Global Water Partnership South Africa
Block A, Hatfield Gardens
333 Grosvenor Street
Pretoria, South Africa

17 February 2025

REF: BID No. ITB. T00003/02/2022/CUVKUN

Dear Sir/Madam,

Subject: Enhanced Water Security and Community Resilience in the Adjacent Cuvelai and Kunene Transboundary River Basins (CUVKUN) Project: *Consultancy for Kunene Basin source-to-sea Integrated Flows assessment to maintain ecological flows and evaluate future Water Resources Scenarios*

Global Water Partnership Southern Africa (GWPSA) is pleased to invite you to submit your applications for the above Consultancy. Please find below the requirements for your response, together with the Terms of reference.

The final date for submission is **18 March 2025 at 00:00 midnight CAT** and it is our intention to contact only shortlisted Consultants/Firms within 4 weeks after the closing date. Any queries must be raised before **5 March 2025 before 17:00 CAT** and should be directed to gwpsaprocurement@gwp.org and copied to silvanus.uunona@gwpsaf.org.

Bids received after the final date of receipt of submissions may be disregarded. GWPSA may extend the final date for submission of bids for any reason it deems necessary and will notify all bidders in this event.

GWPSA procurement policy promotes an open competitive process, and all consultants will be evaluated according to specific criteria based on the terms of reference of this post. This criterion is attached as an annex to the Terms of reference.

Sincerely

Mr. Mark Naidoo
GWPSA: Operations Manager

"Enhanced Water Security and Community Resilience in the Adjacent Cuvelai and Kunene Transboundary River Basins"

ANGOLA

COMISSÃO TÉCNICA PERMANENTE CONJUNTA PARA A BACIA DO RIO CUNENE (CTPC)

PERMANENT JOINT TECHNICAL COMMISSION ON THE CUNENE RIVER BASIN (PJTC)

NAMIBIA

Supported By

Led By

In Partnership With

TERMS OF REFERENCE

Consultancy for Kunene Basin source-to-sea Integrated Flows assessment to maintain ecological flows and evaluate future Water Resources Scenarios

Enhanced Water Security and Community Resilience in the Adjacent Cuvelai and Kunene Transboundary River Basins (CUVKUN) Project

Financing Agency: Global Environment Facility (GEF)

GEF Implementing Agency: United Nations Development Programme (UNDP)

UNDP Executing Agency: Global Water Partnership Southern Africa (GWPSA)

Location: The Kunene River Basins in Northern Namibia and Southern Angola

Duty station: Remote

Duration: 18 Months (The consultant is expected to begin work no later than two weeks from the notice to proceed.)

Submission Deadline: 18 March 2025 at 00:00 midnight CAT

1 Background

The Cuvelai Watercourse Commission (CUVECOM) was established on 16 September 2014 to manage the shared transboundary waters of the Cuvelai Watercourse. The secretariat is currently based in Oshakati, Namibia. Adjacent to the Cuvelai River Basin is the Kunene River Basin. Transboundary cooperation for the Kunene Watercourse is managed through a Permanent Joint Technical Commission (PJTC) established in 1990. Both the Cuvelai and Kunene Watercourses are shared between the Republic of Angola and the Republic of Namibia.

The Global Water Partnership Southern Africa (GWPSA) is an intergovernmental organisation established in 1996 to support countries in implementing more equitable and sustainable management of their water resources. The network spans 13 regions with 2,400 institutional Partners in 158 countries. The global secretariat is in Stockholm, Sweden. The GWP Africa Coordination Unit is based at GWP Southern Africa in Pretoria, South Africa and coordinates GWP Africa programmes across Africa. GWPSA also hosts the GWP global theme on Climate Resilience and is charged with providing global strategic leadership and coordination of the implementation of the GWP strategy on climate resilience.

2 Enhanced Water Security and Community Resilience in the Adjacent Cuvelai and Kunene Transboundary River Basins ("CUVKUN Project")

The CUVKUN project aims to improve water resources management in the transboundary Kunene and Cuvelai basins shared by Angola and Namibia. There is increasing water scarcity and hydrological variability, exacerbated by climate change within the region, even though both basins are stark in contrast. The need for the comprehensive monitoring of climate and water resources and the sharing of information has never been greater, however, the need to improve systems that can provide early warning of climate-related disasters is just as great.

The USD 11 million project is funded by the Global Environment Facility (GEF) and led by the United Nations Development Programme (UNDP), as the GEF Implementing Agency. The Global Water Partnership Southern Africa (GWPSA) is the Executing Agency, while the Cuvelai Commission (CUVECOM) and Kunene Permanent Joint Technical Committee (PJTC) are the focal custodians of the project implementation.

The project will undertake a suite of activities designed to strengthen joint management and planning capacity and practices at the transboundary basin level. These activities will be implemented under six (6) project components:

- **Component 1:** Strengthening the transboundary and conjunctive water resources management in the Cuvelai River Basin;
- **Component 2:** Strengthening the transboundary water resources management with future development scenario analysis in the Kunene River Basin;
- **Component 3:** Strengthening the governance of the Cuvelai and Kunene River Basins to foster joint management by the two countries in the most cost-effective manner;
- **Component 4:** Strengthening institutional, technical, and operational capacity in Angola to sustainably develop and manage the sub-region's water tower located in Central Angola;
- **Component 5:** Enhancing the community participation in Integrated Water Resources Management (IWRM) to build resilience in their livelihoods;
- **Component 6:** Supporting outreach and Knowledge Management for replication, upscaling, and stakeholder engagement.

3 The Kunene River Basin

The Kunene River basin is located in Angola and Namibia as shown in *Figure 1*.

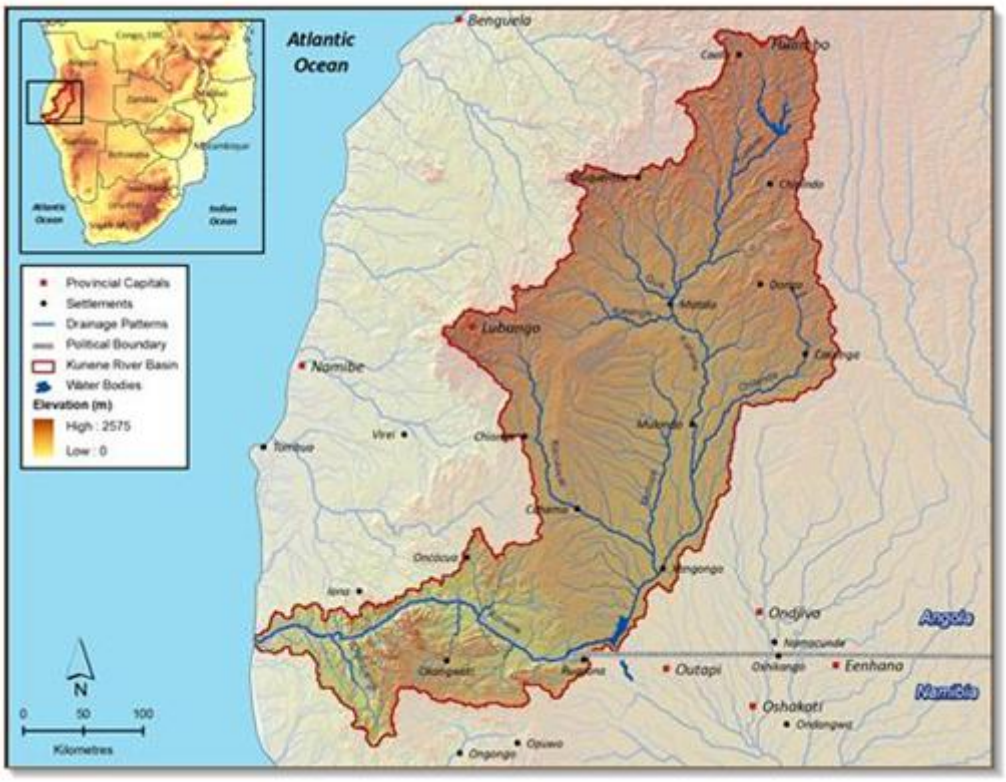

Figure 1: Location of the Cunene River Basin in Angola and Namibia

The Permanent Joint Technical Commission (PJTC) was established in 1990 by the governments of the Republic of Angola and Namibia to manage the Cunene/Kunene River Basin. Because the Cunene River Basin is transboundary in nature, technical and political cooperation between Angola and Namibia is a continuous process for the utilisation of the river basin's water resources.

The Kunene River Basin is characterised by significant variability in rainfall, with more than 1,000 mm/annum in the north-eastern region and less than 100 mm/annum towards the catchment outlet. The river is perennial with an annual discharge of about 5,500 mm^3 at the river mouth.

Key infrastructure in the Kunene River Basin includes Gove Dam (2,574 mm^3 storage), Matala Dam (90 mm^3), Calueque Dam (475 mm^3), and Ruacana Weir (20 mm^3). These dams are used for flow regulation, hydropower generation, domestic water supply, and irrigation. The hydropower infrastructure has a combined installed capacity of 448 MW from Gove, Matala, and Ruacana power plants, and there are plans for additional developments like Baynes Dam with an expected capacity of 878 MW.

The Kunene water resources also support community consumption, irrigation, industry, urban centers, and agriculture. The canal infrastructure in the Kunene River Basin is primarily designed to support water supply for domestic use, agriculture, and irrigation. There are three major canal systems of significance; the Calueque Canal System which transports water from the Calueque Dam to northern Namibia, including the Cuvelai Basin. It supports domestic water supply and agricultural irrigation.

Overall, the Kunene River Basin's surface water resources are vital for various uses but face significant challenges that require integrated management and sustainable practices. Some of the challenges in the basin include environmental threats like deforestation, silting, soil and water contamination, and desert encroachment. Climate change exacerbates the impact of these challenges. Limited streamflow and water quality data and inadequate monitoring networks, especially on the Angolan side, are currently a barrier to developing a joint understanding of the basin.

Notwithstanding the above, the Kunene basin has significant socioeconomic growth opportunities, including potential for agricultural growth, particularly in Angola. Component 2 of the project therefore has the objective to evaluate the remaining development space in the Kunene River Basin to accommodate water resources development plans by the 2 basin countries, without compromising the environmental integrity of the basin. This will be achieved through an environmental flows assessment, including an analysis of how future development scenarios impact on the flow regime and therefore future water resource availability at key points in the basin. There is therefore need for the development of a comprehensive hydrological model for the basin, and for engagement of basin stakeholders on the trade-offs on planned developments, environmentally sustainable practices, and management actions for a healthy basin which serves the needs of people and nature.

4 Consultancy for Kunene River Basin integrated flows assessments, inclusive of future water development scenarios

The objective of this source-to-sea integrated flows assessment and future water resources development scenario analysis assignment is therefore to support the Angola and Namibia governments to facilitate the consultation process of determining environmental flows that support desired ecological conditions at strategic points in the transboundary Kunene basin, and that will, amongst other considerations, inform the specifications of planned developments in the Kunene River Basin.

Angola and Namibia's vision and objectives for the Kunene River Basin are facilitated through the joint Integrated Water Resources Management (IWRM) plan for the Kunene basin and will be further guided by the output of the GEF program and other recent programs with a transboundary focus in the Kunene River basin. The fundamental goal of water resource planning and management is to match the demand for water by the socio-economic system with the supply (quantity and quality) of the available water in the system through administrative control and management (water regulations/laws and infrastructure), without compromising ecosystem sustainability. The assessment criterion for the Kunene basin development scenario should cover the triple bottom line of economically beneficial, socially just, and environmentally sound development. Insights into potential futures will be evaluated through investigation of different planned projects, development priorities, and constraints to determine what can be accommodated within the basin's water resources development space. Scenarios will consider trade-offs and the corresponding water balance (supply and demand), including the impact on current developments, and provide a basis for informing deliberations on the potential future that is mutually beneficial to all stakeholders, and that does not compromise the integrity of ecosystems. The scenarios should be informed by the following key considerations, within the context of climate change: energy security; food security/agricultural investment; urban, mining, and industrial development plans; social development, maintenance of ecosystems and biodiversity, and environmental sustainability.

The analysis will inform decision-making on downstream flows which will rely both on environmental flows determination (flows to maintain ecosystems) and water allocation (environmental flows + flows to feed downstream uses), based on environmental and development targets as specified by basin stakeholders. The specific objectives of this assignment therefore include:

- Identification and characterisation of key ecosystems connected to rivers (aquatic systems, wetlands, groundwater), and of their water needs, in addition to identification of key water management nodes from a resource allocation and use perspective.
- Development of comprehensive hydrological model for the basin and establishment of the current level of water resources development.
- Environmental flows model development and determination of environmental flows in a range of typical aquatic habitats and "hotspot (water tower, wetlands, groundwater, etc)" ecosystems critical for the overall functioning and health of the river system.
- Characterisation of current and potential water demand and uses (future water resources development scenario analyses, including climate change scenarios) and their impact on river flows.
- Determination of environmental flows scenarios and the corresponding ecological status they can support at strategic points in the basins, based on the environmental targets and development scenarios agreed upon at key sites in the basin by stakeholders.
- Recommendations to both countries of the environmental flow values to maintain at strategic points in the basin and availing the rules/tools for computing these values elsewhere to inform sustainable water resource allocation and use throughout the basin.
- Recommendations on the incorporation of environmental flows considerations in the establishment of guidelines and legal texts for the transboundary framework (basin agreements) and national frameworks (water allocation).
- Establishment of a Decision Support System (including linked hydromet) for operations management.

4.1. Scope summary

These Terms of Reference relate to the specialist team that will contribute to setting of the baseline knowledge and analytical framework for a shared source-to-sea diagnosis of ecosystems status, functioning and economic value of the Kunene River basin to inform the Kunene environmental and future development scenarios assessments, which will subsequently inform the development of a Transboundary Diagnostic Analysis (TDA) and an updated shared water resources strategy, i.e. the Kunene River Basin Strategic Action Programme (SAP) for joint ecosystem based management of the Kunene river basin.

The Environmental Flows Consultancy is expected to consist of a team of specialists to carry out a comprehensive environmental flows assessment of the Kunene basin. The team is expected to be multidisciplinary, covering the following specialist areas:

i. *Socioeconomics:* Natural resource use and resource economics, policy, and governance

ii. *Biological/Ecosystems:* Water quality, geomorphology and sediments, vegetation, etc

iii. *Hydrological:* Hydrology and hydraulics, hydrogeology, water resources

The Kunene Environmental Flows assessment and Development Scenario Analysis will proceed in 3 phases/workstreams.

Phase 1 of the Kunene assessment consists of an initial hydrological, physiographic, and socio-economic characterisation of the basin, informing delineation of the basin into homogeneous biophysical and social areas, undertaken by a multidisciplinary team of specialists led by environmental flows process expert. This will be informed by a concurrent hydrogeological assessment led by SADC GMI, and other technical workstreams under the GEF project (data and information sharing between project workstreams will be coordinated by the Project Implementation Unit). These specialist studies will also help to interrogate transboundary basin management issues relating to water and other natural resources, and the immediate and underlying causes of these issues among the social and economic activities. This characterisation will be followed by a rapid estimate of Environmental Flows for the delineated zones (sites) along the drainage network, which will indicate the monthly volumes of flow that could be expected to support different levels of flow driven ecological condition in the river at those sites.

Phase 2 will consist of extensive stakeholder consultation on basin development and basin management scenarios, and objective setting to inform the selection of focus sites for a comprehensive environmental flows assessment. +/-10 key sites are expected to be identified. Key stakeholders to engage on basin infrastructure plans, basin development, and basin management scenarios include:

i. **The Permanent Joint Technical Commission (PJTC):** provides technical advice and support for managing the shared water resources of the Kunene River Basin and is responsible for the development and implementation of joint transboundary programmes and projects.
ii. **The Task Force Calueque (TFC)**: is composed of officials from Angola and Namibia and oversees the implementation of water supply projects and advises the PJTC on the impact of these projects.
iii. **The Baynes Committee (BC:)** oversees and updates the results of studies evaluating the feasibility of building major hydroelectric schemes in the Lower Kunene and advises the PJTC on public information campaigns.
iv. **The Committee on Bilateral Agreements:** studies and analyses the articles and provisions of the 1964 and 1969 Water Use Agreements and proposes an overall agreement on future water uses of the river.
v. **The Master Plan Committee:** supports the development of a river basin master plan and provides a technical review of current and future infrastructure requirements.
vi. **The Office for the Administration of the Kunene, Cubango, and Cuvelai Hydrographic Basins (GABHIC):** manages the integrated water resources in the Kunene River Basin in Angola and provides technical and administrative support to the Angolan constituents of the PJTC.

The above stakeholders have already undertaken significant analytics on basin development, and this assignment is expected to build on that analysis. Phase 2 will also include field campaigns and a joint basin survey with basin stakeholders to get additional information for an in-depth environmental flows' investigation for the identified focus sites. Scenario analysis will include investigation of trade-offs and will make recommendations on sustainable scenarios of development.

Phase 3 will focus on the development of an environmental flow monitoring framework and the deployment of decision support tools for operationalising environmental flows. This assessment will therefore inform the development of operational guidelines for environmental flows implementation at critical sites in the basin.

Capacity building will be crosscutting across all phases, the consultant is expected to develop a detailed capacity building action plan at project inception, which will then be implemented throughout the execution of the environmental flows assessment

4.2. Detailed Scope of the assignment

This Consultancy will include (but may not be limited to) the following tasks:

Phase 1

4.2.1. Delineating and profiling the river - identification and characterisation of key ecosystems connected to rivers (water tower, aquatic systems, wetlands, groundwater), and their water needs, in addition to identification of key water management nodes (at +/- 10 key locations along the river system):

- Ecosystems characterisation in identified hotspots
- Resource economics analysis - identify and characterise the benefits derived from ecosystems connected to the hydro-systems
- Ecosystem prioritisation - Designate priority ecosystems, in terms of biodiversity and in terms of economic contribution, to highlight and raise awareness on the ecosystems, particularly important in terms of services provision/economic contribution and nature conservation
- Identification of critical water management/use nodes from a basin socio-economic development perspective.

4.2.2. Development of a comprehensive hydrological model for the basin and establishment of the basin's current level of water resources development

This will entail the development of an updated basin-wide water resources model for the integrated evaluation of the water resources, aimed at identifying trade-off between different uses, and informing the analysis of the most sustainable development options given the hydrological characteristics of the river. Two hydrological studies of the Kunene River were carried out in 1966, and two reports are available in English and Portuguese by HYDROCONSULTS and Grupo De Trabalho do Cunene e Cuvelai, respectively, which can be the basis for a reassessment and update of the hydrology of the basin. The specific activities include:

- Evaluate the spatial distribution and density of monitoring stations and whether the network adequately covers the basin.
    - Collect all existing hydro-meteorological data and related information on station instrumentation, rating curves, collection methods, etc. historical dam water levels, dam inflow-outflow data, dam operating rules, environmental flow requirements, dam siltation rates, present and future water demands, and future dams for development, assess the accuracy and reliability of the data and identify any data gaps or inconsistencies.

    - Collect remote sensing rainfall data, such as radar and satellite-derived rainfall estimates as needed.
- Stakeholder consultation on the choice of water resource model to be utilised.
- Set up of the model topology and hydrological inputs based on updated data sets and calibration and validation.

4.2.3. Environmental flows model development and determination of environmental flows in a range of typical aquatic habitats and "hotspot (water tower, aquatic systems, wetlands, groundwater, etc)" ecosystems critical for the overall functioning and health of the river system through:

- Adapting an acknowledged international environmental flows requirements methodology for assessing real ecosystems needs to the basin's concerns, specifying clear requirements for stakeholders' inputs into the process.
- A rapid assessment from source to sea to delineate the river into representative reaches and homogeneous zones and validate with stakeholders the +/-10 key locations to be surveyed and monitored.

Phase 2

4.2.4. Data collection campaigns, including a Joint Basin Survey with basin monitoring stakeholders

- Instrumentation of the river reaches and carrying out the assessments through a joint basin survey with the riparian countries' institution and other identified stakeholders with monitoring initiatives in the basin.
- Determining environmental flows at the key sites as dictated by the requirements of the basin agreements and validating these with project stakeholders.

4.2.5. Characterisation of current and potential water demand and uses (future water resources development scenario analyses, including climate change scenarios) and their impact on river flows.

This will take the form of a multi-criteria analysis considering both socio-economic and environmental aspects, and investigating trade-offs between different development scenarios and between sites, and will include the following steps:

- Compiling details of all sectoral demands around the basin, existing and potential, including the consideration of the ecological flow requirements, water abstractions (and transfers), and all possible infrastructure developments.
- Evaluation of reservoir management options - modelling regulation of all existing and planned dams and propose optimisation measures for the entire river cascade from Gove Dam to the Cunene River mouth, and proposing river drought, normal flow, and high flow dam management operating rules.

- Updating scenarios in terms of probable climate change considerations - the impacts of operation strategies and climate change on the monthly, seasonal, and annual discharge patterns and inflows to reservoirs, the environmental river flow requirements, as well as changes in upstream water abstractions, should be assessed, including the existing reservoirs and planned reservoirs operations

- Running scenarios and determining the trade-offs and options for integrated flow management in the Kunene River Basin, including making recommendations on flow management to attain environmental and socio-economic targets. Scenarios where blended grey and green (nature-based solutions) future water development options, and in the context of source-to-sea approaches (basin and estuarine/marine socioeconomics) should be included.

Phase 3

4.2.6. Environmental Flow Monitoring Framework development and Decision Support tools for environmental flow management.

Once the assessment is concluded and stakeholders have decided on the environmental targets and desired ecological status at +/- 10 key sites in the basin, and the environmental flows to maintain this, recommendations, and decision-support tools will need to be provided for informing guidelines for operationalising and monitoring flows through a negotiated process between member states. This will include:

- Developing tools for monitoring the operationalisation of environmental flows during water allocation and use (e.g. agreement of reservoir operation rule curves, guidelines for estimating environmental flows during water allocation at the sub-basin level, etc.)

- Recommendations made for improving the hydroclimatic monitoring network (informed by the Joint Basin Survey to collect data for the environmental flows assessment).

- Facilitating the Development of an Environmental Flow Monitoring Framework by Member States identifying key parameters for joint monitoring, including the frequency of monitoring and roles and responsibilities of basin institutions in the monitoring of the environmental flows.

Cross Cutting across all phases

4.2.7. ***Capacity building on environmental flows*** – this should include knowledge transfer activities during the delivery of the environmental flows assessment (and joint basin survey/data collection campaign), to build stakeholders capacity for environmental mainstreaming and environmental flows implementation, and the use of the tools or procedures developed during the environmental flows assessment.

4.2.8. ***Identification of transboundary priorities for managing basin ecology and ecosystems*** – this will consist of the development of a concise synthesis report highlighting the critical transboundary ecosystem and biodiversity challenges in the Kunene River Basin, their root causes, and opportunities for addressing them.

5 Tasks, Activities, and Deliverables

Tasks	Activities	Deliverables
Phase 1 1. Project inception	Development of project inception report – finalise details of approach and scope in consultation with GWPSA (Global Water Partnership Southern Africa) and project countries	Inception report with detailed workplan and budgets and annexures: i. Annotated Table of Contents for all specialist reports ii. Terms of Reference for all specialists in the environmental flows assessment team iii. Capacity building plan
	Consultation & capacity session on environmental flows assessment approach to be adopted	Environmental flows approach induction course training report
2. Delineation of the study area and profiling of the river	Review existing information, identify gaps; preliminary site selection, finalise geographic scope, preliminary indicator selection	Intermediate Specialist reports: Homogeneous delineation of the basin
	Undertake a hydrological delineation of the basin	
	Undertake a geomorphological and Water Quality delineation of the basin and estuary. Evaluate water quality parameters for physical, chemical, and biological aspects of water such as turbidity, nutrient levels, and contaminants at key sites, including at the dams.	
	Undertake a biological delineation of the basin.	
	Undertake a socioeconomic delineation of the basin, with consideration of resource economics and governance issues	
	Combine into homogenous river reaches	

3. Desktop selection of potential environmental flows sites or reaches, and desktop status and trends assessment	Consult with stakeholders in objective setting workshop to set up management objectives, identify environmental flows focal sites, and review scenarios of water demand and water use	Intermediate report: Desktop trend assessment
	Prioritise and select study sites	
	Desktop status and trends assessment, including current and projected water demand and use scenarios, to evaluate impact on flows and implications for water resources management.	
4. Setup for hydrological modelling	Setup the hydrological model for the basin	Specialist reports – Hydrology & Fluvial Geomorphology
	Obtain daily data for baseline flows (>/= 30 years, until as recent as possible), and prepare baseline timeseries for each Environmental Flows Site	
	Disaggregate daily data for operational scenarios over the same period of record	
	Develop sediment (baseload and suspended) proportional time-series for baseload and suspended sediments	
Phase 2(a)	Field visits and Joint Basin Survey	Field trip and Joint Basin Survey reports
5. Environmental flows site field visits, including Joint Basin Survey, and capacity building	Training on field work for environmental flows assessments	
6. Hydraulics and hydrodynamic modelling	Assess the hydraulics for the identified sites	Specialist report - Hydraulics
	Develop the hydrodynamics for the floodplain and estuary	
7. Selection of indicators	Identify key biophysical aspects of the aquatic ecosystems that can be used as indicators of flow and sediment related changes	Intermediate report: Indicator selection
	Develop initial relationships between the indicators based on existing information	
8. Future water scenarios development	Collate information and consult on future development scenarios, including with climate change projections	Future water resources scenarios report
9. Set up environmental flows assessment model and run scenarios	Set up environmental flows model with data and run scenarios. Finalise specialist reports and environmental flows assessment report	Synthesis environmental flows assessment report with finalised Specialist reports as annexes. To include quantitative resource economics options and analysis of future development scenarios and trade-offs

		at basin scale for planning and investment
	Run future water resources development scenarios and determine the trade-offs and options for integrated flow management	
Phase 2(b) 10. Determine estuarine ecological flow requirements	Conduct desktop analysis and field work for estuarine data collection	Estuarine environmental flows assessment report
	Determine the Ecological Flow Requirement of the estuary	
11. Determine marine ecological flow requirements	Collate marine data including through a limited field visit	Marine environmental flows assessment report
	Ecological Flow Requirement of the marine environment (transitional waters)	
Phase 3 12. Develop tools for operationalising environmental flows allocations at sub-catchment level	Develop sub-catchment-level environmental flows allocation tool(s)	Report on environmental flows tool(s) for catchment-level environmental flows allocations – including a description of the tool(s) and the outcome of running different water resources development scenarios (i.e., guidelines for use of the tool(s))
	Deploy the tool(s) through training workshops	
13. Report on implementation of the Capacity Building Plan	Develop a report on all the capacity building actions carried out, with an assessment of all the training conducted and recommendations for future training requirements and environmental flows succession plan.	Capacity building report
14. Develop Environmental Flows Management Framework with clear recommendations	Develop framework for Environmental Flow Monitoring and management and validate with Member States	Draft Environmental Flow Management Framework
	Facilitate consultations and negotiations by the Member States on the development of a transboundary regulatory framework for environmental flows implementation, including data exchange, operational procedures, and enforcement.	Report on environmental flows implementation plan with monitoring and evaluation framework, and clear recommendations and conclusions for guidelines and legal text for environmental flows implementation

6 Supervision and Reporting

The Consultant will report to the Project Implementation Unit, with technical supervision being provided by the Transboundary Water Governance and Environment Specialist. The assignment will include a high degree of consultation with basin stakeholders, and deliverables and reports will undergo an approval process that includes the Regional Project Coordinator, the Specialised Committees in the basin countries (key stakeholders mentioned earlier), and the Project Steering Committee. All reports will therefore be submitted as draft, to be finalised after all feedback is addressed.

7 Timeline for the development of the Kunene Environmental flows assessment

The Consultancy will be undertaken over a period of thirty (30) months from the commencement of the contract. The Consultant is expected to commence work not later than 2 weeks from the date of the notice to proceed. The Consultant must deploy necessary manpower, logistics, and all other necessary items to complete the assignment within the stipulated time and deliverables and reports will undergo an approval process that includes the basin countries and Project Steering Committee. The proposed workplan in the technical proposal should therefore allow for sufficient time for the discussion and approval of the various reports including ensuring that there is knowledge transfer and capacity building for key institutions responsible for water resources management in Kunene River Basin.

Progress meetings will be held between the client and the consultant, and the consultant will also be expected to participate in strategic meetings to make recommendations and give technical opinions and advisory to other project areas linked to this assignment.

8 Composition of the Consultant Team

The Consultant is expected to submit a description of the Consultancy team, with staff profiles reflecting the number and levels of professional and support staff required to complete the assignment effectively, efficiently, on-time and on-budget. The Team, as a collective, must be fluent in both Portuguese and English and must possess excellent communication and report writing skills. Brief descriptions of the expected key staff and the minimum requirements for their qualifications and experiences are as follows:

8.1. Team Leader/Eflows Process Specialist

The Team Leader will be responsible for the overall planning and implementation of the consultancy services including team management and coordination; ensuring the achievement of the study objectives; and facilitating stakeholder consultation. He/she will have the overall responsibility for the preparation and finalisation of the various reports outlined under this assignment. He/she should have as a minimum, a master's degree in water engineering/environmental sciences, water resources management, environmental management, law or social science, or any related field, and 15 years of work experience, of which at least 10 years in the field of relevant ecological studies and other studies like this project, with a significant part of this being in Africa. The Team Leader should have sound understanding of International River Basin Management principles and approaches, demonstrated

experience in working with participatory methodologies, and knowledge and experience in working on issues of governance, policy development, and strategy formulation.

General Working knowledge of the Southern African region, and in particular familiarity with the Kunene Basin will be an added advantage. The Team Leader should have a proven track record of managing multi-disciplinary teams and should have acted as a Team Leader for at least 3 similar projects, with experience in the undertaking and preparing of Environmental Flows projects and reports and at least 10 years' experience working with governments and international agencies. Excellent and demonstrated communication, consultation, editing and drafting skills and previous experience and knowledge of the relevant laws and regulations in Namibia and Angola will be a significant advantage.

8.2. River Hydraulics Engineer

Minimum qualification of a Bachelor Degree in Civil or Agricultural Engineering or any other relevant fields and 10 years of work experience in planning and development of concept and preliminary designs of hydraulic structures.

8.3. Hydrologist(s):

Minimum qualification of a Bachelor Degree in Hydrology/Water Resources Planning/Civil Engineering or related fields, with 10 years of relevant work experience in in undertaking feasibility hydrology studies of large river basins with surface, wet land and lake systems; large water pipelines' projects, multipurpose water projects and strategic water assessments.

In addition to the above, the Consultancy team must also have the following expertise

- Water Resources Specialist
- Wetland and River Ecology Specialist
- Marine and Estuary Specialist
- Geomorphologist
- Water Quality Specialist
- Ecologists: Vegetation, wildlife etc Specialists
- Socioeconomics Specialist
- Governance Specialist
- Resource Economics Specialist
- Climate Change Specialist

The Consultant may propose a schedule of other required staff as they see fit. The combined team should have a good experience of similar projects in Southern Africa, the inclusion of Angolan and Namibian specialists in the project team is highly recommended, with knowledge of local languages being an added advantage.

9 Other Provisions

9.1 Taxes

A withholding tax shall be charged to the consultant, and GWPSA will avail the corresponding tax certificates. GWPSA will not be liable for any additional taxes due to tax Authority/ies in the country of origin of the Consultant.

9.2 Travel

The Consultant is expected to engage stakeholders and key role players through a number of regional workshops and field visits. The list will include, but not be limited to, relevant departments and institutions in the Member states, and project partners as listed in the CuvKun GEF Project Document.

10 Working Language

The working languages are English and Portuguese. Therefore, all final documents will be in both English and Portuguese

11 Application for Consultancy

The applicant is expected to submit separate **Technical and Financial Proposals** clearly detailing the total number of days to complete work and daily rates inclusive of all anticipated costs in United States Dollars (USD) during the period of assignment. The term "all-inclusive" implies that all costs (professional fees, communications, consumables, VAT etc.) that could be incurred by the consultant in completing the assignment are already factored into the daily fee submitted in the proposal. However, travel costs should be identified separately in line with proposed activities and allocated consulting days.

Electronic Technical and Financial proposals should be submitted in English with a subject line clearly titled: **"Terms of Reference for Consultancy to source-to-sea Integrated Flows assessment to maintain ecological flows and evaluate future Water Resources Scenarios for the Kunene Basin**" through email to gwpsaprocurement@gwp.org or Mr Mark Naidoo mark.naidoo@gwpsaf.org with a copy to Mr Silvanus Uunona silvanus.uunona@gwpsaf.org by no later than **18 March 2025 at 00:00 midnight CAT**.

PROPOSED STANDARD TECHNICAL PROPOSAL EVALUATION CRITERIA

The technical proposal contributes 80% of the total and final evaluation score whilst the financial proposal carries 20% of the weighted score. In addition, the Proposal that scores 75% and more in their technical score will proceed to the financial evaluation stage. This addendum provides a detailed breakdown of how the technical proposals will be evaluated and scored.

	Summary of Technical Proposal Evaluation Forms	Score Weight	Points Obtainable
1	Expertise of Firm / Organization / Individual	30%	30
2	Proposed Methodology, Approach and Implementation Plan	40%	40
3	Management Structure and Key Personnel	30%	30
	TOTAL	**100**	**100**

Technical Proposal Evaluation (FORM 1)		
	Expertise of the Firm/Organisation/Individual	**Points Obtainable**
1.1	Reputation of Organisation and Staff / Credibility / Reliability / Industry Standing	10
	General Organisational Capability which is likely to affect implementation • Financial Stability • Loose consortium, Holding company, or One firm • Age/size of the firm • Strength of the Project Management Support • Project Financing Capacity • Project Management Control	
1.2	Extent to which any work would be subcontracted (subcontracting carries additional risks which may affect project implementation, but properly done it offers a chance to access specialized skills.)	10
	Quality assurance procedure, warranty	
1.3	Relevance of: • Specialized Knowledge • Experience on Similar Programme / Projects • Experience on Projects in the Region • Work for major multilateral/ or bilateral programmes	10
	SUB TOTAL	30

Technical Proposal Evaluation (FORM 2)		
	Proposed Methodology, Approach, and Implementation Plan	**Points Obtainable**
2.1	To what degree does the Proposer understand the task?	15
	Have the important aspects of the task been addressed in sufficient detail?	
	Are the different components of the project adequately weighted relative to one another?	
	Is the proposal based on a survey of the project environment and was this data input properly used in the preparation of the proposal?	
2.2	Is the conceptual framework adopted appropriate for the task?	25
	Is the scope of task well defined and does it correspond to the TOR?	
	Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project?	
	SUB TOTAL	40

Technical Proposal Evaluation (FORM 3)		
	Management Structure and Key Personnel	**Points Obtainable**
3.1	**Team Leader – EFLOWS and Future Water Scenarios/Hydrology/ Engineering** • Master's degree in water engineering / environmental sciences, water resources management, environmental management, law or social science, or any related field • 15 years of work experience, of which at least 10 years in the field of relevant ecological studies and other studies like this project, with a significant part of this being in Africa. • Sound understanding of International River Basin Management principles and approaches, demonstrated experience in working with participatory methodologies, and knowledge and experience in working on issues of governance, policy development, and strategy formulation. • General Working knowledge of the Southern African region, and in particular familiarity with the Kunene Basin will be an added advantage. • Should have a proven track record of managing multi-disciplinary teams and should have acted as a Team Leader for at least 3 similar projects, with experience in the undertaking and preparing of Environmental Flows projects and reports and at least 10 years' experience working with governments and international agencies.	10
3.2	**River Hydraulics Engineer** • Minimum qualification of a Bachelor Degree in Civil or Agricultural Engineering • Experience in planning and development of concept and preliminary designs of hydraulic structures.	10
3.3	**Hydrologist** • Minimum qualification of a Bachelor Degree in Hydrology/Water Resources Planning/Civil Engineering or related fields • 10 years of relevant work experience in in undertaking feasibility hydrology studies of large river basins with surface, wet land and lake systems; large water pipelines' projects, multipurpose water projects and strategic water assessments.	10
	SUB TOTAL	30
	GRAND TOTAL	**100**