



# **Terms of Reference (ToR)**

## **for**

### **Conducting Water Sources Inventory in Dolpa**

#### **1. Background**

WWF is the world's leading independent conservation organization originated in Switzerland in 1961 and currently running in more than 100 countries across 6 continents. WWF initiated work in Nepal with a rhino conservation program in Chitwan in 1967 while the WWF Nepal set up its office formally on 19 May 1993. Currently, WWF Nepal works in five thematic areas- Wildlife, Freshwater, Forests, Climate and Energy and Governance. WWF Nepal's focus has progressed from its localized efforts in conservation of a single species in the 1960s, to integrated conservation and development approach in 1990s, to a new horizon of landscape-level conservation encompassing national, regional, and global scales of complexity since the early 2000s.

Shey Phoksundo National Park (SPNP) is the largest and the only trans-Himalayan National Park of Nepal. It is rich in wildlife, including snow leopards, with an estimated population of around 90 individuals. The Department of National Parks and Wildlife Conservation (DNPWC) and SPNP have been working with Terai Arc Landscape and Conservation Programs and WWF Nepal for holistic snow leopard conservation. The collaborative initiative has worked closely with communities and local governments on diverse research interventions, as well as conservation interventions aimed at helping communities deal with conflicts through preventive and mitigative measures, aiding holistic community well-being, to continue traditional conservation of snow leopards and natural integrity of SPNP.

The water sources and water bodies at Bhijer and Saldang of Dolpa district face varied environmental and socio-economic challenges across their upstream, midstream, and downstream zones. In response, WWF Nepal aims to integrate local and traditional knowledge with a systematic inventory and assessment of water sources and water bodies in the project area.

Therefore, WWF Nepal seeks the services of an individual consultant to conduct a comprehensive field-based inventory and mapping of water sources and water bodies in the Bhijer and Saldang of Dolpa district to support evidence-based planning for water security and resilient ecosystem services. The assessment will be implemented through inclusive, community-led approaches, providing the evidence base for targeted Nature based Solutions interventions in recharge, protection, and climate resilient water management and seeks community-based actions and recommendations to increase water availability, improve livelihoods, enhance biodiversity, and strengthen local governance.

## **2. Objectives**

### **Overall Objective:**

To conduct a comprehensive field-based inventory and mapping of water sources and water bodies in the Bhijer and Saldang of Dolpa district to support evidence-based planning for water security and resilient ecosystem services.

### **Specific Objectives:**

- A. Identify, classify, and map all water sources and water bodies, including:
  - Springs (seasonal and perennial)
  - Streams and rivulets
  - Ponds, lakes, swamp, and wetlands
  - Community level wells, canals, and waterspouts
- B. Document seasonal availability, current use, discharge condition and socio-ecological importance.
- C. Identify drying, degraded, or vulnerable sources and assess contributing factors.
- D. Capture local knowledge and institutional practices on water source use, governance, and recharge initiatives.
- E. Provide spatial datasets and actionable recommendations to guide community-led interventions in water resource protection and restoration.

## **3. Scope and Approach**

The consultant is expected to propose a scientifically sound and locally appropriate methodology combining fieldwork, community knowledge, and geospatial analysis. The fieldwork will be conducted through the local youths. The primary task of the consultant is to travel to Dolpa to train local youths of the project sites (both theoretically and practically) to conduct water sources inventory. WWF Nepal will arrange the trainees in the field for the training. The tentative schedule for the consultant in field is:

Day 1: Travel from Kathmandu to Nepalgunj  
Day 2: Travel from Nepalgunj to Dunai, Dolpa and meeting with Chief Conservation Officer of Shey-Phoksundo National Park  
Day 3: Travel to Chhepka  
Day 4: Travel to Phoksundo Lake  
Day 5: Travel to Rukthang  
Day 6: Travel to Shey  
Day 7: Travel to Saldang  
Day 8 and 9: Training citizen scientists  
Day 10 and 11: Field demonstration of water sources inventory to citizen scientists  
Day 12-16: Travel back to Kathmandu

After the training and on-site practical demonstration, the trainees will conduct water sources inventory of the Bhijer and Saldang area of Dolpa, independently. All the collected data will be shared with the consultant to analyze data, interpret and prepare the report. The final report shall include but not limited to:

- Literature review
- Field work:

- GPS-based mapping of each water source and water body
- Field assessment of condition, discharge, usage, and environmental stressors
- Categorize by source type including spring type, flow seasonality, use and vulnerability
- Analyze threats and vulnerabilities
- Understand practical management/ restoration interventions
- Community consultations to validate findings
- Incorporate Indigenous Peoples and Local Communities (IPLCs) knowledge
- GIS and Remote Sensing:
  - Use QGIS/ArcGIS and freely available remote sensing data
  - Develop spatial layers and maps of the inventory
- Photo and Geo-tagging of all key sites
- Analysis and reporting

#### 4. Duration and Time Frame

The maximum time duration for the task is 40 days for the consultant over the period of 4 months, excluding data collection time by the local youths.

S N	Activity	Weeks														
		W 1	W 2	W 3	W 4	W 5	W 6	W 7	W 8	W 9	W 10	W 11	W 12	W 13	W 14	W 15
1	Inception meeting and finalization of workplan															
2	Desk review and preparatory GIS mapping															
3	Field travel, Training to the local youths, Field demonstration, Field inventory and ground-truthing															
4	Field data collection by local youths															
5	Data consolidation, processing, analysis, and mapping															
6	Draft report preparation and submission															
7	Report feedback and Finalization															

#### 5. Expected Deliverables

The selected consultant will deliver the following:

1. Inception Report including but not limited to methodology, tools, and templates
2. Comprehensive Inventory Report including but not limited to geo-tagged Photos of water sources and Raw Data Files, Shapefiles and GIS Layers for all mapped water sources and bodies

## **6. Consultant competencies**

- Relevant degree in watershed management/ hydrogeology/ geology/ water resource
- Excellent knowledge of hydrogeological studies and water sources inventories
- Experience in similar field surveys, community interaction, and GPS/GIS use

## **7. Proposal Submission Requirements**

Interested Nepali individuals are requested to submit technical and financial proposals electronically to: [proposals-freshwater@wwfnepal.org](mailto:proposals-freshwater@wwfnepal.org). Please mention “Proposal- Water Inventory” as the subject in your email and submit by 5 p.m. Nepal Standard Time, 10<sup>th</sup> February 2026. The proposal must include:

- Technical Proposal
- Financial Proposal
- CV
- PAN registration
- Citizenship Certificate

Note: All the training and mobilization costs of local youth Only selected applicants for further consideration will be contacted.

## **8. Coordination and Supervision**

The team will undertake the assignment under the direct supervision of Head of Freshwater Programs and in close coordination with the team of Mountain Programs of WWF Nepal. The report, data collected, materials including photos related to project must be copyrighted to © WWF Nepal.

## **9. Mode of Payment**

The payment will be made as per WWF Nepal norms and upon submissions of satisfactory deliverables. Note that payments are subject to tax deduction as per prevailing government rules.