

**SALIENT DETAILS**

Name of the Scheme	Combined Water Supply Scheme to Sankarankoil, Puliyanakudi Municipalities, Thiruvankadam Town Panchayat in Tirunelveli District and Rajapalayam, Sivakasi, Thiruthangal Municipalities in Virudhunagar District		
Installation Cost	Rs.557.10 Crore ( 5 year maintenance)		
Annual Maintenance Cost (Base year)	Rs.10.70 Crore		
Per Capita Cost (Base year)	Rs.12802/-		
Cost per 1,000 Litres (Base year)	For Total Cost	For A.M.only	
	Rs.47.55	Rs.9.24	
<b>Proportionate Installation Cost &amp; Annual Maintenance Cost</b>	<b>Name of Beneficiaries</b>	<b>Instalation Cost (Rs.in crore)</b>	<b>A.M. Cost (Rs.in crore)</b>
	Sankarankoil Municipality	53.74	1.19
	Puliyanakudi Municipality	86.41	1.80
	Rajapalayam Municipality	197.79	3.79
	Sivakasi Municipality	117.43	2.12
	Thiruthangal Municipality	88.91	1.62
	Thiruvankadam Town Panchayat	12.82	0.18
	<b>Total</b>	<b>557.10</b>	<b>10.70</b>
<b>Population and Requirement</b>	<b>Base Year (2017)</b>	<b>Intermediate (2032)</b>	<b>Ultimate (2047)</b>
Sankarankoil Municipality	63000	77000	95000
Puliyanakudi Municipality	72000	82000	98000
Rajapalayam Municipality	150000	180000	215000
Sivakasi Municipality	80000	95000	112000
Thiruthangal Municipality	61000	72000	86000
Thiruvankadam Town Panchayat	9150	11550	14560
<b>Total</b>	<b>435150</b>	<b>517550</b>	<b>620560</b>
Pro rata Supply	Municipality -135 lpcd , Town Panchayat -90 lpcd		
Requirement of clear water including 10% transmission loss and 5 % fire fighting demand (in Mld)			
Sankarankoil Municipality		3.88	6.56
Puliyanakudi Municipality		7.56	9.93
Rajapalayam Municipality		15.71	20.91
Sivakasi Municipality		9.16	11.63
Thiruthangal Municipality		6.84	8.92
Thiruvankadam Town Panchayat		0.73	1.02
<b>Total</b>		<b>43.88</b>	<b>59.02</b>
Requirement of Raw water including 5% treatment loss (in Mld)	--	<b>46.08</b>	<b>61.98</b>
Rate of supply (Raw Water) at 23 hours pumping	--	<b>33392 lpm</b>	<b>44913 lpm</b>
Rate of supply (Clear Water) at 23 hours pumping		<b>31798 lpm</b>	<b>42769 lpm</b>

Source	Surface water from River Tamiraparani – upstream side of proposed check Dam near Kondanagaram Village. Intake well (8m dia) cum pump house (12m dia)- 1 No. Turbine pumpset-225 HP,16700 Lpm x 46m – 2+1 Nos. (1 No. stand bye)		
Raw Water Pumping Main	914mm x 8mm MS Pipes – 3.98 km		
Treatment Works	Full scale Treatment Units Capacity – 46.08 MLD		
Clear water sump	Clear water sump -23.20 LL Sump cum pump house – 2.50 LL Clear water pump set from TP to BS I @ Manur Turbine pumpset -240 HP,15900 lpm x 52m Head - 2+1 Nos.(1 No stand bye )		
Clear Water Pumping main to Manur BS I	914mm x 8mm MS Pipes -21.81 km		
Booster station I @ Manur	Sump-23.20 LL	Sump cum pumphouse-2.50 LL	Turbine pumpset- 270 HP, 15900 lpm x 58 m Head - 2+1 Nos.(1 No. stand bye )
Clear Water Pumping main to Panavalichatram BS II	914mm x 8mm MS Pipes -22.23 km		
Booster station II @ Panavalichatram	Sump-23.20 LL	Sump cum pumphouse-2.50 LL	Turbine pumpset- 200 HP, 15900 lpm x 43 m Head - 2+1 Nos.(1 No. stand bye )
Clear Water Pumping Main to Booster Station III @ Sankarankoil	914mm x 8mm MS Pipes -18.04 km		
Booster station III @ Sankarankoil	Sump-25.70 LL	To Sankarankoil- HSC pumpset-25HP, 2812 lpm x 31m Head -1+1 (1 No stand bye ) To Puliangudi-HSC pumpset-70 HP, 2739 lpm x 85m Head -2+1 (1 No stand bye ) To Rajapalayam- HSC pumpset-75HP, 5692 lpm x 44m Head -2+1 (1 No stand bye ) To Thiruthangal- HSC pumpset-35HP, 6062 lpm x 19m Head -2+1 (1 No stand bye )	
Pumping Main to Sump at Puliankudi Municipality	400mm DI K9 pipe- 4.61 km 400mm DI K7pipe- 14.255 km		
Puliankudi Municipality Sump	Cap-4.35 LL	Pumproom-8m x 5m	1. SUB pumpset-12.50 HP, 1773 lpm x 24 m Head -1+1 (1 No stand bye ) 2. SUB pumpset-10 HP, 1246 lpm x 25 m Head -1+1 (1 No stand bye ) 3. SUB pumpset-25 HP, 2459 lpm x 34 m Head -1+1 (1 No stand bye )
Pumping Main to Sump @ Rajapalayam Municipality	600 mm DI K7 pipe -33.76 km		
Sump at Rajapalayam	Cap-9.10LL	Pumproom-15m x9m	1) 1 No.of 30 HP Submersible Pumpset of duty 2238 lpm x 45 m head +1 no of stand bye pumpset. 2) 1 No.of 40 HP HSC Centrifugal Pumpset of duty 4514 lpm x 27 m head +1 no of stand bye pumpset. 3) 1 No.of 40 HP HSC Centrifugal Pumpset of duty 4632 lpm x 29 m head +1 no of stand bye pumpset

Pumping Main to Sivakasi , Thiruthangal	600mm DI K9 pipe- 4.65 km 600mm DI K7pipe- 43.75 km 300mm DI K7pipe- 6.17 km 200mm DI K7pipe- 0.06 km 100mm DI K7pipe- 0.01 km		
Sump at Thiruvenkadam	Cap- 0.65 LL	Pumproom- 8 m x 5 m Existing	1) 1 No.of 4HP Submersible Pumpset of duty 502 lpm x 25 m head +1 no of stand bye pumpset. 2) 1 No.of 3.00 HP Submersible Pumpset of duty 324 lpm x 23 m head +1 no of stand bye pumpset.
Sump at Sivakasi	Cap- 2.65 LL (P) 3.60 LL (E) 1.80 LL (E)	Pumproom- 8m x 5 m Proposed	1) 1 No.of 25 HP Submersible Pumpset of duty 2151 lpm x 37 m head +1 no of stand bye pumpset. 2) 1 No.of 30 HP HSC Centrifugal Pumpset of duty 3770 lpm x 27 m head +1 no of stand bye pumpset. 3) 1 No.of 22.50 HP Submersible Pumpset of duty 2390 lpm x 29 m head +1 no of stand bye pumpset. 4)1 No.of 15 HP Submersible Pumpset of duty 1912 lpm x 27 m head +1 no of stand bye pumpset
Sump at Thiruthangal	Cap- 3.90 LL	Pumproom- 8m x 5m Existing	1) 1 No.of 20 HP Submersible Pumpset of duty 2389 lpm x 26 m head +1 no of stand bye pumpset. 2) 1 No.of 20 HP Submersible Pumpset of duty 2469 lpm x 25 m head +1 no of stand bye pumpset. 3) 1 No.of 1 HP Submersible Pumpset of duty 99 lpm x 23 m head +1 no of stand bye pumpset..
<b>Feeder Mains to Service Reservoirs</b>			
To Sankarankoil Municipality To Puliankudi Municipality To Rajapalayam Municipality To Sivakasi Municipality  To Thiruthangal Municipality To Thiruvenkadam Town Panchayat	5.86 km (350 to 150mm DI K7 pipes) 9.22 km(250 to 100mm DI K7 pipes) 10.51 km(400 to 100mm DI K7 pipes) 6.575 km(300 to 150 mm DI K7 pipes) proposed 6.89 km(150mm DI K7 pipes) existing 6.97 km(250 to 100mm DI K7 pipes) 7.265 km(200 to 100mm DI K7 pipes)		
<b>Service Reservoirs</b>	Existing	Proposed	
Sankarankoil Municipality	<b>4</b> Nos.(8LL-2,7LL-1&2 LL -1)	<b>3</b> Nos.(3.70LL -1 & 3.00 LL-2)	
Puliyankudi Municipality	<b>5</b> Nos. (10LL-1,9LL-1,3LL-1, & 2LL-2)	<b>4</b> Nos. ( 4 LL-2 , 2.30 LL -1 & 0.70 LL -1)	
Rajapalayam Municipality	<b>4</b> Nos (5LL-1, 2LL-2 & 1LL-1)	<b>10</b> Nos. (11.4 LL-2, 8.40 LL -1 , 7 LL-1,6.8LL-1, 6LL-2,5LL-2 & 4LL-1)	

Sivakasi Municipality	<b>8</b> Nos (12LL-1No., 5LL-1No., 3LL-6Nos.)	<b>2</b> Nos.( 4.00LL -1 & 3.80LL -1)
Thiruthangal Municipality	<b>7</b> Nos (8LL-1No., 7LL-1No., 3LL-3Nos.,2LL-1No.& 0.60 LL- 1No).	<b>2</b> Nos (4LL-1No., 1.8LL-1No.)
Thiruvenkadam Town Panchayat	<b>5</b> Nos (1.50LL-1No., 1.00LL-1No.,0.60LL-2Nos. &0.30LL1No)	<b>1</b> Nos (0.60LL-1No)
<b>Total</b>	<b>33</b> Nos	<b>22</b> Nos

<b>Distribution System</b>	Proposed in M	Existing in M	Total in M	HSC proposed in Nos
Sankarankoil Municipality	64728	-	64728	16467
Puliyankudi Municipality	74252	-	74252	17862
Rajapalayam Municipality	139790	-	139790	38586
Sivakasi Municipality	117521	-	117521	22889
Thiruthangal Municipality	72955	3477	76332	15741
Thiruvenkadam Town Panchayat	10879	9177	20056	2500
<b>Total</b>	<b>480125</b>	<b>12654</b>	<b>492779</b>	<b>114045</b>

### **Funding and Present Stage**

Present stage	Adm. Sanc. Accorded vide G.O.No. 6/MAWS(WS2)/dt. 30.01.2017 for Rs. 543.20 Crores to install to be implemented by TWAD Board under World Bank assisted Tamil Nadu Sustainable Urban Development Project (TNSUDP). Technical sanction accorded for Rs. 557.10 Crore to install and Rs. 10.70 Crore. to maintain annually vide CER/TWAD/MDU No.12 / 2016-17 Dt. 15.3.2017.
Funding	The DPR cost for all the beneficiaries will be met out through world bank funds as per the G.O.No. 6/MAWS(WS2)/dt. 30.01.2017 GoI approved Rs.180.05 Crore under AMURUT for Rajapalayam Municipality. GOI SHARE : Rs.90.03 Crore, GOTN SHARE : Rs. 36.01 Crore, ULB SHARE : Rs. 54.01 Crore
Maintenance	On completion , the Scheme will be maintained by TWAD Board.
WUC	Approval sought for vide Chief Engineer,Twad Board,Madurai Lr.no12711/F.Sankl-Rajapalayam CWSS/AE3(D)/2015 dt.11.12.2015 and is awaited.