

**HELEN REEF
PILOT SURVEILANCE/DETERRENCE PROGRAM**

**DRAFT
IMPLEMENTATION PLAN**

**Prepared by the Helen Reef Action Committee – Hatohobei State, Palau
and
The Community Conservation Network (CCN)**

February 2001
Version 1.2

The following Pilot Surveillance and Deterrence Program Plan was designed by the Helen Reef Action Committee during a series of meetings during the period of February 17 through February 24, 2001.

The Helen Reef Action Committee is a voluntary group of Hatohobei citizens assisting with the planning for increasing effective management at Helen Reef. Members who participated in this planning process included: Thomas Patris, Sabino Sakarias, Steven Patris, Dominic Emilio, Francis Victor, Maximo Marcello, Rosania Victor, Paulina Therodore, and Albino Fernando, on behalf of the owners of Helen Reef—the People of Hatohobei.

Representatives of the Community Conservation Network present included:
Michael Guilbeaux, Scott Atkinson, and Mark Ridgley.

1. OBJECTIVE OF THIS PLAN

To protect the outstanding marine resources of Hatohobei State by supporting a human presence at Helen Reef to discourage destructive activities and all illegal entry into the reef.

This pilot plan is an outcome of the desire of the State of Hatohobei and its people to:

- Immediately work to secure and restore the resources of Helen Reef for the benefit of Hatohobei, the Republic of Palau, and the world.
- Support the human habitation at Helen Reef as a learning experience and enforcement-training period until a long-term comprehensive enforcement program can be established.
- Engage in useful activities in addition to surveillance such as sustainable harvesting of resources, mariculture, resource monitoring, and research at Helen Reef.

2. HELEN REEF BACKGROUND AND PRESENT SITUATION

The territory of Hatohobei (Tobi) State is comprised of Hatohobei Island and Helen Reef. Hatohobei Island is a small island at the extreme southwestern boundary of the Palau's Exclusive Economic Zone, bordering the territorial waters of Indonesia and the Philippines. Surrounded by fringing reefs and serving as a rookery for numerous seabird species, Hatohobei Island possesses marine resources that are traditionally an important source of sustenance for the livelihood of the Hatohobei people. Helen Reef is a large atoll located 65 km to the east of Hatohobei Island and approximately 600km from Koror, Palau (see map, Appendix 1). This large enclosed atoll (163 sq. km in extent) has extensive reef flats, an intricate channel system, numerous patch reefs, and a small island that is an important overflight refuge for several species of seabirds. Roughly two-thirds the extent of Palau's largest island, Babeldaob, Helen Reef ecosystem is one of the Pacific's most outstanding atolls in terms of its extensive reef area, ecological integrity, abundance of marine biomass, and biological diversity. Remote from dense human settlement and land use, Helen Reef is relatively intact compared to similar biodiverse reef systems in Indonesia and the Philippines.

While Helen Reef's remoteness has helped to protect it's resources from over use, in modern times its ecological integrity is significantly threatened by overexploitation and destructive fishing, particularly by foreign vessels. Recently, Helen Reef has been identified as a reef at "high risk" by the World Resources Institute's Reefs at Risk Program (1998) due to these external factors. Despite periodic enforcement efforts by the government of the Republic of Palau (ROP) and the Hatohobei State Government (HSG), foreign fishing boats frequent the reef and illegally harvest trochus, sharks, turtles, giant clams, sea cucumbers, live reef fish, and other species beyond sustainable levels (Hirschberger, 1980; Birkeland, *et al.*, in preparation). There is visible evidence of blast fishing in critical fish spawning aggregation areas, depleting fish stocks and degrading habitat (B. Yeeting, in preparation). Primarily due to illegal over-collection by foreigners, populations of several important species such as clams, trochus, and sharks have decreased and remained low.

As the records of HSG and the Palau National Marine Enforcement Division attest, violation by illegal foreign vessels at Helen has dramatically increased, from a level of one or two vessels per month in the mid-1980s to as many as one or two a week in the early 1990s (Black, 1990). Regular visits to Helen Reef by the Palau National Marine Law Enforcement Division's Patrol Boats are scheduled, but they are insufficient to prevent poachers from accessing Helen Reef's resources. In October 2000, 41 Indonesian fishermen collecting sea cucumber and other marine resources at Helen Reef were apprehended by a Palau patrol boat. In April 2001, a Filipino longline vessel was confiscated aground at Helen Reef with 8 crew. In June of 2001, two illicit Filipino vessels were witnessed inside Helen Reef. These recent incursion indicate only a fraction illicit vessels that visit Helen Reef to plunder marine resources – it is uncertain how many unauthorized foreign vessels actually do visit Helen Reef. It is worth noting here that the value of any fines collected or equipment confiscated is usually matched or exceeded by costs of detention, legal fees, and repatriation.

And as long as illegal fishing and harvesting continue unchecked, populations of key species will continue to decline. A Pilot Surveillance and Deterrence Program that tests operational systems and assumptions – intended to develop over time into a long-term Comprehensive Enforcement Program – should begin to improve this situation.

Local commercial and subsistence exploitation also affects populations of endangered or sensitive species of concern, such as sea turtles and sea birds. Seabird populations at Helen have faced a 15-fold decrease in a 13-year period—from total numbers as high as 96,000 in 1979 to high estimates of only 7,100 in 1992 (Engbring, 1983; Keppler, 1993). Initial quantitative resource monitoring of Helen Reef and its resources will provide a baseline from which to measure change over time and the status of certain target species.

For decades the people of Hatohobei have attempted to protect Helen Reef and its islet, Helen Island, and their resources from pillaging by foreign fishermen. In the 1950s, Hatohobei kept a sporadic presence on Helen with the assistance of the U.S. Navy and the Trust Territory Government. As recently as the late 1990s HSG stationed state employees at Helen with radios so they could notify HSG and Palauan officials of the presence of illegal foreign vessels. None of these attempts has been sustainable over the long term, and none has prevented significant resource degradation and loss caused by foreign poachers. Using new ideas, partnerships, and resources to improve resource management and conservation of Helen Reef, the Hatohobei community and HSG intends to protect these natural resources to allow for recovery and future sustainable use. The HSG and Helen Reef Action Committee (HRAC) are leading efforts in working with partners to establish a long-term Comprehensive Enforcement Program for the site. While accounting for local conditions, constraints, and resources, the program will be modeled after other successful remote reef protection programs. Hatohobei Government representatives have sought training and cooperation for this initiative from the Palau National Government to build skills and initiate partnerships for this long-term enforcement effort at Helen. However, the Hatohobei community and State government recognize that this long-term plan may take years to implement.

HSG and the Helen Reef Action Committee have decided to initiate a pilot program while planning, developing partnerships, capacity building, and financing for implementation of a long-term enforcement plan takes place. The Hatohobei people and State government

believe it is imperative to address immediate needs to protect its resources now. Hatohobei does not want to defer action until a long-term comprehensive enforcement program is established, additional site planning activities are completed, or a special legal designation for Helen Reef derived. HSG and HRAC value the benefits of long-term planning and recognize that much can be learned from experience. However, they feel there has been enough planning and discussion and they want to directly address the need for a human presence at Helen Reef through a pilot program. This pilot program will begin with support and guidance from project staff, namely a project manager, a community extension officer, and a technical advisor. The pilot program will also attempt to benefit from a host of “lessons learned” by other local communities who have attempted similar enforcement efforts. The pilot program will also focus on local capacity building, training, and financial assistance from a combination of internal and external sources in its initial stages.

Six members of the Hatohobei community regularly participate in HRAC meetings and a large majority of the community regularly participates in community meetings related to Helen Reef. The HRAC and HSG are now attempting to arrange the personnel, infrastructure, and resources necessary to indicate the entire community’s support for this pilot plan. The Hatohobei community and leaders are increasingly educated in approaches to conserving and protecting marine resources at Helen Reef, but does not yet have the necessary resources to provide protection in the long-term.

The few Hatohobeians who are fully trained in resource protection and enforcement currently work for the Palau Marine Enforcement Division or in other positions. Several Hatohobeians have received initial training in SCUBA diving, biological monitoring, strategic planning, and project management. As part of this pilot plan, on-going training in enforcement will be provided. All of these activities will support the development of the long-term enforcement program for Helen.

Marine resource management at Helen Reef and Hatohobei Island is a priority for the people and State Government of Hatohobei. While the National Government has recognized the need to increase surveillance and enforcement in the SW territorial waters, and Exclusive Economic Zone of Palau, the current configuration of marine enforcement activities, technical assistance, and donor aid is unlikely to be sufficient to completely protect Helen Reef’s biological resources. For example, the National Patrol Boat is scheduled for 80 days at sea a year, allowing very few days for patrolling the immediate Helen Reef area. In order to address pressing needs and provide a training experience for their citizens, the Hatohobei State Government, with the planning advice and assistance of the Helen Reef Action Committee and CCN, is prepared to provide their state vessel as a living platform and five or more staff positions for this pilot program. The Palau National Marine Enforcement Division has indicated support both for this pilot program, and for the long-term enforcement program if proper training and authorization is provided by National Agencies responsible for law enforcement. The Marine Enforcement Division has also expressed its willingness to contribute to joint enforcement and training efforts once a program is underway.

3. A PILOT SURVEILLANCE/DETERRENCE (S/D) PROGRAM FOR HELEN REEF

The pilot program will focus on discouraging destructive and illegal activities that occur through foreign vessel poaching at Helen Reef. This will be accomplished through efforts to establish a sustained human presence at the site that builds Hatoobie State's capacity for a more long-term comprehensive enforcement program (Figure 1.).

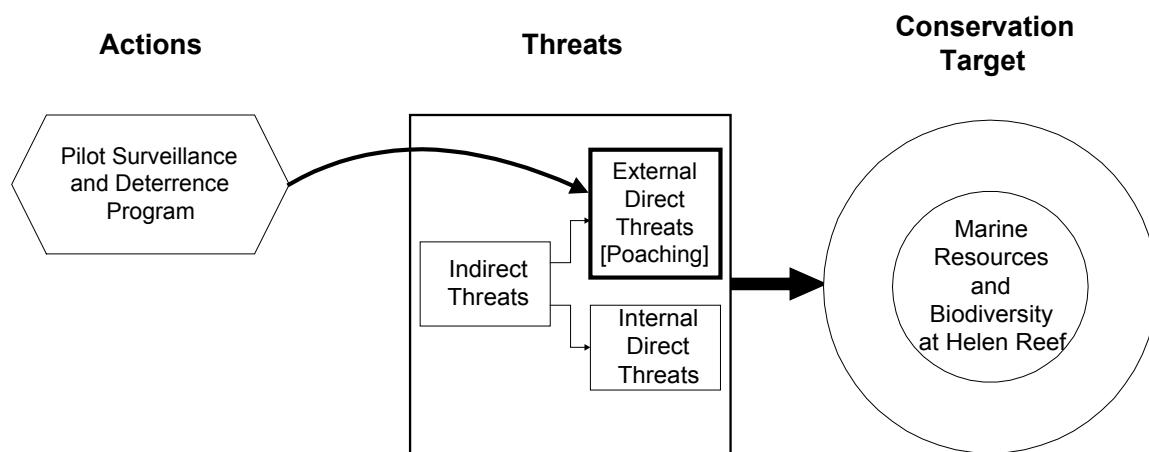


Figure 1. Representation of threats (impacts) and actions (strategies) related to enhancing management and conservation at Helen Reef. The Pilot Surveillance and Deterrence Program is designed to address external direct threats (namely, foreign poaching) that influence the condition of marine resources and biodiversity at Helen Reef, Hatoobie State, Republic of Palau. Other threats to biodiversity are known, but are not addressed in this pilot plan.

Objectives of Pilot Surveillance and Deterrence Program

Pilot Program objective and indicators are included below. Performance will be measured by project staff at commencement of pilot project activities and six, 12, 18 and 24 months thereafter. Monitoring methods, including a list of variables to measure, will be developed by project staff during the commencement (August '01) of the pilot activities based on methods suggested by the Pacific Roundtable for Conservation and Foundations of Success.

Objective 1

For Hatoobie citizens to maintain a temporary presence at Helen Reef implementing the major elements of this included plan at a relative frequency of 180days/year by August 2001 for a duration of 2 years or until a long-term comprehensive enforcement plan can be implemented.

Objective 1, Indicator 1:

Number of days S/D Team is present at Helen Reef.

Objective 1, Indicator 2:

Degree to which elements in this plan are carried out compared to the elements which are not implemented or followed.

Objective 2

Build the capacity (through training, education, exposure, or direct experience) of the State and its personnel to carry out surveillance and enforcement activities at Helen Reef within a two-year period.

Objective 2, Indicator 1

Number of individuals of Hatohobei trained in Marine Enforcement procedures

Objective 2, Indicator 2

Number of individuals of Hatohobei graduated from the Palau National Police Academy

Objective 2, Indicator 3

Number of individuals of Hatohobei implementing or involved in marine enforcement procedures at Helen Reef.

Objective 2, Indicator 4

Number of individuals of Hatohobei who have visited a project or site utilizing similar marine enforcement methods.

Objective 2, Indicator 5

The production of a comprehensive enforcement program plan that outlines how the State and cooperating partners will conduct enforcement and surveillance activities on a long-term basis.

Objective 2, Indicator 6

The identification, collation, and publication in a community-accessible medium of specific “Lessons Learned” during the implementation of the pilot program to guide the design and development of a comprehensive enforcement program.

Objective 2, Indicator 7

Accurate and adequate records of field observations and activity and other project-related information being recorded and stored, including information from participating agencies or organizations.

Objective 3

Increase the level of collaboration and cooperation of Hatohobeians and other partners involved in field activities at Helen Reef

Objective 3, Indicator 1

Number of days National Patrol Boat is at Helen Reef or adjacent the 12 mile vicinity.

Objective 3, Indicator 2

Number and level of involvement of National Agencies participating in and assisting with project.

Objective 3, Indicator 3

Number and level of involvement of Non-Government Organizations in Palau and other countries participating in and assisting with the project.

Objective 3, Indicator 4

Number and level of involvement of Hatohobei citizens in Helen Project activities, including the participation of women in enforcement and project activities.

Objective 3, Indicator 5

Increased effort to educate foreign fisher groups of the enforcement and management activities occurring at Helen Reef.

Objective 3, Indicator 6

The number of MOUs (or other agreements) signed and fulfilled with project partners.

Sub-Objective 3.1

Increase the priority of resource management and protection of biological resources at Helen and Hatohobei Island, through the demonstration and commitment to pilot program activities and goals.

Sub Objective 3.1 Indicator 1

Amount of resources and/or assistance allocated to enforcement and resource management activities by the Hatohobei community, the Hatohobei State Government, the Palau National Government, donors and others.

Objective 4

Through establishing a human presence at Helen Reef, immediately reduce the impact of foreign fishing incursions during which long-term site and project planning is occurring (over the next two years).

Objective 4, Indicator 1

Number of foreign incursions over time.

Comment: No direct indicator for this objective exists, as no information on the actual current level of illicit foreign incursions exists. However, while difficult to

measure, it is expected that the regular presence of project staff will reduce the impact of foreign fishers on Helen Reef's biological resources.

Objective 4, Indicator 2 (Proxy Indicator)

Levels of depleted resources (trochus, calms, specific fish species) recover or increase to a higher level.

Assumption: this holds true if resources are not impacted by other sources and are not depleted beyond recoverable levels (e.g. are still viable populations and are capable of rapid recovery). Depleted resources should recover. No direct indicator for this objective exists, as information on the actual level of illicit foreign incursions exists. However, while difficult to measure, it is expected that the regular presence of project staff will reduce the impact of foreign fishers on Helen Reef's biological resources.

Objective 5

Conduct other useful, project related activities while conducting pilot activities.

Objective 5, Indicator 1

The degree to which trash and other unwanted human debris is cleaned from Helen Island.

Objective 5, Indicator 2

The degree and success to which a rat eradication effort is implemented.

Objective 5, Indicator 3

The degree to which resource monitoring activities promotes the collection and analysis of information on critical resources or parameters at Helen Reef Atoll.

4. DETAIL BY ACTIVITY

I. Pilot Surveillance/Deterrence Trips:

The Helen Reef Action Committee, in coordination with the HSG, has planned surveillance/deterrence trips in the next six months. This schedule will provide the opportunity to rotate teams of field personnel according to a schedule of three to four weeks.

During these trips, HSG staff (and national law-enforcement officers, if provided) will be assigned to the *Atoll Way* for surveillance and deterrence activities.

1. Responsibility/Goals of the Surveillance/Deterrence Team (S/D Team):

a. Surveillance/Deterrence Protocol at Helen Reef with the Atoll Way

- During patrol periods the *Atoll Way* will generally be anchored within the lagoon of Helen Reef
- Staff will survey the area at least twice a day with a combination of radar and physical patrolling. If weather is clear, staff can use radar to look for boats. If the weather is not clear enough to see boats on radar, then staff should patrol with speedboats at least twice per day.

In any event, staff should patrol with speedboats at least once a day. Activities such as monitoring marine resources can be carried out at the same time if appropriate.

b. Illegal Foreign Vessel Encounters

If a boat is encountered or observed by radar, the team will observe and record details on the boat including:

- Location
- Size and class of boat
- Estimated number of crew
- Boat name or registration if visible
- Boat flag
- Behavior of the boat including any observation on activities crew may be conducting such as fishing, traveling in smaller boats
- Direction of the boat's travel
- Any communications between the boat and S/D Team

The team will immediate report the boat to HSG in Koror (via radio or satellite phone if available).

If possible, the team also should report the boat to the Palau Division of Marine Enforcement in Koror. If this contact occurs when the Division is closed, the team should ask HSG to contact the Division through its 24-hour telephone number. If necessary, a representative of the HSG will contact the Division directly at their offices in Koror.

c. Approaching/Encountering Foreign Vessels

The methodology used to approach and engage an illegal vessel differs greatly based on its size.

Two classes of vessels tend to be encountered at Helen and approach methodologies should be adjusted accordingly.

- Small (less than 50 feet) wooden fishing boats from Indonesia or the Philippines which are typically fishing and gleaning on the reef

- Larger (between 50 and 120 feet) steel-hulled vessels. These boats are often long-liners fishing in the deep water in the vicinity of Helen Reef and also sometimes gleaning on the reef.

Once the boat has been reported to HSG and to the Division of Marine Enforcement in Koror, the S/D Team will attempt to raise the boat by radio. If radio contact is made, the S/D team will engage in amicable conversation with the crew and try to ascertain where the boat is from, what is its purpose in being at Helen Reef, and so forth.

Small boats may be approached by the *Atoll Way* or by skiffs. However, the S/D Team should keep a safe distance from the boats and board only if the situation appears safe and only if approval is received from the Division of Marine Enforcement. Before boarding, the S/D Team should enter into polite conversation with the boat crew and assess the situation. The team may board the boat but should always stay alert for any signs of conflict.

During the pilot program, the S/D Team's general approach to a small boat is to be friendly to the boat crew, tell them they are not allowed to fish at Helen Reef, and ask them to leave. Since there will be no resources for apprehending or arresting foreign boats during this pilot program, if the foreign boat refuses to leave when asked, the S/D Team must call the National Patrol Boat to come in and make an arrest. HSG's experience has been that most boats will leave when encouraged to do so by an official looking crew.

With larger commercial vessels, the S/D Team must exercise a great deal more caution. The crew can approach the boat but should remain a safe distance away and tell the violating vessel in a friendly manner that the waters that they are in are within the jurisdiction of HSG, no unauthorized fishing is allowed, and that they must leave. During the pilot program the S/D team will probably never board such a vessel. If the vessel refuses to leave the area, the team will have to call the Palau national patrol boat to make an arrest. Experience at Helen has shown that these boats, too, are dissuaded from fishing by the presence of other boats.

A surveillance protocol designed to protect the safety of the personnel involved is being developed and a Surveillance Protocol Manual will be provided to all staff in the pilot phase of the S/D Program.

d. Other activities for the S/D Team while on patrol at Helen Reef include:

- Reef monitoring: Several permanent transects at Helen Reef should be regularly monitored. The S/D Team will be trained in biological monitoring and will have a regular system to monitor the transects once every six months. Every three months, the team will monitor important commercial species such as grouper, sea cucumbers, trochus, and giant clams.
- Fishing for food: The S/D Team will be allowed to fish at Helen Reef for the ship's provision only. The team will keep records of all species, size, effort, time, method, and location of fishing. The pilot staff will not fish in known fish aggregation areas to protect those stocks and allow them to recover.

- Clean up Helen Island: Helen Island is covered by a great deal of non-natural debris that will be cleaned up by the S/D Team.
- Mariculture: The S/D Team and a Hatohobeian mariculture specialist will start to experiment with mariculture at Hatohobei Island and at Helen Reef. These efforts will be modest at first and include the development of a few tanks to grow brood stock for trochus, giant clam, and green snail. Over time the effort will increase and focus on restoring stocks of these species on Helen Reef. Eventually, these species may be reseeded to the point where commercial harvest is possible.
- Rat eradication: Helen Island has an introduced rat population that is likely to be negatively affecting valued sea bird populations that nest at Helen Island. It has been indicated by the State Government that the elimination of this rat population is a priority. Should the opportunity for deployment of rat bait occur, the S/D Team would be responsible for assisting with rat eradicating efforts with participating cooperating agencies. The S/D Team will also be responsible for educating those involved of the deployment plan and safety issues and precautions related to the deployment of bait.

2. Staffing of Pilot Surveillance and Deterrence Program

The HSG will organize and direct its staff on the S/D Team. This Team is envisioned to include at least the following types of positions:

- A Surveillance/Deterrence Team Coordinator based in Koror to assist the HSG and its Governor with all Surveillance/Deterrence-related activities.
- Helen Reef Field Personnel (e.g. Sea Rangers) some of which are deputized for law enforcement by the National Government stationed at Helen Reef – positions pending; may initially apply some of the HSG vessel crew for these roles.
- Helen Reef Field Operations Officer—responsible for coordinating all field-related activities.
- The State ship will provide transportation and living quarters for the individuals of the S/D Team. Six-member HSG vessel crew to serve a supporting role for the pilot program activities. These include the:
 - Ship Captain
 - First Mate/bosun
 - Helmsman
 - Chief Engineer
 - Oilier (two)

A S/D Team will comprise of at least one (1) Field Operation Officer and approximately three (3) Field Personnel, hence providing roughly four (4) staff dedicated to surveillance and deterrence activities during periods of site presence. Over time, should it become possible to permanently house and shelter S/D Team members at Helen Reef, it is planned

that two complete S/D Teams will be arranged and transported on a rotation basis to and from Helen Reef on a schedule approximately 3-4 week periods. Transportation may occur on the Atoll Way or other vessel. Should this scenario develop, the numbers of the State's S/D Team and relationships with other positions and organizations is represented in Figure 2 below.

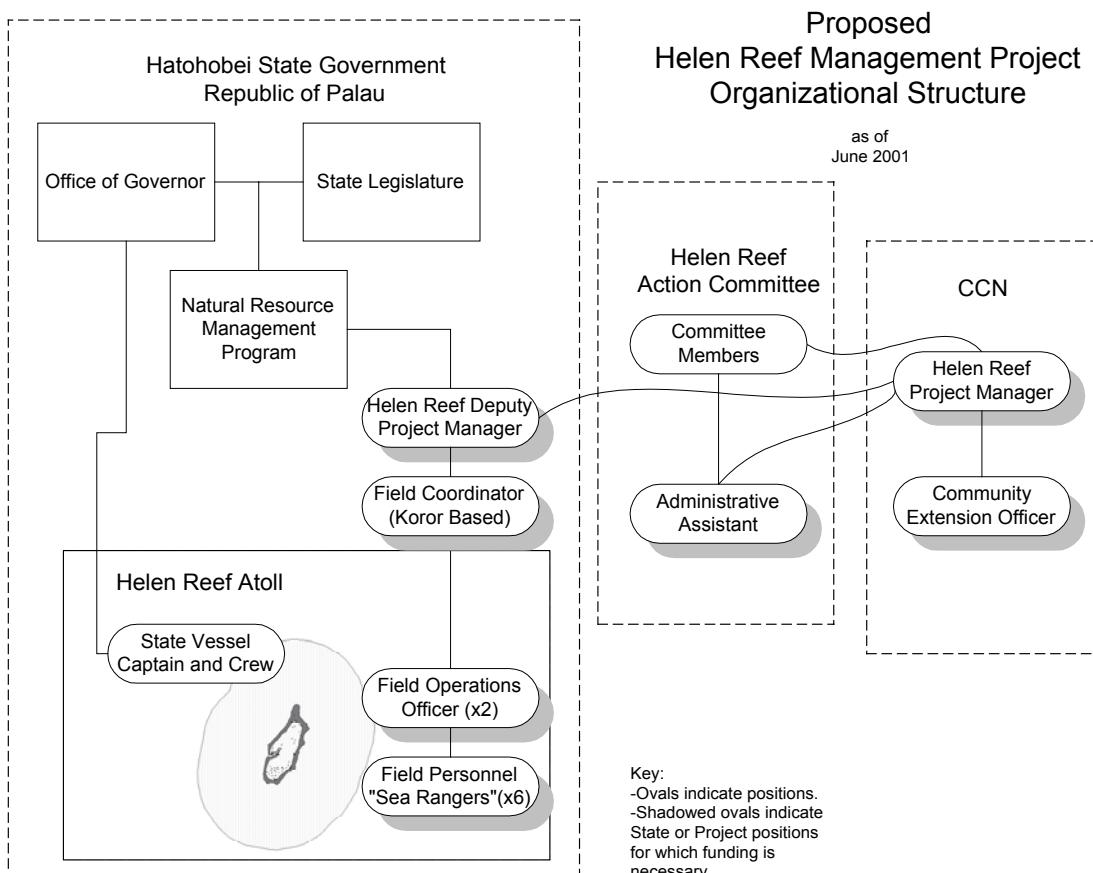


Figure 2. Diagram depicting the relationship among the Hatohobei State Government, the Helen Reef Action Committee, the Community Conservation Network (CCN) and related agencies and positions.

The Palau National Marine Enforcement Division has also indicated an offer to provide one or two staff from the Marine Enforcement Division to assist with these pilot activities (personal communication with Jon Narbutus, Lieutenant Commander of Marine Enforcement, and Michael Rosenthal, Minister of Justice, June 23, 2001). This would augment the number of Field Staff present at Helen Reef for surveillance and deterrence activities and also provide the presence of National staff with law enforcement capabilities.

3. Equipment and Supplies:

Equipment List:

Atoll Way, the 90-foot HSG vessel, with all of its systems in operating condition

Two small speedboats
Outboard engines
VHF radios (three mobiles and one base)
Satellite phone
Spotlights (two)
First aid kits (three)
Scope/binoculars (two)
Camera with high power lens
Geographic Positioning Systems (two)
Diving equipment
Snorkeling equipment
Vest floatation jackets

Needed Supplies List:

Diesel fuel
Gasoline
Oil and grease
Maintenance Supplies for all equipment (e.g. outboards, ship's water desalinator)
Uniforms and Hats
Food
Water
Logbooks
Miscellaneous supplies

II. Training and Education:

Surveillance/enforcement training will be provided during the late summer of 2001. As mentioned earlier, HSG and CCN are discussing marine enforcement training possibilities with the Palau Ministry of Justice, the Australian Government, and the U.S. Department of Interior. Exchange opportunities with other projects with similar programs training such as the WWF Philippines Tubbataha Reef Project may also be pursued.

Such training will include:

- Basic marine ecology
- Maritime knowledge (navigation and vessel operation)
- General safety (including first aid and CPR)
- Surveillance techniques
- Approach safety
- Search and seizure techniques
- Apprehension techniques
- Recording and reporting
- Collecting evidence
- Filing a legal case in Palau

HSG staff will be trained and deputized as enforcement officers by the Palau National Government. This will give them essential enforcement authority and skills needed to carry appropriate arms, apprehend vessels, and arrest crew.

III. Planning for Long-Term Comprehensive Enforcement Program

After the second or third patrol trips of this pilot program, the HSG and CCN will hold a workshop to review the lessons learned to date and begin planning the Comprehensive Enforcement Program. Regular debriefings will be held after every patrol trip to capture lessons and learn from experience.

A two-month planning phase will follow in which HSG and CCN continue to capture lessons and develop the Comprehensive Enforcement Program. Pilot patrolling will continue during this planning period and a comprehensive enforcement plan will be designed, drafted, and hopefully implemented by June, 2002.

5. PILOT PROGRAM TIMETABLE

1. Hiring a Surveillance and Deterrence Program Coordinator: **June, 2001.**
2. Initiation of Pilot Surveillance and Deterrence Program to include a minimum of six patrols of three weeks each in the first year: **late June, 2001.**
3. Gathering data on the number of violations, country of origin of violators, and methods used to deter such violations: **ongoing.**
4. Training for appropriate project staff in Surveillance and Training. The Minister of Justice has offered three months of police academy training to State and project Staff. **July 23 –September 23, 2001.**
5. Deputizing of trained field enforcement officers through a MOU between the Palau National Government, HSG, and designated State Law Enforcement Officers: **November, 2001.**
6. Gathering lessons learned for use in the design of the Comprehensive Enforcement Program: **ongoing.**
5. Planning with Hatohobei citizens and other Palauan resource agencies for the design and initiation of the Comprehensive Enforcement Program: **planning beginning in August, 2001 and completed in January, 2002; program initiation in March, 2002.**
7. Lobbying with Palauan resource agencies to increase support and appropriations for protection at Helen Reef: **ongoing.**

6. GUIDELINES and RULES for the S/D TEAM DURING PILOT PHASE

GENERAL POLICIES

1. In the interest of good leadership, communication, and effective decision-making, the team must have someone designated to be in charge of activities and responsibilities under all different circumstances. These designations should be clear and well understood by all those involved. Suggested leadership roles include:
 - The Captain of the State vessel is in charge of anything related to safety of the vessel or safety while on board.
 - The Field Operations Officer is in charge of overall field operations at Helen Reef (including site patrolling, resource monitoring, and any other programmatic activity of the project).
 - The Field Operations Officer or some other designated staff will be responsible for recording and reporting all significant events and activities will be designated to record events of patrol, foreign boat observation, and team activities.
 - A Patrol Leader, one of the field personnel (e.g. “Sea Ranger”) will be in charge of organizing and undertaking daily patrols and surveillance.
2. No alcoholic beverages will be allowed on the boat and no alcohol drinking will be allowed at any time during the time the S/D Team is at Helen Reef, or on the way to or from the Main Palau Islands and the Southwest Islands.
3. During the time the S/D Team is at Helen Reef, no trips to Hatohobei Island will be allowed unless specifically scheduled in advance, requested by HSG, or in an emergency.
4. To conserve fuel, the *Atoll Way* will not be used for trolling for fish, except during normal operations (e.g., to and from destinations).

SUMMARY of PROTOCOL FOR PATROLLING AND ENGAGING VIOLATORS:

- Record any violators as soon as identified
- Report any violators to the HSG Office (or State Representative) *and* the Marine Enforcement Division as soon as the violators enter the reef (use satellite phone if necessary). Governor (or State Representative) must follow up with the Marine Enforcement Division Office in Koror to ensure they have received the report and are responding accordingly. If unable to contact Marine Enforcement Division for some reason, then contact the Public Safety Office and report violators to them. Contact Information for Agencies or individuals is listed below.
- Crew prepare *Atoll Way* for response and it goes on standby—maintain radio contact, put lookout, crew to stations

- Contact foreign boats to notify them of unauthorized presence
- Approach boats only when they have anchored
- No boarding foreign vessels during pilot activities unless approved by Palau National Government
- No trolling or fishing beyond 12 mile outside Helen Reef for reasons of safety
- Field staff should attempt to minimize the use of fuel in all situations, including routine patrolling and resource monitoring activities.

7. PREREQUISITES FOR STEPPING UP TO COMPREHENSIVE ENFORCEMENT IMPLEMENTATION

- State Police Officers have been identified and declared by the Governor.
- State or Project personnel have been trained in the Palau Police Academy and have been deputized to enforce State and National Laws through the signing of an MOU among the Governor of the State, the Minister of Justice and the State Law Enforcement Officer.
- A Long-term Comprehensive Enforcement Plan (LCEP) which selects preferable long-term enforcement solutions has been written and approved (may be part of an over-all, long-term management plan).
- A facility or platform is established at Helen Reef to provide permanent, efficient, sustainable, comfortable, and safe living conditions.
- Reasonable funding is secured for those activities identified in the LCEP.
- The Helen Reef Action Committee and the State Governor agree to commence the LCEP.

8. CONTACT INFORMATION

- as of June 29, 2001 (Must CONFIRM and UPDATE list REGUALLY)

IMPORTANT RADIO FREQUENCIES:



Jon Narbutus
Lieutenant Commander, Palau Patrol
Boat, Marine Enforcement Division
E-mail: msa@palaunet.com
Patrol Boat 488 6875

Thomas Tuti
Palau Patrol Boat
Marine Enforcement Division

IMPORTANT PHONE NUMBERS:

Public Safety 911

National Marine Law Enforcement
Chief of Patrol – Malakal 488- 2882
Marine Law Office 488 6875
surveillance 488 5339
fax 488 4509
p-boat 488 3911
fax 488 3075
??? 488 5206

Michael Rosenthal
Minister of Justice
Bus: 680 488 3198
Cell Phone:
Home Phone: 488-3800
E-mail: justice@palaunet.com

Hatohobei State Government
Sabino Sakarias, Governor (hm: 488-5187)
Crispin Emilio, Lieutenant Governor (hm:
488-3663)
PO Box 1017, Koror
Republic of Palau, PW 96940
Bus: (680) 488-2218
Bus Fax: (680) 488-5149
E-mail: Hsg@Palaunet.com

Thomas Patris
Helen Reef Action Committee Chairman
Hatohobei National Delegate
PO Box 675, Koror
Republic of Palau, PW 96940
Bus: (680) 488-2507
Home: 488-3308 or 488-2856
E-mail: thomaspatris@palaunet.com

CURRENT PROJECT PARTNERS or COLLABORATORS

Hatohobei State Government
Helen Reef Action Committee
Community Conservation Network
Palau Division of Lands and Surveys
Bureau of Resources and Development
Palau Ministry of Justice
Palau Marine Enforcement Division
Palau International Coral Reef Center
World Wildlife Fund – US
World Wildlife Fund – Philippines
Foundations of Success
Bishop Museum

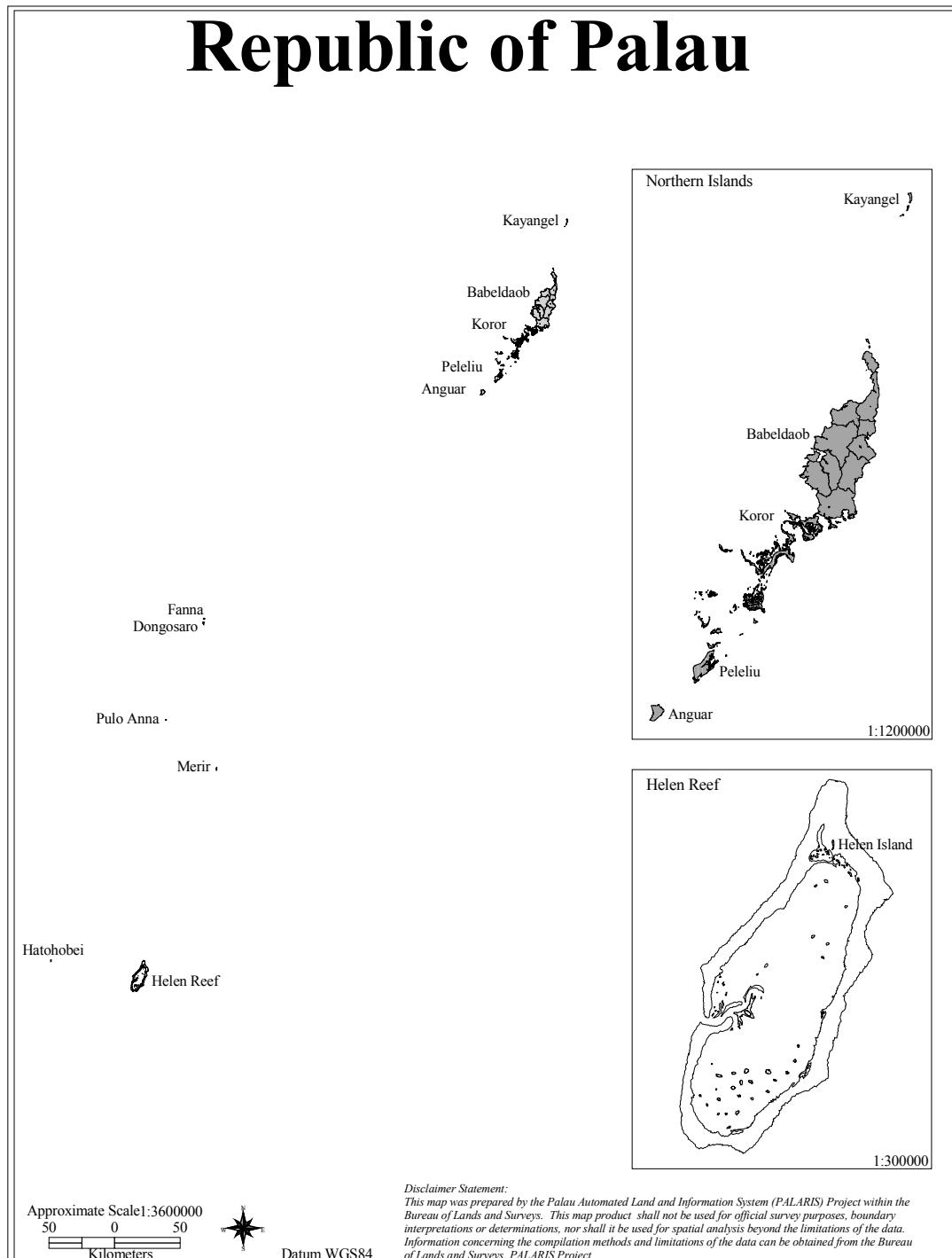
NEW OR PROPOSED PARTNERSHIPS:

International Marinelife Alliance
Palau Division of Marine Resources
Tambuyog Development Center, Philippines

9. REFERENCES

- Birkeland, Charles, Alison Green, Lisa Kirkendale, Terry Donaldson, Rob Myers, Jeff Mangel, Michael Guilbeaux, Kevin Weng, Rob van Woesik, Being Yeeting, Scott Atkinson, Scott Godwin, Kelly Raleigh-Otobed, Dave Sapiro, Dominic Emilio, and Mark Ridgley. In Preparation. *Helen Reef Year 2000 Baseline Scientific Monitoring Synthesis Report*. Prepared for the Hatohobei State Government.
- Black, P. W. 1990 Policy Recommendations for Securing the Republic of Palau's Southern Border. Prepared for the Attorney General of Palau.
- Hirschberger, Wendy. 1980. Tridacnid Clam Stocks on Helen Reef. Marine Fisheries Review. 42 (2) 8-15.
- World Resources Institute. 1998. Reefs at Risk: A map-based indicator of threats to the world's coral reefs. Washington D.C.

APPENDIX 1. Map of The Republic of Palau including Helen Reef.



APPENDIX 2. Proposed Budget of Secured Funding (as of June 2001)

(Click to explore entire budget table in MS Excel)

BUDGET: Conservation and Resource Management at Helen Reef, Southwest Islands, Republic of Palau, Micronesia

Revised as of June 29, 2001				YEAR 1			YEAR 2		
				Homeland *rvsd May01	Hatohobei State	New Zealand PIE	Hatohobei State	New Zealand PIE	Total
I. PROJECT MANAGEMENT				Jan-Dec '01		June '01- May '02		June '02- May '03	
<i>A. Indigenous Project Management Salaries</i>									\$ -
deputy project manager (Tobian) *1									\$ -
admin. assistant *2									\$ -
benefits/expenses (@ 11%)									\$ -
<i>B. Non-Indigenous Project Management Salaries</i>									
chief technical advisor *3									\$ -
technical advisor (M. Guilbeaux @ 20% of time) *4									\$ -
program development (S. Atkinson @ 10% of time) * 5									\$ -
benefits/expenses (@ 31%) *6									\$ -
<i>management salaries sub-total</i>				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL				\$ 2,600	\$ -	\$ -	\$ -	\$ -	\$ 2,600
				\$ 2,600	\$ -	\$ -	\$ -	\$ -	\$ 2,600
II. ENFORCEMENT/FIELD OPERATIONS									
<i>A. Operations Design, Education and Training</i>									
enforcement officer training in police academy *11									\$ -
stipends for enforcement training (6 at \$350/month) *12				\$ 3,150					\$ 3,150
specialized local marine enforcement training *13				\$ 3,000					\$ 3,000
training aboard National Patrol Boat *14									\$ -
stipends for Patrol Boat trainees				\$ 1,400					\$ 1,400
initial joint-enforcement coordination workshop *15				\$ 300					\$ 300
enforcement logistics/feasibility studies/design *16									\$ -
travel (exposure tour) *17				\$ 2,000	\$ 1,915		\$ 2,000		\$ 5,915
travel for workshop participation *18				\$ 2,850					\$ 2,850
community enforcement research *19				\$ 1,400					\$ 1,400
<i>operations education and training sub-total</i>				\$ 12,100	\$ 2,000	\$ 1,915	\$ 2,000	\$ -	\$ 18,015
<i>B. Operations Salaries</i>									
surveillance coordinator *20									\$ -
field operations manager *21									\$ -
composite team field staff (4 @ ~\$6000/year) *22					\$ 14,362		\$ 14,362		\$ 28,725
State Vessel Captain *23				\$ 10,010			\$ 10,010		\$ 20,020
Chief Engineer *23				\$ 9,230			\$ 9,230		\$ 18,460
Bosun *23				\$ 5,538			\$ 5,538		\$ 11,076
Deck Hand *23				\$ 5,330			\$ 5,330		\$ 10,660
Oiler (1) *23				\$ 5,538			\$ 5,538		\$ 11,076
Oiler (2) *23				\$ 5,330			\$ 5,330		\$ 10,660
benefits/expenses (@11%)				\$ 4,507			\$ 4,507		\$ 9,015
<i>field operations salaries sub-total</i>				\$ -	\$ 45,483	\$ 14,362	\$ 45,483	\$ 14,362	\$ 119,691
<i>C. Field Operations</i>									
national patrol boat operations *24									\$ -
field station (Year 2) *25									\$ -
short-distance patrol boat *26									\$ -
outboard engines (2)									\$ -
equipment *27				\$ 500		\$ 9,575		\$ 9,575	\$ 19,650

P 1 of __

Draft Management Plan

Project Goal:

Reduce immediate poaching activity by foreign fishers at Helen Reef by undertaking an effort to create a semi-permanent presence on a short-term basis until a longer-term comprehensive enforcement program can be implemented.

Objective 1:

For Hatoobei citizens to maintain a temporary presence at Helen Reef implementing the major elements of this included plan at a relative frequency of 180days/year by August 2001 for a duration of 2 years or until a long-term comprehensive enforcement plan can be implemented.

Factor(s) in Conceptual Model Targeted by Objective:

Foreign Poaching

Project Assumptions:

The peopling of Helen Reef without enforcement powers will be sufficient to deter some of the illicit foreign poachers.

Underlying Assumptions:

Activities for Objective 1:

- Activity 1**

Prepare the ship for three-four weeks at Helen (maintenance, equipment, supplies)

Why do this activity?

Because it is necessary for bringing people down to Helen, for them to have the supplies they need and to be safe.

How will the activity be carried out?

The crew, State personnel and project staff will organize to prepare the ship

Who is responsible for the activity?

The State Governor, the Lieutenant Governor is responsible for preparing the ship

The Chairman will be responsible for organizing the project staff

CCN will be responsible for providing the funds for fuel, supplies and equipment

When will the activity take place?

Is scheduled to commence in the month of Aug 01 and occur regularly until funds run out, people decide that they don't want to do in anymore, or a comprehensive enforcement plan is implemented.

Where will the activity take place?

Koror and Helen Reef

Underlying Assumptions:

Prerequisites:

P ___ of ___

Activities for Objective __:

- Activity __

Why do this activity?

How will the activity be carried out?

Who is responsible for the activity?

When will the activity take place?

Where will the activity take place?

Underlying Assumptions:

Prerequisites:

- Activity __

Why do this activity?

How will the activity be carried out?

Who is responsible for the activity?

When will the activity take place?

Where will the activity take place?

Underlying Assumptions:

Prerequisites:

Draft Project Management Timeline

Draft Monitoring Plan (Goal)

Goal, Objective, or Additional Information:

Goal: Reduce Impact of Foreign Fishers by establishing temporary presence at Helen Reef

Monitoring Strategy 1:

Monitoring Strategy 2:

<i>WHAT (Indicators)</i>	<i>HOW (Methods & Tasks)</i>	<i>WHEN</i>	<i>WHO</i>	<i>WHERE</i>	<i>Comments</i>
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Monitoring Plan (Objective)

Goal, Objective, or Additional Information:

Objective __:

Monitoring Strategy 1:

Monitoring Strategy 2:

<i>WHAT (Indicators)</i>	<i>HOW (Methods & Tasks)</i>	<i>WHEN</i>	<i>WHO</i>	<i>WHERE</i>	<i>Comments</i>
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*Activities for
Objective*

- Activity 1.
 - Activity 2.
 - Activity 3.
-

*Person Responsible for
Monitoring the Activity*

*Target Date(s) for
Obtaining Information*

Monitoring Plan (Additional Information)

Goal, Objective, or Additional Information:

Additional Information

<i>WHAT (Indicators)</i>	<i>HOW (Methods & Tasks)</i>	<i>WHEN</i>	<i>WHO</i>	<i>WHERE</i>	<i>Comments</i>
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