ICRI Plan of Action 2018-2020
Australia, Monaco and Indonesia

The International Coral Reef Initiative (ICRI) plays an important role in informing international efforts to conserve reef and associated ecosystems, providing both a forum for global advocacy on coral reefs and assisting managers of coral reefs at the national and local levels.

We are already seeing clear impacts of climate change on coral reefs, in addition to the other anthropogenic one such as overfishing, and pollution from land. With current decline, we risk losing an irreplaceable source of livelihoods, food and economic opportunity. Recognising the window for protection of our coral reef ecosystems is narrow and closing, ICRI Members and the Secretariat will aim to highlight the crucial and urgent need for collective and bold actions.

Our actions will be consistent with Sustainable Development Goal 13 (take urgent action to combat climate change and its impacts) and Goal 14 (conserve and sustainably use the oceans, seas and marine resources, among others.

Protection and conservation of our existing coral reefs is the foundation. Having in mind the recent prevision of IPCC on the consequence of climate change on the loss of coral reefs, ICRI works to help managers of coral reefs and governments reduce local pressures and build reef resilience.

ICRI will promote the use of new tools and approaches and encourage innovation and adaptive management to protect and conserve coral reefs. ICRI will promote the relevance of scientific research to decision makers, managers and reef users, understanding that science must inform the regulations and practices devised to protect coral reefs from the impacts of human activity (direct and indirect).

During the 2018-2020 Secretariat term we will seek to strengthen the role of science, build capacity in each of the actions undertaken, and promote collaboration and communication towards different audiences, decision-makers, managers, scientists and users. ICRI will also work to support managers of reefs whose coastal communities are most vulnerable to the decline in coral reef health and least able to resource interventions.

ICRI will support the engagement of current members, seek to encourage applications for new members that are committed to pursuing ICRI's objectives and to partnering with other organisations seeking to achieve similar goals.

Together with ICRI members, the Secretariat intends taking and encouraging actions under the following themes:

Theme 1 – Promote effective and adaptable solutions to improve the protection of coral reefs

ICRI Desired Outcome 2020: *There is demonstrable action to protect and improve the resilience of coral reefs and related ecosystems through policy, management and innovation*

1.A – Strengthening policies - Supporting protection of coral reefs and associated ecosystems through effective policy and legislative frameworks

The consideration of coral reefs and related into national, regional and international policies is an opportunity to ensure their sustainable management and conservation. Moreover, the chairmanship of the Secretariat coincides with the 2050 Vision of the current Strategic Plan for Biodiversity 2011-2020 as well the 2030 Agenda for Sustainable Development and other relevant international processes. Thus, ICRI should take every opportunity to raise the plight of coral reefs. **ICRI will share good practices, encourage and support the development of new or improved policy frameworks at all relevant scales, and contribute to internationally established goals and targets.**

Activities at the national level

Following the work implemented under the 2016-2018 Plan of Action, the current ICRI secretariat will produce summaries of existing legislative and regulatory mechanisms for the protection of coral reefs and related ecosystems at the national level. **To standardize this work, guidance on a methodological approach will be produced.** The Secretariat will lead the work for some selected countries and will encourage other ICRI members to participate in this work. If needed, technical assistance will be provided. The aim is to implement this work for about 15 countries by the end of the Secretariat in order to identify good practices.

Activities at the international level

The UN Environment Assembly (UNEA), at its second universal session, adopted resolution UNEA/2/12 Sustainable Coral Reefs Management. This resolution, in Operative Paragraph 13, requests the Executive Director, in cooperation with the International Coral Reef Initiative, other relevant international organizations and other relevant partners to prepare, by 2018, **an analysis of global and regional policy instruments and governance mechanisms related to the protection and sustainable management of coral reefs.** The results will be shared at the 33rd ICRI General Meeting and then at the 4th UN Environment Assembly (UNEA).

The fifteenth meeting of the Convention on Biodiversity (CBD) Conference of the Parties in 2020 is expected to update the CBD's strategic plan. Under the current plan, *Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use*, a target on coral reefs was adopted - Aichi Target

10: *By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning*. The proposed activities under this work are:

- To undertake a rapid assessment of the implementation by selected countries to achieve Aichi Target 10. It is expected to deliver an assessment on the progress made (success and possible failure) by the selected countries towards achieving the Aichi Target 10.
- To mobilize- ICRI countries for the development of a post Aichi target for coral reefs as part of the development of the post-2020 global biodiversity framework and recommend options for a new target(s).
- To coordinate ICRI's contribution to a post-2020 global biodiversity framework, including preparing a timeline according to the ICRI Rules of Procedure.

The ICRI Secretariat will also take advantage of upcoming international events to advocate for the protection of coral reefs and related ecosystems. A list of possible events is available in annexe 1.

1.B - Promote and build capacity in applying innovative funding

The need for new and innovative financing has been widely recognized, including by the Convention on Biological Diversity (CBD); the UN Environment Assembly; or the Coral Reef Life Declaration (which 16 countries more than 55% the world's corals have signed since 2017). A recent assessment conducted by a Conservation for Biodiversity High-Level Panel estimated that the global investment required for corals reefs is five times greater than current levels.

It is now recognized the need to move from a project-based approach to sustainable funding mechanisms dedicated to coral reefs. In addition, many reports dealing with the financing of coral conservation actions and activities have been produced, but nothing seems to be put into actions on the field so far. Finding new and more diversified sources of funding is just addressing one part of the problem. Coral conservation project managers not only need money, but also the support and the technical assistance to find it and use it in a sustainable way.

In that context, ICRI will:

- Conduct a workshop on innovative funding.
- Think, in collaboration with Conservation Alliance Finance (CFA), about the best way to assist /support ICRI members in developing– innovative – sustainable funding mechanism for coral reef conservation.
- Work on the development of a Global Coral Reef fund.

The ICRI Secretariat will also continue the promotion of the compendium highlighting the best projects received within the framework of the ICRI/UN Environment Grants Programme.

1.C – Support reef resilience at the local, regional and global scale

We are entering a new paradigm of coral reef management that requires greater innovation to support the resilience of coral reefs and associated ecosystems. There has been a growing recognition by coral reef managers globally that business-as-usual approaches are not adequate to address the rapidly changing landscape of risk from climate change and other cumulative pressures. We must intensify our efforts to build the resilience of coral reefs to the disturbances we know to expect in coming decades. This is not just about new activities, but it also includes innovative approaches to the use of existing tools.

ICRI will support and share knowledge of World Heritage and other coral reef managers on leading practice and innovations in protected area management to support reef resilience. Australia will lead this collaboration based on the work being undertaken to implement the Reef Blueprint initiatives developed at the 2017 Reef Summit – where ICRI and UN Environment were represented.

1.D - Promote leading practice reef restoration mechanisms by facilitating partnerships, investment and capacity building among ICRI members

Restoration methods have been developed and tested in some regions of the world, but to date, they have not been widely applied. While existing techniques are generally only feasible at small spatial scales, coral restoration techniques could have the potential to make a contribution as part of broader management actions. Beyond ecological benefits, restoration can also provide opportunities for communities and industries to participate in practical efforts to improve locally-valued sites. In doing so this can help to build community and industry resilience.

ICRI will promote leading practice reef restoration that is part of a management approach intended to improve the condition and resilience of coral reef habitats. ICRI will also establish an *ad hoc* committee to:

- Undertake an inventory of leading and innovative practices/techniques and strategies (including their limits, conditions of implementation, financing, and an assessment of their results).
- Produce an inventory of ongoing reef restorations activities throughout the world.
- Review and update the 2005 ICRI Resolution on coral reef restoration taking into account the current science and management knowledge.

The *Ad Hoc* committee will seek an active participation from organizations already working on the topic including ISRS, the action group on Coral Restoration (Commonwealth Blue Charter), the coral restoration consortium, and Australia's Reef Restoration and Adaptation Program.

Theme 2 – Understand the trends of coral reefs

ICRI Desired Outcome 2020: *A functioning globally coordinated network monitoring the status of coral reefs worldwide*

2.A - Establish a functioning, globally coordinated and sustainably funded Global Coral Reef Monitoring Network (GCRMN) comprising a global network of institutes, agencies and programs that monitor coral reefs

The Global Coral Reef Monitoring Network (GCRMN) was established by ICRI in 1995, to report on the condition of the world's coral reefs in the context of the development of the ICRI Call to Action. At the ICRI General Meeting in 2014, the GCRMN's main purpose was revised as follows: "*GCRMN supports ICRI by working through a global network to strengthen the provision of best available scientific information on, and communication of, the status and trends of coral reef ecosystems, for their conservation and management*".

At ICRI General Meeting 31 in 2016, ICRI Members requested that the ICRI Secretariat and UN Environment *"develop and initiate implementation of a roadmap for strengthening GCRMN"*. Actions performed under the auspices of the joint Monaco/Australian/Indonesia ICRI Secretariat will:

- develop an Implementation and Governance Plan (IGP) for the GCRMN in conjunction with GCRMN Working Group that is comprised of key contributors to and stakeholders in the GCRMN. The IGP will establish governance and coordination structures for the GCRMN that ensures appropriate oversight and implementation of GCRMN activities; and
- develop and present a business case to support enduring funding for core activities of the GCRMN, particularly those associated with coordination, report production and communication and capability development.

2.B - Ensure monitoring data is fit for purpose to aid better decision-making and management

The primary purpose of the GCRMN is to provide the best available scientific information on, and communication of, the status and trends of coral reef ecosystems to support their conservation and sustainable use by informing local, national, regional and global management and policy processes.

The challenge for the GCRMN is to ensure that the information collected and reported by the network is directly relevant to management and policy processes at local, national, regional and global levels. In order to understand the information requirements of managers and developers at all levels and ensure the delivery of relevant information, the GCRMN will:

- apply existing national and international monitoring frameworks to ensure that the indicators, data collection, analysis and communication methods meet management reporting and policy requirements at national, regional and global levels; and

- when required, establish specific Task Forces to provide technical advice on data collection, type, quality, sharing and management, reporting and communication to enhance utility and adoption in management and policy development.

2.C - Build capability to collect, analyse, manage and report ecological, social, economic and cultural data associated with coral reefs

Conservation and sustainable use of coral reefs is dependent on the implementation of appropriate and timely management actions that are informed by up-to-date knowledge of the status and trends of key components (e.g. coral and fish), critical processes (e.g. recruitment, connectivity and recovery), and the impacts of pressures (e.g. human influences) affecting them. Such knowledge is gained through the implementation of targeted monitoring programs.

Worldwide, there are numerous monitoring programs focussed on coral reefs. However, the effectiveness of these programs, and our ability to integrate data and information across programs to inform management and produce coherent regional and global syntheses is challenged by several fundamental issues associated, not the least of which is variable capability to collect, analyse and report monitoring data, and inconsistencies in data collection methodologies, data formats, data management, and taxonomic resolution of indicators. :

In order to improve the quality of data and derived outputs underpinning management and policy decision at local, national, regional and global levels, the GCRMN will:

- strengthen capability to monitor the condition of ecological, social, economic and cultural dimensions associated with coral reefs through direct engagement and training of network members;
- introduce members to standardised data collection protocols to assist with data collection and subsequent integration across monitoring programs and regions; and
- develop protocols and infrastructure to support data analysis, management and integration.

2.D - Produce a Status of Coral Reefs of the World report by mid-2020

The principal outputs of the GCRMN have been periodic global assessments of the status and trends of coral reef ecosystems worldwide. However, the last Status of Coral Reefs of the World report was released in 2008 creating a significant gap in contemporary understanding of global status and trends in coral reefs, which was recognised in UN Environment Assembly Resolution 2/12 on coral reefs which called on UN Environment to *"support further development of coral reef indicators, regional coral reef assessments, and preparation of a global report through GCRMN"*. .

Considering that the CBD Strategic Plan for Biodiversity (Aichi Targets) is due in 2020, and that 2020 also provides the first interim reporting for Agenda 2030 and the Sustainable Development Goals, it appropriate that the GCRMN produce another *Status of Coral Reefs of the World* report by mid-2020 to contribute to these processes and help set targets and assessment for the post-2020 biodiversity agenda. During the joint Monaco/Australian/Indonesia ICRI Secretariat the GCRMN will:

- develop and implement a plan, including timeframes for the delivery of a *Status of Coral Reefs of the World* report to be released in mid-2020;
- mobilize the global coral reef monitoring community to contribute relevant information and data to a *Status of Coral Reefs of the World* report, which includes available social, economic and cultural information;
- produce a series of regional Status of coral reefs reports in support of the 2020 *Status of Coral Reefs of the World* report;
- develop a communication strategy to ensure that the 2020 *Status of Coral Reefs of the World* report has greatest impact at national, regional and international scales; and
- conduct a session on the status of the world's coral reefs at the next ICRS conference in Bremen in 2020.

Theme 3 –Live Reef Food Fish Trade (LRFFT)

> ***ICRI Desired Outcome 2020:*** *there is an increased understanding of the LRFFT, including actions to reduce the impacts of the illegal trade*

The international Live Reef Food Fish Trade (LRFFT) has been a focus of attention for many years considering its significance in monetary value, socio-economic implications and associated ecological and biodiversity concerns. It is heavily associated with both illegal and biologically unsustainable practices. Groupers make up a large proportion of the predator biomass on reefs (similar to sharks in the ocean). They are involved in top-down control of prey abundance, behaviour and habitat structure. Grouper density has been shown to be inversely related to coral-eating starfish (*Acanthaster planci*) while the Napoleon fish (a threatened species on CITES App II) is one of the only other known predator of this damaging starfish. The excessive loss of fish species can negatively affect the coral reef ecosystem.

LRFFT is mostly biologically unsustainable: serious growth and recruitment overfishing occur due to too many fish being removed each year and too many juveniles being caught which erodes reproductive stock (i.e. they do not survive to reproduce). Also, some groupers are particularly vulnerable while they are aggregating to spawn (reproducing in brief, predictable spawning aggregations, a vulnerable life history phase) and severely overfished at this time. Losses of whole aggregations can quickly occur, thereby eliminating reproductive capacity from an area. The main targets of the LRFFT are the groupers, especially several *Epinephelus* and *Plectropomus* spp. also the Napoleon fish, all highly valued in luxury seafood export markets. Actions are needed to limit the catch, regulate gears and catch methods, and protect spawning areas (vulnerable life history phases) as well as safeguard threatened reef fish (several LRFFT are globally threatened species according to the IUCN Red List Nov 2018 update).

LRFFT includes Illegal trade: illegal fishing methods, particularly cyanide, are used to catch certain high value species, particularly Napoleon fish. Large volumes of illegal and unreported exports on foreign vessels of wild-caught groupers threatens biodiversity and the long-term economic viability of this trade and the traded species for Indonesia. Illegal air shipments are also a concern for particular highly valued

species. Actions are needed to monitor, provide incentives, and increase enforcement and regulation in relation to LRFFT illegal and destructive practice.

While it is acknowledged that the management of LRFFT is challenging and complex, multiple countries now have various relevant measures and there are actions that can be taken, or improved upon, that are consistent with current practices exercised in coastal reef fisheries globally in terms of assessment, monitoring and control.

Proposed actions for the next 2 years for ICRI members and Secretariat cover at least four major actions and their outcomes.

3.A – Improve understanding of the LRFFT

Actions include:

- Collect information on the extent and impacts of the LRFFT on coral reef species and ecosystems, including compiling a list of species impacted by the LRFFT, including CITES listed species, particularly in Southeast Asia.
- Collect information on the socio-economic impacts of the LRFFT.

3.B – Improve management measures related to the LRFFT

Actions include:

- Collect information on management measures to address the LRFFT, including the role of species and habitat protection and MPAs.
- Compile policies that address illegal trade in reef fish, including existing policies to combat the illegal extraction of and trade in other fauna and flora, with a particular emphasis on marine, in order to identify where ICRI can contribute to and improve the management of LRFFT.

Theme 4 - Help to reduce anthropogenic threats to coral reefs

> ***ICRI Desired Outcome 2020:*** *Anthropogenic threats to reefs are highlighted by ICRI and information is made available for members on actions that can be taken to reduce threats.*

4.A – Elevate awareness of the threats to coral reefs and the need for a collective response to accelerate actions that increase resilience at a local to global scale.

ICRI will continue to highlight the threats to coral reefs, including climate change and the need for global action to protect coral reefs – especially for developing countries most vulnerable to declines in coral reef health. This will include encouraging ICRI members to i) integrate coral reefs into the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate to be finalised and launched in Monaco in September 2019 or to ii) integrate ocean related components (including coral reefs and associated ecosystems) into national commitments.

4.B – Review of impacts of chemical pollution on coral reefs and associated ecosystems

Building on the review of issues relating to the impact of sunscreens on coral reefs, the Secretariat plans to extend the scope to endocrine disruptors, nanoparticles, but also pesticides, herbicides, and urban effluents. The aim is to extend and promote knowledge on the effects of certain chemicals on corals reefs. If needed, the previous review will also be updated.

4.C - Guide actions to prevent and mitigate the impacts of marine pollution

Sources of marine debris include urban storm water discharge, floating in from international waters, and deliberate or accidental littering from shipping and other activities. Currents transport debris around the world's oceans making coral reefs vulnerable to debris from both local and more distant sources. Studies show that smothering and entanglement of corals by plastic increases the occurrence of coral disease – 89% of coral systems in contact with plastic based marine debris exhibited signs of disease compared to four per cent of corals without exposure. Local to global action is needed to clean up existing marine debris and stop future marine debris.

ICRI will share the research, knowledge and approaches available to combat and reduce the incidence and impact of marine debris – this will include collaboration with UN Environment. These actions apply at local, regional, national and international scales, with the goal of stopping marine debris at the source or before release into the environment. Based on current knowledge the ICRI Secretariat will propose a Recommendation on marine debris that builds on the French Secretariat ICRI Recommendation on plastic microbeads.

4.D – Sustainable tourism

The ecosystem services provided by coral reefs underpin tourism in many parts of the world, and especially in many places strongly impacted by their decline. It is estimated that coral reef tourism contributes $36 billion to the global tourism industry annually.

Yet coral reefs are vulnerable to the effects of tourism, such as increased urbanization and waste water generation. Developing tourism based on coral reefs and their ecosystem services must therefore be carefully managed to prevent reef damage and ensure long-term economic and social gains. Well managed coral reef tourism supports the economy, protects reefs and directly contributes to SDGs 8, 12 and 14.

ICRI will support and share expertise about sustainable tourism and success field examples that provides both effective protection and presentation of coral reefs. This will also include promotion of ecological mooring devices that limit the mechanical destruction of coral reefs and seagrasses.

International Tropical Marine Ecosystem Management Symposium (ITMEMS)

This symposium, held every four years or so, is a flagship activity of the International Coral Reef Initiative.
It aims to develop and strengthen the capacities of coastal and marine managers and their partners to conserve and promote the sustainable use of coral reefs and related ecosystems. ITMEMS has been convened previously in Australia (1998), the Philippines (2003), Mexico (2006), Guadeloupe (2011) and Bohol, Philippines (2015). The goal is to "strengthen the capacities of managers to apply evidence-based approaches, innovative technologies, and emerging science to address management challenges in the local context".

ICRI will establish an *ad hoc* committee to discuss the organization of ITMEMS including inter alia content and themes, venue location, timing of the symposium, range of participants, budget and financing. ICRI Secretariat co-chair, Indonesia, has volunteered to host ITMEMS 6.

Fostering partnerships / collaboration, including with private sector

Coral reefs are receiving growing international attention. Following on from the Aichi Biodiversity Targets and Action Plan, the action plans from Multilateral Environmental Agreements (MEAs) recognize them.

Adopting a resolution on the sustainable management of coral reefs, at the second session of the United Nations Environment Assembly (UNEA-2) in May 2016 or producing the Coral Reef Live declaration form part of this process to highlight both the value of coral reef ecosystems and the cumulative threats they are facing.

The situation of coral reefs, mangroves and seagrasses should also be improved by the high priority given to issues relating to the ocean on the international scene.

The ICRI Action Plan can work to implement international commitments which have already been made in these areas, as well as to work to promote new commitments and develop new partnerships, through groups including the:

- International Partnership for Blue Carbon.
- Community of Ocean Action “coral reefs”.
- World Heritage Marine Programme.
- Commonwealth Blue Charter.
- Norway High Level Panel for a Sustainable Ocean Economy.

Annexe 1 – List of international events

2019			
5-7 March 2019	Abu Dhabi, UAE	YES	World Ocean Summit 2019
11-15 March 2019	Nairobi, Kenya	YES	The fourth session of the UN Environment Assembly (UNEA-4)
24-30 March 2019	Monaco	YES	Monaco Ocean Week
23 May - 3 June 2019	Colombo, Sri Lanka	YES	18th meeting of the Conference of the Parties (CoP) to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
26-31 May 2019	Glacier Bay, Alaska	YES	4th Marine World Heritage Managers meeting
12-14 June 2019	Valetta, Malta	YES	Symposium "Oceans an Climate Change"
30 June - 10 July 2019	Baku, Azerbaijan	YES	43rd session of the World Heritage Committee
24-25 October 2019	Oslo, Norway	YES	Sixth Our Ocean Conference
16-23 September 2019	Monaco	TBC	Validation meeting for the Special IPCC report on Ocean and Cryosphere
December 29019	TBC	TBC	ICRI General meeting 34 in Australia.
2020			
First week of June	Lisbon, Portugal	TBC	The Ocean Conference 2020
11-19 June 2020	Marseille, France	YES	IUCN World Conservatoion Congress 2020
5-10 July 2020	Breme, Germany	YES	14th International Coral Reef Symposium
Oct-20	TBC		The fifteenth meeting of the Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD) will review the achievement and delivery of the CBD's Strategic Plan for Biodiversity 2011-2020. Furthermore, decision on the post-2020 global biodiversity framework will be made, together with decisions on related topics including capacity building and resource mobilisation.
2020	TBC	TBC	6th International Tropical Marine Ecosystems Management Symposium (ITMEMS 6)