|  |  |  |
| --- | --- | --- |
| **Water Management Plan** | | |
|  |  |  |
| Details of Assessment Unit | | |
|  | State | Rajasthan |
| District | Pali |
| Block | Rani |
| Category as per latest Ground water assessment (2017) | OE (Over-Exploited) |
| Hydrogeological Details |  |  |
|  | Average Annual Rainfall (1901-2016) (MM) | 639.78 |
| Aquifer (Major aquifer as per aquifer Mapping) | Sc-Schist, Gr-Granite, Allu(S)-Alluvium Saline and Gr(S)-Granite Saline |
| Discharge of Wells (lps) | |
| Dugwells | 2.0-3.5 |
| Borewells | 2.0-2.5 |
| Tubewells |
| Dug Cum Borewell (DCB) | 2.5-3.5 |
| Water Quality | Fresh To Saline |
| Any other Quality Issue | NA |
| Annual Water Availability | | |
| Fresh water Availability | Ground Water (MCM) | 48.5497 |
| Surface water including major water bodies (MCM) | NA |
| Grey water Availability | Domestic (MCM) | NA |
| Industrial (MCM) | NA |
| Annual Water Consumption | | |
|  | Agriculture (2017) (MCM) | 60.6861 |
| Domestic (2017) (MCM) | 3.7747 |
| Industrial (MCM) |
| Decadal Water consumption trends (2009-2016) (MCM/year) | Rise: 4.03 |
| Common Ground water  Abstraction Structure | Types (Dug well/Bore well/ TW/ DCB etc.) | |
| Average Depth (mbgl) | |
| Dugwells | 25-35 |
| Borewells | 110-180 |
| Tubewells |
| Dug Cum Borewell (DCB) (30 M Dugwell + Boring in dugwell) | 30+(50-120) |
| Future Availability |  |  |
|  | Surface Water (MCM) | NA |
|  | Ground Water (MCM) | 0 |
| Monitoring |  |  |
| Surface Water Monitoring | Average inflow (Cusec) | NA |
| Average outflow (Cusec) | NA |
| Quality (Potable/Non potable) | NA |
| Ground Water Monitoring | Average Depth to Water level (2019) (mbgl) | Pre Mon. : 21.32 Post Mon. : 13.82 |
| Average Decadal Water level trends (2007 -2016) (m/year) | Pre Mon. Rise - 0.15 &  Post Mon. Rise - 0.15 |
| Water Management options and Mitigation | | |
| Recycle and Reuse | Reuse of Domestic Waste Water (Flushing, Horticulture, Agriculture, Industry, Construction etc) (MCM) | NA | |
| Reuse of Industrial Water (MCM) | NA | |
| Adaptive Management strategies (Suggestion for Crop diversification, Micro-irrigation etc) | Less Watering Crop Required, Drip Sprinkler Irrigation System Etc. | |
| Water Conservation and Recharge | Type of artificial recharge RWH structure feasible | Rooftop Rain Water Harvesting Structures, Recharging The Old, Dry And Abandoned Wells, Tube Wells And Hand Pumps (Urban & Rural),  Check dam , Recharge Shaft, Farm Pond , Percolation Tank , Catchment Area Treatment (Plantation, Staggered Trench &Continuous Contour Trench),Anticut, Macro Storage Tank, Mini Percolation Tank etc. | |

Abbreviations:

MM: Millimeter

Lps: Litre per Second

DCB: Dug Cum Borewell

MCM: Million Cubic Metre

TW: Tube Well

Mbgl : Metre below ground level

Cusec: Cubic foot per second

m/year: Metre/year