

**ACTION PLAN FOR RESTORATION OF POLLUTED STRETCH  
(KARUVANNUR)  
OF RIVER KARUVANNUR (Priority-V)**

**May 2019**

## **Contents**

Executive Summary		3-10
Chapter 1	Introduction	11-13
Chapter 2	Assessment of river water quality	14-17
Chapter 3	Action plan	18-29

## Executive Summary

The draft action plan of Karuvannur River was submitted before Hon'ble NGT earlier on 15-12-2019. The modified action plan is given below.

The river has its origins at Poomala Hills in Chimmony Wild life sanctuary of Thrissur District. Both the rivers joins together before Arattupuzha and makes Karuvannur River. Then the river flows to the Kole wetlands. The river divides the Thrissur Kole Wetlands into two regions. The river flows west and splits in two, one falling in Enamakkal Lake which joins Conolly Canal in Thrissur District and the other one into Periyar river. The river is 48 kilometres in length.

Six drains were identified as joining this polluted stretch. The pollution load in terms of BOD was assessed.

### Pollution load in drains

	<b>Drain</b>	<b>Pollution load (BOD) TPD</b>
1	Thirikkuzhi	0.02935
2	Thodu near Kadalassery bridge	0.1273
3	Neerolithodu	0.00553
4	Painkilkayal thodu	0.00325
5	Kanathodu	No flow BOD -2.9 mg/l
6	Kadathodu	0.09483

## 1. Short term plan

(1)Thirukuzhy thodu

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.1.1	A(a)(iv)	Surveillance to restrict dumping of wastes into river and its branches	Vallachira Panchayat with the help of Police	-			Reduced pollution load in canal
2.1.2	E	Cleaning and desilting of canal	Kerala Irrigation Department and Vallachira Panchayat	0.1 and 0.02	SDRF and Suchitwa mission fund	4months	Free flow of water

(2) Thodu near Kadalassery bridge

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.2.1	A(b)	Identification of pollution sources and surveillance to restrict dumping of wastes	Vallachira ,Pudukad & Nenmanikkara Panchayats	-	-	1 month	Prevention of illegal dumping
2.2.2	E	Cleaning and desilting	Kerala Irrigation Department and Vallachira Panchayat	0.1 and 0.2	SDRF and Suchitwa mission fund	4months	Free flow of water

(3) Neerolithodu

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.3.1	E	Cleaning and desilting	Kerala Irrigation Department	0.1 and 0.2	SDRF	4months	Free flow of water

(4)Painkilikayal thodu

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.4.1	E	Cleaning and desilting	Kerala Irrigation Department and Vallachira Panchayat	0.12	SDRF and Suchitwa mission fund	4months	Free flow of water

(5)Kadathodu

No.	Ref para Item Nos as per NGT Order no 673/2018 dated 20.9.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.5.1	A(b)	Identification of pollution sources and surveillance to restrict the dumping of wastes	Vallachira & Nenmanikkara Panchayats	-	-	1 month	Prevention of illegal dumping
2.5.2	E	Cleaning and desilting	Kerala Irrigation Department	0.1	SDRF,	4months	Free flow of water

3.Main Stream –along Karuvannur

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
3.1	A(a)(iv)	Periodic Surveillance to restrict the dumping of	Irinjalakkuda Municipality, Police Dept.	-	-	On going	Reduction of pollution load

		waste into river and imposing Fine					
3.2	A(b)	Sanitation Survey	Irinjalakkuda Municipality	.00075	NHM Fund	3 Months	Identification of Sources leading to pollution
3.3	A(b)	Closing of all un authorized outlets leading to the river	Irinjalakkuda Municipality	-	-	-	Reduction of pollution load
3.4	A(b)	Closing of all un authorized outlets in the drain leading to the river	Irinjalakkuda Municipality	-	-	-	-do-
3.5	E	Boards to display slogans against littering waste in various Places other IEC Activities Like posters, notices and classes	Irinjalakkuda Municipality	3 lakhs	IEC fund	6 months	Reducing the Pollution by Changing the attitude of People

#### **4.Monitoring**

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost	Source of fund	Time line	Remarks
3.1	A(a)(iv)	River water quality monitoring	Kerala State Pollution Control Board		National Water Quality Monitoring Programme (NWMP), CPCB fund	Ongoing ; monthly frequency	Monitoring
3.2	A(b)	Inspection and effluent quality monitoring of the flats, industrial units, service stations, hospitals, hotels etc	Kerala State Pollution Control Board	As per sampling charge-12,16,000/-		On going	



## Long term Plan

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Long term measures proposed	Implementing agency	Amount Required (Rs.in Crore) and Source of fund	Time line	Remarks
5.1	A(b)	Sewage treatment facilities to all house holds	Vallachira Grama Panachayat	0.03 Plan fund	1 yr	-
5.2	A(b)	Construction of FSTP and STP	Irinjalakkuda Municipality	0.9 Suchitwa mission	2 yrs	-
5.3	C(ii)	Setting up of a modern crematorium at Mandarakkadavu, Arattupuzha	Vallachira Grama Panachayat	0.1	2 years	This will prevent dumping cremation residues into river
5.4	C(ii)	Solid waste treatment facility	Vallachira Grama Panachayat	0.2 Suchitwa mission	2 yrs	-
5.5	C(ii)	Construction of Windrow composting plant	Irinjalakkuda Municipality	0.65 Plan Fund	2 years	-
5.6	E	Rejuvenation of Kanathodu	Irrigation department	0.51 plan fund	1 year	-

5.7	E	Installation of CCTV for Surveillance to prevent the dumping of waste in to the river	Irinjalakkuda Municipality	0.06 Plan fund	2 yrs	-
-----	---	---	----------------------------	----------------	-------	---

### **Action Plan by Ground Water Department**

Sl.No	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Ground Water Department
1	B(i)	Ground Water resources and regulation of ground water extraction by industries particularly in over exploited as critical zones/blocks	As per Groundwater resources of Kerala, 2017 estimate a total number of 2 blocks (Cherpu and Irinjalakkuda) comes under the Karuvannur river basin. All the blocks in the river stretch are safe with stage of groundwater extraction ranges from 52.04% to 54.73%
2	B(ii)	Ground water recharging / rain water harvesting	The average pre- monsoon groundwater level ranges from 7.31 to 10 mbgl. Groundwater
3	B(iii)	Periodic ground water quality assessment and remedial actions in case of contaminated ground water tube wells/bore wells or hand pumps	Groundwater Department has 1 observation dug well in this river stretch.
4	B(iv)	For regulating use of ground water for irrigation purpose, adopting good irrigation practices	The total irrigation draft in the area ranges from 1041.58 - 1188.50 ha.m.

### Action Plan by Gramapanchayath

No	Name of Grama panchayath	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost	Source of fund	Time line	Remarks
1	Vallachira	C	MANALIPUZHA RIVER PROTECTION -Jalaraksha Jeevaraksha - Manalipuzha conservation -Fund transfer to Dt. Soil Conservation Office Rs.1,50,000/- & Dt. share isRs. 86,600/-. For Permanent survey	panchayat	236,000	OWN FUND	1 YEAR	
2	Vallachira	C	Setting up of Nursery for Bamboo seedlings in Kadalassery	MGNREGS	200,000	MGNREG	31.03.2020	

3	Vallachira	C	Side protection of Manalippuzha with organic materials available locally	MGNREGS	200,000	MGNREG	31.03.2020	
4	Vallachira	C	Side Protection of Manalippuzha with Bamboo plants	MGNREGS	300,000	MGNREG	31.03.2020	Side Protection of Manalippuzha with Bamboo plants
5	Vallachira	C	Deepening & Protecting Muttikkal Thodu by Spreading Geo Textiles	MGNREGS	140,000	MGNREG	31.03.2020	Deepening & Protecting Muttikkal Thodu by Spreading Geo Textiles
6	<b>Puthukkad</b>	C	Cluster 2-Kurumaly puzha sub river bed -Project document preparation	Gramapanchayat	50,000	OwnFund	1 Year	
7	<b>Nenmenikkara</b>	C	Manalippuzha River Protection-Jala Raksha, Jeeva Raksha , Survey and Tree Plantation- 11,70,216 (Own Fund-1,00,000/- Panchayat share 1,60,000/- Block share- 9,10,216/-)	Grama panchayat	1,170,216	Fund of District Panchayat & Grama panchayat	31.03.2020	
8	<b>Nenmenikkara</b>	C	Manalipuzha River protection	MGNREGS	2,000,000	MGNREG	31.03.2020	

9	<b>Nenmenikkara</b>	<b>A(b)</b>	Protection and reconstruction and protection of Paliyekkara Kayalathod 43,8,000/- date 31/03/2020 (MGNREGS Fund)	MGNREGS	438,000	MGNREG	31.03.2020	
10	<b>Nenmenikkara</b>	<b>A(b)</b>	Reconstruction and protection of Paliyekkara Karama Thodu 500000/- date 31/03/2020 (MGNREGS Fund)	MGNREGS	500,000	MGNREG	31.03.2020	

## **CHAPTER 1**

### **INTRODUCTION**

The river has its origins at Poomala Hills in Chimmony Wild life sanctuary of Thrissur District. The Karuvannur River is formed by the confluence of two rivers, Manali River and Kurumali River. Both the rivers joins together before Arattupuzha and makes Karuvannur River. Then the river flows to the Kole wetlands.

The river divides the Thrissur Kole Wetlands into two regions, an area of 8,072 hectares in the north is termed as North Kole, and an area of 2,115 hectares in the south is known as South Kole. The river flows west and splits in two, one falling in Enamakkal Lake which joins Conolly Canal in Thrissur District and the other one into Periyar river. The river is 48 kilometres in length and gives drinking water to many Panchayats in Thrissur District.

Karuvannur River has a drainage area of 1054 km<sup>2</sup>. The average rainfall in the low land of the river basin is estimated to be 2858 mm, the midland 3011mm and the highland 2851 mm and annual stream flow 1398.3 Mm<sup>3</sup>. Actual use of the river is irrigation, drinking and bathing.

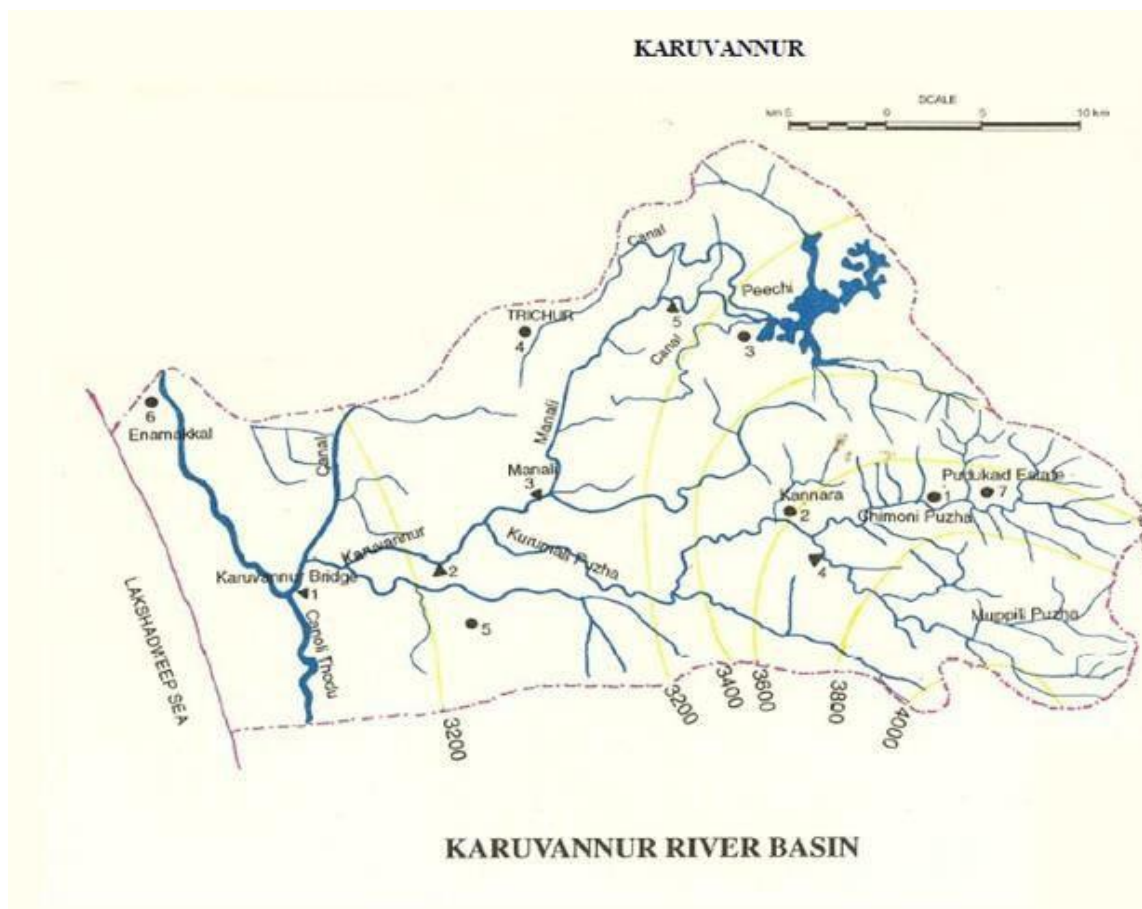


Fig 1.1 Karuvannur River Basin

## ACTIVITIES

Karuvannur Puzha flows through famous Kole Wetlands of Thrissur. It is one of the largest, highly productive and threatened wetlands in Kerala and is a Central Asian Flyway of migratory birds. Agriculture is the main activity along river side and mostly river basin is residential area.

There are no industries along the banks of river directly discharging effluent, or industries which have water intake from the river. Dumping of solid wastes and unauthorised discharge of untreated sewage into the river is suspected as the cause for the degradation of the quality of water. The river falls under priority V category based on the extent of pollution.



Fig 1.2 Solid waste dumped near Karuvannur bridge



## **CHAPTER 2** **ASSESSMENT OF RIVER WATER QUALITY**

2.1 Study area of polluted river stretch is identified as “along karuvannur “



Fig 2.1 Polluted stretch

## 2.2 RESULT OF WATER QUALITY MONITORING FOR THE PAST THREE YEARS

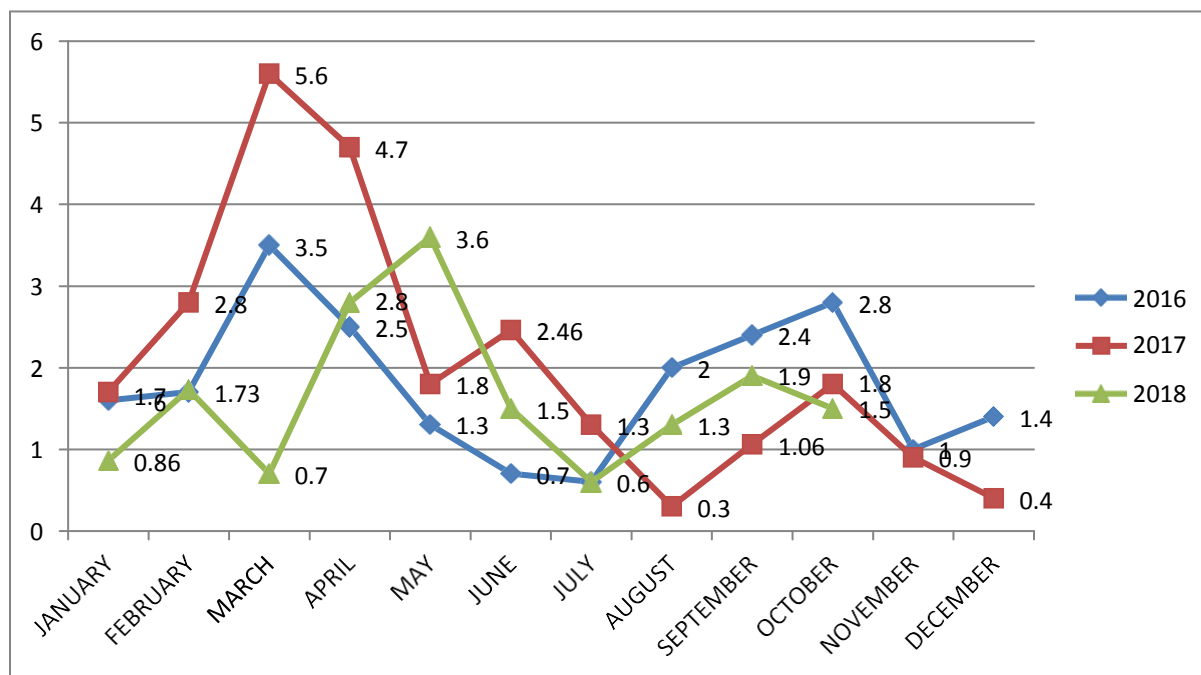


Fig 2.2 BOD graph

Month	2016			2017			2018		
	PH	T C	F C	P H	T C	F C	P H	T C	F C
JAN	7.9	150	110	7.1	100	60	7	300	210
FEB	7.2	260	120	7.6	150	90	7	390	150
MAR	7.1	450	320	7	360	110	6.6	380	100
APR	7.7	220	90	7.3	340	110	7.1	350	150
MAY	7.9	280	250	7.3	260	190	7.1	350	100
JUN	6.9	300	210	7.5	400	180	6.9	200	60
JULY	7.4	450	80	7.2	400	290	6.6	300	120
AUG	8.6	170	60	7.5	200	90	6.4	700	180
SEPT	6.3	190	60	7	200	110	6.6	300	110
OCT	7.4	260	40	6.9	450	140	6.6	600	500
NOV	8.7	40	20	7	700	200	-	-	-
DEC	7.8	550	230	7	250	30	-	-	-

It can be observed from the graph that in the year 2018, BOD value crossed the limit of 3 mg/l only once and it was during summer season. Results of analysis of the sample collected from a point in the polluted river stretch (near Karuvannur bridge) on 22/11/18

Sl.No	Parameter	Unit	
1	pH	-	6.6
2	EL.CONDUCTIVITY	µmhos/cm	69.2
3	TURBIDITY	NTU,	7.4
4	PHENOL.ALKALINITY	mg/l	BDL
5	TOTAL ALKALINITY	mg/l	18
6	CHLORIDES	mg/l	14
7	COD	mg/l	4
8	AMMONIACAL NITROGEN	mg/l	0.43
9	HARDNESS AS CaCO <sub>3</sub>	mg/l	18
10	CALCIUM HARDNESS AS CaCO <sub>3</sub>	mg/l	10
11	MAGNESIUM HARDNESS AS CaCO <sub>3</sub>	mg/l	8
12	SULPHATES	mg/l	3.4
13	SODIUM	mg/l	5
14	TOTAL DISSOLVED SOLIDS	mg/l	58
15	TOTAL FIXED SOLIDS	mg/l	18
16	TOTAL SUSPENDED SOLIDS	mg/l	8
17	PHOSPHATES	mg/l	2.2
18	POTASSIUM	mg/l	1.8
19	BOD	mg/l	5.4
20	FLOURIDES	mg/l	BDL
21	DISSOLVED OXYGEN	mg/l	8.3

22	NITRATE NITROGEN	mg/l	1.1
23	TOTAL COLIFORMS	CFU/100 ml	300
24	FEACAL COLIFORMS	CFU/100 ml	100

The above sample was collected from the downstream of the point where solid waste dumping was noticed. BOD value shows its impact and if dumping of solid waste and sewage into the river can be prevented, it alone can improve the water quality a lot.

**CHAPTER 3**  
**ACTION PLAN**

1. Direction to be issued to local bodies in the catchment area, to plan and execute facilities for sewage treatment and solid waste treatment and disposal to prevent dumping of sewage and solid wastes into the river.
2. Direction to be issued to local bodies to make rain water harvesting system mandatory in all residential and commercial buildings.
3. Direction to be issued to local bodies to install CCTV cameras along the river to identify those who dump solid wastes and sewage into the river, and police authorities to strictly monitor and catch the violators.
4. Direction to be issued to local bodies and other concerned departments to remove encroachments and to curb illegal sand mining.

**2. Pollution load in drains**

Joint inspection was conducted by KSPCB, Kerala Irrigation Department, Kerala Water Authority and Suchitwa Mission and identified the drains leading to polluted stretch of Karuvannur river .

Pollution load in drains

	Drain	Pollution load (BOD) TPD
1	Thirikkuzhi	0.02935
2	Thodu near Kadalassery bridge	0.1273
3	Neerolithodu	0.00553
4	Painkilikayal thodu	0.00325
5	Kanathodu	No flow - BOD -2.9 mg/l
6	Kadathodu	0.09483

### 3. Short term plan

(5)Thirukuzhy thodu

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.1.1	A(a)(iv)	Surveillance to restrict dumping of wastes into river and its branches	Vallachira Panchayat with the help of Police	-			Reduced pollution load in canal
2.1.2	E	Cleaning and desilting of canal	Kerala Irrigation Department and Vallachira Panchayat	0.1 and 0.02	SDRF and Suchitwa mission fund	4months	Free flow of water

(6) Thodu near Kadalassery bridge

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.2.1	A(b)	Identification of pollution sources and surveillance to restrict dumping of wastes	Vallachira ,Pudukad & Nenmanikkara Panchayats	-		1 month	Prevention of illegal dumping
2.2.2	E	Cleaning and desilting	Kerala Irrigation Department and Vallachira Panchayat	0.1 and 0.2	SDRF and Suchitwa mission fund	4months	Free flow of water

(7) Neerolithodu

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.3.1	E	Cleaning and desilting	Kerala Irrigation Department	0.1 and 0.2	SDRF	4months	Free flow of water

(8)Painkilyakal thodu

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.4.1	E	Cleaning and desilting	Kerala Irrigation Department and Vallachira Panchayat	0.12	SDRF and Suchitwa mission fund	4months	Free flow of water

(9)Kadathodu

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
2.5.1	A(b)	Identification of pollution sources and surveillance to restrict the dumping of wastes	Vallachira & Nenmanikkar a Panchayats	-	-	1 month	Prevention of illegal dumping
2.5.2	E	Cleaning and desilting	Kerala Irrigation Department	0.1	SDRF,	4months	Free flow of water

3.Main Stream –along Karuvannur

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost (Rs. Cr)	Source of fund	Time line	Expected outcome
3.1	A(a)(iv)	Periodic Surveillance to restrict the dumping of waste into river and imposing Fine	Irinjalakkuda Municipality, Police Dept.	-	-	On going	Reduction of pollution load



3.2	A(b)	Sanitation Survey	Irinjalakkuda Municipality	.00075	NHM Fund	3 Months	Identification of Sources leading to pollution
3.3	A(b)	Closing of all un authorized outlets leading to the river	Irinjalakkuda Municipality	-	-	-	Reduction of pollution load
3.4	A(b)	Closing of all un authorized outlets in the drain leading to the river	Irinjalakkuda Municipality	-	-	-	-do-
3.5	E	Boards to display slogans against littering waste in various Places other IEC Activities Like posters, notices and classes	Irinjalakkuda Municipality	3 lakhs	IEC fund	6 months	Reducing the Pollution by Changing the attitude of People

#### **4.Monitoring**

<b>No.</b>	<b>Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018</b>	<b>Activity</b>	<b>Implementing agency</b>	<b>Cost</b>	<b>Source of fund</b>	<b>Time line</b>	<b>Remarks</b>
3.1	A(a)(iv)	River water quality monitoring	Kerala State Pollution Control Board		National Water Quality Monitoring Programme (NWMP), CPCB fund	Ongoing; monthly frequency	Monitoring
3.2	A(b)	Inspection and effluent quality monitoring of the flats, industrial units, service stations, hospitals, hotels etc	Kerala State Pollution Control Board	As per sampling charge-12,16,000/-		On going	

## Long term Plan

No.	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Long term measures proposed	Implementing agency	Amount Required (Rs.in Crore) and Source of fund	Time line	Remarks
5.1	A(b)	Sewage treatment facilities to all house holds	Vallachira Grama Panachayat	0.03 Plan fund	1 yr	-
5.2	A(b)	Construction of FSTP and STP	Irinjalakkuda Municipality	0.9 Suchitwa mission	2 yrs	-
5.3	C(ii)	Setting up of a modern crematorium at Mandarakkadavu, Arattupuzha	Vallachira Grama Panachayat	0.1	2 years	This will prevent dumping cremation residues into river
5.4	C(ii)	Solid waste treatment facility	Vallachira Grama Panachayat	0.2 Suchitwa mission	2 yrs	-
5.5	C(ii)	Construction of Windrow composting plant	Irinjalakkuda Municipality	0.65 Plan Fund	2 years	-
5.6	E	Rejuvenation of Kanathodu	Irrigation department	0.51 plan fund	1 year	-
5.7	E	Installation of CCTV for Surveillance to prevent the dumping of waste in to the river	Irinjalakkuda Municipality	0.06 Plan fund	2 yrs	-

## Action Plan by Ground Water Department

Sl.No	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Ground Water Department
1	B(i)	Ground Water resources and regulation of ground water extraction by industries particularly in over exploited as critical zones/blocks	As per Groundwater resources of Kerala, 2017 estimate a total number of 2 blocks (Cherpu and Irinjalakkuda) comes under the Karuvannur river basin. All the blocks in the river stretch are safe with stage of groundwater extraction ranges from 52.04% to 54.73%
2	B(ii)	Ground water recharging / rain water harvesting	The average pre- monsoon groundwater level ranges from 7.31 to 10 mbgl.
3	B(iii)	Periodic ground water quality assessment and remedial actions in case of contaminated ground water tube wells/bore wells or hand pumps	Groundwater Department has 1 observation dug well in this river stretch.
4	B(iv)	For regulating use of ground water for irrigation purpose, adopting good irrigation practices	The total irrigation draft in the area ranges from 1041.58 - 1188.50 ha.m.

## Action Plan by Gramapanchayath

No	Name of Grama panchayath	Ref para item nos as per NGT Order no.673/2018 dated 20.09.2018	Activity	Implementing agency	Cost	Source of fund	Time line	Remarks
1	Vallachira	C	MANALIPUZHA RIVER PROTECTION -Jalaraksha Jeevaraksha - Manalipuzha conservation -Fund transfer to Dt. Soil Conservation Office Rs.1,50,000/- & Dt. share isRs. 86,600/-. For Permanent survey	panchayat	236,000	OWN FUND	1 YEAR	
2	Vallachira	C	Setting up of Nursery for Bamboo seedlings in Kadalassery	MGNREGS	200,000	MGNREGS	31.03.2020	
3	Vallachira	C	Side protection of Manalippuzha with organic materials available locally	MGNREGS	200,000	MGNREGS	31.03.2020	

4	Vallachira	C	Side Protection of Manalippuzha with Bamboo plants	MGNREGS	300,000	MGNREG	31.03.2020	Side Protection of Manalippuzha with Bamboo plants
5	Vallachira	C	Deepening & Protecting Muttikkal Thodu by Spreading Geo Textiles	MGNREGS	140,000	MGNREG	31.03.2020	Deepening & Protecting Muttikkal Thodu by Spreading Geo Textiles
6	<b>Puthukkad</b>	<b>C</b>	Cluster 2-Kurumaly puzha sub river bed -Project document preparation	Gramapanchayat	50,000	OwnFund	1 Year	
7	<b>Nenmenikkara</b>	<b>C</b>	Manalippuzha River Protection-Jala Raksha, Jeeva Raksha , Survey and Tree Plantation- 11,70,216 (Own Fund-1,00,000/- Panchayat share 1,60,000/- Block share- 9,10,216/-)	Grama panchayat	1,170,216	Fund of District Panchayat & Grama panhayat	31.03.2020	
8	<b>Nenmenikkara</b>	<b>C</b>	Manalipuzha River protection	MGNREGS	2,000,000	MGNREG	31.03.2020	
9	<b>Nenmenikkara</b>	<b>A(b)</b>	Protection and reconstruction and protection of Paliyekkara Kayalathod 43,8,000/- date 31/03/2020 (MGNREGS Fund)	MGNREGS	438,000	MGNREG	31.03.2020	
10	<b>Nenmenikkara</b>	<b>A(b)</b>	Reconstruction and protection of Paliyekkara Karama Thodu 500000/- date 31/03/2020 (MGNREGS Fund)	MGNREGS	500,000	MGNREG	31.03.2020	