

SUMMARY OUTCOMES REPORT

EAST POLYNESIA ECOREGION TECHNICAL EXPERTS WORKSHOP 22 – 24 APRIL 2009 EDGEWATER RESORT RAROTONGA, COOK ISLANDS

INTRODUCTION

The East Polynesia Ecoregion (EPE) comprises the islands and waters of the Cook Islands and French Polynesia. It is located at a greater distance from a continent than any other island group in the world. The EPE has a combined EEZ of seven (7) million square kilometres of oceanic and coastal environment exceeding 4,000 marine species including corals, finfish, seaweeds, molluscs, crustaceans, polychaetes, echinoderms, reptiles and cetaceans. To manage the East Polynesia Ecoregion is a multi-jurisdictional responsibility and poses challenges to synthesizing data and management strategies. Identifying and linking the common biodiversity features of both countries would seem to be the most logical approach to a practical assessment of the gaps and needs of conservation goals for the ecoregion. These were attempted during discussions on Day 3.

About 20 participants comprising national fisheries experts (inshore/offshore), policy, climate, biodiversity and socio economic experts attended the meeting. The first day saw presentations in the morning and breakout groups for the rest of the meeting engaged in data capturing and mapping. The last session on Day 3 discussed and agreed on national priority target species and habitats, identified information gaps and decided on next steps.

DAY ONE Wednesday 22nd April

1. Proceedings:

Mathilda Miria-Tairea facilitated the formal opening of the workshop.

The Chairman of the EPE Project Steering Committee Ian Bertram, Secretary of the Ministry of Marine Resources welcomed everyone. MMR is the lead partner in the EPE project with other key government agencies (Ministry of Infrastructure & Planning, National Environment Service, Natural Heritage Project, Office of the Prime Minister) and WWF who comprise the Steering Committee which oversees the project in the Cook Islands.

The Chairman outlined the purpose of the meeting as an opportunity to capture data on marine species and to plot these digitally on GIS maps. Identifying information gaps would enable better planning for developing a plan of action plan to fill in those gaps at the end of the workshop. Data captured during this workshop would be helpful to policy development and planning. Emphasis was placed on ownership of the information as primarily belonging to the people and government of the Cook Islands, not SPREP or WWF. It was noted that a wealth of biodiversity information is available on the Natural Heritage Online Database which would be useful for mapping the EPE. The database lists 1,742 strictly marine species and a further 70 that are both marine and terrestrial such as land crabs and seabirds.

1.1. Workshop Objectives:

- To identify and capture information on species and habitats of local, national and global concern.
- To agree on criteria and rationale for prioritisation of those species and habitats.
- To identify gaps in data and agree on actions to filling those gaps between now and the biovisioning meeting in December 09.
- To assess differences and commonalities and to identify potential synergies with French Polynesia.

1.2 Workshop Outcomes:

- Agreement on the Way Forward for capturing additional data to fill in the gaps
- Agreement on criteria and biological targets
- Agreement on possible/potential linkages with French Polynesia
- Agreement on aligning EPE with the National Biodiversity Strategic Action Plan (NBSAP) in order to access funds for Protected Areas.

2. Presentations

2.1 The Process in the East Polynesia Ecoregion – Mona Matepi, WWF Cook Islands

In late 2007, WWF commissioned a scoping exercise to document existing information on biodiversity in the Cooks, identify information gaps as well as related socio economic, policy, legal and institutional frameworks. The resulting Reconnaissance Report is completed and under final review.

Data capturing will dominate WWF staff activities from here on to gather as much additional information within this time frame to achieve the maps for the bio-visioning planning in December. This week's meeting of experts from the marine and biodiversity conservation sector paves the way for the work ahead; in the coming months we will be gathering more information from the socioeconomics, policy and climate change sectors whose contributions will help greatly to presenting a fully comprehensive ecoregion map of the Cook Islands. Planning conservation goals and assessing the opportunities in the EPE will be the focus of the December meeting and the final phase of consolidating and synthesizing the data and maps we hope will be held here in March 2010 with participants from French Polynesia. The challenges we face are in linking the scientific information and strategies with the needs and aspirations of the Cook Islands.

Issue raised: Kiribati is not included in the EPE – yet is of the same high seas pocket as the Cook Islands and French Polynesia. WWF and the Nature Conservancy (TNC) initiated the ecoregion conservation concept where scientists looked at hotspots around the world and ranked them according to their biological and ecological importance. Cook Islands and French Polynesia is grouped as the biggest of five biogeographical units of similar characteristics in the South Pacific. It could also be a natural ecological barrier with the trans-equatorial current - Kiribati is not in agreement with the closure of the pocket to fishing. Three state parties must agree to a closure in a shared pocket of seas under the Law of the Sea Treaty.

2.2 French Polynesia Progress to Date – Elodie Lagouy, WWF France

Data collecting in French Polynesia for the EPE project started in 2008. Staff conducted community consultations, interviews with fishermen, marine biologists and community practitioners to gather both scientific and anecdotal information. Criteria for scientific data collection are based on; high density and diversity of species including endemics in other parts of the islands; species of specific richness, representative populations and threatened species. All of

this information is sent to Paris where it's plotted on GIS maps. Where there is no data, geomorphic features are used as the proxy for biodiversity.

French Polynesia has over 120 islands and of these, 30 islands were selected as priority sites based on their ecological interests. One staff works with these island communities. Prioritisation of the work takes into consideration features like passages and channels and a standard method for collecting data is adapted to suit communities. French Polynesia has completed the first step of biological and ecological data capturing and is currently undertaking data collecting for the socio economic component of the process. Ground truthing the economic data onto the maps will be held in a separate meeting scheduled for November in French Polynesia.

2.3 Update on Regional NBSAP/PoWPA - Analysing gaps in marine protection & fulfilling PoWPA commitments - Paul Anderson, South Pacific Regional Environment Programme (SPREP)

Important to determine areas essential to Cook Islands fisheries and biodiversity conservation to foster sustainable fisheries and to prioritize management options that will meet PoWPA 2012 marine conservation goals and requirements of the NBSAP. The Protected Areas Program of Work falls under the Convention for Biological Diversity (CBD). All signatories including the Cook Islands agreed to effectively conserve 10% of terrestrial habitat by 2010 and marine by 2012. Protected Areas (PA) conservation may take on several meanings: from 'no take' areas to sustainably managed community resource areas.

The regional approach:

For protected areas management, many Pacific island countries are using similar approaches including- Fiji, Kiribati, Samoa and French Polynesia. Approaches differ slightly but they generally seek to use existing data, expert input, habitat information and GIS.

They also tend to prioritize important national sites to meet international pledges and commitments

Results:

Key sites will capture viable populations of native and endemic species of all taxonomic groups most at risk from extinction. Key sites also capture the best remaining habitats and ecosystems for a wide range of benefits such as ecosystem services, cultural values, resource management, and resilience to extreme weather patterns.

Basic spatial data to be collected:

- Species of critical importance i.e food fish – need to protect spawning aggregations and over-exploited areas.
- Species that are on the IUCN red list
- Locally threatened species
- Species of cultural importance.
- Critical habitats
- Pristine/degraded habitats
- Threats/Pressures
- Current Managed Areas
- Raui/national parks

Data acquisition:

Need for literature review of spatially explicit data to be mapped. This expert meeting is to extract, document and map what is known about the resources. Mapping is important to identifying specific locations and targets to work toward. Documentation of data and GIS mapping allow for the process to be iterative – as more data becomes available it is straight forward to rerun the analysis. Suggestions below on how we might meet global targets –

- Near shore ~1,000km
- 10% of near shore - 100km

- Ra'ui areas- 5km or 0.5%
- Definition of 'Protected Area'
- Best management practices
- Where to focus the other 9.5% of Ra'ui
- Deep sea v's Near shore

Species of Concern:

- IUCN red list.. plus others
- Species from the NBSAP and others
- Species identified by Cook Islands experts

Important to map all endangered and critical species, habitats, high biodiversity areas and management areas. Taxonomic, spatial, habitat and deep sea gaps need to be identified and a digital library or database created linking species and spatial data to the source that supports its listing/mapping. This system allows for replication, additional iterations and verification. Beneficiaries of this information are the Ra'ui sites, communities, government agencies tasked with species conservation/management and Cook Islands commitments to the Convention on Biological Diversity (CBD).

2.4 Update on PoWPA in the Cook Islands – Elizabeth Munro, NES

The objective of PoWPA is to establish and maintain a comprehensive, effectively managed and ecologically representative system of protected areas that will significantly reduce terrestrial biodiversity loss by 2010 and by 2012 for marine. PoWPA focus in on 2 themes –

- a) Endangered species management
- b) Ecosystems management

Types of protected areas in the Cook Islands are sanctuaries, national parks, nature & private conservation areas (terrestrial), marine reserve areas (Ra'ui), water catchment area and wetlands. A total 23 sites are under marine Ra'ui or Marine Managed Areas.

PoWPA Progress to date:

- Draft Biodiversity Conservation Regulation (Environment Act 2003) Clause on the establishment of Protected Areas & a PA system plan
- Draft Suvarrow National Park Regulations
- Atiu and Mitiaro Environment Regulations (NES 2003 Act) - species & habitat for protection & develop management plans for these
- Regulations and Management Plan for the protection of the Takuvaine water catchment & species in the area
- Manuae Management and Resource Management Plans developed
- Assessment on Protected Natural Areas (PNA) within a Proposed National System, listed 36 established PNA
- Capacity Gap analysis carried out for PA management under National Capacity Self Assessment Project

Effective management, monitoring and enforcement remains as challenges compounded by limited resources and technical capacity or expertise to develop and implement species program, insufficient promotion of protected areas, insufficient data on scientific and socio-economic values; limited awareness/outreach programs and information gaps in population and spatial distribution.

Future plans are to develop a National Protected Areas Systems Plan as stipulated in the draft Biodiversity Regulation; define and strengthen the role of the Biodiversity Unit within NES; empower communities in effective management of resources; carry out awareness programs on

protected areas; improve coordination across sectors and organizations including NGOs; improve partnership with civil society; utilize GEF-Pacific Alliance for Sustainability (GEF-PAS) as a funding source and the EPE process.

Issues:

- Mitiaro and Atiu Regulations in force for protection of species of local concern.
- Biodiversity Regulations and Suvarrow Regulations are still in draft format.
- Manuae Management Plan (available on NES website) completed in 2005; there has been no progress since due to land ownership issues.
- Suvarrow National Park regulations due for endorsement in June 2009 include all islets and the lagoon and surrounding waters up to 12 nautical miles out.
- PoWPA goal is to achieve the CBD 10% target of Protected Areas for both marine and terrestrial by 2010 and 2012 respectively. 10% is the minimum target that countries can increase their percentage.

2.5 An overview of the EPE (CK) Reconnaissance Report – Kelvin Passfield, IUCN

Kelvin started by expressing his appreciation to the IUCN Regional Office for Oceania for allowing him to attend this very important meeting.

The Reconnaissance is the first phase in the ecoregion process. It introduced this innovative approach to a wide range of stakeholders, identifying complementary initiatives and potential partners. The report covered the physical environment and a social and economic overview of the Cook Islands. It remains a working draft, started in late 2007, completed in early 2008 and needs to be updated based on additional information available and through stakeholder consultations.

The East Polynesia Ecoregion covers over 7 million sq. km, encompassing the EEZs of French Polynesia (5.4 million sq. km) and the Cook Islands (1.83 million sq. km)

The Report gives a legislative and governance overview citing national policy documents such as the Te Kaveinga Nui (NSDP 2007 – 2010) and various related pieces of national legislation. A biodiversity overview cites over 4,000 marine species contained in the ecoregion, the use of the Natural Heritage Database as the best source of information by far. Threats to the ecoregion include Illegal, Unreported, and Unregulated (IUU) fishing; pollution and sedimentation; intensive aquaculture (e.g resulting in the pearl oyster vibrio outbreak in Manihiki); tourism; harmful and indiscriminate fishing practices; marine mining and climate change.

The final chapter deals with recommendations for addressing the gaps in information, and suggests for policies and governance issues within the ecoregion to be prepared in the final report of the biovisioning process. This current workshop is the first step in filling these gaps.

AFTERNOON SESSION:

2.6 Methodology for data capturing on GIS – Paul Anderson, SPREP

This session introduced the methodology for group work to capture information on the data sheets. Mapping was done island by island moving from north to south for consistency and identification of locations of species/habitats provided for the data maps. Key points:

- Provide specific coordinates or draw location points or polygons on paper maps.
- ID box in data sheets to contain 2 letter code of each island and reference numbers e.g AK01 = Aitutaki01 for species within a specific polygon.
- Provide specific description of species e.g “Giant clam” instead of “bivalve” or “bumphead parrot fish” instead of “fin fish”.

Documentation of data in the breakout groups were captured with one person on data entry and another plotting on maps. Deep sea and offshore species and habitats were considered according to the following features -

- Geomorphic (canyons, pinnacles, sea mounts)

- net ocean primary productivity,
- total sediment thickness,
- ocean bottom water temperature as well as surface and sub-surface thermal structures,
- ocean bottom water dissolved oxygen,
- ocean circulation fronts, dominant mesoscale eddies,
- ocean winds,
- Ocean currents, seasonal transitions,
- climate change predictions e.g. projected availability of Aragonite due to ocean acidification.

Satellite images purchased by SOPAC are given to the Cook Islands government – these are available for manipulation. The mapping exercise was carried out for the rest of the afternoon.

DAY TWO

Thursday 23 April 2009

3. Breakout Groups

3.1 – Session 1: Seabirds & Birds of Interest – Facilitator Gerald McGormack

Upoa – Wedge-tailed Shearwater - only colony recorded was in 1990s in Aitutaki

Rakoa – White-tailed Tropic bird – nesting in hills of Rarotonga; specific colony on Maungapu in Aitutaki

Tavake – Red-tailed tropic bird - found mainly in Palmerston, Takutea, and Suvarrow. They are also eaten by the local communities.

Kaparere – Red-tailed tropic bird nestling

Tara – Sooty Tern of Suvarrow – numbers in at least 50,000 and possibly over 100,000

Kakavia Maui – Black-naped Tern – 40 or 50 birds on Manihiki only

Karahurahu – Blue-grey Noddy (Dark morph) – Penrhyn – very rare

Kara'ura'u – Blue-grey Noddy (Pale morph), Mangaia, was once common in the Cooks, now rare but not red listed nor rare elsewhere in the world

Lulu – Masked Booby – incredibly rare with 25 in Suvarrow – one or two nest every year on Takutea

Kena – Brown Booby nestling, 22 nests as of 1989 in Takutea. maintains a very small but persistent colony – seen nesting in Suvarrow.

Kota'a Nui - Great Frigatebird flies enormous distances – nest only on Suvarrow and Takutea

The above nine species are endangered in the Cooks and rated national priorities for protection.

3.2 Introduced species:

Three giant clams of the same family exist in Aitutaki and Rarotonga - *Tridacna gigas* (TG),

Tridacna derasa, *Hippopus hippopus* (HH). TH and HH were introduced from Australia

TG and HH has previously not spawned in the wild but spawned here for the first time; further assessment needed to find out whether they have naturalised. TD was introduced from Palau and hatchery raised by MMR. Spawning was successful. Further assessment required to determine if these species have naturalised.

Poecilia spp. (molly and guppy) – common in taro swamps on all islands, eats mosquito larvae.

Two types of tilapia exist in Cooks. The *Oreochromis mossambicus* common in ponds is naturalised and found throughout the southern group as well as in Pukapuka and Rakahanga

brackish waters. The *Oreochromis niloticus* in Rarotonga is being raised for commercial purposes and exists also in Atiu and Pukapuka.

Trochus was introduced to all the islands but no information was available to the meeting on their survival in some of the islands.

Oyster was introduced privately for aquaculture purposes.

Algae (*Kappaphigus alvirezeii*) introduced from Kiribati to Aitutaki and Rakahanga but didn't naturalise and disappeared during a cyclone.

Green snail from French Polynesia, originally from New Caledonia was introduced to Rarotonga but did not naturalise.

Mussel was introduced to Muri in between the Motu (islets) but did not survive.

The Giant river-prawn (*Macrobrachium rosenbergii*) was introduced to ponds in Matavera.

3.3 Endemism

The Cook Islands have 12 deep sea fish that are endemic and recommended for Red Listing.

Peppermint Angelfish is reportedly the most expensive fish in the world; Powells false moray was last collected in the 1950's, never collected anywhere else in the world.

| Latin Name | Common Name |
|----------------------------|----------------------|
| Photoplepharon rosenblatti | CK Flashlight fish |
| Malacanthus species | (none) |
| Asterostegus maini | CK Brittlestar |
| Pseudanthias privitera | Fairy Basslet |
| Centropyge boyle | Peppermint Angelfish |
| Powellichthys ventriosus | Powell's False-Moray |
| Belonoperca pylei | (none) |
| Centropyge narcosis | Narcosis Angelfish |
| Cirrhilabrus claire | Claire's Wrasse |
| Parapercis n.sp.Boyle | Deep Sea Sandperch |
| Cirrhilabrus n.sp.Randall2 | (none) |
| Pseudocheilinus ocellatus | (none) |

Table 3.2.1 Deep Sea endemic fish species

3.4 Session 2: A Whale of a Time! – Nan Hauser, Centre for Cetacean Research & Conservation (CCRC)

Nan presented a very informative video of her research on whales in the Cook Islands. (Notes on this presentation will be circulated as an addendum to this report at a later date: the text below are extracts from the CCRC website - . The CCRC's mandate is to ensure the protection of endangered South Pacific humpback whales by determining their population identity and status in the Cook Islands. During a survey in Cook Islands waters in 1998, numerous humpback whales were individually identified, cow-calf pairs were sighted, and song was recorded extensively. Since these humpback whales, including small calves, frequent the Cook Islands throughout the austral winter months, the Cook Islands emerge as a breeding habitat for humpbacks from one of the least-studied of southern hemisphere management areas, Antarctic Area VI.

CCRC has since initiated a long term study comparing genetic, photo-identification, and song samples from Cook Islands humpback whales with samples from whales of other breeding and feeding sites in the South Pacific. Other long-term goals include investigating the behavioral ecology and toxicological loads of the Cook Islands whale population -

"http://www.whaleresearch.org/humpback_researchmethods.htm"

Critical habitats

Beaked whales are most frequently sighted around deep canyons, gullies, and walls, probably because their prey are associated with these features. As we learn more about beaked whale distribution, it appears that beaked whales rely on isolated critical habitats. To ensure the welfare of beaked whale populations around the world, these critical habitats must be identified and protected. A cooperative survey to identify beaked whale populations and their critical habitats around the world is in the making.

Beaked whales and acoustic pollution

Cetaceans, because they communicate and navigate almost entirely using sound, are sensitive to acoustic pollution. Beaked whales, because of their peculiar physiology and deep diving, are especially susceptible to damage resulting from acoustic pollution. Threatening sources of acoustic pollution in marine environments include widespread oil prospecting, ice-breaking, shipping noise, and military sonar.

Over the years Hauser, Gerald McCormack of the Cook Islands Natural Heritage Trust, and Cook Islands fishermen have been engaged in identifying and documenting the beaked whales of the Cook Islands.

DAY 3

Friday 24 April 2009

3.3 Session 3: Priority Species & Habitats – Elizabeth Munro, NES

The purpose of this session was to identify and agree on a prioritisation criteria for species and habitats in line with the NBSAP.

Habitat types found in the Cook Islands are coral, pinnacles, sand, reef slope, lagoon, reef crest, reef passages/channels and some sea mounts. MMR has data on mostly Aitutaki and Rarotonga. Coral on Rarotonga and Suvarrow are reportedly dead. Need to choose areas where coral is rich, areas important to species survival, then work with the landowners/communities to declare as Ra'ui or Reserve. There are 11sq.km of pinnacles which covers a very small percentage of lagoon. Pinnacles are mainly found on the Flying Venus Reef (NE passage of Penrhyn and the Tema Reef (East of Nassau/Pukapuka).

3.4 Agreed priority habitats for protection:

Criteria – important places where biological and ecological processes occur.

- Reef slopes and shallow waters – shorelines are important to female whales for birthing, entire reefs and ocean spaces are important to males for acoustics. Reef slopes have multiple use for important biological processes; suggested for protection of up to 1km or more out to ocean. Whales use islands as landmarks and follow a pattern of celestial navigation and currents to travel from land to land. Sharks around Rarotonga are mainly seen between Matavera point and Avana and the Paradise Inn (Tupapa). Whales sometimes use reef slopes for resting but will not depend on it if the reef is dead. Ra'ui boundaries should extend beyond the reef so the fish can swim back into the lagoon.
- Sand – species found in Aitutaki sand banks, no primitive worms. Ka'i (*asaphis*) found only in Rarotonga around The Rarotongan Resort and Avana. These are areas already under Raui. Kuku (*modiolus*) is found in Avana.
- Lagoon – some are under Ra'ui. Suvarrow lagoon is a protected area (National Park). Ra'ui sites in Southern Cooks are listed and other islands have other means of resources

management systems in place e.g Manihiki lagoons for pearl farming. Protected areas in the northern group have adaptive systems of management for sustainability.

- Swamp sedge strip along Avana/Aroko Muri Beach – this is a Ra’ui site close to estuaries - important nursery grounds recommended for protection as one of the last remaining wetlands on Rarotonga.
- Reef passages & lagoon channels – aggregation areas for sharks. Suggestion for temporary closure of passage to allow uninterrupted spawning. Passage in the north east of Penrhyn suggested for protection - seahorse sighting there and in Avatiu Harbour. Manihiki passages are also spawning sites and included in the islands lagoon management plan.

| Reef Type | Area KM |
|--------------------------|----------|
| bridge | 1.1996 |
| channel | 0.0388 |
| deep lagoon | 366.5439 |
| deep terrace | 4.5355 |
| diffuse fringing | 0.1855 |
| enclosed lagoon or basin | 0.0341 |
| forereef | 65.3048 |
| inner slope | 58.8387 |
| lagoon pinnacle | 11.1827 |
| land on reef | 178.2343 |
| linear reef flat | 0.5627 |
| main land | 88.5285 |
| pass | 3.4555 |
| pass reef flat | 0.1888 |
| reef flat | 132.8756 |
| shallow lagoon | 9.9755 |
| shallow terrace | 23.8700 |
| subtidal reef flat | 0.2464 |
| uplifted reef flat | 10.6109 |
| Total | 956.4118 |

Table 3.4.1 Types of reefs in the Cook Islands

3.4.2 Agreed Priority species:

Criteria - endemism and important food source.

Giant clam, bumphead wrasse, coconut crab, turtles (especially green turtles need management), whales, some sharks, swordfish, rhododendron cone, triton conch – eats COTs, extremely important.

Spider conch (*Lambis* spp.) – especially found in Suvarrow.

Sharks (all pelagic sharks and any shark that interacts with long line fishing). For fin harvesting, MMR has management plan and a policy for carcass of sharks to be brought back to shore. When applying for fishing licence that specifically targets shark, MMR collects data from those vessels.

Invertebrates – mud crabs (upaki – found along the coast of Nikaupara and Taravao in Aitutaki, NBSAP database), varo – sensible management – data available from MMR/Aitutaki; pa'ua (clams) - native species only.

Patito (*lined seahare/stylocheilus striatus*), ariri – management needed in some areas; need research and management; (*note: extremely difficult to determine sex when live - not realistic as a management tool*).

3. Gaps

Data – more research is needed on some of the prioritized species and habitats.

Action – WWF will continue collecting additional data with MMR staff and the NHP database, NES and will work closely with Timoti on mapping.

This work will complete the ecological gap analysis prior to the planning meeting in December. A socio economic analysis to determine biodiversity values will be carried out during this period also with the assistance of the OPM Policy Division.

4. Agreed Criteria for ranking

Cooks will adopt the scoring system used in French Polynesia with amendments appropriate to the Cook Islands, but will only apply to parts of the islands instead of using a standardized system which would cancel out some islands entirely. There needs to be an agreement on this prioritization method nationally with participation by communities who will prioritize sites and species of importance to their islands.

5. Next Steps

- Biovisioning planning meeting scheduled for Dec 2009 - EPE project funds
- Terrestrial component (NBSAP/PoWPA funds) - WWF & NES follow up
- Draft letter to SOPAC – WWF follow up
- Additional data (use Procfish & Reefbasepacific.com as well) – WWF follow up
- Prioritizing process, species list & categories used in PF – WWF follow up
- Completion of a national Red List
- Housing of data online - Govt agencies, WWF, SPREP
- Copy information to Kelvin Passfield for storage with IUCN Oceania
- Issue a press release on the workshop
- Continue data capturing with outer islands residents on Rarotonga

6. General Discussions on possible synergies with French Polynesia:

The following species were identified as potential opportunities for linking conservation goals for Cooks and French Polynesia – grouper, sharks, swordfish, tuna (*no spawning areas in PF), pa'ara (wahoo). Geomorphical habitat layers are similar as are the Ra'ui/Rahui - traditional resource management systems across Cooks and French Polynesia. s.

Emphasis on scientific data collection is crucial to decision making linked to the needs of the resource users (communities). In French Polynesia, anecdotal data was also collected from the communities or individual fishermen and other resource users. There is some level of management in each of the islands with Island Council By Laws regulating the use of or ban on certain species.

7.1 Communications & Public Information – important for the outer islands to know about this process so we can generate information from outside of Rarotonga. Suggested use of the media to inform about the process. Wider consultations should be called with outer islands representatives on Rarotonga to assist in data collecting.

For French Polynesia, priority species include sharks, manta ray, pelagic fish and exploited fish. For habitats – the same data set and categories were used as well as geomorphic layers for analysing. FP collected both scientific and community data.

Socio economic analysis – this will be done over the coming months.

7.2 Challenges & Opportunities:

Management of the EPE as one system - there is recognition of the opportunities for collaboration between Cooks and French Polynesia but not necessarily to standardize a prioritisation system for the ecoregion. French Polynesia has 120+ islands; 30 were selected as priority sites for the project. Cooks has fewer in comparison and therefore ought to include all 15 islands.

The EPE funds are focused on marine activities; however, an opportunity for leveraging additional funds through the NBSAP/PoWPA process is suggested to address terrestrial species/habitats in the ecoregion. The current budget will cover the biovisioning meeting in December.

7. WRAP UP

Over the next month WWF staff will continue working with MMR to collect more information for mapping. Due to an already stretched work schedule, the Steering Committee will hold its next meeting at the end of June 2009. Due acknowledgement accorded to all who participated and contributed to this workshop.

Acknowledgements

Data References:

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8. WORKSHOP PARTICIPANTS

| NAME | ORGANIZATION | CONTACT |
|------------------|---|--|
| Gerald McCormack | National Heritage Project and Te Ipukarea Society | gerald@nature.gov.ck |
| Ian Bertram | MMR | I.Bertram@mmr.gov.ck |
| Dorothy Solomona | MMR | d.solomona@mmr.gov.ck |
| Teina Tuatai | MMR | t.tuatai@mmr.gov.ck |
| Sonny Tatuava | MMR | s.tatuava@mmr.gov.ck |
| Ngere George | MMR | ngere@mmr.gov.ck |
| *Nan Hauser | Whale Research Centre | info@whaleresearch.org |

| | | |
|--------------------|---------------------------|--|
| Mathilda Tairea | Private/Public Policy | ceap1@oyster.net.ck |
| Reboama Mitchell | Private/GIS | reboama@telecom.co.ck |
| Vaine Wichman | OPM/Economist | arama@oyster.net.ck |
| Katherine Ross | WWF Cook Islands | |
| Sylvia T George | WWF Cook Islands | sgeorge@wwfcooks.org.ck |
| Elodie Lagouy | WWF France | elagouy@wwf.fr |
| Paul Anderson | SPREP/GIS | paula@sprep.org |
| Kelvin Passfield | IUCN | kelvin.passfield@gmail.com |
| *Elizabeth Munro | NES/NBSAP | |
| Teariki Rongo | GEF-SGP | |
| Colin Brown | Private/Marine | cibn@oyster.net.ck |
| Timoti Tangiruaine | Infrastructure & Planning | t.tangiruaine@mow.gov.ck |
| Steve Lyon | Private/Marine | dive@pacificdivers.co.ck |
| Jane Lamb | Private/Marine | janelamb@oyster.net.ck |

EAST POLYNESIA ECOREGION TECHNICAL EXPERTS WORKSHOP
EDGEWATER RESORT, RAROTONGACOOK ISLANDS – APRIL 22ND – 24TH 2009

| DAY ONE (22 April 2009) | | | DAY TWO (23 April 2009) | | | DAY THREE (24 April 2009) | | |
|-------------------------|--|------------------|---|------------------------------------|------------------|---|---|------------------------------------|
| Time | Session | Lead | Time | Session | Lead | Time | Session | Lead |
| 9:00am | Welcome & Prayer | Ian Bertram | 9:00am | Recap of Day 1 | Mathilda | 9:00 am – 10:15 am Concurrent sessions | <ul style="list-style-type: none">Capture scientific data onto biodiversity maps.Set biological targets and agree on a process for NBSAP | Paul Anderson Liz Munro |
| 9:10 am | Introduction & Purpose of Meeting -Expected Outcomes | Ian Bertram | 9:15 am – 10:15 am Concurrent sessions | Seabirds | Gerald McCormack | | | |
| 9:20am | Brief on EPE & process taken for Cook Islands | Mona Matepi | | Introduced species | Gerald M / MMR | | | |
| 9:45am | French Polynesia: progress to date. | Elodie Lagouy | | | | | | |
| 10:15am | MORNING BREAK | | | | | | | |
| 10:30am | Update: Regional NBSAP/PoWPA | Paul Anderson | 10:30am – 12:00 pm | Species of local concern | Gerald M / Liz | 10:15am | Recap of Day 2 | Mathilda |
| 11:00am | An overview of the EPE (CK) reconnaissance report. | Kelvin Passfield | Concurrent sessions | Cetaceans | Nan Hauser | 10:25am | Presentation of maps | Paul Anderson |
| 11:30am | Update: Cook Islands PoWPA | Liz Munro | | | | 12:30pm | Plenary / Feedback | Mathilda |
| 12:00pm | LUNCH BREAK | | | | | | | |
| 1:00pm | Methodology & presentation of maps. | Paul Anderson | 1:30pm – 3:30pm | Inshore Fish & Sharks | Kat | 1:30pm | Identify potential synergies with French Polynesia | Mathilda |
| 1:30pm | Plenary | Mathilda | Concurrent sessions | Habitats & currently managed areas | Paul | 3:00pm | Identify gaps & next steps | Mathilda |
| 2:30pm | Offshore fish | MMR | | | | End of workshop | | |
| Concurrent sessions | Turtles & Species of global concern | MMR | 3:30 pm | Plenary/Review preliminary maps | Mathilda | | | |
| 4: 00pm | Plenary/Wrap up Day 1 | Mathilda | 4:30pm | Wrap up Day 2 | Mathilda | | | |
| 5:00pm | END OF DAY | | | | | | | |

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