Terms of Reference

Rapid Biodiversity Assessment Consultant

27th October 2025

Supervised by: WWF Pacific PNG Conservation Program Manager
Work location: Pomio, East New Britain Province, Papua New Guinea
Duration: days (13 days for field activities, 3 days for travel between sites and 4 reporting days)
Starting Date: 10th November 2025

Project Name	Pomio Rapid Biodiversity Assessment
Project Locations	Pomio, East New Britain, Papua New Guinea
Project Reference Number(s)	PG203600 and PG203300

1. Background

WWF Pacific is working together with communities and partners towards: All Pacific peoples and nations are empowered, climate resilient, and prosperous, with nature thriving and visibly and measurably recovering - a 'People and Nature Positive Pacific'. From Papua New Guinea, with the third largest tropical rainforest in the world and home to over seven percent of the world's total number of species, to the Solomon Islands with record numbers of fish species; to the world's third longest continuous barrier reef system in Fiji. The richness and diversity of species found in the Pacific is globally significant. Papua New Guinea and Solomon Islands both form part of the Coral Triangle, the centre of the world's marine biodiversity. Some of the most coral reefs less exposed to climate change are found in Fiji and Solomon Islands. WWF works across Papua New Guinea, Fiji, and Solomon Islands with offices in each country and a regional hub to serve communities and protect this region's rich and unique biodiversity.

WWF has three goals that outlines its ambition, the cross-cutting nature of its work, and what WWF is working towards long-term: empowered Pacific peoples, integrated ocean management, and climate resilient Pacific nations. WWF's overarching focus is on community

and ecosystem resilience combined with area-based conservation, working towards 30x30 and safeguarding the lands and waters of the Pacific. WWF focus on conservation priorities across 30x30: community-led conservation, sustainable fisheries and blue foods, conserving marine species, reducing deforestation, Pacific policy leadership, gender equality, Disability and Social Inclusion (GEDSI) mainstreaming and Sustainable Blue Economy.

Pomio District in East New Britain Province is currently WWF PNG's most active site spanning from tropical rainforest conservation to shoreline, inshore and potential offshore conservation. This region of the New Britain island is a biological marvel hosting 49 mammal and 64 bird species including the recently re-discovered New Britain Goshawk[1]. Herpetofauna and insects are also present in relatively high numbers with opportunities for more discoveries. Floral species include exotic orchids such as the Pomio Brown and the notable tree species, Kwila. It is also home to the Nakanai Karsts tentative World Heritage Site Listing under UNESCO. Further background information into Pomio's culture and socio-economic scene can be found here.

In the face of consistent logging and palm oil expansion threats, WWF PNG is working closely with local communities and leaders to conserve these pristine rainforest ecosystems through formal recognition as community conservation areas (CCAs) or other effective area-based conservation measures (OECMs). As per the Protected Areas Act (2024), application for the formal recognition of all protected areas must entail a rapid biodiversity assessment of the area that will provide basal evidence of focal species that are in the IUCN Red List, CITES, PNG Protected Species (CEPA's Red Book), endemic or have immense cultural significance to the indigenous peoples and local communities (IP&LCs) within these areas. The assessment must also present the state of the ecosystem in these areas to be intact and free from immediate external pressures.

In this regard, WWF PNG Country Office is seeking a suitable individual, company or organization that possess the appropriate expertise and skills to conduct a rapid biodiversity assessment in Pomio, East New Britain Province, within a specified time frame.

[1] Gabriel. J (2024) – Pomio Landscape Assessment Report

2. Objectives of the consultancy

The Consultant will be responsible for delivering the following objectives:

- **Basic marine biodiversity survey techniques, GPS use and mapping training:** Design training materials & plans for 15 participants (5 youths each from 3 communities) local participants and conduct basic marine biodiversity survey techniques, GPS use and mapping training for youths in 3 partner communities to support rapid biodiversity assessments and mapping for at least 3 proposed locally managed marine areas.

- **Rapid Biodiversity Assessment:** Design survey methods and conduct species presence and diversity assessments in the Malai, Bairaman and Sahalil turtle nesting sites for:
    - epipelagic fish,
    - crustaceans,
    - Molluscs
    - sea birds,
    - coral reef systems,
    - Sharks & Rays
    - mangroves
    - seagrass

Basic desk research and field surveys of salinity, water temperature & pH level, sediment deposition, tidal levels, chemical conditions and other biophysical parameters are also required.

Deliverables are outlined below (Table 1).

3. Scope of work and methodology

Under the main objectives, the consultant will be required to:

1. **Basic biodiversity survey techniques, GPS and Mapping training:**
    - Design training materials & plans for local participants based on community profiles that will be provided.

- Conduct basic biodiversity survey techniques training for at least 15 youth participants to support rapid biodiversity assessments in the proposed locally managed marine areas.

2. **Rapid Biodiversity Assessment:**
    - Carry out a literature review of previous marine biological research done in or within the close vicinity of Pomio, New Britain and or New Guinea Islands of similar island ecology.
    - Design biological survey methods based on site profile to be provided.
    - Conduct epipelagic species presence and diversity assessments for 3 proposed locally managed marine areas.
    - Produce a scientific report on the findings in each proposed locally managed marine area.
    - Produce condensed factsheets outlining key findings and results.
    - One hour presentation to WWF PNG team, DDA and relevant stakeholders on the key findings and recommendations

The resulting rapid biodiversity assessment report as well as validated boundary maps will serve as attachments to Protected Area Applications that will be submitted to the Conservation Environment and Protection Authority, hence the following guiding questions must be answered in the final report:

- *Are there species that are categorized as threatened or protected (e.g., listed by IUCN, CITES)?*
- *Are there endemic species of conservation concern?*
- *Is there aggregation of species of conservation concern in a restricted geographic distribution?*
- *Are there important habitats of conservation concern for species life cycle (e.g., areas of aggregation, refugia, and spawning, breeding, nursery and/or migration routes)?*
- *Are there unique, vulnerable, fragile and/or rare habitats of conservation concern (e.g., isolated island, cave, deep sea)?*
- *Are there unique and/or rare landscape/seascape of scenic beauty?*
- *Are there important areas of conservation concern for local livelihood in sustainable recourse use?*
- *Are there important areas of conservation concern for local culture and tradition?*

4. Deliverables/expected outputs

See table 1 below.

5. Required profile

Expertise/knowledge Required

The ideal individual, organization or firm must have:

- Appropriate resources and materials for basic marine biodiversity survey techniques training for indigenous peoples and local communities.
- Extensive expertise in marine biological research and monitoring particularly in conducting biological surveys for the following:
    - epipelagic fish,
    - crustaceans,
    - Marine Molluscs
    - sea birds,
    - coral reef systems,
    - Sharks & Rays
    - mangroves
    - seagrass

- CITES approved wildlife monitoring equipment - Snorkelling equipment (Masks, fins, waterproof slates, waterproof paper, underwater cameras a bonus)

Experience and skills required

The ideal organization or individual must possess the following experiences and skills:

- Proven experience in conducting basic marine biological monitoring survey techniques and GPS use and mapping training to local communities.
- Proven experience in conducting rapid marine biodiversity assessment.
- Established background and experience in scientific data collection and journal publication.

6. Application

- Cover letter expressing the applicant's interest and relevant experiences in conducting biological surveys and assessments in country.
- CV or Organizational Profile presenting CV's of specific staff with appropriate expertise, skills and experience

- Report(s) of most recent biodiversity assessment.

Applications should be submitted to: ppo.hr_recruit@wwfpacific.org

Table 1: Consultancy Activities and Outputs/ deliverables:

Number of Objectives	Objective:	Activities and Scope:	Outputs/deliverables:	When
1	Basic biodiversity survey techniques, GPS and mapping training	Design training materials & plans for local participants based on community profiles that will be provided.	**Training Materials and plan for basic biodiversity survey techniques, GPS and mapping training** – Simplified and appropriate training materials for individuals from local communities to understand. Training plan outlining basic theory and field lessons.	7th November
		Conduct basic biodiversity survey techniques training for youths to support rapid biodiversity assessments in 3 proposed locally managed marine areas.	**Training Report** – Report containing all participant data, modes of delivery and break up of lessons and the achieved outcomes.	Upon completion of trainings in all sites.
2	Rapid Biodiversity Assessment	Carry out a literature review of previous marine biological research done in or within the close vicinity of Pomio and the	**Literature Review** – A compilation of all past and recent biological, environmental and anthropological surveys, research, case studies and any other relevant documented biological reports	7th November

		overall island of New Britain.		
		Design biological survey methods based on site profile that will be provided.	**Survey Plans –** Plan outlining the survey methodologies for different taxa groups, equipment, resources and labour to be utilised.	10th November
		Conduct species presence and diversity assessments for epipelagic fish, crustaceans, sea birds, coral reef systems, mangroves, seagrass species presence and diversity assessments in **3 proposed locally managed marine areas.**	**Daily Journal** – daily record of activities on site during field surveys and key findings, lessons and challenges encountered.	21st November

		Produce a scientific report on the findings in each proposed **locally managed marine area.**	**Rapid Biodiversity Assessment Report** – A detailed scientific report presenting the equipment, methodologies and techniques used, the classes surveyed, the results and the confirming statistical analysis. The report should also discuss recommended conservation actions.	26th November
		Produce condensed factsheets outlining key findings and results.	**Condensed Factsheets** - Synoptic factsheets presenting key findings of each survey site as well as a PowerPoint presentation to communicate findings to WWF's Conservation Programme and the communities.	26th November

Annex: Additional Resources and References