

# **TELULEU CONSERVATION AREA**

## Five Year Management Plan 2013 – 2018





The Nature Conservancy



Developed by the Peleliu Management Planning Team with assistance from Palau Conservation Society

> Funding support provided by the Nature Conservancy and Micronesia Conservation Trust

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#### I Introduction

Teluleu is a nearshore marine protected area in the state of Peleliu. In 2001, through Peleliu State Public Law-188-01, the state designated this key marine habitat for juvenile fish. This area, known as Teluleu Conservation Area, is a no-take conservation area intended for fish reserve. Teluleu acquired its membership in the Palau Protected Areas Network as Management Category VI-B.

Teluleu measures 0.83 square kilometers or 540,016 square meters and is commonly recognized by the people where many key species of juvenile fish aggregate. Also included in the conservation area are various types of sea cucumbers, sea urchins, clams, and other species that are important to the locals for subsistence and for economic purposes. To the local residents of Peleliu, protecting Teluleu makes sense. It has always been a guaranteed place to fetch fish to feed the family and with easy access. Local residents report consistent supply of juvenile napoleon wrasse, humphead parrotfish, groupers, and turtles<sup>i</sup>.

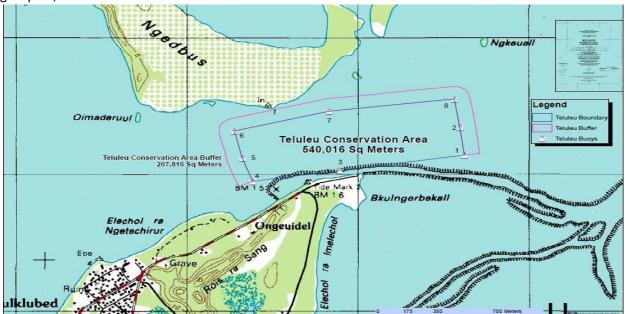


Figure 1 Teluleu Conservation Area, Source: Bureau of Lands & Survey

Although Teluleu has been a conservation area for a while, not many studies have been conducted to sufficiently describe habitats and ecosystems inside the conservation area. But according to researchers from the Palau International Coral Reef Center (PICRC), Teluleu is a type of nursery for juvenile fish<sup>ii</sup>. Recent surveys by PICRC report both fish density and fish biomass that show consistent high numbers in Teluleu over a reference site nearby.

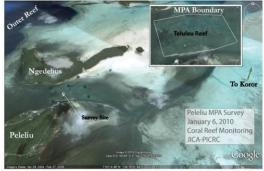


Figure 2 Teluleu Survey Station, Source: PICRC

#### II Purpose and Scope of the Management Plan

The purpose of this management plan is to provide management guidance through a series of strategies deemed feasible for the state over the next five years. The aim of this plan is to 1) increase institutional and technical capacity of resource owners to be able to independently and sustainably manage Teluleu; 2) protect the conservation area from both human and non-human threats; 3) increase education and awareness of protecting important resources; and 4) seek sustainable financing assistance from the Palau PAN Fund and other sources.

The plan, while focusing on Teluleu, will also bring about initiatives for long-term planning to properly formulate a wider Peleliu Protected Areas Network. This will take the "ridge-to-reef" approach to protect other important habitats and resources of the state.

#### III Vision and Management Strategies

In 2012, the Governor created a community planning team to work with the community, to develop a protected area management plan for Teluleu with assistance from Palau Conservation Society and other technical partners. A vision statement and goals for the plan were crafted by the group and presented to the community, and without objections from the people, were accepted during an interim community meeting in Peleliu.

#### Vision

"Kemam el chad er a Beliliou a somam el mengeluolou e melisiich a dikesam ra beluu ma doab meng melemolem el klungiolir ar chad ra beluu. Mal uasei ia kioumerang el kmo, tial Teluleu a mo otutii e smisichii a uldasu el kirel a omsubel, klekerngel, usbechel, omengedmeklel, ma klebekelel el kirel a telecheroll el merael mei". (Peleliu Planning Team, 2012)

#### Goals with Strategic Objectives

 Strengthen the protection of habitat and marine life of Teluleu through developing a Research and Monitoring Plan designed to engage local stakeholders, learning students and other partners.
 **1-1** By December 2012, a biological baseline study and social assessment of Teluleu has been conducted and reported to the community and leadership of Peleliu.
 **1-2** By September 2013, a Teluleu Research and Monitoring Plan is produced that includes specific monitoring needs for the Peleliu community including research for potential aquaculture development in Teluleu. **1-3** By September 2014, an evaluation of the management plan is conducted with corresponding recommendations to revise and improve following years of the Plan.

**1-4** By December 2015, an assessment to expand protected area beyond Teluleu to address source of threats and allow for a "ridge to reef" ecosystem based management approach is developed.

2. Strengthen enforcement and surveillance through improved legal framework complemented and aided by traditional management, rules and regulations, and adequate resources.

**2-1** By December 2012, official boundary for Teluleu is properly marked and clearly visible from afar.

**2-2** By May 2013, twenty-four (24) hour surveillance and enforcement is in place for Teluleu.

2-3 By May 2013, adequate equipments and resources for protected area conservation and law enforcement officers have been sought and provided to improve enforcement and surveillance.
2-4 By December 2013, Rules and Regulations for Teluleu Conservation has been enacted.

3. Achieve wide community understanding and support of Teluleu by the people of Peleliu and visitors alike.

**3-1** By March 2013, fact sheets for Teluleu Conservation Area have been designed and produced for public dissemination.

**3-2** Beginning October 2012, quarterly scheduled public outreach programs are conducted at the community or through broadcast media.

**3-3** By March 2013 a field educational program for students grades is in place to begin in summer 2013.

**3-4** By August 2013, a community awareness plan has been developed with the aim to engage the community in Teluleu management and protection.

4. Achieve sustainable financing through acquiring membership with the Palau PAN, exploring other funding opportunities, and prioritize identifying the management authority for Teluleu to have better access for capacity development to effectively manage Teluleu.

**4-1** By December 2012, Develop and submit PAN Nomination Application Form to the Ministry of Natural Resources, Environment and Tourism (MNRET).

**4-2** By April 2013, a Sustainable Financing Fund Development Plan is produced for Teluleu Conservation Area.

**4-3** By March 2013, a capacity assessment of the Peleliu Marine Law Enforcement Division is conducted.

**4-4** By December 2013, a Teluleu Management Capacity Building Plan is developed and implemented.

#### IV Five Year Actions and the Palau Protected Areas Network Criteria

Following goal 4 of this management plan, as a strategy to sustain long term management actions of Teluleu, the state sought and obtained membership in the Palau Protected Areas Network (PAN) in order to secure sustainable financing in 2012. Now a member of the PAN, management of the conservation area must be aligned with PAN Regulations including PAN recognized management criteria. The criteria include *administrative & regulatory, research & monitoring, education & awareness, enforcement and surveillance,* and *on-the-ground maintenance*. This section of the plan outlines management actions to be carried out, identified, and placed under each of the five criteria and capped within an anticipated timeframe.

#### Criteria 1: Administrative and Regulatory Requirements Strategies

Administrative strategies include those activities necessary to authorize and support management actions taken by the State Government in order to successfully achieve management goals and sustain long term management. Actions include immediate investment in conservation personnel, major asset and equipment purchases, capacity building and filling in policy or regulatory gaps. The Plan's proposed actions on administration and enforcement weigh heavy in the short term. Thus, additional planning is needed to articulate long term development and cultivation toward a robust management institution backed by a sufficient regulatory framework that will support effective management of Teluleu overall Peleliu Protected Areas Network.

#### Criteria 2: Education, Awareness, and Outreach Strategies

The Education, Awareness, and Outreach Strategies under this Plan aims to public awareness of new management measures, provide general education through participatory activities with local residents, visitors, students and school children. The Plan also aims to complete a full public outreach and awareness plan under Year 1 that will call for programmatic activities expected to be recurrent thereafter.

#### Criteria 3: Research and Monitoring Strategies

Research and Monitoring Strategies under this Plan includes the development of a Research and Monitoring Plan for Teluleu and training of personnel to be able to independently carry out surveys and monitoring. It involves biophysical monitoring, socioeconomic monitoring, and targeted research. The state as it begins to establish itself will rely on technical assistance from local agencies to help develop initial Research and Monitoring Plan, establish sufficient baseline information, and train conservation area staff. It is expected that data collection, analysis, and reporting will be recurring activities under the Plan from thereon.

#### Criteria 4: Enforcement and Surveillance Strategies

Enforcement and Surveillance Strategies includes the establishment of Standard Operational Procedures that will provide protocols, guidelines, and standards of enforcing Rules and Regulations of Teluleu. The strategy will significantly strengthen and improve the State's ability to guard its protected areas from violators, poachers, and non-compliant visitors or users.

#### Criteria 5: Maintenance and On-the-Ground Strategies

Maintenance and On-the-Ground Strategies include activities that require physical labor such as erection or installation of signage or billboards, demarcating boundaries, other protected area infrastructures, etc. The results of such strategies are most of the time tangible.

#### Five Year Management Actions Outlook

The objectives with parallel actions are organized by criteria and timeframe in an outlook on Table 1 showing over the next several pages. The outlook makes certain an assumption that objectives laid out in year one are successfully implemented. Therefore, objectives in subsequent years are building off of year one.

### Teluleu Conservation Area Management Plan – 5 Year Work Plan Outlook

-	☑ = To Be Implemented By [Year 1,	2	2013	to_						,2	2014)										
REF	1 TCA Five Year Work Plan Outlook		Ye	ar 1			Yea	r 2		Year 3				Year 4					Year	r 5	$\neg$
No.		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CR1	Administrative & Regulatory Strategies																				
1-3	By September 2015, an evaluation of the management plan is conducted with corresponding recommendations to revise and improve following years of the Plan											V									
1-3a	Conduct annual evaluations of management plan implementation using reports, inspections, financial reports, etc.														еси	iren	t		-		
1-3b	Develop evaluation report for the management plan with corresponding recommendations and revisions for next phase of second period of the management plan (2013 – 2018) by September 2015																				
1-4	By December 2015, an assessment to expand protected area beyond Teluleu to address source of threats and allow for a "ridge-to-reef" ecosystem based management approach is developed											v									
1-4a	Seek technical expertise to conduct an assessment to determine possible expansion of protected areas beyond Teluleu to allow a "ridge-to-reef" ecosystem based management approach by June 2015																				
1-4b	Finalize assessment report for ecosystem based management by December 2015 and submit to Office of Governor																				
2-4	By December 2013, Rules and Regulations for Teluleu Conservation has been enacted				٧																
2-4a	Seek technical expertise to develop Rules and Regulations for Teluleu Conservation Area by June 2013																				
2-4b	Submit final draft of Rules and Regulations for Teluleu Conservation Area by June 2013 to the Governor																				

REF			Ye	ar 1			Yea	ar 2			Yea	nr 3			Yea	ar 4		Year 5			
No.		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
4-1	By December 2012, develop and submit PAN Nomination Application Form to the Ministry of Natural Resources, Environment, and Tourism (MNRET) and hire Peleliu Coordinator	v																			
4-1a	Peleliu State Government to submit PAN nomination to MNRET	со	mpl	lete	d																
4-1b	Amend Teluleu Conservation Act to include new boundaries and coordinates of the conservation area	со	mpl	lete	d																
4-1c	Hire Peleliu Protected Area Coordinator																				
4-2	By April 2013 a sustainable financing fund development plan is produced for TCA	v																			
4-2a	Hire a consultant to help develop SFFDP																				
4-2b	Network with other state governments (??)																				
4-3	By March 2013, a capacity assessment of the Peleliu Marine Law Enforcement Division (PMLED) is conducted	v																			
4-3a	Develop organizational chart for PMLED																				
4.3b	Coordinate with other entities to assess capacity needs																				
4-4	By December 2013, a Teluleu Management Capacity Building Plan is developed and implemented				٧																
4-4a	Teluleu management capacity plan that includes budget, finance, monitoring, education, etc.																				
CR2	Education, Awareness, and Outreach Strategies																				
3-1	By March 2013, fact sheets for Teluleu Conservation Area have been designed and produced for public dissemination	v																			
3-1a	Gather all important information on Teluleu including allowable and non-allowable activities, enforcement and fines to develop a Teluleu Conservation Area Fact Sheet																				
3-1b	Design, print, and distribute or make available such fact sheets to the public																				

REF		Year 1					Yea	ar 2			Yea	r 3		Year 4				Year 5			
No.		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
3-2	By August 2013, an education and awareness plan is developed and implemented through quarterly scheduled public outreach programs are conducted at the community or through broadcast media			V																	
3-2a	Develop Community Outreach Plan in collaboration with Palau Conservation Society, community based organizations and new community groups																				
3-2b	Community awareness plan has been developed with the aim to engage the community in Teluleu management and protection																				
3-2c	Conduct outreach with stakeholders, i.e. tour agencies, Belau Tourism, Governor's Association, etc.																				
3-2d	Build Teluleu Visitor's Facility Center and Teluleu Boardwalk for visits and educational tours to the conservation area																				
CR3	Research and Monitoring Strategies																				
1-1	By December 2013, a biological baseline study and socia assessment of Teluleu has been conducted and reportec to the community and leadership of Peleliu				٧																
1-1a	Acquire final biological baseline study from PICRC by end of August 2012																				
1-1b	Conduct socio-economic survey of Peleliu and produce report for the state and submit to the Governor																				
1-1c	Report results of socio-economic survey to local community																				
1-2	By September 2013, a Teluleu Research & Monitoring Plan is produced that includes specific monitoring needs for the Peleliu community including research for potential aquaculture development in Teluleu				٧																
1-2a	Seek technical expertise to help develop Teluleu Research & Monitoring Plan with assistance from stakeholders and private consultant by June 2013																				

REF			Yea	ar 1			Yea	ar 2		Year 3				Year 4				Year 5			
No.		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1-2b	Seek technical expertise to assess potential aquaculture development in Teluleu and produce a report by July 2013.																				
CR4	Enforcement and Surveillance Strategies																				
2-2	By May 2013, twenty four (24) hour surveillance and enforcement is in place for Teluleu		۷																		
2-2a	Seek funding for existing protected area conservation and law enforcement officers (PMLED) salaries and benefits																				
2-2b	Seek funding to recruit and hire (1)conservation officer and (2) additional law enforcement officers to be able to provide 24 hour surveillance of protected area																				
2-3	By May 2013, adequate equipments and resources for protected area conservation and law enforcement officers have been hired to improve enforcement and surveillance services		V															n			
2-3a	Seek and ensure funds for training and on-going capacity building for conservation and law enforcement officers																				
2-3b	Seek and secure funds for necessary equipments to carry out effective enforcement and surveillance activities																				
CR5	Maintenance and On-the-Ground Strategies	1								Ī											
2-1	By December 2012, official boundary for Teluleu is properly marked and clearly visible from afar	٧																			
2-1a	Work with BLS/PALARIS to make official the boundaries of Teluleu	со	mpl	ete	d																
2-1b	Install adequate markers clearly visible to the naked eye to deter illegal entry into the area	С	om	olet	ed																
2-1c	Install "No-Entry" signs on the four corners of the CA	С	omp	lete	d																

#### V Site Description, Activities, and Restrictions

As prefaced in the Introduction section of this Plan, not many studies have been conducted for Teluleu. The baseline study commissioned by this management plan will be able to provide insight into the value of the area as a nursery. However, sufficient information has been drawn from a number of assessments reported on the marine environment of Peleliu. Because of limited information, this Plan can only highlight the connectivity and vital role of Teluleu within a larger ecological context.



PCS Photo Collection, 2012



Seagrass meadow in Peleliu (photo by Brad)

"Peleliu marine waters support the largest seagrass beds and second largest mangrove swamps in Palau along with spectacular ocean reef walls. The seagrass beds occur along the northeast side of the island, continuing out onto the large barrier and fringing reef flats adjacent to Peleliu. The beds are nearly continuous, stretching from NW facing to the SE facing ocean reef flats NW of the island. The main bed measures 6.0 x 5.3 km, and is the largest in Micronesia. Wave action and tidal currents contribute to the maintenance of this vast seagrass meadow. Green sea turtles and occasionally dugongs feed among the grass. Large fish populations are supported by the seagrass<sup>iii</sup>".

"Mangrove swamps in Peleliu are also the largest outside of Babeldaob. They provide critical habitat for one of only two remaining breeding populations of endangered saltwater crocodile in Palau. Large mangrove crab and shellfish beds are associated with the mangroves. These swamps differ from those of volcanic islands in Koror and Babeldaob and constitute a unique and important ecosystem for Palau<sup>iv</sup>".

Teluleu is a seagrass area in Peleliu that is surrounded by a reef crest. This area has a depth that ranges from the lowest tide of 0.5 meters to the highest of about 2.9 meters, and has a weak current. Teluleu is composed of mostly seagrass with little parts consisting of coral, rubble, and sand. The seagrass area is composed of three types of seagrass species, namely *Enhalis acoroides, C. rontundata,* and the dominant *Thalassia hemprichii.* Teluleu is valued for the herbivorous fish that reside in the area, as well as different species of sea cucumber and sea turtles.

Teluleu serves an important function of providing refuge to young fish in their growth cycle. The area provides a crucial link as it receives larval supplies from nearby spawning areas (which are outside of the conservation area and are not protected) and hosting the small fishes as they transition to a stage where they are ready to exit the nursery.

#### Activities, Allowable and Non-Allowable

The goal for Teluleu Conservation Area is to protect and conserve the fish population and habitat. To achieve this goal through management, the following control measures are put in place.

- To control the access and usage of Teluleu, taking into consideration uses for specified and limited community purposes.
- To conserve the fish populations of Teuleu.
- To conserve the biological resources of Teluleu, especially the nationally protected fish species populations.

- To identify and support environmentally compatible and non-extractive activities for people to enjoy.
- To accommodate research and education for locals and visitors of important resources for the state
- To establish effective surveillance, enforcement and biological monitoring programs for Peleliu.

All activities within the Reserve boundary require a permit to be issued by the Governor. The following activities are allowable within the stated limitations:

REF NO.	ΑCTIVITY	CONTROL MEASURE	PERMIT	FEE
	Entry (Special)	Traditional, cultural, and educational such as those based on creation myths, migration and oral traditions, school tours and scientific research and monitoring	V	V
	Commercial Underwater Photography	Photography for commercial use and for profit	V	V
	Commercial Diving / Snorkeling	Prohibited		
	Turtle harvest	Prohibited		
	Fishing (of all forms)	Prohibited		
	Trochus harvest	Prohibited		
	Monitoring	For purpose of Teluleu only under the auspices of the Governor. To assess and evaluate the status of the Reserve in relation to the goal of the Reserve and the stated objectives of the management Plan.	V	
	Research	To provide information concerning Teluleu that increases the understanding of the conservation area and its function.	V	
	Enforcement and Emergencies	Entry into the Reserve for enforcement activities is allowed at any time, provided it is done so by an authorized enforcement officer of the state or the national government. Also included under this provision is entry for special circumstances, specified by the Governor, such as: search and rescue, removal and salvage of wrecks deposited after the establishment of the conservation area, and pollution control including oil spill control and clean-ups.		
Spe	cific Prohibitions	With the exception of the specific activities noted above, all other activities wi	thin Telu	leu
Con	servation Area are	e prohibited. Prohibited activities include, but are not limited to:		
		isanal, and subsistence fishing.		
	The take of turt	les.		
		tion or drilling within the conservation area		
		ctive uses such as sand mining, coral mining, dredging, etc		
	-	ns of new species.		
		structure development		
Vulr	=	equiring Special Management:		
	Hawksbill Turt			
	Green Tur		-	due
	Dugo		uleu.	
	Saltwater Crocod	ile		

#### VI Parties Responsible for Implementing the Management Plan

Implementation of the Management Plan is led and coordinated by the management authority but will involve cooperation and collaboration between the different divisions or departments of the State Government, the State Legislature, the Traditional Leaders, and the *cheldebechel* (community-based organizations). Other areas of implementation in the Plan will also require close collaboration with national government agencies such as the Division of Fish & Wildlife, Bureaus of Agriculture and Marine Resources.

#### Management Authority

The ultimate executive authority of this Plan is the Governor. The success or failure to achieving the goals of the Plan relies heavily on the commitment and willingness of the top executive and his creativity to exploit the potential of this Plan to bring the State to its desired vision.

#### Peleliu Marine Enforcement Division

Effective implementation and enforcement of the Plan entails considerable commitment, time, and resources, including certain skills and knowledge. For that reason, this Plan proposes the creation of a dedicated unit within the executive branch of the State Government that is to be run by an administrative head. The unit shall be primarily responsible for the daily administration, enforcement, planning, resourcing, budgeting, and reporting to or on behalf of the Governor including but not limited to the following duties:

- Develop the Departments annual work plan and budget
- Coordinate law enforcement incidents with the Ministry of Justice.
- Produce and ensure adequacy of incident reports.
- Seek to process and file citations in Court.
- Report to the Governor every end of budget year of its expenditures, investments, and progress in advancing the objectives of this Management Plan.
- Seek and exploit new source of funding from activities within the protected area, the Palau PAN Fund, or other external donor agencies.
- Lead and coordinate the review and update of the Management Plan every Year 4 of the Plan.
- Develop and produce reports as required by the Governor and external donors.
- Pursue ongoing capacity building and training programs for department personnel and other assisting state personnel.

The Governor may also, from time to time, create temporary advisory committees made up of representation of the various stakeholders to advise him on the direction and management of Teluleu and the state's protected areas network.

#### Management Personnel

This Plan proposes, at a minimum, that the management authority shall house a unit head, four Marine Rangers and one Conservation Officer. A Peace Corps or JICA Volunteer may also be recruited to assist

with specific aspects of the Plan (such as creation of educational materials).

- 1. Protected Area Coordinator (1)
- 2. Conservation Officer (1)
- 3. Marine Rangers (3 immediate hires)
- 4. Peace Corps or JICA Volunteer

This plan also intends to utilize the services of existing State personnel, including:

- 1. State Finance and Administrative Staff
- 2. State Maintenance and Public Works Staff
- 3. State Transportation Staff

Other professional services will be needed with certain aspects of the Plan such as:

- 1. Legal services (i.e. promulgation of regulations)
- 2. Technical services (i.e. research and monitoring)
- 3. Consultancy (i.e. bird-watching tourism industry, sports fishing industry, etc...)

The Plan also proposes to seek engagement from the *cheldebechel* (community-based organizations) from time to time during outreach programs.

#### **Duties of Management Personnel and Divisions**

(see Appendices 1 - 4)

#### Palau Conservation Consortium: Experts, Cooperation, and Partnerships

To help improve the State's management skills, a number of government, semi-government, and nongovernment agencies are available to provide the State with technical support in planning, management, monitoring and other related expertise. Most of the agencies voluntarily form and participate in the Palau Conservation Consortium. The Consortium holds meetings from time to time and welcomes participation and attendance of newly organized conservation management authorities.

Belau National Museum, Natural History Department	Palau Automated Land and Resource Information						
	Services (PALARIS)						
Bureau of Agriculture	Palau Conservation Society						
Bureau of Marine Resource	Sustainable Land Management Project (SLM)						
Environmental Quality Protection Board (EQPB)	The Nature Conservancy						
Helen Reef Project	US Natural Resource Conservation Services						
Koror Department of Conservation and Law							
Enforcement							
National Weather Services							

Palau Conservation Consortium, Participating Agencies:

#### VII Budget and Sustainable Financing Mechanism

The budget is developed based on best estimated cost of the activities laid out for year one and projected over the next four years. Based on the activities, the budget for Year one is <u>\$239,616.00</u>. The amount includes significant start-up costs in the area of capital or major equipment investments.

Teluleu Conservation Area, Five Year Budget Outlook	Year 1	Year 2	Year 3	Year 4	Year 5
RECURRING COSTS					
Personnel					
Protected Area Coordinator	\$18,000.00	\$18,900.00	\$19,845.00	\$20,837.00	\$21,879.00
Conservation Officer	\$16,000.00	\$16,800.00	\$17,640.00	\$18,522.00	\$19,448.00
Senior PA Ranger	\$14,000.00	\$14,700.00	\$15,435.00	\$16,207.00	\$17,017.00
Protected Area Rangers (3x)	\$30,000.00	\$31,500.00	\$33,075.00	\$34,729.00	\$36,465.00
Peace Corps Volunteer/JICA Volunteer	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00
Governor (25%)	\$8,000.00	\$8,400.00	\$8,820.00	\$9,261.00	\$9,724.00
State Finance Officer (20%)	\$3,600.00	\$4,725.00	\$4,961.00	\$5,210.00	\$5,471.00
Total Protected Area and Law Enforcement Staff					
Subtotal	ć00 500 00	Ć05 025 00	\$100,676.00	6105 CCC 00	¢110.004.00
Subtotal Supplies	\$90,500.00	\$95,925.00	\$100,676.00	\$105,666.00	\$110,904.00
Paper supplies	\$500.00	\$525.00	\$551.00	\$579.00	\$608.00
Office supplies	\$500.00	\$525.00	\$551.00	\$579.00	\$608.00
Consumable Field Supplies (slates, ropes, etc)	\$1,500.00	\$1,575.00	\$1,654.00	\$1,737.00	\$1,824.00
Uniforms	\$1,500.00	\$1,000.00	\$800.00	\$800.00	\$1,824.00
Subtotal	\$1,500.00	\$1,000.00	\$3,556.00	\$3,695.00	\$3,840.00
Petroleum Oil Lubricants	\$16,000.00	\$16,800.00	\$17,640.00	\$18,522.00	\$19,448.00
Maintenance & Repair	\$5,000.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00
Communications (internet, telephone, postage)	\$1,800.00	\$1,890.00	\$1,985.00	\$2,084.00	\$2,188.00
Publication (design, print, broadcast)	\$5,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
Capacity Building & Training	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
Subtotal	\$30,300.00	\$27,690.00	\$28,625.00	\$29,606.00	\$30,636.00
Meetings	7-0/	7 - 1 / 22 21 22	+==,=====	+	<i>,</i> ,
Community meetings	\$1,200.00	\$1,200.00	\$1,200.00	\$1,200.00	\$1,200.00
Subtotal	\$1,200.00	\$1,200.00	\$1,200.00	\$1,200.00	\$1,200.00
Contractual			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Legal Services	\$5,000.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00
Technical Experts	\$12,000.00	\$2,500.00	\$2,500.00	\$1,500.00	\$1,500.00
Annual Reports, Workplans, and Budgets	\$1,000.00	\$-00	\$-00	\$-00	\$-00
Management Monitoring and Evaluation	\$5,000.00	\$3,500.00	\$3,500.00	\$5,000.00	\$3,500.00
Subtotal	\$23,000.00	\$9,500.00	\$9,500.00	\$10,000.00	\$8,500.00
Subtotal (All categories)           Administration (17%)	\$149,000.00	\$137,940.00	\$143,557.00	\$150,167.00	\$155,080.00
Includes occupancy, insurance, bank fees, audits, depreciation, and other miscellaneous operational expenses	\$25,330.00	\$23,449.80	\$24,404.69	\$25,528.39	\$26,363.60
Recurring Costs TOTAL	\$174,330.00	\$161 <i>,</i> 389.80	\$167,961.69	\$175,695.39	\$181,443.60
CAPITAL ASSETS AND EQUIPMENT					
Enforcement & Surveillance Station	\$-00	\$-00	\$-00	\$-00	\$-00
Patrol Boat	\$18,000.00	\$-00	\$-00	\$-00	\$-00
Utility Truck	\$25,000.00	\$-00	\$-00	\$-00	\$-00
Field equipment (GPS, cameras, binoculars, radios, SCUBA	\$3,500.00	\$-00	\$-00	\$-00	\$-00
gear, safety equipment) Mooring buoys	\$1,500.00	\$-00 \$-00	\$-00	\$-00	\$-00
			\$-00		
Demarcation buoys	\$3,000.00	\$-00		\$-00	\$-00
Desktop computer	\$1,200.00	\$-00 \$-00	\$-00 \$-00	\$-00 \$-00	\$-00 \$-00
Laptop computer	\$1,500.00 \$800.00	\$-00 \$-00	\$-00 \$-00	\$-00 \$-00	\$-00 \$-00
Projector Printer	\$800.00	\$-00 \$-00	\$-00 \$-00	\$-00 \$-00	\$-00 \$-00
PA System	\$500.00	\$-00	\$-00	\$-00	\$-00
•	6FF 000 00	<i>.</i>	<i></i>	<i></i>	<i></i>
Subtotal (All categories)	\$55,800.00	\$-00	\$-00	\$-00	\$-00
Administration (17%)	\$9,486.00	\$-00	\$-00	\$-00	\$-00
Capital Asset Costs TOTAL	\$65,286.00	\$-00	\$-00	\$-00	\$-00
	\$239,616.00	\$161,389.80	1		1

#### Sustainable Financing

This Plan proposes the community and state government to acquire membership for the Teluleu Conservation Area with the Palau PAN. The membership with PAN will help secure means for sustainable financing for the management of Teluleu. In addition, the Plan identifies other strategic objectives that will help expand opportunities to sustainably finance the conservation area. One option is forging partnership with a community based group (CBO) or *cheldebechel*, who can seek and apply for other grant opportunities to help financially sustain the management of Teluleu. Another medium term strategy in the Plan is to seek technical assistance to develop a fundraising plan for Teluleu Conservation Area. For long term conservation, a potential source of funding to support management and conservation of Teluleu and other critical biodiversity sites in Peleliu is income generated from an established tourist fee.

#### VIII Capacity Building

#### Knowledge and Skill Building

The development of basic understanding in conservation and management skills is fundamental for sustaining effective conservation measures. Capacity building required for the authority responsible for implementing this Plan can be approached both from the top down and bottom up. The decision-makers, who often are responsible for creating conducive policy and legal environment and leadership, can be equipped with general knowledge and basic understanding that form the basis for conserving natural resources. At the management level, the acquisition of basic technical and administrative skills is important to effectively implement this Plan. Thus, successful implementation would require cultivating a professionally ran department committed to building capacity for its leadership, personnel and other support staff. The Plan also offers new employment opportunities for the State. Therefore, management approach must take into account the following areas of capacity building:

Basic Technical Skills	Administrative and Reporting Skills	General Knowledge and Understanding
Basic Law Enforcement Academy	Integrated Strategic and Financial Workplan	Understanding Biodiversity
Basic CPR Certification	Quarterly and Annual Reports	Understanding Ecosystems and Ecosystems Services
Open Water SCUBA Certification	Basic Facilitation Skills	Understanding Climate Change
Basic Writing Skills in English/Palauan	Organization and Time Management Skills	Species Management: Fish, Birds, Coconut Crabs, Trochus, Clams
Basic Biosecurity and Quarantine	Monitoring Management Effectives	Cost of Protecting Biodiversity and Sustainable Financing
		Knowledge of Palau Environment Legal Framework National & State

#### Access to Training

At this time, access to training can be mostly opportunistic. However, it is critical to begin training as soon as possible. Opportunities for trainings can be pursued by contacting any of the resource agencies in the Palau Conservation Consortium. Trainings can come in the form of actual voluntary fieldwork to help out an agency or another state, in the form of a workshop, or through fee for services. From time to time, regional trainings are offered and will cost the State. For this reason, the Plan's budget line items include Capacity Building & Training, Travel, and Per diem / Subsistence.

#### Timing and Application of New Skills

Each time employees undergo training, it increases the likelihood for a successful management. It is understandable that organized protected area management is a new experience for the State Government. In this instance, the earlier new skills are gained the more room there is for practice and refinement of skills through experience.

The Office of the Governor and the Peleliu Marine Enforcement Division must be conscious of encouraging personnel to share and apply newly acquired skills whenever and wherever possible. The best training grounds for such is at the home state, where staffs are comfortable to make mistakes and not be shy or discouraged.

#### IX Review and Approval Process

There are several planning activities in the next five years, such as the creation of round the clock enforcement, visitor awareness, and public outreach plans. Additionally, PAN regulations require a written Annual Work Plan with corresponding budgetary requirements. Annual reviews of this Management Plan are also necessary, as well as a thorough review and revision at the five-year mark. Thus, this Plan includes the establishment of a permanent Advisory Council.

The head of the division (or PA Coordinator) shall be responsible for generating annual reports that convey the progress of objectives in this Plan. The annual reports must include a financial report and shall incorporate all relevant monitoring and evaluation data and information.

Based on these reports, the division head shall draft annual work plans and a budget request to be forwarded to the Advisory Council for review. The division head shall also forward any recommendations for changes to this Management Plan to the Advisory Council.

The Advisory Council shall review, change, and approve the Work Plans and any changes to the Management Plan. Once the Advisory Council has approved the annual work plans and any changes to the Management Plan, they shall be forwarded to the Governor in the form of a proposal for review and approval. Once the Governor has approved the annual work plans and changes to the Management Plan, the Governor's signature and date is affixed on the revised Plan with the Annual Work Plan and Budget.

#### X Conflict Resolution

In the case of conflicts between any parties in this Plan, the Governor shall ask the Traditional Leaders for their advice. If necessary, any party may initiate facilitated meetings (with advice and facilitation provided by technical partners such as PCS, TNC, or any other impartial body) to assist with conflict resolution. The State Attorney shall be consulted on any conflicting legal matters.

#### XI Legal Authority

The Constitution of the Republic of Palau delegates specific powers to state governments, and reserves all other powers to the national government. The states have been specifically granted "ownership" of its water resources

within the water area surrounding its land (to 12 nautical miles). The Constitution specifically and significantly expands the scope of this ownership right by allowing the states to collect revenues with regard to the state's water territory.

This Plan is given authority by laws of the State and the Peleliu State Constitution. The plan is also supported by the Palau Protected Areas Network Act and various other National laws.

#### State Laws

Peleliu State Public Law No. 311-12 establishes the Peleliu Protected Areas Network Act. It also compels the state governor to promulgate rules and regulations to aid in enforcing the prohibitions of the Act.

#### National Laws

The Palau Constitution provides that state power lies only where specifically granted to the states or where specifically denied to the national government. Article XI, Section 2 of the Constitution reads

"All governmental powers not expressly delegated by this Constitution to the states nor denied to the national government are powers of the national government. The national government may delegate powers by law to the state governments"

This Plan is in line with National Laws. The following is a list of national laws that impact the scope and implementation of this management plan:

The Marine Protection Act of 2007 (27 P.N.C. § 1201-1211)	<ul> <li>Limits domestic fishing</li> <li>limit the take, sale, purchase, and export of many species</li> <li>closed seasons for grouper and rabbit fish,</li> <li>minimum sizes for parrotfi sh, wrasse, crabs, and lobster</li> <li>gear restrictions (prohibition on fishing with SCUBA gear and minimum and prohibitions on certain types and sizes of nets)</li> </ul>
	<ul> <li>restricts the taking of aquarium fish</li> <li>requires labeling of exports</li> <li>authorizes additional regulations to protect certain species</li> </ul>
27 PNCA §§ 101-207	Limits foreign fishing within the 200 mile EEZ. Prohibits foreign fishing within Palau's territorial sea and internal waters (generally 3 miles from a land baseline)
Endangered Species Act (24 P.N.C. § 1001-1012)	Prohibits any person from taking, engaging in commercial activity with, possessing, or exporting any endangered or threatened species of plant or animal.
Protected Sea Life-Turtles (24 P.N.C. § 1201)	Limits seasons and size for sea turtle harvesting. Prohibits taking of eggs or harassment of females during egg-laying.
Hawksbill Sea Turtle Law	Places a 5-year moratorium on all harvest of Hawksbill Sea Turtles (2011-2015)
27 PNCA §§ 101-207	Limits foreign fishing within Palau's 200 mile extended fishery zone. Foreign fishing is generally prohibited in Palau's territorial sea or internal waters (waters up to three miles from the baseline).
Control of sponge harvesting (24 P.N.C. § 1211)	Limits harvest of sea sponges.
Mother-of-Pearl (24 P.N.C. § 1221)	Prohibits harvest of mother of pearl.
Dugong (24 P.N.C. § 1231)	Prohibits harvest or harassment of dugongs.
Trochus (24 P.N.C. § 1241-1246)	Controls trochus harvest.
Protected Land Life Act (24 PNCA § 1401)	Prohibits harvest or harassment of all but four bird species.
Title 24 Palau National Code Annotated (24 PNCA) (The Environmental Quality Protection Act)	Establishes general standards for environmental review and regulates earthmoving, water quality, air pollution, and environmental impact.

#### XII Background Information

#### Peleliu Community

Peleliu is one of the sixteen state governments in Palau located southwest of Koror. The state jurisdiction contains five separate island bodies surrounded by its twelve nautical mile nearshore water. The main island of Klouklubed has a total area of 5 mi<sup>2</sup> (13 km<sup>2</sup>) that holds tenure of Teluleu Conservation Area. It is also home to the main population of Peleliu and host to over 100 households and nearly 700 fulltime residents. The community enjoys all basic amenities to include twenty-four hour electricity, piped water, a disintegrated sewer system, telecommunications including access to the internet, schools and churches. All of the public essential services are subsidized and technically supported by the state government.

Peleliu is a forty minute ride by speed boat from Koror. A state operated boat provides public transportation from Peleliu to Koror and back at least twice weekly. The public transport and easy access makes for availability of import goods that supplies small "mom and pop" stores. The supplies also hold up a growing tourism industry that goes to Peleliu for World War II relics on land and marine, as well as other marine recreational activities.



Figure 3 Map of Peleliu, Bureau of Land & Survey

#### **Description of the Management Planning Process**

In early 2012, the Governor created a community planning team to work with Palau Conservation Society to develop a protected area management plan for Teluleu Conservation Area. The team, composed of twelve members, initiated the planning process in April. Thereafter, the team held several planning meetings and community meetings. The planning meetings were held both in Peleliu (the community) and in Koror at the Palau Conservation Society conference room. All of the community meetings were held in Peleliu in the evenings. The community meetings took place before planning began, in the interim, and after the first draft of this Plan was submitted to the Governor.

#### Peleliu Planning Team Members:

Vice Speaker Edwight Mengiraro, Chairman Timothy Rrull, Vice Chairman Eden R. Uchel, Secretary Legislator Joe Nobuo A. Lukes Isechal Joel Okada Legislator Gene Tkel Legislator Hanes Tsuneo Roxanne S. Blesam Lalii Chin Maireng Sengebau Milton Shioichi

#### Strengths Weaknesses Opportunities Threats (SWOT) Analysis

The planning team had an opportunity to go through a SWOT exercise to understand the feasibility of successfully implementing the management objectives of this Plan over the next five years.

STRENGTHS	OPPORTUNITIES	WEAKNESSES	THREATS
INTERNAL	EXTERNAL	INTERNAL	EXTERNAL
MAJORITY COMMUNITY	WATER TRANSPORTATION;	LACK OF 24HR	TOURISM (HUMAN
SUPPORT	BOAT IN FUTURE	SURVEILLANCE	PRESSURE)
EXISTING MARINE	FINANCIAL SUSTAINABILITY:	LACK OF PROTECTION /	POACHERS – ILLEGAL
ENFORCEMENT DIVISION	MONEY FROM PAN, USER FEES	ENFORCEMENT	HARVEST (MOSTLY FISH)
NATURAL NURSING	DIVE GEARS, LAPTOP	LACK OF MANAGEMENT	LACK OF FUNDIING FOR
GROUND SPECIFIC TO TELULEU		PLAN	BOUNDARY MARKERS
LOTS OF FISH AND OTHERS	PCS PLANNING ASSISTANCE	LACK OF EXPERTISE:	DILIDS (RED TIDE)
(SEACUCUMBERS,		MONITORING, CERITIFIED	
SEAGRASS)		SCUBA	
GOVERNMENT LEADERS SUPPORT	BECOME MEMBER OF PAN	SEDIMENT	STORMS BREAK CORALS
LOCAL KNOWLEDGE	ECONOMIC GROWTH: 2%	PAST DREDGING CHANGED	BOAT TRAFFIC OIL
	OF BLOCK GRANT FOR PA ESTABLISHMENT	HYDROLOGY	POLLUTION / DEBRIS
MONITORING PLAN DONE	PICRC WILL ASSIST	LAND DEVELOPMENT	LAND BASED POINT SOURCE
	MONITORIING AND SURVEYS / TRAINING	CAUSING EROSION INTO TCA	POLLUTION
TRADITIONAL BUL	NGO TRAINING	LACK OF HUMAN	HUMAN POLLUTION
		RESOURCE: MORE CONSERVATION OFFICERS	
SHOULD HAVE MORE	MONITORING TECH, VIDEO	CAPACITY BUILDING:	NON POINT SOURCE
PUBLIC AWARENESS	CAMERA	FORMAL TRAINING LAW ENFORCEMENT	STORMWATER
	SMALL TOUR OPERATORS TO		CLIMATE CHANGE: CORAL
	TEACH AWARENESS		BLEACHING
	INTERNATONAL AID FOR		DESTRUCTIVE FISHING
	INFRASTRUCTURE		METHODS: NETS <3
	IMPROVEMENT		

#### XIII Conclusion

The strength of this Plan lies with the people of Peleliu, their state government, and its leaders, who have been engaged in the process and have given their full support in creating the Teluleu Conservation management plan.

This plan brings to the forefront, the desires and wishes of the people of Peleliu for Teluleu. But the wishes and desires of the people reflected in the goals and stated in the Plan to a great extent, rely on the Palau Protected Areas Network for assistance in law enforcement and sustainable financing. The state government and community are committed to the implementation of this Plan, and look forward with vigor to continue support for full implementation of the Teluleu Conservation Area Management Plan.

#### **ENDNOTES**

#### **APPENDICES**

Position Descriptions:

Department Head, Appendix 1 Protected Area Coordinator, Appendix 2 Conservation Officer, Appendix 3 Protected Area Rangers, Appendix 4

Conservation Action Plan Report of Peleliu, Appendix 5

<sup>&</sup>lt;sup>i</sup> Personal communications with local fishermen who also served on the community management planning team 2012.

<sup>&</sup>lt;sup>ii</sup> Personal communication with A.L. Isechal during familiarization tour of Teluleu, 2012.

<sup>&</sup>lt;sup>III</sup> Information from the "Marine And Coastal Areas Survey of the Main Palau Islands: Part 2 Rapid Ecological Assessment Synthesis Report" by JE Maragos, et al., 1994 USDOI, p. 67-70.

<sup>&</sup>lt;sup>iv</sup> Information from the "Conservation Action Plan Report by the Nature Conservancy Palau Field Office, 2011.