

Depehk/Takaiou Marine Protected Area Five Year Management Plan (2015 – 2020)



Draft Version

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U Municipality, Pohnpei State, Federated States of Micronesia

Contributors to this document:

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Partners:

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Acknowledgements:

The Communities of Dephek/Takaieu MPA together with their village chiefs would like to thank the Conservation Society of Pohnpei and OneReef Micronesia for facilitating and writing up our management plan. This plan has been in our mind and our hearts since the establishment of our MPA. With CSP and OneReef, we were able to go through a community participatory process to develop this plan. This plan embodies our dream of happy communities living in a healthy environment with abundant resources.

All photos within this document are by Wayne Andrew © and used with his permission. For additional copies or information regarding this management plan, please contact Conservation Society of Pohnpei Office at PO Box XXX, Kolonia Pohnpei, FSM 96941; Telephone (691) 320-xxx; E-mail: cspdirector@mail.fm or contact village Chief Gelak Takaieu Pedrus Primo at (691) 320-xxx. The printing of this document was funded by OneReef Micronesia and the Conservation Society of Pohnpei.



Foreword

The Communities of Tephek and Takaieu with CSP and OneReef undertook this task of developing a resource management plan for the Tephek and Takaieu MPA with guidance from the PIMPAC Management Planning Guide. This plan is made possible by the unanimous blessings of our community and state Leadership (traditional and elected), the enthusiastic input from our community CCO's, and generous guidance and support from local and regional partners such as MCT and PIMPAC. We are very happy to present to you this 5 year management plan 2015 – 2020 for the long term management of the Dephek and Takaieu MPA. This management plan took over a 3 months to complete and considerable amount of leadership and community input. We believe that this version fits the most current needs of our people of Dephek and Takaieu. This plan is envisioned as the foundation of the long-term sustainable management of communities rich biodiversity and for food security of their people and the people of Pohnpei State.

The people's vision in this plan is: ***“For our communities of Dephek and Takaieu to be happy with good quality of life and abundant resources”***. This vision sums up the direction and the intent of this plan and will serve to unify our people and guide our efforts in sustainable management of our resources. We thank all of our State Leadership (traditional and elected), people of Pohnpei State and U Municipality, all our partners and our friends for all their invaluable efforts and contributions into completing this plan. We hope that this plan will guide our community management efforts in prioritizing our limited resources and advancing our community in the next five years with annual review for adaptive management. We look forward to the successful implementation of this plan.

By signing below, we hereby approve this management plan and affirm our commitment to our roles and responsibilities to implement this management plan.

_____ Pedrus Primo Kelahk Takaieu	_____ (Date)	_____ Soumas Chief Dephek	_____ (Date)
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_____ XXX Ramirez Mayor U Municipality	_____ (Date)	_____ Pius Hadley Director Department of Land	_____ (Date)
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_____ Eugene Joseph Executive Director Conservation Society of Pohnpei	_____ (Date)	_____ Tony Pernet Chief Division of Fish and Wildlife	_____ (Date)
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Dephek Takaieu MPA Vision Statement:

“For our communities of **Dephek** and **Takaieu** to be happy with good quality of life and abundant resources”.

Purpose of the Dephek Takaieu Sanctuary (MPA)

The Pohnpei State Legislature finds that certain areas of the terrestrial and marine environment possess conservation, cultural, recreational, ecological, historical, research, educational, or aesthetic qualities which give them special national and international significance, and that protection of these special areas is necessary for the social, cultural, and economic well-being of future generations. The Dephek and Takaieu Sanctuary is designated by Pohnpei Legislature as have the above mentioned characteristics and requires this special protection. Through the efforts from the community leaders of Tephek and Takaieu the State has made this designation.

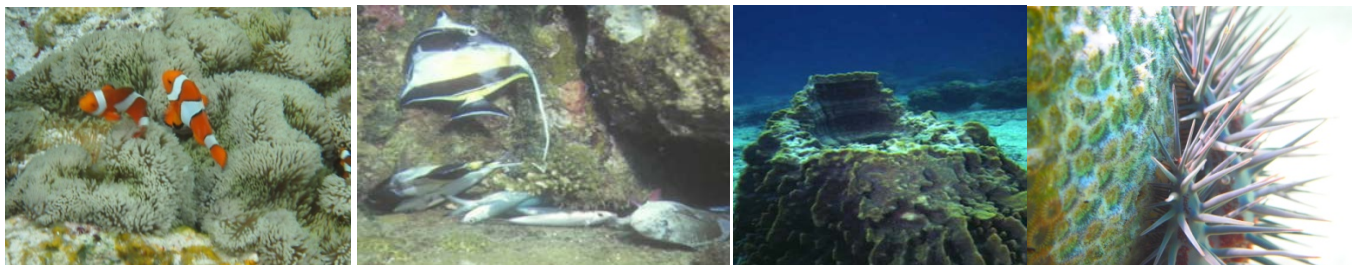
Key Management Targets

Key management targets that have been identified by the local community include: rabbit fish, parrot fish, snappers, wrasse, sea cucumber, turtles, clams and many other important food species. It is important to note that this MPA extends from the Mangrove area out to the deep inner reef. It is mostly sea grass habitat that also serves as nursery for many target food fishes. While the communities of Tephek and Takaieu are primarily focused on increasing the population of key food fishes through effective management of their MPA, it is also their intent to continue to address other land threats or targets important to achieving their above vision.



General Threats to the Area

A wide variety of threats to marine diversity have been identified at regional - local level in Micronesia (Kelty and Kuartei 2004, Hasurmai et al. 2005). They are subdivided into the following categories: climate change and coral bleaching; coral diseases; predator outbreaks (e.g., crown-of-thorns seastar); sedimentation; dredging; coastal pollution; impacts from unregulated tourism; over-fishing by locals: illegal overfishing by foreign vessels; poorly regulated trade of corals and other reef species; shipping (pollution, alien introductions and groundings) and marine debris. For the Dephek and Takaieu MPA the biggest threats identified by the communities are 1) Overfishing and illegal fishing by locals, 2) destruction of habitats due to sedimentation and pollution 3) Lack of alternative income generating scheme and 4) impacts from climate change including, lack of fresh water, coral bleaching, salt water inundation killing or disrupting season for fruit crops, and shoreline flooding and erosion.



Dephek Takaieu MPA Management Goal, Objectives and Activities

Goal: Good Natural Resource Management:

“Our people are understanding and benefiting from our key natural resources at Dephek and Takaieu by managing them to be healthy and abundant into the future”

***Objective 1: Maintain and improve the health of key species populations and ecosystems within the Dephek and Takaieu MPA and its surrounding areas through the implementation of an effective co management surveillance and monitoring program by 2017.**

Activity 1.1.1: Maintain Surveillance and Enforcement Program at Dephek Takaieu MPA including logbook and incident reports to the Municipal and State Authorities in a timely manner.

Activity 1.1.2: Working with CSP and other partners to conduct annual biological and socio economic monitoring to measure changes in population of key species using approved Micronesia Challenge monitoring methods.

Activity 1.1.3: Report results of monitoring to the Dephek and Takaieu community and other key partners in a timely manner and no later than 3 months after the completion of annual monitoring.

Continue education and outreach to visitors to all Sections of the U Municipality and nearby Municipalities that have the potential to come and fish at Dephek and Takaieu. Work with key partners to develop and implement a research plan that will answer key questions the community needs for management decisions including spawning aggregations, turtle foraging areas, nursery areas etc...

Objective 2: Creating opportunities for improved livelihood at Tephek - Takaieu and maintaining our island community by 2020.”

Activity 2.1.1: Initiate discussions with OFA and others about establishing income generating activities and scaling it up, including, Seaweed farming and other opportunities.

Activity 2.1.2: Seek funding to do a feasibility study on viable income generation options for both communities.

Activity 2.1.3: Conduct a socio economic monitoring every 3 years with the Dephek - Takaieu Community to understand their needs, and support for the plan implementation, rules, and benefits.

Objective 3: Protecting our reef and resources from negative human impacts.

Activity 3.1.1: Continue and improve site surveillance program that identifies and records all boat visitation at the MPA.

Activity 3.1.2: Develop Partnerships with State DFW and other agencies including training in enforcement to collect information violations needed for prosecution.

Activity 3.1.3: Promote compliance of Dephek Takaieu MPA rules through education and awareness activities and other means.

Objective 4: Managing our Activities in the Present and Planning for the Future.

Activity 4.1.1: Maintain sufficient and innovative, cost-effective infrastructure to ensure adequate communications, local transportation and energy production.

Activity 4.1.2: Share program experiences and learning with other similar programs through sister-site partnerships and other means.

Activity 4.1.3: Designate a Coordinator to work with CSP to raise funds needed to implement this plan.

Activity 4.1.4: Work with CSP and OneReef to explore and establish a MCA for long term financial support.

Activity 4.1.5: Continue to build CCO's capacity to be sufficiently skilled and motivated to undertake surveillance, enforcement, and monitoring activities.

Activity 4.1.6: Gelag Takaieu will provide program leadership and accountability to the Tephek and Takaieu community and local leaders and external partners.



Prohibited activities within the Tephek Takaieu Sanctuary

(1) Within the boundaries of an area designated as part of the Sanctuary:

- (a) No person shall disturb, injure, cut, burn, remove, destroy or possess any part of the real or personal property of the state, including mangrove and forested areas, natural growth and minerals, in any area of the System;
- (b) No person shall take or possess any fish, bird, mammal or other wild vertebrate or invertebrate animals or part, or nest, or egg thereof within any such area unless otherwise allowed by regulations issued under this chapter;
- (c) No person shall engage in fishing, unless otherwise allowed by regulations issued under this chapter;
- (d) No person shall engage in dredging, mining or other removal of minerals, rock, sand, coral or other natural resources;
- (e) No person shall use or possess, any explosive, toxic chemical, firearm, bow and arrow or other weapon, or any trap capable of taking fish, birds, mammals or any other types of wildlife, unless otherwise permitted by regulations issued under this chapter; and
- (f) No person shall enter, use or otherwise occupy any area of the System for the purpose of engaging in any activity prohibited under this section, unless such activities are otherwise permitted under this chapter or regulations issued under this chapter.

(2) Commercial exploitation of resources within the boundaries of the System is prohibited. Qualified institutions and individuals shall be permitted to conduct nondestructive forms of scientific investigation within the state reserve system, upon receiving the prior written approval from the Director pursuant to regulations issued under this chapter.

Source: S.L. No. 4L-115-99 §7, 7/23/99

Permits and permitting process

(1) The Director of Land and Natural Resources is authorized, under such regulations as he may prescribe, to permit the use of areas within the System for non-commercial recreational hunting and fishing, subsistence fishing, public recreation and accommodations, and scientific research whenever such uses are compatible with the purposes for which such areas were established.

(2) If the material provisions of any permit issued are violated by the permit holder, in addition to any other remedies allowed by law, the Director may revoke or suspend the permit permanently or for a specified period of time pursuant to procedures established by regulations.

Source: S.L. No. 4L-115-99 §8, 7/23/99

Civil penalties. — Any person who violates any provision of this chapter, the regulations promulgated under this chapter, or a permit issued under this chapter shall be liable to pay a civil penalty of not more than \$20,000 for each violation. In determining the amount of the penalty, the gravity of the violation, prior violations, and

the demonstrated good faith of the person charged in attempting to achieve rapid compliance after notification of a violation shall be considered.

Source: S.L. No. 4L-115-99 §12, 7/23/99

Criminal penalties. — In addition to any action which may be brought under this chapter, any person who knowingly violates this chapter, regulations promulgated under this chapter, or a permit issued under this chapter shall be fined not more than \$50,000, or imprisoned for not more than one year, or both.

Source: S.L. No. 4L-115-99 §13, 7/23/99

Tephek Takaieu Sanctuary (MPA) Zoning



Roles and Responsibilities of Coordinator

The role of the Coordinator is to provide the overall oversight supervision of the implementation of this Management Plan and to provide local leadership on custom, culture and protocol including the responsibilities below.

1. Responsible in ensuring successful implementation of this plan.
2. Communicate with CSP, Municipal and State Leaders on the progress of work at the MPA.
3. Report regularly to the community on progress of work and not less than twice a year.
4. Develop annual work plan and budget and seek assistance of Yap CAP and other partners with technical and financial support for the community work plan.
5. Review the progress of work of the Community Conservation Officers.
6. Work with the Communities of Dephek and Takaieu to make needed changes to their Management Plan for adaptive management.
7. Ensure this plan is aligned with culture and customs and implementation is in harmony with local protocols.
8. Be the local ambassador for Tephek Takieiu community effort in the local community and nearby communities.

Roles and Responsibilities of Key Partners

CSP: The role of CSP in this community effort is to provide capacity building for the Management Committee and its staff to be able to undertake effective management of this site including following responsibilities:

1. Assist with community meetings and trainings to build their capacity.
2. Assist in building the capacity of the Project Coordinator including, management, outreach, monitoring, fundraising, partnership building, and leadership.
3. Advise the Coordinator to seek needed funding to implement this plan.
4. Support Coordinator to seek out partnerships needed to implement this plan.
5. Recommend changes to this plan to the Community.
6. May act as a fiscal sponsor for funds to implement this plan until such time the community is able to undertake this on their own.

Pohnpei State Government: The role of Pohnpei State through its proper agencies will support the Communities of Dephek and Takaieu protect its biodiversity for present and future generations. Pohnpei State will be asked to assist the implementation of this plan in the following areas:

1. Support community surveillance needs through coordination with DFW Patrol Boat.
2. Provide technical and financial support needed to implement this plan through DLNR and OFA.
3. Provide fund when possible to implement this plan.

OneReef Micronesia: The role of OneReef Micronesia is to raise funds needed to implement this plan and verify progress made by the Management Committee on the Goals and Objectives of this plan including the below responsibilities:

1. Seek additional funders that could support other needs of this Plan.
2. Conduct annual review of progress made under this plan.
3. Seek out other partners including volunteers that could help in the implementation of this program.
4. Assist CSP and Project Coordinator to provide needed capacity building efforts in enforcement, planning, monitoring, evaluation, leadership for this program.

Monitoring Plan

Monitoring will be carried out by CSP and the Community CCO's and other key partners on an annual basis. This monitoring shall be consistent with the Micronesia Challenge region wide monitoring system to allow the site to compare success of its management over time with other comparable sites in the region. This can include sea grass monitoring, sedimentation monitoring among others. It is important that the community participates in the monitoring efforts with CSP to ensure long term sustainability of the monitoring program.

Visitor Awareness/Compliance and Surveillance/Enforcement Plans

It will be the responsibility of the Community Leaders to establish a visitor awareness and compliance plan. This should reflect traditional knowledge of frequent and potential visitors to

the Managed Area. The Community Leader will work with local and regional partners to develop key messages and outreach materials designed to increase compliance with MPA Rules. Additionally, the designated community leader will work to establish a surveillance plan to detect and deter illegal fishing at the site. This will include implementing a logbook system with reports to the U Municipality and State Authorities on illegal activities at the site.

Dephek Takaieu MPA Management Budget

Budget Category	Amount
Enforcement Fuel for Patrol @ about 250 gallon of gas annually	\$ 2,000.00
Community and CCO's Meeting (quarterly @ \$500 each)	\$ 2,000.00
Education and Outreach marterials other cost	\$ 2,000.00
Annual Monitoring (Biological Monitoring with CSP)	\$ 2,000.00
Enforcement Supplies and Equipments (Spark plugs, Rain Coats, Batteries, etc.,)	\$ 1,000.00
CSP Admin Cost	\$ 1,000.00
Total	\$ 10,000.00

Other infrastructure need that still needs to be raised includes:

1. Two surveillance boats with double engines (23 footer with double 40HP engines) @ \$30,000.00
2. 2 Water Catchment Tanks for the two Communities (Tephek and Takaieu) for droughts @10,000 gallons each for a total budget of \$20,000.00 (Communities to explore using desalination system)
3. Acquire two Solar Systems to power surveillance equipments and other community needs. This can be a 4kilowatt system @ \$ 30,000.00

Financing Plan

Community Coordinator will work with CSP to engage with OneReef Micronesia on an MCA that can finance their commitments over time. This will include raising funds for their infrastructure needs and annual operational cost. It is envision that the community with CSP and other partners will work to generate some revenue through income generating activities and other grants to support the long term sustainability of the MPA. The Community Leader will continue to seek the support of the State in funding their management efforts. Below is a list of traditional Environment or Conservation Donors that the Community Leader, CSP and other partners can look into for support of the management actions in this plan.

Potential Funders:

1. Packard Foundation
2. MacArthur Foundation
3. Marisla Foundation
4. National Fish and Wildlife Foundation
5. Australian Aid Small Grants Program
6. Global Environmental Facility Small Grants Program (GEF FSM)
7. New Zealand Overseas Development Assistance Program
8. Department of Interior Coral Reef Program

9. National Oceanic and Atmospheric Administration Coral Program
10. US Aid
11. Global Green Grants (William Kostka, Micronesia Program Contact)
12. Toyota Foundation
13. Micronesia Conservation Trust
14. The Locally Managed Marine Area Network
15. UN Small Grants Program
16. Canadian Aid
17. Seacology (Simon Ellis, Micronesia Program Officer)
18. Japan Grassroots Grants
19. USDA Rural Development Grant (non construction)
20. European Union Global Climate Change Funds

The approach will be to have a Coordinator with the capacity to oversee the implementation of this plan and ability to work with partners to develop strong proposal to the above mentioned donors and others not listed to raise the needed funds to implement this plan. CSP and OneReef Micronesia will serve as advisors to review and improve proposals of the Community to ensure likelihood of approval.

Sustainability Plan

Sustainability of the Dephek Takaieu MPA will follow a three pronged approach. First, the Community Leader with the Community and all CCO's shall develop small mechanisms to contribute to the financing of this plan. This can include extending the Marine Conservation Agreement (MCA) for the site. MCA is a partnership tool used by OneReef Micronesia to connect Coral Reef Investors with Coral Reef Owners to help finance the protection of coral reefs.

Secondly, the Leaders of Dephek and Takaieu will work with CSP to develop a plan to build their capacity so that they can help support long term management of Dephek Takaieu MPA. This includes, partnerships on trainings, refresher trainings, training of trainers and Memorandum of Agreements between Municipal, State and other NGO regional partners to support the long term management activities of Dephek and Takaieu. Trainings could include enforcement from partners at Guam Department of Agriculture, biological monitoring from CSP or Palau International Coral Reef Center, Socioeconomic Monitoring from Pacific Marine Resources Institute or awareness training from Sea Web. It is envisioned that the Community Leaders and CSP will assist in forging strong partnership agreements with these relevant local and regional partners.

Lastly, the Dephek Takaieu MPA must be current and maintain an adaptive management approach to reduce cost, increase effectiveness and document lessons learnt over time. The Community Leaders shall develop a plan to review key management plan objectives, operations and explore cost reductions in the program while still achieving the goal and objectives of this plan. This includes exploring new technologies to help reduce surveillance cost, effective transportation, or doing briefings and debriefings with all activities to document what works and what does not work for adaptive management. Annual retreats are highly recommended for adaptive management of this plan.

