

Medal Ngediull Conservation Area, Airai a Five Year Management Plan (2014 – 2019)

*“kora lemau era
Ngediull el di
omekeroul a mo
kemedukl”*

June 2013

*Prepared for
Airai State Government by
the Airai State Resource
Management Planning Team
with assistance from
L. Gibbons-Decherong,
Palau Conservation Society*

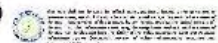
*Supported by the
Office of the Governor*

*Additional support provided
by the Nature Conservancy*



Legend
Medal Ngediull
Mangroves

0 125 250 500 Meters
Scale 1:13,000



Contents

Foreword	
1 Introduction	1
2 Management of Medal Ngediull Conservation Area	2
2.1 <i>Management Goals and Strategic Objectives</i>	2
2.2 <i>Management Actions</i>	4
2.3 <i>Five Year Plan and the Palau Protected Areas Network Management Criteria</i>	10
3 Year 1 Work Plan Activities Cost and Budget	13
3.1 <i>Budget</i>	13
3.2 <i>Sustainable Financing</i>	17
4 Parties Responsible for Implementing the Management Plan	17
4.1 <i>Management Authority</i>	17
4.2 <i>Management Personnel</i>	18
4.3 <i>Palau Conservation Consortium: Experts, Cooperation and Partnerships</i>	19
5 Capacity Building Plan	19
5.1 <i>Knowledge and Skill-building</i>	19
5.2 <i>Access to Training</i>	20
5.3 <i>Timing and Application of New Skills and Knowledge</i>	20
6 Review and Approval Process of this Management Plan	20
7 Conflict Resolution	21
8 Legal Authority	21
8.1 <i>National Authority</i>	21
8.2 <i>State Authority</i>	22
8.3 <i>Traditional Authority</i>	23
8.4 <i>Enforcement</i>	23
8.5 <i>Penalties and Fines</i>	23
9 Site Description	24
9.1 <i>Targets for Conservation</i>	25
9.2 <i>Conservation Threats</i>	26
10 Activities, Restrictions and Prohibitions	27
11 Background Information	28
11.1 <i>Medal Ngediull Conservation Area Community</i>	28
11.2 <i>Description of the Management Planning Process</i>	28
12 Conclusion	28
Endnotes	29

APPENDICES

Foreword

Developing a plan for a very important conservation site in the state of Airai involves time, dedication, and patience. This is a product of many months of hard and dedicated work of a State Resource Management Planning Team chaired by Honorable Delegate Kerai Ngirmekur of Ngerusar Hamlet with technical expertise of a Technical Team led by Ms. Lolita Gibbons-Decherong, Program Manager of Conservation and Protected Areas at Palau Conservation Society (PCS).

When we learned that this kind of a plan was required by the Office of Protected Areas Network (PAN) to be done before we could request for any funds from Green Fees, it took us a while searching for funding and seeking for individual(s) or an agency who can help the state of Airai to develop the required plan. Fortunately, we found Palau Conservation Society so through special arrangement with its Former Executive Director, Mr. Elbuchel Sadang, it was agreed that they will help the state of Airai to develop its PAN Site Management Plan. On May 17, 2012, I signed an Executive Order that created a State Resource Management Planning Team (SRMPT) consisting of representatives from the two affected hamlets of Ordomele and Ngerusar and representatives from concerned departments of the State Government, who worked in close collaboration with a Technical Team consisting of professionals from the Palau Conservation Society, the Nature Conservancy and the Palau International Coral Reef Center to develop the required plan.


This plan contains meaningful and helpful information about the site and all the different species of fish that are significantly important to the lives and the cultures of Airai State. In addition, the plan also outlines our wishes and desires as people of Airai through a stated vision and management goals and objectives for Medal Ngediull.

Researching, discussing, compiling, recording and organizing information for producing the kind of product required patience, time, experience and some traditional expertise as these were done during normal work hours, weekends, and long evening hours. It took more than an anticipated time to do what was done and this plan became possible.

It is not possible to acknowledge fully and appropriately all the individuals that have helped to make this plan possible. However, we wish to sincerely thank first the Palau Conservation Society, especially Mr. Elbuchel Sadang, Former Executive Director of PCS for his understanding and full support and Ms. Lolita Gibbons-Decherong, Program Manager of Conservation and Protected Areas at Palau Conservation Society for her professionalism and tireless efforts in leading the development of this plan to a successful completion.

We also thank Delegate Kerai Ngirmekur of Ngerusar Hamlet who chaired the State Resource Management Planning Team and all the members of the team who were the key staff of their respective departments of the Airai State Government for working diligently and professionally to complete the required plan.

We also extend our sincere gratitude to everyone who helped by providing information and making this plan possible.



Victoria "Vicky" Ngiratka-Kanai
Governor

6th Airai State Constitutional Government (Year 2010- 2014)



Governor Victoria Ngiratka-Kanai

I Introduction

Medal Ngediull Conservation Area is situated to the east of the state of Airai or Southeast of Babeldaob Island, the largest land mass in Palau. The site measures 3.18 square kilometers or 318.46 hectares. The boundary of the conservation area follow natural landmarks outlining traditional boundaries beginning from Bkul Olesabaol to Kliis Ra Ebas, to Toi Ra Meres, to Bkul a Tmengedib, to Chedelteber, to Bkul a Teblo Medal, and ending at an area known as Bkul Ngermeosar. Medal Ngediull is relatively small but with rich habitat diversity. The site includes mangroves, limestone rock islands, shallow reef basins, reef flats and sediment bottoms. According to the Palau International Coral Reef Center (PICRC), Medal Ngediull is a critical habitat for juvenile Napoleon Wrasse, Humphead Parrotfish, and Rabbit Fish.

Figure 1 Map of Medal Ngediull, Office of PALARIS



In 2005, Airai State Government formally designated the site as a “**No Entry**” conservation area through enactment of Airai State Public Law No. A-4-14-05. Following the formal designation, in 2012 the state nominated Medal Ngediull to the Palau Protected Areas Network as IUCN Management Category 1a, Use Category A Restricted non-extractive uses. Membership in the Palau PAN was acquired, making the conservation area eligible for sustainable financing from the PAN Fund and added law enforcement support from the Ministry of Justice.

Our Vision

In 10 years we so desire to see rampant sediment build-up and all other forms of pollution eliminated from Medal Ngediull Conservation Area. That the area is full of life once again with abundant fish, turtles, and all other living things that habituate inside Medal Ngediull. That our children, people of Airai, and all curious are given opportunity to learn and participate in the conservation management of the Area, so they may one day sustain conservation actions to maintain the health, productivity, and important ecosystem services of Medal Ngediull, and that the area is contributing positive benefits to the well being of our people and the overall economy of the State of Airai.

2 Management of Medal Ngediull Conservation Area

Rationale and Scope of Management

Medal Ngediull Conservation Area is an exceptional protected site with high ecological diversity and several types of habitat that provide a wide collection of species taking refuge in the area. However, while MCA is protected from human access and extraction as a “no-entry” site, it suffers rampant sediment build-up caused by soil erosion run-offs coming from nearby land activities.

The scope of this Plan in the next five years first, seeks to improve ecological integrity of the conservation area by saving its coral reefs from land pollution. In addition, the Plan proposes strategies to improve institutional support for conservation management, promote educational and social values that are specifically linked to the cultural significance of the site and representative of the people of Airai, and increase community awareness of both threats and opportunities of MCA. The goals determined for this Plan by the Airai State Resource Management Planning Team also seek to complement if not help advance, the goals and objectives of the Airai Master Plan that was ratified by the state legislature in January 2010.

2.1 Management Goals and Strategic Objectives

Goal 1: Medal Ngediull is restored to a healthy reef the way it is remembered by senior community members over 30 years ago.

1-1 By March 2014, immediate actions to reduce run-off into MCA are taken and monitoring is in place to track amount of run-off captured

1-2 By March 2015, a long term Sediment Reduction Plan is developed and implementation begins.

1-3 By December 2014, appropriate measures are taken to clear mangroves that are encroaching into coral reef areas

Goal 2: Medal Ngediull Conservation Area offers an engaging and interactive learning platform in both environmental and social science studies for students and general public at all levels.

2-1 By March 2014, an urgent one year public campaign message aimed for reducing land pollution into MCA has been developed and launched with the community.

2-2 By July 2014, a general public awareness and outreach plan focusing on MCA has been developed and is being implemented.

2-3 By May 2014, a regularly scheduled “ureor el beluu” to clean the reef has been established and implemented on annual basis.

2-4 By May 2014, identify and develop at least one cultural event linked to Medal Ngediull and implement with the community.

Goal 3: Protected Area is supported by improved Rules & Regulations and full enforcement.

3-1 By December 2013, the state has improved Rules and Regulations that support enforceability of ASPL No. A-4-14-05.

3-2 By March 2014, Protected Area Rangers are implementing 24 hour surveillance and patrol of the protected area.

Goal 4: A monitoring plan is in place and implemented by protected area staff but also allows community members to participate and engage in some of the monitoring activities.

4-1 By July 2014, a baseline survey of fish, invertebrates, corals, seagrass, and mangroves in the conservation area has been produced.

4-2 By March 2014, a bird assessment survey for Bkul a Kemim and Delebebai Islands in MCA is conducted.

4-3 By September 2014, a long term land pollution monitoring plan is in place to track sediment and other pollutant reduction and other improvements in MCA and is being implemented.

Goal 5: A fully operational protected area management unit is in place and effectively managing Medal Ngediull Conservation Area.

5-1 By January 2014, boundaries of MCA is adjusted and delineated, and accepted by all of the villages situated around the protected area, and the law is amended to designate improved boundaries.

5-2 By March 2014, the law has been amended to reflect new boundary and boundary is demarcated.

5-3 By May 2014, protected area personnel have been trained to develop and implement annual work plans, budgets, and required reports.

5-4 By August 2014, a sustainable financing plan to expand long term funding source of MCA management is in place and implemented.

5-5 By October 2014, management staff have capacity to conduct annual self management evaluations, develop work plans and budget, produce reports, and administer grant aids.

5-6 By March 2018, technical assistance is sought to conduct five year evaluation of MCA management plan and its implementation.

Goal 1, Medal Ngediull Conservation Area is part of Airai Bay and in very close proximity to land with uses made up of primarily residential settlement and some commercial uses. At the beginning of the management planning process, the planning team conducted its familiarization tour of the area. At the tour, the sediment build-up on the reef from visual observation appeared extreme. Five minutes into the tour a midsize green turtle surfaced the water all covered with mud. The mangroves seemed overgrown and invading an area of corals, this matter was also raised during the community meeting. This goal seeks to reduce the loss of coral reef using strategies that integrate watershed and sustainable land use objectives through development of a Sediment Reduction Plan.

Goal 2, this goal aims to increase awareness of the cultural significance of Medal Ngediull as well as educate the young generation in traditional etiquette for using and caring for their natural resources. This plan recognizes traditional knowledge and skills are dissipating thus affects the way people interact with their environment and leading to much carelessness and unsustainable use of resources. The goal also include actions that will increase public willingness to take measures on their own to reduce poor land use activities that will help to also reduce pollution into MCA.

Goal 3, while the state had designated Medal Ngediull as a conservation area for some time, they have not been able to develop and implement regulations that support full processes of enforcement. This goal aspires to provide sufficient regulatory and enforcement framework that outline processes or protocols for carrying out law enforcement duties, schedule of fines and collection, issuing special research permits and managing enforcement of the conservation area.

Goal 4, seeks to institute regular monitoring of the conservation area to track changes and be able to provide regular reports to the community of the status of the various conservation targets and including the sediment build-up and other pollution coming into the protected area.

Goal 5, the protected area is surrounded by several villages of Ordomeh hamlet and Ngerusar Hamlet. Some of the villages have traditionally had their own *taoch* used to access fishing grounds. When the protected area was established the boundary delineated closed off access to and from the *taoch*. This goal seeks to resolve existing boundary line where villagers can go back to using their *taoch* to access other unrestricted reefs where they can fish or for recreational activities. This matter was raised at a community meeting during the management planning process that the planning team took into consideration to address. Further, this goal puts forth effort to improve management of Medal Ngediull by making sure there are ample resources and capacity to carry out management activities. It also ensures that the unit in charge of management is also able to constantly seek additional outside support and be able to administer and report on such assistance.

2.2 Management Actions

This section outlines specific activities for the management authority to carry out under each of the objectives proposed in this plan. The initial activities that were determined by the Airai State Resource Management Planning Team during the management planning process mainly make up a work plan for the first year of implementation of this Plan (see Table 1). The activities identified are also actions that have been deemed feasible and practical for the existing Department of Marine and Coastal Conservation given their current capacity and extent of support coming from the state government and the community. Thereafter, for each of the years following, the management staff must go through an annual work plan exercise to develop a work plan for the coming year. The new work plan will include an associated budget and submitted to the Governor for approval.

The activities already contained for year one of this Plan, also serve to provide basis for an estimated budget for the first year of implementation and in which year one is used as baseline for projecting funding requirements the following second year to the fifth year of the Plan.

Table of Activities by Quarter	2014				2015				2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
2-1 By March 2014, an urgent one year public campaign message aimed for reducing land pollution into MCA has been developed and launched with the community		√																		
2-1a) seek technical assistance to help develop key message for the campaign, identify key audience, plan campaign launch, and produce a one year schedule of activities and carry out																				
2-2 By July 2014, a general public awareness and outreach plan focusing on MCA has been developed and is being implemented				√																
2-2a) seek technical assistance to help develop important messages and design public outreach and awareness plan for MCA																				
2-3 By May 2014, a regularly scheduled “ureor el beluu” to clean the reef has been established and implemented			√																	
2-3a) conduct consultations with state leadership and traditional leaders of MCA to obtain guidance for scheduling and planning the “ureor el beluu”																				
2-3b) establish set schedule for annual “ureor el beluu” and incorporate into state calendar of events; and implement annually																				
2-4 By May 2014, identify and develop at least one cultural event linked to Medal Ngediull and implement with the community			√																	
2-4a) consult with Governor and other appropriate leaders to plan an annual social cultural event the promotes cultural values of MCA for the community; and implement																				
3-1 By December 2013, the state has improved Rules and Regulations that support enforceability of ASPL No. A-4-14-05	√																			

Table of Activities by Quarter	2014				2015				2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
3-1a) seek technical assistance to help develop rules and regulations for MCA																				
3-1b) submit final draft of rules and regulations to the Governor and state legislature for adoption																				
3-1c) ensure all necessary forms to implement rules and regulations are printed and available for use																				
3-1d) design, develop, and publicize newly adopted rules and regulations																				
3-2 By March 2014, Protected Area Rangers are implementing 24 hour surveillance and patrol of the protected area		√																		
3-2a) Additional rangers are hired and trained for surveillance and patrol																				
3-2b) A standard operations procedure for implementation of ASPL No. A-4-32-06 "Airai State Ranger Act of 2006" is developed and implemented to support state rangers in carrying out their duties under the Act																				
4-1 By July 2014, a baseline survey of fish, invertebrates, corals, seagrass, and mangroves in the conservation area has been produced							√													
4-1a) seek outside assistance to help conduct baseline survey and develop a monitoring plan																				
4-1b) develop and produce a report of the survey and submit to the Governor and state legislature																				
4-1c) plan and schedule community meetings to inform and update the community of current survey results																				
4-2 By March 2014, a bird assessment survey for Bkul A Kemim and Delebebai Islands in MCA is conducted		√																		

Table of Activities by Quarter	2014				2015				2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
4-2a) seek technical assistance to help conduct bird survey in Bkul A Kemim and Delebebai and develop a monitoring plan for forests and birds; and implement																				
4-2b) develop and produce report of survey results and submit to Governor and state legislature																				
4-2c) consolidate bird assessment survey with activity 4-1c to update and inform community of current bird survey results																				
4-3 By September 2014, a long term land pollution monitoring plan is in place to track sediment and other pollutant reduction and other improvements in MCA and is being implemented								√												
4-3a) seek technical assistance to help develop a long term land pollution monitoring plan; and implement																				
5-1 By January 2014, boundaries of MCA is adjusted and delineated, and accepted by all of the villages situated around the protected area, and the law is amended to designate improved boundaries		√																		
5-1a) conduct field survey to determine desired adjustment																				
5-1b)Governor requests field survey by PALARIS / BLS																				
5-1c)a map of newly adjusted boundary is produced and brought to the community for input																				
5-1d) a proposed change to the boundary is submitted to the state legislature to consider for amendment of the MCA designation Act.																				
5-2 By March 2014, the law has been amended to reflect new boundary and boundary is demarcated		√																		

Table of Activities by Quarter	2014				2015				2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
5-2a) new boundaries are marked by GPS coordinates and buoys are installed																				
5-2b) sign boards are erected at all docks adjacent to MCA to inform the public of boundaries and prohibitions of the conservation area and maintained thereafter																				
5-3 By May 2014, protected area personnel have been trained to develop and implement annual work plans, budgets, and required reports			√																	
5-3a) seek training from the PAN Office or other Palau Environmental Consortium agencies for capacity building training and attend such trainings																				
5-4 By August 2014, a sustainable financing plan to expand long term funding source of MCA management is in place and implemented								√												
5-4a) seek assistance to help develop a sustainable financing plan for MCA; and implement																				
5-5 By October 2014, management staff have capacity to conduct annual self management evaluations, develop work plans and budget, produce reports, and administer grant aids						√														
5-5a) conduct first annual self management effectiveness evaluation; and repeat every year thereafter																				
5-5b) develop annual work plan with associated budget for year 2 of this plan and submit to Governor; and repeat thereafter																				
5-6 By March 2018, technical assistance is sought to conduct five year evaluation of MCA management plan and its implementation																		√		

2.3 Five Year Plan and the Palau Protected Areas Network Management Criteria

In 2012, Airai State Legislature ratified the Palau Protected Areas Network (PAN) Regulations and Palau's commitment to the Micronesia Challenge of conserving thirty percent of its near shore marine area and twenty percent of its terrestrial area by the year 2020 (otherwise usually presented as Micronesia Challenge 30/20 by 2020). In the same year, the state nominated Medal Ngediull Conservation Area to the PAN and submitted their nomination application that was accepted by the Minister of Natural Resource Environment and Tourism, thus gaining their membership in the PAN. The PAN membership made Medal Ngediull Conservation Area as a PAN site eligible for sustainable financing from the PAN Fund and including eligibility for law enforcement assistance from the Ministry of Justice when requested by the Governor of the state.

As a PAN site, this management plan for Medal Ngediull Conservation Area aims to meet all aspect of conservation management categories that are suggested in the PAN Regulations. These management categories include 1) administrative and regulatory strategies, 2) education, awareness, and outreach strategies, 3) research and monitoring strategies, 4) enforcement and surveillance strategies, and 5) maintenance and on-the-ground strategies. In this section following, the management strategies for this Plan are organized into each of the management categories.

Category 1: Administrative and Regulatory Strategies

Strategies under this category 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, and filling in policy or regulatory gaps such as promulgating rules and regulations to enable implementing procedures to enforce the state law that designated Medal Ngediull as a conservation area.

Ref. No.	Administrative and Regulatory Activities	Short term (Yr 1)	Med-term (Yr 2-3)	Long term (Yr 4-5)	RECURRENT
1-1a	Create a small voluntary technical group who will identify a set of short term measures to reduce run-off into MCA	X			
1-2a	Seek technical assistance to help develop a long term Sediment Reduction Plan and submit to Governor for approval; and implement	X			X
1-2b	Identify strategic areas as "restricted earth-moving zones" and submit to Governor to take further urgent policy actions	X			
1-3a	Create a technical working group who will work to develop a mangrove management plan for MCA		X		
1-3b	Seek expert advice that will help identify actions to address overgrown mangrove in MCA		X		
1-3c	Seek technical assistance to help develop a long term Mangrove Management Plan; and implement		X		X
2-3a	Conduct consultations with state leadership and traditional leaders of MCA to obtain guidance for scheduling and planning the "ureor el beluu"	X			
2-3b	Establish set schedule for annual "ureor el beluu" and incorporate into state calendar of events; and implement annually	X			X

Ref. No.	Administrative and Regulatory Activities, <i>continued</i>	Short term (Yr 1)	Med-term (Yr 2-3)	Long term (Yr 4-5)	RECURRENT
2-4a	Consult with Governor and other appropriate leaders to plan an annual social cultural event that promotes cultural values of MCA for the community; and implement annually	X			X
3-1a	Seek technical assistance to help develop rules and regulations for MCA	X			
3-1b	Submit final draft of rules and regulations to the Governor and legislature for adoption	X			
3-1c	Ensure all necessary forms to implement rules and regulations are printed and available for use	X			
4-2b	Develop and produce report of survey results and submit to Governor and state legislature	X			
5-1b	Governor requests field survey by PALARIS / BLS	X			
5-1c	A map of newly adjusted boundary is produced and brought to the community for input	X			
5-1d	A proposed change to the boundary is submitted to the state legislature to consider for amendment of the MCA designation Act	X			
5-3a	Seek training from the PAN Office or other Palau Environmental Consortium agencies for capacity building training and attend such trainings	X			
5-4a	Seek assistance to help develop a sustainable financing plan for MCA; and implement	X			X
5-5a	Conduct first annual self management effectiveness evaluation; and repeat every year thereafter	X			X
5-5b	Develop annual work plan with associated budget for year 2 of this plan and submit to Governor; and repeat every year thereafter	X			X

Category 2: General Public Education Awareness and Outreach Strategies

Under this category are the activities that channel effort into increasing the MCA community and general public of the status of the area as restricted, why, how, where, and what benefits this action will bring about to the people of Airai and Palau. It also supports promotion of specific cultural values coming from natural events that occur in the area such as the “Imall”. Activities under this category also allow for social events that provide opportunity for public engagement in caring for the reef such as “urreor el beluu”. The social events are intended to promote appreciation of traditional conservation ethics and convey important lessons particularly to the young people of Airai.

Ref. No.	Public Education Awareness and Outreach Activities	Short term (Yr 1)	Med-term (Yr 2-3)	Long term (Yr 4-5)	RECURRENT
2-1a	Seek technical assistance to help develop key message for the campaign, identify key audience, plan campaign launch, and produce a one year schedule of activities and carry out	X			
2-2a	Seek technical assistance to help develop important messages and design public outreach and awareness plan for MCA; and implement	X			X
3-1d	Design, develop, and publicize newly adopted rules and regulations	X			X
4-1c	Plan and schedule community meetings to inform and update	X			

	the community of current survey results				
4-2c	Consolidate bird assessment survey with activity 4-1c to update and inform community of current bird survey results	X			

Category 3: Research and Monitoring Strategies

Under this category, the Plan proposes to establish regular monitoring to track the health of the reef and fish, mangroves, including the limestone islands and birds in MCA, and community attitude. Currently, the Palau International Coral Reef Center conduct biological monitoring at the site. The monitoring plan will involve gathering baseline information, biophysical monitoring and targeted research and may also include socio economic monitoring. Additionally, the DMCC personnel under the capacity building plan will seek to build their skills in research and monitoring.

Ref. No.	Research and Monitoring Activities	Short term (Yr 1)	Med-term (Yr 2-3)	Long term (Yr 4-5)	RECURRENT
4-1a	Seek outside assistance to help conduct baseline survey and develop a monitoring plan; and implement	X			X
4-1b	Develop and produce a report of the survey and submit to the Governor and state legislature	X			
4-2a	Seek technical assistance to help conduct bird survey in Bkul a Kemim and Delebebai and develop a monitoring pan for forests and birds; and implement	X			X
4-3a	Seek technical assistance to help develop a long term land pollution monitoring plan; and implement	X			X

Category 4: Enforcement and Surveillance

Enforcement and Surveillance strategies include establishment of standard operational procedures that will provide protocols, guidelines, and standards of enforcing rules and regulations for Medal Ngediull Conservation Area. Further, because of MCA's close proximity to land and easy access, illegal entry into the area persists particularly during night time. To address this matter, this plan proposes to launch 24 hour surveillance and patrol of the conservation area to try and stop illegal entry into the area. There are also related strategies that cross over to support enforcement and surveillance strategies such as promulgation of rules and regulations for MCA which overlaps from administrative and regulatory strategies.

Ref. No.	Enforcement and Surveillance Activities	Short term (Yr 1)	Med-term (Yr 2-3)	Long term (Yr 4-5)	RECURRENT
3-2a	Additional rangers are hired and trained for surveillance and patrol	X			
3-2b	A standard operations procedure for implementation of ASPL No. A-4-32-06 "Airai State Rangers Act of 2006" is developed and implemented to support state rangers in carrying out their duties under the Act	X			X

Category 5: Maintenance and On-the-Ground Strategies

Strategies under this category include activities that require field time and mostly resulting in physical tangible results. Such actions may include installation and maintenance of buoys, signage, or billboards, building trails or other conservation area infrastructures.

Ref. No.	Maintenance and On-the-Ground Activities	Short term (Yr 1)	Med-term (Yr 2-3)	Long term (Yr 4-5)	RECURRENT
1-1b	Identify proper areas to install silt fences and sediment filter socks to reduce run-offs	X			
5-1a	Conduct field survey to determine desired adjustment	X			
5-2a	New boundaries are marked by GPS coordinates and buoys are installed and maintained thereafter	X			X
5-2b	Sign boards are erected at all docks adjacent to MCA to inform the public of boundaries and prohibitions of the conservation area and maintained thereafter	X			X

3 Year 1 Work Plan Activities Cost and Budget

The first year work plan show that the number and type of activities to be carried out mainly fall under the administrative and regulatory functions. This indicates that formal conservation management for MCA is still at its initial stage therefore so much time will be dedicated to building institutional support and regulatory environment. Financial allocations on the other hand show the bulk of year one’s budget for carrying out activities weigh most heavy on Public Education Awareness and Outreach followed by Research and Monitoring. The least funded activities in year one are Maintenance and On-the-Ground and Enforcement and Surveillance Functions. Under all of the management categories, some activities initiated are completed at the end of its time line or once it has been achieved, such as designating improved boundary lines for MCA. Other activities will be initiated, for example establishment of 24 hour surveillance and patrol which will require constant watch around the clock, thus is recurrent in nature, and will become part of standard operations for the Department of Marine and Coastal Conservation.

The work plan puts each activity into respective category, tells us who the lead person for that activity will be, what will be the indicators of success, benchmarks to measure progress, estimated cost of the activity, and description of cost (see Table 2).

3.1 Budget

The budget based on the level of activities and support requirement, give the cost of operations and investment of initial start up major equipment and assets that are necessary to successfully carry out activities. Because this Plan proposes that management of MCA be sustainably financed, it has to actively seek external source of funding without relying too much on the State’s limited income. For this reason, a 12% administrative cost for the state to administer grants has been determined and included in the budget. Following is a summary of the budget, while detailed budget is shown (see Table 3) following the work plan table.

	Year 1	Year 2	Year 3	Year 4	Year 5
Recurring Costs	157634	151701	153416	155859	157312
Capital Assets Cost	36848	58240	28000	21952	21784
TOTAL ALL COSTS	194482	209941	181416	177811	179096

Medal Ngediull Conservation Area, Airai

Table 2 Year 1 Work Plan and Activities Cost

Ref No.	Objective/Activity	General Strategy	Lead person	Indicator of success	How measured	Estimated cost	Cost description
1-1a	Create a small voluntary technical group who will identify a set of short term measures to reduce run-off into MCA	Administrative & Regulatory	Department Head or designee	voluntary technical group created	composition determined, people selected	300	meeting supplies
1-2a	Seek technical assistance to help develop a long term Sediment Reduction Plan and submit to Governor for approval; and implement	Administrative & Regulatory	Department Head or designee	plan is approved and implemented	TA identified; draft submitted	2500	technical assistance cost
1-2b	Identify strategic areas as "restricted earth-moving zones" and submit to Governor to take further urgent policy actions	Administrative & Regulatory	Department Head or designee	Governor issue policy or legislature passes law restricting identified zones	areas are identified; restricted activities recommended and submitted to Governor	1000	technical advise
2-3a	Conduct consultations with state leadership and traditional leaders of MCA to obtain guidance for scheduling and planning the "ureor el beluu"	Administrative & Regulatory	Department Head or designee	"ureor el beluu" scheduled; all men/women eldebechel show up	leaders supportive of idea; participate in planning	150	planning meeting supplies
2-3b	Establish set schedule for annual "ureor el beluu" and incorporate into state calendar of events; and implement annually	Administrative & Regulatory	Department Head or designee	event accepted on state calendar of events	first "ureor el beluu" provided great experience and community wants to continue	500	tools, first aid supplies, water, equipment rental
2-4a	Consult with Governor and other appropriate leaders to plan an annual social cultural event that promotes cultural values of MCA for the community; and implement annually	Administrative & Regulatory	Department Head or designee	cultural event takes place and many community leaders and eldebechel show up	great local review, young people learn something new about MCA	1000	set-up materials and supplies, equipment rental
3-1a	Seek technical assistance to help develop rules and regulations for MCA	Administrative & Regulatory	Department Head or designee	rules and regulations are drafted	TA identified	1500	TA fee,
3-1b	Submit final draft of rules and regulations to the Governor and legislature for adoption	Administrative & Regulatory	Department Head or designee	rules and regulations are adopted	draft submitted and Governor approves	0	
3-1c	Ensure all necessary forms to implement rules and regulations are printed and available for use	Administrative & Regulatory	Department Head or designee	forms are available for use	forms designed and ready for final printing	350	professional printing
4-2b	Develop and produce report of survey results and submit to Governor and state legislature	Administrative & Regulatory	Department Head or designee	survey report submitted to Governor	report drafted	0	
5-1b	Governor requests field survey by PALARIS / BLS	Administrative & Regulatory	Department Head or designee	field survey is conducted with PALARIS / BLS	Governor's request is received at PALARIS/BLS	50	field lunches and drinks
5-1c	A map of newly adjusted boundary is produced and brought to the community for input	Administrative & Regulatory	Department Head or designee	community accepts changes to boundary	map produced; community meeting takes place	250	meeting snacks and drinks, professional printing
5-1d	A proposed change to the boundary is submitted to the state legislature to consider for amendment of the MCA designation Act	Administrative & Regulatory	Department Head or designee	amendment passes in legislature	new boundaries satisfies community and legislature	0	
5-3a	Seek training from the PAN Office or other Palau Environmental Consortium agencies for capacity building training and attend such trainings	Administrative & Regulatory	Department Head or designee	staff complete trainings	relevant trainings identified	500	training fees, training materials
5-4a	Seek assistance to help develop a sustainable financing plan for MCA; and implement	Administrative & Regulatory	Department Head or designee	MCA Sustainable Financing Plan is produced	TA identified; consultancy begins; draft produced	1000	TA fee
5-5a	Conduct first annual self management effectiveness evaluation; and repeat every year thereafter	Administrative & Regulatory	Department Head or designee	ME self evaluation is conducted; and repeated every year	first evaluation conducted	0	

Ref No.	Objective/Activity	General Strategy	Lead person	Indicator of success	How measured	Estimated cost	Cost description
5-5b	Develop annual work plan with associated budget for year 2 of this plan and submit to Governor; and repeat every year thereafter	Administrative & Regulatory	Department Head or designee	Annual work plan with budget produced	staff conduct work planning exercise	0	
2-1a	Seek technical assistance to help develop key message for the campaign, identify key audience, plan campaign launch, and produce a one year schedule of activities and carry out	Education Awareness Outreach	Department Head or designee	a stop land pollution into MCA" campaign is launched and activities carried out	campaign plan is produced	7000	TA fee, posters, signage, meeting supplies, fact sheets, media broadcast, print media, dvd production
2-2a	Seek technical assistance to help develop important messages and design public outreach and awareness plan for MCA; and implement	Education Awareness Outreach	Department Head or designee	MCA Public Education Awareness and Outreach Plan is produced and implemented	TA identified; plan development begins	2500	TA fee, professional layout & printing
3-1d	Design, develop, and publicize newly adopted rules and regulations	Education Awareness Outreach	Department Head or designee	Rules & Regulations printed and available to public; posted online	hand out materials are developed	1500	professional printing, distribution
4-1a	Seek outside assistance to help conduct baseline survey and develop a monitoring plan; and implement	Research & Monitoring	Department Head or designee	monitoring plan is developed and implemented	TA identified, survey carried out, plan developed	5000	TA fee, field lunches and drinks, monitoring materials
4-1b	Develop and produce a report of the survey and submit to the Governor and state legislature	Research & Monitoring	Department Head or designee	survey report submitted to Governor	survey data collected, analyzed, report drafted	0	
4-2a	Seek technical assistance to help conduct bird survey in Bkul a Kemim and Delebebai and develop a monitoring pan for forests and birds; and implement	Research & Monitoring	Department Head or designee	monitoring plan is developed and implemented	TA identified, survey carried out, plan developed	3000	TA fee, field lunches and drinks, monitoring materials
4-3a	Seek technical assistance to help develop a long term land pollution monitoring plan; and implement	Research & Monitoring	Department Head or designee	sediment and land pollution monitoring plan is developed and implemented	TA identified, plan drafted	2500	TA fee
3-2a	Additional rangers are hired and trained for surveillance and patrol	Enforcement & Surveillance	Department Head or designee	additional rangers trained and carrying out duties	vacancy announcement issued, Governor hires	150	vacancy announcement publication
3-2b	A standard operations procedure for implementation of ASPL No. A-4-32-06 "Airai State Rangers Act of 2006" is developed and implemented to support state rangers in carrying out their duties under the Act	Enforcement & Surveillance	Department Head or designee	SOP produced and implemented	development of SOP begins and draft accepted and approved	500	technical advise
1-1b	Identify proper areas to install silt fences and sediment filter socks to reduce run-offs	Maintenance & Ontheground	Department Head or designee	silt fences and filters installed at proper areas	silt fences and sediment filter socks purchased	5000	silt fence materials, sediment filter socks, field technical assistance
5-1a	Conduct field survey to determine desired adjustment	Maintenance & Ontheground	Department Head or designee	location for boundary adjustment identified	field survey conducted	0	0
5-2a	New boundaries are marked by GPS coordinates and buoys are installed and maintained thereafter	Maintenance & Ontheground	Department Head or designee	new boundary demarcated	PALARIS plots new coordinates	75	field materials, lunches & drinks
5-2b	Sign boards are erected at all docks adjacent to MCA to inform the public of boundaries and prohibitions of the conservation area and maintained thereafter	Maintenance & Ontheground	Department Head or designee	signboards installed	sign boards designed and built	2500	2500
Activities Estimated Cost, Total						38825	

Table 3 Detailed Budget and Five Year Projection

Medal Ngediull Conservation Area, Airai	Year 1	Year 2	Year 3	Year 4	Year 5
Personnel					
Department Head	21000	21000	22050	23153	23153
Conservation Coordinator	17000	17000	17850	18743	18743
Field Monitoring Technician	11000	11000	11550	12128	12128
Protected Area Rangers (3x)	27000	27000	28350	29768	29768
Peace Corps Volunteer/JICA Volunteer		2400	2400	2400	2400
Governor (20%)	6400	6400	6720	7056	7056
State Finance Officer (20%)	3600	3600	3780	3969	3969
Total Staff	8	9	9	9	9
Subtotal	86000	88400	92700	97217	97217
Supplies					
Paper supplies	500	500	500	500	800
Office supplies	500	500	500	500	800
Consumable Field Supplies (slates, ropes, etc)	1200	1200	1000	1000	1000
Uniforms	500	500	500	500	500
Subtotal	2700	2700	2500	2500	3100
Petroleum Oil Lubricants	12045	12647	13279	13943	14640
Maintenance & Repair	2,000	1200	3000	3000	3000
Communications (telecomm, postage, shipping)	2100	2100	2100	2100	2100
Publication (design, print, broadcast)	3000	1500	1500	1500	1500
Capacity Building & Training	2500	2500	2500	2500	2500
Subtotal	21645	19947	22379	23043	23740
Meetings					
Community meetings	2400	2400	2400	2400	2400
Subtotal	2400	2400	2400	2400	2400
Contractual					
State Attorney	8000	5000	5000	5000	5000
Technical Experts (mapping, communications, assessments, feasibility,etc)	20000	12000	8000	5000	5000
Annual Reports, Workplans, and Budgets		2000	1000	1000	1000
Monitoring and Evaluation		3000	3000	3000	3000
Subtotal	28000	22000	17000	14000	14000
Subtotal (All categories)	140745	135447	136979	139160	140457
Administration (12%)	16889	16254	16437	16699	16855
Recurring Costs TOTAL	157634	151701	153416	155859	157312
CAPITAL ASSETS AND EQUIPMENT					
Enforcement & Surveillance Station	0	50000	0	0	0
Patrol Boat	16000	0	0	10000	0
Boat Service & Repair	0	2000	2000	2500	3000
Boat engine replacement	0	0			10000
Utility Truck	0	0	23000	0	0
Field equipment (GPS, cameras, binoculars, radios, SCUBA gear, safety equipment)	3000	0	0	3000	0
Mooring buoys	2500	0	0	0	2000
Demarcation buoys	5000	0	0	2500	2500
Desktop computer	1200	0	0	0	1200
Laptop computer	1600	0	0	1600	0
Projector	1600	0	0	0	0
Printers	1500	0	0	0	750
PA System	500	0	0	0	0
Subtotal (All categories)	32900	52000	25000	19600	19450
Administration (12%)	3948	6240	3000	2352	2334
Capital Asset Costs TOTAL	36848	58240	28000	21952	21784
TOTAL, ALL COSTS	194482	209941	181416	177811	179096

3.2 Sustainable Financing

While the State has set out to seek and acquire membership with the Palau Protected Areas Network making MCA eligible for sustainable financing from the PAN Fund, the DMCC must strive to seek additional source of financing. It is highly recommended that the state look for new opportunities for income generation and allocate a portion to subsidize the management of MCA or put away into a type of savings that can be used in case the PAN Fund is not able to provide one hundred percent funding. The state may also enter into partnership with a community-based organization with ability to seek and apply for grants to help sustain management activities. The DMCC may also build its capacity in grant writing skills to be able to seek grants that a public entity is eligible for and apply for such grants.

4 Parties Responsible for Implementing the Management Plan

This Plan proposes that implementation of the Management Plan be led and coordinated by the Department of Marine and Coastal Conservation (DMCC). The department however will work under the leadership of the Governor and operate in close cooperation with other departments of the state government, the state legislature, traditional leaders, and *eldebechel* (community-based organizations). Other areas of implementation in the Plan will also require close collaboration with national government agencies and NGO organizations.

4.1 Management Authority

For the reason that efficient and measurable implementation of this Plan involve commitment, time, and resources, the DMCC will be responsible daily for administration, enforcement, planning, resourcing, budgeting, and reporting to the Governor and state government, traditional leaders, donors, and community.

The Department will be responsible for carrying out the following general duties:

- Develop the Departments annual work plan and budget
- Coordinate law enforcement incidents within MCA with the Division of Fish and Wildlife
- 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 objectives of this Management Plan
- Seek and exploit new source of funding from activities within the state, the Palau PAN Fund, the GEF Small Grants Scheme Program, and other grant agencies
- Lead and coordinate review and update of the Management Plan on an annual basis and fifth year evaluation
- Develop and produce reports as required by the Governor and donors
- Pursue ongoing capacity building and training opportunities for department personnel and other assisting state personnel
- Plan, organize, and conduct MCA community meetings
- Make policy recommendations to the Governor that will help achieve conservation objectives for MCA
- Research issues relating to MCA

This Plan also proposes establishment of a voluntary Protected Area Review and Advisory Council for the Governor made up of at least nine but not more than eleven members to review and advise effectiveness of implementation particularly in areas of work where there are impediments to progress. The Review and Advisory Council may include at least one representative from:

1. The Office of the Governor
2. Traditional Leaders
3. Olbiil Ra Ngerchumelbai (state legislature)
4. Eldebechel rar sechal (men's community-based organization)
5. Elbechel rar redil (women's community-based organization)

and advisors from technical agencies that may include:

6. Palau International Coral Reef Center
7. Belau National Museum, Natural History Department
8. Environmental Quality Protection Board
9. Bureau of Marine Resource

The role of the Protected Areas Review and Advisory Council may include:

- Rendering advise on implementation particularly in areas where there are impediments to progress.
- Undertake guidance in planning when annual work plans are being developed and where new goals or objectives are being considered.
- Review related draft regulations or procedures including proposed changes to relevant legislation or bills and provide collective comments.
- Participation in annual evaluations and the management plans 5 year evaluation.

The advisory council may hold 2 meetings each year at the call of the designated chairperson with the Governor and the Department Head.

4.2 Management Personnel

This Plan proposes at a minimum the DMCC houses a department head, four protected area rangers, one conservation coordinator, a Field Monitoring Technician, and a professional volunteer such as a Japan JOCV or US Peace Corp.

Successful implementation of this Plan will also need assistance from other state personnel such as the finance and administrative staff, and maintenance and public works staff. Other professional services will also be need with certain aspects of the Plan such as legal services, technical services, and consultancy.

The Plan also proposes to seek engagement from community-based organizations within the MCA community to help carry out community activities such as outreach programs and others.

Specific position descriptions of management personnel are included in the appendix section.

4.3 Palau Conservation Consortium: Experts, Cooperation and Partnerships

A number of government, semi-government agencies, non-government organizations and professional individuals make available technical support in planning, management, monitoring and other related expertise to the State’s management authority to help improve their management skills. Most of the agencies and individuals 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.

Palau Conservation Consortium, Participating Public Agencies:

Belau National Museum, Natural History Department	Palau Automated Land and Resource Information Services (PALARIS)
Bureau of Agriculture	National Invasive Species Council
Bureau of Marine Resource	Koror Department of Conservation and Law Enforcement
Environmental Quality Protection Board (EQPB)	Palau International Coral Reef Center
PAN Office	National Weather Services
Office of Environmental Response Coordination (OERC)	US Natural Resource Conservation Services

5 Capacity Building Plan

The development of basic understanding of conservation and management skills is one of the key fundamentals of sustaining effective conservation measures. Capacity building required for DMCC and community leaders within MCA community and can be approached both from top down and from the bottom up.

5.1 Knowledge and Skill-building

Successful implementation would require cultivating a professionally ran department committed to building capacity for its personnel and other support staff. The Plan offers new employment opportunities for the State therefore management approach must take into account the following areas of capacity building:

<i>Basic Technical Skills</i>	<i>Administrative and Reporting Skills</i>	<i>General Knowledge and Understanding</i>
Basic Law Enforcement Academy	Integrated Strategic and Financial Work Plan	Understanding Biodiversity
Basic CPR Certification	Quarterly and Annual Reports	Understanding Ecosystems and Ecosystems Services
Open Water SCUBA Certification	Basic Facilitation Skills	Understanding Climate Change
Writing Incident Reports in English and Palauan	Organization and Time Management Skills	Species Management: Fish, Birds, turtles
Coral Reef Survey and Monitoring	Monitoring Management Effectiveness	Cost of Protecting Biodiversity and Sustainable Financing
Basic CPR Certification	Knowledge of Palau Environment Legal Framework National & State	
Fish Monitoring and Survey		
Bird Monitoring and Survey		

Search and Rescue: Wildlife Rescue		
Oil/Chemical Spill Response EQPB Certification		

5.2 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 also 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, or 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.

5.3 Timing and Application of New Skills and Knowledge

Each time employees undergo training it increases likelihood for 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 DMCC 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 home state, where they are comfortable to make mistakes and not be shy or discouraged.

6 Review and Approval Process of this Management Plan

There are several planning activities in the next five years, such as Sediment Reduction Plan, Awareness Campaign, and the Public Education Awareness and Outreach Plan. Additionally, PAN regulations require a written Annual Work Plan with corresponding budgetary requirements. Annual reviews of this Management Plan are also necessary, as is a thorough review and revision at the five-year mark. Thus, this Plan includes the establishment of a voluntary Review and Advisory Council.

The Department Director shall be responsible for generating quarterly progress reports and annual reports that convey the progress of objectives in this Plan. Both reports are accompanied with corresponding financial reports as required by the PAN Office. The Director shall incorporate all relevant monitoring and evaluation data and information into these reports.

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

The Advisory Council shall review and recommend changes to improve the Work Plans and any changes to the Management Plan. Once the Advisory Council has completed their review of the annual work plans and any changes to the Management Plan, they shall be forwarded to the Governor with report of their review and recommendation for approval. Once the Governor has approved the annual work plan

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.

The Advisory Council with the Department Head shall review and develop a revised and updated Management Plan and then seek approval from the Governor. The Governor may hold a public hearing on the proposed revised Plan.

7 Conflict Resolution

In the case of conflicts between any parties in this Plan, the Governor may seek advise from the traditional leaders of the MCA community. If necessary, any party may initiate facilitated meetings (with advice and facilitation provided by technical partners such as TNC or PCS) to assist with conflict resolution. The State Attorney shall be consulted on any conflicting legal matters.

8 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 and land territory.

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

8.1 National Authority

At the national government level, a number of laws are in place to provide control over harvest of species, use of poisons, explosives or chemicals and establishment of the Protected Areas Network. “There is also established an exclusive fishery zone contiguous to the territorial sea, extends twelve nautical miles from the baseline. There is also a 200 nautical mile extended fishery zone, covering approximately 600,900 square kilometers. Within the exclusive fisher zone the National Government has exclusive management, conservation and regulatory authority over all living resources to the extent recognized by international law”. (Gavitt, 2003).

<p>The Marine Protection Act of 2007 (27 P.N.C. § 1201-1211)</p>	<p>Limits domestic fishing</p> <ul style="list-style-type: none"> • limit the take, sale, purchase, and export of many species • closed seasons for grouper and rabbit fish, • minimum sizes for parrotfi sh, wrasse, crabs, and lobster • gear restrictions (prohibition on fishing with SCUBA gear and minimum and prohibitions on certain types and sizes of nets) • restricts the taking of aquarium fish • requires labeling of exports • authorizes additional regulations to protect certain species
<p>27 PNCA §§ 101-207</p>	<p>Limits foreign fishing within the 200 mile EEZ. Prohibits foreign fishing</p>

	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 (24PNCA) (The Environmental Quality Protection Act)	Establishes general standards for environmental review and regulates earthmoving, water quality, air pollution, and environmental impact.
Historical and Cultural Preservation Act (Title 19) Palau Lagoon Monument (Chapter 3)	Protects culturally, historically, or archaeologically significant areas eligible for protection. Chapter 3 protects underwater archaeological and historical tangible remains.
Protected Areas Network Act 24 PNCA Chapter 34	Creates the Protected Areas Network and the Protected Areas Network Fund

8.2 State Authority

For the Airai State, there are also a number of laws relevant to environmental conservation and protection including ASPL No. A-4-14-05 designating Medal Ngediull as a conservation area. Following is a table of relevant state laws:

ASPL No. A-2-04-94	Designates the Ngchesechang Mangrove Conservation Area
ASPL No. A-2-25-97	Designates Ngeream Conservation Area
ASPL No. A-2-27-97	Protection and preservation of historical and cultural resources of the state
ASPL No. A-3-03-99	Provide for control of subsistent and commercial fishing
ASPL No. A-4-02-02	Designates Oikull Mangrove Conservation Area
ASPL No. A-5-01-07	Provide for protection and conservation of trees and vegetation in mangrove and other wetland areas

The development of this Plan also referred to the Airai State Master Plan published in 2011 and the Draft Watershed Management Plan.

8.3 Traditional Authority

Traditional leadership lies with the *klobak* of each community or state. The *klobak* lead with *kelulau* or “whispered policies” which forms basis on which they lead, manage, protect and preserve the *beluu* or land (Historians, 1998). 1 PNCA §302 provide that “The customs of the people of Palau not in conflict with the legal authority set out in section 301 of this chapter shall be preserved. The recognized customary law of the Republic shall have the full force and effect of law so far as such customary law is not in conflict with such legal authority.

The Arai State Constitution Article VI Section 6 provide that “A Council of Chiefs composed of a traditional chief from each hamlet of Airai State, Ngiraked, Tuchermele, Ngirachitei, Iyechaderteluang, Spis, and Techedib, shall advise the Governor on matters concerning traditional laws, customs and their relationship to the Constitution and the laws of Airai State. The compensation of the members of the Council of Chiefs shall be established by law”.

8.4 Enforcement

Enforcement of the law creating MCA is carried out by the state’s protected area rangers. Further, because MCA is now in the PAN, 24 PNCA section 3410 provide that “All laws regulations with relation to a protected area as defined under this chapter may be enforced by the Ministry of Justice, Bureau of Public Safety, state and national law enforcement officers, or such personnel of the Ministry of Natural Resources, Environment and Tourism as the Minister so designates”.

According to the WildAid legal and enforcement assessment report conducted in 2003 it suggests that “because there are inadequate resources for enforcement at both National and State levels, law enforcement authorities should focus on traditional leaders as potential partners in management and protection of MPAs. Issues between law enforcement and traditional systems should be addressed through open discussions with communities and their traditional leaders concerning marine resource protection. With inclusion in the management and regulatory process, these communities (including their resource users) often become the “eyes and ears” for law enforcement. They not only comply with regulations but also provide officers important intelligence about illegal activity occurring in an area. As a result, enforcement efficiency goes up and costs go down” (Gavitt, 2003).

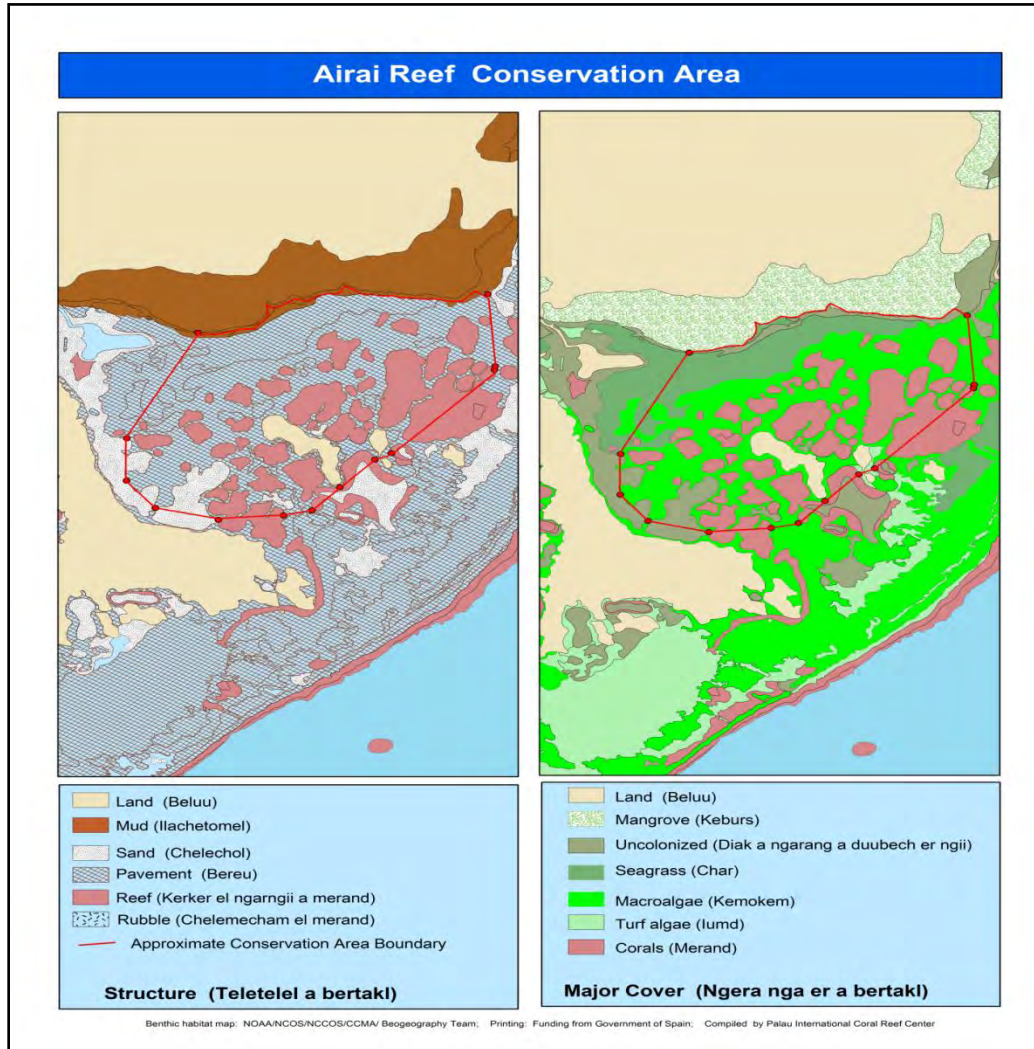
8.5 Penalties and Fines

In Section 4 of ASPL A-4-14-05 it states penalty for violation as such “Any person who violates Section 3 of this Act shall be subject to a fine of \$150.00 or imprisonment of not more than 30 days, or both. Further, Section 3409 of the PAN Act provide “Any person who is convicted of a violation of this chapter or regulations in relation to a nationally designated protected area may be sentenced to imprisonment for a term of up to 1 year, or fined not less than \$500, or both. Any person convicted of a second violation may be sentenced to imprisonment for a term of up to 2 years, or fined not less than \$2,500, or both. Subsequent violations shall carry a penalty of up to 5 years imprisonment and a fine of up to \$10,000, or both”. In addition, Section 3410 provide for civil penalties by a party aggrieved from actions that violated prohibitions of the PAN site.

9 Site Description

Medal Ngediull Conservation Area is a small protected site however, it offers rich habitat diversity. The total area of 318.46 hectares consists of 39 hectares (Kitalong, Kitalong, Penna, Kitalong, & Kitalong, 2009) of mangroves, two limestone rock islands consisting of small areas of terrestrial forests, a cave, and rock island fringing reef. The reef area is made up of shallow reef flats and sediment bottoms (mud and sand), sea grass, and reef basins.

Figure 2 PICRC MPA Effectiveness Survey 2006, Medal Ngediull Conservation Area



“A large number of basins around Babeldaob are found on the west sides of Ngarchelong and Ngardmau States (roughly 130 basins), the east side of Ngarchelong (about 20 basins), the southern reef of Airai State (about 80 basins), and the southwestern area of Babeldaob (about 28 basins). The reefs around Koror Island have about 40 basins (Colin, 2009). The reef basins of Airai, are almost all within Medal Ngediull.

9.1 Targets for Conservation

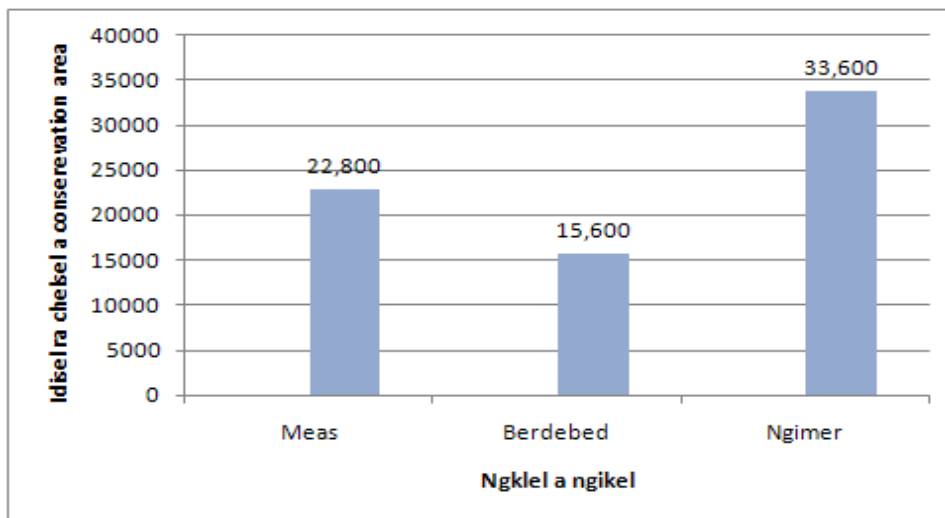
The main purpose of designating MCA as a conservation area as suggested in ASPL NO. A-4-14-05 is to bring back the once abundance of fish in the area. Total closure of MCA was the official strategy the state took to act on to help with rapidly diminishing local subsistence and small scale fishery from the area. The repeated concern was “*ng dikea ngikel*” or “no more fish” during the planning process. It was made clear at the community meeting and throughout the planning process that “fish” would be the main target for conservation. Other targets include species or attribute such as certain habitat and functions in Medal Ngediull that the community and the State Resource Management Planning Team (SRMPT) identified important and either wanted to protect or take measures to restore such as seagrass and corals¹.

Priority Targets Ranked		Other Important Targets	
1.	Fish	4.	Invertebrates
2.	Sea grass	5.	Mangroves
3.	Corals		

This Plan proposes that the above top three targets be the center of focus of this management plan for the next five years.

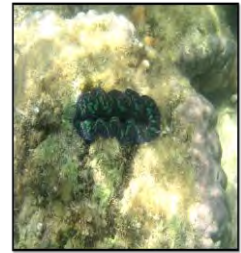
Priority 1 Fish. MCA is documented as critical habitat for ngimr, berdebed, and meas rabbitfish (Siganidae). Fish migration events take place in the area making the *Imall* a well known event and the people of Airai have popularized this event.

Figure 4 PICRC MPA Effectiveness Study 2006



Priority 2 Seagrass. The seagrass area in MCA is part of an extended sea grass bed on the fringing reef off Arai from Ngerdewais to the KB Channel (Colin, 2009). “Of the many fishes frequenting seagrass beds, the rabbitfishes (Siganidae) stand out as having both high biomass and traditional cultural importance. They have been variously estimated to comprise about 50% of subsistence catch for fishes from seagrass beds” (Colin, 2009).

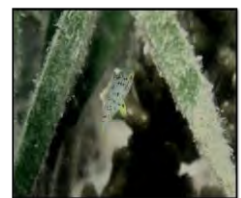
Figure 3 species variety MCA, PICRC 2006



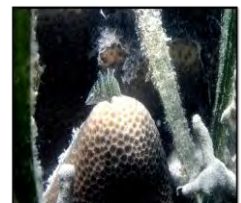
Oruer – tara cheled el debetik er ngii ra chesel a Conservation Area



Delul a char ma merand – soal a mekekerai el ngikel el kiei er ngii



Ngelekel a kemeduki (kekerei ra 1 inch)



Ngelekel a mami (kekerei ra 1 inch)



Ngikel el ngara delul a char

Priority 3 Corals. According to the Status of Palau’s Coral Reefs Report in 2005, the general south eastern region of Babeldaob show low to medium coral coverage in patch reefs and fringing reefs. The map on Figure 2 from PICRC’s MPA Effectiveness Project show sizeable coral coverage concentrated inside Medal Ngediull Conservation Area.

9.2 Conservation Threats

The main concern from the community meeting that also echoed throughout the planning process by the SRMPT was the run-off from land into MCA and sediment building up on in the mangrove areas and on the reef. Another issue of concern from the community were mangroves that were observed to be growing fast and encroaching into coral areas. Poaching or illegal entry into the area was brought up due to the fact that the state is not able to provide twenty four hour patrol or surveillance of the area to deter violators.

Threats of Critical Concern Ranked

1. Sedimentation
2. Overgrown mangroves
3. Poaching

Threat 1, Sedimentation. Although a specific study on sediment build up in MCA has never been conducted, a related study that included nearby Ngerikiil Watershed and Bay in 2010 concluded that “the biggest factor contributing to sedimentation on the reef was from development on land. Once sediments reached the reef, geomorphology and hydrodynamic properties determined the fate of sediments. Previous studies have demonstrated the numerous negative impacts of sediments on coral reef resources. Thus, the fate of reefs around Babeldaob ultimately will depend on the type and number of development activities within the watersheds” (Golbuu, Wolanski, Harrison, R.H., Victor, & Fabricius, 2011).

In 2009, a study for Mangroves, crabs, clams and communities in Arai State tested water quality and found high turbidity and coliform bacteria in MCA. This situation was found to be true at nearby Oikull Conservation Area and Ngcheschang Conservation Area (Kitalong, Kitalong, Penna, Kitalong, & Kitalong, 2009).

Figure 5 Arai Conservation Areas, PALARIS



Figure 6 Arai Official Land Use Map



The above Figures 5 and 6 provide an idea of the connection and general proximity of Medal Ngediull Conservation Area and other nearby conservation sites to allocation of land uses in the area.

Threat 2, Overgrown Mangroves. The mangrove area in MCA was an issue that also dominated a good part of the discussions during the planning process. Complaints highlighted from the SRMPT were *a)* the mangroves were encroaching into coral areas where fish used to forage and *b)* overgrown mangroves are not allowing air through and affecting natural current in the area “ngdiak a soiu”.

The prospect of mangroves as another critical threat to other habitat inside the conservation area may need to be investigated further. However, the seemingly accelerated spread of mangrove in the area was previously noted as far back as 2000 and the relationship is suggested to be due to increased development in the area (Colin, 2009).

Threat 3, Poaching. Although there is currently no patrol around the clock in the area, MCA is very close to nearby villages. The community reports hearing boats in the area at night and some can also be seen during the day.

10 Activities, Restrictions and Prohibitions

As stated in Airai State Public Law No. A-4-14-05, “Medal Ngediull is well known by the people of Airai as refuge to a variety of fish and other species, a nursery for juvenile fish, and that the mangroves, lagoon and ocean area is best preserved and conserved to ensure protection of its nursery function”.

In order to meet the wishes of the people of Airai, the following measures for control are put in place:

- To control the access and usage of Medal Ngediull
- To conserve and protect the fish population
- To conserve and protect all other biological resources inside the area
- To accommodate effective law enforcement, surveillance and patrol of the area
- To accommodate studies, research, survey and monitoring activities for the purpose of effective management of the conservation area itself
- To accommodate unforeseen or significant cultural or community event that obligates the state
- To prohibit entry for recreation
- To prohibit entry for rock island exploration
- To prohibit entry for fishing
- To prohibit entry for harvest of turtles
- To prohibit entry for the purpose bird watching
- To prohibit entry for general photography
- To prohibit entry for the purpose of extraction of any and all form of flora or fauna that is outside the scope of a permitted study, research, survey and monitoring activity
- To prohibit entry for the purpose of extraction of any minerals
- To prohibit entry for the purpose of building or infrastructure development

Other than the discharge of duties by authorized state protected area rangers or national law enforcement officials who have obtained a permit from the state, all other activities warranting entry into the conservation area may be permitted by the Governor with restrictions or limitations.

11 Background Information

The State of Airai is located immediately north of Koror, the commercial and tourism center for Palau connected by the Japan Palau Friendship Bridge. The Palau International Airport is located in Airai and so is the headquarters for the Palau National Communications Center and the Palau Water Treatment Plant.

Airai is home to the second largest urban population in Palau. According to the State, in 2012 there were a total of six hundred sixty six households in Airai. Modern concrete, semi-concrete, and wooden homes make up residential homes. Most public and large commercial buildings are concrete. Residents enjoy all basic amenities to include twenty four hour electricity, water, and sewage systems. Children attend the Airai Elementary School. Majority of the work force in Airai commute to Koror for their place of employment. Small scale enterprises exists in the state and so does subsistence living.

11.1 Medal Ngediull Conservation Area Community

The MCA falls under traditional governance of the hamlet of Ordomei and hamlet of Ngerusar. Ordomei is made up of three hundred forty eight households while Ngerusar has one hundred twenty five households.

11.2 Description of the Management Planning Process

In 2012, the Governor requested for assistance from Palau Conservation Society to help develop a management plan for Medal Ngediull Conservation Area. The state created a State Resource Management Planning Team to work with PCS in the development of the plan. The team was composed of the following representatives:

1. Chairman Kerai Ngirmekur, Delegate for Ngerusar Hamlet – Olbiil Ra Ngerchumelbai
2. Vice Chairman Junior Teriong, Delegate for Ordomei Hamlet – Olbiil Ra Ngerchumelbai
3. Clarence Kitalong, Olbiil Ra Ngerchumelbai
4. Ketty Santos, Airai Planning Commission
5. Clarence Polloi, Department of Marine and Coastal Conservation
6. Dedelil Daniel, Terrestrial Officer and Team assistant

The planning process was straight forward as MCA was the single site that the state wished to develop a management plan for and nominate to the Palau Protected Areas Network. Palau Conservation Society facilitated the planning process that included a community meeting, familiarization tour of the site, and the planning meetings. The meetings were mostly held at the state government building in Airai and few at the PCS office.

12 Conclusion

The strength of this Plan is the full support of the community and its leaders. The plan puts forward the desires and wishes of the people of Airai captured in the vision for Medal Ngediull Conservation Area. The successful progress toward that vision however, relies to a certain extent the support of the Palau Protected Areas Network for assistance in sustainable financing and law enforcement. The state

government and community are committed to the implementation of this Plan and look forward with vigor to support full implementation of the Medal Ngediull Conservation Area Management Plan.

Endnotes

ⁱ Prior to the development of this management plan a Conservation Action Plan exercise was never conducted in the community. The targets for conservation and identified threats were identified during the community meeting and the planning process.

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- Colin, P. L. (2009). *Marine Environments of Palau*. San Diego, CA: Indo-Pacific Press.
- Gavitt, J. (2003). *Marine Protected Areas in teh Republic of Palau: Status, Needs and Recommendations*. WildAid.
- Golbuu, Y., Wolanski, E., Harrison, P., R.H., R., Victor, S., & Fabricius, K. (2011). Effects of Land-Use Change on Characteristics and Dynamics of Watershed Discharges in Babeldaob, Palau, Micronesia. *Journal of Marine Biology* .
- Kitalong, A., Kitalong, K., Penna, N., Kitalong, C., & Kitalong, C. (2009). Mangroves, crabs, clams and communities in Airai State, the Republic of Palau. *11th Pacific Science Inter-Congress*, (p. 5).

Airai State Government

Department of Marine and Coastal Conservation

POSITION DESCRIPTION

Title:	Department Head
Reports to:	Governor
Primary Station of Duty:	Airai Department of Marine and Coastal Conservation, Airai State Government
Secondary Station of Duty:	
Salary:	\$21,000 to \$28,000 per annum
Classification:	Appointment and Contract
Upon Hire:	Resolution authority no. _____; Contract No. _____

Purpose

The Department Head is principle liaison between the community, traditional leaders, and state government whose primary role is to facilitate and obtain consensus between the various stakeholders to advance the goals of the Medal Ngediull Conservation Area Management Plan.

Duties & Responsibilities

The primary duties of the Department Head position is to provide executive direction and management of the Department of Marine and Coastal Conservation; act as the overall site manager for Medal Ngediull Conservation Area; Chief implementer of the MCA Management Plan; lead institutional building effort of the Department; and serve as a primary representative of the Department in a conscientious manner and consensus with the Governor.

The role and responsibilities of the Department Head position are as follows, but not limited to:

- Provide general oversight and management of all programs through implementation and review of the management plan, annual work plans and budgets in consultation with the Governor and the Conservation Coordinator.
 - Oversee daily operations.
 - Manage organizational properties, assets and financial resources.
 - Direct complex projects from concept to fully operational status, while ensuring program accountability to the state and legal compliance.
 - Assess and build teamwork, flexibility, adaptability, coordinating skills and common values and goals of staff as team leader.
 - Supervise, direct and evaluate staff performance.
 - Develop and implement institutional building plan, sustainable financing plan, enforcement and surveillance plan, and capacity building plan.
- Promote the Medal Ngediull Conservation Area Management Plan and its vision.
 - Establish, build and maintain functional relationship with key stakeholders, organizations, donors, members, communities and partners at the local, regional and

- international level.
- Communicate regularly with the community and partner agencies to address ongoing strategies and concerns.
- Ensures adequate reports to the Palau Protected Areas Network and the PAN Fund Board
- Report regularly to the Governor
- Other duties assigned by the Governor

Required Knowledge & Skills

- Apply decision-making and problem solving skills to lead and guide organization to achieve its goals and objectives.
- Apply organizational skills and time management by meeting deadlines with quality product.
- Apply team building strategies, i.e., inspire, motivate, resolve conflicts, build a shared vision, etc.
- Apply interpersonal, communications and negotiation skills.
- Apply fundraising strategies and methods.
- Ability to facilitate, develop and implement strategic conservation planning and policy.
- Apply knowledge of politics and society in the context of conservation.
- Possess leadership and visionary qualities.
- Possess cultural understanding and values of Airai and Palau.
- Strong enforcer of law and respects the rule of law both traditional and statutory

Basic Qualifications

- 5 years administrative experience as a senior manager in business management or organizational administration.
- Experience in managing and coordinating complex, multiple projects, and multi-faceted projects that include partners, community and other stakeholders.
- Experience in implementing strategic plans
- Strong knowledge of legal processes and law enforcement
- Some technical background in conservation and natural resource management field.

Preferred Qualifications

- BA/BS degree in Business Administration, Business Management, Financial Management, Natural Resource Management, or related fields.
- 5 years administrative experience as a senior manager in business management or organizational administration.
- Experience in managing and coordinating complex, multiple projects, and multi-faceted projects that include partners, community and other stakeholders.
- Strong technical background in conservation and natural resource management field.

Working Conditions

- Challenging Governor, leadership and staff with high expectations
- Twenty four hours duty

- Outdoor and field activities
- Some travel

Direct Reports

- Conservation Coordinator
- Conservation Officer
- Protected Area Rangers
- All other department staff

Approved by:	
Date approved:	
Date reviewed:	

This job description will be reviewed annually and updated as often as necessary.

Airai State Government
Department of Marine and Coastal Conservation

POSITION DESCRIPTION

Title:	Protected Areas Coordinator (conservation coordinator)
Reports to:	Department Head
Primary Station of Duty:	DMCC Office, Airai State Government Building
Secondary Station of Duty:	
Salary:	\$17,000 to \$23,000 per annum
Classification:	Full time Civic Employee
Upon Hire:	Personnel Action

Purpose

The Protected Area Coordinator's primary responsibility is to implement the protected area management plan and protected area regulations fully. Coordinate cooperative work and technical assistance with partners and supervise protected area staff. The PAC will also be responsible for developing annual work-plans, budgets, initiates review and revision process when deemed necessary or as scheduled in the management plan. The PAC is also responsible for developing all required reports including financial and performance and submits such reports to the Department Head in a timely manner.

An ideal candidate would have a strong interest in environmental issues and resource management and willing to spend considerable time on the job. The position requires a strong link to the community, familiarity with traditional and state government protocols, and the capacity to participate in physically demanding fieldwork. The position reports to the Department Head.

Role: *Coordinator and Implementer role: Ensure that all regulations are enforced and all management actions occur according to schedule. Work closely with the Department Head to coordinate management activities, review the Plan, and oversee all associated staff.*

Duties & Responsibilities

- Coordinate and implement activities
- Follow up with leadership on administrative actions, including development of permit system
- Coordinate development of educational materials and programs
- Supervise and coordinate printing and distribution of educational materials, signs, etc.
- Coordinate and participate in community meetings, cleanups, restorations, etc.
- Draft additional necessary plans and submit to Department Head for review (e.g. Communications Plan)
- Jointly develop daily surveillance plans

- Hear daily reports from Conservation Officers on enforcement issues
- Supervise and coordinate monitoring activities and baseline studies
- Collect and analyze monitoring data and suggest changes to Management Plan as necessary
- Develop annual work plans and budgets
- Initiate expenditure requests based on activities

Minimum Required Knowledge & Skills

- AA / AS Degree 2 years college
- At least 3 - 5 years work experience in related field or administration and management
- Strong ability to work as part of a multi-sectoral team
- Fluency in English and Palauan
- Computer literate—Microsoft Word, Internet Explorer, Outlook, and Excel

Basic Qualifications

- Experience in implementing strategic work plans
- Strong knowledge of legal processes and law enforcement
- Strong technical background in conservation and natural resource management field.

Working Conditions

- Challenging Department Head, Governor and staff with high expectations
- Planning, writing, designing, meeting, coordination, correspondences, research, facilitate
- Outdoor and field activities
- Some travel

Approved by:	
Date approved:	
Date reviewed:	

This job description will be reviewed annually and updated as often as necessary.

Airai State Government
Department of Marine and Coastal Conservation

POSITION DESCRIPTION

Title:	Conservation Officer
Reports to:	Department Head
Primary Station of Duty:	DMCC Airai State Government Building
Secondary Station of Duty:	
Salary:	\$12,000 - \$16,000 per annum (+Hazardous / Night Differential)
Classification:	Full time Civic Employee
Upon Hire:	Personnel Action

Purpose

The primary purpose of the Conservation Officer is to carry out activities under Research and Monitoring and On-the-Ground Activities; secondary purpose is to serve as proxy to the Protected Area Rangers whenever there is absence.

Role: chief implementer of Research and Monitoring activities, and On-the-Ground activities. Assists PA Rangers in completing citations to meet legal requirements and proxy to surveillance and patrol when there is absence.

Duties & Responsibilities

- Carry out research and monitoring activities;
- Carr out On-the-Ground activities (buoys, mapping, boundaries, signs, etc)
- Data collection and entry;
- To enforce all Airai State laws and special assignments dispensed by the Department Head;
- To comply with all special assignments, protect all citizens, conduct routine monitoring, and guard Airai State Government properties;
- To respond to non-compliance within the conservation area by utilizing patrol intercepts, warnings, citations, prosecutions, and community service projects;
- To work with the PA Rangers, PA Coordinator, and Department Head to ensure MCA Management Plan goals and objectives are met.
- To work with the National Division of Fish and Wildlife, Division of Marine Law Enforcement in enforcement response.

Minimum Required Knowledge & Skills

- AA/AS in science or related field
- Deputized Law Enforcement Officer (National Police Academy)
- At least 1 – 2 years work experience in related field
- Strong ability to work as part of a multi-sectoral team
- Fluency in English and Palauan
- Computer literate—Microsoft Word, Internet Explorer, Outlook, and Excel

Basic Qualifications

- Strong science or related field background
- Strong knowledge of legal processes and law enforcement
- Strong commitment to the rule of law both traditional and statutory
- Licensed boat and vehicle boat operator

Working Conditions

- Field / outdoor surveillance, patrol and pursuit
- All weather conditions apply
- Exposure to safety risks
- Required to undergo Marine and Terrestrial Measures Training
- Required to undergo National Police Academy, Open-water SCUBA Certification, Basic CPR
- Some travel

Approved by:	
Date approved:	
Date reviewed:	

This job description will be reviewed annually and updated as often as necessary.

Airai State Government

Department of Marine and Coastal Conservation

POSITION DESCRIPTION

Title:	Protected Area Ranger (combines terrestrial and marine)
Reports to:	Department Head
Primary Station of Duty:	DMCC Airai State Government Building
Secondary Station of Duty:	
Salary:	\$9,000 to \$16,000 per annum (+Hazardous / Night Differential)
Classification:	Full time Civic Employee
Upon Hire:	Personnel Action

Purpose

The primary purpose of the Protected Area Ranger is law enforcement, surveillance, and 24 hour patrol of Medal Ngediull Conservation Area.

Role: To act under the command of the Department Head and utilize all of the authority and responsibility of the Department Head when acting.

Duties & Responsibilities

- To enforce all Airai State laws and special assignments dispensed by the Department Head;
- To comply with all special assignments, protect all citizens, conduct routine monitoring, and guard Airai State Government properties;
- To respond to non-compliance within Medal Ngediull by utilizing patrol intercepts, warnings, citations, prosecutions, and community service projects;
- To work with the Conservation Officer, PA Coordinator, and Department Head to ensure MCA Management Plan goals and objectives are met.
- To work with the National Division of Fish and Wildlife, Division of Marine Law Enforcement in enforcement response.

Minimum Required Knowledge & Skills

- High School Graduate
- Deputized Law Enforcement Officer (National Police Academy, will undergo upon hire)
- At least 1 – 2 years work experience in related field
- Strong ability to work as part of a multi-sectoral team
- Fluency in English and Palauan

Basic Qualifications

- Strong knowledge of legal processes and law enforcement
- Strong commitment to the rule of law both traditional and statutory
- Licensed boat and vehicle operator

Working Conditions

- Field / outdoor surveillance, patrol and pursuit
- All weather conditions apply
- Exposure to safety risks
- Required to undergo National Police Academy, Open-water SCUBA Certification, Basic CPR
- Some travel

Approved by:	
Date approved:	
Date reviewed:	

This job description will be reviewed annually and updated as often as necessary.

Airai State Government
Department of Marine and Coastal Conservation

POSITION DESCRIPTION

Title:	Field Monitoring Technician
Reports to:	Department Head
Primary Station of Duty:	DMCC Airai State Government Building
Secondary Station of Duty:	
Salary:	\$9,000 to \$16,000 per annum
Classification:	Full time Civic Employee
Upon Hire:	Personnel Action

Purpose

The primary purpose of the Field Monitoring Technician is to conduct regular inspections and field investigations to track and measure soil and water run-off into MCA, inspects for pollution, collect and compile related field data and finds ways to control or prevent run-offs and pollution.

Role: To act under the command of the Department Head and utilize all of the authority and responsibility of the Department Head when acting.

Duties & Responsibilities

- To conduct regular field monitoring and collect soil and water samples
 - Compile data and log
 - Work with EQPB and PICRC to develop a sediment monitoring plan
 - Works with land developers and farmers to minimize water run-off
 - Assists Conservation Officer in other monitoring activities as called for in the management plan
-

Minimum Required Knowledge & Skills

- 2 year college
 - At least 1 – 2 years work experience in related field
 - Strong ability to work as part of a multi-sectoral team
 - Fluency in English and Palauan
 - Able to work in all weather condition
-

Basic Qualifications

- Associates Degree in science, biology, mathematics, or land survey
 - Knowledge of operating or handling hydrological equipment
-

Working Conditions

- Field / outdoor inspections
 - All weather conditions apply
 - Exposure to safety risks
 - Required to undergo EQPB and PICRC monitoring training
 - Some travel
-

Approved by:	
Date approved:	
Date reviewed:	

This job description will be reviewed annually and updated as often as necessary.
