

WHALE AND DOLPHIN ACTION PLAN 2008-2012

PACIFIC ISLANDS REGION

GOAL

To conserve whales and dolphins and their habitats for the peoples of the Pacific Islands Region

INTRODUCTION

Whales and dolphins are an important component of the marine biological diversity of the Pacific Islands Region. Over half the world's known species of whales and dolphins are found in the region, and for some species such as the humpback whale, the Pacific Islands Region is a vital breeding area. Whales and dolphins are widely regarded as flagship species for Pacific marine ecosystems and feature prominently in promotional tourist material. Many Pacific island cultures have legends, stories and traditional uses and values of marine mammals. These species are generally long-lived and have low reproductive rates.

For many species of large whales, the impacts of commercial whaling during the nineteenth and twentieth centuries, largely by countries from outside the region, have reduced the breeding populations of South Pacific whales to extremely low levels, possibly to local extinction for some species

In recent time, many Pacific Island countries and territories have declared whale sanctuaries or marine sanctuaries for marine animals including whales and dolphins.

SPECIES DISTRIBUTION

Based on largely opportunistic and anecdotal records, Miller¹ (2007) reported that at least 30 different whale and dolphin species occur within the Pacific Islands, although this number increases to more than 40 species when Hawaii, New Zealand and Australia are also considered. The checklist of country-specific whale and dolphin species records, classified according to the "reliability" of the record, for the 22 Pacific Island countries and territories is given in Table 3.1 attached. The limited research efforts in the region, coupled with the very large expanse of marine area, makes it plausible that there may be still unreported species that inhabit these waters.

Our current understanding of whale and dolphin diversity and distribution in the Pacific Islands Region is considered incomplete as there are many locations that have not been surveyed. For example, only 5 whale and dolphin species have been reported to occur in Tuvalu waters, however records for additional species have been reported in EEZs of adjacent countries, which suggests that these species may also be part of the Tuvalu whale and dolphin fauna. In addition, as capacity and research within the region is strengthened, data and information that is gathered will produce increasingly accurate records for the Pacific Islands Region.

Sperm whales are the most widely reported cetacean species in the Pacific Islands Region with all 22 PICTs having records of this species. Rare species for the region include the Southern bottlenose whale and the Indo-Pacific humpback dolphin. A relatively high number of records were reported for both Papua New Guinea and Solomon Islands, while very few records were available for the Pitcairn Islands and Wallis and Futuna.

¹ Current State of Knowledge of Cetaceans Threat, Diversity and Habitats in the Pacific Islands Region. A report by the Whale and Dolphin Conservation Society for the First Meeting of the Signatories to the Memorandum of Understanding for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region.

SPECIES STATUS

Population status of virtually all species of whales and dolphins in the Pacific Islands Region is basically unknown. The exception to this is for the South Pacific humpback whale and local population estimates for certain species e.g. spinner dolphins in Moorea, French Polynesia. Widely distributed and were heavily exploited in the 20th Century.

The total takes on the humpback whale in the Southern Ocean IWC Management Areas IV, V and VI were approximately 80,000. Recent work by the SPWRC has shown that there are likely to be at least three genetically distinct populations of humpback whales in Eastern Australia, and east Polynesia and two distinct populations in central and west Polynesia. Based on closed population models, Baker *et al* (2006), in a paper submitted for consideration by the Inter-Sessional Workshop for the Comprehensive Assessment of Southern Hemisphere Humpback Whales (Hobart, Tasmania, 3-7 April 2006), estimated regional abundance of humpback whales in Oceania as 472 for the New Caledonia stock, 2311 for the Tonga stock and 1057 for the French Polynesia stock. However, the open-population models yield 15-25% lower estimates. In comparison, the Eastern Australia humpback abundance has been estimated to be approximately 8,000 and this population is increasing by about 10% per annum [re-word to give proper reference]. This difference in abundance could be because the South Pacific populations have been so depleted or were always smaller and/or because some South Pacific whales have shifted migration routes to Australia.

Several whale and dolphin species are listed on Appendix I² of the CITES, and the remaining species are listed in Appendix II³. The CMS also lists whale and dolphin species needing protection on its Appendices I⁴ and II⁵. The IUCN Red List of Threatened Species 2006 lists several whale and dolphin species as endangered and vulnerable with a lot of species having deficient data for categorizing.

TRADITIONAL KNOWLEDGE AND CUSTOMS

Whales and dolphins are important in the cultures, legends, traditions and heritage of many Pacific Island peoples. In Fiji, sperm whale teeth have particular cultural significance. Whales and dolphins are associated with identity, lifestyle and well-being. Migrations of whales are used as an environmental cue on some islands and ceremonies and ritual surround cetaceans across the region. In some traditions, they are viewed as incarnations of humans.

TOURISM INCOME GENERATING OPPORTUNITIES

A recent review of the status of marine mammal tourism activities in the Pacific Islands region, commissioned by IFAW in collaboration with SPREP, SPWRC and the SPTO, showed that the industry experienced strong annual growth for the period 1998 – 2005. The study indicates that between 1998 and 2005, both the number of whales watchers and the number of countries offering whale watching significantly increased (Table 3.2). Whale watching is becoming an important component of tourism development in the region with a total estimated direct economic value of \$US 7.5 million and \$US 21 million in total value in 2005.

² Appendix I lists species that are the most endangered among CITES-listed animals and plant, which are threatened with extinction and CITES prohibits international trade in specimens of these species except when the purpose of the import is not commercial, for instance for scientific research. In these exceptional cases, trade may take place provided it is authorized.

³ Appendix II lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled. International trade in specimens of Appendix-II species may be authorized by the granting of an export permit or re-export certificate.

⁴ Migratory species that have been categorized as being in danger of extinction throughout all or a significant proportion of their range are listed on Appendix I of the Convention. States strive towards strictly protecting these animals, conserving or restoring the habitats in which they live, mitigating obstacles to migration and controlling other factors that might endanger them

⁵ Migratory species that have an unfavourable conservation status or would benefit significantly from international co-operation organised by tailored agreements are listed in Appendix II to the Convention. For this reason, the Convention encourages the Range States to conclude global or regional Agreements for the conservation and management of individual species or, more often, of a group of species listed on Appendix II

Table 3.2: Growth of whale and dolphin watching in the Pacific Islands Region (EcoLarge, 2006)

Pacific Region Findings	Numbers of Whale Watchers	Countries with whale watch operations	Average annual growth in whale watchers (1998 – 2005)	Estimated Direct Value of whale watching industry	Estimated Total Value of the industry
1998	10,308	9			USD 1,185,000
2005	110,746	14	45%	USD 7,525,500	USD 21,012,000

THREATS

Whales and dolphins in the Pacific Islands region face various threats and there are important issues arising for their effective conservation and management.

Fishery Interactions: Depredation and incidental by-catch in long-line fisheries is categorized as a high threat for small and medium toothed whales, and may be a serious concern for small localized populations. Depredation is also recognized as a significant economic threat to long-line fishermen due to loss of catch or bait.

Directed take: Directed take is categorized as a high threat. Scientific whaling on minke, fin, and humpback whales is of specific concern, particularly the take of humpbacks that could directly impact on the recovery of the small vulnerable humpback populations in the waters of SPREP members. An additional issue is the recovery of other large whale species from previous unsustainable commercial harvest.

The drive hunt in the Solomon Islands is categorized as a high threat, as the three species taken may be highly localized and the impacts to these populations are unknown. Capture of animals for public display has also recently occurred and any resumption would be of concern.

Climate Change: Climate change is potentially a high threat to whales and dolphins and their habitats in the region through potential disruption of ocean circulation, changes in the amount and distribution of prey, changes in salinity, temperature and acidity and other parameters. Current climate change models include a wide range of potential scenarios.

Tourism/human interaction: Whales and dolphin watching is an important economic opportunity for many countries and territories in the Pacific Islands. If managed according to responsible wildlife viewing practices it should pose only a low threat to whale and dolphin populations. However, if not managed properly this form of tourism could pose a medium threat to the fitness of animals, and potentially a high threat for specific, localized populations that may be vulnerable to disturbance in certain areas such as resting bays. Recent studies show that in some circumstances whale and dolphin watching can cause impacts upon the individuals and populations being watched.

Habitat Degradation: Habitat degradation includes coastal development, sedimentation, aquaculture, nutrients, and other habitat impacts. Of most significance could be localized point source activities. This threat is categorized overall as medium.

Pollution: Plastics are categorized as a medium threat to whales and dolphins in the region. Species that prey on soft-bodied prey such as squid may be susceptible to plastic ingestion, and this has been shown in necropsy results of stranded animals. Toxic chemicals are considered a largely unknown but low threat, but may be of higher concern in specific areas due to impacts from mining operations, port and urban development and ship groundings.

Ship strikes, acoustics, disease: Ship strikes, acoustics, and disease are considered largely unknown but low threats to whales and dolphin in the region. Ship strikes may be a potential for concern in areas with fast vessels and high whale and dolphin concentrations.

THEMES AND OBJECTIVES

Theme	Objectives
1. NATIONAL, REGIONAL AND INTERNATIONAL COLLABORATION AND COOPERATION	<ul style="list-style-type: none"> • Promote and enhance national, regional and international coordination, collaboration and partnership for whale and dolphin conservation in the Pacific Islands region
2. THREAT REDUCTION	<ul style="list-style-type: none"> • To develop, test and disseminate effective mitigation techniques that reduce depredation and incidental by-catch, and to document the impact of Illegal, Unreported and Unregulated fishing on whales and dolphins in the Pacific Islands Region • Limit direct take to sustain populations • Improve our understanding on impacts of climate change on whales and dolphins • Minimize impacts of pollution on whales and dolphins • Support the development of sustainable eco-tourism practices in the region • Ensure coastal developments take account of potential impacts on whale and dolphin populations • Improve information on ship strikes, acoustics, disease (Low but Unknown)
3. ECOSYSTEM/HABITAT PROTECTION	<ul style="list-style-type: none"> • Support the designation and management of national whale/marine sanctuaries in the EEZs of SPREP members • Identify key critical habitat, hotspots, and migratory pathways that are candidates for improved conservation.
4. CAPACITY BUILDING	<ul style="list-style-type: none"> • Increase in-country expertise, field capacity and regional cooperation
5. EDUCATION AND AWARENESS	<ul style="list-style-type: none"> • Develop communication strategies, training programs and protocols for key issues within the Whale and Dolphin Action Plan • Increase awareness and understanding of whales and dolphins in the Pacific Islands Region • Promote awareness regarding the value of traditional knowledge and practices in the management of whales and dolphins
6. CULTURAL SIGNIFICANCE AND VALUE	<ul style="list-style-type: none"> • To document the range of cultural practices, values and knowledge associated with whales and dolphins and encourage a more cohesive approach in policies and legislation • Preserve and protect the traditional knowledge and values associated with whales & dolphins • Ensure appropriate cultural knowledge, practices, and values inform and underpin management measures
7. LEGISLATION AND POLICY	<ul style="list-style-type: none"> • Develop country level legal, policy and institutional framework to support the effective implementation of the Whale and Dolphin Action Plan
8. RESEARCH AND MONITORING	<ul style="list-style-type: none"> • Improve information received on stranding events in the Pacific Islands Region • Identify key species and areas for baseline surveys • Identify significance of and priority for toxicological research
9. WHALE AND DOLPHIN-BASED TOURISM	<ul style="list-style-type: none"> • Foster sharing of lessons learnt and undertake regular assessment of the industry • Ensure the best practice management of the whale and dolphin watching industry in the Pacific Islands Region • Maximize educational and economic values of whale and dolphin watching

THEMES AND PRIORITY ACTIONS

THEME 1: NATIONAL, REGIONAL AND INTERNATIONAL COLLABORATION AND COOPERATION		
OBJECTIVE: <i>Promote and enhance national, regional and international coordination, collaboration and partnership for whale and dolphin conservation in the Pacific Islands region.</i>		
Actions:	Lead	Priority
1.1 Promote understanding by facilitating effective information sharing mechanisms to assist in addressing cross-sectoral issues and migratory species conservation.	SPREP	High
1.2 Encourage and support PICTs to remove internal cross-sectoral barriers to effectively implement the WDAP at the local, island, government level.	Members	High
1.3 Facilitate PICTs involvement and participation in relevant international meetings and initiatives for whales and dolphins conservation.	SPREP/ Partners	High
1.4 Promote cooperation and highlight achievements and lessons learnt in whale and dolphin conservation at regional and international conferences and fora.	SPREP	High
1.5 Ensure whales and dolphins conservation needs are integrated into the development and implementation of the SPREP Environment Ministers Regional MPA framework.	SPREP	High
1.6 Develop linkages with relevant regional organizations and processes (such as RFMOs), eg. MoUs information exchange and cross-sectoral integration.	SPREP/ Members	Medium
1.7 Develop linkages with relevant private sector organizations to reduce threats to whales and dolphins such as by-catch, depredation and marine debris (such as fishing and tourism industries, NGOs).	Members/ SPREP/ Partners	High
1.8 Effect improved integration of whale and dolphin conservation into national, regional and international initiatives including: national - NBSAP, NSDS; regional - Pacific Islands Regional Oceans Policy, Action Strategy for Nature Conservation, CROP Marine Sector Working Group, RFMOs, NBSAP Working Group).	Members/ SPREP/ Partners	High
Indicators:		
<ul style="list-style-type: none"> ⊙ Number of national, regional and international organizations, processes and frameworks incorporating PIR whale and dolphin conservation needs. ⊙ Number of national, regional and international partnerships created to support WDAP implementation. 		

THEME 2: THREAT REDUCTION		
OBJECTIVE (i): FISHERIES INTERACTION		
<ul style="list-style-type: none"> • <i>To develop, test and disseminate effective mitigation techniques that reduce depredation and incidental by-catch;</i> • <i>To document the impact of Illegal, Unreported and Unregulated fishing on whales and dolphins in the Pacific Islands Region.</i> 		
Actions:	Lead	Priority
<u>Depredation/fishery interactions</u>		
2.1 Collaborate with RFMOs and share information on fisheries, marine mammals interactions and successful and unsuccessful tactics for mitigation.	Members, SPREP, RFMO, WCPFC, SPC, FFA, FAO, CBD, DWFNs, Partners	High

2.2	Encourage distant water fishing nations to support PIR in ensuring sustainable and responsible fishing practices and to maintain the health of the ocean and PIR economies.	Members, RFMO, WCPFC, SPC, FFA, FAO, DWFNs, SPREP, Partners	Medium
2.3	Foster industry/research institutions/governments partnerships to develop and test mitigation techniques to reduce by-catch and depredation.	Members, DWFNs, RFMOs	High
2.4	Examine information on IUU to better understand potential impacts on marine mammals including by-catch and depredation.	SPREP, SPC, FFA, FAO, Research Institutions, Partners	High
2.5	Collect and disseminate information on the scale of depredation and by-catch from fishing operations, to better assess level of priority and possible mitigation actions.	FFA, SPC, RFMO, SPREP, Members	High
Fishery Ecological Interactions (Low but regional concern on this issue is High).			
2.6	Support outreach and education programmes that provide understanding of the scientific principles of the low level of competition between whales/dolphins and fisheries in this region.	Partners	Low/High
Indicators:			
<ul style="list-style-type: none"> ⊙ Properly tested mitigation technique. ⊙ Acceptance and use of a successful technique by long-line fisheries in the region. ⊙ System of collecting data from fishing operations on by-catch and depredation developed and used. 			
OBJECTIVE (ii): <i>Limit direct take to sustain populations</i>			
Actions:		Lead	Priority
Direct take: Whaling			
2.7	Support non-lethal research on abundance, structure, trends, and assessments of impacts – particularly on humpback, minke and fin whales.	SPREP/Partners/ Members	High
Direct take: Drive hunts and live capture			
2.8	Support research on abundance, structure, distribution, trends, and assessments of harvest impacts on the whale and dolphin species targeted.	SPREP/Partners/ Members	High
2.9	Ensure the direct take of whales and dolphins does not affect viability of local populations.	Members	High
2.10	Ensure any live capture activities in the region comply with international regulations and agreements.	Members	High
Indicators:			
<ul style="list-style-type: none"> ⊙ Non-lethal Research on abundance etc carried out concerning whale and dolphin species targeted in whaling, hunt and live capture. ⊙ Sustainable principles applied to any direct take and international regulations/agreements applied to capture activities. 			
OBJECTIVE (iii): <i>Improve our understanding of climate change impacts on whales and dolphins</i>			
Actions		Lead	Priority
2.11	Facilitate the collation and dissemination of current knowledge on the impacts of climate change on marine mammals and their habitats,	SPREP, scientific institutions, CBD Sec and UNFCCC Sec, partners	High
Indicators:			
<ul style="list-style-type: none"> ⊙ Document/presentation on climate change impacts to whales and dolphins provided to SPREP members by 2009. 			

OBJECTIVE (iv): <i>Minimize impacts of pollution on whales and dolphins</i>		
Actions:	Lead	Priority
<p>Plastics and marine debris</p> <p>2.12 Encourage improved waste management at community and national levels to reduce plastics and other debris in the marine environment.</p> <p>2.13 Develop and promote the use guidelines for fishing operations related to discarding of waste.</p> <p>2.14 Collect information on the potential impact of plastics and fishing gear on whales and dolphins, including from stranding networks.</p> <p>2.15 Where possible, request that necropsies include examination for plastic ingestion.</p>	<p>Members</p> <p>SPREP/SPC Members/ partners</p> <p>Members</p>	<p>Medium</p> <p>Medium High</p> <p>High</p>
<p>Indicators:</p> <ul style="list-style-type: none"> ⊙ Better information on the impacts of plastics and other debris to whales and dolphins. ⊙ Guidelines developed for proper waste management at all levels including from fishing boats. 		
OBJECTIVE (v): <i>Identify and mitigate any significant impact from marine whale and dolphin based tourism</i>		
Actions:	Lead	Priority
<p>2.16 Identify potential for significant impact/localised effects from tourism activities on whales and dolphins.</p> <p>2.17 Develop management and mitigation strategies to reduce identified impact.</p> <p>2.18 Assess any potential impacts of whale and dolphin watching activities on the animals e.g.</p> <ul style="list-style-type: none"> • Spinner dolphin watching • Swim-with programs • Vessel interactions. 	<p>Partners/ SPREP/ Members</p> <p>Partners</p>	<p>Medium</p> <p>High</p>
<p>Indicators:</p> <ul style="list-style-type: none"> ⊙ Significant adverse effect from whale and dolphin watching tourism identified and threat mitigated and lessons learnt promoted and widely shared in the region. ⊙ Studies on impacts of whale/dolphin watching completed in New Caledonia, Tonga. Studies undertaken in Guam, French Polynesia, Hawaii. 		
OBJECTIVE (vi): <i>Ensure coastal development takes account of impacts on whale and dolphin populations</i>		
Actions:	Lead	Priority
<p>2.18 Encourage consultation/consideration of impacts on whales and dolphins in national legislative and EIA processes.</p> <p>2.19 Identify particular localized areas and populations – and then develop appropriate monitoring and mitigation of any significant impacts.</p> <p>2.20 Provide information on potential impacts of coastal development to whales and dolphins to decision makers and public.</p>	<p>Members</p> <p>Members/ Partners</p> <p>Members</p>	<p>High</p> <p>Medium</p> <p>Medium</p>
<p>Indicators:</p> <ul style="list-style-type: none"> ⊙ Consideration of impacts on whales and dolphin incorporated in national legislation and other processes such as EIA and potential impact information made available. ⊙ Monitoring of identified localized populations initiated. 		

OBJECTIVE (vii): <i>Improve understanding of unknown but potential threats to whales and dolphins, including ship strikes, entanglement, acoustics, disease</i>		
Actions:	Lead	Priority
2.21 Encourage anecdotal and opportunistic recording and documentation for ship strikes, entanglement and disease.	Members	Low but Unknown
2.22 Identify any significant source of acoustic noise pollution that could affect whales and dolphins in the region.	Members	Low
Indicators:		
<ul style="list-style-type: none"> ⊙ System in place and operational to collect anecdotal opportunistic data and to be able to respond if one of these becomes a significant threat at local, national or regional level. 		

THEME 3: ECOSYSTEM/HABITAT PROTECTION⁶		
Objectives:		
<ul style="list-style-type: none"> ▪ <i>Support the designation and management of national whale/marine sanctuaries in the EEZs of SPREP members</i> ▪ <i>Identify key critical habitat, hotspots, and migratory pathways that are candidates for improved conservation.</i> 		
Actions:	Lead	Priority
3.1 Support the declaration of EEZ wide whale sanctuaries by SPREP members and support these sanctuaries to develop and implement management plans and strategies.	SPREP/ Partners	High
3.2 Establish a working group on ecosystem/habitat protection that will identify critical habitats, hotspots and migratory pathways and environmental linkages (spatial and temporal).	SPREP/ Partners/ Members	Medium
3.3 Evaluate and support marine protected areas and networks where they are a suitable method and benefit to the protection of whales and dolphins and their habitats in the identified areas.	SPREP/ Partners	High
3.4 Integrate, where relevant and appropriate, whale and dolphin conservation into the development of MPAs/MMAs in the region.	Members	High
Indicators:		
<ul style="list-style-type: none"> ⊙ Additional SPREP Member designate national EEZ whale sanctuaries. ⊙ Management strategies/plans developed, finalized and implemented for existing sanctuaries. ⊙ Working group identifies potential areas for marine protected area designation and management. 		

⁶ There are two general terms often used in regard to whales and dolphins ecosystem protection, these are “sanctuaries” and “marine protected areas”. Typically in the Pacific Islands Region, and for the use in this Plan, “sanctuaries” refer to EEZ-wide whale sanctuary declarations with a principle objective of prohibiting commercial whaling. The other management tool, here referred to as “marine protected areas”, may be smaller in scale and often refer to specific critical habitats, hotspots, or pathways.

THEME 4: CAPACITY BUILDING

OBJECTIVE: *Increase in-country expertise and capacity*

Actions:	Lead	Priority
4.1 Identify training needs and support proposal writing to implement WDAP at the country and regional level, using existing processes such as NCSA.	Members/ SPREP	High
4.2 Develop training packages on common priorities (e.g. stranding, data recording, legislation, communication etc) based on regional priorities and convene workshops based on identified needs.	SPREP/ Partners	High
4.3 Support internship training on whales and dolphins in existing research centers.	Partners	High
4.4 Build in-country capacity to prepare relevant regulation, legislation and policy.	Members/ SPREP	High
4.5 Conduct local and/or regional training workshops on necropsy including collection and storage of tissues, skeletal remains and analysis.	SPREP/ Auckland Uni,	High
4.6 Conduct training and verification of whale and dolphin sightings and reporting, and develop database complementary to that under Marine Turtle Action Plan.	SPREP/ Partners	Medium
4.7 Conduct at least one specialist regional workshop in abundance estimation techniques (sighting surveys) followed by field training cruise.	SPREP/ CMS/ WDCS	High
4.8 Develop surveillance and enforcement capacity for implementation of national protection measures including whale and dolphin watching tourism operations.	Members	High
4.9 Conduct industry training and certification programs for whale/dolphin watching operators and guides, which should be required to attain a whale & dolphin watching permit/ license where applicable.	Partners	High
Indicators: <ul style="list-style-type: none"> ⊙ Training needs identified and addressed. ⊙ Training packages prepared and made available. ⊙ Increased technical capacity to obtain information and assist in the conservation of whales and dolphins in the region. ⊙ Improved capacity to develop and implement policies and legislation. ⊙ Whale/dolphin operator training and certification programs are implemented in SPREP nations. 		

THEME 5: EDUCATION AND AWARENESS

OBJECTIVE (i): *Develop communication strategies, training programs and protocols for key issues within the Whale and Dolphin Action Plan*

Actions:	Lead	Priority
5.1 Identify key issues for each Member and support development of appropriate education strategies and programs (e.g. known threats, species ID and status).	Members/ Partners	High
5.2 Develop appropriate educational and awareness tools for different target audiences at a regional and national level including producing a template to facilitate production in local dialect.	SPREP/ Members/ Partners	High
5.3 Up-skilling of government agencies and community trainers to facilitate stewardship, and to develop and deliver outreach programs.	Members	Medium
Indicators: <ul style="list-style-type: none"> ⊙ Community and school education programs implemented. ⊙ Regionally relevant facts sheets to inform governments and industry on key issues are produced (e.g. fisheries interactions, cultural practices, regulations, biology & natural history). ⊙ Training programs carried out in-country for key government agencies and identified local community stewards. 		

OBJECTIVE (ii): <i>Increase awareness and understanding of whales and dolphins in the Pacific Islands Region</i>		
Actions:	Lead	Priority
5.4 Utilize existing community networks and venues to deliver public presentations.	Members	High
5.5 Provide materials and information to community media (TV and radio stations) in-country to inform public.	Members/SPREP/ Partners	High
5.6 Disseminate educational materials targeted at recreational/ private boaters to ensure minimum impact.	Members/SPREP/ Partners	Medium
Indicators:		
<ul style="list-style-type: none"> ⊙ Presentations on whales & dolphins are carried out in schools, village halls, and during annual festivities. ⊙ Whales & dolphins are profiled through documentaries, interviews and regular spots in local media. ⊙ ID guides, fact sheets and guidelines brochures are distributed to boaters, marinas, yacht clubs, through government agencies and NGO's. 		
OBJECTIVE (iii): <i>Promote awareness regarding the value of traditional knowledge and practices in the management of whales and dolphins</i>		
Actions:	Lead	Priority
5.7 Integrate traditional knowledge, stories and customs into education and awareness developed.	Members, SPREP	High
5.8 Encourage the use of informal/traditional methods of education within villages, e.g. utilizing elders as resource people.	Members, Partners, SPREP	Medium
Indicators:		
<ul style="list-style-type: none"> ⊙ Education programs implemented in schools, education centres and museums. ⊙ Informal/traditional methods of education are employed at community level. 		

THEME 6: CULTURAL SIGNIFICANCE AND VALUE

OBJECTIVE (i): <i>To document the range of cultural practices, values and knowledge associated with whales and dolphins and encourage a more cohesive approach in policies and legislation.</i>		
Actions:	Lead	Priority
6.1 Undertake a review of customary practice and knowledge related to the conservation and management of whales and dolphins.	SPREP/ Partners	High
6.2 Promote the adoption and integration of customary practices related to the conservation and management of whales and dolphins, where appropriate.	Members	High
6.3 Review and identify gaps and conflicts in relevant policies and legislation that supports/limits the protection and promotion of TRM, TK, IPR, ABS, and CMT.	Members	High
6.4 Encourage the need to address gaps and conflicts found in the review where required, in consultation with local communities and relevant stakeholders.	Members/ SPREP	High
6.5 Support and promote the introduction of appropriate formal protection of IPR, TK and ABS at a national, regional and international level.	Members/ SPREP	High
6.6 Support the documentation of traditional knowledge, practices, heritage and values, using existing networks.	Members/ SPREP	High

Indicators:		
<ul style="list-style-type: none"> ⊙ TK and other customary practices and values documented and incorporated where relevant. ⊙ Review on gaps carried out and report published and disseminated. ⊙ Artifacts and narratives (oral histories) documented and conserved in local museums. 		
OBJECTIVE (ii): <i>Preserve and protect the traditional knowledge and values associated with whales and dolphins</i>		
Actions:	Lead	Priority
6.7 Identify and empower appropriate in country authorities to hold, maintain and promote traditional knowledge.	Members	High
6.8 Establish documentation protocols and agreed partnerships with cultural groups/chiefly bodies and individual knowledge holders regarding appropriate use and dissemination of information.	Members	High
Indicators:		
<ul style="list-style-type: none"> ⊙ Each country has identified appropriate authority to house and promote cultural information. ⊙ On going promoting and support for TK, ABS in national, regional and international fora etc. 		
OBJECTIVE (iii): <i>Ensure appropriate cultural knowledge, practices, and values inform and underpin management measures.</i>		
Actions:	Lead	Priority
6.9 Assess the sustainability of cultural practices involving whales and dolphins that may represent a threat to whales and dolphins (e.g. Fijian <i>tabua</i> , Solomon Islands dolphin drive).	Members/ SPREP	High
6.10 Ensure biological survey designs respect and draw upon Traditional Knowledge.	Members	High
6.11 Ensure national and local policies and management respect and draw upon Traditional Knowledge.	Members	High
Indicators:		
<ul style="list-style-type: none"> ⊙ Case studies supported on sustainability of cultural practices in country's interested supporting sustainability assessments. ⊙ Relevant whale and dolphin TK and cultural values are utilized and acknowledged in scientific survey design and execution and formulation of national management policies. 		

THEME 7: LEGISLATION AND POLICY

OBJECTIVE: *Develop country-level legal, policy and an institutional framework to support the effective implementation of the Whale and Dolphin Action Plan.*

Actions:	Lead	Priority
<p>7.1 Complete legislative and policy review and disseminate the final report. Review to include:</p> <ul style="list-style-type: none"> • Identifying legislative inconsistencies and gaps within PICTs; • Extending to cover US, UK, Pitcairn, France, Australia and NZ; • Assessment of country capacity to implement the WDAP, CMS Cetacean MoU, CITES and CBD where relevant; • Country capacity to implement CITES/CBD; • Habitat and species protection measures; • Sanctuary declaration; • Regulation of distant water and local fleets, including observer programme coverage to document commercial fishing impact on whales and dolphin. 	IFAW/SPREP	High
<p>7.2 Further develop policies, regulations and legislation for the effective conservation management of whales and dolphins, including measures to mitigate threat and ensure habitat protection.</p>	Members/ SPREP/Partners	High
<p>7.3 Identify and respond to country/territory legal and policy capacity needs.</p>	Members/ SPREP/ Partners	Medium
<p>7.4 Assess processes and outcomes used for NCSA and other related biodiversity mechanisms, to address legal and policy capacity needs for whale and dolphin conservation.</p>	Members	Medium
<p>Indicators:</p> <ul style="list-style-type: none"> ⊙ Regional legislative/management review completed and widely disseminated. ⊙ Harmonization of in-country/territory policy and legal instruments. ⊙ Capacity strengthened to draft, manage and enforce legislation and policy in-country/territory. ⊙ Number of NBSAPs or equivalent strategies integrating WDAP actions. 		

THEME 8: RESEARCH AND MONITORING

This Action Plan promotes only non-lethal techniques for research

OBJECTIVE (i): *Improve information received on stranding events in the Pacific Islands Region.*

Actions:	Lead	Priority
<p>8.1 Develop a web-accessible regional stranding database, with verification process for species identification.</p>	SPREP/ Te Papa/ Members	High
<p>8.2 Collect community records and knowledge on whales and dolphins and incorporate into the regional stranding database.</p>	Members	High
<p>8.3 Produce a regional booklet/stranding manual with species identification, forms and instructions in English, Pidgin and French.</p>	SPREP	High
<p>8.4 Encourage an MoU between the University of Auckland and SPREP for processing and storage of tissue samples for genetic work.</p>	SPREP/ CMS	High
<p>8.5 Provide basic stranding kits (for genetic samples) to Members.</p>	Auckland	High

8.6 Assist in funding for experts to attend national workshops in regions.	Uni/Donors SPREP	Medium
Indicators:		
<ul style="list-style-type: none"> ⊙ Stranding Database and network established and operational. ⊙ Stranding manual produced in three languages and distributed. ⊙ Tissue archive and protocols for deposition and access established. ⊙ Kits for genetic sampling distributed and used. ⊙ Improved information on strandings events in all PICTs. 		

OBJECTIVE (ii): Identify key species and areas for baseline surveys

Actions:	Lead	Priority
8.7 Establish web-accessible sighting database.	SPREP	Medium
8.8 Improve species inventories for all PICTs, prioritizing those recognised as data deficient.	Members/ Partners/ SPREP	High
8.9 Conduct dedicated surveys to estimate abundance and trends of whales and dolphins species.	SPWRC/ Partners/ Members	High
8.10 Provide adequate species identification and related information resources for all PICTs e.g. IFAW and SPC identification kit for observer programme.	SPREP/ SPC/ IFAW/ Partenrs	Medium
8.11 Increase use of platforms of opportunity (e.g. fisheries patrols and observers, aerial surveillance, naval and merchant shipping, other marine research programmes) for whale and dolphin sightings.	All	Medium
8.12 Increased use of remote sensing devices, especially acoustic.	SPWRC/ NOAA/Partners	Low

Indicators:

- ⊙ Online regional sighting database established and operational.
- ⊙ Species inventories for all data deficient SPREP members improved.
- ⊙ Species inventories for at least 3 SPREP members improved by addition of further species.
- ⊙ Cruises to estimate abundance of whales and dolphins species completed in at least 2 SPREP Members.
- ⊙ Species information and id kit assembled and distributed.
- ⊙ Incorporation of whale and dolphin expertise to conduct sightings and research activities in cruises dedicated to other purposes (e.g. Rapid Ecological Assessments).
- ⊙ Increased reporting level for whales and dolphins sighted from fisheries enforcement patrols, fisheries observers, ferries, other commercial vessels and aerial surveillance flights conducted to combat IUU fishing.
- ⊙ At least one remote sensing device deployed in the region for at least six months.

OBJECTIVE (iii): Identify significance of and priorities for toxicological research

Actions:	Lead	Priority
8.13 Investigate need and opportunities for toxicological research.	SPREP	Low
8.14 Identify suitable laboratories for toxicological analysis.	SPREP	Low
8.15 Identify funding sources.	SPREP/ Partners	Low

Indicators:

- ⊙ Regional expertise in, and laboratories for toxicological analysis identified.
- ⊙ Areas in the region where toxicological analysis would be a high priority identified.

THEME 9: WHALE AND DOLPHIN-BASED TOURISM

To ensure that the development of whale and dolphin based tourism is sustainable and conducted responsibly throughout the Pacific Islands Region

OBJECTIVE (i): *Foster sharing of lessons learnt and undertake regular assessment of the industry*

Actions:	Lead	Priority
9.1 Develop a framework to maintain effort to document industry growth (building on SPTO/SPREP/IFAW/SPWRC work).	Partners/SPREP	High
9.2 Promote understanding of the industry, the lessons learnt and their implications.	Partners/SPREP	High/ Medium
9.3 Foster communication between key in-country stakeholders, in particular industry and government, to promote understanding and assist in the management of the industry.	Members	High/ Medium
9.4 Monitor, document and support PICTs where whale watching activities occur as models in addressing licensing, regulation and management issues, ensuring that industry development draws on lessons learned.	SPREP/ Partners	High

Indicators:

- ⊙ Reporting system developed to gather information on growth of the industry.
- ⊙ Regional whale watching report updated and disseminated to relevant management bodies, industry, media and community.
- ⊙ Industry, Government and key stakeholders (NGO's, researchers, community groups) meet in-country as required to discuss issues and actions.
- ⊙ Key resources and technical support (reports, examples, templates) is available from SPREP.

OBJECTIVE (ii): *Ensure the best practice management of whale and dolphin based tourism in the Pacific Islands Region*

Actions:	Lead	Priority
9.5 Develop region-wide whale and dolphin watching guidelines.	IFAW/ SPREP/Partners	High
9.6 Hold regional whale and dolphin watching workshop to promote best practice management and endorse regional guidelines.	Operation Cetaces/ IFAW/SPREP	High
9.7 Support collaborative and best practice management of whale and dolphin watching activities involving all stakeholders.	Members	High
9.8 Promote licensing/permitting of whale and dolphin watching tourism operations as a tool for management.	Members	High

Indicators:

- ⊙ Workshop held, well attended by SPREP members and industry.
- ⊙ Regional guidelines developed, accepted, published and utilized by SPREP members and industry.
- ⊙ Stakeholders are consulted in the development of management measures.
- ⊙ Licensing schemes are implemented in SPREP nations where whale and dolphin based watching tourism occurs.
- ⊙ Management agencies have on-water presence to monitor and enforce in-country licensing and permitting conditions.
- ⊙ Whale and dolphin tourism in the region operating according to responsible wildlife viewing practices

OBJECTIVE (iii): *Maximize educational and economic values of whale and dolphin based tourism watching*

Actions:	Lead	Priority
9.9 Develop programs for whale and dolphin watching operators to collect useful data.	Members/ SPREP	High
9.10 Support countries to develop an education kit for on-board operations.	SPREP/ Partners	High
9.11 Promote socio-economic benefits of whale and dolphin watching to local communities.	Members	High/ Medium
9.12 Assist countries to explore the potential for whale and dolphin watching through feasibility studies.	Partners/ SPREP	High/ Medium
<p>Indicators:</p> <ul style="list-style-type: none"> ⊙ Data sheet developed and disseminated to operators and reported annually to SPWRC. ⊙ Educational Kits developed and disseminated to SPREP nations. ⊙ Community outreach program conducted in-country targeted at local media, villages, community groups. ⊙ Feasibility studies conducted in relevant SPREP nations. 		

Table 3.1: Check-list of Country/Territory-Specific Whale and Dolphin Species Records in the Pacific Islands Region (Miller, 2007).

Cetacean Species	American Samoa	Cook Islands	Federated States of Micronesia	Fiji	French Polynesia	Guam	Kiribati	Marshall Islands	Nauru	New Caledonia	Niue	CNMI	Palau	PNG	Pitcairn Islands	Samoa	Solomon Islands	Tokelau	Tonga	Tuvalu	Vanuatu	Wallis and Futuna	
Minke whales*	1	2		1	U			2		1	1		U		U	U			1				
Sei whale		U				U				2				1									
"Bryde's-like" whales*		U	1	1	U	U		U	2	1		U	2	U		2	U					U	
Blue whales*		2		U			U	2		1							2						
Fin whale				2	U			2															
Humpback whale	1	1		1	1	2		2		1	1	1		U	U	1	U		1		1	1	
Common dolphins*		2		U				2		2		U					U						
Pygmy killer whale					1					1			U	U					1				
Short-finned pilot whale	1	1	1	1	1	2	2	2		1	2	2	U	1	2	1	1		1		2		
Risso's dolphin		U			1	2				1		1	U	1		2	1		1				
Fraser's dolphin		1	1	U	1		1		2				U	1		2	2						
Irrawaddy/snubfin dolphin														2			U						
Orca	2	1	U	U	1	U	2	2		1	1	U	2	2		1	1	U	1	2	2		
Melon-headed whale		1	1		1	U	U	2	2	1		1	U	1		2	2		1		2		
False killer whale	1	U		1	1		U			1	1	U	U	1		1	2		1				
Indo-Pacific humpback dolphin														2									
Pantropical spotted dolphin	2	1	U	1	1	U	2	2		1			U	1			1		1	U	1		
Striped dolphin		U	1			U	U	2				U	2			2	2					U	
Spinner dolphin	2	1	1	1	1	2	1	2		1	1	1	U	1		1	1		1	1	1		
Rough-toothed dolphin	2			U	1		2	U		1		1	U			1	1						
Bottlenose dolphins*	2	U	2	2	1	U	1	2		1		U	U	1		1	1		1	2	2		
Dwarf/pygmy sperm whale	U			U	1	2				1		2		1		1							
Sperm whale	1	1	2	1	1	U	1	U	2	1	2	2	U	1	U	1	1	1	1	2	1	U	
Southern bottlenose whale							2																
Blainville's beaked whale		1		2	1		U			1				U			U						
Cuvier's beaked whale	2	1	U		1	U	U		U	1		2	U	1		1	U						

1=relatively recent field (or specimen record) confirmation of a given species within EEZ

2=potentially Class1 record that is either dated, or may be marginally outside of a given EEZ

U=unconfirmed-record that either was not definitely identified, has not been confirmed by field observations, is from an unobserved stranding event, or is an anecdotal report that for various reasons may be difficult to corroborate