**File No.CGWA-28/1/2020-CGWA**

# WATER MANAGEMENT PLAN

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| **Details of Assessment Unit** | | |
| | **State** | Tamil Nadu |
| | **District** | Thiruchirapalli |
| | **Block/Mandal/Taluk/Firka** | Taluk Manapparai/ Vaiyampatti Firka |
| | **Category as per the latest ground water assessment (2017)** | Over Exploited |
| **Hydrogeological details** | | |
| | **Normal Rainfall (mm)**<br>**Monsoon**<br>**Non monsoon** | <br>681.27<br>133.21 |
| | **Aquifer** | Migmatitic Gneiss / Charnockite / Khondalite |
| | **Discharge of Wells (lps)** | |
| | **Dugwells** | 1 to 2 |
| | **Borewells/ Tubewells** | 3 to 5 |
| | **DCB** | 2.5 |
| | **Water Quality** | Fresh |
| | **Any other Quality Issue** | |
| **Annual Water Availability** | | |
| **Fresh Water availability** | **Ground water (in MCM)** | 10.14959714 |
| | **Surface water including major water bodies (in MCM)** | 4.552 |
| **Grey water availability** | **Domestic (in MCM)** | 0.8735 |
| | **Industrial (in MCM)** | 0.5823 |
| **Annual water consumption** | | |
| | **Agriculture (in MCM)** | 12.2115 |
| | **Domestic (in MCM)** | 1.455 |
| | **Industrial (in MCM)** | 0.970 |
| | **Decadal Water consumption trends (period)** (MCM/year(Rise/falling/no change) | Couldn't derived |
| **Common GW abstraction structures** | **Types (**Dug well/Borewell/TW/DCB etc.) | Dug well & Bore well |
| | **Average depth (mbgl)** | |
| | **Dugwells** | 10 m to 22 m |
| | **Borewells/ Tubewells** | 120 m to 250 m |
| | **DCB** | 60 m to 150 m |

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| **Future availability** | | |
| | **Surface water (MCM)** | |
| | **Ground water (MCM)** | 0 |
| **Monitoring** | | |
| **Surface water Monitoring** | **Average inflow (Cusec)** | - |
| | **Average outflow (Cusec)** | - |
| | **Quality** (Potable/Non potable) | Potable |
| **Ground water monitoring** | **Average DTW (mbgl)** | 2.83 |
| | **Average decadal water level trends** (m/year(Rise/falling/no change)) | Rise |
| **Water management options and mitigation** | | |
| **Recycle and Reuse** | **Reuse of domestic waste water (Flushing, Horticulture, Agriculture, Industry, Construction, etc)** | Available treated water<br>Used for Horticulture and industrial uses |
| | **Reuse of Industrial water** | It is being managed within the industrial purpose like cleaning, gardening etc., |
| | **Adaptive management strategies** | Suggestion for crop diversification, micro- irrigation etc. |
| **Water conservation and recharge** | **Type of artificial recharge RWH structure feasible** | Rooftop RWH structures, percolation ponds, construction of Check dams |

***Abbreviations used***

*mm: millimetre*
*lps : Litres Per Second*
*MCM: Million Cubic Metre*
*TW: Tube Well*
*DCB: Dug Cum Bore well*
*Mbgl: Metres below groundlevel*
*Cusec: One cubic foot per second*
*DTW: Depth to water level*
*RWH: Rainwater Harvesting*