



Restoration of River Ecosystem

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River-Conflux with various Ecosystems



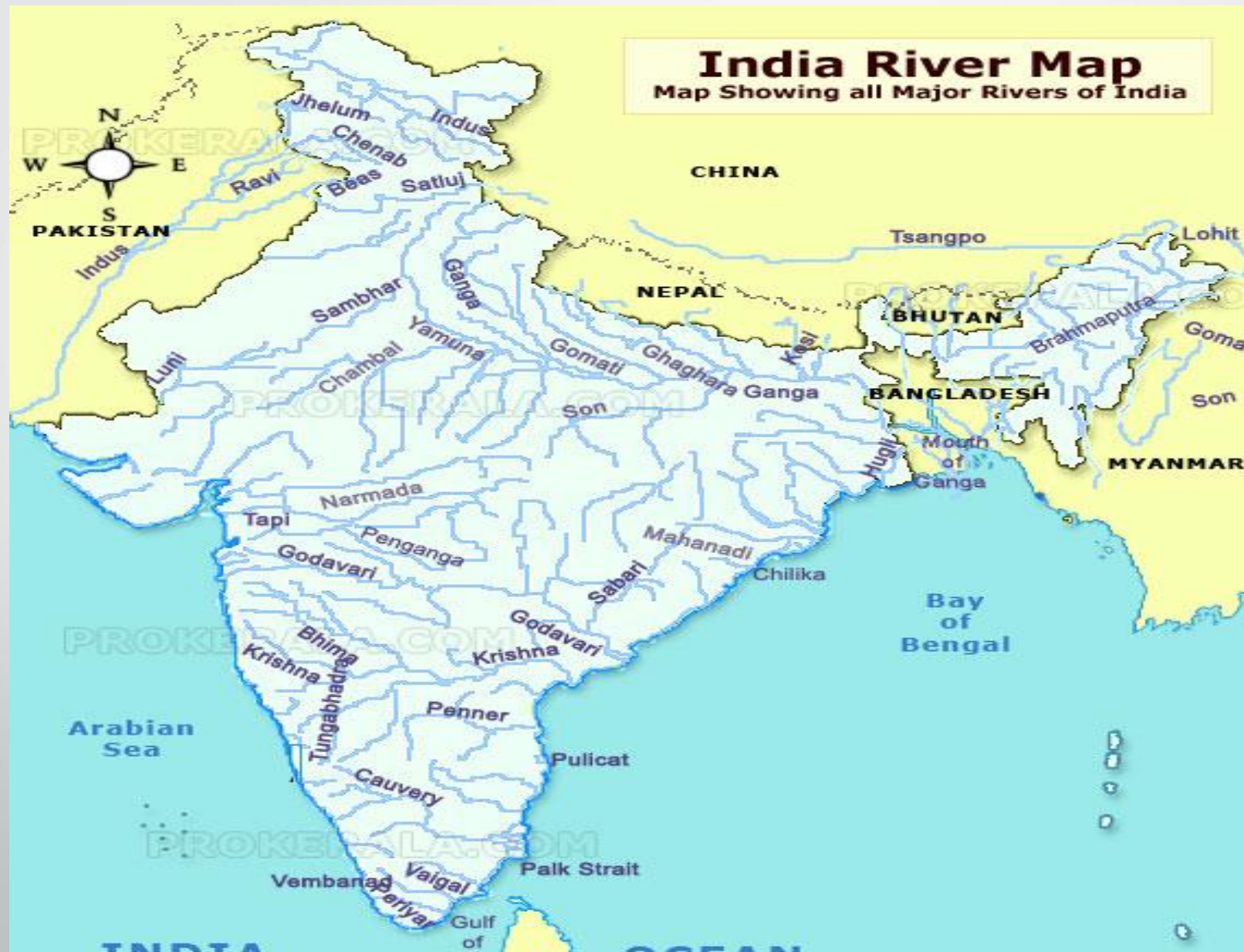
Vital Gift of Nature

- ❖ Most of the civilizations were originated on the River bank
- ❖ River is blood of Human Ecosystem
- ❖ Its quality is Health index of Society
- ❖ It is alive when originated but dead while reach the sea

Serving to humanity

- ❖ Supply of drinking water
- ❖ Source of Irrigation
- ❖ Electricity generation
- ❖ Fishing
- ❖ Ground water recharge
- ❖ Maintaining food cycle, nutrition cycle, Hydrogen cycle etc
- ❖ Pollution sink

Rivers of India



**Table – 2: State-wise & Priority wise number of Polluted River Stretches**

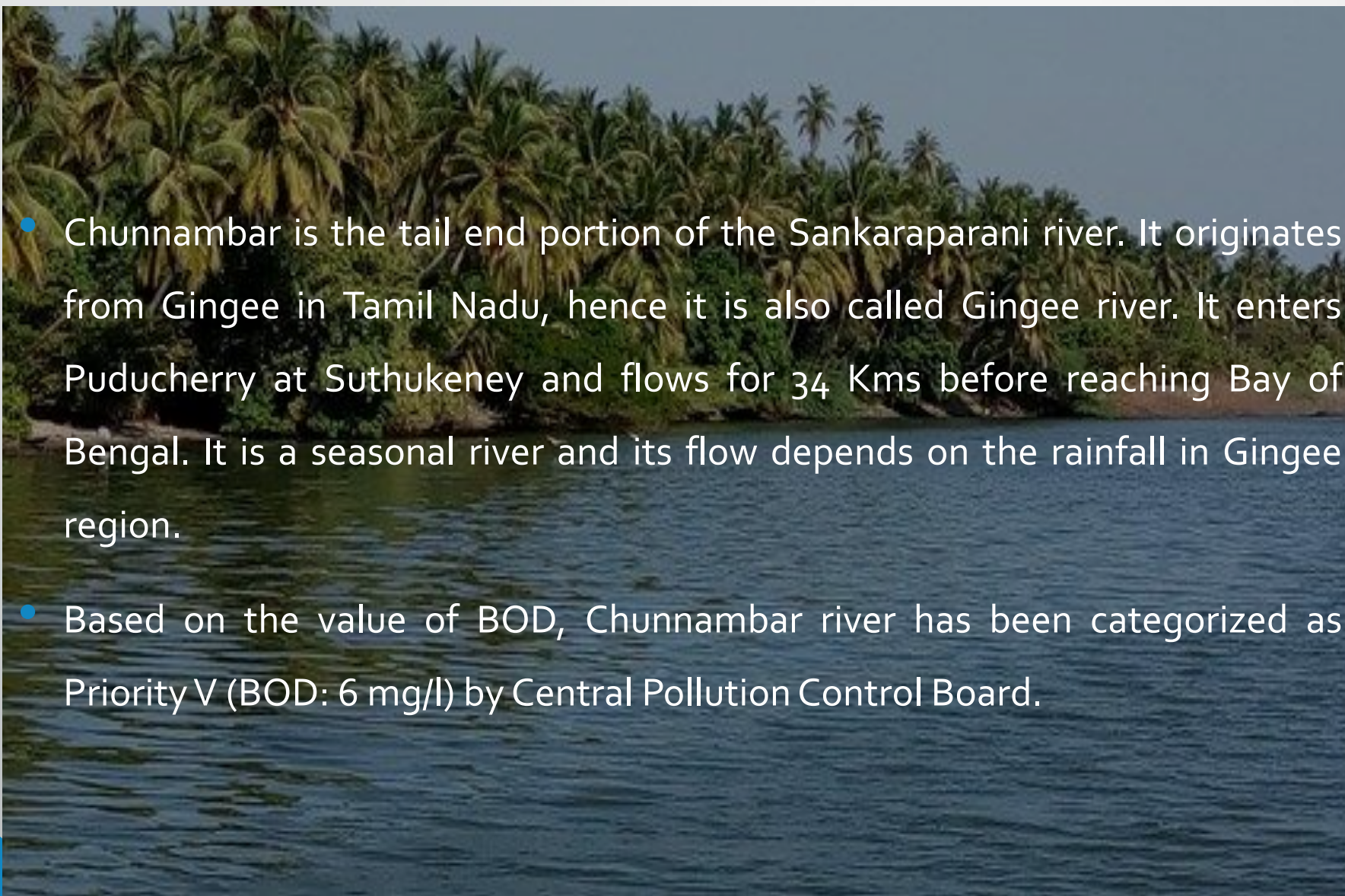
S.No	STATE/UNION TERRITORY	PRIORITY					Grand Total
		I	II	III	IV	V	
1	ANDHRA PRADESH				2	3	5
2	ASSAM	3	1	4	3	33	44
3	BIHAR			1		5	6
4	CHHATTISGARH				4	1	5
5	DAMAN, DIU AND DADRA NAGAR HAVELI	1					1
6	DELHI	1					1
7	GOA			1	2	8	11
8	GUJARAT	5	1	2	6	6	20
9	HARYANA	2					2
10	HIMACHAL PRADESH	1	1	1		4	7
11	JAMMU & KASHMIR		1	2	2	4	9
12	JHARKHAND				3	4	7
13	KARNATAKA			4	7	6	17
14	KERALA	1			5	15	21
15	MADHYA PRADESH	3	1	1	3	14	22
16	MAHARASHTRA	9	6	14	10	14	53
17	MANIPUR		1			8	9
18	MEGHALAYA	2			3	2	7
19	MIZORAM			1	3	5	9
20	NAGALAND	1		1	2	2	6
21	ODISHA	1		3	2	13	19
22	PUDUCHERRY				1	1	2
23	PUNJAB	2			1	1	4
24	RAJASTHAN			1		1	2
25	SIKKIM					4	4
26	TAMIL NADU	4			1	1	6
27	TELANGANA	1	2	2	2	1	8
28	TRIPURA					6	6
29	UTTAR PRADESH	4		1	2	5	12
30	UTTARAKHAND	3	1	1	4		9
31	WEST BENGAL	1	1	2	4	8	17

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- Chunnambar in Puducherry and Arasalar in Karaikal are figured in the polluted river stretches list of CPCB.



Chunnambar River, Puducherry

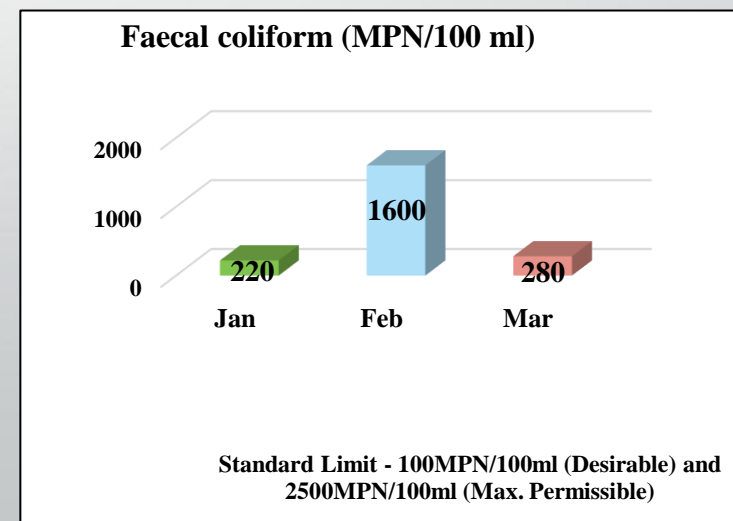
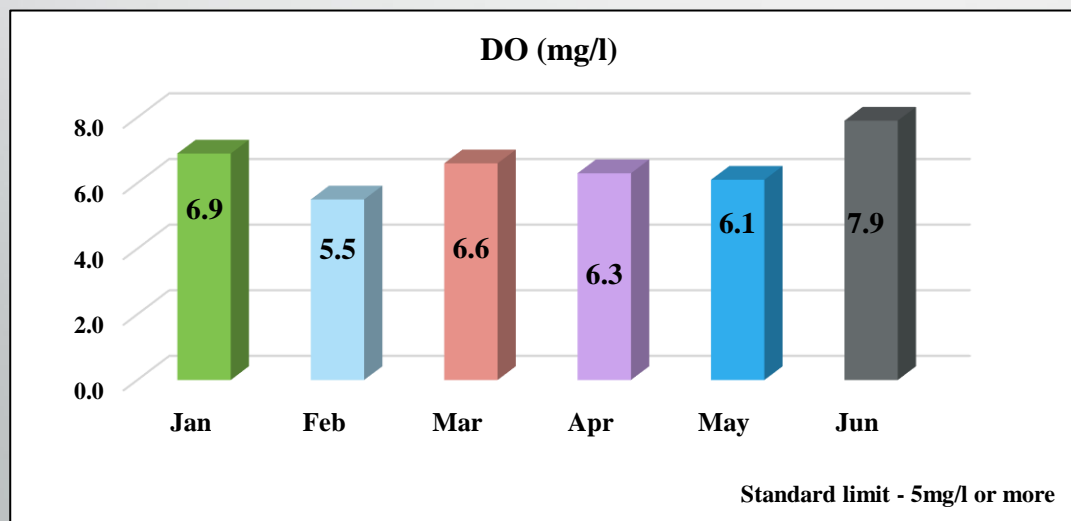
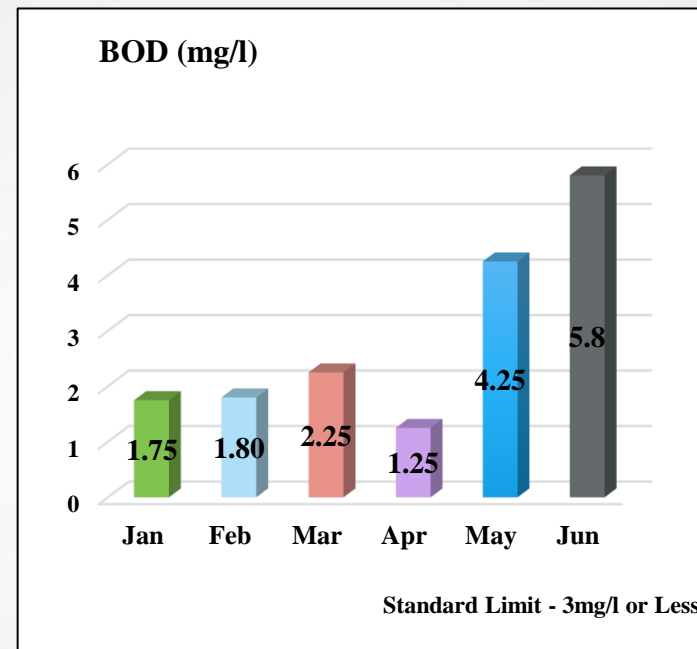
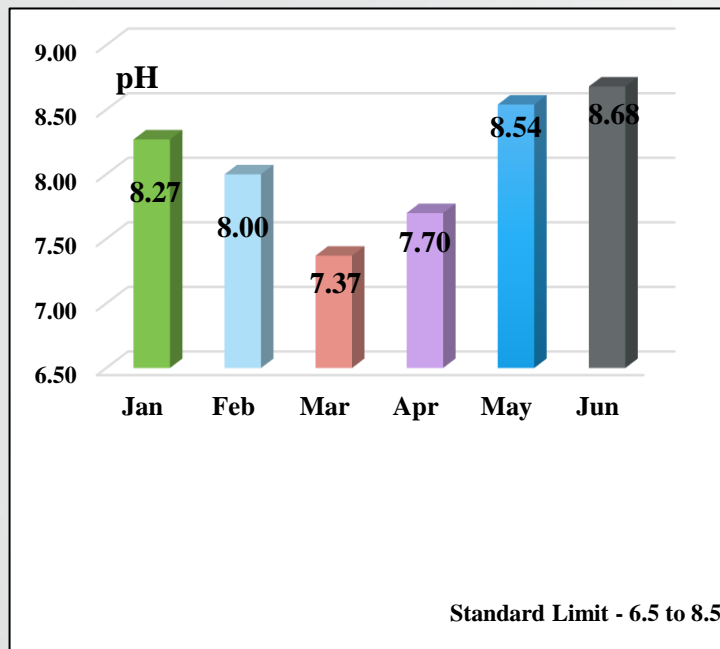


- Chunnambar is the tail end portion of the Sankaraparani river. It originates from Gingee in Tamil Nadu, hence it is also called Gingee river. It enters Puducherry at Suthukeney and flows for 34 Kms before reaching Bay of Bengal. It is a seasonal river and its flow depends on the rainfall in Gingee region.
- Based on the value of BOD, Chunnambar river has been categorized as Priority V (BOD: 6 mg/l) by Central Pollution Control Board.

Arasalar river, Karaikal

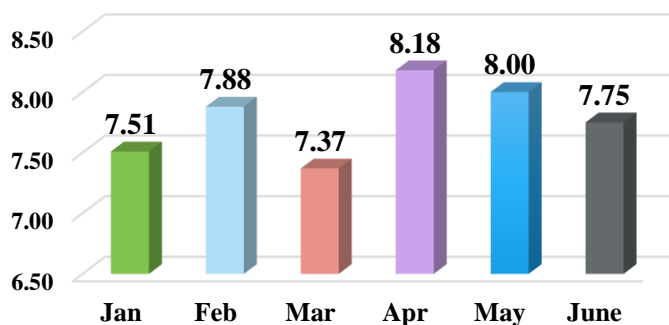
- Arasalar is having a total run of 24 Km, enters Karaikal, a little east of kalanganni. It forms the natural boundary line separating Neravy Commune from Thirunallar on the north-west and Karaikal on the north-east.
- It runs a distance of 12 Km, in Karaikal district before entering into the Bay of Bengal. The construction of Kannambadi Dam in 1916 and Mettur Dam in 1932 have reduced the flow of water in Arasalar.
- It has been categorized as Priority IV by CPCB based on the value of BOD of the River (7 mg/l).

Chunnambar-River Water quality



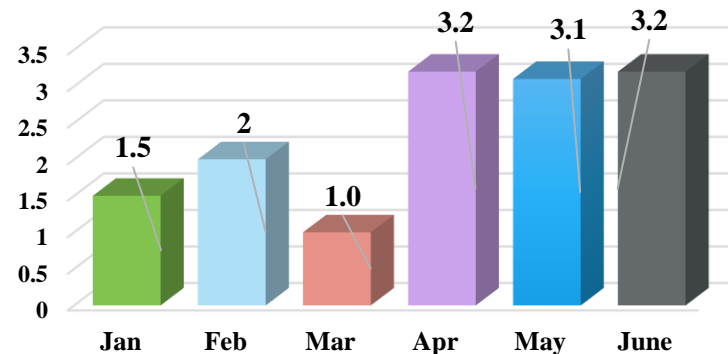
Water quality -Arasallar

Arasalar river - pH



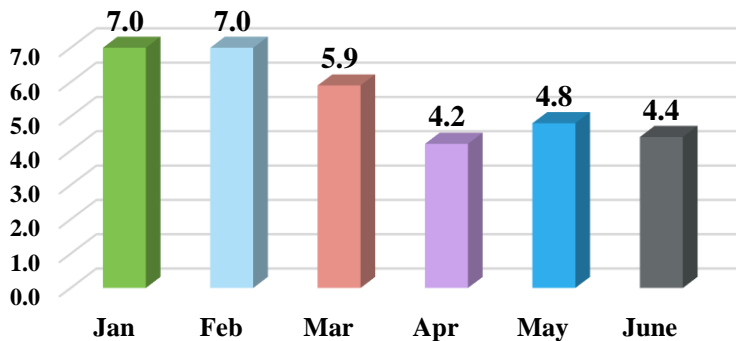
Standard Limit - 6.5 to 8.5

Arasalar river - BOD (mg/l)



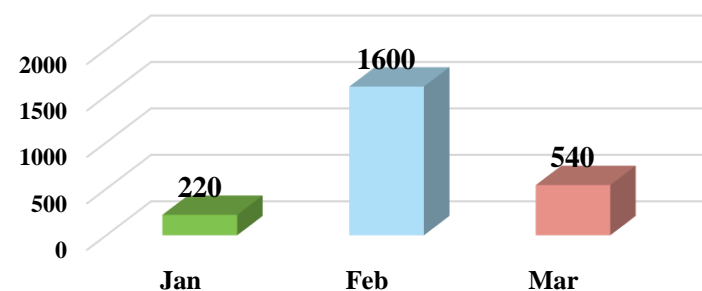
Standard Limit - 3mg/l or Less

Arasalar river - DO (mg/l)



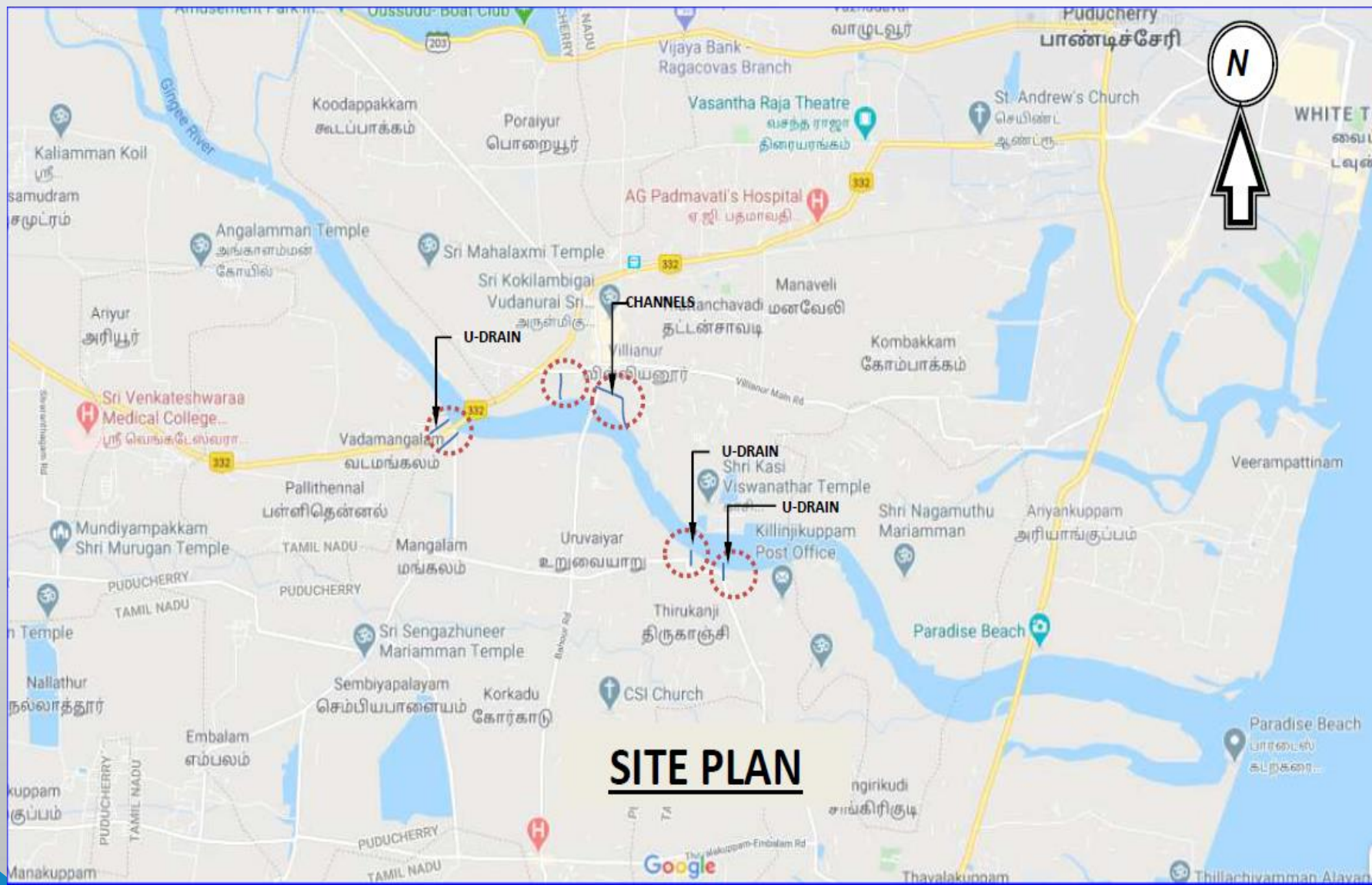
Standard limit - 5mg/l or more

Arasalar river - Faecal coliform (MPN/100 ml)



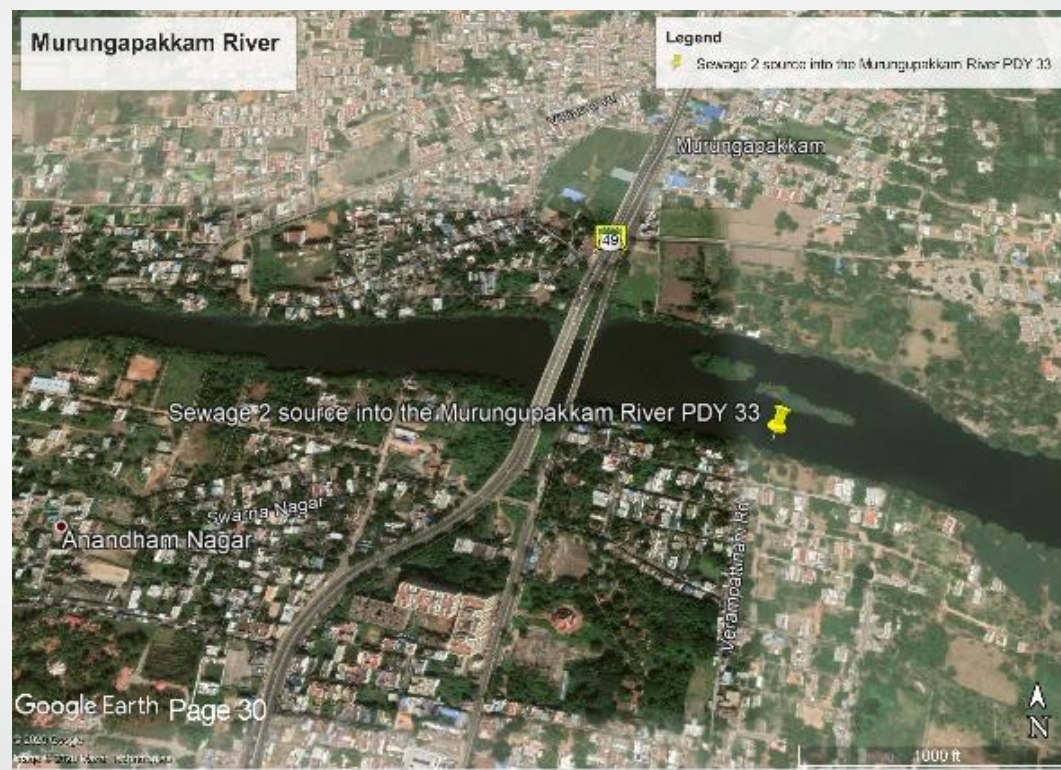
Standard Limit - 100MPN/100ml (Desirable) and 2500MPN/100ml (Max. Permissible)

Drains Enter Into Chunnambar





Sewage 1 source into the
Murungupakkam River



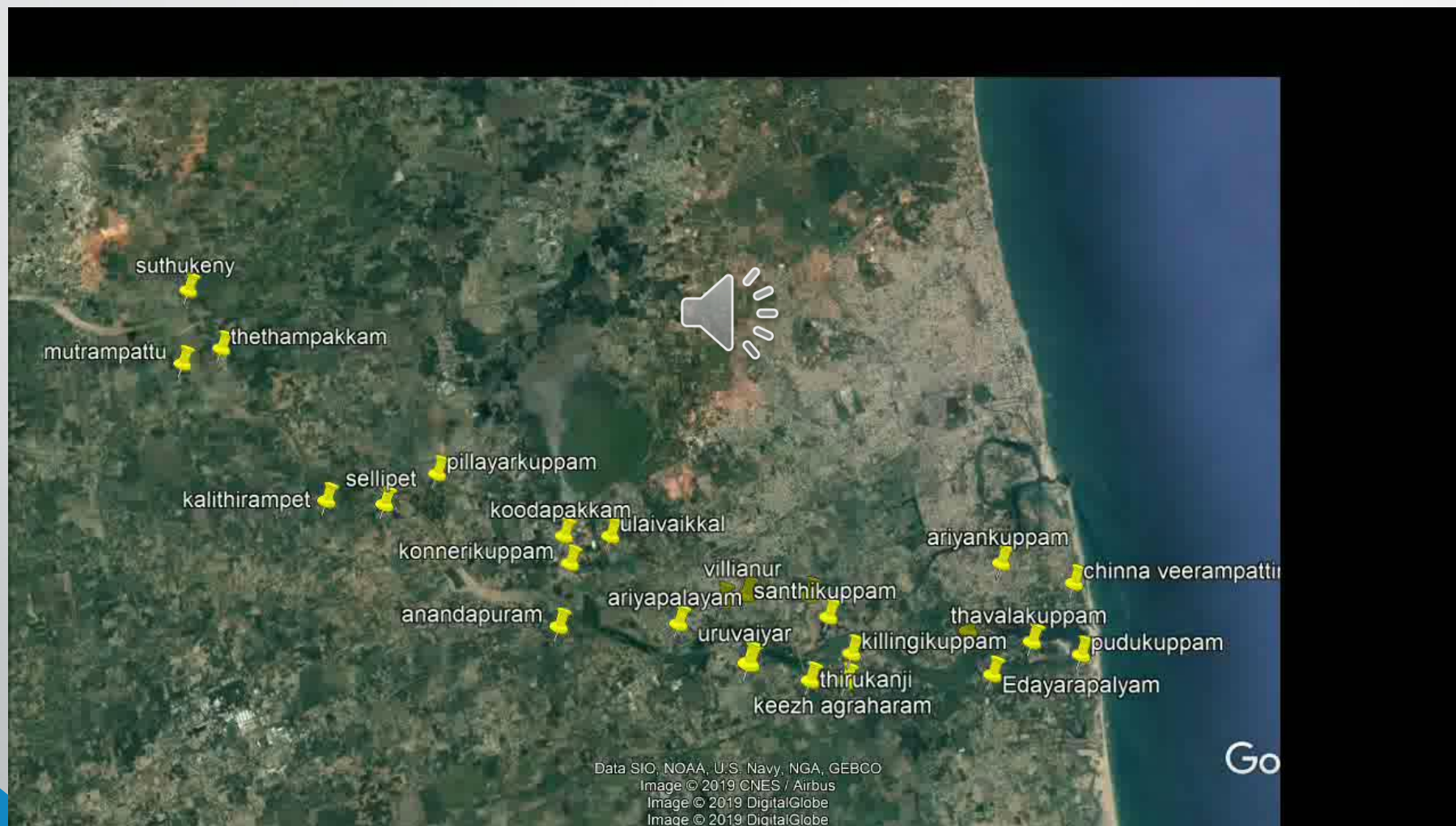
Sewage 2 source into the
Murungupakkam River

Drains entering into Rivers.

S.No	Commune	No. of drains	In-situ remediation	Status
1	ACP	8	Grill gratings	Completed all
2	NCP	15	Grill gratings	Completed all
3	BCP	25	Grill gratings	Completed all
4	MCP	44	Grill gratings	33 completed
5	VCP	54	Grill gratings	30 completed

7. Eradication of open defecation on the River Banks

Villages on the bank of Sankaraparani river



Provision of STP in the Chunnambar Boat House

- Chunnambar is one of the active tourist spot in Puducherry. Boat House is attractive tourist destination. Around 5000 person per week are visiting the place.



Arresting illegal sand mining

- Sankaraparani River bed is known for illegal sand mining. It affects flow of the river.



The Action Plan consists of the following ten components



1. Assessment of pollution level in the rivers.



2. Inventorisation of industries located on the bank of the river and closing down of unauthorized industrial operations if any .



3. Tracing of polluted streams which contaminates the river.



4. Installation / upgradation of ETP/STP in the industries.



5. Identification of Municipal, Hazardous and Bio-medical Waste dumping sites on the bank of river.

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6. Provision of STP in the habituated area of river bank.



7. Eradication of open defecation on the River Bank



8. Arresting the sand mining.



9. Development of Green belt on the river bank and improving biodiversity.



10. Formulation of Information Education and Communication programmes (IEC).



THANKYOU