

Justification for locating the Project in Forest Land and Details of alternate examine:

Name of the Project: Construction and Reconstruction works of dilapidated Head Sluice, Bed Dam, Retaining wall and Culvert in Malattar Channel across Malattar River Bed Forest Area for water supply to tanks in Tirukoilur and Villupuram Taluks of Villupuram District.

Introduction:

The Malattar channel is taking off from right side of Thirukoilur anicut, which is constructed across Pennaiyar river in Athandamarudhur village, Thirukoilur taluk of Villupuram district. The Latitude and Longitude of this point is 11 deg 15 min 00 sec N and 79 deg 15 min 15 sec E respectively. This Malattar channel flows parallel to Thirukoilur to Arasur road and through Paiyur, Mazhavarayanur, Thiruvannainallur, Arasur, Natham, Thiruvamur, Siruvathur villages and finally infalls into Gadilam river in cuddalore district. This channel comes under Pennaiyar basin. The total length of this channel is 40000 m. The carrying capacity at its head is 297 cusecs through the head sluice which was constructed with Thirukoilur anicut during the year 1861.

The channel from 0m to 24000m in Thirukoilur & Ulundurpet taluk is considered for improvement, as this portion of channel is almost in worst condition, which requires immediate improvement. The portion from 0m to 9000m is under the control of Lower Pennaiyar Basin, Public Works Department and from 9000m to 24000m is under the control of Reserve Forest Department. The flow diagram of this channel is enclosed for reference.

This channel irrigates to an ayacut of 4909.26 acres through 7 tanks in Thirukoilur taluk and 9 tanks in Panrutti taluk.

Details of ayacut getting benefitted through this channel:

Sl.No	Name of tank	Name of village	Ayacut in acres
1	Paiyur tank and Direct ayacut	Paiyur	345.09
2	Mazhavarayanur tank	Mazhavarayanur	67.99
3	Emappur tank	Emappur	638.00
4	Siruvanur tank	Siruvanur	231.67
5	Kannarapmattu tank	Kannarampattu	312.85
6	Eruvelpattu direct ayacut	Eruvelpattu	148.76
7	Karappattu tank	Karappattu	35.00
8	Anathur tank	Anathur	225.06
9	Natham tank	Natham	639.83
10	Thiruvamur tank	Thiruvamur	112.04
11	Elanthampattu tank	Elanthampattu	156.30
12	Siruvathur tank	Siruvathur	534.16
13	Manapakkam tank	Manapakkam	142.05
14	Semakkottai tank	Semakkottai tank	175.00
15	Kollapakkam tank	Kollapakkam tank	32.63
16	Sirugramam tank	Sirugramam tank	493.00
17	Veeraperumanallur tank	Veeraperumanallur tank	639.83
Total extent			4909.26

Present condition:

The structures like drops, head sluices, grade walls, retaining wall, revetment at various locations are almost in damaged conditions as they are constructed a long back. This channel lost its carrying capacity as deposition of earth in the channel bed throughout the length. The banks on both sides are eroded and over washed at different chainages. Many branch channels like

- Meyyur channel
- Kongarayanur channel
- Siruvanur branch channel
- Sirumadhurai branch channel
- Kannarampattu channel
- Karappattu channel &
- Eruvelpattu channel

Up to the chainage 24000m are in the same level of adjacent lands as they were not brought back to its original condition after flood, since 1972. Due to this, the water flows at patta lands at some places. Some portions of this main and branch channels are already encroached which need to be acquired. A bed dam is also proposed for the diversion of water to south malattar for irrigation of the tanks along the offtake point of south malattar and recharging in the sub surface all along the middle malattar.

Necessity:

- To regulate water to the tanks, the structures like head sluices, drops, grade walls are to be reconstructed.
- To retain the sliding loose earth, it is found necessary to reconstruct retaining wall at different locations.
- To maintain the bed width, bed level of channel it is necessary to construct lining & revetment.
- To supply the malattar channel water to tanks, the branch channels are to be restored to its original condition.
- In order to irrigate the entire ayacut under this channel, to draw full capacity of water, to fill the tail end tanks, to prevent the wastage of water which overflow the side banks due to blockages in the channel, it is necessary to restore the damaged channels.
- To protect the main and branch channels from encroachers, it is a must to demarcate the boundary by concrete pillars.
- To reconstruct the pipe culvert in to R.C.C culvert for free flow of water

- In order to make confident for the farmers in agriculture and to improve the life style of farmers, this scheme work must have to be taken.
- To fulfill the representation of Nellikuppam M.L.A & Malattar Jeevanadhi association, it is necessary to take up this project.

Proposal:

It is proposed to renovate and improve the malattar channel by means of

- Protecting the bank's erosion and slippage by retaining wall & lining works;
- Restoring the branch channels;
- Reconstructing head sluices at the branch channel offtake points;
- Reconstructing drops at the existing damaged structures;
- Reconstructing grade walls to allow water in the branch channels, wherever required;
- Clearing vegetation and removing silt deposits;
- Restoring banks;
- Demarcating the boundaries.
- Reconstruction of pipe culvert into R.C.C culvert.

Conclusion:

By implementing this scheme by doing the following works in this channel, the ayacut of 4909.26 acres will get proper irrigation. The water table will be considerably raised as the river bed at some places is full of sand aquifer. This will facilitate by increasing the borewell water level of surrounding villages, which in turn increase the products of sugarcane, banana, and groundnut crops which is additional ayacut. If this work is done, more than 6200 families will get benefitted.

Hence, considering Forest Conservation Act, 1980, Executive Engineer was authorised by the Superintending Engineer, WRD, Periyar Basin Circle, Thiruvannamalai to obtain the permission from Forest Department. Hence, Executive Engineer, WRD Lower Pennaiyar Basin Division, Villupuram has preparing this proposal for obtaining permission from the Government of India through online. The area required for diversion is the barest minimum.


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