

KAIWALAGAU DANGHALAW A WARUW YA WATHAN

Kaiwalagal Dugong and Turtle Management Plan

Management Plan Developed for:

Kaurareg Nation of Kaiwalagal (Inner islands)

For the Management of the Dugong and Turtle Fisheries in:

Kaiwalagal Dugong and Turtle Management Area

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Acknowledgements

The Kaiwalagal Plan was developed by the Kaurareg traditional owners with support from the Torres Strait Regional Authority, Land and Sea Management Unit.

Many Traditional owners generously gave their time and knowledge during many meetings leading up to and during the development of the Plan.

The Australian Government's Natural Heritage Trust (now part of the Department of Environment, Water, Heritage and the Arts) provided funding for the development of the Plan through the cross-regional Dugong and Marine Turtle Project coordinated by the North Australia Indigenous Land and Sea Management Alliance (NAILSMA).

Staff from the Australian Government and Queensland Government agencies as well as James Cook University provided valuable assistance in providing technical and policy advice during a review of the Plan. The Torres Strait Protected Zone Joint Authority (PZJA) has supported the Plan development throughout the project since 2005.


Use of the Plan


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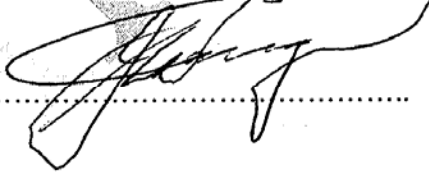
Traditional Owner Endorsement

The Kaurareg Council of Elders of Ngurupai (Horn Is), Waibene (Thursday Is), Kiriri (Hammond Is) and Muralug (Prince of Wales Is) represented by the Kaiwalagal Aboriginal Corporation (Prescribed Body Corporate) endorse this management plan.

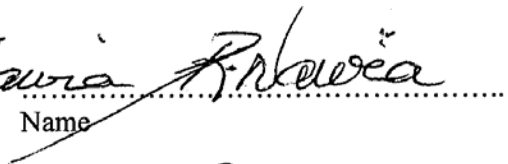
The Council of Elders through Kaurareg customary protocol gives the traditional owner authorisation to the Kaiwalagal rangers to implement the Traditional Management Arrangements and Dugong and Turtle Cultural Protocols in this Plan. We do so with respect to all the elders, traditional owners and inhabitants in the Kaurareg land and sea country within our Dugong and Turtle Management Area.

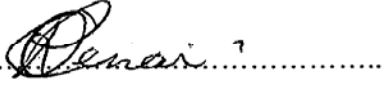
Pearson Wigness 
Name Name

Connally Wigness 
Name Name

Elder Joseph Wigness 
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Elder: Rev. Dr. Ronny Wigness - Wigness
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Rolford Navia 
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Roy Genai 
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Name Name

Executive Summary

This draft management plan provides a framework plan for the management of the dugong and turtle fisheries in Kaiwalagal Dugong and Turtle Management Area; with a supporting implementation plan. It has been developed by Kaurareg Traditional Owners within the Kaurareg Nation.

Kaurareg want a collaborative approach with surrounding Islander communities and all levels of government to implement this plan for a sustainable harvest of the turtle and dugong to achieve conservation. This plan will also concentrate on reducing the impacts of increased commercial fishing activities on dugong and turtle in the land and sea country of our Dugong and Turtle Management Area.

The Torres Strait Regional Authority (TSRA) has provided support to eight Torres Strait communities in developing management plans for turtle and dugong. This has been made possible through Natural Heritage Trust funding, on behalf of the North Australian Indigenous Land and Sea Management Alliance (NAILSMA).

The project is supporting communities move towards sustainable management approaches for dugong and marine turtle including through the development of these management plans, monitoring activities; education and awareness-raising programs. It is envisaged that each community based plan will form part of an overarching regional framework for community-based approach to the management of these Fisheries in conjunction with the PZJA. TSRA has developed this management plan template with the support of Protected Zone Joint Authority Agencies (PZJA) and Torres Strait communities.

A recent review undertaken by James Cook University (Havemann and Smith 2007) sought to identify elements of current governance framework conducive to a community-based partnership governance framework for sustainable use and conservation of dugongs and marine turtles in the Torres Strait region.

The main finding of a legal review concluded that there was:

1. nothing stopping community based management plans being made within the existing legal and policy arrangements;
2. a sub-clause be added to the *Torres Strait Fisheries Act* to “ensure the Minister fully consult with community based management groups for input on social, ecological and economic factors before authorising plans that impact upon traditional activities;
3. that existing government agencies could be delegated authority to set up a Torres Strait region-wide community based management program; and,
4. that the community management groups be backed by government enforcement mechanisms, such as the Queensland Parks and Wildlife Service. The government enforcement should assist with addressing breaches of the community plans if

local remedies from the management plan are ignored. (Havemann and Smith 2007).

This draft Plan, along with the other seven draft plans will now be circulated to key stakeholders for feedback and support. The remaining ten communities are yet to have had the opportunity to undertake this process, but have been consulted where there has been overlapping boundaries.

The development of this Plan has occurred during the development of the Strategic Assessment of the Torres Strait Dugong and Turtle Fisheries, a requirement of all Commonwealth Fisheries under the *Environment Protection Biodiversity Conservation Act 1999* (EPBCA). TSRA project staff has assisted in the community consultation for the Strategic Assessment and remained in close liaison with both Australian Fisheries Management Authority (AFMA) and Department of Environment and Water Resources (DEW) during this period. This relationship and communication has ensured that the community based management plans developed as part of the TSRA project will be an integral consideration for the drafting of Strategic Assessment Recommendations by DEW.

Glossary

Vision: 20 to 30 years (plus), the big picture, combine 'where we want to be' statement.

Objective: Up to 5 years plus 5 years, life of each plan, brief / broad statement of how the concern is to be managed / resolved.

Strategy: Triggers action, thinking behind activities to achieve the objectives.

Actions: Daily / weekly, shorter term activities that when combined work towards achieving the objectives.

Performance Indicator: the measure of whether actions are happening, successful or not, whether objectives are being met.

Review / Check / Evaluate: Check whether the overall project is working, on budget, on time, getting planned results.

DRAFT

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1.0 Introduction

The Kaurareg vision for dugong and turtle management in the land and sea country of the Kaiwalagal Management Area is:

To develop sustainable management and use of dugong and turtle resources within the sea boundaries of the Kaurareg nation of Kaiwalagal based on Kaurareg Customary Protocol

This document describes the way forward in managing the Dugong and Turtle Fisheries through a community-based management approach, in partnership with all levels of government and research institutions. This management plan recognises and aligns with the regional, State and Commonwealth obligations and objectives of dugong and turtle management.

The Kaiwalagal Dugong and Turtle Management Plan (hereafter referred to as the Kaiwalagal Plan) proposes to adopt both traditional management and existing statutory management arrangements already established for the fishery; which proposes to direct Dugong and Turtle Fisheries management in the land and sea country of the Kaurareg Traditional Owner Group and Kaiwalagal Community Traditional Inhabitants through the Protected Zone Joint Authority (PZJA) consultative structure.

The endorsement of the draft Plan forms the foundation for a framework agreement and partnership between Kaurareg and the PZJA for the sustainable management of the Torres Strait Dugong and Turtle Fisheries.

1.1 Purpose of the Plan

“Community based involvement and planning of the fisheries allows each island community to shape the way that dugong and turtle hunting in that community is carried out. At the heart of community based management is the principle that those people affected by decisions should participate directly in the decision making process. Community based management means that all community members, including women, elders, youth and hunters have the opportunity to decide how the plans are made and how they will be carried out” (Havemann and Smith 2007).

1.2 What this plan means to Kaurareg

The Kaurareg people are the Traditional Owners of Kaiwalagal (Inner Islands region) that includes the inhabited islands of Ngurupai (Horn Island), Waibene (Thursday Island), Kiririri (Hammond Island) and Muralag (Prince of Wales Island). The Kaurareg Nation

of Kaiwalagal also extends to a large number of uninhabited islands, reefs, sand banks and islets.

The Kaurareg people have witnessed large changes over time in their land and sea country. Kaurareg people acknowledge that cultural practice and traditions change over time. These changes have occurred largely through disturbances caused during colonization of our land by Europeans from the 1860's and the establishment of Waibene as the commercial centre of Torres Strait. Since this time diverse cultures have settled in our Nation and the westernized influences on our people have also influenced changes in cultural practice and tradition.

Kaiwalagal has bountiful land and marine resources including large populations of dugong and turtles. Kaurareg have harvested dugong and turtle since time immemorial and these animals are totems for our people. With the intermarriage with Mualgal due to movement of Kaurareg people to Moa Island under the Native Affairs regime, dugong has also become of close cultural significance through the story of Gelam.

Use of Dugong and Turtle Before Time (Prior to Colonisation Impacts)

Kaurareg follow an initiation process whereby young boys are initiated in order to become men and taught boys about respecting their place and environment as well as Cultural Protocols. Only initiated Kaurareg men were allowed to hunt dugong and turtle.

Turtle were traditionally hunted for subsistence purposes, particularly during the saulal (mating) season. Kaurareg manned lookout stations for turtle where the tide runs strongly off a high rocky point. On spotting a turtle a canoe would be manned to go and catch the turtle using rope. Turtle were also caught from canoes at moon lit nights in Kaiwalagal. Kaurareg were also skilled at the use of gapu (sucker fish) to catch turtles. It is considered that this was mostly used to capture the gapu waru (flatback turtle). A number of turtles were also caught while they nested on beaches.

Eggs of all species of nesting turtle were taken. Kaurareg people identified the eggs of flatback, green and hawksbill turtles nesting on their islands.

Dugong was caught much less frequently than turtles. Kaurareg people utilised both the naith (platform) and canoes to hunt dugong spotted feeding near shore. The dugong were speared using a wap (traditional hunting spear with detachable point) tied off to the naith or canoe using rope. On capture the dugong were towed back to a nearby beach for butchering. The dugong was cut into strips using a sharp shell, each strip containing meat, fat and skin. The tail was also cut for cooking.

Dugong and Turtle meat was distributed widely amongst the families after capture. This meant that the entire community would benefit from the catch and this would aid in maintaining family ties. Certain cuts of meat were given to certain people. Dugong and turtle were traditionally cooked in the amai (earth oven). Dugong was traditionally left over night to bloat slightly to assist in butchering process.

All wastes would be disposed of according to Kaurareg custom of what comes from the sea must go back to the sea and shell and bones were discarded out in the water.

Before time turtles basked openly on reef tops in Kaiwalagal as the tide dropped. These turtles would wait for the tide to flood back in and then they would continue feeding. As the tide flooded dugong would also move in close to fringing island reefs, up onto flooding sand banks, particularly close to Gaiyalag (Friday Island).

Use of Dugong and Turtle Present Time

Kaurareg people have noticed big changes in how dugong and turtle are used from before time to present time.

Today a wide range of people hunt dugong and turtle in Kaiwalagal. This includes initiated as well as un-initiated men. Today the initiation process is being overlooked and young men without proper training and understanding are now hunting. Larger numbers of men are now hunting in Kaiwalagal and more women are also part of the hunting party.

Dugong and turtle hunting has also been modernized through the use of powered aluminium and fiberglass dinghies. Advancement in vessel technology from canoe to powered dinghies allows hunters to travel greater distances in order to hunt and has opened up larger areas for hunting. For example hunters can travel from Waibene out to hunt near Neyangu (Booby Island) in the morning and return to Waibene with two dugong. Use of outboards also allows turtle egg harvest to be maintained efficiently on most islands in Kaiwalagal. There has also been an increase in unplanned harvest of dugong and turtle with hunters coming across these animals when traveling or hunting for fish or kiar (crayfish).

Hunting techniques have also changed over time. A number of hunters still utilise a (Paupa Thaiyan) drift method of hunting from either small clinkers or the foredeck of dinghies. This traditional hunting includes zagul, the method of spearing dugong by following phosphorescence illumination but only through the drifting technique.

A number of other hunters utilise new methods that require chasing dugong and turtle in powered dinghies. This method is used during both the day and night and the animals are chased until they tire. These methods are **not** considered cultural hunting methods and have a range of issues including disturbing dugong in hunting area, potential boat strike and scaring away dugong being hunted by other hunters. The impacts of these activities are being noticed by experienced hunters who report that dugongs are not coming close to shore behind Gaiyalag (Friday Island).

Today different butchering and cooking methods are being used. Hunters are filleting dugong and turtle meat and not using traditional slicing methods. A number of butchers are also leaving a lot of meat on the bones, discarding skin and fat as well as the tails. These methods are encouraging single family distribution of meat and are reducing customary sharing. Instead of butchering close to where the animal was caught hunters are now returning to inhabited islands to butcher and many leave their wastes on the waters edge. This is attracting crocodiles and sharks close to these places. Some hunters also butcher under their houses. The sight of dead dugong in vehicles being moved through villages is also distressing to Kaurareg – Mualgal people.

These cultural meats are also showing up as discarded slabs of meat in the Horn Island rubbish dump. Some people are known to replace old dugong and turtle meat with freshly caught meat and throw the old meat in the bin. There are also reports that dugong is being moved south of Torres Strait for black market sale.

Today turtles are not seen basking on reef tops. Turtles are scared by motorised dinghies and will only come onto the reef top on a flooding tide. Dugong behaviour has also changed in Kaiwalagal. Following the introduction of zagul hunting and chasing during the day dugong are not coming to feed close to Friday Island. Dugongs now stay out in deeper water out towards Neyangu (Booby Island) and are scared of coming closer. Once an outboard is started during the night on the feeding grounds dugong herds will scatter. This may be impacting the dugong herds in Kaiwalagal by pushing them away from their feeding grounds.

Why we need this management Plan

The Kaurareg people accept that cultural practice has and continues to be modernized in regards to dugong and turtle in Kaiwalagal. Some of this modernization is unacceptable to the Kaurareg people and we want to use this management plan to stop and change some practices and activities. However Kaurareg people also accept that traditional practice changes through modernization but these changes require management to control the level of hunting and how dugong and turtle is used. The Kaurareg people are also concerned about other environmental issues that are impacting on their dugong and turtle populations.

This is what this management plan means to the Kaurareg people and why we need this plan to be implemented.

1.3 Guiding Principles of the Plan

Community control and empowerment – The Kaurareg traditional owners make management decisions in consultation with the Kaiwalagal community and organise

activities that should maximise opportunities for local Torres Strait Islanders and Aboriginal people as participants in the management of their dugong and turtle resources;

Respect for Kaurareg cultural values and traditional knowledge - for Kaurareg there are all embracing values inherent in all sites in the management area, and the preservation of these sites through the implementation of management arrangements based on traditional knowledge is a primary focus of management;

Conservation of natural and cultural values of the management area - the use and management of the area must be sustainable and must protect the ecological and heritage values that are the result of generations of Kaurareg management;

Two ways management - maximising opportunities for Torres Strait Islander and Aboriginal people to devise strategies from mutual investigation of Western and Indigenous systems of knowledge;

Continued development of collaborative partnership - in programs and research to support sustainable use and management of dugong and turtle resources. Cooperative and respectful partnerships with government and independent agencies will be sought by Kaurareg traditional owners.

1.4 Objectives of the Kaiwalagal Plan

The draft Plan has been developed for the purpose of community based management of dugong and turtle resources in the Kaiwalagal Dugong and Turtle Management Area. The Kaiwalagal community has identified a number of concerns (see Section 8) that need to be addressed to achieve their vision as stated in the Introduction.

To address these concerns, management objectives, strategies and actions have been developed. For each action, stakeholders have been identified who could partner the actions. The Plan sets this information out in a tabulated summary as an implementation plan (**Attachment 1**).

The key objectives which the Kaiwalagal community has identified include:

- Slow the rate of dugong and turtle hunting in the Kaiwalagal Management Area;
- Monitor dugong and turtle populations and habitats;
- Consolidate the Kaiwalagal ranger program to implement the management plan and undertake monitoring program;
- To keep the shorelines of all islands in Kaiwalagal clean of all dugong and turtle wastes, and;
- Kaiwalagal community aware of dugong and turtle sustainability issues and Kaiwalagal Management Plan.

2.0 Native Title

Nothing in the draft Plan is intended to, or will, affect:

- (a) any native title rights and interests, including any activity carried out in accordance with any native title rights or interest; and
- (b) the operation of section 211 of the *Native Title Act 1993* as provided in the Torres Strait Fisheries Management Act 1991;
- (c) the outcomes of the Regional Sea Claim lodged to the NNTT; and
- (d) the operation of:
 - 1. any other law of the Commonwealth; or
 - 2. any law of the State of Queensland,

That acknowledges, protects or preserves any native title rights and interests.

3.0 Traditional Owner Group(s)

- (a) Traditional owners have agreed to the contents of the draft **Kaiwalagal Plan**. The draft Plan for consultation is a joint agreement between the members of the following Traditional Owner group(s):

[List Traditional Owners]

- (b) **Kaurareg** traditional owners under the **[List Name of Prescribed Bodies Corporate]** Prescribed Bodies Corporate (PBC) hold successful native title determination(s) over the following place(s):

Kaiwalagal PBC (Insert Island Names)

If more than one PBC continue to list

4.0 Consultation

Development of the draft Plan has occurred through an extensive consultation process undertaken by **[Insert Name of Project Officer]**, dugong and turtle project officer for Ngurupai (Horn Island), including:

- List activities, events and meetings.

Documentation of the draft Plan occurred during facilitated meetings held with the **Kaiwalagal** Plan steering committee and the draft was finalized on **[Insert Date]**.

The draft plan will be submitted to government agencies, non-government organisations and research organisations for initial comment; and after further feedback and consultation with the Kaiwalagal community, a second consultation.

The draft plan will be submitted to the PZJA Management Committee in **[Insert Date]** and PZJA in **[Insert Date]**.

The process for plan development will include consultation between community and government and other stakeholders, with the Torres Strait Regional Authority facilitating the process. On agreement of the final draft plan between parties, the individual community plan, or a combined regional plan will be formally submitted to the PZJA for endorsement. The Fisheries Minister has the jurisdiction to then formalize the management plan.

5.0 Establishment and Role of Kaiwalagal Plan Steering Committee

The Plan steering committee is the Kaurareg authority that has developed the management arrangements in this draft Plan. For the purpose of drafting this Plan the steering committee was made up of Kaurareg traditional owners and traditional inhabitants of Kaiwalagal.

The Plan Steering Committee is made up of the following Kaurareg elders:

Senior Elder Uncle Rolford Nawia
Senior Elder Uncle Joseph Wasaga
Pearson Wigness
Roy Genai
Dr Roney Wasaga
Conwall Wasaga
Elizah Wasaga

The draft Plan has been approved by the Kaurareg Council of Elders represented by the Kaiwalagal Aboriginal Corporation. Following ratification the Kaiwalagal Plan steering committee will operate under the following conditions:

- (a) Traditional owners and traditional inhabitants covered by this Plan will be represented by a Plan steering committee comprising representatives from the Kaurareg Council of Elders as well as one representative from the Kaiwalagal Aboriginal Corporation that comprise the Kaurareg traditional owners;
- (b) The Plan steering committee will include the endorsed Community Fisher Group Representative for Kaiwalagal and this representative will take dugong and turtle issues to the Protected Zone Joint Authority (PZJA) through the Dugong and Turtle Working Group;
- (c) The Plan steering committee will include Kaiwalagal land and marine rangers. These rangers will provide information to the Plan steering committee as required for Plan review and notification of infringements, research and monitoring activities;
- (d) The Plan steering committee will grant authorities in accordance with permit arrangements, and;
- (e) The Plan steering committee will refer infringements and penalty related issues to the **[Insert Name]** Community Justice Group.

5.1 Plan Steering Committee Contact Details

- a) The contact person(s) for notification of the Plan steering committee is:

Name
Title
Organisation
Address
Island, QLD 4875
Tel:

- b) Subsequent contact persons for notification of the Plan steering committee will be:
 - 1. Nominated by the Plan steering committee, and;
 - 2. Notified to the Torres Strait Regional Authority (TSRA) and the Australian Fisheries Management Authority (AFMA) within 7 days of the nomination date.

6.0 Kaurareg Dugong and Turtle Cultural Protocols

6.1 Cultural Protocol on Dugong and Turtle Welfare

7.0 Kaiwalagal Dugong and Turtle Management Area

We know our traditional boundaries and these boundaries relate to other Traditional owners within the Kaurareg Nation and surrounding Nations of Zenadh Kes.

Our traditional land and sea boundaries do not conform to Western geographic boundaries. We have responsibilities for traditional land and sea country management regardless of where non-indigenous tenure has been superimposed. We understand however the need for conventional boundaries for the process of International borders and Fisheries Management and the way this affects our management programs. It is for that reason and on this basis that we have identified our Dugong and Turtle Management Area.

- a) The Kaiwalagal Dugong and Turtle Management Plan covers an area of land and waters depicted in the map below, and include all the land, tidal lands, reefs, islets, sand bars and open water areas (**Referred to as Kaiwalagal Dugong and Turtle Management Area in Figure 1**).
- b) For the purposes of this Plan only, the boundaries of the Kaiwalagal plan area, as described in writing below, have been agreed with neighboring Traditional Owner groups.

The Kaiwalagal Dugong and Turtle Management Area extends from Pituli (White Rocks Ilet) (142.04, -10.473) north east to Ului (West Is) (142.05, -10.364) east through Warrul (Hawksbury Is) (142.132, -10.372) then east south-east to Mukanab (Travers Is) (142.36, -10.37) then south east to Wagilwane (142.618, -10.597) and south to Murri (Mt Adolphus Is) (142.653, -10.63) then west south-west to Yelubi (Big Woody Is) (then south west to Woody Wallis Island (142.033, -10.887) then north north west through Red Wallis Island (142.023, -10.849) to Neyangu (Booby Is) (141.909, -10.606) then north east to Pituli.

This area includes: the inhabited islands of Muralag (Prince of Wales Is), Ngurupai (Horn Is), Kirirri (Hammond Is), Waibene (Thursday Is), Zuna, Gaialug (Friday Is); the uninhabited islands of Palilug (Goodes Is), Mawai (Wednesday Is), Kudulag (Tuesday Ilets), and; the major reefs and sand banks within this area.

- c) If this plan relates to any other regions management plans or sea country then describe how the proximity of these areas relates.

The Kaurareg people share the boundary of the Kaiwalagal Dugong and Turtle Management Area with the Anggamudi and Gudang people to the south, and this includes the Torres Strait Islander communities that reside in Seisia and Bamaga and the Badulgal and Mualgal people to the north.

The islands of Ului and Warrul form the boundary between the Kaiwalagal Dugong and Turtle Management Area and the Mura Badulgal Dugong and Turtle Management Area. Agreements on how these islands are managed will require negotiation between the Kaurareg and the Mura Badulgal people. The boundary between the Kaiwalagal Dugong and Turtle Management Area and the sea country of the Anggamudi and Gudang people require further discussion.

Figure 1. Map of Kaiwalagal Management Area



8.0 Traditional Owner Concerns for Dugong and Turtle Management

The Kaiwalagal community has identified a number of issues that concern them for dugong and turtle management within their Dugong and Turtle Management Area. These concerns include:

- a. Changes in cultural hunting practices and development of a generation gap where younger hunters are now hunting dugong for sport;
- b. Dugong and turtle hunting is now faster with greater areas covered, more hunting boats during the sager wind time around Friday Island and hunting is also occurring on unplanned trips such as during fishing trips;
- c. Industrial port noise and shipping movements causing disturbance of seagrass habitat by shipping vessels (freighters and barges);
- d. Hunting too many dugong and turtle for ceremonies because there are too many people hunting and no respect or discussion with the ceremonial organiser about numbers of people attending;
- e. Hunting for personal use and not hunting for special events that benefit the whole of community;
- f. The movement of dugong and turtle meat to the mainland for non-ceremonial activities and other bad practices;
- g. Lack of catch and dugong and turtle habitat monitoring information;
- h. Traditional owners need to be the group responsible and resourced to implement the plans not any government group;
- i. High cost of living and fuel prices in the Torres Strait and concern that some hunters are not planning and using traditional knowledge to hunt and therefore go out at the wrong time or to the wrong place and waste the households money for food;
- j. Wastes left at water pipeline and Cooks Landing;
- k. Movement of whole dugong through the village with disrespect to dugong augud people;
- l. Loss of traditional butchering and sharing practices;
- m. Commercial harvest of dugong by Western Province and their use of nets to catch dugong and turtle;

- n. Impact of commercial fishing activities on dugong and turtle habitats;
- o. Impact of foreign fishing vessels catching dugong and turtle through netting and long-line fishing, and;
- p. If management plan is implemented rangers need strong legal support to enforce the rules and cultural protocols and properly resourced.

9.0 Management Arrangements for Kaiwalagal Plan

9.1 Statutory Management Regulations

The Plan recognises the current legislative framework for Torres Strait Fisheries relevant to the Dugong and Turtle Fisheries (**Attachment 2**). This includes the following statutory management regulations that have been created by the Protected Zone Joint Authority (PZJA) for the Torres Strait Dugong and Turtle Fisheries.

The Torres Strait Fisheries Act (*TSF Act*) sets out the following regulations for Dugong and Turtle Fisheries taken from Fisheries Management Notices 65 and 66:

- Dugong and turtle may only be taken by Traditional Inhabitants;
- Dugongs may only be taken using the traditional spear (wap);
- Dugong and turtle must not be taken or carried by a boat more than 6 metres in length, and;
- Dugong hunting is banned in a large area of western Torres Strait which has been set aside as a dugong sanctuary (**Refer to Attachment 3**).

The *TSF Act* also declares the sale of dugong and turtle meat illegal.

The following penalties apply to those in breach of the regulations:

- For *Individuals* a maximum penalty of 50 penalty units applies with a maximum fine of \$5,500 (each unit being \$110).
- For *Corporations* a maximum penalty of \$25,000 applies.

9.2 Traditional Owner Management Regulations

Kaurareg have proposed the following rules and regulations for the hunting and harvest of dugong and turtle meat and turtle eggs in the Kaiwalagal Management Area. The rules and regulations relate to objectives that require regulation or restrictions needed to achieve objectives.

The traditional owner framework proposes a permit system and community penalty processes. This will require administrative and policy support from government to make it practicable and lawful. It is accepted that the existing statutory processes will be managed under existing arrangements.

In relation to traditional visitation guidelines, Kaiwalagal is outside the Torres Strait Protected Zone and under the Torres Strait Treaty PNG Traditional Inhabitants are not permitted to travel south of the Prince of Wales Channel. Therefore Traditional Visitation Guidelines are not required in the Kaiwalagal Plan.

9.2.1 Dugong and Turtle Hunting Rules and Permitted Methods

a) Turtle and dugong – General

All individuals whether local or external from the Kaiwalagal region, wanting to hunt dugong or turtle, must firstly obtain a permit from the Kaiwalagal rangers and be signed and authorised by three (3) Kaurareg elders, represented on the Kaiwalagal Plan Steering Committee. The application for permit must include a written and signed letter stating the reason for dugong and turtle harvest and be signed by a traditional owner or traditional inhabitant elder.

Dugong and turtle harvest in Kaiwalagal is only permitted for Ceremonial or Whole of community events. Dugong and turtle harvest for general consumption is not permitted and a permit will not be issued for this purpose.

A mandatory component of the permit system is catch monitoring. Kaiwalagal community will monitor dugong and turtle take during the first 6 months of plan implementation (Now and December 2008) and will use this catch statistic to develop a 2009 Total Allowable Catch.

Permit System and Conditions

Kaurareg Elders are in consultation with fisheries agencies to develop the permit system. This may take one to two years to get the system finalised through the PZJA. In the mean time the permit system will not operate.

Kaiwalagal rangers will issue hunting permits from their office on Ngurupai (Horn Island) at the Horn Island Aboriginal Corporation on Miskin Street. Permits will only be

issued to Initiated hunters. Permits must be carried at all times by the hunter during the hunt and a flag will be issued to the hunter that must be displayed on the hunting dinghy.

Rangers will be employed on each inhabited island in Kaiwalagal to monitor turtle and dugong take.

The following permit conditions must be followed prior to hunting dugong and turtle:

1. Permits will be issued
2. Permits are only valid for 2 days;
3. There is no hunting of dugong and turtle on Sundays;
4. A limit of 2 turtles can be harvested per permit;
5. A limit of 2 dugong can be harvested per permit;
6. Hunters must apply for permits in person on Ngurupai (Horn island);
7. Permits are to be returned after hunting is carried out if catch or no catch;
8. Monitoring data sheet must be completed by hunter or with assistance by Kaiwalagal rangers on return from hunting trip if catch or no catch;
9. Special ceremonial permits can be issued during the kuki seasonal closure for dugong hunting;
10. If no catch is landed hunter can reapply for permit after 5 days; and
11. Each permit will only become active when signed and authorised by 3 elders represented in the Kaiwalagal Plan Steering Committee members to be valid.

A permit system will be used upon effectiveness of this plan for a period of twelve months. If proven to be effective, then the permit system will remain, however if unsuccessful, then alternative arrangements will be pursued.

b) Turtle – Specific

The following conditions of turtle hunting permitted under the Plan:

- Spot lighting at night for turtle is permitted from dinghies whilst motoring;
- For all the four seasons (kuki, naigai, wourr, ze) only three of the four seasons will be utilised for turtle hunting, and;
- Season four (kuki) or turtle mating season, hunters are not permitted to take mating turtles (turtle pas) but are still permitted to hunt and catch turtle singly on the reef or drifting.

Turtle Egg Harvest Rules

The following egg harvest rules are permitted under the Plan:

- Limit of two nest per dinghy

c) Dugong – Specific

The following conditions of dugong hunting permitted under the Plan:

- Hunters will cease/stop taking small dugong (size or name), mother and calf (apu kazi) and well as pregnant dugong (kazilaig).
- Hunters will not use the method of buoying when dugong is speared, the rope must be tied off the clinker or dinghy that the dugong is speared from;
- Hunting by means of motoring and spot lighting at night for dugong is not permitted;
- Hunters will not chase dugong or dugongs in open waters, by means of motoring;
- Seasonal hunting, out of the four seasons hunters will hunt on the three seasons by permit on the Kuki season hunters will not need a permit for the duration of the Kuki winds.
- Hunters will only spear one dugong per dinghy during the kuki winds.
- Hunters that have speared a dugong during the kuki winds will cease hunting for 1 month.
- Hunters from other communities outside of Kaiwalagal must apply for a permit to hunt dugong.
- Hunters from Kaiwalagal are not permitted to go hunting for dugong with or for members of communities from outside of Kaiwalagal for the purpose of taking the dugong back to their respective community.

Ceremonial or community activity purposes

Dugong and turtle is permitted to be harvested for the following listed ceremonies only under this Plan:

- Zugu Nurpai and yatha pathai (initiation ceremonies)
- Tombstone opening
- Funeral
- Wedding
- Church special day
- House and Boat Blessing

Closures

The following area and seasonal closures are applied are applied for dugong and or turtle harvest under the Plan:

- Seasonal closure for dugong hunting (30th January to 1st April). Idea that hunting allowed during this period through special permit for ceremonial purpose. Must be drift hunting.
- Seasonal closure during saulal season that commences when the first birrul birrul (Rainbow Bee Eaters) are seen migrating from Moegi Daudai (Papua

New Guinea) to Koey Daudai (Australian mainland) – August 01 to Dec 01 every season.

- Kaurareg elders will look at closing Warrul (Hawksbury), Ului, Nelgi, Ngurubi and Mokannab for turtle egg take during kuki season. These are important unuwa nesting sites.

Kasa Kai Kai - General Consumption

Dugong and turtle harvest is not permitted for general consumption. Hunting permits for dugong and turtle will not be issued for general consumption purposes.

9.2.2 Designated Butchering areas

The following activities are permitted under the Plan for the butchering and uses of dugong and turtle meat.

Butchering

The following butchering conditions apply under the Plan:

- Dugong cannot be displayed wholly in the back of utility vehicles, trailers or in dinghies on trailers that are being towed by a vehicle;
- Dugong and turtle must always be cut next to the sea either on the beach at the shore line;
- Hunters and butchers are encouraged to take their time and attempt to utilise as much of the dugong and turtle as possible (for example use the flippers for soup or boil the dugong bones for stew), and;
- Whole dugongs are not to be cut at home (this contradicts Kaurareg law and is a health issue).

Disposal of dugong and turtle waste

The following waste disposal conditions apply under the Plan:

- Unwanted waste (skin, bone, shell, amai shell, intestines) must go back to the sea. These wastes must be carried by dinghy into a deep water channel and properly sunk.
- Unwanted dugong and turtle wastes are not permitted to be dumped at the rubbish tip or through the community rubbish bins.

Movement of meat to mainland of Australia

The following meat movement conditions apply under the Plan:

- One concern was that meat was moving to the mainland for sale and non-ceremonial reasons.
- A permit could be created that you can only send meat south if permitted for ceremonial purpose.
- Idea at meeting was that AQIS could assist in monitoring permits at airport and checking at Seaswift.
- Still allow movement but only for ceremonial purpose.

Tethering Turtle

The following conditions for the tethering of turtles apply under the Plan:

9.2.3 Penalties

These penalties will be reviewed as part of the permit system and may come under Statutory Regulations. The following penalties apply to those in breach of the dugong and turtle rules and permitted methods documented in Sections 9.2.1 and 9.2.2 under this management plan. :

1st offence – Suspension of hunting equipment for a period of time nominated by Kaiwalagal PBC;

2nd offence – Penalty will be nominated by PBC and elders, and;

3rd offence – Ban entirely from participating in dugong and turtle hunting activities for period of time nominated by the Kaiwalagal PBC.

10.0 Implementation

The objectives of the management will apply to all members of the Kaiwalagal community and any other traditional owner or traditional inhabitant visitors that wish to hunt or harvest in the Kaiwalagal Management Area. The Kaiwalagal Plan Steering Committee will enforce all actions required under the Kaiwalagal Plan.

10.1 *Duration of the Plan, Review and Reporting*

The Plan vision is a long term aspiration of the Kaurareg people. The timeframe of the Plan is five (5) years.

The Kaiwalagal rangers will develop yearly Operational Plans through the five year timeframe. The Operational Plans will guide the rangers and associated individuals and groups involved in implementing the Plan on a yearly basis in order to achieve our objectives.

10.1.1 **Review**

The Plan may be subject to change over time based on community circumstances. The Plan will be reviewed by the Plan Steering Committee and rangers at the end of year 2 and year 4 of the plan timeframe. The year 4 review will provide time to adjust the Plan and prepare a submission for the subsequent five year funding cycle.

Operational Plans will be developed for the subsequent year of implementation in the second last month of each year of implementation.

Plan review will involve the Kaiwalagal rangers presenting monitoring data to the Plan Steering Committee during the review period to allow discussion of results and to inform the review and amendments if required. The objectives table in Attachment 1 describes the how we will measure the success of the actions in the plan.

Any amendments to the Plan and relevant monitoring data will be provided by the Kaiwalagal CFG representative to colleagues in the Dugong and Turtle Working Group.

This information will be provided up through the PZJA consultative structure as applicable. Copies of the amended Plan will be provided to the TSRA and AFMA within 30 days of the review for discussion and endorsement by the PZJA.

The Plan Steering Committee for the purpose of reviewing the plans is provided in **Attachment 4**.

10.1.2 Reporting

Kaiwalagal rangers in conjunction with TSRA will prepare Quarterly Reports against the progress towards the Plan. These reports will focus on significant achievements against Plan objectives and actions as well as provide a report on catch and habitat monitoring that the rangers have been undertaken. These reports will also document progress against Operational Plans including associated difficulties.

Reports will be reviewed by the Plan Steering Committee prior to release to other parties.

Kaiwalagal rangers will report fortnightly to the TSRA regarding progress against the yearly Operational Plans.

10.2 Compliance and Enforcement

The monitoring and compliance of the Plan rules and regulations will be carried out by the Kaiwalagal land and marine rangers. Breaches of the Traditional Management Arrangements, rules and regulations will be dealt with through the **[Insert Name]** Community Justice Group.

Describe the process of referral of infringements to the Community Justice Group. Who is involved, how reports are provided.

Kaiwalagal land and marine rangers propose to report any breaches of the Statutory Management Arrangements to AFMA and Customs under a reporting agreement referred to in the Attachment 1. Kaurareg want to discuss opportunities for Kaiwalagal land and marine rangers to take part in training opportunities and joint patrols with State and Commonwealth Fisheries enforcement agencies.

Any issues regarding compliance and enforcement of the Kaiwalagal Plan will be referred to the Kaiwalagal CFG representative for discussion in the Dugong and Turtle Working Group and PZJA consultative structure.

10.3 Communications and Education

Kaurareg propose to use the following communications methods to advertise their Plan:

- List methods

10.3.1 Educational Activities

Kaiwalagal land and marine rangers propose the following activities to educate Kaiwalagal traditional inhabitants and school age children on the Plan and turtle and dugong conservation:

- List activities

Kaurareg wishes to work collaboratively with Queensland Education, Tagai College, particularly the Hammond Island, Thursday Island and Horn Island Campus's to develop and deliver this range of culturally appropriate educational activities for students. Kaurareg anticipates that these activities may require additional financial support from Queensland Education.

10.4 Research and Development

Briefly describe the history of scientific research and the relevant dugong and turtle survey information for the management area

In order to address a number of concerns that Kaiwalagal community have for dugong and turtle and to answer a number of their questions about dugong and turtle activities within their Management Area they have documented the following research priorities:

- a) List research priorities

10.4.1 Research Partnerships

Describe current research partnerships that the traditional owner group(s) are involved in.

All research activities are to be undertaken in consultation with the Kaiwalagal Plan Steering Committee and Kaiwalagal Prescribed Bodies Corporate with the involvement of the Kaiwalagal land and marine rangers. Results and progress of all research will be distributed in an appropriate form to all relevant stakeholders and the Kaiwalagal CFG representative will update the Dugong and Turtle Working Group and PZJA consultative structure on these activities.

10.4.2 Training

Describe training aspirations of the traditional owner group(s) particularly for the land and marine rangers.

10.4.3 Catch and Habitat Monitoring

Kaiwalagal land and marine rangers will collect dugong and turtle catch data from all dugong and turtle catch from Kaiwalagal Management Area. Catch monitoring will utilize the standardised Torres Strait Dugong and Turtle Catch Monitoring Sheet and methodology.

All catch data will be entered into the catch monitoring database by the Kaiwalagal land and marine rangers. Currently the TSRA Land and Sea Management Unit in conjunction with the North Australian Land and Sea Management Alliance (NAILSMA) are developing this database. The database will be reviewed on a 6 monthly basis by the Kaiwalagal land and marine rangers and TSRA project staff and during the annual management plan review. Reports on dugong and turtle catch; use and method of capture will be used to inform the Plan.

Currently there is not regional database for the review and assessment of dugong and turtle catch data. Kaurareg wish to negotiate with other Island communities and the PZJA to enter in data sharing agreements for use of the dugong and turtle catch data. Kaurareg see this as an important step to better assessing the condition of the Dugong and Turtle Fisheries.

Kaurareg also wish to continue to participate in catch monitoring training programs in partnership with relevant fisheries agencies and research organisations. These monitoring programs can be tied to ongoing research projects and ensure effective and ongoing data collection. Improved monitoring is a key recommendation of the Torres Strait Dugong and Turtle Fisheries Strategic Assessment and will require financial and technical support of various levels of government.

References

List references

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ATTACHMENT 1 Objectives of the Kaiwalagal Plan

This Plan has been developed for the purpose of community based management of dugong and turtle resources in the Kaiwalagal Management Area. The overall aim of the Plan is “*Insert Vision*”.

The Kaiwalagal community has identified a number of concerns (see Section 8) that need to be addressed to achieve the overall aim. A management objective has been developed to address these concerns as well as corresponding strategies, actions and partnerships that Kaurareg believe will assist them in achieving these objectives.

Objective	Strategy	Action to achieve objective	Who	Resources / costs	When	Performance Indicator / Did it happen? / Did it work?
Slow the rate of dugong and turtle hunting in the Kaiwalagal Management Area	Develop a range of appropriate management arrangements to address over-harvesting	Limit the ceremonial harvest of dugong and turtle to a defined set of ceremonies or activities				Number of dugong and turtle caught for ceremonial activities
		Negotiate and liaise with Queensland Boating and Fisheries to increase enforcement of the Dugong Sanctuary				The number of dugong sanctuary patrols The number of hunters identified hunting inside the Dugong Sanctuary
		Implement a seasonal dugong hunting closure during the kuki (north west) season from January 1 st till the end of the Kuki on April 1 st				Number of reported incidents of hunters hunting during kuki seasonal dugong hunting closure
		Ban dugong and turtle hunting for general consumption purposes (kasa kai kai)				No dugong and turtle caught for general consumption
	Reinforce Kaurareg and other nations cultural hunting practices through Kaiwalagal Elders	Kaurareg and Traditional Inhabitant elders to encourage young men to go through cultural initiation (zug ngurpai)				The number of young men that have gone through initiation ceremony inside Kaiwalagal
		Educate hunters on proper movement / traditional butchering of dugong to respect cultural protocol				
	Implement an awareness raising program about only initiated hunters are allowed to hunt for dugong and turtle in Kaiwalagal	School education program Pamphlets				The number of reported incidents of non-initiated hunters hunting
	Kaurareg cultural hunting protocols being practiced and traditional hunting culture strong					The number of reported sightings of hunters chasing dugong using powered dinghies
	Reinforce the use of drift hunting (paupa / paipa thaiyan)	Ban the chasing of dugong using powered dinghies both at night and day				
	Develop and implement a dugong and turtle hunting permit system to reduce hunting effort (Year 1 work plan)	Kaurareg elders to meet with relevant State and Federal fisheries agencies to develop suitable permit system				Appropriate permit system developed with support from Queensland Boating and Fisheries Patrol and Australian Fisheries Management Authority
		Kaiwalagal rangers and Kaurareg elders to authorise permits				Number of permits issued
	Implement an awareness raising program about dugong and turtle sustainability and Kaiwalagal management plan (Year 1 work plan)	Develop pamphlets and posters on sustainability and the Kaiwalagal management plan				Number of pamphlets and posters distributed or erected
		Conduct regular radio program on Radio 4MW regarding Kaiwalagal Management Plan and dugong and turtle				Number of radio programs aired on Radio 4MW

Objective	Strategy	Action to achieve objective	Who	Resources / costs	When	Performance Indicator / Did it happen? / Did it work?
		sustainability				
	Establish a Kaiwalagal ranger patrol of dugong hunting grounds	Kaurareg elders to liaise with Queensland Boating and Fisheries regarding development of patrol and reporting protocols				Patrol program developed Reporting protocols for patrols developed
		Kaiwalagal rangers and QB&F to undertake regular patrols to monitor dugong and turtle hunting in Kaiwalagal				Number of patrols of hunting grounds undertaken
	Develop partnership between Kaurareg traditional owners, Kaiwalagal rangers and Queensland Boating and Fisheries for management plan implementation and enforcement	Negotiate and liaise with Queensland Boating and Fisheries Patrol regarding a partnership in the management plan enforcement and compliance and permit system				
		Support Kaiwalagal rangers in undertaking appropriate enforcement and compliance training				
		Liaise with Queensland Boating and Fisheries Patrol to regularly patrol and enforce the Dugong Sanctuary				
		Develop reporting partnership between Kaiwalagal rangers and QB&F				
Monitor dugong and turtle populations and habitats	Develop dugong and turtle population monitoring program (Year 1 work plan)	Undertake turtle nest monitoring surveys on key turtle nesting beaches in Kaiwalagal				
		Continue monitoring program of Kaiwalagal turtle foraging population				
		Kaiwalagal rangers and TSRA LSMU to liaise with relevant government and non-government agencies to develop dugong monitoring projects				
		Kaiwalagal rangers and TSRA LSMU to apply for monitoring and research funding to support monitoring programs				
	Develop a dugong and turtle habitat monitoring program (Year 1 work plan)	Quarterly seagrass watch program on Ngurupai (Horn Is), Waibene (Thursday Is), Kirirri (Hammond Is) in conjunction with Queensland Department of Primary Industries and Fisheries (QDPI&F)				Number of seagrass monitoring sites Number of monitoring sessions undertaken Seagrass watch sites exhibiting healthy seagrass condition
		Advertise seagrass watch results in Torres News paper and on regular Radio 4MW radio program				Number of articles published and radio programs aired
		Create a GIS database of existing seagrass habitat mapping for Kaiwalagal rangers				GIS database developed Number of rangers using the GIS
		Map dugong feeding and seagrass habitats that have not been mapped in Kaiwalagal				Number of mapping activities undertaken Area of seagrass mapped

Objective	Strategy	Action to achieve objective	Who	Resources / costs	When	Performance Indicator / Did it happen? / Did it work?
	Establish monitoring program for meat movement to mainland	Kaurareg elders and TSRA LSMU to liaise and negotiate with AQIS to develop a monitoring program for meat movement from Horn Island airport				Agreement developed for AQIS to monitor dugong and turtle meat movement and place management plan pamphlets in eskies containing dugong and turtle meat
		Issue permits for requests for all turtle and dugong meat movement to mainland for ceremonial purposes				Number of permits issued for turtle and dugong meat to be transported to mainland
		Rangers to monitor all dugong and turtle meat movement from Kaiwalagal in partnership with AQIS				Number of eskies with permit and containing dugong and turtle meat moving through Horn Island airport and Seaswift
		Ban dugong and turtle meat movement to mainland for general consumption (kasa kai kai) purposes				Number of eskies monitored by AQIS containing dugong and turtle meat without permit
	Establish catch monitoring program through Kaiwalagal ranger program (Year 1 work plan)	Rangers to undertake training in use of catch monitoring sheet and pass information onto hunters during permit process				
		Hunters are to return permits to Kaiwalagal rangers if catch or no catch taken and reported for monitoring purposes				Number of catch monitoring sheets completed
		Kaiwalagal rangers to undertake catch monitoring and input data into catch monitoring database				Number of cultural ceremonies or activities Number of dugong caught Number of turtle caught
		Rangers to undertake patrols of hunting areas and check hunters for permits on regular basis				
	Develop a TAC for Kaiwalagal Plan using catch monitoring data	Review catch monitoring data in 2 nd year plan review				
		Invite experience fisheries managers to discuss the development of TAC using catch monitoring data				
		Set TAC for 3 rd year of Management Plan				
Consolidate the Kaiwalagal ranger program to implement the management plan and undertake monitoring program	Kaiwalagal rangers employed to implement the management plan and monitoring programs (Year 1 work plan)	Transfer ranger capital equipment from Kaiwalagal Aboriginal Corporation to Horn Island Aboriginal Corporation				
		TSRA LSMU to apply for funding for ranger wages and operational costs				
		Establish Kaiwalagal ranger office				
		Purchase relevant capital and equipment for ranger program				
		Undertake Kaiwalagal ranger recruitment				
		Kaiwalagal rangers to commence and or continue marine ranger and compliance and enforcement training (Link to LSMU Training and Capacity Building Project)				

Objective	Strategy	Action to achieve objective	Who	Resources / costs	When	Performance Indicator / Did it happen? / Did it work?
To keep the shorelines of all islands in Kaiwalagal clean of all dugong and turtle wastes	Implement Kaiwalagal management plan waste disposal rules	Enforce rules about proper waste disposal through permit system				No dugong and turtle wastes identified on shorelines of any island in Kaiwalagal
		Encourage butchering of dugong and turtle away from inhabited islands through the permit system				No whole dugong or turtle reported being bought back to inhabited islands, only butchered meat, bones and shell
Kaiwalagal community aware of dugong and turtle sustainability issues and Kaiwalagal Management Plan	Develop awareness raising program for dugong and turtle sustainability and Kaiwalagal Management Plan (Year 1 work plan)	Develop posters and pamphlets on dugong and turtle sustainability and cultural hunting practices				
		Develop pamphlets and media articles on Kaiwalagal Management Plan				
	Establish school education program regarding dugong and turtle sustainability and management (Year 1 work plan)	Liaise with Tagai College and Ti High School to develop program				
		Kaiwalagal rangers, initiated hunters and elders to attend school sessions as part of school program				
		Kaiwalagal rangers to liaise with school to integrate students into any relevant monitoring programs				
	Implement awareness program with mainland families regarding the management and sustainability of dugong and turtle hunting in Kaiwalagal as part of monitoring program (Year 1 work plan)	Place pamphlets on dugong and turtle sustainability and Kaiwalagal management plan into all eskies containing dugong and turtle meat going to mainland				
		Advertise Kaiwalagal management plan on Townsville, Cairns, Brisbane, Mackay, Rockhampton and Darwin Indigenous radio stations				Number of radio segments aired on indigenous radio stations about the Kaiwalagal management plan
		Place Kaiwalagal Management Plan on TSRA website for mainland communities to view				Number of visitors to view management plans on TSRA website
	Implement awareness raising program on catch monitoring in Kaiwalagal community (Year 1 work plan)	Hunters advised to return all turtle tags to Kaiwalagal rangers and these to be forwarded to Queensland Parks and Wildlife				
		Develop pamphlets and posters regarding the importance of catch monitoring and how the information is used				

ATTACHMENT 2 – Current Dugong and Turtle Legislative Framework

A number of levels of legislative frameworks operate in regards to the management and conservation of dugong and marine turtle species in the Torres Strait. These operate at International, National, State as well as the Torres Strait regional level. The International, National, State and regional level contexts are described below for both dugong and marine turtle species.

The dugong as well as six of the seven known species of marine turtles are found in Australian waters - the loggerhead (*Caretta caretta*), olive ridley (*Lepidochelys olivacea*), flatback (*Natator depressus*), green (*Chelonia mydas*), hawksbill (*Eretmochelys imbricata*) and the leatherback (*Dermochelys coriacea*).

International Dugong and Turtle Management Framework

The dugong is afforded a degree of international protection through inclusion in Appendix II of the Convention on Migratory Species (CMS) and Appendix I of the Convention on International Trade in Endangered Species (CITES) including:

- Appendix I of CITES strictly regulates trade in dugong to circumstances such as for scientific research, and;
- Appendix II of CMS requires parties to cooperate to develop arrangements aimed at the protection and conservation of species listed on it such as dugong.

All species of marine turtle are also afforded a degree of international protection through inclusion in Appendix I and II of the Convention on Migratory Species (CMS) and Appendix I of the Convention on International Trade in Endangered Species (CITES) including:

- Appendix I of CITES strictly regulates trade in listed turtles to circumstances such as for scientific research;
- Appendix I of CMS lists species threatened with extinction and requires parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them. Besides establishing obligations for each State joining the Convention, CMS promotes concerted action among the Range States of many of these species, and;
- Appendix II of CMS requires parties to cooperate to develop arrangements aimed at the protection and conservation of species listed on it such as marine turtles.

Department of Environment, Water, Heritage and the Arts, International Section responsible for CITES in Australia are currently reviewing how CITES affects the carriage of dugong and turtle across the International border between Australia and Papua New Guinea.

National Dugong and Turtle Management Framework

The dugong is listed as migratory and marine species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). No national conservation, management or recovery plan has been developed for this species. The Act expressly acknowledges that native title rights to harvest dugong, including s.211, are not affected by the Act.

All species of marine turtles found in Australia are listed as threatened, migratory and marine species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The loggerhead and olive ridley turtles are listed as endangered and the flatback, green, hawksbill and leatherback are listed as vulnerable.

A strategy titled *Recovery plan for marine turtles in Australia* has been developed under the EPBC Act. The overall premise of the plan follows “...to reduce the likelihood that current threats will cause mortalities, or to modify activities to reduce the potential for future mortalities at all stages of a marine turtle's life, and to ensure that traditional harvest of marine turtles by indigenous Australians and Torres Strait Islanders is ecologically sustainable”. The Act expressly acknowledges that native title rights to harvest turtles, including s.211, are not affected by the Act.

Queensland Dugong and Turtle Management Framework

The dugong (*Dugong dugon*) is listed as vulnerable under the *Queensland Nature Conservation Act 1992*. A strategy titled *Conservation and management of the dugong in Queensland 1999 – 2004* has been developed to aid the management of the species in Queensland. This conservation plan addresses key aspects of dugong conservation, including habitat degradation (particularly seagrass loss); incidental mortality from fishing; boating traffic; indigenous hunting; education and information; and research and monitoring.

The NCA acknowledges that despite any other Act, the native title rights to harvest dugong, including s.211, are not affected.

All species of marine turtles found in Queensland are listed as threatened under the *Nature Conservation Act 1992* (NCA). The loggerhead, olive ridley and leatherback are listed as endangered and the flatback, green and hawksbill are listed as vulnerable.

To date no conservation or recovery plans have been developed under the NCA. The NCA acknowledges that despite any other Act, the native title rights to harvest turtle, including s.211, are not affected.

Torres Strait Dugong and Turtle Management Framework

Torres Strait Treaty

The Governments of Australia and Papua New Guinea (PNG) signed the Torres Strait Treaty (the Treaty) on 15 February 1985. The Treaty is designed to resolve issues of sovereignty and maritime boundaries in the Torres Strait, to recognise and protect the traditional way of life and livelihood of traditional inhabitants, and to protect the Torres Strait marine environment.

The Treaty establishes the Torres Strait Protected Zone (TSPZ). The principal purpose of the two countries in establishing the TSPZ is:

'To acknowledge and protect the traditional way of life and livelihood of the traditional inhabitants including their traditional fishing and free movement' (Treaty, Article 10.3).

The Treaty identifies a further purpose of the TSPZ, that being to protect and preserve the Torres Strait marine environment and indigenous fauna and flora (Treaty, Article 10.4). In fulfilling this obligation, Australia and PNG have agreed to use their:

'Best endeavours to minimise any restrictive effects on the traditional activities of the traditional inhabitants' (Treaty, Article 14.4).

The Treaty allows traditional inhabitants from both countries the right of free movement across the Australia / PNG border for 'the performance of lawful traditional activities' (Treaty, Article 11.1). Free movement provisions are restricted to movement within the TSPZ. Traditional inhabitants from the PNG coastal villages are permitted to hunt dugong and turtle in Australian waters within the TSPZ and Australian traditional inhabitants can equally hunt dugong and turtle in PNG waters inside the TSPZ.

Each country has agreed to permit the continued exercise of such traditional rights 'on conditions not less favourable than those applying to like rights of its own traditional inhabitants' (Treaty Article 12).

Torres Strait Fisheries Act 1984

Domestically, the *Torres Strait Fisheries Act 1984* (the TSFA) is the implementing legislation for the Australian Government's international obligations as stated under the Torres Strait Treaty. The Act explicitly states a number of objectives.

The TSFA incorporates the Treaty objectives of recognising and protecting the traditional way of life and livelihood of traditional inhabitants and protecting the Torres Strait marine environment, and of trying to achieve these goals in a manner that minimises any restrictive effects on the traditional activities of the traditional inhabitants.

Torres Strait Dugong and Turtle Management Objectives

The objectives adopted by the *Torres Strait Fisheries Act 1984* for the Torres Strait Dugong and Turtle Fisheries are:

- To promote the conservation of turtle and dugong stocks, and
- To restrict the taking of dugongs and turtles to Traditional Inhabitants fishing for traditional purposes.

Torres Strait Dugong and Turtle Management Arrangements

The Protected Zone Joint Authority, acting in accordance with the powers conferred on the Authority by paragraph 35(1)(a) of the *Torres Strait Fisheries Act 1984*, and the Minister in accordance with the powers under section 16 of the *Torres Strait Fisheries Act 1984* has made two notices for the management of the Dugong and Turtle Fisheries:

- Fisheries Management Notice No.65 (Torres Strait Dugong Fishery), and;
- Fisheries Management Notice No. 66 (Torres Strait Turtle Fishery)

Only Traditional Inhabitants are allowed to take dugong and turtle. They are taken for subsistence food or for special occasions such as weddings, funerals and tombstone openings. **The sale of dugong and turtle meat and products is prohibited.**

Protected Zone Joint Authority Consultative Structure

The TSFA establishes the Torres Strait Protected Zone Joint Authority (the PZJA) as the responsible domestic body for the management of Torres Strait fisheries. The PZJA is responsible for monitoring the status of, and formulating policies and plans for the good management of, the fisheries under its jurisdiction.

The PZJA comprises three members - the Australian Government Fisheries Minister as the Chair, Queensland Fisheries Minister and Chairperson of the Torres Strait Regional Authority (the TSRA). The consultative structure includes a number of advisory committees and working groups.

Framework for the Community-based Management Plan Approach to the Torres Strait Dugong and Turtle Fisheries

It is proposed the community-based planning process will align within the framework of the Protected Zone Joint Authority (PZJA) and under the *Torres Strait Fisheries Act 1984*.

The Protected Zone Joint Authority (PZJA) is responsible for management of commercial and traditional fishing in the Australian area of the Torres Strait Protected Zone (TSPZ) and designated adjacent Torres Strait waters.

Under the *Torres Strait Fisheries Act 1984*, each fisheries management plan must set out the objectives of the plan of management; and measures by which the objectives are to be attained; and performance criteria against which, and time frames within which, the measures taken under the plan of management may be assessed. It is envisaged, this framework could also be proposed for the individual turtle and dugong plans; or collectively as one regional plan.

Once the Plans are endorsed as part of the overall fishery, it is proposed a number of structures could be put in place to assist in the management of the fishery and implementation of the plans. Based on suggestions identified in Havemann and Smith (2007), a number of proposals have been suggested and endorsed by the community.¹

It is proposed a community management group or land and marine ranger program, be established to help guide the management of all turtle and dugong in Torres Strait, including the Kaiwalagal Plan. This group could be based on Ministerial delegation under the *Torres Strait Fisheries Act*. The structure must have the capacity to implement dugong and turtle conservation plans which relate to national and regional fisheries and conservation bodies who can provide support, knowledge and infrastructure. For practical reasons, the establishment of a land and sea group could undertake all natural and cultural resource activities in the area.

To ensure the land and sea structure is practical and successful, guidance and support would need to be provided by the TSRA Land and Sea Management Unit and the PZJA; operationally and scientifically. Havemann and Smith (2007) suggest such a scheme ought to be articulated with EPBCA mandated National Wildlife Conservation Plans linked into adequately funded community based management scheme based on traditional owner participation. The Land and Sea structure should also be provided with State backed enforcement mechanisms such as the Queensland Fisheries & Boating Patrol or possibly QPWS to assist with sanctioning breaches the community based management plans for sustainable turtle and dugong fisheries where local remedies prove futile or non-viable.

The other structure, which would address the regional fishery, would be the establishment of a turtle and dugong working group. This group would fit within the existing PZJA structure, and made up of Torres Strait Island and Aboriginal people and government officials to identify local priorities, traditional conservatory norms and indigenous knowledge as well as to explain and justify species management assumptions based upon western scientific knowledge.

The community based management structure, enforcement, compliance and reporting processes are discussed in Section 9.1 through 9.4. These processes attempt to align with the current PZJA consultative structure.

¹ *Current legislation and policy conducive to sustainable community management of dugong and turtle traditional fisheries in the Torres Strait.* Havemann, P, Smith R. JCU. 2007

Strategic Assessment of Torres Strait Dugong and Turtle Fisheries

The *Environment Protection Biodiversity Conservation Act 1999* requires all Commonwealth Fisheries to undergo a strategic assessment process, including those fisheries management by the PZJA. A Strategic Assessment Report for the Torres Strait Dugong and Turtle Fisheries was prepared by the Australian Fisheries Management Authority (AFMA) and sent out for public comment, which included extensive community consultation. The Department of Environment, Water, Heritage and the Arts is undertaking an assessment of the sustainability of the Torres Strait dugong and turtle fishery and will also provide recommendations for future management. The Kaiwalagal Plan aims to form part of these recommendations, providing a foundation for a community-based management approach to the Torres Strait dugong and turtle fisheries.

ATTACHMENT 3 – Dugong Fishery Map

DRAFT

ATTACHMENT 4 – Plan Review Committee

The list below provides details of the Plan review committee and support agencies that **Kaurareg** people will invite to undertake the second and fourth year review of their Plan.

DRAFT

ATTACHMENT 5 – Ranger Year One Work Plan

Objective Consolidate the Kaiwalagal ranger program to implement the management plan and undertake monitoring program					
Strategy Kaiwalagal rangers employed to implement the management plan and monitoring programs					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Convene a meeting with PBC and key individuals to up date and brief on the ranger program, including funding, governance, decision making and administrative options	Decide on date for meeting Invite PBC and elders to meeting through formal letter Invite LSMU representative to attend	Project officer	June 2008	Fax machine Stationary Vehicle Flights Catering \$300	Meeting held Traditional owners aware of progress
Finalise the management plan and ranger program gain endorsement from Traditional owners, including dugong and turtle clan or affiliated with species	Distribute notices Invite PBC and elders to meeting Sign off inside management plan	Project officer	By 25 th July	Fax machine Stationary Vehicle Flights Catering \$300	Meeting held Traditional owner sign off on plan
Finalise the yearly ranger work plan with costs and resource requirements	Plan steering committee meeting	Project officer	By 25 th July	Fax machine Stationary Vehicle Catering \$150	Yearly plan finalised and approved
LSMU obtain bridging funding from Sept 30 th till Ranger Program commencement for wages	Develop wages budget Liaise, identify and if needed apply for funding Issue grants for TSIRC for PO wage	LSMU	August – early September	* estimate PO wages budget	PO Wages obtained
LSMU to obtain in principle support from TSIRC to develop ranger program administrative arrangement	LSMU to meet with TSIRC CEO and Chair Develop Memorandum of Understanding Sign off on MoU	LSMU	By 25 th July	Printing \$0	MoU signed
Ongoing liaison and discussion with LSMU regarding contracts, administrative body and ranger positions	LSMU to communicate with project officer Project officer to communicate with LSMU and traditional owners	LSMU Project officer	Ongoing until funding delivered	Telephone Internet / email \$0	Contracts and administrative arrangements finalised
Liaise with Council for office space, storage area and necessary support of resources for the program	Write letter to Council, Island Manager and Councilor / CEO of TSIRC / Community forum	Project Officer	June 2008	Computer / printing Telephone \$0	Response in writing about office space available or not
Explore the sharing of office / storage resources with Australian Government agencies	TSRA LSMU to contact relevant AG agencies in Torres Strait and meet to discuss options Write letter to agency General Managers	TSRA LSMU	June 2008	Computer \$0	Response in writing about office space available or not
If office space unavailable, identify appropriate site through PBC and include serviced double shed into global Working on Country bid	Project officer to meet with PBC and island manager to identify site LSMU obtain quotes for shed and installation Include in working on country application	TSRA LSMU Project Officer	By 25 th July	Computer Fax Telephone \$150	Site identified and approved Quote obtained WOC submitted

Objective Consolidate the Kaiwalagal ranger program to implement the management plan and undertake monitoring program					
Strategy Kaiwalagal rangers employed to implement the management plan and monitoring programs					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Develop recruitment protocols and rules	Scope members for recruitment panel Develop interview questions Develop PD and duty statement Develop selection criteria	Project officer LSMU	Within a month of funding notification	Telephone	PD, Selection panel membership, interview questions, duty statement developed
Form ranger recruitment committee	Nominate members and chair	LSMU	Within a month of funding notification	Telephone \$0	Committee formed
Advertise ranger positions, starting with Senior ranger	Project officer to distribute advertising	LSMU Project officer	Within a month of funding notification	Telephone Email \$50	Approved PD's PD distributed to interested parties
Interview and recruit successful applicants	LSMU facilitate interviews on island with island manager Successful applicant sign contract Commence wage payment	LSMU Recruitment committee TSIRC	Within 2 months of funding notification	Flights Office space Vehicle \$700 *Wages (10-20% on costs) Senior ranger and ranger annual salary	Contract(s) signed
Purchase necessary equipment and capital for ranger program	Identify equipment Obtain quotes Develop equipment budget Order equipment	Rangers LSMU	First six months of plan implementation	**Link to WOC application Also to be determined \$?	Equipment list developed Equipment received
Develop inventory of equipment and use policies for rangers	Asset manual developed Obtain and copy existing policies Develop additional policies List of equipment	PBC LSMU TSIRC Rangers	First six months of implementation Ongoing	Computer Telephone Printing Email \$50	Policies developed for operations and equipment use
Training and orientation of rangers	Identify training needs Identify prior learning Enroll rangers in training courses Induction and OH&S orientation Attend training workshops / conferences ***Link to LSMU Training and Capacity Building Project	LSMU rangers	Ongoing	Flights \$5,000 per ranger x 3 Course costs \$5,000 per ranger x 3	Rangers receiving appropriate training to undertake ranger operations and implement plans Increase capacity of rangers to undertake work
Communication between ZK Ranger Groups	Convene a meeting <ul style="list-style-type: none"> • Face to face and/or • Telephone link up • Ranger exchanges 	ZK Rangers groups LSMU	Quarterly	\$2000 Airfares \$200 catering STD phone call	<ul style="list-style-type: none"> • Meeting took place; • Telephone link up happened;
			TOTAL	\$32,600 **, **	

Objective Kaiwalagal community aware of dugong and turtle sustainability issues and Kaiwalagal Management Plan					
Strategies Develop awareness raising program for dugong and turtle sustainability and Kaiwalagal Management Plan Establish school education program regarding dugong and turtle sustainability and management Implement awareness program with mainland families regarding the management and sustainability of dugong and turtle hunting in Kaiwalagal as part of monitoring program Implement awareness raising program on catch monitoring in Kaiwalagal community					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Develop Island and Nation information and community awareness packages	Meeting with rangers within nation to develop package <ul style="list-style-type: none"> Telephone link up; Face to face; Convene a meeting 	<ul style="list-style-type: none"> LSMU Rangers PO's Relevant community members 	Jan 2009	\$2000 Airfare \$200 Catering Telephone	Meeting took place Information and Awareness raising package developed
Raising community awareness about ranger program, management plan, dugong and turtle sustainability	Convene meeting with community	<ul style="list-style-type: none"> LSMU Relevant community members Project Officer 	Quarterly	\$700 Airfare \$200 Catering	Meeting took place
To develop posters and pamphlets about key objectives of the management plans.	<ul style="list-style-type: none"> LSMU and POs to write text for pamphlets and posters. Commission ZK-TO designers to do graphic design Contract printing; Distribute posters and pamphlets as part of community awareness tasks in Zenadh Kes and mainland areas. 	<ul style="list-style-type: none"> LSMU PO's Graphic artists Printing contractor 	November 2008	\$5000	Posters/Pamphlets/ drafted, checked and produced
Liaise with TAGAI College to establish a school awareness program regarding dugong and turtle sustainability and traditional ways (Relevant island campuses)	Project Officer meet with schools, administrators, councils and leaders – face to face Set up awareness program schedule Inform the Parents & Citizens Group	<ul style="list-style-type: none"> School teachers Principals; School Councils Project Officer 	Sept – Oct 2008	N/A	Meeting held and student engagement arrangement
Rangers to conduct school classroom visits to talk to students	Go to the school at scheduled times Meet with teachers to discuss class and times Obtain teaching resources from LSMU Use Information Package developed by LSMU	<ul style="list-style-type: none"> Rangers LSMU Project officer 	Ongoing	Information Package \$N/A	Sharing resources Number of classroom visits
Raising community awareness through media	Convene meeting between rangers to develop items for Torres News and/or radio	<ul style="list-style-type: none"> LSMU Rangers Elders & artists 	Ongoing	\$200 catering Costs for postage	Article published in Torres News and/or article read over radio
Sharing Traditional knowledge	Convene a traditional ways workshop Recording traditional ways and cultural protocols Sharing information in culturally appropriate ways and formats	<ul style="list-style-type: none"> ZK Rangers groups ZK nations community 	Quarterly	STD phone call Voice recorder Digital camera \$2000 Airfares \$600 catering \$2000 accomm	<ul style="list-style-type: none"> Workshop took place; Knowledge is shared between rangers and used in community awareness package

Objective Monitor dugong and turtle populations and habitats					
Strategy Establish catch monitoring program through Kaiwalagal ranger program					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Contribute to the development of a regional catch monitoring strategy (to be established within first two years of plan).	<p>Liase with LSMU, PZJA agencies, Zenadh Kes PBCs to develop catch monitoring protocols.</p> <p>Develop information sharing and intellectual and cultural property and partnership agreements with PZJA agencies, LSMU and research organisations on the collection and use of monitoring data.</p>	Rangers PZJA agencies LSMU ZKPBCs research orgs.	As required to be coordinated by AFMA	To be decided	<p>Catch monitoring protocols.</p> <p>Data & partnership agreements.</p>
Review regional catch monitoring datasheet	Project Officers to meet with LSMU to update existing datasheet.	Project Officer LSMU	By end August 2008	Telephone linkup	New/updated datasheet.
Develop database to record data.	<p>Project Officers to work with LSMU to develop spreadsheet to record catch data.</p> <p>Organise training for rangers on data entry and data management and reporting if necessary.</p>	Project Officer Rangers PZJA agencies LSMU NAILSMA	<p>August to September 08</p> <p>When database available</p>	Laptop or PC MS Access software Piggy back on Fisheries Training	Database developed.
Conduct a catch monitoring training workshop with project officers/rangers to learn how to collect and manage data.	Organise training workshop for project officers/rangers to learn how to collect and manage data.	Project Officer Rangers LSMU	By end August 2008	Piggy back on Fisheries Compliance Training	Workshop held and completed.
Conduct a catch monitoring training workshop with hunters to ensure they know how to collect and manage data.	<p>Organise training workshop for hunters to learn how to collect data and manage it.</p> <p>Demonstrate data collection by filling in datasheets, measuring catch etc.</p>	Project Officer Rangers, hunters LSMU	Sept – Dec 08	Datasheets Training Methods Tape measures	Workshop held and completed.
Distribute catch monitoring datasheets to hunters.	<p>Hand datasheets out to hunters at catch monitoring workshop.</p> <p>Post information flyer explaining catch monitoring and showing catch monitoring sheet</p> <p>Notify hunters where they can collect datasheets within community (at workshop).</p> <p>Project Officer/Rangers to distribute blank datasheets at collections points in community.</p>	Project Officer, Rangers	At workshop and on-going	Datasheets	Datasheets distributed.
Promote catch monitoring throughout community and in schools to ensure compliance.	Regularly talk to hunters in community and other project officers/rangers to ensure catch is recorded and current.	Project Officer Rangers	On-going	N/A	Weekly discussion with hunters held
Collect catch monitoring data.	<p>Project officer and rangers to regularly collect datasheets from hunters.</p> <p>Project officer and rangers to regularly collect datasheets from organised drop off points.</p>	Project Officer Rangers	On-going		Completed datasheets and monthly summary report of catch data.

Objective Monitor dugong and turtle populations and habitats					
Strategy Establish catch monitoring program through Kaiwalagal ranger program					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Reporting of catch monitoring data	Rangers to prepare monthly summary reports of catch within community. Rangers to keep LSMU informed of catch monitoring. Rangers to report to steering committee at monthly meetings to keep community informed of collected catch data.	Project Officer Rangers LSMU Plan steering committee / PBC	Monthly	Computer	Monthly summary report of catch data.
Obtain cyber-tracker for monitoring and patrol work	Contact NAILSMA to get details for cyber-tracker distributors. Ring and order distributor to purchase	Project Officer NAILSMA	By end August 2008 When budget available	Phone/cost of phone call \$4000	Contact with NAILSMA. Equipment acquired
Training to learn how to use cyber-tracker.	Project Officers to talk with LSMU and NAILSMA to organise training dates. LSMU and/or NAILSMA to run training program for Project Officers/rangers.	Project Officer Rangers LSMU NAILSMA	After purchased		Completed training. Use of cyber-tracker in community.
If applicable to island community locate and construct appropriate designated butchering sites to aid in catch monitoring.	Project officer / rangers to liaise with council and PBC to identify appropriate butchering sites within community. Project officer / rangers to get necessary approvals and funding for butchering facilities if approved by council and PBC. Buy necessary equipment/materials for construction.	Project Officer Rangers Island council PBC	December 2008	Construction materials	Meetings with council and PBC. Construction of butchering infrastructure.
Collect turtle tagging data from all tagged turtles.	Project officer / rangers to collect information on tagged turtles from hunters and forward data to QLD EPA.	Project Officer Rangers hunters, QLD EPA	On-going	Postage costs Fax	Tag return reports from QLD EPA.

Objective Monitor dugong and turtle populations and habitats					
Strategies Develop dugong and turtle population monitoring program Develop dugong and turtle habitat monitoring program					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Finalise research and monitoring priorities in management plan	Engage traditional owners during final plan endorsement meeting to confirm research and monitoring priorities Project officer to liaise with neighbouring communities to align research and monitoring priorities where appropriate	Project Officer Traditional owners PBC LSMU	Before 25 th July 08	Part of Plan endorsement	Research and monitoring priorities agreed and endorsed
Submit research and monitoring priorities to relevant government and non-government research organisations	LSMU to approach research organisations to discuss potential partnerships and funding to progress research and monitoring priorities LSMU to submit priorities for turtle and dugong research to TSSAC to seek potential funding and support Project officers to present research and monitoring priorities to JCU Research Workshop	Project Officer Rangers PBC Research organisations LSMU TSSAC	Following plan endorsement Subject to TSSAC Meetings October 2008	To be decided	Research priorities delivered to relevant organisations Potential funding partnerships secured Funding obtained
Contribute to the development of a regional research strategy and protocols for habitat and population monitoring	Rangers to liaise with LSMU, PZJA agencies, Zenadh Kes PBCs to develop regional research strategy including Nation based research protocols. Negotiate information sharing and intellectual and cultural property and partnership agreements with PZJA agencies, LSMU and research organisations on the collection and use of research data.	Rangers PZJA agencies LSMU PBC research organisations	To be decided in first year of plan implementation	To be decided	Data & partnership agreements.
Rangers to be briefed by LSMU and TSSAC on the existing, on-going and proposed turtle and dugong research in Zenadh Kes.	LSMU to brief project officers and rangers about existing turtle and dugong research in Zenadh Kes.	Project officer Rangers LSMU	Twice per year depending on TSSAC meetings	N/A	Report from TSSAC.
Develop and submit funding applications as they become available to obtain resources to implement research and monitoring priorities outside the scope of Working on Country budget (Link to Ranger Monitoring Program)	LSMU to advise project officers / rangers of potential funding opportunities LSMU / project officer / rangers to develop and submit funding applications LSMU to facilitate partnerships with relevant research organisations	LSMU Project officer Rangers Relevant research organisations	As funding opportunities arise and are advertised	Telephone Internet Project officer flights if required	Funding applications submitted Funding obtained
Rangers to facilitate appropriate and relevant research.	Rangers to ensure appropriate permission of entry and research projects with traditional owners Rangers and LSMU to obtain research permits are obtained for research conducted within the management areas	Project officer Rangers LSMU PBC QLD EPA Relevant research	On-going		Formal letters of permission obtained from PBC Research permit(s) held by community or researchers.

Objective Monitor dugong and turtle populations and habitats					
Strategies Develop dugong and turtle population monitoring program Develop dugong and turtle habitat monitoring program					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
		organisations			
Respond to research organisation requests to undertake research by distributing island or nation research protocols	Project officer / rangers to facilitate involvement of PBC and traditional owners to finalise research protocols using LSMU template Rangers / LSMU to provide to relevant research organisations	Project Officer Rangers PBC LSMU	As research requests arise	Internet Telephone	Research protocols finalised Research protocols being sent to interested organisations
Develop ranger dugong and turtle Monitoring Plan describing monitoring activities and identified monitoring sites	Project officer / rangers consult with traditional owners to discuss monitoring sites and patrol areas Project officer / rangers to undertake site visits to monitoring sites if necessary to scope out activities and budget Project officer / rangers / LSMU to develop program Project officer / rangers / LSMU develop budget for monitoring program Project officer / rangers / LSMU to identify activities that can be undertaken within the Working on Country funding application Project officer / ranger to submit the monitoring plan and program to LSMU for endorsement	Project Officer Rangers PBC LSMU	Sept – Dec 08 Once Working on Country budget available	Surveyed vessel Internet Telephone Digital camera GPS Maps / GIS	Monitoring program developed
Undertake seagrass monitoring in community	Rangers through LSMU to contact the research organisation running existing seagrass monitoring program to express an interest in extending the program to their management area. If already involved with existing program, continue involvement in monitoring.	Project Officer Rangers PBC LSMU QDPI&F	Sept – Dec 08	Seagrass monitoring kit \$700 Fuel Consumables Vessel Vehicle	Seagrass monitoring undertaken Seagrass monitoring program established
Undertake ghost net surveys and clean up work around island and in shore reefs	LSMU to liaise with Ghost Net program coordinator to obtain support to expand ghost net program to community If already involved with existing program, continue involvement in monitoring and clean ups Rangers to liaise with community / hunters / fishermen regarding ghost net sightings Rangers to undertake routine patrols to identify and if possible clean up ghost nets Identify appropriate site for ghost net collection and storage Identify opportunities for reuse of ghost nets by community / art centre	Project Officer Rangers PBC LSMU Southern Gulf NRM Group	Sept – Dec 08	Ghost net survey kit Cybertracker GPS Digital camera	Ghost net program undertaken Ghost net monitoring program established

Objective Monitor dugong and turtle populations and habitats					
Strategies Develop dugong and turtle population monitoring program Develop dugong and turtle habitat monitoring program					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Monitor turtle and dugong sightings during patrols	Based on agreed Monitoring Program rangers to record sightings of dugong and turtle in foraging areas during sea country patrols Establish regular survey sites to monitor	Rangers LSMU Relevant research organisations	On-going	Cybertracker Vessel Fuel Consumables GPS Tidal information	Dugong and turtle survey sites identified Survey patrols undertaken Number of surveys
Involvement in dugong aerial surveys.	Rangers to contact JCU to express an interest in becoming observers for the dugong aerial surveys.	Rangers JCU	Prior to next aerial survey (2011?)		Letter of agreement between JCU and Rangers.
If funding available monitor significant turtle nesting areas.	Rangers to contact turtle experts to design research plan for monitoring turtle nesting (to ensure consistency with other programs) and link to Dugong and Turtle Monitoring Plan LSMU to organise relevant turtle research and monitoring training for rangers. Rangers to acquire the necessary equipment needed for turtle monitoring. Rangers to regularly monitor turtle nesting at significant nesting areas based on Monitoring Plan	Rangers Traditional owners Turtle Biologists	As per funding availability and according to agreed Monitoring Plan	Vessel Fuel Consumables Digital camera Survey equipment	Funding available and obtained Monitoring Plan with turtle nest monitoring component developed Monitoring occurring
If funding available monitor turtle nest predation at significant turtle nesting areas.	Rangers to regularly monitor turtle nesting beaches to document level and type of nest predation. Rangers to protect nests from predators where possible. If applicable rangers to obtain information on feral animals causing nest predation and explore management opportunities	Rangers LSMU DNRW – land protection officer for Torres Strait	Turtle season (On-going)	Vessel Fuel Consumables screens to protect nests	
If funding available investigate turtle tagging to monitor turtle populations in their feeding grounds.	Rangers to contact turtle experts to identify potential research partnerships to conduct turtle monitoring programs Rangers to undertake foraging surveys based on agreed survey plan linked to Monitoring Plan	Rangers LSMU Turtle Biologists	As per funding availability and according to agreed Monitoring Plan	Vessel Fuel Consumables Digital camera Survey equipment	Funding available and obtained Monitoring Plan with turtle nest monitoring component developed Monitoring occurring

Objective Slow the rate of dugong and turtle hunting in the Kaiwalagal Management Area					
Strategies Develop and implement a dugong and turtle hunting permit system to reduce hunting effort					
What	How	Who	When	Resources / Costs	Performance Indicator / Check
Explore options / opportunities / obstacles regarding permit system for Kaiwalagal	<p>AFMA officer to liaise with Senior AFMA officers regarding permit system opportunities / obstacles under current legislation</p> <p>LSMU to liaise with Native Title Office to explore ability of Prescribed Bodies Corporate to administer a permit system under the Native Title Act</p> <p>LSMU to liaise with QEPA about the permit system in other regions</p> <p>Project Officer to liaise with other indigenous communities about their permit systems / opportunities / obstacles</p>	<p>Project officer AFMA – TS LSMU NTO QEPA</p>	June / July 08	<p>Telephone Ferry Internet</p>	All information sources obtained on permit system
Make Commonwealth and State government fisheries agencies aware of the need for a permit system	Project officer / LSMU to develop statement of why Kaiwalagal traditional owners require permit system	Project officer LSMU	July 08	Ferry fares Telephone	Statement on permit system developed
Present proposed permit system to the TSFMAC and PZJA	<p>Project officer / LSMU to develop briefing paper on the Kaiwalagal permit system for the TSFMAC and PZJA</p> <p>LSMU / Project officer to present briefing paper to MAC.</p>	<p>Project officer LSMU PZJA agencies NTO</p>	<p>July to August 08</p> <p>Dependent on TSFMAC timetable</p>	Ferry fare Telephone	TSFMAC briefing paper developed
Ongoing liaison with LSMU to follow progress of the permit system	<p>Project officer to liaise with LSMU</p> <p>LSMU to liaise with PZJA agencies regarding the development and progress of the permit system</p> <p>LSMU to liaise with PZJA agencies, specifically DAFF regarding required legislative amendments.</p>	<p>Project officer Rangers LSMU PZJA agencies</p>	Ongoing	Telephone Internet	Updates on permit system provided to project officer and rangers