Job Description: Water Resource Engineer / Watershed Expert

Section	Details
1. Position Title	Water Resource Engineer
2. No. of Positions	2
3. Location	Nagpur & Akola
4. Experience Required	Minimum 2 years (Preference: Waterbody Restoration & Watershed Projects)
5. Role Purpose	To lead the planning, design, and execution of large surface waterbody restoration (5–10+ acres) along with watershed interventions to enhance water storage, recharge, and ecosystem sustainability.

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6. Core Technical Focus

Technical Area
Waterbody Restoration (Desilting, hydrology, inlet-outlet, embankment)
Drainage Line Treatment (Nala works, CNB, Gabion, LBS)
CCT, WAT, Farm Ponds, Recharge Shafts, Jaltara
Plantation on bunds & catchment

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7. Core Responsibilities

7.1 Waterbody Restoration (Primary)

- Survey and demarcation of large waterbodies
- Assessment of storage capacity, silt load, and hydrology
- Supervise desilting, deepening, inlet-outlet repair
- Strengthen embankments and ensure proper drainage
- Plan silt disposal and filtration systems

7.2 Hydrology & Assessment

- Catchment mapping and runoff analysis
- Monitoring water levels and groundwater (observation wells)
- Coordinate water quality testing and pollution source identification

7.3 Watershed Structures

- Execute CCT, WAT, CNB, Gabion, LBS, Farm Ponds
- Ensure ridge-to-valley treatment approach

7.4 Survey, Design & Estimation

- Auto Level & Hydro marker survey
- Prepare layouts, designs, and BoQs

7.5 Plantation

- Plantation layout and species selection
- Supervise plantation and maintenance

7.6 Community Engagement

- Coordinate with Gram Panchayat & Water management association
- Build ownership for maintenance

7.7 Monitoring & Reporting

- Maintain measurement books and records
- Prepare reports and documentation

7.8 Maintenance Planning

- Develop long-term maintenance systems
- Ensure sustainability through community involvement

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8. Key Result Areas (KRAs)

KRA	Performance Indicators / Expected Outcome
1. Technical Planning & Design	Accurate surveys using Auto Level; Technically & scientifically sound designs; timely preparation of layouts, estimates, and BoQs
2. Quality Execution of Structures	All structures (waterbody works, CNB, Gabion, CCT, etc.) executed as per design; minimal rework; adherence to technical standards
3. Waterbody Restoration Impact	Measurable increase in storage capacity; improved water retention duration; visible improvement in waterbody condition
4. Hydrological Improvement	Enhanced groundwater recharge; improved seasonal water availability; proper inlet-outlet functioning
5. Project Timeline Management	Completion of activities within defined timelines; efficient labor and resource utilization
6. Plantation Success	Higher survival rate, proper layout and species selection
7. Community Ownership & Sustainability	Active involvement of community/WMA; defined maintenance roles; community-led upkeep systems functional
8. Monitoring & Documentation	Timely and accurate reporting; proper maintenance of measurement books; strong photo and field evidence

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9. Required Skills

Category	Skills
Technical	Hydrology, watershed planning, structure design
Survey	Auto Level & Hydro marker
Field	Site supervision, contractor & labor management
Analytical	Runoff, soil, and water data interpretation
Soft Skills	Communication, coordination, community engagement

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10. Educational Qualification

Essential:

- Civil Engineering
- Agricultural Engineering
- Water Resource Engineering
- Soil & Water Conservation Engineering
- Geology / Hydrogeology

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11. Candidate Preference

- Experience in **large surface waterbody restoration projects (must be preferred)**
- Experience in **watershed/NRM projects (NGO/CSR/Government)**
- Understanding of **ridge-to-valley approach**
- Experience working with **rural communities**

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12. Reporting Structure

Reports To	**Project Manager / Team Lead**
Works With	Field Coordinators, Community Mobilizers, WMA
