# Water Management Plan

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| Details of Assessment Unit | | | |
| | State | Karnataka | |
| | District | Chitradurga | |
| | ~~Block/Mandal~~/Taluka~~/Firka~~ | Hiriyur | |
| | Category as per latest GW assessment | OE (2017) | ~~Safe/Semi-Critical/ Critical/~~ OE |
| Hydrogeological Details | | | |
| | Average Annual Rainfall (Period) | 550 (2005-2016) | mm |
| | Aquifer | Gneisses&Schist | Major aquifer as per aquifer Mapping |
| | Discharge of Wells<br>Dugwells<br>Borewells<br>Tubewells<br>DCB | <br>Negligible<br><1 to 3 | lps |
| | Water Quality | Fresh | Fresh~~/Saline~~ |
| | Any other Quality Issue | Presence of Nitrate is more than Permissible limit in some pockets | |
| Annual Water Availability | | | |
| Fresh water Availability | Ground Water | 98.89(Dynamic) | Quantum in MCM |
| | Surface water including major water bodies | 5.653 | Quantum in TMC |

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| Grey water Availability | Domestic | 5.29 | Quantum in MCM |
| | Industrial | Yet to receive the data | Quantum in MCM |
| Annual Water Consumption | | | |
| | Agriculture | 114.90 | Quantum in MCM |
| | Domestic | 7.29 | Quantum in MCM |
| | Industrial | 0.23 | Quantum in MCM |
| | Decadal Water consumption trends (Period) | 0.75 (Rising) | MCM/year (Rise/falling/no change) |
| Common GW Abstraction Structure | Types | Bore wells | Dug well/Bore well/ TW/DCB etc. |
| | Average Depth<br>Dugwells<br>Borewells<br>Tubewells<br>DCB | <br><br>15-20<br>200-350 | M bgl |
| Future Availability | | | |
| | Surface Water | Not Available | MCM |
| | Ground Water | 1.99 | MCM |
| Monitoring | | | |
| Surface Water Monitoring | Average inflow | 1.81 | BCM |
| | Average outflow | 1.68 | BCM |

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| | Quality | | Potable/Non potable |
| Ground Water Monitoring | Average DTW | 9.95(most of the dugwells are dry) | M bgl |
| | Average Decadal Water level trends | 0.46 ( Falling) | m/year (Rise/ falling/no change) |
| Water Management options and Mitigation | | | |
| Recycle and Reuse | Reuse of Domestic Waste Water (Flushing, Horticulture, Agriculture, Industry, Construction etc) | 5.29 | MCM |
| | Reuse of Industrial Water | Yet to receive the data | MCM |
| | Adaptive Management strategies | Water Use Efficiency & Reuse of domestic waste water | Suggestion for Crop diversification, Micro-irrigation etc |
| Water Conservation and Recharge | Type of artificial recharge RWH structure feasible | Percolation Tank – 255<br>Check Dams – 960<br>Sub Surface Dykes – 8 | |