

Name of Protected Area: Sawataetae Wildlife Management Area

Part 1: Basic information about the protected area

Table 1. Protected area information

| | |
|---|---|
| Name, organisation and contact details for person(s) conducting the assessment <i>Person 1: Name, Organisation, Address, Email, Phone</i> | Greg Peterson, SPREP/Protected Area Solutions, 283 Madill Road, Tandur, Q4570, Australia, gregpeterson53@hotmail.com, 0414300955 |
| <i>Person 2: Name, Organisation, Address, Email, Phone</i> | |
| Today's Date | 17/6/2016 |
| Name (or names) of protected area | Sawataetae Wildlife Management Area |
| Size of protected area (ha) | 700 |
| PNG Code or number | |
| World Database of Protected Areas site code (these codes can be found on www.unep-wcmc.org/wdpa/) | 9719 |
| What level or kind of protected area is it? (National Park, Wildlife Management Area, Sanctuary, Reserve, Locally Managed Marine Area etc) | Wildlife Management Area |
| IUCN Category | |
| International protected area? e.g. World Heritage or Ramsar? | |
| Country | Papua New Guinea |
| Province/s | Milne Bay |
| District/s | Esa'ala |
| Local level governments | Duau |
| Ward/s | Sawaetetaebe |
| Nearest big town | Selulea |
| Location of protected area (brief description) | Sawataetae is located in north-central Normanby Island, adjacent to Etabu Bay. It consists of terrestrial, marine, inter-tidal and sub-tidal environments. The coastal lowlands rise to high hills. Mangroves are located on the coast. |
| Map references | Papua New Guinea 1:100 000 Topographic Survey – Sheet 9177 (Duau); 825975 |
| When was the protected area gazetted or formally established? | 30/6/1977 |
| Reference for gazettal or Memorandum of Understanding (MoU) | |
| Who owns the protected area? please enter Government Private Community/ customary landowners, private, Other (name) and include Clan name(s) | Customary landowners; located on alienated land subject to agricultural (copra) and pastoral (cattle) leases. The community does not recognise the leases. |

| | |
|---|--|
| Number of households living in the protected area | Small number of people from 2 villages (Sawataetae and Mwatebu) have use rights over the WMA, although all land is owned by families in Sawataetae Village. Land is inherited matrilineally. There are four clans at Sewataetae Village – Gegela, Bwayobwayo, Magisupu and Kilakila. |
| Population size within the protected area | Between 1000 and 2000 |
| Who manages the protected area?(e.g. please enter government, customary landowners [add clan names] management committee [how many and what gender]) | No one. No longer operates as a WMA. The last person from the original committee died recently. |
| Total number of staff (this means anyone working on the protected area in paid jobs – whether NGOs, community, rangers or customary landowners) | 0 |
| <i>Temporary paid workers</i> | 0 |
| <i>Permanent paid workers</i> | 0 |
| Annual budget (US\$) – excluding staff salary costs | 0 |
| Operational (recurrent) funds | 0 |
| Project or special funds | 0 |
| Reason for park establishment | To prevent hunting with firearms by “outsiders”. |
| What are the main values for which the area is designated (Fill this out after data sheet 2) | Mangroves and flat land for gardens and crocodiles. |
| List the primary protected area management objectives (add lines if needed after the most important objectives): <i>Management objective 1</i> | No management objectives exist. |
| <i>Management objective 2</i> | |
| <i>Management objective 3</i> | |
| Number of people involved in answering the assessment questions | 1 |
| Name/organisation/contact details of people participating the assessment (<i>Please do not insert return/enter or dot points</i>) | James Moabe, jamesmoabe234@gmail.com, 79969488. |
| Customary landowners/other community; CEPA, Other national government agency; Provincial govt; local level govt; Protected area staff (anyone working on the protected area in paid jobs; NGO; Donors; External experts; Others | Other community |
| Please note if assessment was carried out in association with a particular project, on behalf of an organisation or donor. | SPREP through the PNG Protected Area Assessment Project, which is a component of the GEF Community-based Forest and Coastal Conservation and Resource Management Project in PNG. |

Part 2: What makes this protected area special and important?

The bay is important as a safe harbor for small boats. Mangroves are used for building materials and the area is important for fish spawning. The flat land supports gardens for subsistence cultivation. The flat land in the past was developed into a coconut plantation, but this is no longer operational (the plantation was an important source of income). There was also a crocodile farm in the past, but it is also no longer operational. Cattle raising also occurred in the past.

Table 2. Key values of the protected area

| No. | Key values | Brief description | Note if endangered species or ecosystem (IUCN) |
|-----|--------------------|---|--|
| 1 | Mangroves | They are found in the intertidal zone on the mudflats and are important. However, their extent is limited (as the WMA boundary extends to the high water mark). They provide bush material for house construction, are important as a fish spawning area and filter sediment. | |
| 2 | Flat land | This is important for gardening and providing for the subsistence needs of the customary landowners. | |
| 3 | Crocodiles | The area is important for crocodiles. In the past there was a crocodile farm, but this is no longer operational. These are increasing in occurrence. | |
| 4 | Coconut plantation | There was a functioning coconut plantation, but this is not operational. The copra palm trees remain and provide an opportunity for future income generation. | |

Table 3. Checklist of values/benefits

Not important 0; Important 1; Very important 2; Don't know DK

| How important is the protected area for each of the listed values/benefits? | Score (0,1,2, DK) | Comment |
|---|-------------------|---|
| 1. Biodiversity – the presence of many different kinds of plants, animals and ecosystems | 1 | Most of the habitat has been degraded by the past agricultural and pastoral lease activities, but what remains is important for protecting biodiversity. The primary vegetation has been cleared and now consists of secondary regrowth in the copra plantation. The overstorey is mainly remnant copra palms with a regenerating understorey. Some birds |
| 2. Presence of rare, threatened, or endangered species (plants and animals) | 1 | No survey undertaken. Unlikely to be any rare, threatened, or endangered species. However there have been rare species in the past (e.g. spoonbills, Agile wallabies). |
| 3. Ecosystems (e.g. wetlands, grasslands, coral reefs etc) that are rare because they have been cleared or destroyed in other areas | 1 | Mangrove ecosystems on the coast which provide material for house building and fish breeding areas. |
| 4. Protecting clean, fresh water | 1 | |
| 5. Sustaining important species in big enough numbers that they are able to survive here | 1 | |
| 6. Providing a source of employment for local communities now | 0 | No income generating activities currently. |
| 7. Providing resources for local subsistence (food, building materials, medicines etc.) | 1 | |
| 8. Providing community development opportunities through sustainable resource use | 1 | |
| 9. Religious or spiritual significance (e.g. tambu places) | 1 | |
| 10. Plant species of high social, cultural, or economic importance | 1 | |
| 11. Animal species of high social, cultural, or economic importance | 1 | |
| 12. Attractive scenery | 1 | |
| 13. Tourism now | 0 | |
| 14. Potential value for tourism in the future | 1 | |
| 15. Educational and/or scientific value | 1 | |
| 16. Maintaining culture and tradition on customary land and passing this on to future generations | 1 | |

Part 3: What are the threats to the protected area?

Table 4: Threats to the protected area

- H** High significance threats are seriously degrading values. This means they are badly damaging some value –it might be a kind of animal or plant, or your traditional gardens
- M** Medium threats are having some negative impact – they are damaging values but not so badly
- L** Low threats are present but not seriously damaging values
- 0** N/A where the threat is not present in the protected area or where something is happening but is not threatening the values at all

| Threat type | Score (H,M,L,0) | Notes |
|---|--------------------|--|
| 1.1 Housing and settlement | L | There is sufficient land to accommodate new housing and this presents only a low threat. |
| 1.1a Population increase in the protected area community | L | There is sufficient land to accommodate the growing population, so this presents only a low threat. |
| 1.2 Commercial and industrial areas | 0 | |
| 1.3 Tourism and recreation infrastructure | 0 | |
| 2.1 Customary land owner and community gardens and small crops | L | |
| 2.1a Drug cultivation | 0 | |
| 2.1b Commercial plantations | L | |
| 2.2 Wood and pulp plantations | 0 | |
| 2.3 Livestock farming and grazing | 0 | |
| 2.4 Marine and freshwater aquaculture | 0 | |
| 3.1 Oil and gas drilling | 0 | |
| 3.2 Mining and quarrying | H | A mine site exists on neighbouring land and impacts on the WMA. |
| 3.3 Energy generation | 0 | |
| 4.1 Roads and railroads (include road-killed animals) | L | There is a plan to improve the road surface and this may impact on the WMA. |
| 4.2 Utility and service lines (e.g. electricity cables, telephone lines) | 0 | |
| 4.3 Shipping lanes | 0 | |
| 4.4 Flight paths | 0 | |
| 5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict) | M | Uncontrolled and unmonitored hunting takes place in the WMA and this results in loss of species. |
| 5.2 Gathering terrestrial plants or plant products (non-timber) | L | |
| 5.3a Logging and wood harvesting for local/customary use | L | |
| 5.3b Logging and wood harvesting – commercial logging | L | |
| 5.4a Fishing, killing and harvesting aquatic resources for local/customary use | M | Even though there is currently sufficient fish stocks, the view is that this may change at any time due to the over-harvesting of this resource. |
| 5.4b Fishing, killing and harvesting aquatic resources for commercial use | M | There is some poaching by neighbours. |
| 6.1 Recreational activities and tourism | 0 | |
| 6.2 War, civil unrest and military exercises | 0 | |
| 6.3 Research, education and other work-related activities in protected areas | 0 | |

| Threat type | Score (H,M,L,0) | Notes |
|--|--------------------|--|
| 6.4 Activities of protected area managers (e.g. construction or vehicle use) | 0 | |
| 6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors | 0 | |
| 7.1 Fire and fire suppression (including arson) | H | The recent drought caused small fires and this impacted on the landscape e.g. loss of habitat and fragmentation. |
| 7.2 Dams, hydrological modification and water management/use | 0 | |
| 7.3a Increased fragmentation within protected area | L | Stream erosion has altered garden allotments and boundaries |
| 7.3b Isolation from other natural habitat (e.g. deforestation) | L | This occurs on a small scale and is mainly due to the impact of fires. |
| 7.3c Other 'edge effects' on park values | 0 | |
| 7.3d Loss of keystone species (e.g. top predators, pollinators etc.) | DK | |
| 8.1 Pest plants | H | There is a new weed that is spreading very quickly, but the species is not known. There is likely to be mimosa and elephant grass. |
| 8.1a Pest animals | M | Wild pigs cause damage to the landscape. |
| 8.1b Diseases such as fungus or viruses that make native plants or animals sick | M | Breadfruit has a fungal disease. |
| 8.2 Introduced genetic material (e.g. genetically modified organisms) | 0 | |
| 9.1 Household sewage and urban waste water | M | There are no proper toilets and the effluent impacts on waterways. |
| 9.1a Sewage and waste water from protected area facilities | 0 | |
| 9.2 Industrial, mining and military effluents | 0 | |
| 9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides) | 0 | |
| 9.4 Garbage and solid waste | 0 | |
| 9.5 Air-borne pollutants | 0 | |
| 9.6 Excess energy (e.g. heat pollution, lights etc.) | 0 | |
| 10.1 Volcanoes | L | Undersea volcanic disturbances represent a potential threat. |
| 10.2 Earthquakes/Tsunamis | H | There is evidence of significant damage to the shoreline from cyclones. |
| 10.3 Avalanches/Landslides | L | |
| 10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes) | M | The front part of the beach has been destroyed. |
| 11.1 Habitat shifting and alteration | H | Habitat has been effected by saltwater intrusions. |
| 11.2 Droughts | H | Promote increased risk of fire and this impacts on the landscape. |
| 11.3 Temperature extremes | H | Anecdotal evidence of hotter days over a longer time each year. |
| 11.4 Storms and flooding | H | Cyclones caused 'big damage' to the shoreline. |
| 11.5 Coral bleaching | H | It is currently occurring. |
| 11.6 Intrusion by saltwater into gardens etc. | M | Storm surges and cyclonic activity have resulted in saltwater intrusion onto the land. |
| 11.7 Sea level rise | H | The coastal lowlands will suffer if the predicted sea level rises are a reality. |
| Other (please explain) | | |
| 12.1 Loss of cultural links, traditional knowledge and/or management practices | H | Young people are being influenced by western culture and neglecting or ignoring traditional knowledge and practices. |
| 12.2 Natural deterioration of important cultural site values | H | Clay pot was upturned – this was a place of spirits and it filled with water. Speaking English in tambu places. |

| Threat type | Score (H,M,L,0) | Notes |
|--|--------------------|----------------------------------|
| 12.3 Destruction of cultural heritage buildings, gardens, sites etc. | 0 | |
| Other (please explain) | H | Smoking drugs and alcohol abuse. |

Table 5. Worst threats and ways forward

| Threat No. | Threat (Most significant first) | Threat number or name (copy no. from Table 4) | Nature of the threat, impact and how to reduce the impact. |
|------------|---|---|--|
| 1 | Impacts from climate change related phenomena | 11.1,11.2,11.3,11.4,11.5,11.6,11.7 | Increase in storm and cyclonic activity and some evidence supporting sea level rise. |
| 2 | Loss of culture | 12.1 | Education should include programs on culture. |
| 3 | Smoking drugs and alcohol abuse | Other | Make community policing more effective. Provide awareness raising on the dangers of drugs and alcohol. |

Part 4: What is the management like in the protected area?

Table 6. Management effectiveness scores, comments, next steps

| Issue | Score (0,1,2,3, NA) | Comment | Next steps |
|---|---------------------------|--|------------|
| 1a. Legal status | 3 | Legally gazetted. | |
| 1b. Legal status | | | |
| 2a. Protected area regulations | 0 | | |
| 2b. Protected area regulations | | | |
| 3. Law enforcement | 0 | | |
| 4. Protected area objectives | 0 | | |
| 5. Protected area design | 0 | | |
| 6. Protected area boundaries | 0 | | |
| 7. Management plan | 0 | | |
| 7a. Planning process | 0 | | |
| 7b. Planning process | 0 | | |
| 7c. Planning process | 0 | | |
| 8. Regular work plan | 0 | | |
| 9. Resource inventory | 0 | | |
| 10. Protection systems | 0 | | |
| 11. Research and monitoring | 0 | | |
| 12. Resource management | 0 | | |
| 13a. Staff numbers | 0 | | |
| 13b. Other people working on the protected area | 0 | | |
| 14. Training and skills | 0 | | |
| 15. Current budget | 0 | | |
| 16. Security of budget | 0 | | |
| 17. Management of budget | NA | | |
| 18. Equipment | 0 | | |
| 19. Maintenance of equipment | NA | | |
| 20. Education and awareness | 0 | | |
| 21. Planning for land use or marine activities | 0 | | |
| 22. State and commercial neighbours | 0 | | |
| 23. Indigenous people/ Customary landowners | 0 | | |
| 24a. Impact on communities | 0 | | |
| 24b. Impact on communities | 0 | | |
| 24c. Impact on communities | 0 | | |
| 25. Economic benefit | 0 | The community relies on the WMA for its subsistence needs. | |
| 26. Monitoring and evaluation | 0 | | |
| 27. Visitor facilities | 0 | | |
| 28. Commercial tourism operators | 0 | | |
| 29. Fees | 0 | | |
| 30. Condition of values | 0 | | |
| 30a. Condition of values | 0 | | |
| 30b. Condition of values | 0 | | |
| 30c. Condition of values | 0 | | |

Part 5: Condition and trends of protected area values

Table 7. Values, condition and trend

| Key value (from Table 2) | Condition Score (VG, G, F, P, DK) | Trend Score (I, S, D, DK) | Information source and justification for Assessment and HOW the condition can be IMPROVED |
|-----------------------------|---|---------------------------------|--|
| Coconut plantation | P | S | The plantation is overgrown and is not operational. |
| Mangroves | VG | I | Breeding ground for fish. Community uses mangroves for building materials. |
| Flat land | G | S | Shifting cultivation for gardening. The land is in good condition for these purposes. |
| Crocodiles | VG | I | Numbers are increasing. |

Table 8. Recommendations and ways forward

| 1. | 2. | 3. |
|--|--|---|
| Re-establish the WMA and seek funding. Establish the Management Committee. Increase agriculture to encourage greater participation in the WMA. | Develop an education program and conduct awareness raising. It is important to use local knowledge to have a sustainable future. | Create some employment in the community. Develop the tourism potential to provide benefits to the community (e.g. contacting Esa'ala Tourism organization). |

Table 9. Strengths and challenges (facilitator/recorder synthesis)

| | Strengths | Challenges |
|---|--|--|
| 1 | The land is still owned by the customary landholders, and some have a vision for a sustainable future for the community. | The protected area does not function. There is no management plan and no customary landholder involvement in protected area maintenance. |
| 2 | A largely healthy marine ecosystem. | |