



## Member's report on activities related to ICRI

Reporting period December 2015 – November 2016

**NOTE: TO CHECK A BOX, DOUBLE CLICK ON IT AND TICK 'CHECKED' UNDER 'DEFAULT VALUE' IN THE POP UP WINDOW**

1. **Contribution to the ICRI Plan of Action and GM.** *Your responses to the following questions will assist the Secretariat in assessing contributions towards the major themes of the current ICRI Plan of Action (<http://www.icriforum.org/icri-secretariat/current>) and objectives of the general meeting.*

### **a. Bleaching event**

*Were you affected by the Third Global Coral Reef event? Did you do some monitoring, if yes what are the results and could you explain what method did you use? Would you like to report during the ICRI Meeting?*

### **Was the Great Barrier Reef affected by the Third Global Coral Reef event?**

In early 2016, the Great Barrier Reef experienced its most severe coral bleaching event on record, following record high sea surface temperatures during February, March, April and May. This was caused by a combination of global climate change and a strong El Niño event. The extent and severity of the bleaching varied greatly across the Great Barrier Reef Marine Park. The most severe bleaching occurred in the far north, while only minor bleaching was detected in the southern part of the Marine Park.

In response to this, the Great Barrier Reef Marine Park Authority formed a coral bleaching incident management team, whose role it was to coordinate and undertake the surveys, and manage the logistics, mapping, data analysis, and stakeholder and broader communications.

The extent of recovery for live bleached corals will vary across the Marine Park and will be dependent on other factors, including the presence of other pressures such as poor water quality.

The bleaching event was consistent with the findings made in the agency's 2009 and 2014 Outlook Reports which found climate change is the biggest threat to the long-term health of the Reef. The other major pressures facing the Reef continue to be poor water quality from land-based run-off, impacts from coastal development, and some remaining impacts of fishing.

### **Did you do some monitoring and what are the results?**

The Great Barrier Reef Marine Park Authority and the Australian Bureau of Meteorology work closely with America's National Oceanic and Atmospheric Administration (NOAA) to monitor, model, forecast and assess the risk of coral bleaching conditions each year. As the mass bleaching unfolded, the Great Barrier Reef Marine Park Authority triggered its long-established and comprehensive coral bleaching incident risk and impact assessment plan to guide the assessment of and management response to the bleaching event.

During the peak of bleaching the Great Barrier Reef Marine Park Authority completed in-water and aerial surveys with its partners to assess the extent and severity of coral bleaching on the Reef. This included detailed surveys of 63 reefs along seven transects (each consisting of three inshore, three mid-shelf and three outer shelf reefs) to assess bleaching impacts in different environments and regions.

Overall, the survey results show that an estimated that 22 per cent of the Reef’s coral died as a result of this bleaching event, with 85 per cent of the coral mortality occurring in the far north of the Marine Park, the 600 kilometre stretch between the tip of Cape York and just north of Lizard Island. Overall, the southern two-thirds of the Great Barrier Reef Marine Park escaped significant bleaching-induced mortality.

Die-off of corals in other areas of the Marine Park was highly variable by location, and many reefs escaped with little or no mortality. Bleaching-related mortality of corals was highest on inshore and mid-shelf reefs in the far north around Cape Grenville and Princess Charlotte Bay. Variability in bleaching severity was highest among reefs in the Cairns–Port Douglas and Townsville areas. Most reefs south of Cairns escaped major impacts. The strong latitudinal gradient and high variability of bleaching severity among reefs has left many reefs relatively unaffected and still in relatively good condition.

The Great Barrier Reef is a large and resilient ecosystem. While the bleaching this year was very serious, recent studies have shown that in the three years prior to the bleaching coral cover increased by 19 per cent across the Marine Park. However, the severity of the global mass bleaching event reinforces the need for a concerted international effort on climate change as well as national and local actions to reduce all other pressures on the Great Barrier Reef.

The Great Barrier Reef Marine Park Authority has undertaken follow-up surveys in October 2016 to gain more data on the rate of survival versus mortality. The extent of recovery for heat-affected corals will vary across the Marine Park, and will largely depend on how stressed the corals were locally. Data from follow-up surveys will be used to assess recovery rates of live bleached corals. The Australian Government will use the results of the surveys to guide management actions to support the recovery of affected reefs.

### Would you like to report during the ICRI Meeting?

Yes, the agency representatives attending the ICRI Meeting will provide a report on the bleaching event and the management responses to the event.

- b. **INDCs - Intended Nationally Determined Contributions** – *Did your national contribution mention ‘marine ecosystems or coral reefs’? Would you be interested in joining an Ad Hoc committee to develop guidelines to integrate coral reefs in the INDC?*
- c. **Nature-based Solutions to address Climate Change** - *Do you have some example(s) of Nature-based (coral reef and related ecosystems) Solutions to address climate change? If yes, could you please provide use some details?*
- d. **UN Sustainable Development Goals** – *Do you have example(s) showing how coral reefs and related ecosystems address the SDG (SDG 14 but also other related ones such as SDG 1 – End poverty in all its form; SDG 2 – End hunger, achieve food security and improved nutrition...)*
- e. *Do you have notional measure(s) – existing or in development - to ban the sale and manufacture of cosmetics and personal care products containing plastic microbeads? And plastic bags?*
- f. **Upcoming events** - *Do you plan to attend:*
  - *November 2016 - Marrakech Climate Change Conference / The twenty-second session of the Conference of the Parties (COP 22)*
  - *December 4, 2016 to December 17, 2016 - Convention on Biological Diversity COP13*
  - *June 2017 - Oceans & Seas Global Conference, Fiji*
  - *Other(s):*

GBRMPA attendance at future events is unconfirmed at this stage

2. **Updates on your activities.** The following table is a summary of ICRI's *Framework for Action* (FFA) and its four cornerstones. (The full text of the FFA is available in English, French, and Spanish at <http://icriforum.org/icri-documents/icri-key-documents/continuing-call-action-2013> ).

Integrated Management	Objective	Manage coral reefs and related ecosystems using an ecosystem approach, recognizing place based activity; connectivity within and among ecological, social, economic, and institutional systems; as well as with attention to scale; resilience of ecological and social systems; and long-term provision of ecosystem services.
	General Approach	Integrated management, using a strategic, risk-based, informed approach, provides a framework for effective coral reef and related ecosystem management which supports natural resilience, ecosystem service provision, and enhances the ability to withstand the impacts of climate change and ocean acidification.
	Desired outcome	There is a demonstrable reduction in the threats to coral reefs and related ecosystems through management action.
Capacity Building	Objective	To build capacity in all facets of management of coral reefs and related ecosystems and support dissemination and application of best practices to achieve the widest possible engagement of all stakeholders in planning and management activities.
	General Approach	Continued collaboration, partnerships, outreach, information sharing and education to ensure the uptake of best practices and encourage behavioural change. This can only be successful if the diversity of cultures, traditions and governance among nations and regions are taken into account.
	Desired outcome	Persons who have influence in the management of coral reef and related ecosystems have the knowledge, tools and capital necessary to apply best practices, adapted to the cultural and socio-economic context.
Science & Monitoring	Objective	To support research and citizen science approaches to enable countries and communities assess and report on the status of and threats to their coral reefs and related ecosystems in a coordinated, comparable and accessible manner.
	General Approach	Research and monitoring programs are essential to ensure that management of coral reefs and related ecosystems is based on best available (scientific) information.
	Desired outcome	Knowledge of the status and trends in coral reefs and related ecosystems health is enhanced and used to inform planning and management, improving management outcomes.
Periodic Assessment (Review)	Objective	To engage in periodic review of the impact and effectiveness of all elements of management to enable evaluation and refinement of management measures in an adaptive framework.
	General Approach	Periodic assessments of management effectiveness and evaluation of projects and activities to ensure the efficacy of management tools and systems in tackling the range of pressures affecting coral reefs and related ecosystems and protecting the values associated with them.
	Desired outcome	Management processes and activities are regularly reviewed and improved using a structured approach, to enhance their ability to effectively reduce pressures and threats.

Using the table on the previous page, as well as the detailed descriptors of approaches and strategies available in the full text of the FFA as a reference, please give us an update on an activity/project/program(s) which has been particularly successful in your country/organization during this reporting period.

### Project 1

Cornerstone(s) implemented through the project	Check all that apply: <input checked="" type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building <input type="checkbox"/> Science & Monitoring <input type="checkbox"/> Periodic Assessment (Review)
Project Title	<a href="#">Crown-of-thorns starfish control program</a>

Location	Great Barrier Reef Marine Park
Dates	2012 to present
Main Organizer(s)	Great Barrier Reef Marine Park Authority (GBRMPA)
Main Stakeholder(s)	<ul style="list-style-type: none"> <li>• Great Barrier Reef Marine Park Authority</li> <li>• Great Barrier Reef tourism industry</li> <li>• The Association of Marine Park Tourism Operators (AMPTO)</li> <li>• The Reef and Rainforest Research Centre (RRRC)</li> <li>• State Government of Queensland</li> </ul>
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	<p>The Great Barrier Reef is the world’s largest coral reef ecosystem, ranging in over 14 degrees in latitude, comprising more than 2900 separate coral reefs and containing more than 400 species of hard coral. Coral reef habitats cover an area of 26,000 square kilometres – about seven per cent of the Great Barrier Reef Marine Park. They can be broadly classified into inner, mid and outer shelf platform reefs and can be made up of different types of reef.</p> <p>Reef types, including fringing, inshore turbid, shelf, ribbon, deltaic, northern detached and submerged coral reefs, represent major stages in the Earth’s evolutionary history and are examples of the Region’s outstanding universal value. They also provide vitally important habitat for a wide diversity of plants and animals. In addition to their biological value, coral reefs deliver a range of ecosystem services including shoreline protection, and provide community benefits from, for example, fisheries and tourism.</p> <p>Crown-of-thorns starfish are a major predator of coral. Under natural conditions, it is likely that their populations increase to outbreak concentrations in a 50 to 80 year cycle. However, in the Great Barrier Reef there have been three major population outbreaks of crown-of-thorns starfish over the past 50 years (1962 to 1976, 1978 to 1990, and 1993 to 2005). An emerging outbreak was detected in 2011. An outbreak of crown-of-thorns starfish is considered to be occurring when they are at densities greater than about 30 starfish per hectare. A crown-of-thorns starfish can consume up to 478 square centimetres of coral each day.</p> <p>Outbreaks of crown-of-thorns starfish have been one of the major causes of coral death and reef damage on the Great Barrier Reef since surveys began in the 1960s. The current crown-of-thorns outbreak is largely limited to the northern part of the Great Barrier Reef. However, based on previous population increases, the outbreak is likely to move south in the coming years.</p> <p>When densities of the starfish have reached the point where they are eating coral faster than it can grow, management intervention is needed. The manual control of crown-of-thorns starfish, using an injection of approved solutions, has occurred on the Great Barrier Reef since the 1980s.</p> <p>To address the current outbreak, the Australian Government’s holistic response to crown-of-thorns starfish management includes strategic oversight by GBRMPA of the crown-of-thorns starfish control program</p>

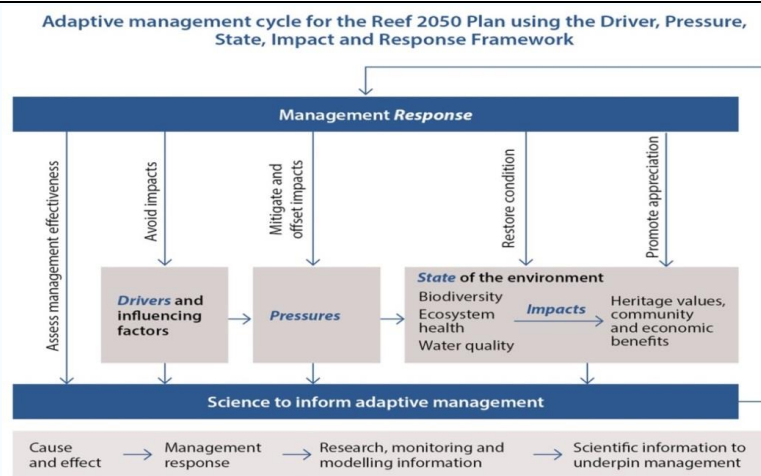
	<p>(culling effort), research to improve control method efficiency and increased investment in improving water quality.</p> <p>The control program involves dedicated dive teams from the Association of Marine Park Tourism Operators, with support from the Queensland Parks and Wildlife Service and the Great Barrier Reef Marine Park Authority. In 2014 the Reef and Rainforest Research Centre also joined management efforts.</p> <p>The control program is made up of three elements:</p> <ul style="list-style-type: none"> <li>• Intelligence and dedicated surveillance to detect crown-of-thorns starfish and assess coral health</li> <li>• A highly trained control team to cull the starfish using injection methods and to assess changes in coral health</li> <li>• A comprehensive reef health database to monitor effectiveness of control efforts and adaptively manage the program.</li> </ul> <p><b>Short-term strategy</b></p> <p>Manual injection of the crown-of-thorns starfish is carried out by divers deployed by the Association of Marine Park Tourism Operators through a contractual agreement with the Great Barrier Reef Marine Park Authority.</p> <p>The association also trains tourism operators and community-based organisations that have a permit and the appropriate insurance to search for and lethally inject the coral-eating starfish.</p> <p>In 2012, researchers from the ARC Centre of Excellence for Coral Reef Studies developed a new innovative single-injection method that uses a bile salts solution. Comprehensive laboratory and field trials undertaken before large-scale use of this method on the Reef in 2013 showed no observable adverse effects on the ecosystem.</p> <p>The single injection method is now being used in the management program and is available to people who obtain a permit from the Great Barrier Reef Marine Park Authority.</p> <p>The new method is in addition to the multi-injection sodium bisulphate method endorsed under the crown-of-thorns starfish control guidelines.</p> <p>The single-shot method has resulted in a two and a half fold efficiency gain, allowing dive teams to inject more starfish and cover more of the Reef during a single dive. However, increased efficiency between the two methods will always be dependent on the density of starfish. Where starfish densities are low, the efficiency difference between the two methods will be negligible.</p>
<p>Outcome (Expected outcome)</p>	<p><b>Results to-date</b></p> <p>Across all programs since July 2012, nearly 410,000 crown-of-thorns starfish have been culled from 107 reefs. This included regular cull visits to 21 reefs prioritised for their tourism and/or ecological values.</p> <p>To date, the control program, reef health and impact surveys and</p>

	<p>independent monitoring by the Australian Institute of Marine Science (AIMS) demonstrate that coral cover has been protected on the 21 target reefs. Average coral cover is 34 per cent, and 75 per cent of the control reefs have more than 25 per cent average coral cover (well above a critical threshold for coral recovery). The adult crown-of-thorns starfish population has also been held below outbreak levels offshore from Cairns.</p> <p>Demonstrating the efficiency gain from the single-shot method, between 1 July 2015 and 8 September 2016, more than 40,000 starfish have been culled from priority reefs in the Cairns region, and coral cover has been maintained.</p> <p>The success of the program has also resulted in an additional financial commitment by the Australian Government to fund a second vessel control program over three years from 2016-2019.</p> <p><b>Long-term expected outcome</b></p> <p>The long-term strategy is to protect live coral cover and the integrity of the ecosystem from crown-of-thorns starfish outbreaks.</p> <p>This involves understanding the causes of outbreaks and, if possible, trying to prevent them. It also includes early surveillance and detection to allow faster responses to outbreaks and to reduce their spread, with the ultimate aim of increasing the duration between outbreaks. This will give the Reef greater time to recover.</p> <p>Given a new outbreak is firmly underway, the primary objective for management and research for the 2014–2017 period has been to preserve coral cover and to learn as much as we can from the current outbreak by testing improved methods for detection and manual control. Efforts will focus on reefs of high-ecological value, crown-of-thorns starfish 'spreader reefs' and prime tourism sites.</p> <p>We are also developing a long-term integrated management framework with a range of partners, incorporating past and current research. This will be the overarching management strategy needed to understand and address the drivers behind outbreaks, use early surveillance and detection, and implement timely responses. The framework, based on an integrated pest management approach, will also coordinate and identify resource needs to prepare for outbreaks or prevent them where possible.</p> <p>The framework will be used during outbreak and non-outbreak periods to strengthen the Great Barrier Reef's resilience over coming decades.</p>
<p>Lessons learned</p>	<p><b>Research</b></p> <ul style="list-style-type: none"> <li>• The program has already adopted new technologies including the one-shot injection method that has significantly improved control efficiency and hydrodynamic modelling that is enabling better targeting of reefs to achieve management objectives.</li> <li>• The use of vinegar as a culling agent will also be trialled in the Marine Park in 2016. If successful, the use of vinegar will further enhance culling efficiency as a cheaper more readily available option for tourism operators.</li> </ul>

	<ul style="list-style-type: none"> <li>The outputs of the National Environmental Science Programme (NESP) Tropical Water Quality Hub project 'Integrated Pest Management of Crown-of-Thorns Starfish', with its enhanced surveillance capacity at a site level, are being used to improve the management of the existing COTS outbreak.</li> </ul>
Related websites (English preferred)	<a href="http://www.gbrmpa.gov.au/about-the-reef/animals/crown-of-thorns-starfish">http://www.gbrmpa.gov.au/about-the-reef/animals/crown-of-thorns-starfish</a> <a href="http://www.ampto.org/services.html">http://www.ampto.org/services.html</a>

## Project 2

Cornerstone(s) implemented through the project	Check all that apply: <input type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Science & Monitoring <input type="checkbox"/> Periodic Assessment (Review)
Project Title	Harnessing citizen science and community expertise for the Reef 2050 Integrated Monitoring and Reporting Program
Location	Great Barrier Reef World Heritage Area
Dates	2015 to 2050
Main Organizer(s)	Great Barrier Reef Marine Park Authority (GBRMPA)
Main Stakeholder(s)	<ul style="list-style-type: none"> <li>Great Barrier Reef Marine Park Authority</li> <li>Reef Advisory Committee</li> <li>State Government of Queensland</li> <li>Commonwealth Government of Australia</li> </ul>
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	<p>The Reef 2050 Long-Term Sustainability Plan (Reef 2050 Plan) is an overarching framework for protecting and managing the Great Barrier Reef from 2015 to 2050. It has seven major themes - economic benefits, community benefits, heritage, water quality, biodiversity, ecosystem health and governance - each with outcomes, objectives, targets and actions. (Website listed below.)</p> <p>The Reef 2050 Plan is underpinned by the establishment of the Reef 2050 Integrated Monitoring and Reporting Program (RIMReP) which integrates existing monitoring and modelling activities, and develops indicators to assess the Reef 2050 Plan's progress. (Website listed below.)</p> <p>The Great Barrier Reef Marine Park Authority is leading the marine component and the Queensland Government is leading the catchment component.</p> <p>The Program is developing indicators consistent with the Driver-Pressure-State-Impact-Response (DPSIR) framework, to better understand cumulative impacts, support environmental decisions and inform resilience-based adaptive management of the Great Barrier Reef World Heritage Area.</p>



A guiding principle for the RIMReP is to collect data once and use it many times through nested reporting. Reporting currently includes the:

- Reef-wide five-yearly Great Barrier Reef Outlook Report, which reports on the overall condition of the Reef, factors influencing the Reef, management effectiveness and risk
- Reef 2050 Plan annual report which provides an update on the implementation of actions
- Reef-wide Reef Water Quality Protection Plan Report Card, which reports on progress to water quality targets and inshore marine health
- annual regional report cards, which provide finer scale local information relating to freshwater, estuary and marine, and integrate data from local government, ports, universities and other partners
- reporting in response to Reef health incidents at variable scales and locations.

GBRMPA and its partners are involved in a number of citizen science projects which contribute to the biophysical monitoring of the Great Barrier Reef, and together with more formal scientific monitoring, contribute to the implementation of RIMReP. Well-established citizen science programs for the Reef include the Eye on the Reef Program, coral watch and seagrass watch. (Websites listed below.)

Systems for developing, assessing and benchmarking social, economic and cultural indicators are being developed for the Reef. Some social and economic monitoring can be done systematically through the collation and organisation of existing secondary data sets (i.e. data collected by government and non-government agencies including census data). Information about people's attitudes and perceptions about the Reef is collected through surveys. (i.e. primary data). Surveys can be cheaply designed, distributed and analysed using an on-line platform such as survey monkey. Benchmarking progress towards the social, economic and cultural dimensions of the Reef 2050 Plan will be done by analysing all of the primary and secondary data sets, then presenting the evidence to expert groups to consider. Experts include stakeholders and partners from diverse backgrounds who hold different types of knowledge and experience – e.g. Traditional Ecological Knowledge, Reef managers and people with specific disciplinary knowledge. Ratings will be applied through discussion and consideration of pre-determined criteria. (Websites listed below.)



<p>Outcome (including expected outcome)</p>	<p>Specific outcomes for this approach include:</p> <ul style="list-style-type: none"> <li>• Involvement of citizens, stakeholders and partners in all aspects of monitoring and bench-marking , resulting in better community appreciation, enjoyment and understanding of the Reef and its management;</li> <li>• Clear guidance on the identification, collation and analysis of relevant data sets consistent with the DPSIR framework and that pertain to the seven themes of the of the Reef 2050 Plan;</li> <li>• Classification, selection and prioritisation of indicators for a fit-for-purpose monitoring, evaluation and reporting program for the Reef 2050 Plan at Great Barrier Reef, whole-of-catchment and regional scales;</li> <li>• Selection of the fewest number of relevant indicators that would allow decision-makers to monitor and rate specific elements of the whole system over time;</li> <li>• Benchmarking of the Reef 2050 Plan’s progress towards meeting its targets, objectives and outcomes through monitoring;</li> <li>• Provision of alternative future scenarios under different biophysical and social conditions through predictive modelling; and</li> <li>• Establishment of common language to efficiently communicate across disciplines and to the public.</li> </ul>
<p>Lessons learned</p>	<p>Still learning, as the program is still developing.</p>
<p>Related websites (English preferred)</p>	<p>Website for the Reef 2050 Plan  <a href="http://www.environment.gov.au/marine/gbr/long-term-sustainability-plan">http://www.environment.gov.au/marine/gbr/long-term-sustainability-plan</a></p> <p>Website for the Reef 2050 Integrated Monitoring and Reporting Program (RIMReP)  <a href="http://www.gbrmpa.gov.au/managing-the-reef/reef-2050/reef-integrated-monitoring-and-reporting-program">http://www.gbrmpa.gov.au/managing-the-reef/reef-2050/reef-integrated-monitoring-and-reporting-program</a></p> <p>Websites about some of the Reef’s citizen science programs:  <a href="http://www.gbrmpa.gov.au/managing-the-reef/how-the-reefs-managed/eye-on-the-reef">http://www.gbrmpa.gov.au/managing-the-reef/how-the-reefs-managed/eye-on-the-reef</a>  <a href="http://coralwatch.org/web/guest;jsessionid=8B6F86D0BA72E57B8A894A634FBF8E5D">http://coralwatch.org/web/guest;jsessionid=8B6F86D0BA72E57B8A894A634FBF8E5D</a>  <a href="http://www.seagrasswatch.org/home.html">http://www.seagrasswatch.org/home.html</a></p> <p>Websites about collation and benchmarking of social, economic and cultural data for the Reef:  <a href="http://seltmp.eatlas.org.au/">seltmp.eatlas.org.au/</a>  <a href="http://eprints.qut.edu.au/94268/1/Attributes_Report.pdf">http://eprints.qut.edu.au/94268/1/Attributes_Report.pdf</a></p> <p><a href="http://theconversation.com/community-wellbeing-best-measured-from-the-ground-up-a-yawuru-example-64162">http://theconversation.com/community-wellbeing-best-measured-from-the-ground-up-a-yawuru-example-64162</a></p>

**Project 3**

<p>Cornerstone(s) implemented through the project</p>	<p>Check all that apply:</p> <table> <tr> <td><input checked="" type="checkbox"/> Integrated Management</td> <td><input checked="" type="checkbox"/> Capacity Building</td> </tr> <tr> <td><input type="checkbox"/> Science &amp; Monitoring</td> <td><input type="checkbox"/> Periodic Assessment (Review)</td> </tr> </table>	<input checked="" type="checkbox"/> Integrated Management	<input checked="" type="checkbox"/> Capacity Building	<input type="checkbox"/> Science & Monitoring	<input type="checkbox"/> Periodic Assessment (Review)
<input checked="" type="checkbox"/> Integrated Management	<input checked="" type="checkbox"/> Capacity Building				
<input type="checkbox"/> Science & Monitoring	<input type="checkbox"/> Periodic Assessment (Review)				

Project Title	Indigenous Ranger Compliance Enhancement Program
Location	Northern Great Barrier Reef
Dates	July 2015 to June 2017
Main Organizer(s)	Great Barrier Reef Marine Park Authority The Australian Government Department of Prime Minister and Cabinet
Main Stakeholder(s)	Great Barrier Reef Marine Park Authority The Australian Government Department of Prime Minister and Cabinet The Australian Government Department of Environment and Energy The Government of Queensland The following Indigenous Ranger groups within the broader Marine Park area: <ul style="list-style-type: none"> <li>• Girringun Rangers</li> <li>• Gunggandji Rangers</li> <li>• Djunbunji Rangers</li> <li>• Yirrgandji Rangers</li> <li>• Jabalbina Rangers</li> <li>• Yuku Baja Muliku Rangers</li> <li>• Hopevale Congress Rangers</li> <li>• Lama Lama Rangers</li> <li>• Apudthama Rangers</li> </ul>
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	<p>In 2013, the Australian Government announced commitment to implement the Dugong and Turtle Protection Plan (DTPP) to protect those species from the threats of poaching, illegal hunting and marine debris. The DTPP sits within Reef 2050 Plan - administered by the Department of Environment and Energy.</p> <p>The Great Barrier Reef Marine Park Authority (the Agency) is contributing to the DTPP through development and implementation of the Indigenous Ranger Compliance Enhancement Program (IRCEP), to be administered over two years. The Agency's dedicated Indigenous Compliance team will train and mentor up to 20 Indigenous Rangers along the Great Barrier Reef coastline and employ a further four Indigenous Compliance Officers to contribute to the program. The Indigenous Ranger Compliance Enhancement Program has four major deliverables:</p> <ol style="list-style-type: none"> <li>1) Employment of four Indigenous Compliance Officers on full time two year contracts to work in the Indigenous Compliance Team of GBRMPA's Indigenous Partnerships Section</li> <li>2) Delivery of a specifically tailored and nationally accredited Certificate IV in Compliance and associated assessment and workplace program</li> <li>3) Identification and enrolment of up to 20 Indigenous Rangers to undertake the Certificate IV and also facilitate rangers participation in compliance activities</li> <li>4) On successful completion of the Certificate IV, support participants to apply for appointment as Marine Park</li> </ol>

	<p>Inspectors.</p> <p>The IRCEP is complimentary to the Australian Department of Prime Minister and Cabinet responsibility for Indigenous land and sea management policy and programs under the Land, Jobs and Economy Indigenous Advancement Strategy.</p> <p>The IRCEP forms an essential component of the Governments strategy to protect dugong and turtle and to constrain the poaching and illegal trade in dugong and turtle meat. In line with the Governments priority of ensuring that as many Indigenous people as possible are working in real jobs, the IRCEP is also developing career pathways for Indigenous rangers into compliance focused roles and potentially creating new employment opportunities for Indigenous people in compliance occupations.</p> <p>IRCEP integrates contemporary compliance activities and functions into traditional Indigenous rights and interests.</p>
<p>Outcome (Expected outcome)</p>	<p><b>Current status:</b></p> <ul style="list-style-type: none"> <li>• All components are expected to be delivered ahead of schedule by June 2017.</li> <li>• Four applicants were successful in taking up the positions as Compliance Officers with the Great Barrier Reef Marine Park Authority.</li> <li>• In October 2015 the specifically tailored and nationally accredited Certificate IV was delivered to 28 participants. This event was successful with 100% completion.</li> <li>• In the first twelve months Indigenous Compliance Officers and/or rangers participated in 52 patrol days, travelling a total of 12,350km’s within the Great Barrier Reef Marine Park.</li> <li>• These patrols were undertaken with helicopters, port based vessels, large off shore vessels or 4WD.</li> <li>• Patrols are a critical part of the program as they expose rangers to the varied aspects of field compliance activities including patrol planning, risk assessment, situational awareness, conflict resolution, communication, patrol execution and trip reporting in a real life environment.</li> <li>• Officers are also delivering community training and workshops, educating participants on rights of Indigenous people under Native Title and how to identify, report and act on non-compliance.</li> </ul>
<p>Lessons learned</p>	<p>The program is only in the first twelve months of a two year program however early successes and lessons learned have been identified:</p> <ul style="list-style-type: none"> <li>• Indigenous Rangers play a critical role and should be considered instrumental in supporting the delivery of the compliance obligations in the World Heritage area.</li> <li>• Programs like this will only succeed with active contribution and support of the other regulatory bodies involved (e.g. State government, fisheries agencies, police), across state and national jurisdictions.</li> <li>• Competing demands on Indigenous Rangers need to be</li> </ul>

	<p>carefully managed through consolidated teams and annual work programs as managing multiple interests can be resource intensive.</p> <ul style="list-style-type: none"> <li>• There is strong community support for Indigenous Rangers to manage sea country and related extractive activities.</li> <li>• Community management plans are a very important part of successful compliance strategies and provide Indigenous Rangers with clear and unobstructed guidance in regard to extractive activities.</li> </ul>
<p>Related websites (English preferred)</p>	<p>Youtube video of ranger training at Yuku Baja Muliku ranger base <a href="https://www.youtube.com/watch?v=od_1qGXIIf8">https://www.youtube.com/watch?v=od_1qGXIIf8</a></p>

*Note: If you have more activities/projects/programs you would like to report on or share with other members, please duplicate the table above and fill it in for as many projects as you wish.*

3. **Publications.** Please list relevant publications/reports you have released during this reporting period.

Title (incl. author and date)	Website URL if available	Type of publication (Paper, report, etc.)
Let's go fishing: year 6 Australian science curriculum focus; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/2991">http://hdl.handle.net/11017/2991</a>	Book
Lady Musgrave Reef (23-082): Site Management Arrangements Supporting Information; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/2998">http://hdl.handle.net/11017/2998</a>	Policy
Interacting with whales and dolphins information sheet; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/3036">http://hdl.handle.net/11017/3036</a>	Guidelines
Aircraft sensitive area list information sheet; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/3035">http://hdl.handle.net/11017/3035</a>	Guidelines
Dredging coral reef habitat: operating a facility or carrying out works for the development of marine infrastructure; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/3009">http://hdl.handle.net/11017/3009</a>	Guidelines
Filming and research using unmanned aircraft information sheet; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/3038">http://hdl.handle.net/11017/3038</a>	Guidelines
Land and sea country partnerships: annual report summary 2015-16; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/3032">http://hdl.handle.net/11017/3032</a>	Staff paper - brochure
Reef Guardian Councils program highlights 2014-15; Great Barrier Reef Marine Park Authority, 2016.	<a href="http://hdl.handle.net/11017/3027">http://hdl.handle.net/11017/3027</a>	Brochure

4. **General Information.** (Note that this information will be posted on the ICRI website on your member page: <http://www.icriforum.org/about-icri/members-networks>.)

Member type (Country / Organization):	
<b>Focal Point 1:</b>	
Name:	Margaret Johnson
Title/Organization:	General Manager Policy & Stewardship, GBRMPA
Email:	Margaret.johnson@gbmpa.gov.au
<b>Focal Point 2:</b>	
Name:	Ben Palmer
Title/Organization:	International Business Manager, GBRMPA
Email:	international@gbmpa.gov.au

*Thank you very much for sharing your valuable experiences and information with ICRI.*