61	69	87
3	pH_GEN (pH units)	7.1	6.6	6.9	6.8	6.9
4	TDS (mg/L)					
5	Temp (deg C)	23.8	23.5	24.0	23.9	25.2
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	22	23	17	16	26
2	B (mg/L)	0.01	1.92		0.01	0.10
3	Ca (mg/L)	5	5	5	6	8
4	Cl (mg/L)	6.5	7.1	6.6	9.0	10.1
5	F (mg/L)	0.02	0.08	0.05	0.07	0.31
6	Fe (mg/L)	0.2	0.1		0.3	0.3
7	HCO ₃ (mg/L)	26	27	21	20	32
8	K (mg/L)	1.0	1.3	1.2	1.3	1.7
9	Mg (mg/L)	2.9	2.9	2.3	2.6	3.1
10	Na (mg/L)	4.1	4.7	3.9	4.2	5.0
11	NO ₂ +NO ₃ (mg N/L)	0.64	0.82	0.69	1.14	0.96
12	NO ₂ -N (mgN/L)	0.00	0.01	0.01	0.01	0.01
13	NO ₃ -N (mgN/L)	0.64	0.81	0.69	1.13	0.95
14	o-PO ₄ -P (mg P/L)	0.004	0.003		0.035	0.023
15	SiO ₂ (mg/L)	13.2	15.2		12.6	9.3
16	SO ₄ (mg/L)	3.0	3.2	2.8	3.6	3.1
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)			1.5	0.8	1.9
2	DO (mg/L)			6.6	5.8	5.3
3	DO_SAT% (%)			79	69	65
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			1.0	0.6	
2	Cd ($\mu\text{g}/\text{L}$)			0.3	0.1	
3	Cr ($\mu\text{g}/\text{L}$)			3.4	0.4	
4	Cu ($\mu\text{g}/\text{L}$)			22.0	0.9	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			2.2	9.3	
7	Pb ($\mu\text{g}/\text{L}$)				3.2	
8	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	13	12	12	14	19
2	HAR_Total (mgCaCO ₃ /L)	25	24	21	25	32
3	Na% (%)	25	29	27	26	25
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	0.4	0.4	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	49.84	27.69	12.08	60.96	12.47
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	73	413	196	93	88
3	pH_GEN (pH units)	7.2	7.4	7.4	7.5	7.5
4	TDS (mg/L)					
5	Temp (deg C)	24.7	21.8	22.8	23.8	22.1
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	21	101	33	22	29
2	B (mg/L)	0.48	0.00	0.00	0.01	0.08
3	Ca (mg/L)	6	22	11	3	7
4	Cl (mg/L)	8.5	59.6	27.5	12.8	10.1
5	F (mg/L)	0.06	1.46	1.38	0.07	0.06
6	Fe (mg/L)	0.2	7.6	0.2	0.2	0.1
7	HCO ₃ (mg/L)	26	124	40	27	35
8	K (mg/L)	1.3	5.5	7.8	1.9	1.1
9	Mg (mg/L)	2.7	13.9	5.2	4.2	2.9
10	Na (mg/L)	4.2	50.3	19.7	9.6	5.6
11	NO ₂ +NO ₃ (mg N/L)	0.68	3.89	3.62	0.64	0.53
12	NO ₂ -N (mgN/L)	0.01	0.00	0.00	0.00	0.01
13	NO ₃ -N (mgN/L)	0.67	3.89	3.62	0.64	0.52
14	o-PO ₄ -P (mg P/L)	0.068	0.296	0.000	0.072	0.034
15	SiO ₂ (mg/L)	13.3	5.1	1.3	7.3	19.1
16	SO ₄ (mg/L)	3.0	13.1	12.7	1.4	0.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.1				
2	DO (mg/L)	6.3				
3	DO_SAT% (%)	76				
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	15	55	28	7	18
2	HAR_Total (mgCaCO ₃ /L)	26	113	50	25	30
3	Na% (%)	25	48	42	38	28
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.4	2.1	1.2	0.9	0.4
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	17.35	16.65	14.23	14.02	12.49
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	84	86	94	79	95
3	pH_GEN (pH units)	7.3	7.2	6.7	7.1	7.0
4	TDS (mg/L)					
5	Temp (deg C)	22.5	22.5	21.5	23.9	24.8
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	27	29	27	23	26
2	B (mg/L)	0.03	0.02	0.00		0.01
3	Ca (mg/L)	7	6	7	7	8
4	Cl (mg/L)	9.2	10.9	11.7	8.5	13.8
5	F (mg/L)	0.04	0.08		0.23	0.19
6	Fe (mg/L)	0.2	0.1	0.0		0.1
7	HCO ₃ (mg/L)	33	28	34	28	31
8	K (mg/L)	1.2	1.2	1.3	1.3	1.4
9	Mg (mg/L)	3.2	3.9	3.9	2.4	3.2
10	Na (mg/L)	4.9	4.7	5.8	5.2	6.3
11	NO ₂ +NO ₃ (mg N/L)	0.66	0.98	0.94	0.65	1.08
12	NO ₂ -N (mgN/L)	0.02	0.01	0.00	0.01	0.00
13	NO ₃ -N (mgN/L)	0.64	0.97	0.94	0.64	1.08
14	o-PO ₄ -P (mg P/L)	0.010	0.003	0.005		0.021
15	SiO ₂ (mg/L)	16.6	15.9	13.8		12.5
16	SO ₄ (mg/L)	2.1	2.8	2.0	2.1	1.5
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)				0.5	1.0
2	DO (mg/L)			6.9	6.3	6.7
3	DO_SAT% (%)			75	74	80
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)				5.3	
2	Cd ($\mu\text{g}/\text{L}$)			0.1	0.0	
3	Cr ($\mu\text{g}/\text{L}$)			1.7	0.3	
4	Cu ($\mu\text{g}/\text{L}$)			20.4	0.2	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			3.9	5.7	
7	Pb ($\mu\text{g}/\text{L}$)			0.2		
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	17	14	17	17	19
2	HAR_Total (mgCaCO ₃ /L)	30	30	33	27	32
3	Na% (%)	25	25	27	29	29
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.4	0.4	0.4	0.5	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	11.8	35.05	1.448	1.058	3.582
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	99	96	454	225	113
3	pH_GEN (pH units)	7.3	7.3	7.2	7.4	7.3
4	TDS (mg/L)		53			
5	Temp (deg C)	23.0	23.8	22.8	22.3	24.3
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	28	25	117	47	26
2	B (mg/L)	0.22	0.20	0.02	0.00	0.01
3	Ca (mg/L)	9	6	30	7	8
4	Cl (mg/L)	12.7	13.6	50.6	28.1	14.4
5	F (mg/L)	0.06	0.26	1.35	1.74	0.11
6	Fe (mg/L)	0.1	0.2	7.6	6.3	0.1
7	HCO ₃ (mg/L)	35	31	143	57	32
8	K (mg/L)	3.6	1.5	2.2	7.5	0.9
9	Mg (mg/L)	3.2	3.9	15.9	10.1	3.5
10	Na (mg/L)	5.5	7.2	42.3	22.1	10.3
11	NO ₂ +NO ₃ (mg N/L)	0.92	0.78	3.62	2.83	0.07
12	NO ₂ -N (mgN/L)	0.01	0.01	0.00	0.00	0.00
13	NO ₃ -N (mgN/L)	0.91	0.77	3.62	2.83	0.07
14	o-PO ₄ -P (mg P/L)	0.005	0.194	0.207	0.000	0.052
15	SiO ₂ (mg/L)	12.1	14.3	10.8	6.3	10.4
16	SO ₄ (mg/L)	2.2	2.3	15.4	12.2	6.9
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	2.0	1.7			
2	DO (mg/L)	6.1	6.5			
3	DO_SAT% (%)	71	77			
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			10.0	4.8	10.0
2	Cd ($\mu\text{g}/\text{L}$)	0.0		0.0	1.0	1.1
3	Cr ($\mu\text{g}/\text{L}$)	10.2		3.8		
4	Cu ($\mu\text{g}/\text{L}$)	1.8		3.8	3.0	3.4
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	11.6		4.6		
7	Pb ($\mu\text{g}/\text{L}$)	1.3			2.7	1.5
8	Zn ($\mu\text{g}/\text{L}$)	8.4			59.0	29.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	23	16	74	18	19
2	HAR_Total (mgCaCO ₃ /L)	36	32	141	60	34
3	Na% (%)	23	30	39	43	39
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.4	0.6	1.6	1.4	0.8
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	2.069	2.63	2.747	2.407
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	95	98	113	101
3	pH_GEN (pH units)	7.4	7.4	6.8	6.9
4	TDS (mg/L)				
5	Temp (deg C)	23.0	25.3	25.0	23.0
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	36	38	38	32
2	B (mg/L)	0.05	0.02	0.03	
3	Ca (mg/L)	6	6	7	7
4	Cl (mg/L)	7.6	7.7	12.0	11.1
5	F (mg/L)	0.04	0.07	0.05	0.06
6	Fe (mg/L)	0.2	0.1	0.1	
7	HCO ₃ (mg/L)	44	46	45	40
8	K (mg/L)	1.4	1.6	1.6	1.6
9	Mg (mg/L)	4.2	4.2	5.2	4.2
10	Na (mg/L)	5.8	6.4	6.5	5.9
11	NO ₂ +NO ₃ (mg N/L)	0.54	0.49	0.68	0.76
12	NO ₂ -N (mgN/L)	0.00	0.01	0.00	0.01
13	NO ₃ -N (mgN/L)	0.54	0.48	0.68	0.75
14	o-PO ₄ -P (mg P/L)	0.010	0.007	0.005	
15	SiO ₂ (mg/L)	14.7	18.9	21.0	
16	SO ₄ (mg/L)	2.7	1.4	3.1	1.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)				1.5
2	DO (mg/L)				5.5
3	DO_SAT% (%)				63
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	7.4		1.5	0.8
2	Cd ($\mu\text{g}/\text{L}$)			0.0	0.1
3	Cr ($\mu\text{g}/\text{L}$)	2.4		1.3	3.5
4	Cu ($\mu\text{g}/\text{L}$)	6.3		4.3	8.6
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	13.8			7.2
7	Pb ($\mu\text{g}/\text{L}$)			0.2	3.8
8	Zn ($\mu\text{g}/\text{L}$)				34.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	16	16	19	17
2	HAR_Total (mgCaCO ₃ /L)	34	34	40	35
3	Na% (%)	27	28	25	26
4	RSC (-)	0.1	0.1	0.0	0.0
5	SAR (-)	0.4	0.5	0.4	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : SAKLESHPUR (CCR00U6)

Local River : Hemavathi

River Water

Division : Cauvery Division, Bangalore

Sub-Division : SWRSD - III, MANGALORE

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	1.284	2.139	2.404	0.521
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	87	100	105	95
3	pH_GEN (pH units)	7.1	7.2	7.2	7.1
4	TDS (mg/L)				44
5	Temp (deg C)	25.0	26.3	25.8	26.3
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	22	31	30	28
2	B (mg/L)	0.00	0.08	0.29	0.17
3	Ca (mg/L)	7	8	7	7
4	Cl (mg/L)	10.9	10.9	14.1	10.6
5	F (mg/L)		0.37	0.38	
6	Fe (mg/L)	0.1	0.3	0.1	0.1
7	HCO ₃ (mg/L)	27	38	37	35
8	K (mg/L)	1.5	2.3	2.5	1.3
9	Mg (mg/L)	2.9	3.6	4.9	3.9
10	Na (mg/L)	5.6	6.2	6.1	5.7
11	NO ₂ +NO ₃ (mg N/L)	1.04	0.95	0.50	0.72
12	NO ₂ -N (mgN/L)	0.00	0.01	0.01	0.00
13	NO ₃ -N (mgN/L)	1.03	0.94	0.49	0.72
14	o-PO ₄ -P (mg P/L)	0.017	0.031	0.017	0.014
15	SiO ₂ (mg/L)	18.5	19.9	10.5	17.0
16	SO ₄ (mg/L)	3.0	2.7	2.3	2.7
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	0.7	1.7	1.6	0.8
2	DO (mg/L)	5.4	6.0	5.0	5.2
3	DO_SAT% (%)	65	75	61	66
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	6.7	0.9		6.0
2	Cd ($\mu\text{g}/\text{L}$)	0.0	0.0		
3	Cr ($\mu\text{g}/\text{L}$)	0.5	0.4		0.3
4	Cu ($\mu\text{g}/\text{L}$)	3.6	2.4		4.3
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	0.8	11.6		0.7
7	Pb ($\mu\text{g}/\text{L}$)	2.0	0.4		
8	Zn ($\mu\text{g}/\text{L}$)	11.1	24.0		4.9
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	17	20	17	19
2	HAR_Total (mgCaCO ₃ /L)	29	35	566	35
3	Na% (%)	28	26	25	25
4	RSC (-)	0.0	0.0	0.0	0.0
5	SAR (-)	0.5	0.5	0.4	0.4
PESTICIDES					

HISTORY SHEET

		Water Year : 2015-2016
Site	: CHUNCHUNKATTE	Code
State	: Karnataka	District
Basin	: Cauvery	Independent River : Cauvery
Tributary	: -	Sub Tributary :
Sub-Sub Tributary	:	Local River : Cauvery
Division	: Cauvery Division, Bangalore	Sub-Division : Upper Cauvery SD, Bangalore
Drainage Area	: 2995 Sq. Km.	Bank : Right
Latitude	: 12° 30' 34"	Longitude : 76° 18' 04"
Zero of Gauge (m)	: 748.000 (m.s.l)	21/07/1998
	Opening Date	Closing Date
Gauge	: 24/07/1998	
Discharge	: 19/07/2008	
Sediment	:	
Water Quality	: 03/10/2008	

Water Quality Datasheet for the period : 2015-2016

Station Name : Chunchunkatte (CC000V7)

Local River : Cauvery

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/06/2015	01/07/2015	01/08/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	150.60	50.36
2	Colour_Cod (-)		Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		96	
4	Odour_Code (-)		odour free	
5	pH_GEN (pH units)		7.5	
6	TDS (mg/L)			
7	Temp (deg C)		23.0	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	
2	ALK-TOT (mgCaCO ₃ /L)		28	
3	B (mg/L)		0.41	
4	Ca (mg/L)		8	
5	Cl (mg/L)		11.0	
6	CO ₃ (mg/L)		0.0	
7	F (mg/L)		0.08	
8	Fe (mg/L)		0.1	
9	HCO ₃ (mg/L)		35	
10	K (mg/L)		0.9	
11	Mg (mg/L)		3.9	
12	Na (mg/L)		3.8	
13	NO ₂ +NO ₃ (mg N/L)		0.42	
14	NO ₂ -N (mgN/L)		0.01	
15	NO ₃ -N (mgN/L)		0.41	
16	o-PO ₄ -P (mg P/L)		0.031	
17	SiO ₂ (mg/L)		12.7	
18	SO ₄ (mg/L)		3.9	
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		20	
2	HAR_Total (mgCaCO ₃ /L)		36	
3	Na% (%)		18	
4	RSC (-)		0.0	
5	SAR (-)		0.3	
PESTICIDES				

Water sample not collected.

Water Quality Datasheet for the period : 2015-2016

Station Name : Chunchunkatte (CC000V7)

Local River : Cauvery

Division : Cauvery Division, Bangalore

River Water Analysis

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/09/2015	05/10/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	31.43	80.22	86.29
2	Colour_Cod (-)	Clear	Light Brown	Light Brown
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	152	161	190
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.6	7.4	7.7
6	TDS (mg/L)			
7	Temp (deg C)	24.5	23.5	23.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	55	62	71
3	B (mg/L)	0.38	0.28	0.32
4	Ca (mg/L)	16	16	19
5	Cl (mg/L)	11.7	12.4	16.7
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.25	0.13	0.19
8	Fe (mg/L)	0.1	0.2	0.2
9	HCO ₃ (mg/L)	68	75	86
10	K (mg/L)	1.0	1.1	1.0
11	Mg (mg/L)	3.9	7.8	5.8
12	Na (mg/L)	7.5	5.7	9.5
13	NO ₂ +NO ₃ (mg N/L)	0.49	0.90	0.87
14	NO ₂ -N (mgN/L)	0.00	0.01	0.00
15	NO ₃ -N (mgN/L)	0.49	0.88	0.87
16	o-PO ₄ -P (mg P/L)	0.196	0.331	0.186
17	SiO ₂ (mg/L)	19.7	13.5	16.6
18	SO ₄ (mg/L)	3.4	3.5	3.0
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	40	40	48
2	HAR_Total (mgCaCO ₃ /L)	56	72	72
3	Na% (%)	22	14	22
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.4	0.3	0.5
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Chunchunkatte (CC000V7)

Local River : Cauvery

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/12/2015	01/01/2016	01/02/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	4.434	15.54	0.000
2	Colour_Cod (-)		Clear	
3	EC_GEN ($\mu\text{mho}/\text{cm}$)		244	
4	Odour_Code (-)		odour free	
5	pH_GEN (pH units)		8.0	
6	TDS (mg/L)		116	
7	Temp (deg C)		24.5	
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)		0.0	
2	ALK-TOT (mgCaCO ₃ /L)		103	
3	B (mg/L)		0.18	
4	Ca (mg/L)		30	
5	Cl (mg/L)		14.6	
6	CO ₃ (mg/L)		0.0	
7	F (mg/L)		0.19	
8	Fe (mg/L)		0.1	
9	HCO ₃ (mg/L)		125	
10	K (mg/L)		1.3	
11	Mg (mg/L)		5.8	
12	Na (mg/L)		9.1	
13	NO ₂ +NO ₃ (mg N/L)		0.49	
14	NO ₂ -N (mgN/L)		0.00	
15	NO ₃ -N (mgN/L)		0.49	
16	o-PO ₄ -P (mg P/L)		0.155	
17	SiO ₂ (mg/L)		20.8	
18	SO ₄ (mg/L)		2.9	
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)		76	
2	HAR_Total (mgCaCO ₃ /L)		100	
3	Na% (%)		16	
4	RSC (-)		0.1	
5	SAR (-)		0.4	
PESTICIDES				

Water sample not collected.

Water Quality Datasheet for the period : 2015-2016

Station Name : Chunchunkatte (CC000V7)

Local River : Cauvery

River Water Analysis

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/03/2016	01/04/2016	01/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	0.000	0.000	0.000
2	Colour_Cod (-)			
3	EC_GEN ($\mu\text{mho}/\text{cm}$)			
4	Odour_Code (-)			
5	pH_GEN (pH units)			
6	TDS (mg/L)			
7	Temp (deg C)			
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)			
2	ALK-TOT (mgCaCO ₃ /L)			
3	B (mg/L)			
4	Ca (mg/L)			
5	Cl (mg/L)			
6	CO ₃ (mg/L)			
7	F (mg/L)			
8	Fe (mg/L)			
9	HCO ₃ (mg/L)			
10	K (mg/L)			
11	Mg (mg/L)			
12	Na (mg/L)			
13	NO ₂ +NO ₃ (mg N/L)			
14	NO ₂ -N (mgN/L)			
15	NO ₃ -N (mgN/L)			
16	o-PO ₄ -P (mg P/L)			
17	SiO ₂ (mg/L)			
18	SO ₄ (mg/L)			
BIOLOGICAL/BACTERIOLOGICAL				
TRACE & TOXIC				
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)			
2	HAR_Total (mgCaCO ₃ /L)			
3	Na% (%)			
4	RSC (-)			
5	SAR (-)			
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Chunchunkatte (CC000V7)

Local River : Cauvery

River Water Summary

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHSICAL					
1	Q (cumec)	366	483.2	0.000	43.09
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	5	244	96	169
3	pH_GEN (pH units)	5	8.0	7.4	7.6
4	TDS (mg/L)	1	116	116	116
5	Temp (deg C)	5	24.5	23.0	23.7
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	5	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	5	103	28	64
3	B (mg/L)	5	0.41	0.18	0.31
4	Ca (mg/L)	5	30	8	18
5	Cl (mg/L)	5	16.7	11.0	13.3
6	CO ₃ (mg/L)	5	0.0	0.0	0
7	F (mg/L)	5	0.25	0.08	0.17
8	Fe (mg/L)	5	0.2	0.1	0.1
9	HCO ₃ (mg/L)	5	125	35	78
10	K (mg/L)	5	1.3	0.9	1.1
11	Mg (mg/L)	5	7.8	3.9	5.4
12	Na (mg/L)	5	9.5	3.8	7.1
13	NO ₂ +NO ₃ (mg N/L)	5	0.90	0.42	0.63
14	NO ₂ -N (mgN/L)	5	0.01	0.00	0.01
15	NO ₃ -N (mgN/L)	5	0.88	0.41	0.63
16	o-PO ₄ -P (mg P/L)	5	0.331	0.031	0.18
17	SiO ₂ (mg/L)	5	20.8	12.7	16.7
18	SO ₄ (mg/L)	5	3.9	2.9	3.4
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	5	76	20	45
2	HAR_Total (mgCaCO ₃ /L)	5	100	36	67
3	Na% (%)	5	22	14	19
4	RSC (-)	5	0.1	0.0	0
5	SAR (-)	5	0.5	0.3	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Chunchukatte (CC000V7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2008	2009	2010	2011	2012
PHYSICAL						
1	Q (cumec)	35.17	107.9	125.5	198.1	101.9
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	202	101	90	95	91
3	pH_GEN (pH units)	7.8	7.8	7.7	7.1	7.5
4	TDS (mg/L)					
5	Temp (deg C)	26.0	24.8	24.9	24.3	24.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	92	36	34	36	33
2	B (mg/L)	0.23	0.04		0.00	
3	Ca (mg/L)	18	8	7	8	8
4	Cl (mg/L)	9.9	7.3	6.7	6.3	6.0
5	F (mg/L)	0.17	0.06	0.10	0.09	0.12
6	Fe (mg/L)	0.2	0.2	0.2	0.2	
7	HCO ₃ (mg/L)	112	50	41	44	41
8	K (mg/L)	0.8	0.9	0.7	1.1	0.8
9	Mg (mg/L)	8.7	4.6	4.6	3.9	3.9
10	Na (mg/L)	12.0	4.6	3.7	4.9	4.3
11	NO ₂ +NO ₃ (mg N/L)	0.35	0.49	0.55	0.88	0.90
12	NO ₂ -N (mgN/L)	0.01	0.00	0.00	0.00	0.02
13	NO ₃ -N (mgN/L)	0.34	0.49	0.54	0.88	0.88
14	o-PO ₄ -P (mg P/L)		0.000	1.250	0.003	
15	SiO ₂ (mg/L)	14.3	11.5	11.1	11.2	
16	SO ₄ (mg/L)	1.9	2.1	2.6	3.0	2.7
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Ni ($\mu\text{g}/\text{L}$)					
6	Pb ($\mu\text{g}/\text{L}$)					
7	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	44	21	18	21	20
2	HAR_Total (mgCaCO ₃ /L)	80	40	37	37	36
3	Na% (%)	24	20	17	22	21
4	RSC (-)	0.2	0.0	0.0	0.0	0.0
5	SAR (-)	0.6	0.3	0.3	0.3	0.3
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Chunchunkatte (CC000V7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood			Winter	
		Jun - Oct			Nov - Feb	
		2013	2014	2015	2008-2009	2009-2010
PHYSICAL						
1	Q (cumec)	205.7	229.6	54	32.84	24.86
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	110	152	136	251	217
3	pH_GEN (pH units)	7.4	7.6	7.5	7.8	8.0
4	TDS (mg/L)					
5	Temp (deg C)	22.9	23.3	23.7	24.2	25.2
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	35	36	48	117	101
2	B (mg/L)	0.02	0.10	0.36	0.09	0.15
3	Ca (mg/L)	10	10	13	23	21
4	Cl (mg/L)	9.9	8.5	11.7	11.6	11.0
5	F (mg/L)	0.07	0.17	0.15	0.13	0.16
6	Fe (mg/L)	0.3	0.2	0.1	0.1	0.1
7	HCO ₃ (mg/L)	43	44	59	142	124
8	K (mg/L)	0.9	1.2	1.0	0.9	0.8
9	Mg (mg/L)	4.6	4.9	5.2	10.4	9.1
10	Na (mg/L)	5.3	3.8	5.7	14.9	11.9
11	NO ₂ +NO ₃ (mg N/L)	1.24	0.61	0.60	0.48	0.53
12	NO ₂ -N (mgN/L)	0.01	0.04	0.01	0.02	0.03
13	NO ₃ -N (mgN/L)	1.23	0.57	0.59	0.46	0.50
14	o-PO ₄ -P (mg P/L)	0.039	0.018	0.186	0.038	0.007
15	SiO ₂ (mg/L)	10.4	8.8	15.3	18.8	15.6
16	SO ₄ (mg/L)	4.5	3.1	3.6	1.9	2.1
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)	6.1				
2	Cd ($\mu\text{g}/\text{L}$)	0.0				
3	Cr ($\mu\text{g}/\text{L}$)	0.9				
4	Cu ($\mu\text{g}/\text{L}$)	0.4				
5	Ni ($\mu\text{g}/\text{L}$)	8.8				
6	Pb ($\mu\text{g}/\text{L}$)	0.6				
7	Zn ($\mu\text{g}/\text{L}$)	0.0				
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	26	24	33	59	53
2	HAR_Total (mgCaCO ₃ /L)	45	44	55	102	91
3	Na% (%)	20	16	18	24	22
4	RSC (-)	0.0	0.0	0.0	0.3	0.2
5	SAR (-)	0.3	0.2	0.3	0.6	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Chunchukatte (CC000V7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter				
		Nov - Feb				
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
PHYSICAL						
1	Q (cumec)	27	27.71		25.43	25.44
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	219	247		247	254
3	pH_GEN (pH units)	8.0	7.3		7.7	8.0
4	TDS (mg/L)					
5	Temp (deg C)	24.1	24.5		24.3	23.2
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	98	108		104	110
2	B (mg/L)	0.02	0.00		0.01	0.16
3	Ca (mg/L)	20	23		25	26
4	Cl (mg/L)	8.8	12.4		14.3	14.6
5	F (mg/L)	0.16			0.53	0.20
6	Fe (mg/L)	0.1	0.0		0.1	0.1
7	HCO ₃ (mg/L)	120	132		131	134
8	K (mg/L)	1.2	1.0		1.0	2.6
9	Mg (mg/L)	10.0	9.4		9.4	10.0
10	Na (mg/L)	9.9	13.1		13.6	10.7
11	NO ₂ +NO ₃ (mg N/L)	0.79	1.19		1.11	1.22
12	NO ₂ -N (mgN/L)	0.01	0.00		0.00	0.01
13	NO ₃ -N (mgN/L)	0.78	1.19		1.11	1.21
14	o-PO ₄ -P (mg P/L)	0.003	0.005		0.048	0.007
15	SiO ₂ (mg/L)	11.6	15.5		13.8	12.6
16	SO ₄ (mg/L)	3.3	3.4		2.7	3.8
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					0.0
3	Cr ($\mu\text{g}/\text{L}$)					0.3
4	Cu ($\mu\text{g}/\text{L}$)					1.5
5	Ni ($\mu\text{g}/\text{L}$)					0.1
6	Pb ($\mu\text{g}/\text{L}$)					0.9
7	Zn ($\mu\text{g}/\text{L}$)					9.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	50	57		61	65
2	HAR_Total (mgCaCO ₃ /L)	91	96		100	107
3	Na% (%)	19	22		23	17
4	RSC (-)	0.2	0.2		0.1	0.1
5	SAR (-)	0.5	0.6		0.6	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Chunchukatte (CC000V7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter	Summer			
		Nov - Feb	Mar - May			
		2015-2016	2009	2010	2011	2012
PHYSICAL						
1	Q (cumec)	50.92				
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	217				
3	pH_GEN (pH units)	7.8				
4	TDS (mg/L)	116				
5	Temp (deg C)	23.8				
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	87				
2	B (mg/L)	0.25				
3	Ca (mg/L)	25				
4	Cl (mg/L)	15.6				
5	F (mg/L)	0.19				
6	Fe (mg/L)	0.1				
7	HCO ₃ (mg/L)	106				
8	K (mg/L)	1.2				
9	Mg (mg/L)	5.8				
10	Na (mg/L)	9.3				
11	NO ₂ +NO ₃ (mg N/L)	0.68				
12	NO ₂ -N (mgN/L)	0.00				
13	NO ₃ -N (mgN/L)	0.68				
14	o-PO ₄ -P (mg P/L)	0.171				
15	SiO ₂ (mg/L)	18.7				
16	SO ₄ (mg/L)	3.0				
BIOLOGICAL/BACTERIOLOGICAL						
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)		Water samples not collected because of dry bed / no flow condition			
2	Cd ($\mu\text{g}/\text{L}$)		Water samples not collected because of dry bed / no flow condition			
3	Cr ($\mu\text{g}/\text{L}$)		Water samples not collected because of dry bed / no flow condition			
4	Cu ($\mu\text{g}/\text{L}$)		Water samples not collected because of dry bed / no flow condition			
5	Ni ($\mu\text{g}/\text{L}$)		Water samples not collected because of dry bed / no flow condition			
6	Pb ($\mu\text{g}/\text{L}$)		Water samples not collected because of dry bed / no flow condition			
7	Zn ($\mu\text{g}/\text{L}$)		Water samples not collected because of dry bed / no flow condition			
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	62				
2	HAR_Total (mgCaCO ₃ /L)	86				
3	Na% (%)	19				
4	RSC (-)	0.0				
5	SAR (-)	0.4				
PESTICIDES						

Water Quality Seasonal Average for the period: 2008-2016

Station Name : Chunchukatte (CC000V7)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)				
2	EC_GEN ($\mu\text{mho}/\text{cm}$)				
3	pH_GEN (pH units)				
4	TDS (mg/L)				
5	Temp (deg C)				
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)				
2	B (mg/L)				
3	Ca (mg/L)				
4	Cl (mg/L)				
5	F (mg/L)				
6	Fe (mg/L)				
7	HCO ₃ (mg/L)				
8	K (mg/L)				
9	Mg (mg/L)				
10	Na (mg/L)				
11	NO ₂ +NO ₃ (mg N/L)				
12	NO ₂ -N (mgN/L)				
13	NO ₃ -N (mgN/L)				
14	o-PO ₄ -P (mg P/L)				
15	SiO ₂ (mg/L)				
16	SO ₄ (mg/L)				
BIOLOGICAL/BACTERIOLOGICAL					
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)				
2	Cd ($\mu\text{g}/\text{L}$)				
3	Cr ($\mu\text{g}/\text{L}$)				
4	Cu ($\mu\text{g}/\text{L}$)				
5	Ni ($\mu\text{g}/\text{L}$)				
6	Pb ($\mu\text{g}/\text{L}$)				
7	Zn ($\mu\text{g}/\text{L}$)				
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)				
2	HAR_Total (mgCaCO ₃ /L)				
3	Na% (%)				
4	RSC (-)				
5	SAR (-)				
PESTICIDES					

HISTORY SHEET

Water Year : 2015-2016

Site	: KUDIGE	Code	: CC000Y5
State	: Karnataka	District	Coorg
Basin	: Cauvery	Independent River	: Cauvery
Tributary	: -	Sub Tributary	:
Sub-Sub Tributary	:	Local River	: Cauvery
Division	: Cauvery Division, Bangalore	Sub-Division	: Upper Cauvery SD, Bangalore
Drainage Area	: 1934 Sq. Km.	Bank	: Left
Latitude	: 12° 30' 09"	Longitude	: 75° 57' 40"
Zero of Gauge (m)	: 809.000 (m.s.l)	01/11/1973	
	Opening Date	Closing Date	
Gauge	: 01/11/1973		
Discharge	: 01/11/1973		
Sediment	: 01/11/1973		
Water Quality	: 01/06/1978		

Water Quality Datasheet for the period : 2015-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

River Water Analysis

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/07/2015	01/09/2015	02/11/2015
		A	A	A
PHYSICAL				
1	Q (cumec)	195.1	76.03	65.34
2	Colour_Cod (-)	Light Brown	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	91	74	99
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.3	7.3	7.6
6	TDS (mg/L)			
7	Temp (deg C)	24.0	22.0	22.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	27	26	29
3	B (mg/L)	0.05	1.44	0.21
4	Ca (mg/L)	8	6	8
5	Cl (mg/L)	9.9	6.0	13.1
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.04	0.11	0.10
8	Fe (mg/L)	0.2	0.1	0.1
9	HCO ₃ (mg/L)	33	31	35
10	K (mg/L)	0.9	0.7	1.2
11	Mg (mg/L)	3.9	3.4	3.9
12	Na (mg/L)	4.2	4.2	5.8
13	NO ₂ +NO ₃ (mg N/L)	0.83	0.59	0.74
14	NO ₂ -N (mgN/L)	0.00	0.06	0.00
15	NO ₃ -N (mgN/L)	0.83	0.53	0.74
16	o-PO ₄ -P (mg P/L)	0.041	0.331	0.393
17	SiO ₂ (mg/L)	8.1	23.5	12.5
18	SO ₄ (mg/L)	1.7	2.0	2.6
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)		1.1	1.2
2	DO (mg/L)	5.7	6.1	7.6
3	DO_SAT% (%)	67	70	87
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			
2	Cr ($\mu\text{g}/\text{L}$)			
3	Cu ($\mu\text{g}/\text{L}$)			
4	Ni ($\mu\text{g}/\text{L}$)			
5	Zn ($\mu\text{g}/\text{L}$)			
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	20	14	20
2	HAR_Total (mgCaCO ₃ /L)	36	28	36
3	Na% (%)	20	24	25
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.3	0.3	0.4
PESTICIDES				

Water Quality Datasheet for the period : 2015-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

River Water Analysis

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	01/01/2016	01/03/2016	02/05/2016
		A	A	A
PHYSICAL				
1	Q (cumec)	31.35	1.717	0.509
2	Colour_Cod (-)	Clear	Clear	Clear
3	EC_GEN ($\mu\text{mho}/\text{cm}$)	117	154	169
4	Odour_Code (-)	odour free	odour free	odour free
5	pH_GEN (pH units)	7.8	7.3	7.5
6	TDS (mg/L)	55	72	79
7	Temp (deg C)	23.0	31.0	27.0
CHEMICAL				
1	Alk-Phen (mgCaCO ₃ /L)	0.0	0.0	0.0
2	ALK-TOT (mgCaCO ₃ /L)	36	57	49
3	B (mg/L)	0.17	0.34	0.06
4	Ca (mg/L)	10	16	13
5	Cl (mg/L)	12.4	13.8	21.3
6	CO ₃ (mg/L)	0.0	0.0	0.0
7	F (mg/L)	0.08		
8	Fe (mg/L)	0.2	0.1	0.1
9	HCO ₃ (mg/L)	44	70	59
10	K (mg/L)	1.2	1.3	1.5
11	Mg (mg/L)	4.9	4.9	7.8
12	Na (mg/L)	4.7	6.5	7.9
13	NO ₂ +NO ₃ (mg N/L)	0.81	0.52	1.09
14	NO ₂ -N (mgN/L)	0.00	0.01	0.03
15	NO ₃ -N (mgN/L)	0.81	0.50	1.06
16	o-PO ₄ -P (mg P/L)	0.114	0.021	0.000
17	SiO ₂ (mg/L)	17.5	21.8	20.4
18	SO ₄ (mg/L)	2.6	3.4	3.2
BIOLOGICAL/BACTERIOLOGICAL				
1	BOD ₃₋₂₇ (mg/L)	0.8	0.2	0.8
2	DO (mg/L)	7.1	5.4	5.0
3	DO_SAT% (%)	83	72	63
TRACE & TOXIC				
1	As ($\mu\text{g}/\text{L}$)			4.1
2	Cr ($\mu\text{g}/\text{L}$)			0.9
3	Cu ($\mu\text{g}/\text{L}$)			0.9
4	Ni ($\mu\text{g}/\text{L}$)			3.0
5	Zn ($\mu\text{g}/\text{L}$)			3.9
CHEMICAL INDICES				
1	HAR_Ca (mgCaCO ₃ /L)	24	40	32
2	HAR_Total (mgCaCO ₃ /L)	44	60	64
3	Na% (%)	18	19	21
4	RSC (-)	0.0	0.0	0.0
5	SAR (-)	0.3	0.4	0.4
PESTICIDES				

Water Quality Summary for the period : 2015-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

Division : Cauvery Division, Bangalore

River Water Summary

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Number of Observations	Maximum	Minimum	Mean
PYHICAL					
1	Q (cumec)	366	918.2	0.264	75.18
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	6	169	74	117
3	pH_GEN (pH units)	6	7.8	7.3	7.5
4	TDS (mg/L)	3	79	55	69
5	Temp (deg C)	6	31.0	22.0	24.8
CHEMICAL					
1	Alk-Phen (mgCaCO ₃ /L)	6	0.0	0.0	0
2	ALK-TOT (mgCaCO ₃ /L)	6	57	26	37
3	B (mg/L)	6	1.44	0.05	0.38
4	Ca (mg/L)	6	16	6	10
5	Cl (mg/L)	6	21.3	6.0	12.8
6	CO ₃ (mg/L)	6	0.0	0.0	0
7	F (mg/L)	4	0.11	0.04	0.08
8	Fe (mg/L)	6	0.2	0.1	0.1
9	HCO ₃ (mg/L)	6	70	31	45
10	K (mg/L)	6	1.5	0.7	1.1
11	Mg (mg/L)	6	7.8	3.4	4.8
12	Na (mg/L)	6	7.9	4.2	5.6
13	NO ₂ +NO ₃ (mg N/L)	6	1.09	0.52	0.76
14	NO ₂ -N (mgN/L)	6	0.06	0.00	0.02
15	NO ₃ -N (mgN/L)	6	1.06	0.50	0.75
16	o-PO ₄ -P (mg P/L)	6	0.393	0.000	0.15
17	SiO ₂ (mg/L)	6	23.5	8.1	17.3
18	SO ₄ (mg/L)	6	3.4	1.7	2.6
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	5	1.2	0.2	0.8
2	DO (mg/L)	6	7.6	5.0	6.1
3	DO_SAT% (%)	6	87	63	74
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	1	4.1	4.1	4.1
2	Cr ($\mu\text{g}/\text{L}$)	1	0.9	0.9	0.9
3	Cu ($\mu\text{g}/\text{L}$)	1	0.9	0.9	0.9
4	Ni ($\mu\text{g}/\text{L}$)	1	3.0	3.0	3
5	Zn ($\mu\text{g}/\text{L}$)	1	3.9	3.9	3.9
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	6	40	14	25
2	HAR_Total (mgCaCO ₃ /L)	6	64	28	45
3	Na% (%)	6	25	18	21
4	RSC (-)	6	0.0	0.0	0
5	SAR (-)	6	0.4	0.3	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2005	2006	2007	2008	2009
PHYSICAL						
1	Q (cumec)	232.7			246.6	195.2
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	267			87	49
3	pH_GEN (pH units)	7.1			7.5	7.4
4	TDS (mg/L)					
5	Temp (deg C)	24.0			22.3	25.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	78			23	15
2	B (mg/L)	0.00				0.01
3	Ca (mg/L)	18			6	4
4	Cl (mg/L)	35.6			12.7	5.9
5	F (mg/L)	0.11			0.01	0.13
6	Fe (mg/L)	0.1				0.2
7	HCO ₃ (mg/L)	96			28	19
8	K (mg/L)	6.5			1.1	0.7
9	Mg (mg/L)	6.7			1.9	2.4
10	Na (mg/L)	28.5			8.4	2.5
11	NO ₂ +NO ₃ (mg N/L)	0.20			0.55	0.49
12	NO ₂ -N (mgN/L)	0.00			0.00	0.00
13	NO ₃ -N (mgN/L)	0.20			0.55	0.49
14	o-PO ₄ -P (mg P/L)	0.165				0.047
15	SiO ₂ (mg/L)	11.8				8.3
16	SO ₄ (mg/L)	4.1			2.0	1.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	0.2			0.9	2.3
2	DO (mg/L)	7.1			6.7	6.9
3	DO_SAT% (%)	84			77	82
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	46			14	10
2	HAR_Total (mgCaCO ₃ /L)	74			22	20
3	Na% (%)	44			44	21
4	RSC (-)	0.1			0.0	0.0
5	SAR (-)	1.5			0.8	0.2
PESTICIDES						

Water Quality monitoring is suspended as per rationalisation of sites

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood				
		Jun - Oct				
		2010	2011	2012	2013	2014
PHYSICAL						
1	Q (cumec)	213.8	272.9	118.9	117.5	425.8
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	45	50	49	73	53
3	pH_GEN (pH units)	7.4	6.9	7.0	7.5	7.4
4	TDS (mg/L)					
5	Temp (deg C)	26.3	24.5	25.5	24.5	23.0
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	14	14	14	21	16
2	B (mg/L)		0.01		0.01	0.06
3	Ca (mg/L)	4	5	4	6	5
4	Cl (mg/L)	4.8	6.0	5.0	7.8	6.0
5	F (mg/L)	0.02	0.03	0.28	0.07	0.09
6	Fe (mg/L)	0.1	0.1		0.2	0.4
7	HCO ₃ (mg/L)	17	17	17	25	20
8	K (mg/L)	0.5	0.6	0.7	0.9	0.6
9	Mg (mg/L)	1.9	1.9	2.2	2.9	2.4
10	Na (mg/L)	2.2	2.3	2.7	3.6	2.4
11	NO ₂ +NO ₃ (mg N/L)	0.56	0.60	0.77	0.89	0.44
12	NO ₂ -N (mgN/L)	0.00	0.00	0.01	0.03	0.06
13	NO ₃ -N (mgN/L)	0.53	0.60	0.76	0.85	0.39
14	o-PO ₄ -P (mg P/L)	0.005	0.005		0.036	0.010
15	SiO ₂ (mg/L)	10.1	9.5		12.4	10.5
16	SO ₄ (mg/L)	1.5	2.4	1.9	3.2	1.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)		0.2	0.6	1.1	1.2
2	DO (mg/L)	6.9	6.4	6.7	6.3	6.2
3	DO_SAT% (%)	85	76	81	75	73
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			1.0	3.1	
2	Cd ($\mu\text{g}/\text{L}$)				0.0	
3	Cr ($\mu\text{g}/\text{L}$)			4.6	1.5	
4	Cu ($\mu\text{g}/\text{L}$)			5.2	0.4	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			0.7	6.2	
7	Pb ($\mu\text{g}/\text{L}$)				1.1	
8	Zn ($\mu\text{g}/\text{L}$)				0.0	
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	10	12	9	16	12
2	HAR_Total (mgCaCO ₃ /L)	18	20	18	28	22
3	Na% (%)	21	19	24	22	19
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.2	0.2	0.3	0.3	0.2
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Flood	Winter			
		Jun - Oct	Nov - Feb			
			2015	2005-2006	2006-2007	2007-2008
PHYSICAL						
1	Q (cumec)	135.6	32.27			11.49
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	83	240			112
3	pH_GEN (pH units)	7.3	7.7			7.8
4	TDS (mg/L)					
5	Temp (deg C)	23.0	24.0			23.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	26	67			43
2	B (mg/L)	0.75	0.10			0.11
3	Ca (mg/L)	7	12			9
4	Cl (mg/L)	8.0	33.2			8.7
5	F (mg/L)	0.08	0.13			0.11
6	Fe (mg/L)	0.2	0.6			0.1
7	HCO ₃ (mg/L)	32	82			52
8	K (mg/L)	0.8	4.1			0.8
9	Mg (mg/L)	3.6	7.6			5.3
10	Na (mg/L)	4.2	27.6			5.3
11	NO ₂ +NO ₃ (mg N/L)	0.71	0.24			0.59
12	NO ₂ -N (mgN/L)	0.03	0.00			0.00
13	NO ₃ -N (mgN/L)	0.68	0.24			0.59
14	o-PO ₄ -P (mg P/L)	0.186	0.196			0.031
15	SiO ₂ (mg/L)	15.8	12.3			16.6
16	SO ₄ (mg/L)	1.9	4.2			1.0
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.1	1.4			0.8
2	DO (mg/L)	5.9	6.1			6.0
3	DO_SAT% (%)	69	73			70
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)					
2	Cd ($\mu\text{g}/\text{L}$)					
3	Cr ($\mu\text{g}/\text{L}$)					
4	Cu ($\mu\text{g}/\text{L}$)					
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)					
7	Pb ($\mu\text{g}/\text{L}$)					
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	17	29			22
2	HAR_Total (mgCaCO ₃ /L)	32	61			44
3	Na% (%)	22	46			20
4	RSC (-)	0.0	0.1			0.0
5	SAR (-)	0.3	1.5			0.3
PESTICIDES						

Water Quality monitoring is suspended as per rationalisation of sites

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter				
		Nov - Feb				
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
PHYSICAL						
1	Q (cumec)	30.89	37.83	27.67	18.11	36.29
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	100	100	124	97	109
3	pH_GEN (pH units)	7.5	7.5	7.0	7.2	7.3
4	TDS (mg/L)					
5	Temp (deg C)	24.3	24.3	24.5	26.0	22.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	35	34	44	30	38
2	B (mg/L)	0.05	0.02			0.01
3	Ca (mg/L)	7	7	10	10	9
4	Cl (mg/L)	8.8	7.8	9.4	8.5	9.9
5	F (mg/L)	0.08	0.06		0.55	0.57
6	Fe (mg/L)	0.2	0.1	0.1		0.2
7	HCO ₃ (mg/L)	43	42	54	37	47
8	K (mg/L)	1.3	0.8	0.9	0.8	0.9
9	Mg (mg/L)	4.9	4.4	5.8	3.4	4.1
10	Na (mg/L)	4.5	4.5	5.3	4.2	7.0
11	NO ₂ +NO ₃ (mg N/L)	0.55	0.76	1.18	1.11	1.30
12	NO ₂ -N (mgN/L)	0.01	0.01	0.01	0.01	0.01
13	NO ₃ -N (mgN/L)	0.54	0.76	1.17	1.10	1.29
14	o-PO ₄ -P (mg P/L)	0.005	0.005	0.010		0.010
15	SiO ₂ (mg/L)	12.8	13.0			13.4
16	SO ₄ (mg/L)	1.2	2.2	2.4	1.7	1.8
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.9	1.0	0.7	0.4	0.7
2	DO (mg/L)	6.8	6.6	6.0	6.1	6.3
3	DO_SAT% (%)	80	79	72	76	73
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			0.3	3.1	
2	Cd ($\mu\text{g}/\text{L}$)			0.2	0.0	
3	Cr ($\mu\text{g}/\text{L}$)			2.4	0.4	
4	Cu ($\mu\text{g}/\text{L}$)			22.3	1.2	
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)			3.1	8.2	
7	Pb ($\mu\text{g}/\text{L}$)			0.2		
8	Zn ($\mu\text{g}/\text{L}$)					
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	18	18	24	24	22
2	HAR_Total (mgCaCO ₃ /L)	38	36	48	38	39
3	Na% (%)	20	22	19	19	28
4	RSC (-)	0.0	0.0	0.0	0.0	0.0
5	SAR (-)	0.3	0.3	0.3	0.3	0.5
PESTICIDES						

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Winter		Summer		
		Nov - Feb		Mar - May		
		2014-2015	2015-2016	2006	2007	2008
PHYSICAL						
1	Q (cumec)	25.64	48.35	4.601		4.811
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	117	108	230		144
3	pH_GEN (pH units)	7.7	7.7	7.4		7.6
4	TDS (mg/L)		55			
5	Temp (deg C)	23.0	22.5	26.8		28.5
CHEMICAL						
1	ALK-TOT (mgCaCO ₃ /L)	37	32	60		38
2	B (mg/L)	0.14	0.19	0.01		0.06
3	Ca (mg/L)	12	9	10		13
4	Cl (mg/L)	11.9	12.8	33.7		19.9
5	F (mg/L)	0.09	0.09	1.75		0.04
6	Fe (mg/L)	0.1	0.1	0.4		0.1
7	HCO ₃ (mg/L)	46	39	73		47
8	K (mg/L)	2.2	1.2	3.2		1.6
9	Mg (mg/L)	4.4	4.4	6.3		3.4
10	Na (mg/L)	4.6	5.2	27.9		10.8
11	NO ₂ +NO ₃ (mg N/L)	1.27	0.78	0.07		0.01
12	NO ₂ -N (mgN/L)	0.01	0.00	0.00		0.00
13	NO ₃ -N (mgN/L)	1.27	0.78	0.07		0.01
14	o-PO ₄ -P (mg P/L)	0.005	0.253	0.103		0.041
15	SiO ₂ (mg/L)	9.0	15.0	8.8		12.6
16	SO ₄ (mg/L)	3.6	2.6	3.2		3.2
BIOLOGICAL/BACTERIOLOGICAL						
1	BOD ₃₋₂₇ (mg/L)	1.6	1.0	1.8		1.2
2	DO (mg/L)	6.6	7.4	6.3		7.1
3	DO_SAT% (%)	77	85	79		91
TRACE & TOXIC						
1	As ($\mu\text{g}/\text{L}$)			12.6		7.3
2	Cd ($\mu\text{g}/\text{L}$)	0.0		0.0		1.0
3	Cr ($\mu\text{g}/\text{L}$)	0.4		5.7		
4	Cu ($\mu\text{g}/\text{L}$)	11.9		9.3		4.3
5	Hg ($\mu\text{g}/\text{L}$)					
6	Ni ($\mu\text{g}/\text{L}$)	2.7		2.2		
7	Pb ($\mu\text{g}/\text{L}$)	1.4				1.4
8	Zn ($\mu\text{g}/\text{L}$)	8.3				30.0
CHEMICAL INDICES						
1	HAR_Ca (mgCaCO ₃ /L)	30	22	26		34
2	HAR_Total (mgCaCO ₃ /L)	48	40	52		48
3	Na% (%)	16	22	52		32
4	RSC (-)	0.0	0.0	0.2		0.0
5	SAR (-)	0.3	0.4	1.7		0.7
PESTICIDES						

Water Quality monitoring is suspended as per rationalisation of sites

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2009	2010	2011	2012
PHYSICAL					
1	Q (cumec)	2.951	7.324	8.766	5.747
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	161	132	134	156
3	pH_GEN (pH units)	7.6	7.6	7.1	7.1
4	TDS (mg/L)				
5	Temp (deg C)	27.8	28.5	28.0	26.0
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	64	53	42	55
2	B (mg/L)	0.09	0.06	0.03	
3	Ca (mg/L)	12	10	10	11
4	Cl (mg/L)	13.3	9.6	11.0	12.2
5	F (mg/L)	0.09	0.08	0.13	0.09
6	Fe (mg/L)	0.1	0.1	0.0	
7	HCO ₃ (mg/L)	78	64	51	67
8	K (mg/L)	1.6	1.3	1.7	1.8
9	Mg (mg/L)	7.3	6.3	5.8	7.3
10	Na (mg/L)	8.7	6.3	5.9	7.2
11	NO ₂ +NO ₃ (mg N/L)	0.65	0.56	0.90	1.01
12	NO ₂ -N (mgN/L)	0.00	0.00	0.01	0.02
13	NO ₃ -N (mgN/L)	0.65	0.56	0.88	0.99
14	o-PO ₄ -P (mg P/L)	0.016	0.005	0.005	
15	SiO ₂ (mg/L)	18.1	15.0	18.9	
16	SO ₄ (mg/L)	2.4	1.4	3.6	3.9
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.3	0.9		0.6
2	DO (mg/L)	5.7	5.7	5.4	6.4
3	DO_SAT% (%)	72	74	69	77
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)			1.5	0.7
2	Cd ($\mu\text{g}/\text{L}$)			0.0	0.0
3	Cr ($\mu\text{g}/\text{L}$)			1.1	3.0
4	Cu ($\mu\text{g}/\text{L}$)	1.1		4.1	10.5
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	10.6			4.2
7	Pb ($\mu\text{g}/\text{L}$)			0.1	4.2
8	Zn ($\mu\text{g}/\text{L}$)				37.0
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	30	24	24	28
2	HAR_Total (mgCaCO ₃ /L)	60	50	48	58
3	Na% (%)	23	21	20	21
4	RSC (-)	0.1	0.1	0.0	0.0
5	SAR (-)	0.5	0.4	0.4	0.4
PESTICIDES					

Water Quality Seasonal Average for the period: 2005-2016

Station Name : Kudige (CC000Y5)

Local River : Cauvery

River Water

Division : Cauvery Division, Bangalore

Sub-Division : Upper Cauvery SD, Bangalore

S.No	Parameters	Summer			
		Mar - May			
		2013	2014	2015	2016
PHYSICAL					
1	Q (cumec)	2.493	3.666	6.835	1.113
2	EC_GEN ($\mu\text{mho}/\text{cm}$)	135	151	132	162
3	pH_GEN (pH units)	7.4	7.3	7.5	7.4
4	TDS (mg/L)				76
5	Temp (deg C)	28.3	28.3	26.0	29.0
CHEMICAL					
1	ALK-TOT (mgCaCO ₃ /L)	45	54	42	53
2	B (mg/L)	0.00	0.14	0.33	0.20
3	Ca (mg/L)	13	12	10	14
4	Cl (mg/L)	11.4	12.2	14.6	17.6
5	F (mg/L)		0.54	0.09	
6	Fe (mg/L)	0.1	0.1	0.1	0.1
7	HCO ₃ (mg/L)	55	66	51	65
8	K (mg/L)	1.4	3.8	2.5	1.4
9	Mg (mg/L)	4.4	5.3	6.3	6.3
10	Na (mg/L)	7.3	8.5	5.5	7.2
11	NO ₂ +NO ₃ (mg N/L)	1.17	1.18	1.84	0.81
12	NO ₂ -N (mgN/L)	0.01	0.00	0.03	0.02
13	NO ₃ -N (mgN/L)	1.16	1.18	1.80	0.78
14	o-PO ₄ -P (mg P/L)	0.036	0.036	0.021	0.010
15	SiO ₂ (mg/L)	22.2	13.5	5.8	21.1
16	SO ₄ (mg/L)	2.9	3.5	2.5	3.3
BIOLOGICAL/BACTERIOLOGICAL					
1	BOD ₃₋₂₇ (mg/L)	1.5	1.0	0.3	0.5
2	DO (mg/L)	5.7	4.8	5.5	5.2
3	DO_SAT% (%)	73	61	68	67
TRACE & TOXIC					
1	As ($\mu\text{g}/\text{L}$)	2.3	0.1		4.1
2	Cd ($\mu\text{g}/\text{L}$)	0.2	0.0		
3	Cr ($\mu\text{g}/\text{L}$)	0.6	0.6		0.9
4	Cu ($\mu\text{g}/\text{L}$)	3.7	0.4		0.9
5	Hg ($\mu\text{g}/\text{L}$)				
6	Ni ($\mu\text{g}/\text{L}$)	1.5	11.3		3.0
7	Pb ($\mu\text{g}/\text{L}$)	12.0	0.3		
8	Zn ($\mu\text{g}/\text{L}$)	0.1	17.0		3.9
CHEMICAL INDICES					
1	HAR_Ca (mgCaCO ₃ /L)	32	30	26	36
2	HAR_Total (mgCaCO ₃ /L)	50	52	52	62
3	Na% (%)	23	24	18	20
4	RSC (-)	0.0	0.1	0.0	0.0
5	SAR (-)	0.4	0.5	0.3	0.4
PESTICIDES					

(केवल कार्यालय उपयोग हेतु)
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वार्षिक जल पुस्तिका
जल गुणवत्ता परिदृश्य
**WATER YEAR BOOK
WATER QUALITY SCENARIO**

जून 2015 – मई 2016
JUNE 2015 – MAY 2016

कावेरी बेसिन
CAUVERY BASIN



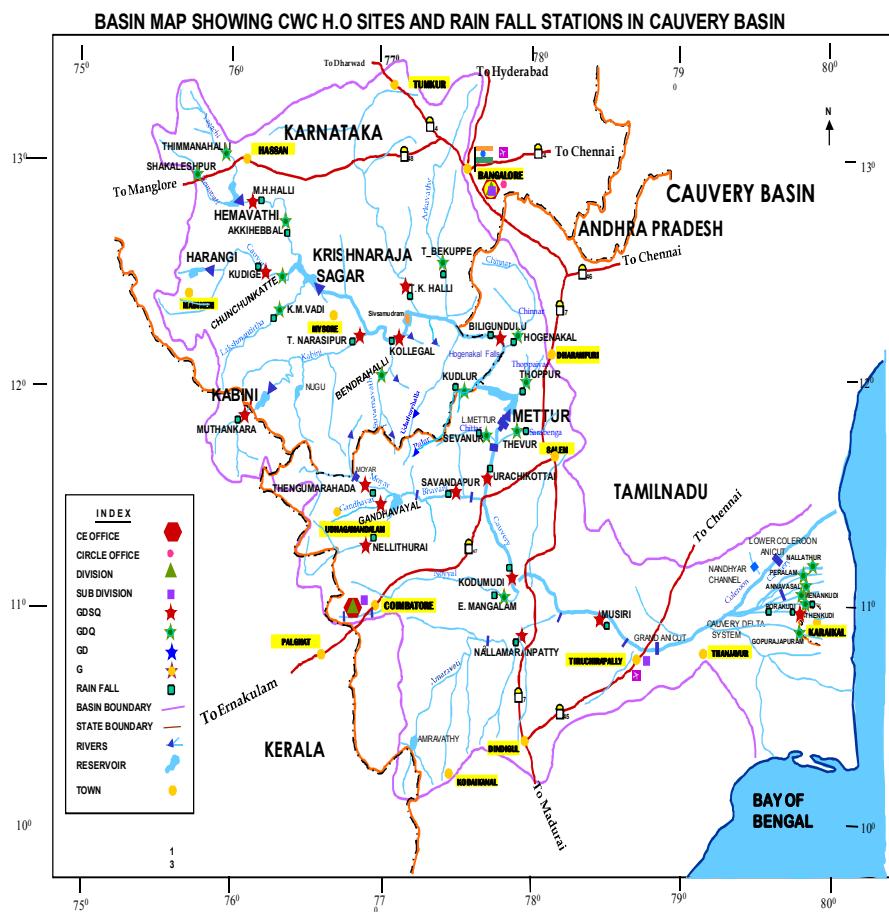
कावेरी एवं दक्षिणी नदियाँ परिमण्डल, बैंगलुरु
CAUVERY & SOUTHERN RIVERS CIRCLE, BENGALURU

कावेरी एवं दक्षिणी नदियाँ संगठन, कोयम्बत्तूर
CAUVERY & SOUTHERN RIVERS ORGANISATION, COIMBATORE

अप्रैल - 2017
APRIL - 2017

1. INTRODUCTION:

The river Cauvery originates at Talakaveri in Coorg District of Karnataka in Brahmagiri Range of hills in the Western Ghats at an elevation of 1341m (above MSL) and drains a total area of 81,155 Sq.Kms of which 34,273 Sq.Kms. lies in Karnataka, 43,856 Sq.Kms. in Tamil Nadu, 2,866 Sq.Kms. in Kerala and 160 Sq.Kms. in the Union Territory of Pondicherry. The total length of the river from the origin to its outfall into the sea is 800 Km. of which 320 Km is in Karnataka, 416 Km in Tamilnadu and 64 Km forming 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. This river basin in Tamilnadu receives good flow from the North East Monsoon.



2. MAJOR RIVERS:

2.1 Main River Cauvery:

The Cauvery river system consists of 21 principal tributaries each with Catchment Area exceeding 250 Sq.Kms. The largest among them are the Catchment Area of Shimsha lying wholly in Karnataka, the Amaravathi rising in Kerala but lying mostly in Tamil Nadu and the Kabini rising in both Kerala and Tamil Nadu but lying mostly in Karnataka. The Bhavani is the fourth largest and the second longest river. It rises in Kerala but lies mostly in Tamil Nadu. The longest tributary, the Hemavathi (245 Kms.) is the fifth largest in Catchment Area and lies wholly in Karnataka.

There are 7 water quality stations on the main river Cauvery before it forms distributaries in the Cauvery delta of Karaikal region. They are in the order from its origin are **Kudige, Chunchunkatte, Kollegal, Biligundulu, Urachikottai, Kodumudi** and **Musiri**.

2.2 The Hemavathi

The Hemavathi rises in the Western Ghats and runs South-East. After a stream from the West joins it, it turns east, receiving the Yagachi from the North. It then winds round Holenarasipur and runs south to the Cauvery near Yedatore. There are four stations in this basin i.e. the site at **Sakeleshpur, M.H.Halli** and **Akkihebbal** in the main river, rest on the tributary Yagachi at **Thimmanahalli**.

2.3 The Lakshmanathirtha

The Lakshmanathirtha is a tributary of the Cauvery. It originates from Kodagu district and flows eastward. It joins the river Cauvery just above the K.R. Sagar Reservoir. The catchment area of Lakhshmanathirtha river is 1690 Sq.Km and the length is 131 Km. The only water quality station in this river is at **K.M. Vadi**.

2.4. The Kabini

The Kabini is an important tributary of the Cauvery. It is a perennial river, 150 to 200 M wide and has a course of about 240 Kms. It rises in the Western Ghats in North Wynad in Kerala State as two streams i.e., the Mannantoddypuzha and Panamarampuzha. About 16 Kms. below their confluence, the Kabini forms border between Kerala and Karnataka for about 12 Kms. before entering Karnataka State. It joins the Cauvery at Tirumakudalu Narasipur (T.Narasipur) and this confluence point is being considered as a spot of great sanctity. The confluence point is also called as “Triveni Sangama”. There are two water quality stations in this river system namely **Muthankera** and **T.Narasipur**.

2.5 The Suvarnavathi

The Suvarnavathi is a tributary of the Cauvery. It originates from Nasrur Ghat range. The catchment area of Suvarnavathi river is 1787 Sq.Km and the length is 88 Km. The only water quality station in this river is at **Bendrahalli**.

2.6 The Shimsha

The Shimsha river is a tributary of the Cauvery. It originates at an altitude of 914 m in the Devarayanadurga hill. After originating in the Tumkur district, the river takes a southernly course and enters the Mandya district. The catchment area of Shimsa river is 8469 Sq.Km and the length is 221 Km. The only water quality station in this river is at **T.K.Halli**.

2.7 The Arkavathi

The Arkavathi river is a tributary of the Cauvery. It originates at Nandihills of Chikkaballapur district. The catchment area of Arkavathi river is 4351 Sq.Km and the length is 161Km. The only water quality station in this river is at **T.Bekuppe**.

2.8 The Chinnar

The Chinnar river is a tributary of the Cauvery. The only water quality station in this river is at **Hogenakkal**.

2.9 The Palar

The Palar river is a tributary of the Cauvery. It originates in Talagavara village in Kolar district. The catchment area of Palar river is 2813 Sq.Km and the length is 348 Km. The only water quality station in this river is at **Kudlur**.

2.10 The Thoppaiyar

The Thoppaiyar river is a tributary of the Cauvery. The only water quality station in this river is at **Thoppur**.

2.11 The Chittar

The Chittar river is a tributary of the Cauvery. The only water quality station in this river is at **Sevanur**.

2.12 The Sarabenga

The Sarabenga river is a tributary of the Cauvery. The only water quality station in this river is at **Thevur**.

2.13 The Bhavani

The Bhavani is a 217-kilometer long perennial river and it originates from Nilgiri hills of the Western Ghats fed mostly by the southwest monsoon and

supplemented by the northeast monsoon. Its watershed drains an area of 0.62 million hectares spread over Tamil Nadu (87%), Kerala (9%) and Karnataka (4%). The main river courses majorly through Coimbatore district and Erode district in Tamil Nadu. There are four stations in this basin i.e. the site at **Nellithurai** and **Savandapur** in the main river, rest on the tributaries viz., Moyar at **Thengumarahada**, Gandhayar at **Gandhavayal**.

2.14 The Amaravathi

The Amaravathi river is a tributary of the Cauvery. It originates at Anamalai hills in Tamil Nadu. The catchment area of Amaravathi river is 9080 Sq.Km and the length is 282 Km. The only water quality station in this river is at **Nallamaranpatty**. Only one water sample from this river is collected due to insufficient flow/dry bed throughout the year on the dates of sampling.

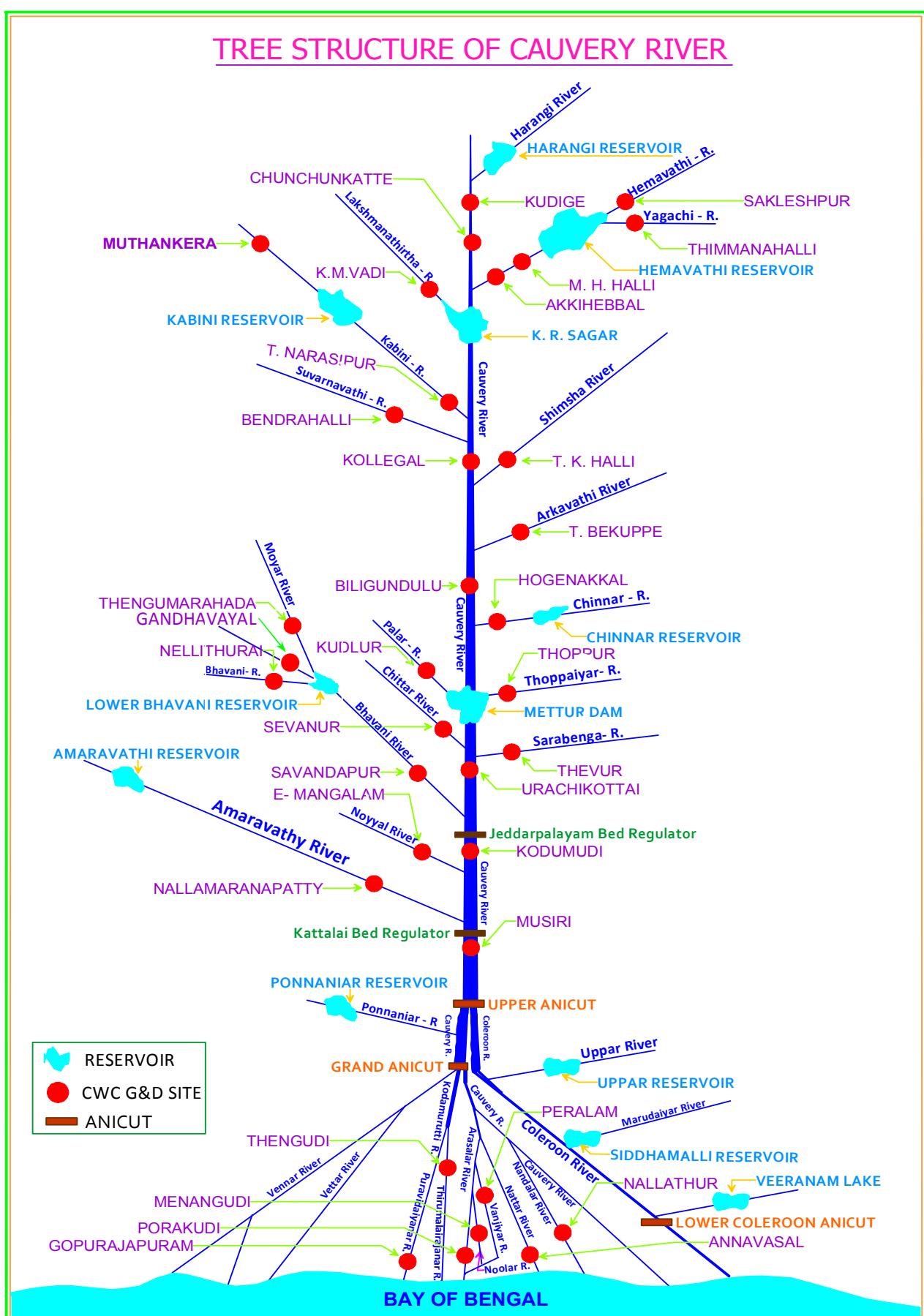
2.15 The Noyyal

The Noyyal river is the **most polluted tributary** of the Cauvery river. It originates at Vellingiri hills in Western Ghats of Tamilnadu. The catchment area of Noyyal river is 3500 Sq.Km and the length is 180 Km. The only one water quality station in this river is at **Elunuthimangalam**.

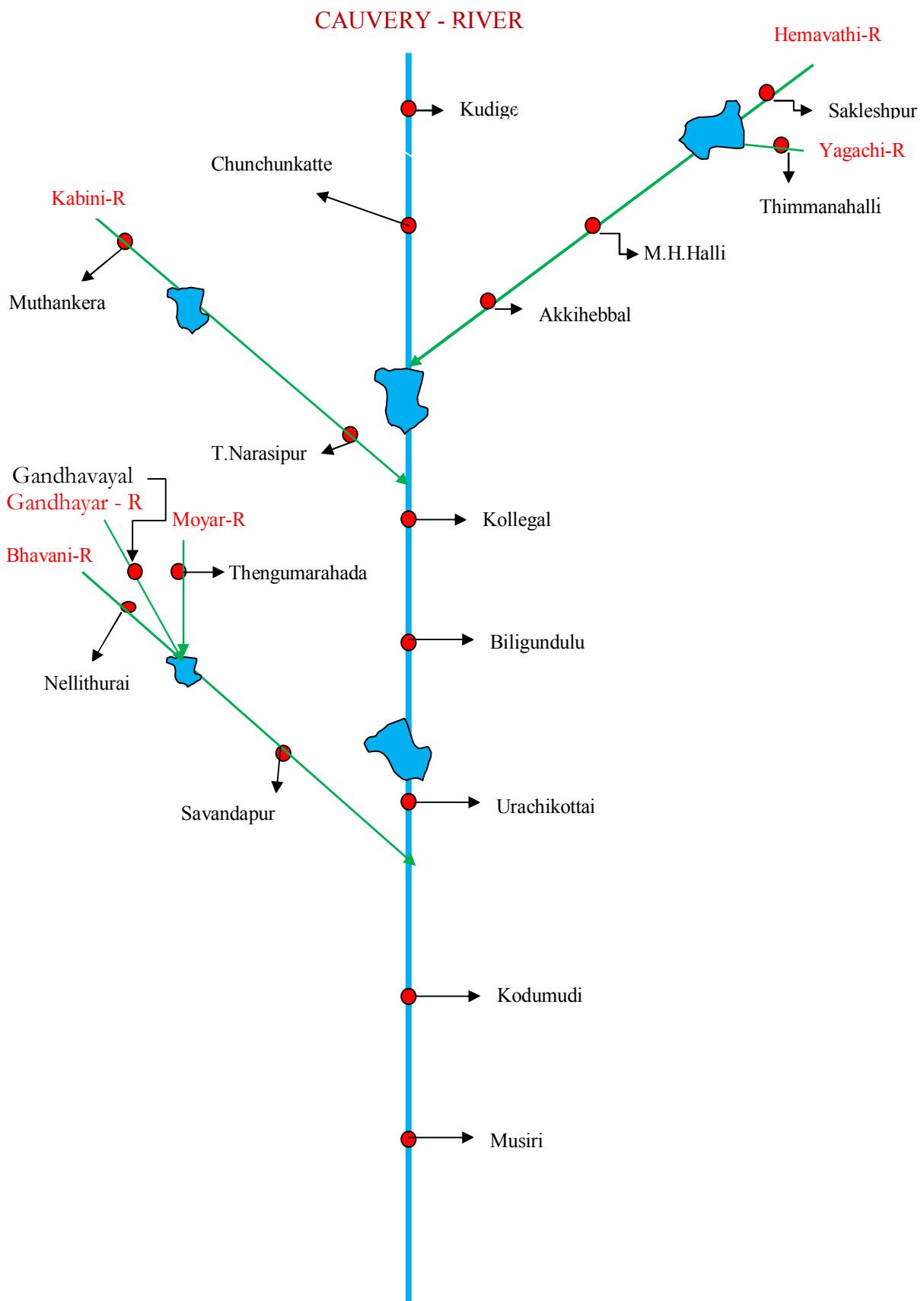
2.16 The Distributaries of Cauvery Delta Region

There are 7 distributaries from the river Cauvery in delta region that contributes the flow to the Karaikal area which are Nandalar, Nattar, Vanjiyar, Noolar, Arasalar, Thirumalairajanar and Puravadaianar. All the distributaries in the region are non-perennial and flow is mainly due to the release of Cauvery water. For most of the months in the year, the flows available are the releases/regulated flows from upper regulators maintained by the Government of Tamil Nadu. There are 7 water quality stations on the 7 distributaries of Cauvery. They are **Nallathur**, **Annavasal**, **Peralam**, **Menangudi**, **Porakudi**, **Thengudi** and **Gopurajapuram**.

TREE STRUCTURE OF CAUVERY RIVER



- RESERVOIR
- CWC G&D SITE
- ANICUT



Line Diagram of Cauvery Basin Scenario

3. Water Quality Network:

River wise network details in Cauvery Basin

River	River Type	WQ Sites	Date of Opening	Drainage Area (Sq.Km)	State
Cauvery	Main River	Kudige	01/06/1978	1934	Karnataka
		Chunchunkatte	03/10/2008	2995	
		Kollegal	01/06/1978	21082	
		Biligundulu	01/06/1978	36682	Tamil Nadu
		Urachikottai	01/06/1979	44100	
		Kodumudi	01/06/1978	53233	
		Musiri	01/06/1978	66243	
Hemavathi	Tributary	Sakaleshpur	02/09/2002	617	Karnataka
		M.H. Halli	01/07/1980	3050	
		Akkihebbal	02/09/2002	5236	
Yagachi	Tributary	Thimmanahalli	02/09/2002	1010	Karnataka
Lakhshmanirtha	Tributary	K.M. Vadi	01/07/1979	1330	Karnataka
Kabini	Tributary	Muthankera	01/06/1978	1260	Kerala
		T.Narasipur	01/06/1978	7000	Karnataka
Suvarnavathi	Tributary	Bendrahalli	01/04/2008	1900	Karnataka
Shimsa	Tributary	T.K.Halli	02/06/1979	7890	Karnataka
Arkavathi	Tributary	T.Bekuppe	01/12/2003	3500	Karnataka
Chinnar	Tributary	Hogenakkal	01/11/2004	1636	Tamil Nadu
Palar	Tributary	Kudlur	02/02/2001	709	Karnataka
Thoppaiyar	Tributary	Thoppur	01/11/2001	362	Tamil Nadu
Sarabenga	Tributary	Thevur	01/10/2001	1248	Tamil Nadu
Chittar	Tributary	Sevanur	01/10/2001	258	Tamil Nadu
Bhavani	Tributary	Nellithurai	01/06/1979	1475	Tamil Nadu
		Savandapur	02/04/1979	5776	
Moyer	Tributary	Thengumarahada	01/06/1979	1370	Tamil Nadu
Noyyal	Tributary	Elunuthimangalam	03/10/2000	3386	Tamil Nadu
Amaravathi	Tributary	Nallamaranpatty	16/08/1978	9080	Tamil Nadu
Gandhayar	Tributary	Gandhavayal	01/04/2013	90.17	Tamil Nadu
Puravidaiyanar	Distributary	Gopurajapuram	01/10/2005		Tamil Nadu
Nattar	Distributary	Annavasal	01/09/2005		Pondicherry
Nandalar	Distributary	Nallathur	01/09/2008		Pondicherry
Noolar	Distributary	Menangudi	01/09/2005		Tamil Nadu
Arasalar	Distributary	Porakudi	01/09/2005		Tamil Nadu
Vanjiyar	Distributary	Peralam	01/09/2005		Tamil Nadu
Thirumalairajanar	Distributary	Thengudi	01/09/2005		Tamil Nadu

4. Analysis:

Water Quality monitoring provides information on the physical, chemical and biological status of water resources. The river water quality monitoring is a part of hydrological observation of Central Water Commission. The objectives of the river water quality monitoring is to assess the suitability of river water for various designated uses viz, irrigation, drinking purposes, out-door bathing and propagation of wildlife and fisheries, water quality improving or degrading etc.

River Water Quality Data of sites on the main river for the period given in Table – 1 has been taken into consideration for studying the WQ Scenario of the Rivers. Average of yearly Maximum, Average of yearly Minimum and Annual Average for the period of Since Inception, Last 10 years i.e. 2005 – 2006 to 2014 – 2015 and One year (2015 – 2016) for the major parameters like Electrical conductivity, pH, Fluoride, Biochemical Oxygen Demand and Dissolved Oxygen are taken into consideration for concluding the WQ Scenario of Cauvery, Hemavathi, Kabini and Bhavani Rivers.

Table-1

River	WQ Site Name	Year of Inception	Last 10 years	Last One Year
Cauvery	Kudige	1978 - 1979	2005-06 to 2014-15	2015 - 2016
	Chunchunkatte	2008 - 2009	2005-06 to 2014-15	2015 - 2016
	Kollegal	1978 - 1979	2005-06 to 2014-15	2015 - 2016
	Billigundulu	1978 - 1979	2005-06 to 2014-15	2015 – 2016
	Urachikottai	1979 - 1980	2005-06 to 2014-15	2015 – 2016
	Kodumudi	1979 - 1980	2005-06 to 2014-15	2015 – 2016
	Musiri	1979 - 1980	2005-06 to 2014-15	2015 – 2016
Hemavathi	Sakleshpur	2002 - 2003	2005-06 to 2014-15	2015 - 2016
	M. H. Halli	1980 - 1981	2005-06 to 2014-15	2015 - 2016
	Akkihebbal	2002 - 2003	2005-06 to 2014-15	2015 - 2016
Kabini	Muthankera	1990 - 1991	2005-06 to 2014-15	2015 - 2016
	T. Narasipur	1978 - 1979	2005-06 to 2014-15	2015 - 2016
Bhavani	Nellithurai	1979 - 1980	2005-06 to 2014-15	2015 - 2016
	Savandapur	1979 - 1980	2005-06 to 2014-15	2015 - 2016

WQ Scenario of these Rivers is concluded with relation to the Tolerance limits of selected pollution indicating parameters for inland surface waters designated for different uses as prescribed by the Bureau of Indian Standards (BIS IS: 2296-1982) which is shown in Annexure - IV and Drinking Water Specification as prescribed by Bureau of Indian Standards (IS 10500: 2012) which is shown in Annexure - V.

4.1 Cauvery River:

The water quality scenario is being presented in pictorial graph among the sites **Kudige, Chunchunkatte, Kollegal, Biligundulu, Urachikottai, Kodumudi** and **Musiri** on river Cauvery under Cauvery Rivers Basin. The data details considered for water quality trend study from upstream to downstream of Cauvery River is given below.

4.1.1 Electrical Conductivity (EC) ($\mu\text{mhos}/\text{cm}$)

EC values for the period considered is given in Table - 2 and their graphical representation is given in Figure - 1.1, Figure - 1.2 & Figure - 1.3.

Table – 2

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Kudige	334	173	169	63	78	74	143	124	117
Chunchunkatte	257	259	244	77	74	96	166	166	169
Kollegal	448	452	476	169	171	148	321	341	354
Biligundulu	581	549	647	193	194	167	377	388	445
Urachikottai	498	444	547	202	195	138	349	320	404
Kodumudi	690	765	892	230	226	305	447	461	558
Musiri	655	798	780	252	256	342	464	521	593

Figure - 1.1

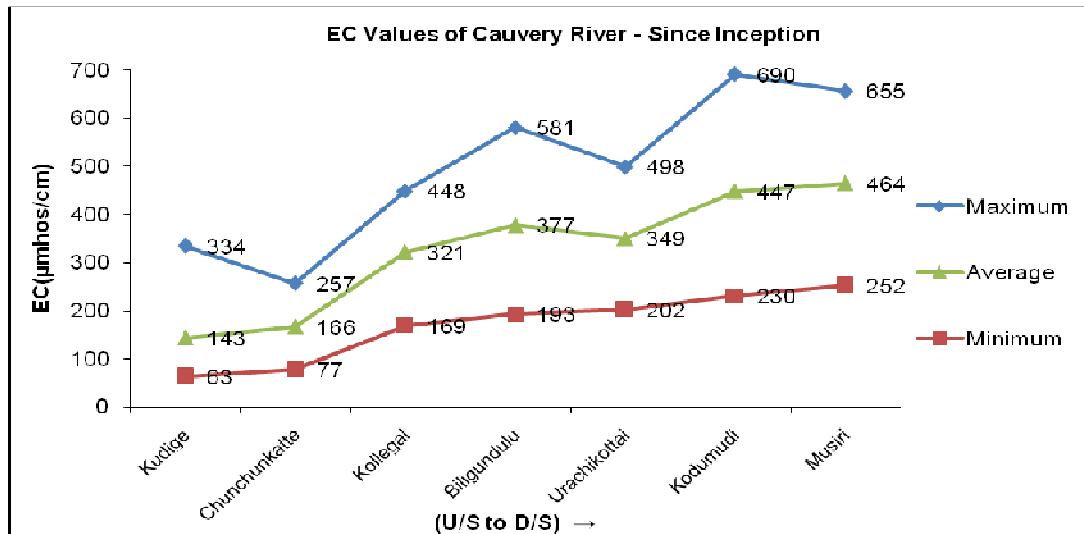


Figure - 1.2

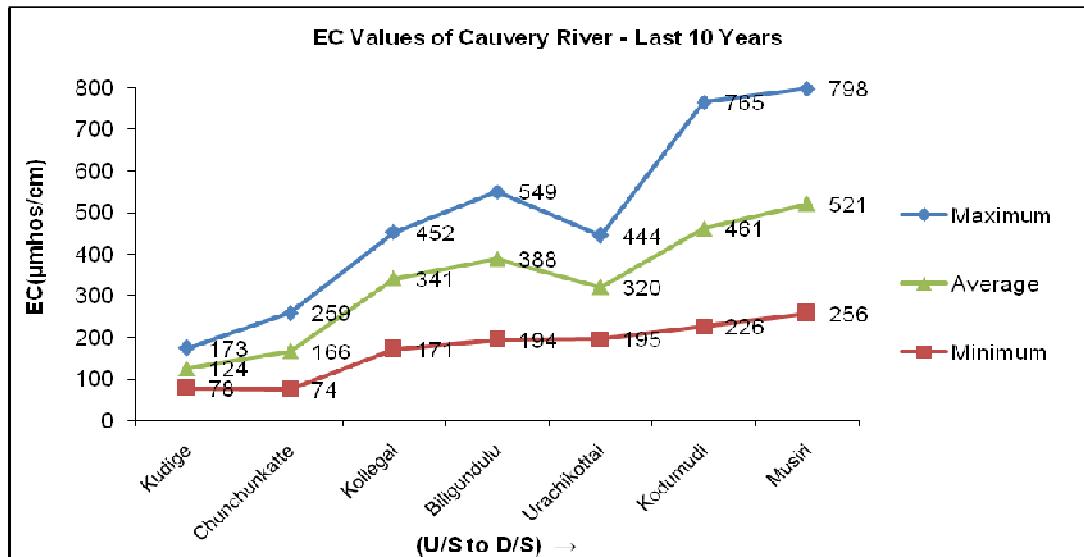
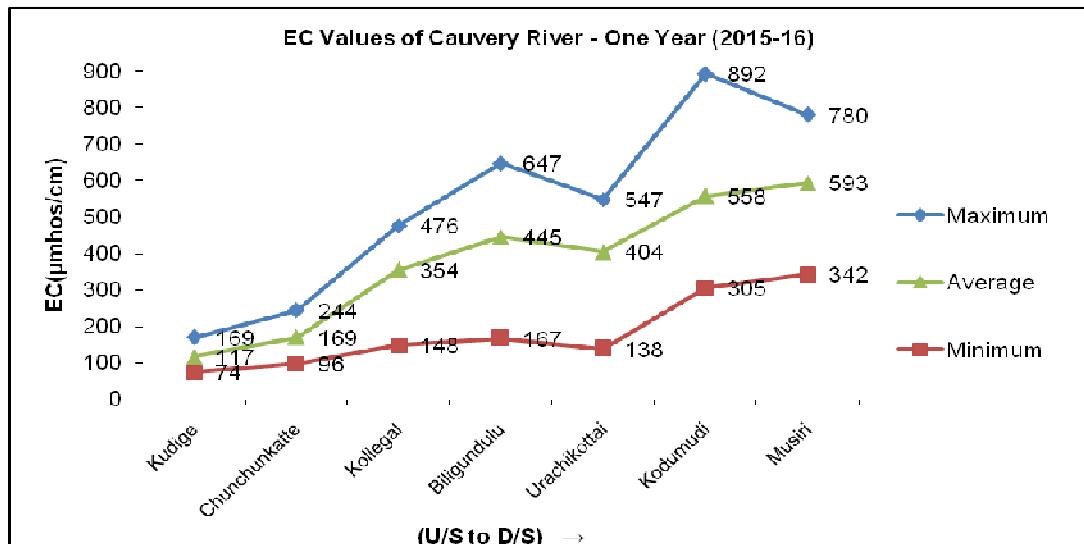


Figure - 1.3



4.1.2 pH

pH values for the period considered is given in Table - 3 and their graphical representation is given in Figure - 2.1, Figure - 2.2 & Figure - 2.3.

Table - 3

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Kudige	8.3	7.7	7.8	7.0	7.1	7.3	7.6	7.4	7.5
Chunchunkatte	8.0	8.0	8.0	7.3	7.3	7.4	7.6	7.6	7.6
Kollegal	8.3	8.3	8.2	7.2	7.3	7.4	7.8	7.9	7.8
Biligundulu	8.4	8.4	8.4	7.4	7.7	7.7	8.0	8.1	8.1
Urachikottai	8.4	8.5	8.7	7.5	7.6	7.7	8.0	8.1	8.2
Kodumudi	8.4	8.4	8.4	7.5	7.5	7.4	8.0	8.0	8.0
Musiri	8.5	8.5	8.7	7.6	7.5	8.0	8.1	8.2	8.2

Figure - 2.1

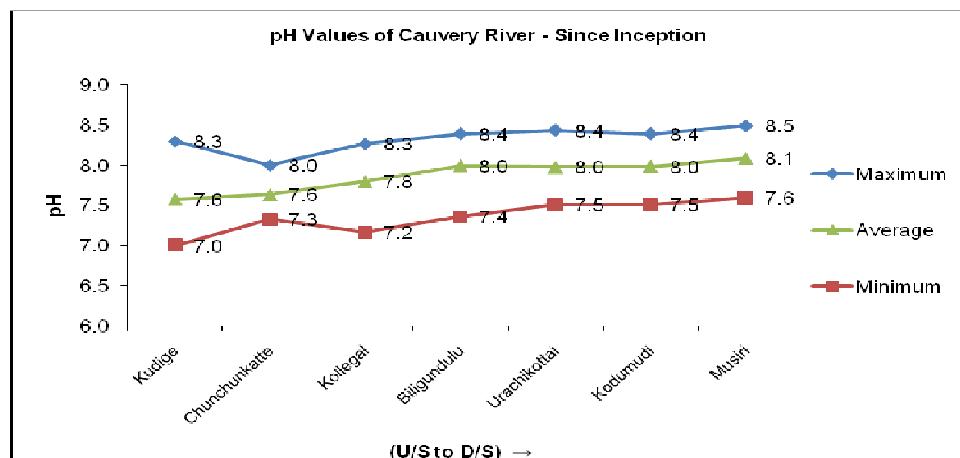


Figure - 2.2

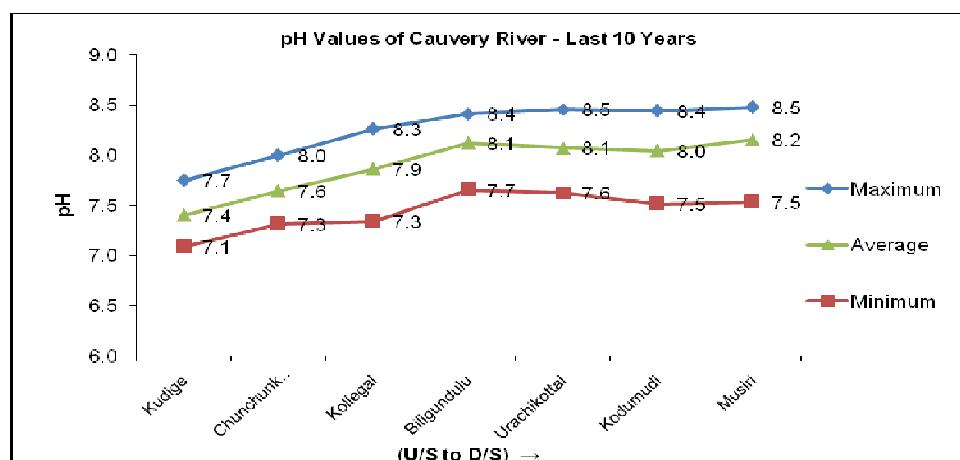
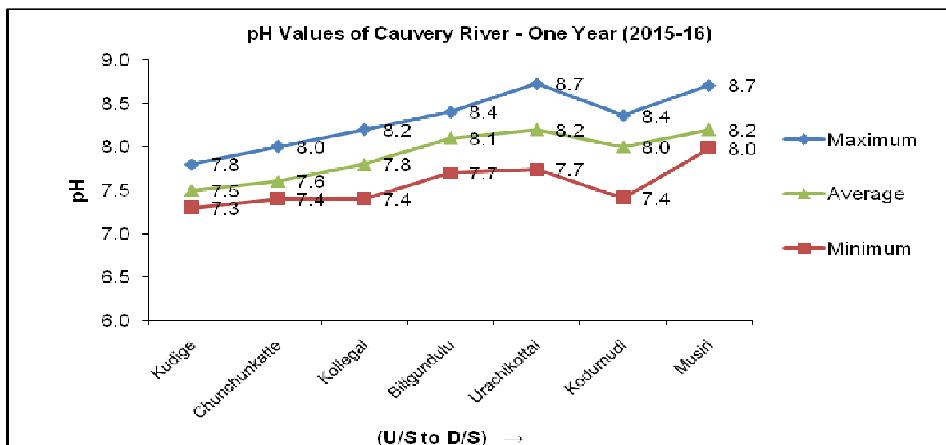


Figure - 2.3



4.1.3 Fluoride, mg/L

Fluoride values for the period considered is given in Table - 4 and their graphical representation is given in Figure - 3.1, Figure - 3.2 & Figure - 3.3.

Table – 4

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Kudige	0.90	0.60	0.11	0.10	0.06	0.04	0.33	0.20	0.08
Chunchunkatte	0.26	0.26	0.25	0.06	0.05	0.08	0.15	0.15	0.17
Kollegal	1.13	1.30	0.48	0.13	0.09	0.13	0.40	0.40	0.34
Biligundulu	1.20	2.04	0.59	0.13	0.15	0.13	0.43	0.54	0.40
Urachikottai	0.77	0.65	0.62	0.18	0.18	0.44	0.43	0.39	0.49
Kodumudi	0.88	0.80	0.81	0.22	0.18	0.47	0.46	0.44	0.55
Musiri	0.87	0.80	0.57	0.21	0.19	0.47	0.45	0.43	0.51

Figure - 3.1

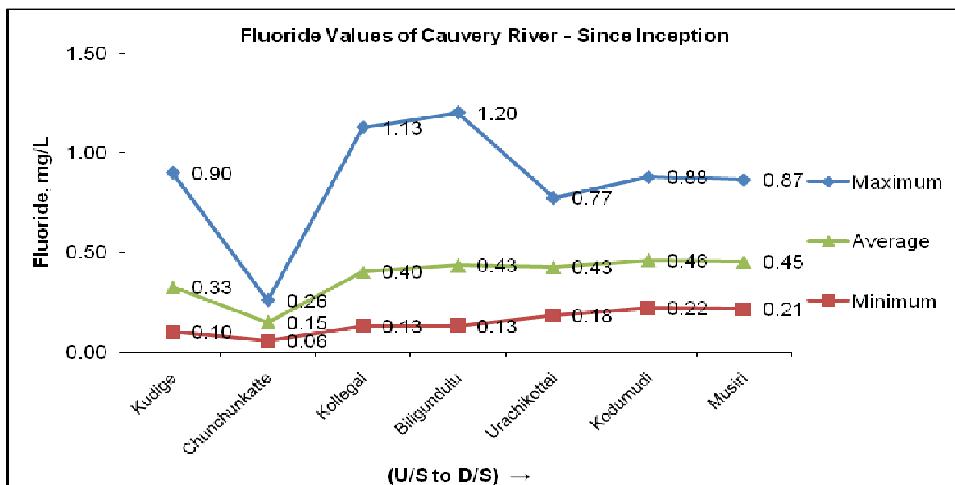


Figure - 3.2

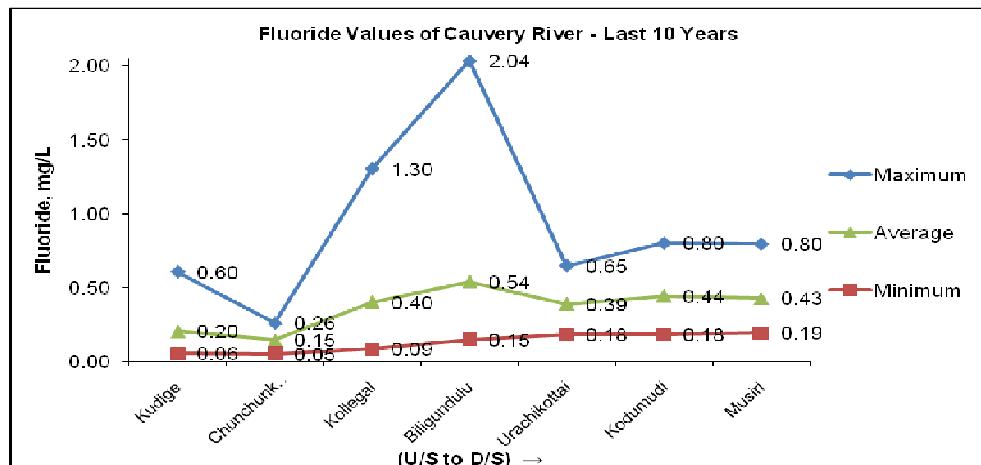
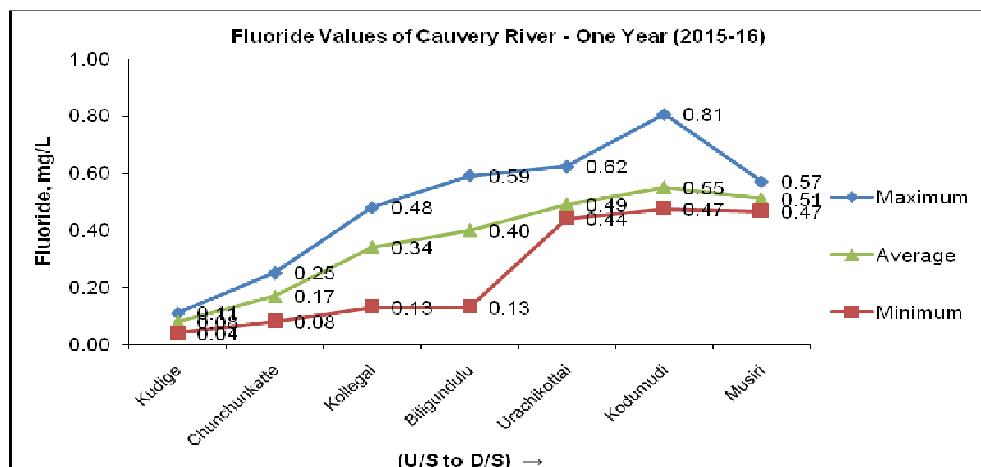


Figure - 3.3



4.1.4 BOD, mg/L

Biochemical Oxygen Demand (BOD) values for the period considered is given in Table - 5 and their graphical representation is given in Figure - 4.1, Figure - 4.2 & Figure - 4.3.

Table – 5

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Kudige	2.2	1.8	1.2	0.4	0.6	0.2	1.0	1.1	0.8
Chunchunkatte	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kollegal	2.6	2.3	1.6	0.5	0.7	0.4	1.3	1.3	1.0
Biligundulu	2.6	2.0	2.6	0.4	0.5	0.8	1.3	1.1	1.5
Urachikottai	3.9	3.7	5.6	0.9	0.7	2.2	2.1	1.8	4.0
Kodumudi	3.9	3.7	5.1	0.8	0.6	1.2	1.8	1.7	2.5
Musiri	3.1	3.2	3.5	0.6	0.5	1.2	1.5	1.5	2.0

Figure - 4.1

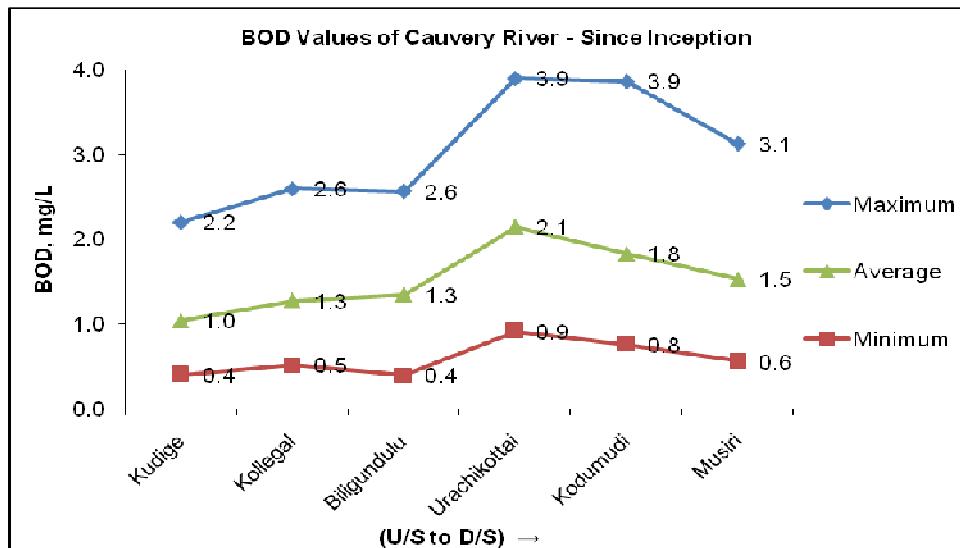


Figure - 4.2

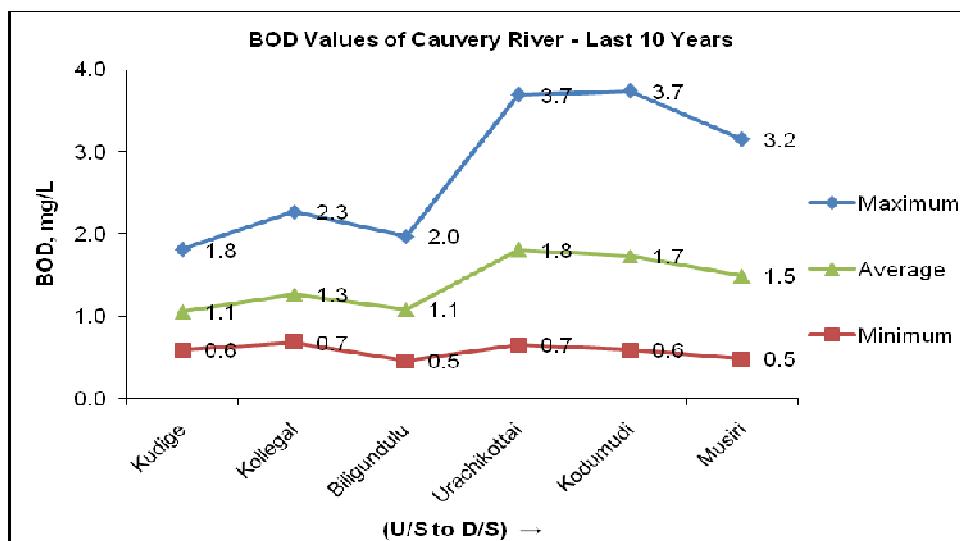
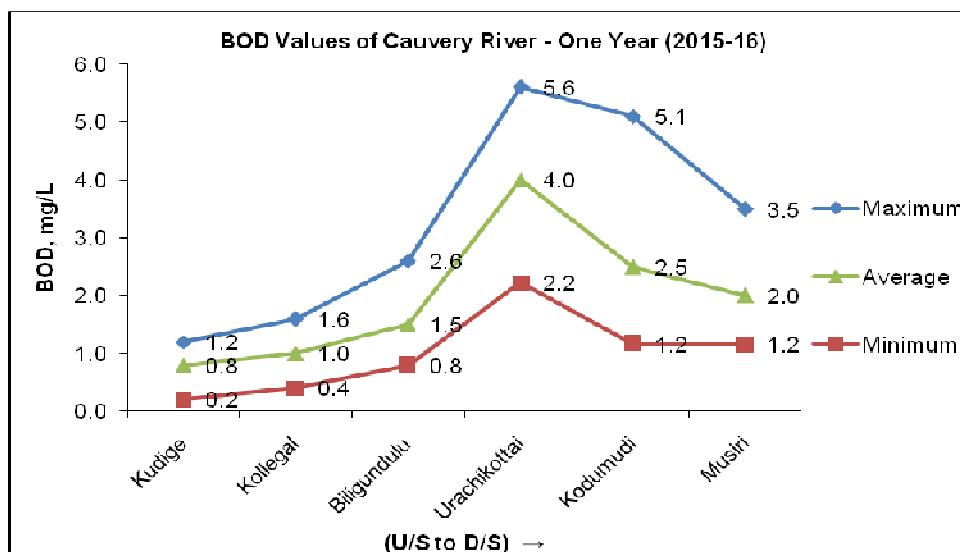


Figure - 4.3



4.1.5 DO, mg/L

Dissolved Oxygen (DO) values for the period considered is given in Table - 6 and their graphical representation is given in Figure - 5.1, Figure - 5.2 & Figure - 5.3.

Table – 6

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Kudige	8.6	7.0	7.6	5.5	5.5	5.0	7.0	6.3	6.1
Chunchunkatte	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kollegal	8.5	7.9	7.3	5.1	4.5	4.9	6.7	6.1	5.8
Biligundulu	8.4	7.7	8.5	5.5	5.0	5.7	7.1	6.6	6.7
Urachikottai	7.9	8.2	7.4	6.5	6.5	6.8	7.3	7.5	7.1
Kodumudi	7.0	6.7	6.8	6.2	6.1	4.3	6.6	6.4	5.8
Musiri	7.6	7.4	7.0	6.5	6.4	6.0	7.0	6.9	6.5

Figure - 5.1

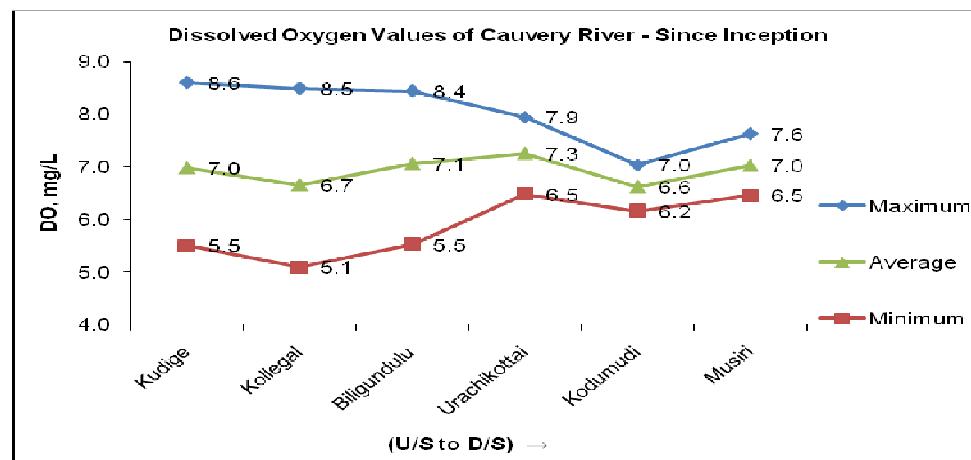


Figure - 5.2

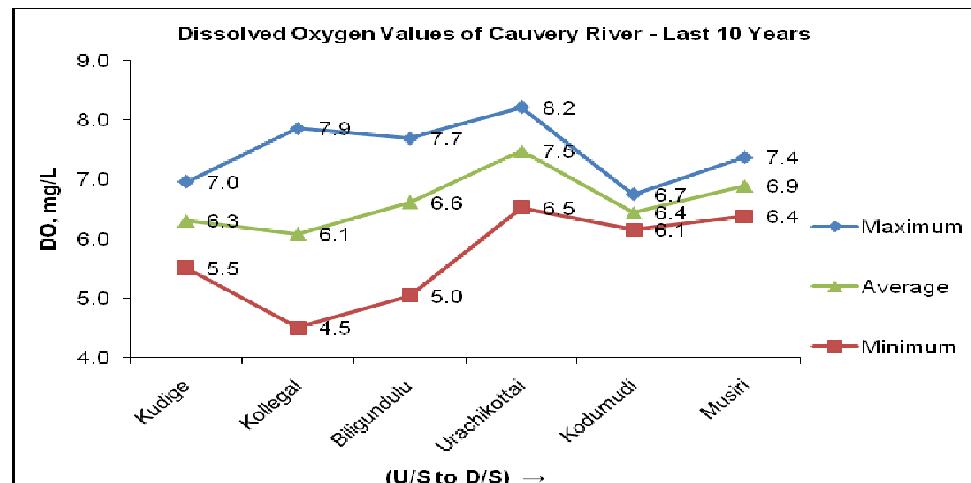
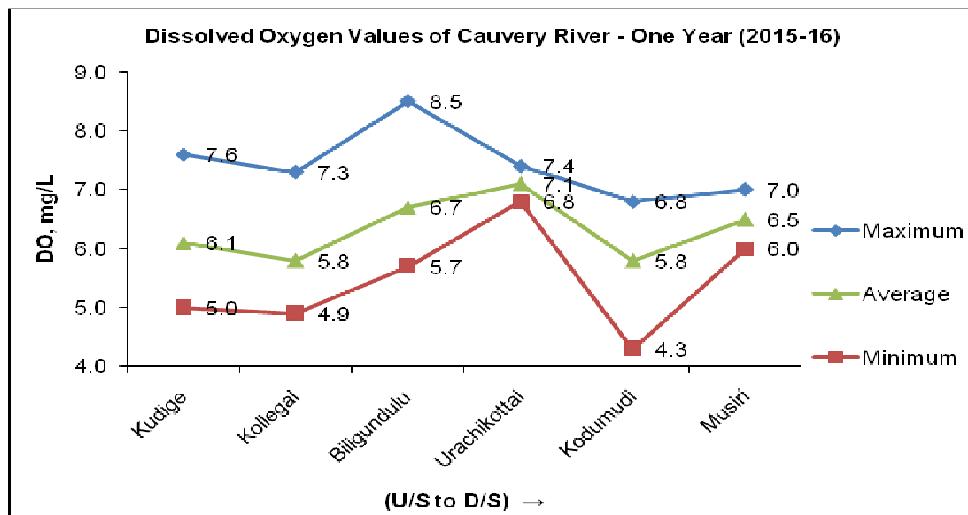


Figure - 5.3



5.1 General Remarks / Conclusion about Water Quality Trend:

Trends of the river Cauvery with its tributaries are as follows:

The water quality of river Cauvery is almost same and good in nature. The ionic concentration is gradually increasing from upstream to downstream. From Origin to site Biligundulu is very good. The water quality of river Cauvery is little deteriorating due to direct human activities which can be seen from the above graphs. At sites Urachikottai and Kodumudi, concentrations of all pollution indicating parameters are increasing. But towards downstream at site Musiri, quality of water is comparatively improving due to self purification of river in its own course or as the quantum of water increases in river Cauvery.

4.2 Hemavathi River:

The water quality scenario is being presented in pictorial graph among the sites **Sakleshpur**, **M. H. Halli** and **Akkihebbal** on river Hemavathi under Cauvery Basin. The data details considered for water quality trend study from upstream to downstream of Hemavathi River is given below.

4.2.1 Electrical Conductivity (EC) ($\mu\text{mhos}/\text{cm}$)

EC values for the period considered is given in Table - 7 and their graphical representation is given in Figure - 6.1, Figure - 6.2 & Figure - 6.3.

Table – 7

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Sakleshpur	334	173	169	63	78	74	143	124	117
M. H. Halli	257	259	244	77	74	96	166	166	169
Akkihebbal	448	452	476	169	171	148	321	341	354

Figure - 6.1

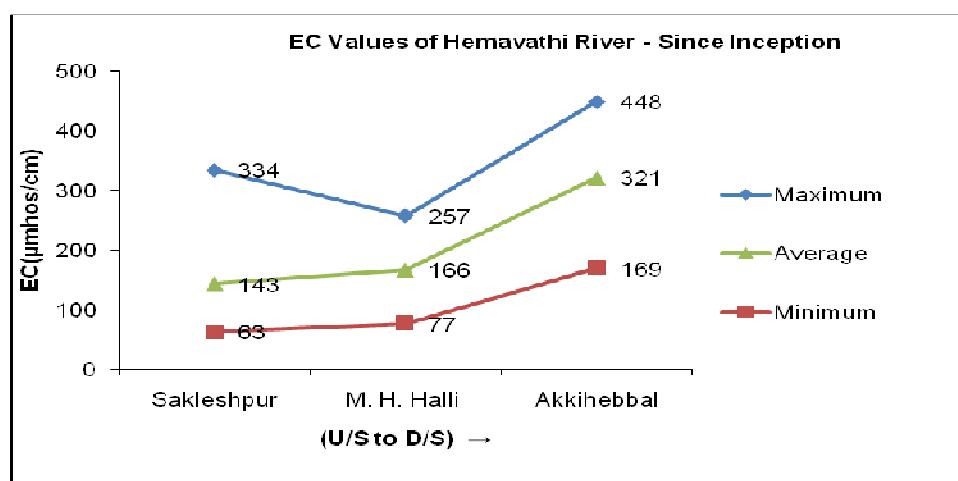


Figure - 6.2

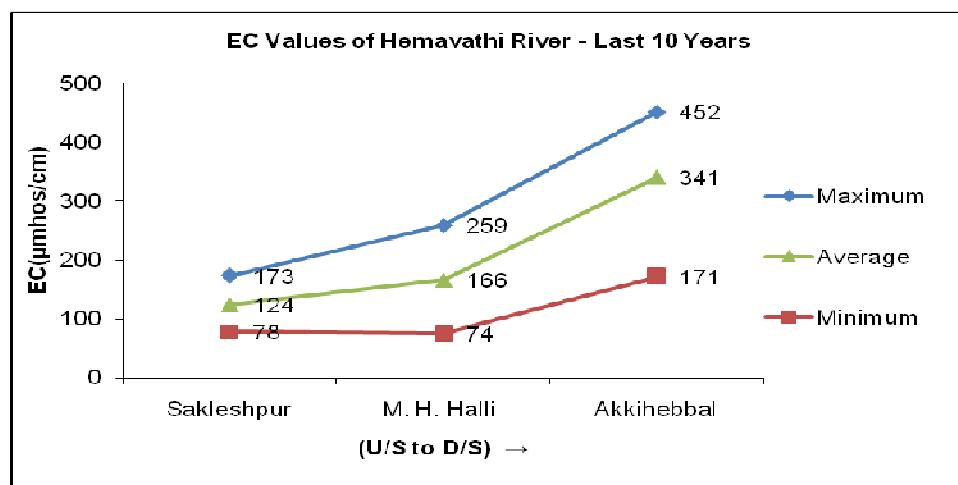
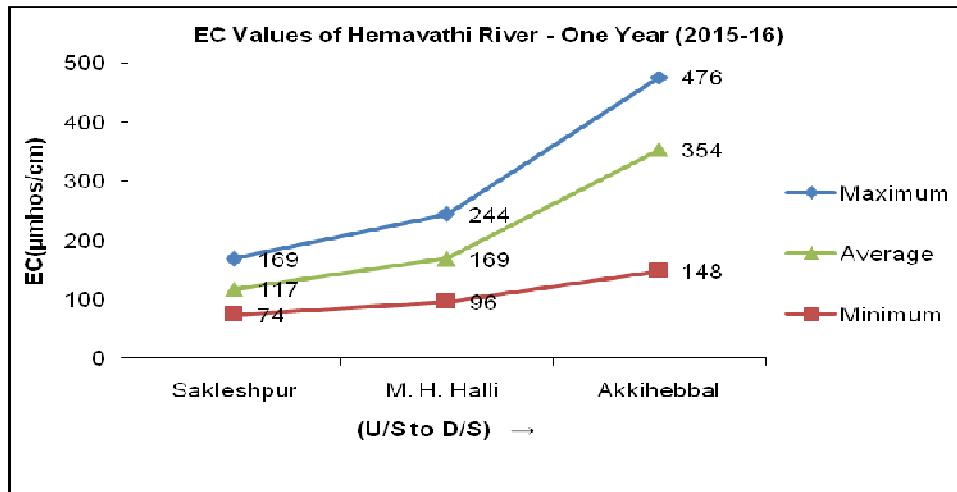


Figure - 6.3



4.2.2 pH

pH values for the period considered is given in Table - 8 and their graphical representation is given in Figure - 7.1, Figure - 7.2 & Figure - 7.3.

Table - 8

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Sakleshpur	7.7	7.6	7.5	6.7	6.7	6.9	7.2	7.1	7.2
M. H. Halli	8.0	7.7	6.9	7.1	7.0	6.7	7.6	7.4	6.8
Akkihebbal	8.2	8.2	8.1	7.4	7.3	7.1	7.8	7.8	7.7

Figure - 7.1

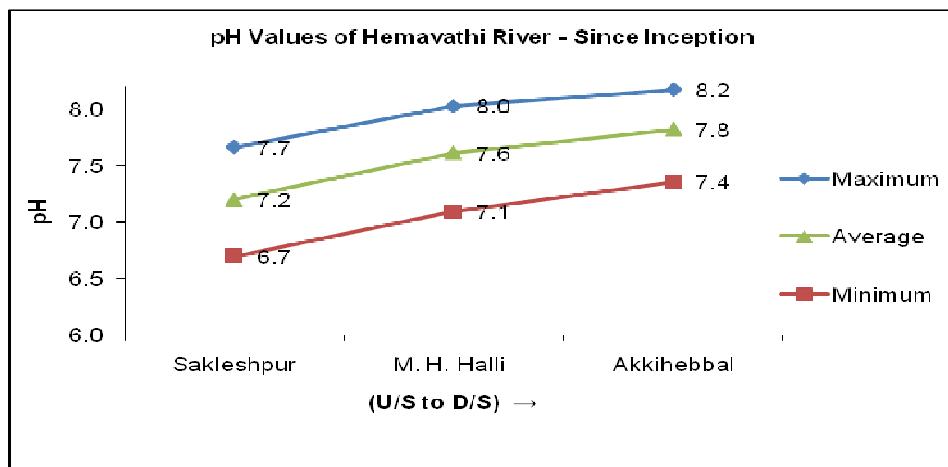


Figure - 7.2

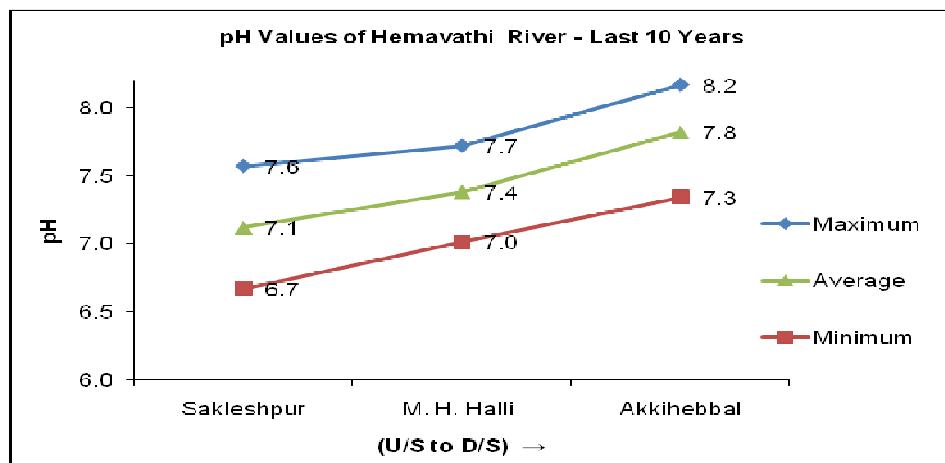
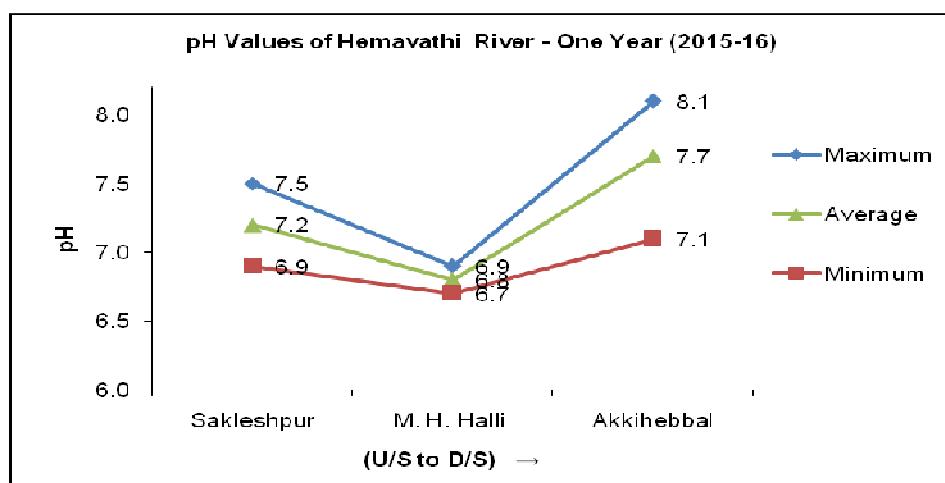


Figure - 7.3



4.2.3 Fluoride, mg/L

Fluoride values for the period considered is given in Table - 9 and their graphical representation is given in Figure - 8.1, Figure - 8.2 & Figure - 8.3.

Table – 9

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Sakleshpur	0.83	0.72	0.80	0.17	0.22	0.04	0.36	0.37	0.15
M. H. Halli	0.82	0.48	0.29	0.13	0.14	0.20	0.31	0.24	0.20
Akkihebbal	1.04	0.76	0.44	0.10	0.07	0.19	0.32	0.26	0.28

Figure - 8.1

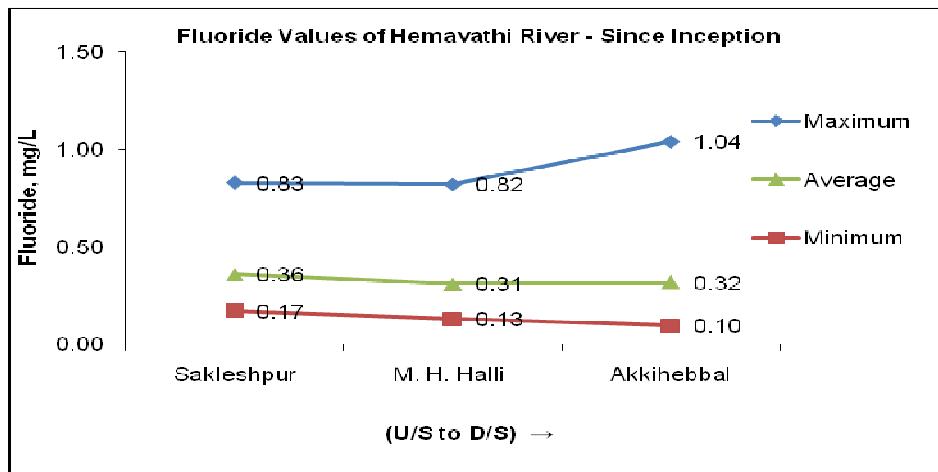


Figure - 8.2

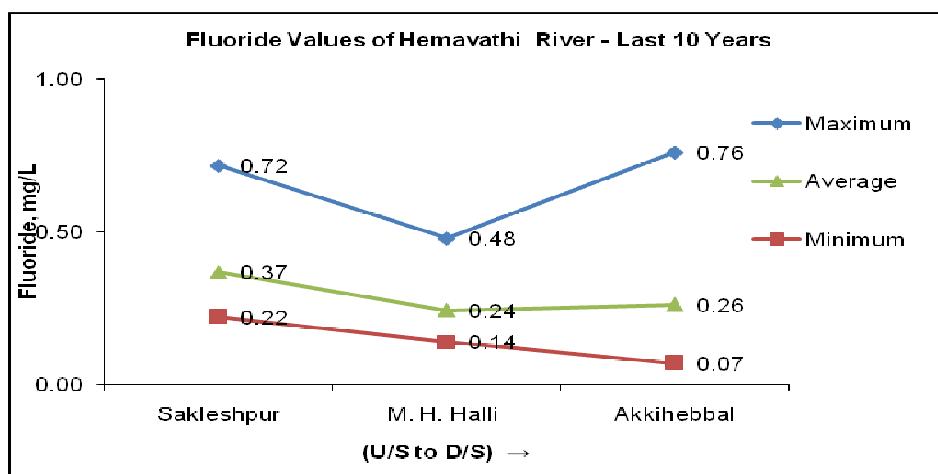
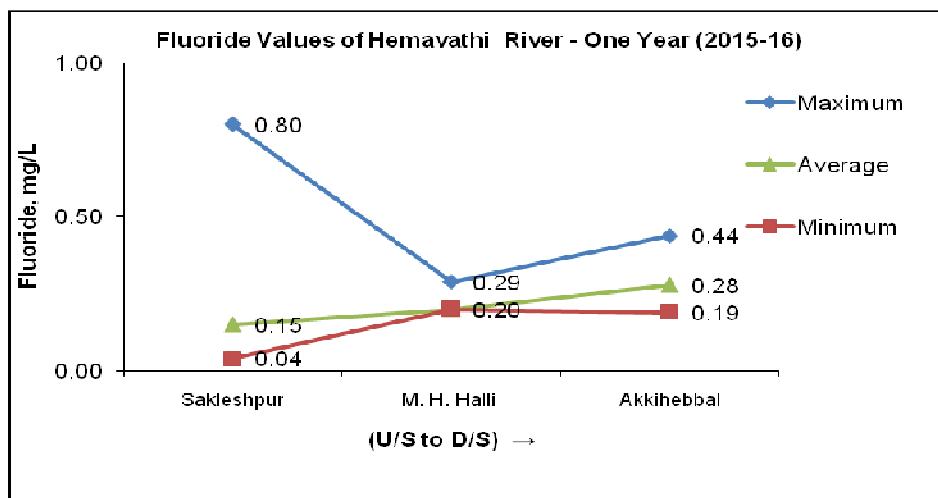


Figure - 8.3



4.2.4 BOD, mg/L

Biochemical Oxygen Demand (BOD) values for the period considered is given in Table - 10 and their graphical representation is given in Figure - 9.1, Figure - 9.2 & Figure - 9.3.

Table – 10

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Sakleshpur	2.5	2.4	2.6	0.6	0.7	0.4	1.4	1.4	1.5
M. H. Halli	1.9	1.4	1.1	0.5	0.6	0.7	1.0	1.0	0.9
Akkihebbal	2.8	3.1	1.4	1.0	1.1	0.4	1.6	1.7	0.8

Figure - 9.1

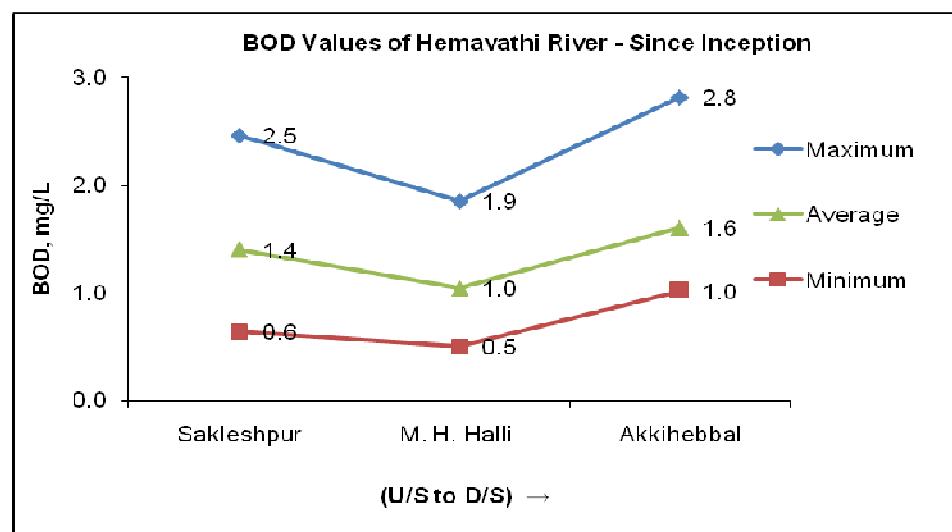


Figure - 9.2

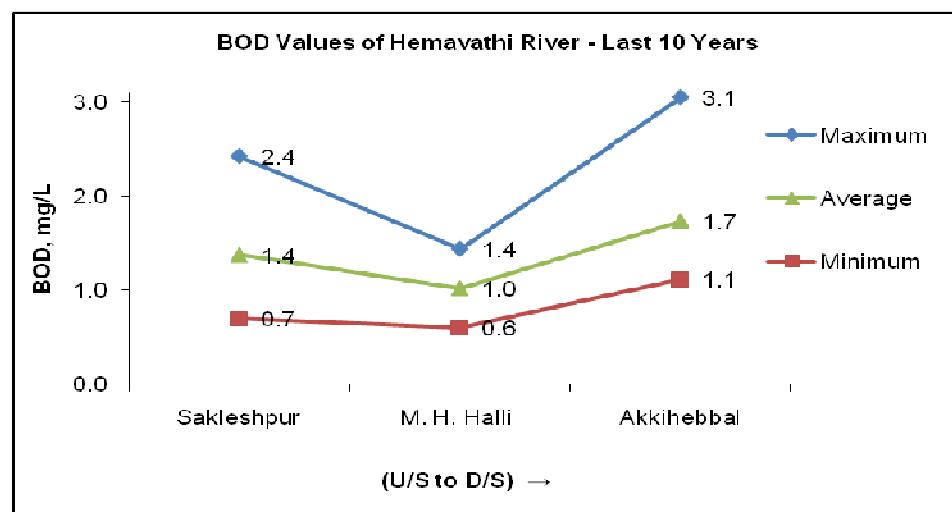
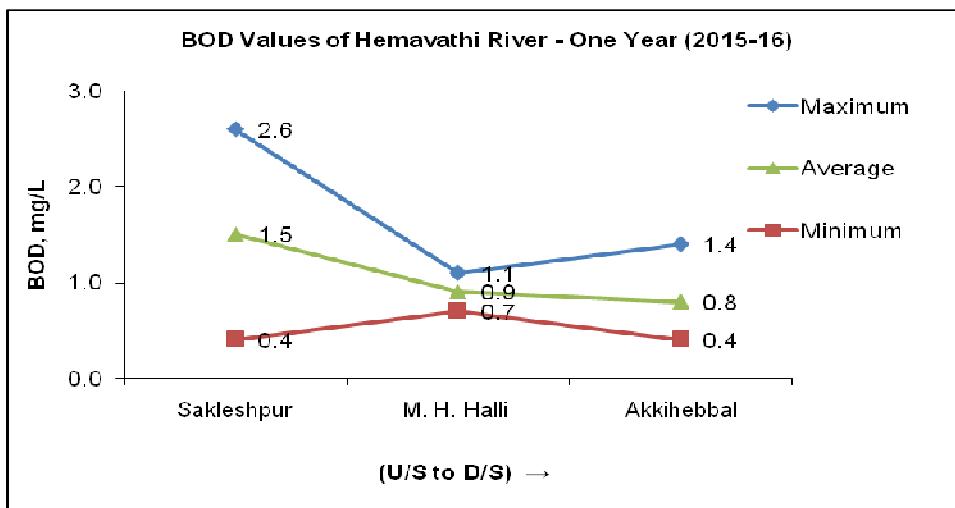


Figure - 9.3



4.2.5 DO, mg/L

Dissolved Oxygen (DO) values for the period considered is given in Table - 11 and their graphical representation is given in Figure - 10.1, Figure - 10.2 & Figure - 10.3.

Table – 11

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Sakleshpur	7.2	7.1	7.3	4.8	4.8	5.2	6.0	6.0	6.3
M. H. Halli	7.6	6.7	5.4	5.4	4.7	3.0	6.6	5.8	4.2
Akkihebbal	7.2	7.1	7.8	4.4	4.8	2.0	5.9	5.9	5.8

Figure - 10.1

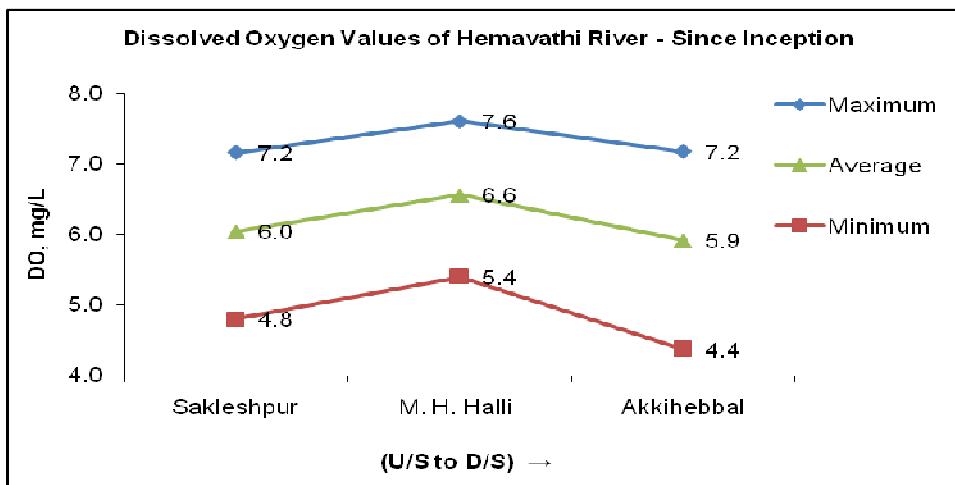


Figure - 10.2

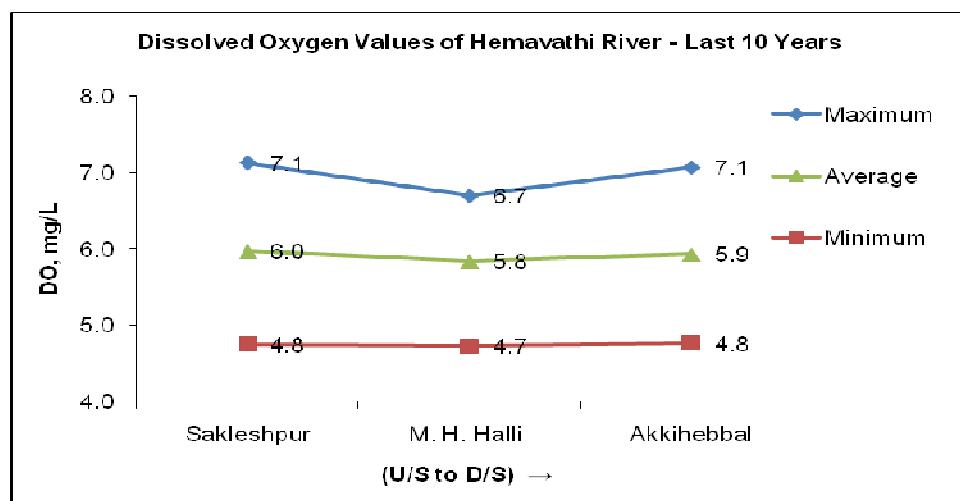
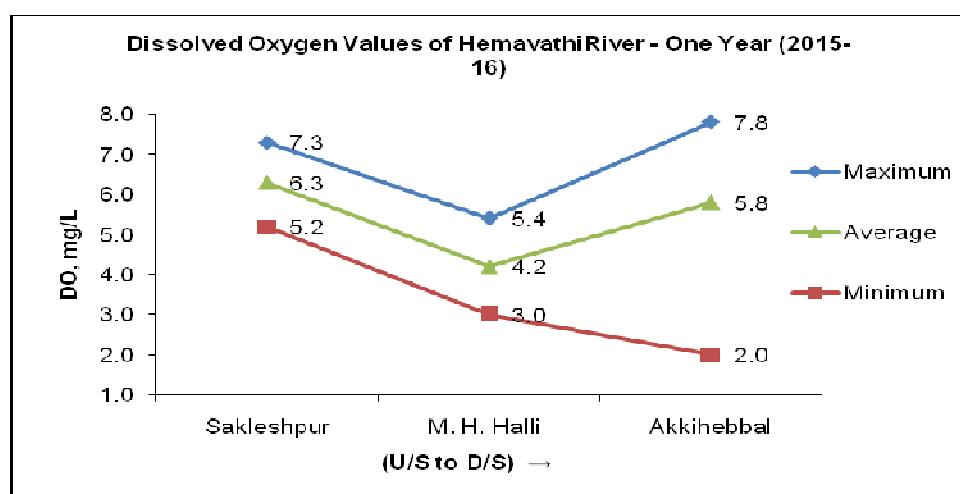


Figure - 10.3



5.2 General Remarks / Conclusion about Water Quality Trend:

Trends of the river Hemavathi is as follows:

The water quality of river Hemavathi is almost same and good in nature. The ionic concentration is gradually increasing from upstream to downstream. From Origin to site M. H. Halli is very good. The water quality of river Hemavathi is little deteriorating due to direct human activities which can be seen from the above graphs. At site Akkihebbal, concentrations of all pollution indicating parameters are increasing.

4.3 Kabini River:

The water quality scenario is being presented in pictorial graph among the sites **Muthankera** and **T. Narasipur** on river Kabini under Cauvery Basin. The data details considered for water quality trend study from upstream to downstream of Kabini River is given below.

4.3.1 Electrical Conductivity (EC) ($\mu\text{mhos}/\text{cm}$)

EC values for the period considered is given in Table - 12 and their graphical representation is given in Figure - 11.1, Figure - 11.2 & Figure - 11.3.

Table – 12

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Muthankera	138	118	132	52	47	37	126	83	80
T. Narasipur	503	522	575	155	139	135	325	328	310

Figure - 11.1

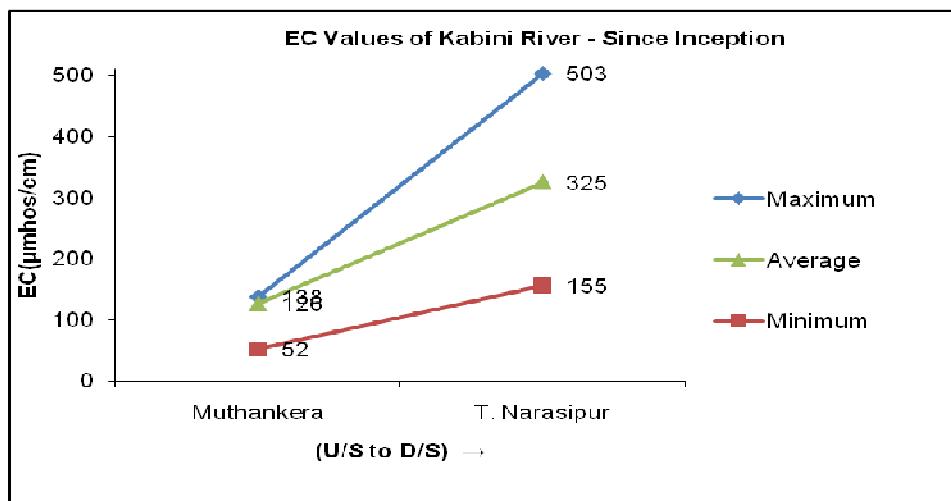


Figure - 11.2

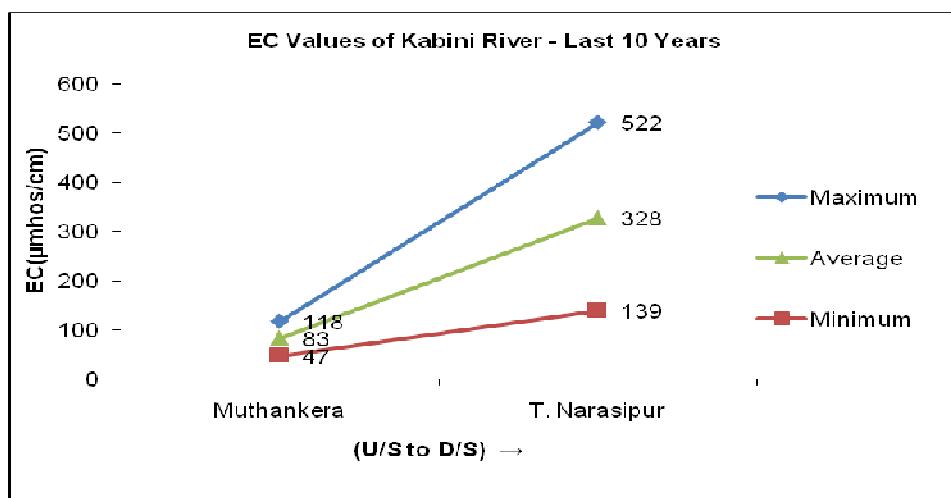
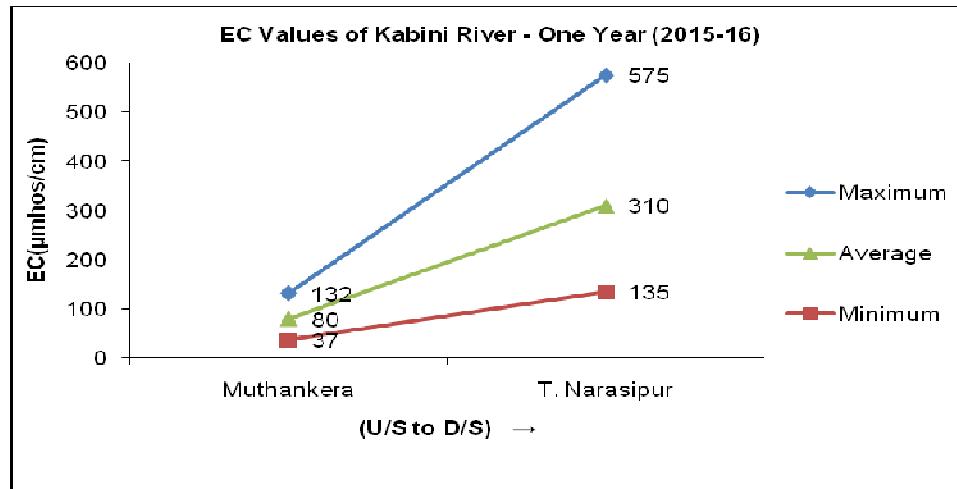


Figure - 11.3



4.3.2 pH

pH values for the period considered is given in Table - 13 and their graphical representation is given in Figure - 12.1, Figure – 12.2 & Figure - 12.3.

Table – 13

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Muthankera	7.7	7.7	7.9	6.5	6.5	6.4	7.1	7.0	7.1
T. Narasipur	8.3	8.2	8.2	7.2	7.3	7.4	7.8	7.8	7.7

Figure - 12.1

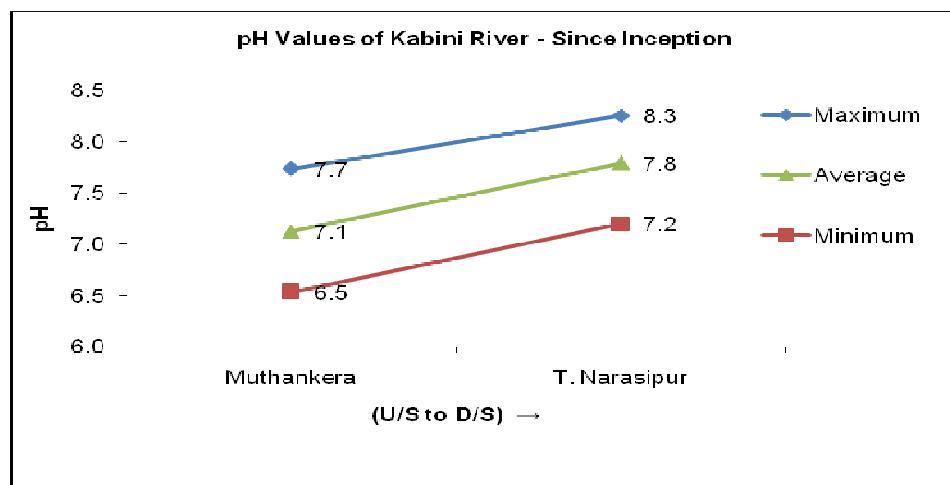


Figure - 12.2

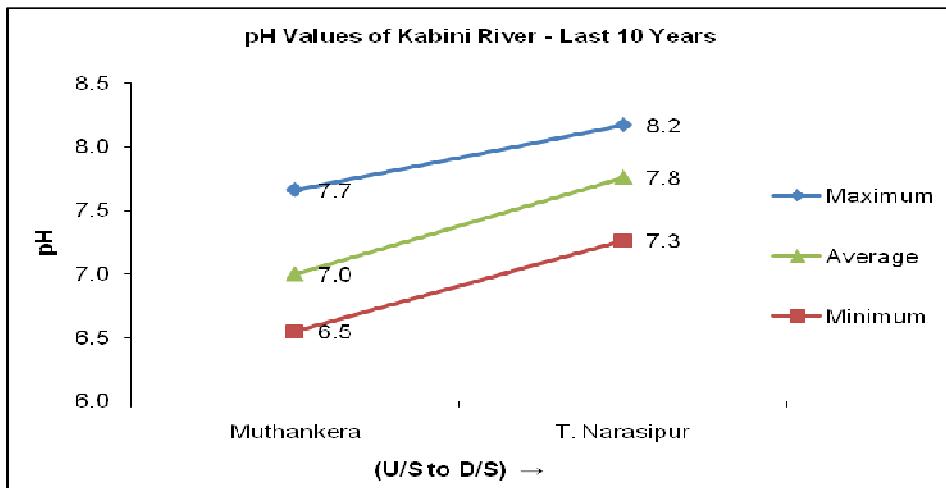
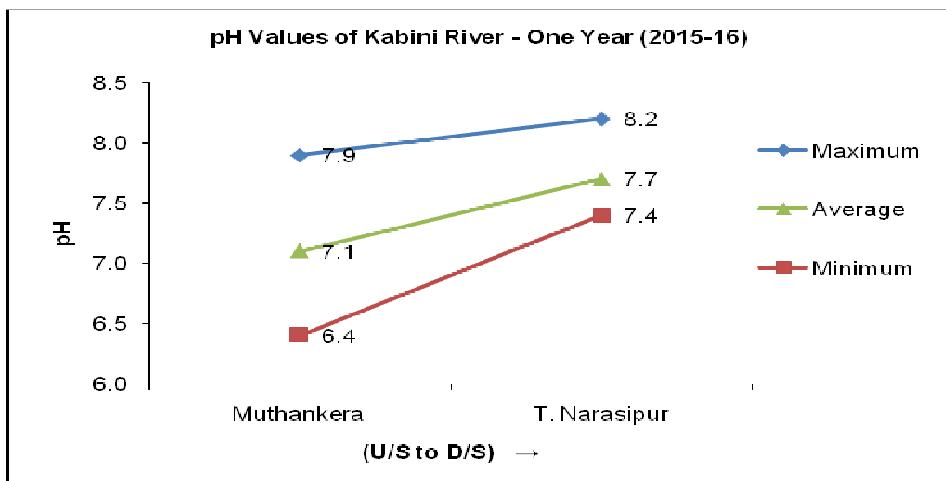


Figure - 12.3



4.3.3 Fluoride, mg/L

Fluoride values for the period considered is given in Table - 14 and their graphical representation is given in Figure - 13.1 & Figure - 13.2.

Table – 14

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Muthankera	0.47	0.05	NA	0.08	0.05	NA	0.22	0.17	NA
T. Narasipur	1.06	0.91	0.57	0.15	0.06	0.29	0.49	0.41	0.39

Figure - 13.1

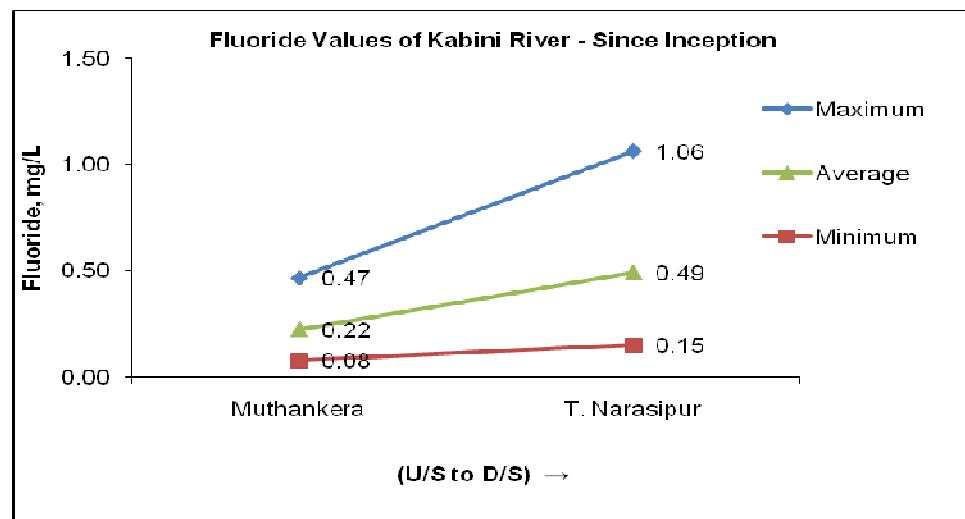
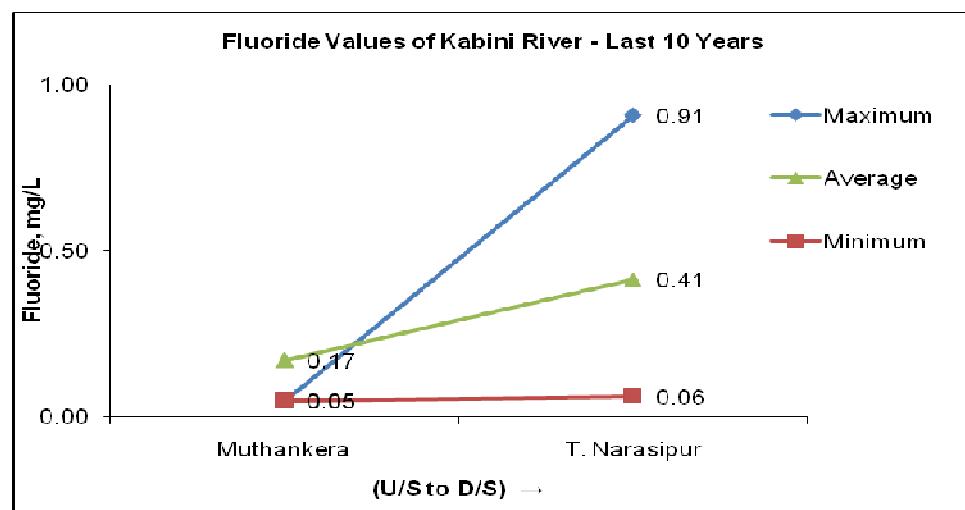


Figure - 13.2



4.3.4 BOD, mg/L

Biochemical Oxygen Demand (BOD) values for the period considered is given in Table - 15 and their graphical representation is given in Figure - 14.1, Figure - 14.2 & Figure - 14.3.

Table – 15

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Muthankera	1.5	1.5	1.8	0.3	0.3	0.4	0.8	0.8	1.1
T. Narasipur	2.9	2.2	1.8	0.6	0.6	0.4	1.5	1.2	1.0

Figure - 14.1

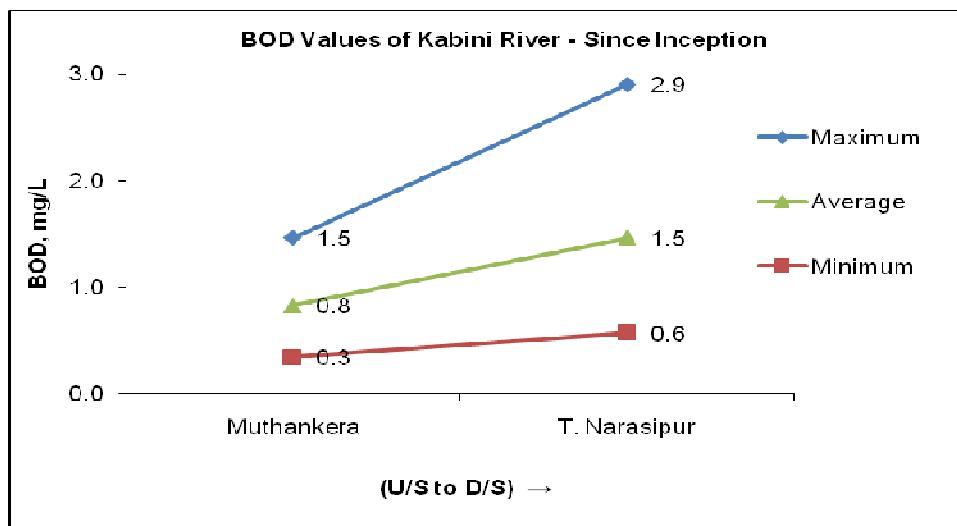


Figure - 14.2

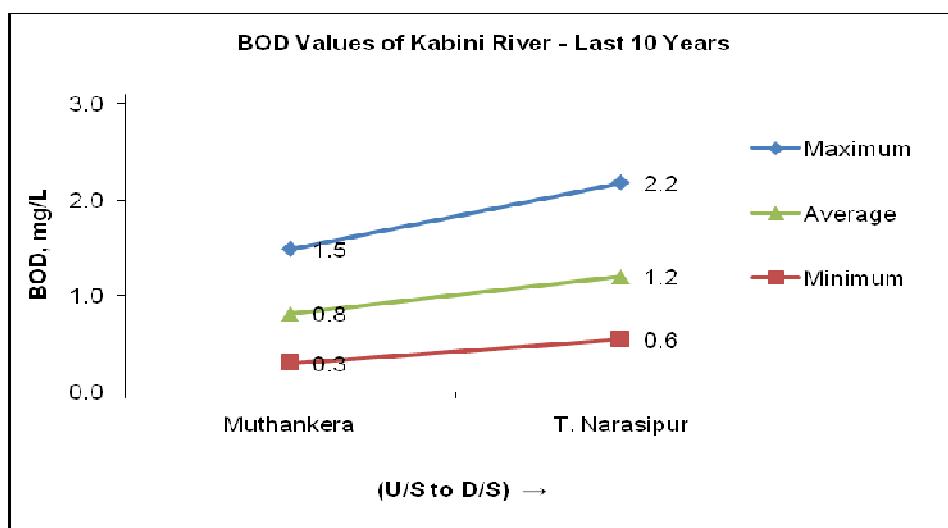
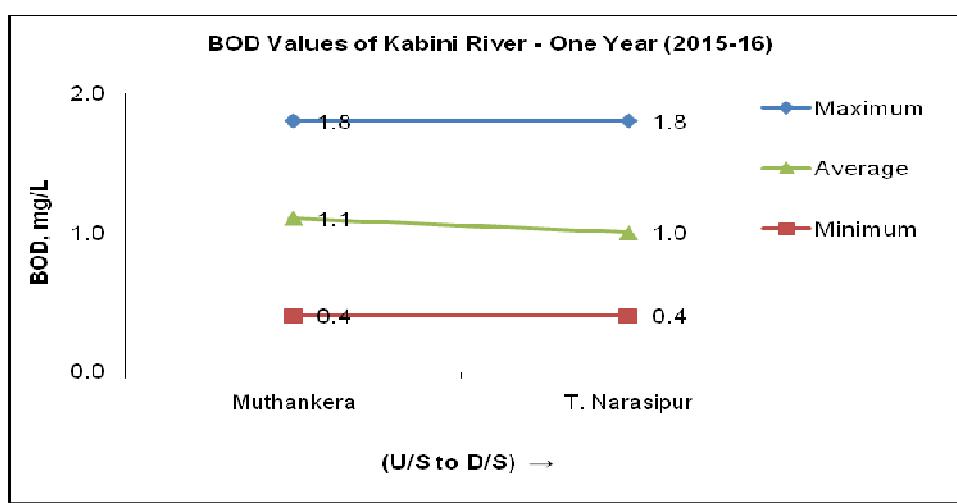


Figure - 14.3



4.3.5 DO, mg/L

Dissolved Oxygen (DO) values for the period considered is given in Table - 16 and their graphical representation is given in Figure - 15.1, Figure - 15.2 & Figure - 15.3.

Table – 16

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Muthankera	7.8	7.3	7.8	5.7	5.2	4.6	6.7	6.3	6.6
T. Narasipur	8.3	7.2	7.5	5.0	4.6	4.8	6.6	5.9	5.7

Figure - 15.1

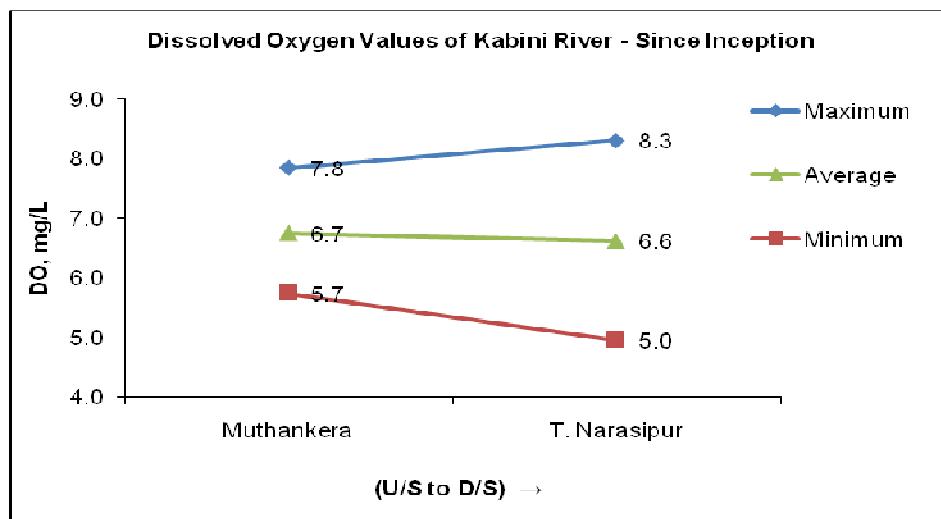


Figure - 15.2

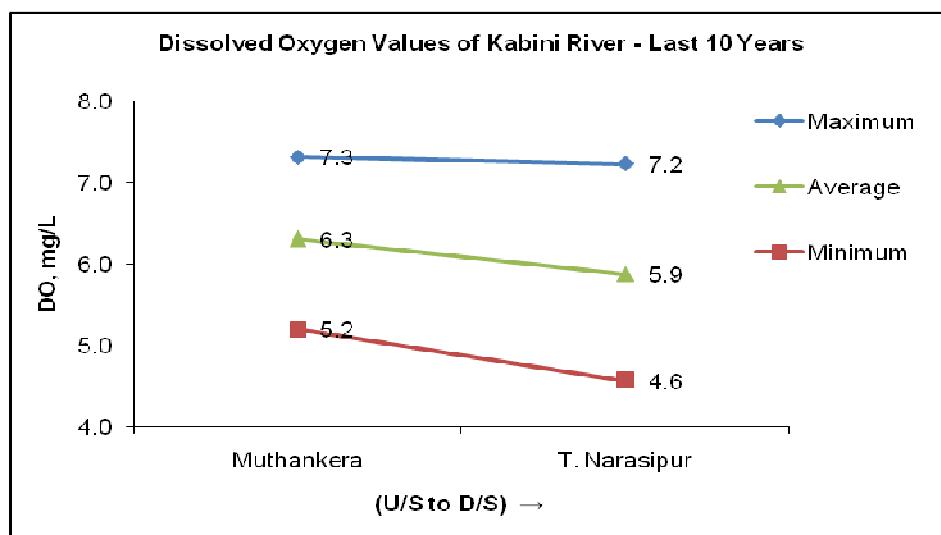
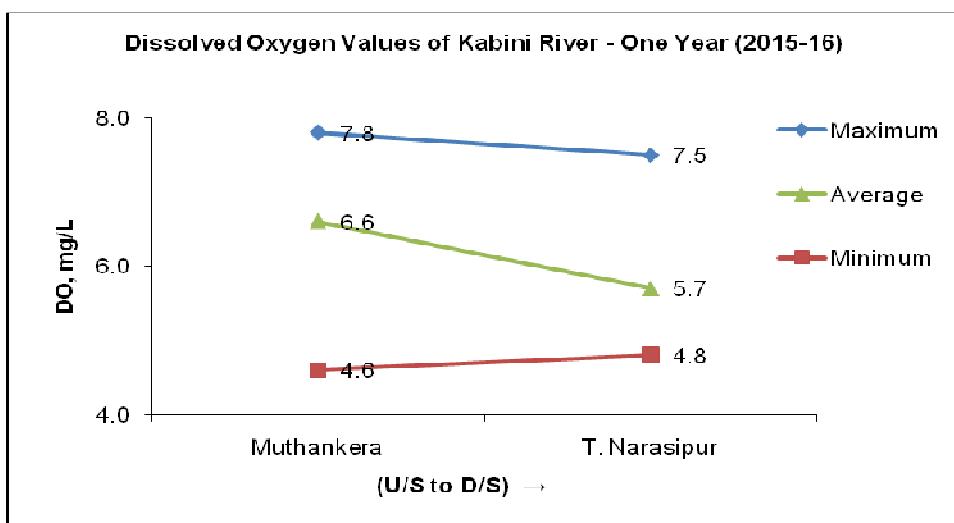


Figure - 15.3



5.3 General Remarks / Conclusion about Water Quality Trend:

Trends of the river Kabini is as follows:

The water quality of river Kabini is good in nature. The ionic concentration is gradually increasing from upstream to downstream. There is a huge difference in ionic concentrations of these two sites even though both are on the same river. The reason for the huge difference in ionic concentrations may be due to the Kabini Reservoir in between these two sites. The water quality of river Kabini is little deteriorating at sites T. Narasipur due to direct human activities which can be seen from the above graphs.

4.4 Bhavani River:

The water quality scenario is being presented in pictorial graph among the sites **Nellithurai** and **Savandapur** on river Bhavani under Cauvery Basin. The data details considered for water quality trend study from upstream to downstream of Bhavani River is given below.

4.4.1 Electrical Conductivity (EC) ($\mu\text{mhos}/\text{cm}$)

EC values for the period considered is given in Table - 17 and their graphical representation is given in Figure - 16.1, Figure - 16.2 & Figure - 16.3.

Table – 17

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Nellithurai	227	240	325	50	42	47	105	96	136
Savandapur	506	486	529	209	171	178	353	320	378

Figure - 16.1

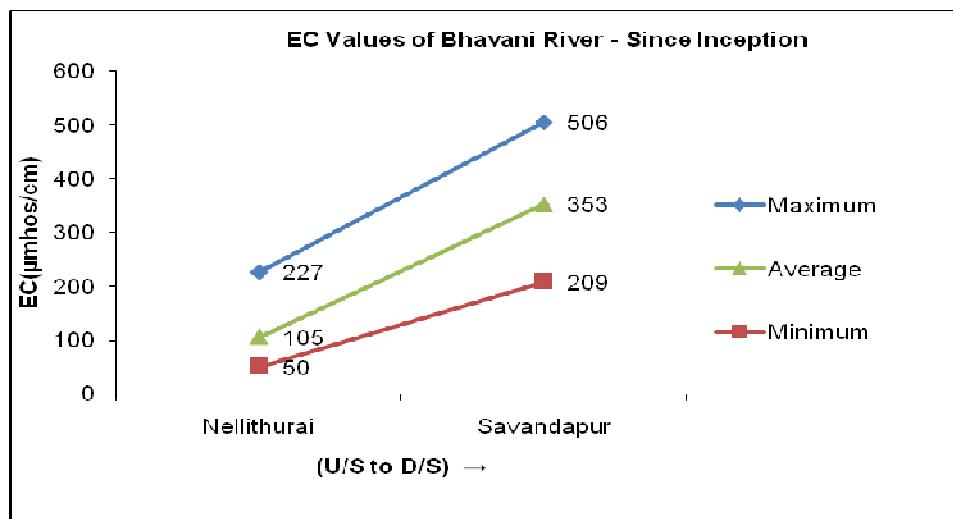


Figure - 16.2

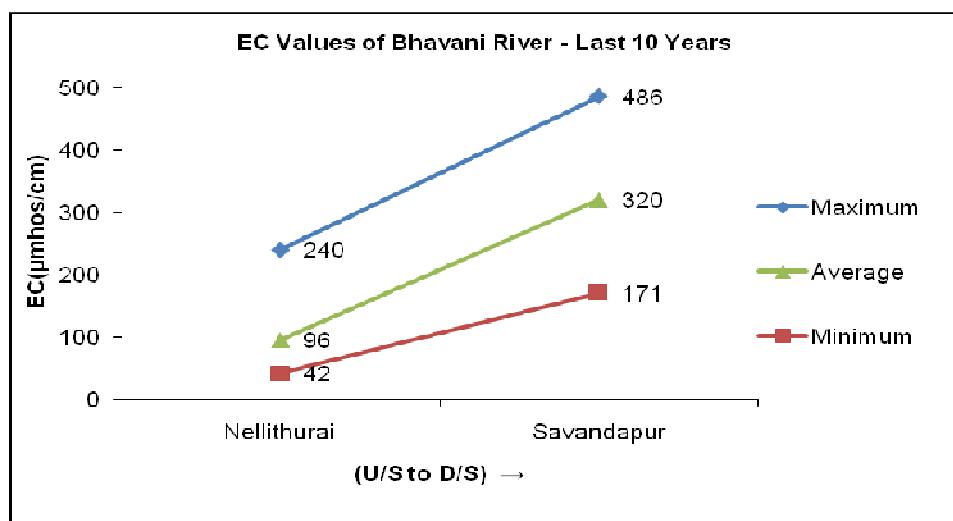
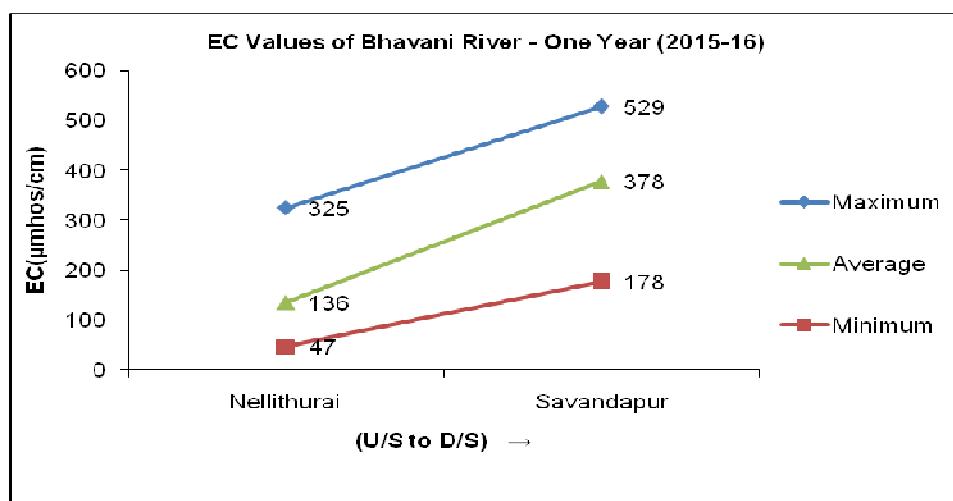


Figure - 16.3



4.4.2 pH

pH values for the period considered is given in Table - 18 and their graphical representation is given in Figure - 17.1, Figure – 17.2 & Figure - 17.3.

Table – 18

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Nellithurai	8.2	8.2	8.9	7.0	7.0	7.4	7.6	7.7	7.7
Savandapur	8.1	8.0	8.1	7.2	7.3	7.5	7.7	7.7	7.7

Figure - 17.1

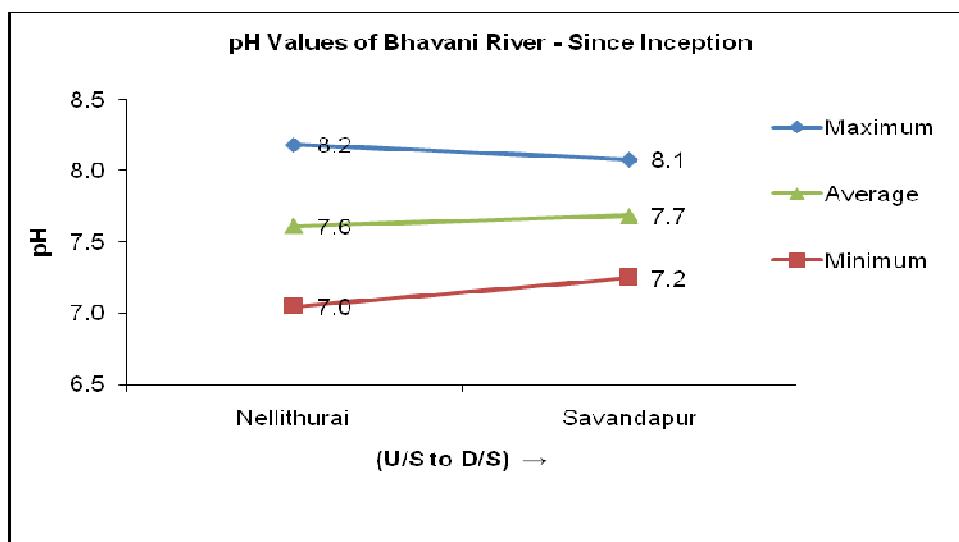


Figure - 17.2

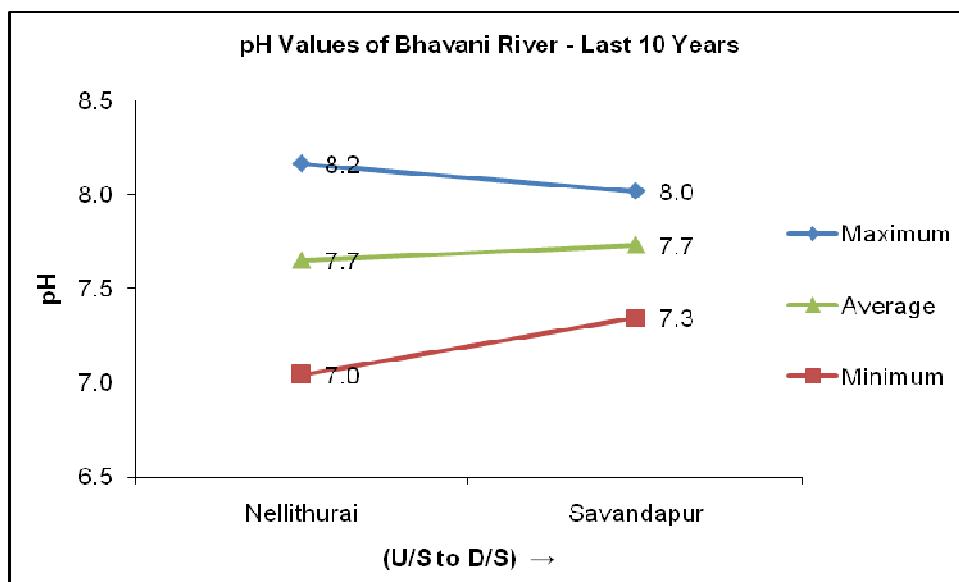
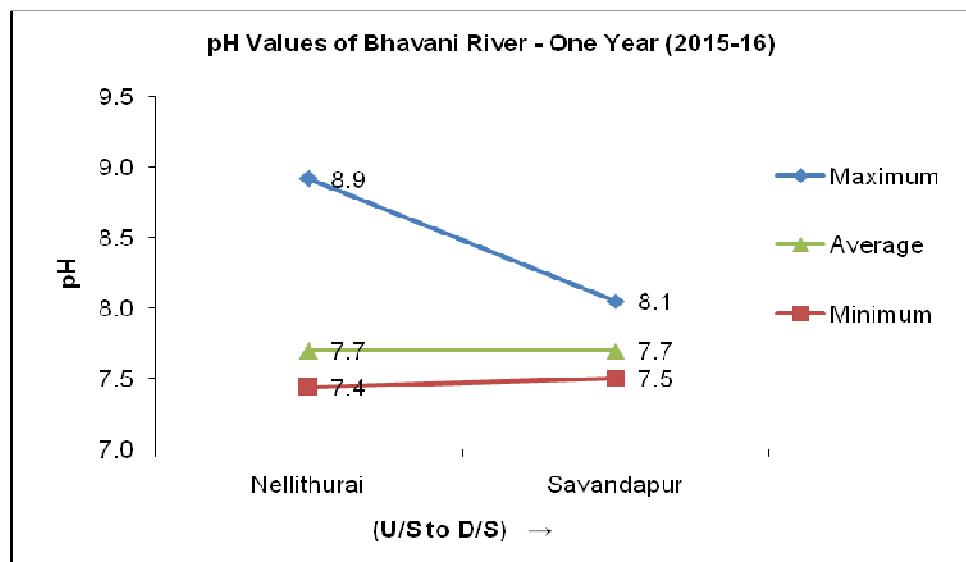


Figure - 17.3



4.4.3 Fluoride, mg/L

Fluoride values for the period considered is given in Table - 19 and their graphical representation is given in Figure - 18.1, Figure - 18.2 & Figure - 18.3.

Table – 19

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Nellithurai	0.78	0.38	0.31	0.06	0.06	0.00	0.20	0.17	0.14
Savandapur	0.98	0.57	0.48	0.14	0.14	0.20	0.34	0.31	0.35

Figure - 18.1

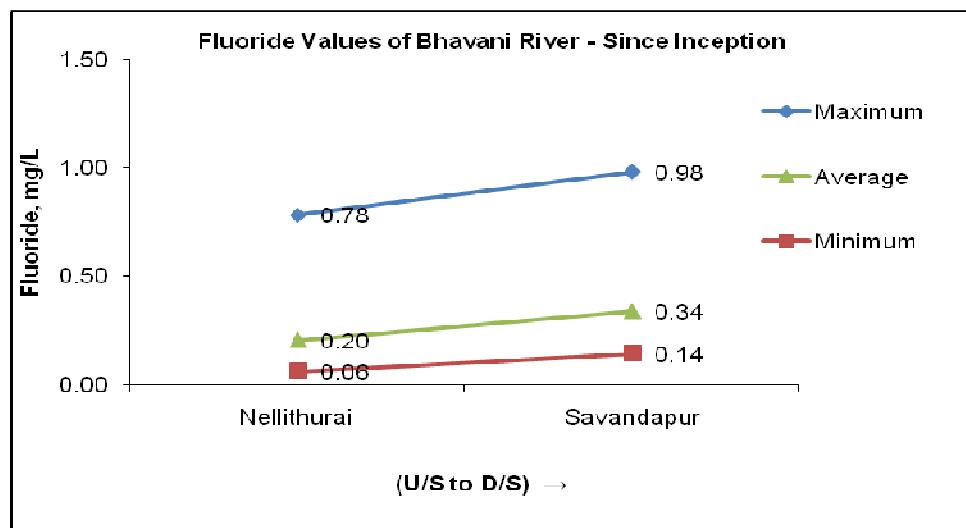


Figure - 18.2

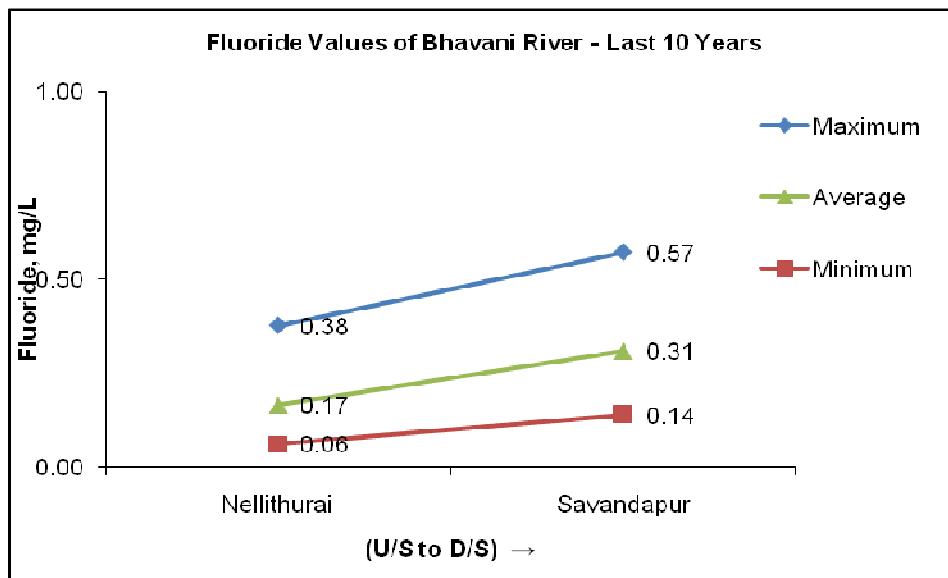
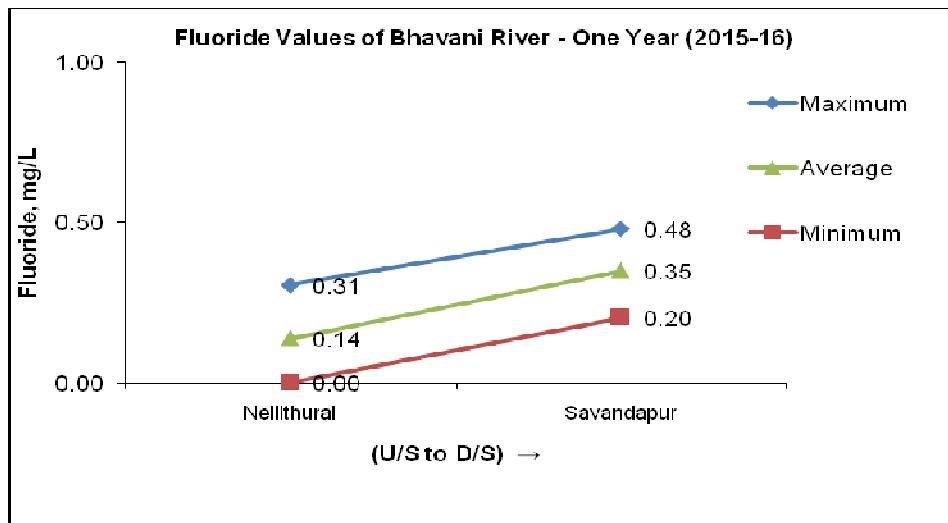


Figure - 18.3



4.4.4 BOD, mg/L

Biochemical Oxygen Demand (BOD) values for the period considered is given in Table - 20 and their graphical representation is given in Figure - 19.1, Figure - 19.2 & Figure - 19.3.

Table – 20

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Nellithurai	1.6	1.6	2.3	0.3	0.3	0.2	0.8	0.8	1.0
Savandapur	2.9	2.4	4.3	0.5	0.4	1.1	1.3	1.1	2.1

Figure - 19.1

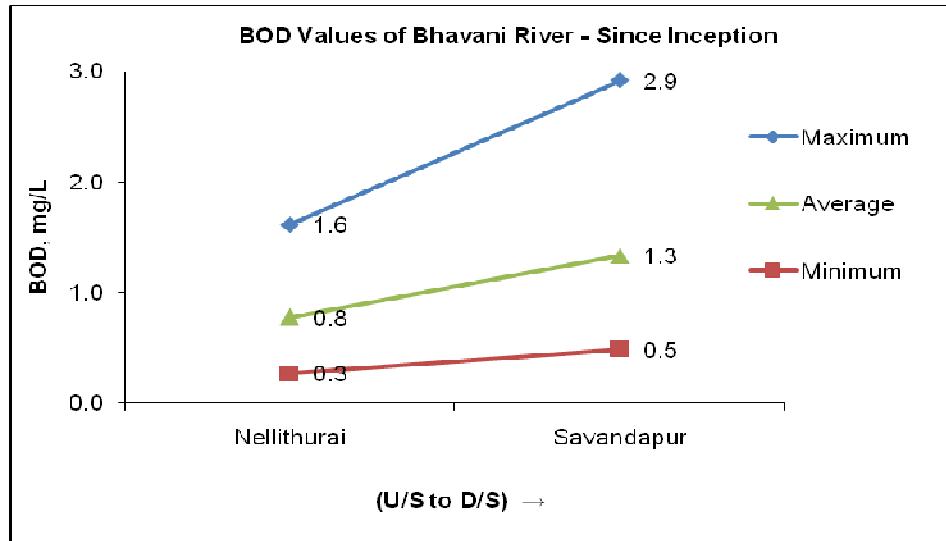


Figure - 19.2

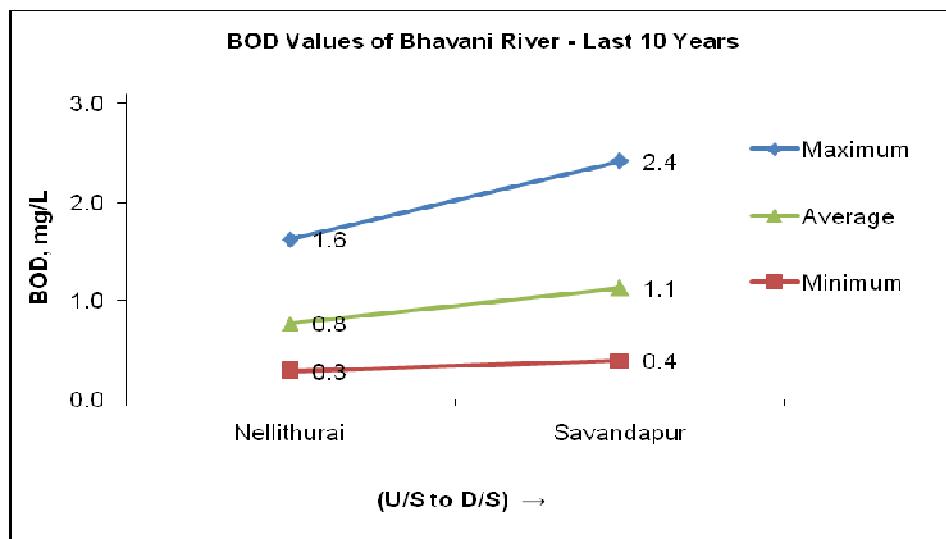
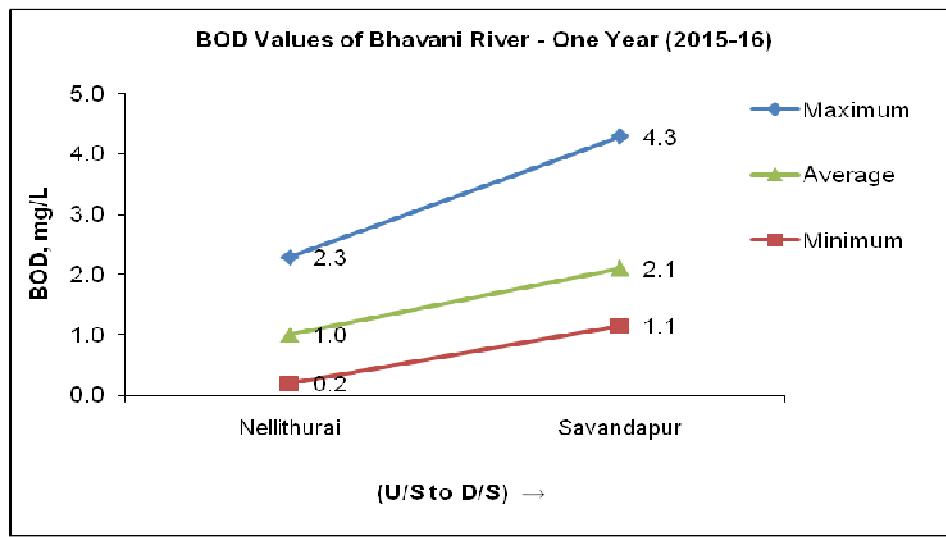


Figure - 19.3



4.4.5 DO, mg/L

Dissolved Oxygen (DO) values for the period considered is given in Table - 21 and their graphical representation is given in Figure - 20.1, Figure - 20.2 & Figure - 20.3.

Table – 21

Site Name	Average of Yearly Maximum			Average of Yearly Minimum			Annual Average		
	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year	Since Inception	Last 10 Years	One Year
Nellithurai	8.3	8.3	8.2	7.2	7.3	5.5	7.8	7.9	7.7
Savandapur	7.2	7.6	9.1	5.5	5.7	3.8	6.4	6.6	7.3

Figure - 20.1

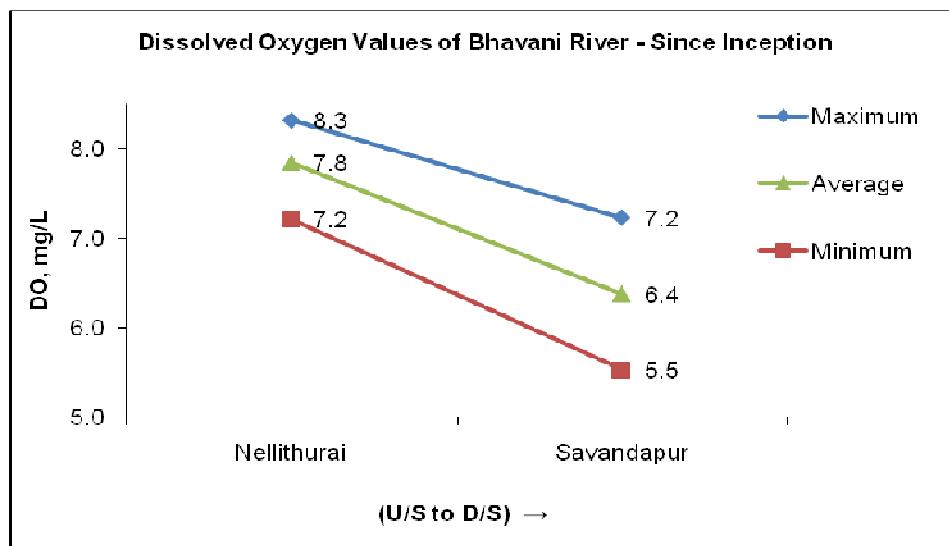


Figure - 20.2

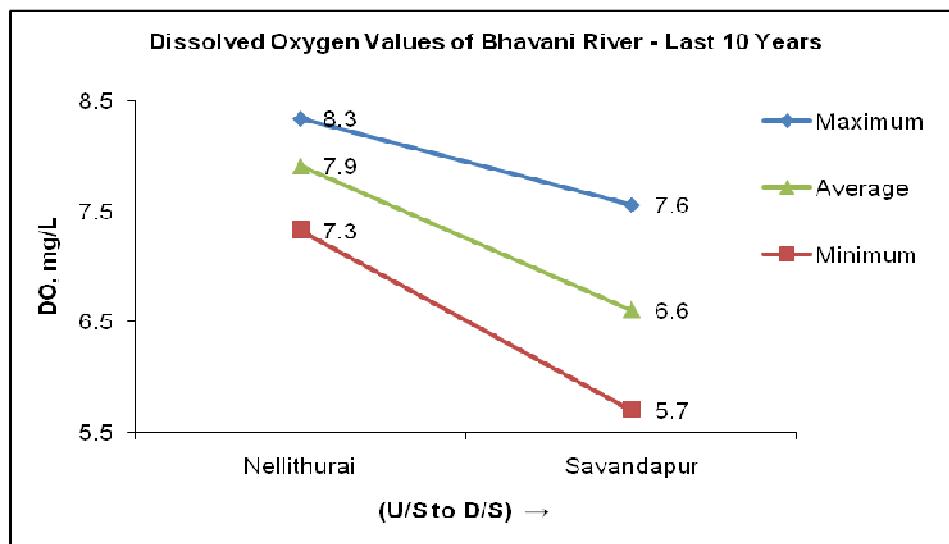
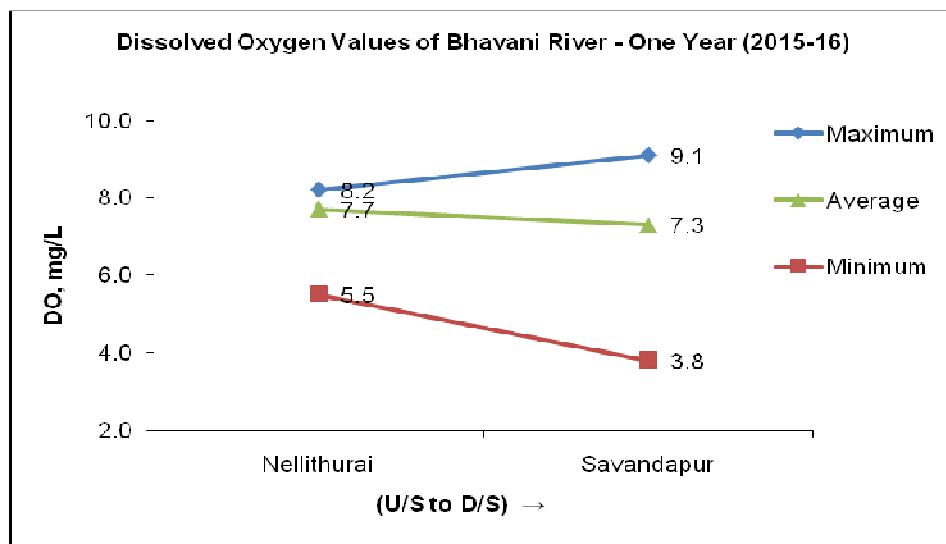


Figure - 20.3

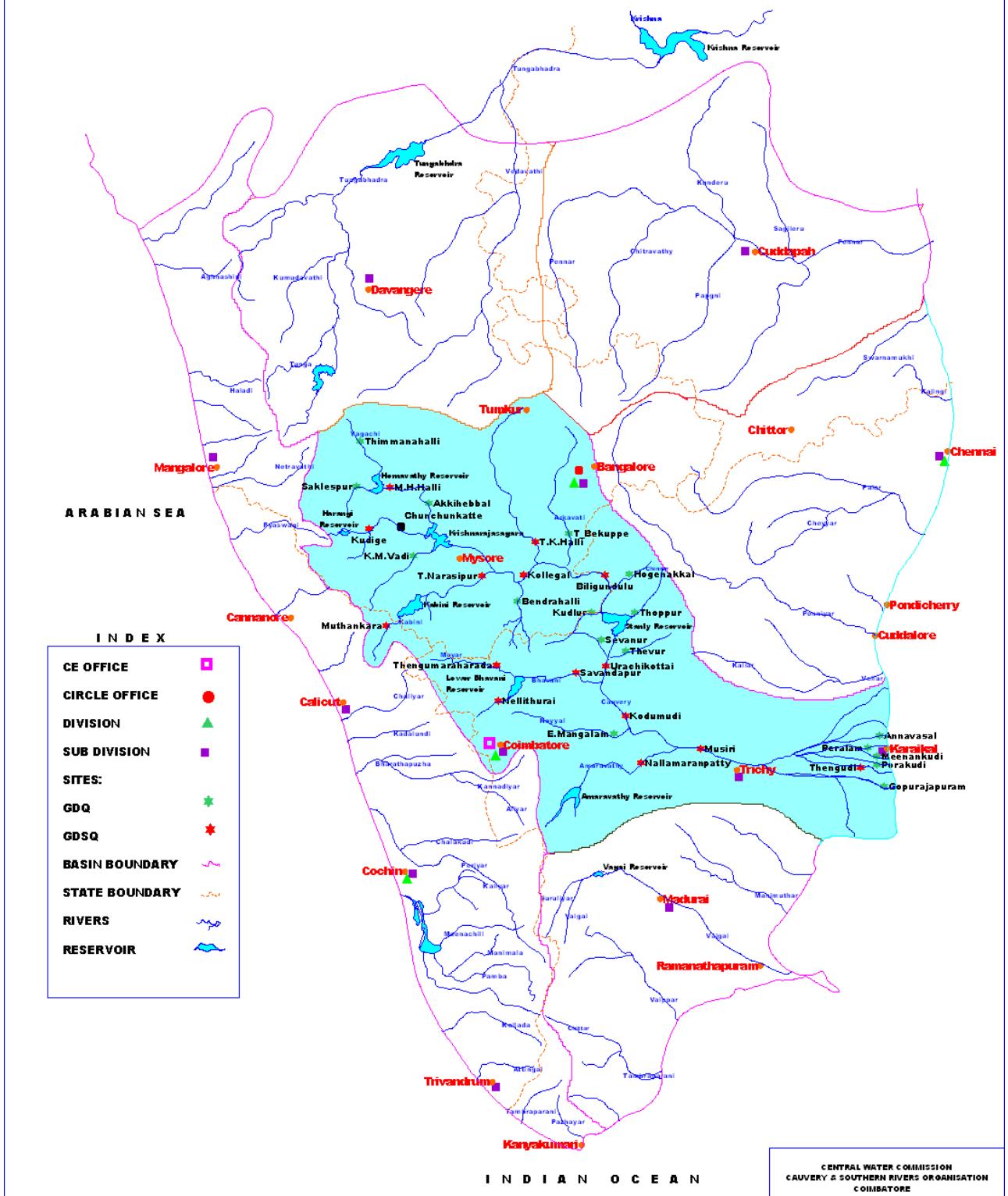


5.4 General Remarks / Conclusion about Water Quality Trend:

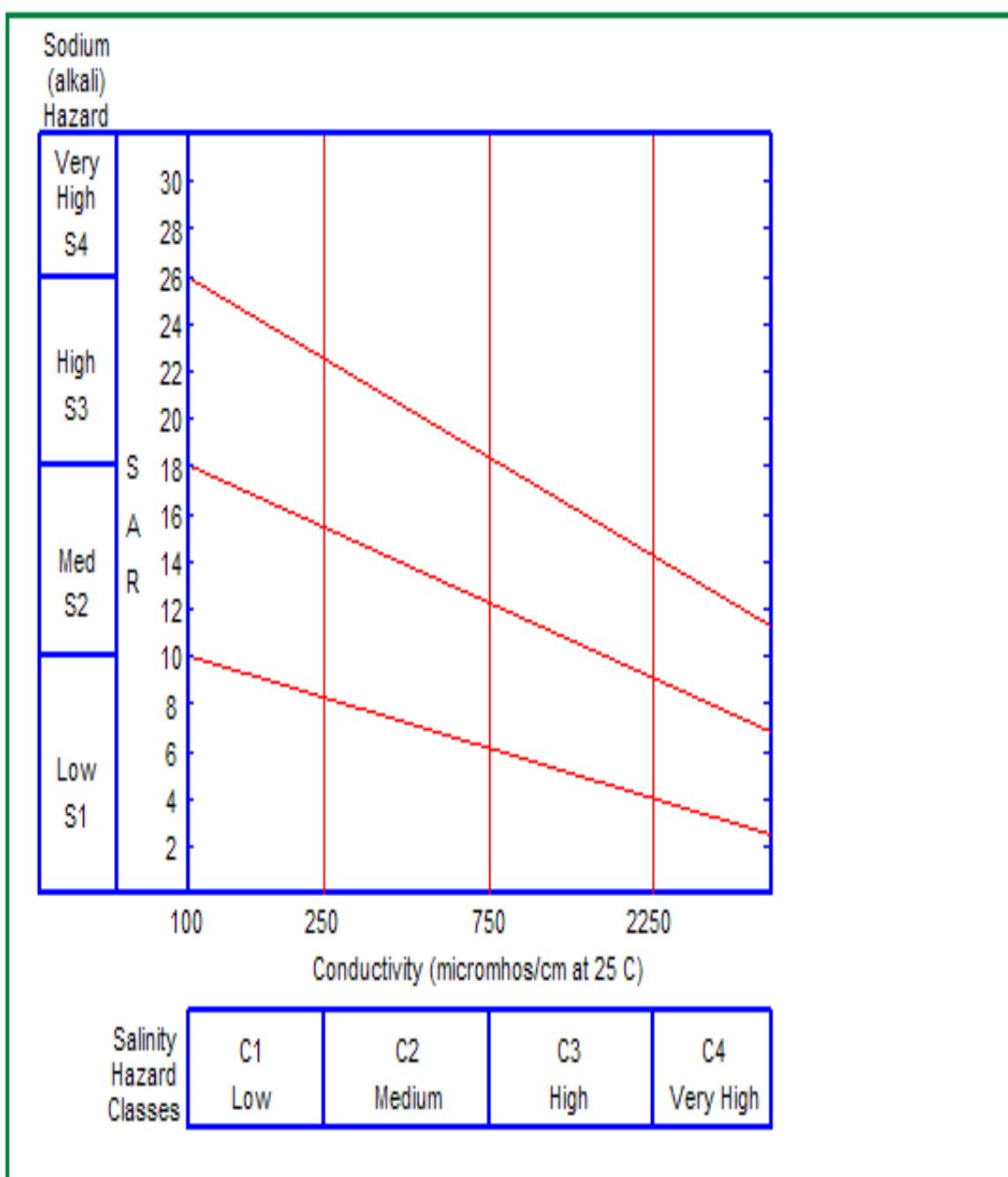
Trends of the river Bhavani is as follows:

The water quality of river Bhavani is good in nature. The ionic concentration is gradually increasing from upstream to downstream. The water quality of river Bhavani is little deteriorating at sites Savandapur due to direct human activities which can be seen from the above graphs.

MAP SHOWING HYDROLOGICAL OBSERVATION STATIONS IN CAUVERY BASIN



Wilcox Diagram



ABBREVIATIONS AND SYMBOLS

Q (Cumec)	: Discharge in Cubic metre per second
EC_FLD	: Electrical Conductivity Field
EC_GEN	: Electrical Conductivity General
pH_FLD	: Negative logarithm of hydrogen ion concentration - Field
pH_GEN	: Negative logarithm of hydrogen ion concentration - General
Temp (°C)	: Temperature in degree celsius
Alk-Phen	: Phenolphthalein Alkalinity
ALK-TOT	: Total Alkalinity
B	: Boron
Ca	: Calcium
Cl	: Chloride
CO ₃	: Carbonate
F	: Fluoride
Fe	: Iron
HCO ₃	: Bicarbonate
K	: Potassium
Mg	: Magnesium
Na	: Sodium
NH ₃ -N	: Ammonia Nitrogen
NO ₂ -N	: Nitrite Nitrogen
NO ₃ -N	: Nitrate Nitrogen
o-PO ₄ -P	: Ortho Phosphate Phosphorus
SiO ₂	: Silica
SO ₄	: Sulphate
BOD	: Biochemical Oxygen Demand (3 days incubation at 27°C)
COD	: Chemical Oxygen Demand
DO	: Dissolved Oxygen
As	: Arsenic
Cd	: Cadmium
Cr	: Chromium
Cu	: Copper
Hg	: Mercury
Ni	: Nickel
Pb	: Lead
Zn	: Zinc
HAR_Ca	: Calcium Hardness
HAR_Total	: Total Hardness
Na%	: Sodium Percentage
RSC	: Residual Sodium Carbonate
SAR	: Sodium Adsorption Ratio
SRD	: Southern Rivers Division, Coimbatore
CD	: Cauvery Division, Bengaluru

TOLERANCE LIMITS OF THE WATER QUALITY PARAMETERS FOR USE IN
IRRIGATION, INDUSTRIAL, COOLING AND CONTROLLED WASTE DISPOSAL

(According to ISI publication IS: 2296 - 1982)

Sl.No.	Characteristics	Tolerance limits
1	pH	6.0 to 8.5
2	Electrical Conductance at 25°C, mhos/cm, max.	2250×10^{-6}
3	Total Dissolved Solids (inorganic)	2100
4	Sodium Adsorption Ratio, max.	26
5	Percent Sodium, max.	60
6	Boron (as B), mg/L, max.	2
7	Chlorides (as Cl) mg/L, max.	600
8	Sulphates (as SO ₄) mg/L, max.	1000

**TOLERANCE LIMITS OF SELECTED WATER QUALITY
PARAMETERS FOR OTHER PURPOSES**

(According to ISI publication IS: 2296 - 1982)

Sl. No.	Characteristics	Tolerance limits *			
		Class-A	Class-B	Class-C	Class-D
1	pH value	6.5 to 8.5	6.5 to 8.5	6.5 to 8.5	6.5 to 8.5
2	Dissolved Oxygen mg/L, min.	6	5	4	4
3	Bio-chemical Oxygen Demand (5 days at 20°C) mg/L, max	2	3	3	-
4	Total Coliform Organisms MPN/100 ml, max.	50	500	5000	-
5	Total Dissolved Solids, mg/L, max.	500	-	1500	-
6	Chlorides (as Cl) mg/L, max.	250	-	600	-
7	Sulphates (as SO ₄) mg/L max.	400	-	400	-
8	Electrical Conductance at 25°C, mhos/cm, max.	-	-	-	1000 x 10 ⁻⁶

* Class-A : Refers drinking water without conventional treatment but after disinfection.

Class-B : Refers outdoor bathing.

Class-C : Refers drinking water with conventional treatment followed by disinfection.

Class-D : Refers fish culture and wild life propagation.