

Minutes of the 28th ICRI General Meeting

Belize City, Belize, 14-17 October 2013

Summary of the General Meeting

The second General Meeting under the Australia-Belize Secretariat was held from the 14-17 October 2013 in Belize City, Belize. Australia and UNEP (through US State funding) provided travel support to a number of delegates therefore enabling their participation in the meeting. Over 60 delegates from about 30 countries attended.

New Members

The ICRI Membership welcomed seven new Members:

- Colombia
- Costa Rica
- Grenada
- Honduras
- Interamerican Association for Environmental Defence (AIDA)
- Marine Ecosystem Services Partnership (MESP)
- Panama.

Ad Hoc Committees

New Terms of Reference were adopted for the *Ad Hoc* Committee on Enforcement & Investigation (Appendix 1), the *Ad Hoc* committee on Economic Valuation of Coral Reef Ecosystems (Appendix 2), and the *Ad Hoc* Committee on Coral Reef Associated Fisheries (Appendix 3). Two side meetings were held with members of the Economic Valuation *Ad Hoc* Committee to discuss the implementation of the new ToRs, including the holding of a capacity building workshop on economic valuation and sustainable financing and a broader program on sustainable financing for marine conservation.

The *Ad Hoc* Committee on the lionfish invasion in the Caribbean (or Regional Lionfish Committee, RLC) continues to exist under the same terms of reference for now; however the question of embedding lionfish management efforts in existing institutions within the Caribbean still remains. The RLC launched its flagship publication, the *Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean*. Next steps for the RLC include helping sub-regions, countries and territories elaborate frameworks for implementation of the regional strategy.

Resolutions & Recommendation

One recommendation was adopted:

- *Recommendation on addressing the decline in coral reef health throughout the wider Caribbean: the taking of parrotfish and similar herbivores* (Appendix 4).

This recommendation, developed based on the latest GCRMN report *Status and Trends of Caribbean Coral Reefs: 1970-2012* urges Nations and multilateral institutions of the wider Caribbean to take action to protect parrotfish (and similar herbivores) to improve coral reef resilience and to restore ecosystem balance.

Three resolutions were adopted:

- *Resolution on using co-management approaches for marine protected areas and other mechanisms for managing coral reefs and associated ecosystems* (Appendix 5)

This resolution calls on ICRI members to adopt and implement sound co-management arrangements for the protection of their coral reefs.

- *Resolution on the Continuing Call to Action and Framework for Action* (Appendix 6)
- *Resolution on the revised Organisation and Management Procedures* (Appendix 7)

These two resolutions update the three foundational documents of ICRI.

Community-based management workshop day

Congruent with on the hosting themes of the joint Australia-Belize Secretariat, a full day of the 28th General Meeting was devoted to the theme of community-based management for coral reef and related ecosystems. The workshop day was divided into two sub-themes: coral reef monitoring (including community-based monitoring); and co-management.

The morning session on coral reef monitoring presented the result of the Global Coral Reef Monitoring Network's (GCRMN) latest report entitled: *Status and Trends of Caribbean Coral Reefs: 1970-2012* (the Caribbean report), a major synthesis and analysis of over forty years of data on coral reef condition in the wider Caribbean. Several monitoring programs in the Caribbean were presented (e.g. Ecomar, Healthy Reefs Initiative, the Atlantic and Gulf Rapid Reef Assessment Program (AGRRA), the Caribbean Coastal Marine Productivity program (CARICOMP), the CATLIN Seaview Survey), fostering discussions on options, possibilities and ways forward for a sound GCRMN monitoring network in the Caribbean and other regions of the world – including key indicators, reporting formats, data storage and analysis. Panel discussions commenced at the end of the morning session were continued in a parallel session in the afternoon, focusing specifically on the GCRMN Caribbean Network.

The main findings of the GCRMN Caribbean report were translated into a recommendation on the taking of herbivores, particularly parrotfish (see above).

The afternoon session focused on coral reef co-management approaches, and participants had an opportunity to share experiences and draw out key principles behind sound co-management practices for coral reefs and associated ecosystems, which were then summarised in a resolution (see above resolution on co-management).

Regional initiatives and Operational Networks

ICRI East Asia Initiatives

The outcomes of the 9th ICRI East Asia Regional workshop, held on 9-12 September 2013 in Singapore, were presented. The workshop focused on management effectiveness.

UNEP's Coral Reef Partnership

UNEP's Coral Reef Unit presented a refined concept of the 'Global Coral Coast Partnership', a support framework for national and regional actions to reduce pressures on coral reefs and related ecosystems mobilizing Regional Seas, UNEP and affiliated centres including UNEP-WCMC and UNEP GRID-Arendal, in collaboration with governments, technical organisations and the private sector. ICRI members were asked to consider collaborating with the Partnership, and to submit comments and suggestions. They approved the participation of the ICRI Secretariat in the partnership as an ex-officio member of its governing body.

Global Coral Reef Monitoring Network

A side meeting was held to discuss governance issues for the Global Coral Reef Monitoring Network (GCRMN). The main outcomes of these discussions were reported on the first day of the ICRI General Meeting, and included:

- Current challenges encountered by the GCRMN, including funding, lack of coordinator and consequential lack of communication with regional networks;
- The need to secure funding to resolve these challenges, starting with the hiring of a new coordinator;
- The need to clarify the role and composition of the GCRMN governing bodies (e.g. the GCRMN Management Group). Terms of Reference for the Management Group were discussed, and will be circulated for further discussion before the end of the Australia-Belize Secretariat tenure.

Parallel discussions held on the revival of the GCRMN Caribbean Network led to the following conclusions:

- A ‘GCRMN Caribbean Regional Committee’ will be established to facilitate GCRMN networking and activities in the region, including compilation of GCRMN reports. This committee will include a core group of individuals involved in monitoring (<10). The committee will be co-chaired by the GCRMN coordinator and a rotating regional member.
- The membership of this Committee should be identified with the help of local key players including ICRI members, regional organisations and the ICRI Secretariat. The committee should encompass members from different parts/subregions of the Wider Caribbean.
- The role of the members of this Committee will be to support gathering information, and in turn, providing feedback and support to data providers including on protocol and management.
- The Committee will maintain regular contact by electronic means and would meet on a regular basis to assemble data/information and discuss challenges and way forward. The Netherlands offered to host and support a first meeting of this Committee.

It was agreed that although this model would work for the Caribbean region, it would not necessarily be applicable to other regions. Individuals and institutions participating in GCRMN activities in other regions will be approached on this matter to provide comment/suggestions.

Next ICRI hosts

A handover ceremony was held to reflect the passing of the ICRI Secretariat from Australia and Belize to Japan and Thailand (incoming Secretariat). The tenure of the incoming Secretariat will start on 1 April 2014; the two co-hosts will hold secretariat duties for two years.

Minutes of the General Meeting

SECTION 1: Opening & membership

Official opening

The meeting was opened by Minister Lisel Alamilla, (Belize Minister of Forestry, Fisheries & Sustainable Development) and George Myvett, Senior Fisheries Officer, Belize.

Dr. Russell Reichelt, Chairman of the Great Barrier Reef Marine Park Authority (GBRMPA), Australia provided welcoming remarks.

Presentation and Adoption of the Agenda

The meeting was co-chaired by Australia and Belize.

The following ICRI members sent apologies to the ICRI Secretariat: Brazil, Convention of Biological Diversity Secretariat, CORDIO, Dominican Republic, Fondation pour la Biodiversité Marine – Haiti, Honduras, PERSGA, Seychelles, SACEP, Ramsar Convention Secretariat, Tanzania, United States of America, WWF International.

The overall agenda was presented and no comments were received.

New members

A presentation on ICRI's membership procedures was provided by the ICRI Secretariat. Seven new membership applications were considered:

- Colombia – presented in person
- Costa Rica – presented in person
- Grenada (presentation was provided during workshop day)
- Honduras
- Interamerican Association for Environmental Defence (AIDA) – presented in person
- Marine Ecosystem Services Partnership (MESP) – presented in person
- Panama – presented in person

All seven were warmly welcomed by the ICRI membership as new ICRI members.

Supporting Documents: Presentations from Colombia, Costa Rica, AIDA, MESP, Panama

SECTION 2: Reports from ICRI bodies

Members' reports

The ICRI Secretariat gave a very brief introduction on the members' reports:

- Twenty one reports were received for this meeting from the following countries/organisations: Australia, Barbados, Blue Ventures, Brazil, Cayman Islands, Central Caribbean Marine Institute (CCMI), the Coral Reef Alliance (CORAL), FoProBiM (Haiti), ICRI East Asia, Jamaica, Japan, Maldives, Monaco, the Netherlands, Science and Conservation of Fish Aggregations (SCRFA), South Africa, Tanzania, the United Kingdom, UNEP, the USA, and the Wildlife Conservation Society (WCS).
- Participants were reminded of the necessity of providing reports as a Member's obligation (article 1.4 of the Organisation and Management Procedures).

Jamaica and the Principality of Monaco provided presentations on their activities.

Supporting Documents:

- *Presentation: Jamaica's Members' Report*
- *Meeting paper: Monaco's Member Report*

Ad Hoc Committees

Existing *Ad Hoc* Committees (AHCs) reported on their work since the last ICRI General Meeting (July 2012).

- *Enforcement and Investigation (Coral Reef CSI)*

David Gulko, Chair of the Enforcement & Investigation Committee, presented in support of the Meeting paper submitted for this AHC. Gulko reminded of the history of the AHC (created in 2005) and its achievements to date, including the establishment of the Coral Reef CSI training program. He presented the new Terms of Reference for the AHC, which includes a vessel groundings investigation and compensation component. The need to ensure local regulations and legal frameworks were taken into account when trying to achieve compliance was underlined.

The new Terms of Reference for the Committee were adopted (Appendix 1), in accordance with the previous General Meeting's resolution on this matter.

Supporting Document:

- *Meeting paper: Proposed new Terms of Reference for ICRI's Ad Hoc Committee on Enforcement and Investigation – Revised Terms of Reference*

- *Economic Valuation*

Nicolas Pascal, as technical advisor for the Committee, presented the paper on this AHC. Pascal underlined the links between the objectives of the AHC and global targets such as Aichi targets 2, 10 and 20; presented the new Terms of Reference for the AHC with expected results; and reminded of the history and achievements of the AHC to date, as well as ongoing related projects on Economic Valuation of coral reefs. The new Terms of Reference for the Committee were adopted (Appendix 2), in line with the previous General Meeting's resolution on this matter.

Supporting documents:

- *Meeting paper: Proposed new Terms of Reference for ICRI's Ad Hoc Committee on Economic Valuation*
- *Presentation: Ad Hoc Committee on Economic Valuation*

- *Coral Reef Associated Fisheries*

Martin Russell, Chair of the Coral Reef Associated Fisheries AHC, reminded of the AHC's history since its creation in 2010, and put forward broad facts of fish aggregations. The new Terms of Reference for this Committee were adopted (Appendix 3).

Supporting documents:

- *Meeting paper: Proposed new Terms of Reference for ICRI's Ad Hoc Committee on Coral Reef Associated Fisheries*
- *Presentation: ICRI Ad Hoc Committee on Coral Reef Associated Fisheries*

- *Caribbean Regional Response to Lionfish Invasion (Regional Lionfish Committee-RLC)*

Activities undertaken by the RLC since the last GM were reported on (July 2012 – October 2013). These have focused on the development, launch and publication in three languages of a *Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean*, including:

- The holding of a writing workshop, to create the first draft of the Regional Lionfish Strategy, hosted by UNEP-CEP through the Regional Activity Center for Specially Protected Areas and Wildlife, with support from UNEP;
- The refinement of the draft with input from partners;
- The translation of the Strategy in Spanish and French;
- The design of the Strategy
- The publication and printing of the Strategy in accordance with partner's requirements (e.g. eco-friendly printing);
- The launch (through media releases) of the Strategy and its distribution (ongoing).

The Strategy has been well received so far, with offers from the CBD and FAO-WECAFC to present the strategy to their members for adoption or example of best practice.

Next steps include the launch of Lionfish web portal gathering information related to research, monitoring, control and management of invasive lionfish; and technical aid to support countries to develop national or local strategies.

The ICRI Secretariat and UNEP-CEP commended and congratulated the RLC for its work, focus and effort which augurs well for sustainable management in the Caribbean. UNEP-CEP pointed out that the Cartagena Protocol could provide a suitable framework to support the outreach and implementation of the strategy.

At this stage, the RLC will continue to exist under the same terms of reference, although the need to embed it into existing institution(s) was acknowledged; as was the idea of broadening its focus to all Marine Invasive Species. Belize pointed out that a Caribbean invasive species working group already existed (chaired by CABI with involvement of the University of Florida); a lot of work has also been conducted in the Pacific, and efforts could be merged should the RLC broaden its focus to other marine invasive species and to other regions.

The RLC will remain an ICRI AHC with the same Terms of Reference, until at least the next General Meeting, where its status will be reconsidered.

Supporting document:

- *Presentation: Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean*

Reports from regional initiatives

- *ICRI East Asia Activities*

Japan (Naoki Amako) reported on the outcomes of the 9th ICRI East Asia Regional workshop, held in Singapore on 9-12 September 2013. The workshop sought to build capacity on MPA management effectiveness, one of the items of the *ICRI East Asia Regional Strategy on MPA Networks 2010* as well as international targets and objectives such as Aichi Target 11, the CBD Programme of Work on Protected Areas, and ICRI's Framework for Action.

Representatives from 8 countries and a number of international NGOs attended the workshop, facilitated by 4 international experts in MPA Management Effectiveness. Participants shared approaches and challenges, examined several possible systems to implement Management Effectiveness, identified common elements, and developed action plans for catalysing development and/or effective use of Management Effectiveness assessments for their MPAs. Terms of Reference were also developed for the next workshop, to be held in 2014.

Supporting Documents:

- *Meeting paper: Report of the 9th ICRI East Asia Regional Workshop*
- *Presentation: Report of the 9th ICRI East Asia Regional Workshop*

- *UNEP's Coral Reef Partnership*

UNEP (Jerker Tamelander) presented a refined concept of its Coral Reef Partnership, developed through a workshop in association with the 2nd Conference on Land-Ocean Connections held in Montego Bay, Jamaica, 2-4 October 2013. The Partnership seeks to act as a support framework for national and regional actions to reduce pressures on coral reefs and related ecosystems, focussing on three broad themes: (1) management for resilient coral reefs, (2) ecosystem services assessment and valuation, and (3) state of environment reporting and other assessments to support decision-making. The Partnership will form part of UNEP's Programme of Work 2014-2017, with implementation commencing in January 2014. Formal launching of the partnership is tentatively planned for the Global Meeting of the Regional Seas in 2014. UNEP encouraged ICRI members to consider collaborating with the Partnership and to submit comments and suggestions on ways forward. The participation of the ICRI Secretariat as an ex-officio member of the partnership governing body was sought; no objection was forthcoming.

IUCN asked for more insights on the novelty aspects of the Partnership and its 'selling points'. UNEP underlined that the principal novel focus of the partnership was the emphasis on adoption and application of best practice tools and information through regional intergovernmental mechanisms, based on technical collaboration at the global level and supported by national level pilot or demonstration projects and capacity building. The resilience theme will, for instance, focus on how resilience understanding can be practically applied in existing decision support frameworks, towards enhanced ecosystem-based management. The second theme will explore how to conduct policy-focused economic valuation of ecosystem services and support planning and investment decisions in public as well as private sectors; the third theme intends to cross-pollinate the work of GCRMN and Regional Seas by placing the findings of GCRMN reports and recommendations arising from these in the intergovernmental policy-making for a of the Regional Seas.

Supporting Documents:

- *Meeting paper: UNEP-Regional Seas Global Coral Reef Partnership*
- *Presentation: Global Coral Coast Partnership: UNEP-Regional Seas*

SECTION 3: ICRI Governance

- *Updating the ICRI Call to Action and Framework for Action*

The ICRI Secretariat reminded of the history of the Call to Action and Framework for Action, the foundational documents of ICRI adopted in 1995. Under the previous Secretariat (France-

Samoa), the need to update these two documents to reflect how coral reef concerns and threats have changed in the past two decades was recognised. The Australia-Belize Secretariat vowed to continue the work started under the France-Samoa Secretariat, and sent out survey to gauge members' expectations for 'refreshed' documents. Survey results were taken into account to develop a 'zero draft' which was circulated for comment; following which a 'first draft' was circulated for a second round of comment. The second draft, including all comments received, was submitted as a motion to the 28th General Meeting. The main changes included in the Call to Action and Framework for Action were presented, including the 'Continuing Call to Action' itself, which reiterates the four ICRI cornerstones of integrated management, capacity building, science & monitoring, and review; the insertion of a vision statement, and the new format of the Framework for Action which includes a broad objective, a suggested implementation approach, a desired outcome, and some potential actions for each ICRI cornerstone.

Additional minor comments on the text of the Call to Action and Framework for Action were received, to be included in the final document for adoption.

Supporting Documents:

- *Motion: Continuing Call to Action and Framework for Action 2013*
- *Presentation: the Continuing Call to Action and Framework for Action 2013*
- *Updating the ICRI Organisation & Management Procedures*

The Australia-Belize Secretariat also undertook to update ICRI's organisation and management procedures, initially adopted at ICRI's 13th General Meeting in 2002 to "*maximise the efficiency and effectiveness of ICRI*". The procedures were revised a number of times since then; but a questionnaire developed by the previous secretariat identified some additional updating needs.

Accordingly, procedures were reviewed and updated in 2013 to enhance readability, tighten up formatting/language and reflect current practices. A draft was circulated to members for comments in July-August 2013. Comments received were included in the motion circulated at ICRI's 28th General Meeting.

Main changes include:

- Inclusion of private entities as eligible ICRI members
- Documentation of membership application and suspension processes
- Clarification of members' obligations
- Specification of objectives and governance arrangements for *Ad Hoc* Committees and Operational Networks
- Streamlining of ICRI documents nomenclature, consistently with practices and website
- Clarification of motion submission procedures
- Update on wording for Secretariat hosting period.

Additional minor comments on the text of the Organisation and Management Procedures were received, to be included in the final document for adoption.

Supporting Documents:

- *Motion: Revised Organisation and Management Procedures 2013*
- *Presentation: Organisation and Management Procedures for the International Coral Reef Initiative*

- *GCRMN governance arrangements*

IUCN (Carl Gustaf Lundin) provided a summary overview of discussions held during a side meeting held on the previous evening on GCRMN governance arrangements. The meeting discussed:

- current challenges encountered by the GCRMN, including funding, lack of coordinator and consequential lack of communication with regional networks;
- the need to secure funding to resolve these challenges, possibly through the identification of a key donor for each region and starting with the hiring of a new coordinator;
- the need to clarify the role and composition of the GCRMN governing bodies e.g. the GCRMN Management Group. All agreed that a Management Group was needed for legitimacy, but that its composition should be tightened and linked to financial or in-kind interests. Terms of Reference for the Management Group will be circulated for further discussion before the end of the Australia-Belize Secretariat tenure.

This overview generated discussions around the room on the need to reengage volunteer node members; to analyse options to support them (for examples via regional groupings such as UNEP-CEP); and to think of their primary objectives (e.g. community of practice and communications vs data collection and reports).

Supporting Document:

- *Presentation: GCRMN update*

Community-based management workshops

Congruent with one of the hosting themes of the joint Australia-Belize Secretariat, a full day of the 28th General Meeting was devoted to the theme of community-based management for coral reef and related ecosystems. The workshop day was divided into two sub-themes: coral reef monitoring (including community-based monitoring); and co-management

SECTION 4: Monitoring

Prof. Jeremy Jackson chaired the morning session on coral reef monitoring, the objectives and outline of which were presented by the ICRI Secretariat.

Prof. Jackson started the session by presenting the main findings and result of the Global Coral Reef Monitoring Network's (GCRMN) latest report entitled: *Status and Trends of Caribbean Coral Reefs: 1970-2012* (the Caribbean report), a major synthesis and analysis of over forty years of data on coral reef condition in the wider Caribbean. The report aims to document the varying conditions of the reefs by compiling essential metadata on environmental conditions; and to cross-cut trends in these conditions with history of potential drivers of decline. Tens of thousands of datasets were collected on coral, microalgae, fishes and urchins for this report. It was found that:

- In terms of the *patterns of change*, most of the degradation of Caribbean reefs occurred earlier than thought (1970s to early 1990s), with an average 54% decline but with enormous geographic disparity in this decline;
- In relation to *drivers of change*, they included extreme increases in tourism and coastal dwellers; overfishing of parrotfish leading to increases in macroalgae, as well as possible introduction of microbes through ballast waters (which could possibly explain coral black-band disease outbreaks and die-off of the sea urchin *Diadema*). Although water quality data was insufficient, the little data collected seemed to indicate that decline in water quality was also a significant driver; whilst extreme heating events had severe but geographically and temporally limited effects.

Main recommendations for management coming out of the report were to:

- Increase protection of parrotfish, including by prohibiting some fishing gear used for taking parrotfish such as fish traps
- Simplify and harmonise monitoring, and make results freely and promptly available to promote adaptive management, for example through online public access. Parameters should include % coral and macroalgae cover; parrotfish biomass and *Diadema* abundance; coral density of small colonies <40mm; incidence DHWs, coral bleaching and disease; and water transparency.
- Foster communication, including among managers, to encourage standardised monitoring and improve management strategies.

The GCRMN will roll out the Caribbean report in late 2013, to then concentrate on 2 or 3 other regions in 2014 (Eastern Pacific, Northern Pacific and East Asia), using a similar approach as used for the Caribbean but tailored to the existing context and needs of these regions. A global synthesis is anticipated to be produced for launching at the next International Coral Reef Symposium, to be held in Hawaii in 2016.

The presentation generated discussions on the need for continuous water quality monitoring throughout the Caribbean as a decision support tool for coastal zone management and land use planning. Existing initiatives such as the Global Partnership for Oceans (GPO) as well as activities under the Protocol Concerning Pollution from Land-Based Sources of Activities (LBS

Protocol) to the Cartagena Convention are presently conducting water quality reports in the Caribbean and it would be interesting to interlink these with GCRMN data.

In terms of broadcasting the main recommendations of the GCRMN report, suggestions included to develop policy briefs; to translate the summary in Spanish and French; to reach to international media; and to roll it out appropriately with every country through local community events (e.g. local launches). The GCRMN motion on the parrotfish was briefly mentioned.

Supporting Document:

- *Presentation: GCRMN Caribbean Report: Purpose, Science, Management, and Relevance for Future GCRMN Reports*

Following the presentation of the latest GCRMN reports, a number of monitoring programs of the Caribbean were presented, namely:

- Belize's local community-based monitoring programs, led by Ecomar (Coral Watch, Lionfish, ReefRally, Turtle Watch, Whale Watch);
- Monitoring conducting as part of the Healthy Reefs Initiative in Mesoamerica (Mexico, Belize, Guatemala & Honduras)
- The Atlantic and Gulf Rapid Reef Assessment (AGRRA) Network
- The Caribbean Coastal Marine Productivity (CARICOMP) Network
- The CATLIN Seaview Survey.

These programs provide data at various geographic scales and using different methods and tools, collected by various stakeholders: from volunteers and tourism operators (Ecomar) to managers and scientists (AGRRA, CARICOMP).

Supporting Documents:

- *Presentation: Ecomar: A local example of community-based monitoring*
- *Presentation: Healthy Reefs Initiative: regional collaborative monitoring & evaluation*
- *Presentation: the AGRRA network*
- *Presentation: Caribbean Coastal Marine Productivity (CARICOMP)*
- *Presentation: new tools for reef monitoring: CATLIN Seaview*

A prototype database currently being developed in the Indian Ocean (through ISLANDS, an Indian Ocean Commission-led program) was then presented as an example of online database that can be used by regional GCRMN nodes. The database, named 'Coral Reef Information System' (CRIS), can act as a central repository for smaller databases; whilst also serving as an outreach and educational tool which can keep data collectors interested and feeling truly part of a broader regional (and global) network. Benefits of such a concept include:

- central (online) hosting/storage of historical databases

- ability to analyse metadata from various datasets for easier reporting
- basic search/query functions for historical data, with mapping components
- user-friendliness, and ability to provide networking facilities via social media
- ability to engage managers and decision-makers.

Such a concept could help establish or strengthen connections among existing monitoring efforts and foster constituency support in regions. There is also the potential to add SocMon data to such an online tool, fostering cross-pollination and collaboration between social and scientific data collectors (and data) – something that has been identified as a gap for many years.

Supporting Document:

- *Presentation: Coral Reef Information System*

The workshop continued with a panel discussion, animated by the presenters (Cortes Nunez, Gonzalez-Rivero, Kaminski, Lang, McField, Ogden, and Searle), and chaired by Jeremy Jackson. Discussions emphasized:

- The importance of considering the place and added value of different existing monitoring programs such as AGRRA and CARICOMP, and their possible evolutions with the advent of new monitoring technologies such as CATLIN.
- The need to first think of the management question(s) that needs to be answered, to then target monitoring; using a range of technologies from basic ‘quadrats-type’ to CATLIN type as is available and/or needed, in order to foster concrete on-ground changes.
- The importance of analysing results from data whilst keeping in mind what we know from the past, including not only historical data but also geological data that can help us understand the meaning of recent trends in a longer timescale context. This helps create a vision of what the ecosystem SHOULD look like, a critical step in fostering change.
- The (ongoing, and universal) issue of communicating science to managers, and the need to reconcile both scientific and political cultures through interchange and better targeted interfaces, as well as better communications between fisheries and environment managers (for instance by demonstrating clear links with food security).
- The difficulties in doing so in terms of timelines (i.e. reconciling longer-term scientific research and shorter, mandate-determined political cycles) and message (i.e. scientific hypothetical and precautionary talk vs political ‘electoral promise’ type of messages); and the need to invest in communications smartly and electively (i.e. when science has a meaningful, far-reaching message to convey).
- The importance of monitoring not only quantitative biodiversity elements, but also other elements that are particularly useful to managers such as fish production, tourism frequentation, costal development and investment in protection; in other words, the need to link socio-economic monitoring data with biodiversity data.

- The benefits of embedding local monitoring results/findings within a broader network such as the GCRMN as a way to provide additional data and information based on which decisions can be made.
- The opportunity to capitalise on new technologies and innovations in terms of monitoring and data storage and analysis, to collect and utilize that data to its full potential, including to extricate information for management that is useful and digestible (including to the media).
- A successful example is report cards developed by the Healthy Reefs Initiative, which provides managers with a color-coded grading system that allows them to assess how their site is faring, and what needs to be done to improve the health and condition of coral reefs. Getting the right message (e.g. simple recommendations that are easy to implement) at the right stage of the political cycle is crucial.
- The need to reach out to community groups, especially in countries that rely on locally-managed areas such as Papua New Guinea, and to be inclusive of fishing communities. A successful example of such community engagement is the Ecomar project in Belize, which has a strong outreach component that has meant that monitoring results have been directly translated into concrete management actions (e.g. Caye Caulker).
- The need for vision and leadership as attributes of change, with an understanding of what pathways are available to go where we want to be (e.g. strategic assessment) with clear explanations to all stakeholders as to how their efforts contribute towards achieving the vision for the future, with the help of regional and global networks.

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Discussions on possible options to revitalize the GCRMN Network in the Caribbean region were held concurrently with the afternoon session on co-management (see Section 6).

SECTION 5: Co-management

Ms Beverly Wade, ICRI Co-chair, chaired the afternoon session on the theme of co-management. The objective of this session was to familiarise ICRI members on co-management approaches for coral reefs, through case studies and exchanges which would help extract core principles behind successful implementation of co-management arrangements.

Case studies were presented for Belize and Grenada.

Supporting Document:

- *Presentation: Co-management in Belize*
- *Presentation: Grenada's Marine Protected Areas, a co-management approach*

These two presentations showcased different approaches to co-management, where Belize adopts a *delegated* approach (i.e. delegated management powers to NGOs) whereas Grenada has adopted a collaborative approach (i.e. established decision-making committees with representatives from each stakeholder group). Both approaches have benefits and challenges that were discussed.

Following these discussions, participants split in break-out groups to workshop key concepts and principles to foster successful co-management arrangements, to be reflected in an ICRI resolution.

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Main findings of the co-management workshop and monitoring parallel session were reported back in plenary. There were lengthy discussions on the draft GCRMN motion on parrotfish, with strong views on the need to mention alternative livelihoods where livelihoods are displaced by fishing restrictions to promote the notion of urgency and criticality of the situation and the need for targeted and strategic actions whilst retaining wording that enhance likelihood of policy uptake and enable decision making. Participants were urged to provide their comments on the motion to the ICRI Secretariat for inclusion in a final version for adoption.

Field Day: Experiencing co-management

In an effort to concretely illustrate, thanks to ‘on-ground’ visits and experience, the ICRI hosts’ second theme of co-management, ICRI delegates had an opportunity to participate in a field day. Three options were provided, two of which intended to showcase some of Belize’s co-management programs for marine reserves. The three options were:

- Co-management arrangements for the Hol Chan Marine Reserve (with a further option of visiting the Bacalar Chico marine reserve, directly managed by the government).
- Co-management arrangements for Lighthouse Reef (with interpretation provided by the Belize Audubon society as co-manager of this World Heritage site).
- Delving into ancient history: the Altun Ha Mayan temple (a terrestrial example).

SECTION 6: General Matters

ICRI communication tools

The ICRI Secretariat presented its updated communication tools:

- *ICRIforum website*: since the last General Meeting, the ICRI Secretariat has conducted a systematic review of functionalities of the ICRIforum website, leading to a major facelift of its looks and feel. The new website, launched in July 2013, has been redesigned to

reflect best practice in website layouts, including: moving buttons on the top of the page, inserting visuals such as rolling banners, re-writing of major pages such as the ‘about ICRI’, ‘ICRI, Coral Reefs and the UN’ and *Ad Hoc* Committee pages to increase readability, and reordering of website architecture to enable users to find the information they are after in less than 3 minutes. The result is a web platform that is much more user-friendly and informative, and easier to navigate. There is still some ongoing work to be done to fully finalise the website. Any suggestions or feedbacks to further improve the website are welcomed; and members are reminded that the ICRI website could be better used to promote their own activities or share news. It is also important for member page information to be up-to-date.

- *ICRI Social Media*: the secretariat provided an update on its social media interfaces, particularly its Twitter (micro blogging) and Facebook (social networking) pages. The ‘uptake’ of both media (i.e. number of ‘followers’ and ‘likes’ respectively) has been relatively slow, mainly due to the fact that the maintenance of these media has been low priority for the Secretariat. Currently the Facebook page has over 400 ‘likes’ and the Twitter account has over 300 followers. Both mainly relay information posted on the ICRIforum, which remains the principal outreach mechanism. Both media are not currently used to their full potential – members may use them to share experiences, contribute their expertise, or post/share photographs via the ICRI Secretariat.

Supporting documents:

- *ICRI Social Media (Presentation)*

ICRI Grants Program

The ICRI Secretariat reported on its Grants Program 2012-13, one of its hosting objectives. The Program aimed to support community groups in coral reefs countries protect their coral reefs, in line with the ICRI Call to Action cornerstones of integrated management, science and monitoring, capacity building, and review. Call for applications and assessments were conducted in 2012, with winners announced at ICRI’s 27th General Meeting. The four winners were Nature Conservation Egypt (AU\$10,000); Kenya Marine and Fisheries Research Institute (AU\$9,922), Aleipata & Safata Marine Protected Area Trust Society Inc. from Samoa (AU\$10,000); and Kousapw Palikir Community Group in Micronesia (AU\$2,730).

All parties submitted detailed project plans and entered into Grant Agreement Deeds with the ICRI Secretariat, with regular milestone reporting requirements. Two projects have been satisfactorily completed by 30 June 2013: the project in Kenya, which assessed the effects of community-conserved areas or *Tengefus* along the Kenyan coast; and the project in Micronesia, which sought to eradicate Crown-of-Thorn starfish from the Palikir Reefs. The project in Egypt had to be provided with an extension due to political instability in the country which delayed the conduct of the project; and the project in Samoa had to be terminated before completion.

Main lessons learnt from running this grants program were that:

- It is important to check with previous donors (if any) on the experience they had with a proponent
- The political context of a country is important to take into account during the selection process
- Regular communications with project implementers during the life of the project is key to its success; well-placed advice can be really helpful to steer the project in the right direction
- Funds should never be provided upfront however small they may be, to maintain implementers' interest in finalising the project.

There were suggestions that future grants programs ran by the ICRI Secretariat could be outsourced to existing entities dedicated to running such programs, to lighten the Secretariat's load. The Prince Albert II of Monaco Foundation was put forward as a suitable institution.

Supporting documents:

- *Presentation: ICRI Grants Program 2012-2013*

ICRI input into the Convention on Biological Diversity (CBD) work plan on coral bleaching

The CBD Secretariat could not attend the ICRI meeting as they were running the 17th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 17) in Canada that week; however they approached the ICRI Secretariat to request ICRI's input on the CBD work plan on coral bleaching. UNEP presented this item on their behalf.

The work plan on coral bleaching was adopted at the CBD's 7th Conference of the Parties (COP7) in 2004 ([Decision VII/5](#), Annex I, Appendix 1). The CBD COP10 (held in Nagoya in 2010) requested the CBD Secretariat to prepare a report on the progress made on the work plan's implementation. Progress on was reported at [SBSTTA 16](#) in May 2012, and COP 11(India, 2012) took note on the need to update this work plan to include considerations such as ocean acidification and the effects of tropical storms and rising sea levels. It also requested the CBD to work with relevant stakeholders, including entities such as ICRI, to develop proposals to update the work plan on coral bleaching for submissions to COP12, including capacity building needs.

The CBD Secretariat is therefore requesting the ICRI body to submit suggestions and input to be included into an updated work plan. Inputs will be compiled between November and January 2013 to then be peer-reviewed, revised and submitted to SBSTTA 18, to be held in June 2013. Inputs sought are on three major elements:

- Impacts on coral reefs caused by ocean acidification, tropical storms and rising sea levels;
- Integration of these impacts into management frameworks;

- Addressing specific coral reef management needs, including ecosystem-based adaptation measures, management of coral reefs as socio-ecological systems; and formulation of adaptation strategies to enhance the resilience of ecosystems to enable the continued provision of goods and service.

Any input can be provided to the ICRI Secretariat at icri@gbrmpa.gov.au by 11 January 2014.

Supporting documents:

- *Presentation: CBD's work on the implementation of the specific work plan on coral bleaching: areas of collaboration with ICRI*

GCRMN Regional activity

- *Caribbean*

Prof. Jeremy Jackson presented the outcomes of discussions held during the parallel session of the workshop on the GCRMN Caribbean Network. Main outcomes were that:

- A **Caribbean Regional Committee** would be established (replacing the past nodal structure), composed of a small number of energetics individuals, including scientists and managers, co-chaired by the GCRMN Coordinator or Chief Scientist with another member rotating as co-chair.
- The committee would be tasked with providing data and contacts, feed report findings back to stakeholders at national and regional levels, and help raise awareness about main issues and actions needed for Caribbean reefs.
- It would meet once a year in conjunction with Association of Marine Laboratories of the Caribbean (AMLC) and Gulf and Caribbean Fisheries Institute (GCFI) meetings, with frequent communications through emails and Skype. The Netherlands offered to provide funding to host its first meeting in 2014.
- The GCRMN would provide training to the Committee on data management and monitoring protocols. It would also identify areas where monitoring is lacking, and provide avenues to establish monitoring programs there.

Prof. Jackson emphasized that this model was deemed as suitable for the Caribbean region but would not necessarily be applicable to other regions.

Discussions were held around the need to establish strong feedback loops between the GCRMN, members of this Caribbean Regional Committee and the broader network, and line governments.

- *East Asia*

Tadashi Kimura (Japan Wildlife Research Centre) provided an update on GCRMN activity in East Asia. The GCRMN East Asia Network is composed of two nodes: an East and North Asia

Node (China, Hong Kong, Taiwan, Japan and Korea) and a Southeast Asia Node (Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam). The GCRMN East Asia Network works through an Asia-Pacific Coral Reef Society (APCoRS) chaired by Professor Chou Loke Ming from the National University of Singapore and steered by a Steering Committee composed of 14 members representing countries. The Secretariat functions are provided by Japan and Singapore. APCoRS organises regional Asia Pacific Coral Reef Symposia (the next one will be held in June 2014 in Taiwan) and compile East Asia Regional Reports. The network is purely voluntary and does not have dedicated funding, but it is supported by host countries as well as proceedings from symposia registration fees and the government of Japan. The network has recently set up a working group on migrating hard corals, which seem to be posing a problem since they are settling in fisheries ground traditionally fished for pelagic species. APCoRS is keen to feed information better to decision makers through policy briefs and through the ICRI East Asia Regional initiative; with enhanced linkages to the broader GCRMN community.

Supporting documents:

- *Presentation: GCRMN Regional Activity: East Asia Network*

Biodiversity monitoring and databases in the Dutch Caribbean

Nathaniel Miller (Dutch Caribbean Nature Alliance) presented on its work in the six Dutch Caribbean islands of Aruba, Bonaire, Curaçao, Saba, St Eustatius and St Maarten. DCNA has developed a Biodiversity Strategy for these islands to support management and guide policy, which includes prioritising monitoring. A Dutch Caribbean Biodiversity Database has been developed to safely store data in order to facilitate international reporting. The database provides data collectors with secure storage and acts as a user-friendly platform to input data, perform analysis and identify errors. The main features of that database were presented, including interactive mapping components, resources central archiving component and search engine.

DCNA also presented their Lionfish Control phone Application, which allows in-water users to view and record real-time sightings and captures of lionfish, with mapping and reporting components.

Supporting documents:

- *Presentation: Biodiversity monitoring and databases in the Dutch Caribbean*

Outcomes of recent international meetings

- *2nd Global Conference on Land-Ocean Connections (GLOC-2), Jamaica, October 2013:* UNEP presented elements of the outcomes of this conference. GLOC-2 focused on the three priority areas of UNEP's Global Programme of Action on the Protection of the Marine Environment from Land Based Sources of Pollution (GPA) for 2012-2016, which

are marine litter, nutrients and wastewater, as well as development of a new partnership for coral reefs. Parallel sessions were held on these four themes. Recommendations in relation to priorities in addressing wastewater and nutrients were made that are of particular relevance to coral reefs. The GPA as well as the global partnerships on nutrients, wastewater and marine litter may provide opportunities to collaborate on further outreach and implementation of the ICRI Call to Action and Framework for Action. Recommendations from the session on the coral reef partnership included: the need to see coral reefs as an integral part of the broader tropical coastal ecosystem; the usefulness of pilot projects to demonstrate best practice; the need to utilize Regional Seas mechanisms in promoting national uptake of and support to reef management; the need to prioritise activities on the use of ecosystem service assessment and valuation; and the urgency in proactively responding to climate change.

- *1st Panamerican Coral Reef Congress, Merida, Mexico, October 2013*. Mexico reported on the main outcomes of this congress. The congress gathered scientist from around the Mesoamerican region around the theme of ‘local management, global impacts’. Some key ICRI players attended, and findings of the GCRMN Caribbean report were discussed. The RLC’s Regional Lionfish Strategy was also launched and presented.

Supporting documents:

- *Presentation: GLOC-2: draft elements for a report from the conference*

French Coral Reef Initiative (IFRECOR) sponsorship strategy

France presented on IFRECOR’s experience with the development of a public private partnership to fund coral reef projects, stemming of shortages of funds following the global financial crisis. IFRECOR developed a corporate ethical charter to delineate acceptable measures within this system, implemented a project portfolio to designate project specifically attractive to the private sector, and developed a targeted communication strategy to boost IFRECOR’s attractiveness for corporate enterprises. Although some administrative difficulties remain, everything is now in place to attract private funding. Negotiations are also underway to establish a formal partnership between IFRECOR and a private firm. This is a model that could be replicated by other National Coral Reef Initiatives and eventually, even ICRI itself.

Supporting documents: Philanthropy experience at IFRECOR (Presentation)

SECTION 7: Meeting outcomes

Motions

One (1) motion was adopted by the ICRI membership as a recommendation:

- Recommendation on addressing the decline in coral reef health throughout the wider Caribbean: the taking of parrotfish and similar herbivores (Appendix 4).

Three (3) motions were adopted by the ICRI membership as resolutions:

- Resolution on using co-management approaches for marine protected areas and other mechanisms for managing coral reefs and associated ecosystems (Appendix 5)
- Resolution on the Continuing Call to Action and Framework for Action (Appendix 6)
- Resolution on the revised Organisation and Management Procedures (Appendix 7).

Economic Valuation side meetings

Two side meetings were held with members of the Economic Valuation *Ad Hoc* Committee to discuss the implementation of the new ToRs. Participants agreed that a capacity building workshop on policy-oriented economic valuation (based on the World Resource Institute's new Guidebook on this) and sustainable financing of protected areas, directed at Caribbean countries, was needed. The Netherlands agreed to provide start-up funding for such a workshop, which will be held in Bonaire in the first half of 2014. Colombia, Costa Rica, Barbados and Mexico provided their support for this concept.

Participants also agreed to support the implementation of a project entitled 'Blue Finance' held by IRCP to explore innovative financial mechanisms at all levels of marine conservation and management. Barbados, Colombia, Costa Rica and Mexico have confirmed their interests to be pilot sites for this project.

Supporting documents:

- *Terms of Reference: Caribbean Economic Valuation workshop 2014*

SECTION 8: the future

Upcoming ICRI Activities and events of interest to members

ICRI Members were encouraged to participate in several upcoming ICRI or other coral reef-related events, including:

- ICRI events at the International Marine Protected Areas Congress held in Marseille, France on 21-27 October 2013, including an ICRI-IFRECOR Ocean + evening event on Tuesday 22 October; an ICRI workshop on Strategic Environmental Assessment on Wednesday 23 October, and Knowledge Cafés on regional cooperation and economic valuation of coral reefs on Friday 25 October.

- The IUCN-WCC side event (Conservation Campus) on Management Effectiveness, an interactive, capacity building event to be held on 9 September in Jeju, Korea. The ICRI Secretariat will present the outcomes of the General Meeting's Management Effectiveness workshop at this event.
- A UNEP-ICRI parallel session on coral reef partnerships at the 9th the 9th Pacific Island Conference on Nature Conservation and Protected Areas, to be held in Fiji on 2-6 December 2013.
- The UN Conference on Small Island Developing States, to be held on 1-4 September 2014 in Apia, Samoa.
- The IUCN World Parks Congress, to be held on 12 November 2014 in Sydney, Australia.

The next ICRI General Meeting will be held in Japan in the second half of 2014 (exact dates to be advised).

Supporting documents:

- *Upcoming events of interest to ICRI members (Presentation)*

Summary of Australia-Belize Secretariat activity

The ICRI Secretariat presented on its achievements since the inception of its hosting in January 2012. Main achievements included:

- The organisation and holding of two General Meetings (GM27 and 28)
- The promotion of the two hosting themes of management effectiveness and community-based management through the workshops and themed field days at General Meetings and the support of the 9th ICRI East Asia regional workshop on management effectiveness
- The revision of the ICRI Call to Action and Framework for Action, and the publication of a pamphlet for both (to be made available as a print ready file on the ICRIforum)
- The update of the ICRI Organisation and Management Procedures
- The running of a small grants program
- The engagement of previous and new members in ICRI (through diplomatic cables), with the welcoming of 9 new members during its tenure (5 of which are countries)
- The redesign of the ICRIforum website, and the development of use of ICRI Facebook and Twitter accounts
- The support of ICRI networks and *ad hoc* committees, including through input to, publication, media launch, printing and distribution of the Regional Lionfish Committee's Regional Lionfish Strategy
- The holding of side events at the IUCN-World Conservation Congress held in Jeju, Korea in September 2012, the International Marine Protected Areas Congress held in

Marseille, France, in October 2013, and the 9th Pacific Islands Conference on Nature Conservation and Protected Areas to be held in Fiji in December 2013.

Supporting documents:

- *Australia-Belize Hosting Progress Report (Presentation)*

ICRI Secretariat handover ceremony & incoming secretariat's plan of action

Dr Russell Reichelt (Australia) officially announced that the next Secretariat would be co-hosted by Japan and Thailand, starting in April 2014 and for two years. Japan has about 35,000 ha of coral reefs, including high-latitude coral community area. It formulated a domestic Action Plan for coral reefs in 2012, to coordinate monitoring, promote eco-tourism and restoration projects, COTS control and involvement in ICRI and East Asia Regional Activities. Dr Reichelt officially handed over the ICRI Coco de Mer to Naoki Amako (Japan), as wants the ICRI tradition.

Following the handover ceremony, Japan presented a brief outline of its plan of action for the Secretariat. The plan includes to:

- Implement ICRI's *Continuing Call to Action* and *Framework for Action 2013* in compliance with the revised Organisation and Management Procedures
- Organise two General Meetings: one in Japan (2014) and one in Thailand (2015)
- Maintain and enhance ICRI's visibility in international fora
- Support the activities of Operational Networks, *Ad Hoc* Committees, and regional initiatives.

A more detailed Plan of Action will be drafted in consultation with Thailand and circulated to ICRI members.

Official Closing

The meeting was closed by His Excellency Mr Ross Tysoe, Australian High Commissioner to Trinidad and Tobago.

Appendices

- *Appendix 1: Amended Terms of Reference for the ICRI Ad Hoc Committee on Enforcement & Investigation*
- *Appendix 2: Amended Terms of Reference for the ICRI Ad Hoc Committee on Economic Valuation of Coral Reef Ecosystems*
- *Appendix 3: Amended Terms of Reference for the ICRI Ad Hoc Committee on Coral Reef Associated Fisheries*

- *Appendix 4:* Recommendation on addressing the decline in coral reef health throughout the wider Caribbean: the taking of parrotfish and similar herbivores
- *Appendix 5:* Resolution on using co-management approaches for marine protected areas and other mechanisms for managing coral reefs and associated ecosystems
- *Appendix 6:* Resolution on the Continuing Call to Action and Framework for Action 2013
Appendix 7: Resolution on the revised Organisation and Management Procedures 2013

APPENDIX 1

Amended Terms of Reference for the ICRI *Ad Hoc* Committee on Enforcement & Investigation

Adopted on 14 October 2013, at the 28th ICRI General Meeting (Belize City)

The ICRI General Meeting agrees to extend the work of the ICRI *Ad Hoc* Committee for the next two General Meetings, under the chairmanship of the ICRI Secretariat with technical support by David Gulko. Participation is encouraged by members, and particularly government members and experts who could support the Committee in meeting its objectives.

Objectives

- i. Provide mechanisms and training support for small scale Marine Protected Areas on enforcement and compliance; and
- ii. Explore and compare large-scale vessel grounding investigation approaches, including evidence collection and documentation on coral reef damage which can be used for both restoration and compensation.

The *Ad Hoc* Committee will implement the following **activities**:

- *Activity 1*: Develop an MPA Enforcement and Compliance Strategy (ECS) to be used as a framework for local and regional strategies.
- *Activity 2*: Develop training programs on enforcement and investigation, based on the CRCSI model, specifically tailored for small-scale MPAs.
- *Activity 3*: Develop a Large-Scale Vessel Grounding Investigative Protocol Strategy (VGIPS) as a collaborative approach towards the investigation and documentation of natural resources impacts associated with large-scale vessel grounding.
- *Activity 4*: Organise a committee meeting and expert workshop, subject to funding, to confirm, revise and refine the ECS and VGIPS
- *Activity 5*: Establish an information platform to enable the sharing of strategies and mechanisms, with a view to improve both enforcement and compliance efforts within small-scale MPAs and natural resource trustee actions associated with large-scale vessel groundings.

APPENDIX 2

Amended Terms of Reference for the ICRI *Ad Hoc* Committee on Economic Valuation of Coral Reefs Ecosystems

Adopted on 14 October 2013, at the 28th ICRI General Meeting (Belize City)

ICRI Members agree to extend the work of the ICRI *Ad Hoc* Committee on Economic valuation of coral reef ecosystems until ICRI's 30th General Meeting, under the chairmanship of the ICRI Secretariat with the technical assistance of CRILOBE-France. Wide participation by members, and particularly government members, is encouraged.

The Committee was established in January 2008 at ICRI's 21st General Meeting and was originally co-chaired by Mexico, the United States, the World Resources Institute (WRI) and the ICRI Secretariat. Through its members, it carried a number of activities including an inventory of studies, articles and publication on coral reef valuation (WRI), and an online valuation library led by the Marine Ecosystems Services Partnership (MESP).

The Committee will build on these achievements, and integrate other relevant achievements¹ by members to work towards a renewed set of objectives.

These objectives are:

- (i) to increase public investment in coral reef management through better awareness of the societal benefits produced by coral reefs and their positive economic return as a public investment
- (ii) to encourage countries to integrate coral reef sustainable funding mechanisms (such as, but not limited to, offsets, biodiversity banking, credit stacking, conservation concessions etc.) in their national laws
- (iii) to provide advice to countries wishing to set up a framework to encourage private funding for coastal management.

The *Ad Hoc* Committee will implement the following activities:

¹ These include outputs by the World Resources Institute on economic valuation of coral reefs and associated coastal ecosystems in the Caribbean; initiatives by the US National Oceanographic and Atmospheric Administration (NOAA) and TEEB/UNEP (The Economics of Ecosystem and Biodiversity) ; the World Bank's CCRES initiative (Capturing Coral Reef Related Ecosystem Services); Forest Trends' Marine Ecosystem Services (MARES) Program; SPC's RESCCUE program (Restoration of Ecosystem Services against Climate Change Unfavourable Effects) and work by the French Coral Reef Initiative (IFRECOR)'s working groups on compensation, economic valuation and marine conservation financing.

- *Activity 1:* Continue to work with the ICRI Secretariat to facilitate the dissemination of relevant information on coral reef economic valuation through ICRI channels and within the international arena;
- *Activity 2:* Act as a coordinating platform to take stock of, and report on, relevant international and regional initiatives such as the ones mentioned in the footnote;
- *Activity 3:* Draft guidelines of best practice for coral reef compensation mechanisms of anthropogenic damages to coral, based on case studies and including principles, practical tools (e.g. habitat equivalency calculations, compensation ratios) and guidance on how to draft compensation provisions, obtain guarantees and monitor compensations.
- *Activity 4:* Produce two short policy briefs², summing up:
 - The socio-economic benefits of coral reef ecosystem services, with examples taken from the three main reef regions highlighting the potential returns on public investment that coral reefs can provide.
 - Emerging financing mechanisms (e.g. offset of damages, PES, access rights) and their potential to contribute to long-term conservation financing

² The purpose of a policy brief in this context is to convince the target audience of the urgency of the current problem and the need to adopt the preferred alternative or course of action outlined and therefore, serve as an impetus for action.

APPENDIX 3

Amended Terms of Reference for the ICRI *Ad Hoc* Committee on Coral Reef Associated Fisheries

Adopted on 14 October 2013, at the 28th ICRI General Meeting (Belize City)

The ICRI General Meeting agrees to extend the work of the ICRI *Ad Hoc* Committee on Coral Reef Associated Fisheries to facilitate a coordinated approach to addressing the need to gather more information, and facilitate appropriate management of fish aggregations in coral reef ecosystems.

The *Ad Hoc* Committee will be chaired by Science and Conservation of Fish Aggregations (SCRFA). Participation is encouraged by other countries, territories and organizations.

The *Ad Hoc* Committee will implement the following activities:

- i. Continue to work with ICRI Secretariat to disseminate information on key science and management issues for fish aggregations, and the need to ensure fish aggregations are considered in coral reef management planning.
 - ii. Engage members to contribute information to the SCRFA global fish aggregation database. This includes filling data gaps on fisheries management status, fish aggregation status, and traditional knowledge.
 - iii. Identify Pacific Ocean countries for whom training and research on fish aggregations is a priority for management
 - iv. Disseminate a questionnaire to the identified Pacific countries on aggregations.
 - v. Develop a brochure and training materials for the Pacific countries.
 - vi. Promote research on fish aggregation areas to improve knowledge on their role in the sustainability of fisheries.
 - vii. Develop an ICRI status report on the status of fish aggregations globally and or regionally.

APPENDIX 4

RECOMMENDATION on addressing the decline in coral reef health throughout the wider Caribbean: the taking of parrotfish and similar herbivores

Adopted on 17 October 2013, at the 28th ICRI General Meeting (Belize City)

Background

The latest report of the Global Coral Reef Monitoring Network (GCRMN), entitled: *Status and Trends of Caribbean Coral Reefs: 1970-2012* is the first report to document quantitative trends of coral reef health based on data collected over the past 43 years throughout the wider Caribbean region.

The results of the study clearly show:

- Coral reef health requires an ecological balance of corals and algae in which herbivory is a key element;
- Populations of parrotfish are a critical component of that herbivory, particularly since the decline of *Diadema* sea urchins in the early 1980s;
- The main causes of mortality of parrotfish are the use of fishing techniques such as spearfishing and, particularly, the use of fish traps.

The Report further identifies that overfishing of herbivores, particularly parrotfish, has been the major drivers of reef decline in the Caribbean to date, concluding that management action to address overfishing at the national and local levels can have a direct positive impact on reef health now and for the future. In some areas of the wider Caribbean (for example Bermuda and the Exuma Cays Land and Sea Park in the Bahamas, and more lately in Belize and Bonaire), active management including bans on fish traps, has led to increases in parrotfish numbers and consequent improvement in reef health and resilience to perturbations including hurricanes. This is in contrast to other areas within the Caribbean, where heavily fished reefs lacked the resilience to recover from storm damage.

Positive impacts on reef health demonstrably have spill over effects on local economies, including the potential for alternative livelihoods to fishing, thanks to increased tourism revenues, replenishment of fish stocks and restoration of ecosystem services such as shoreline protection.

It is recognised that in the Caribbean there are varying levels of community reliance on fishing in general and the taking of parrotfish in particular. However, in light of the evidence now available, and in accordance with ICRI's Framework for Action cornerstone of 'integrated management' (which includes fisheries management), the International Coral Reef Initiative would like to highlight the benefits of strong management to protect reefs from overfishing, and urges immediate action to effectively protect parrotfish and similar herbivores.

Accordingly, the International Coral Reef Initiative urges Nations and multi-lateral groupings of the wider Caribbean to:

1. **Adopt** conservation and fisheries management strategies that lead to the restoration of parrotfish populations and so restore the balance between algae and coral that characterises healthy coral reefs;
2. **Maximise** the effect of those management strategies by incorporating necessary resources for outreach, compliance, enforcement and the examination of alternative livelihoods for those that may be affected by restrictions on the take of parrotfish;
3. **Consider** listing the parrotfish in the Annexes of the SPAW Protocol (Annex II or III) in addition to highlighting the issue of reef herbivory in relevant Caribbean fisheries fora;
4. **Engage** with indigenous and local communities and other stakeholders to communicate the benefits of such strategies for coral reef ecosystems, the replenishment of fisheries stocks and communities' economy.

Annex: Executive Summary – Status and Trends of Caribbean Coral Reefs; 1970-2012, GCRMN Report

APPENDIX 5

RESOLUTION on using co-management approaches for marine protected areas and other mechanisms for managing coral reefs and associated ecosystems

Adopted on 17 October 2013, at the 28th ICRI General Meeting (Belize City)

Cooperative management, or co-management, is a specific type of governance approach that entails sharing of management functions between government and a group, or groups, of stakeholders.

It can be an effective governance approach in countries where outcomes for coral reefs and associated ecosystems rely on strong partnerships for success.

Discussions held on the topic of co-management by ICRI members during the 28th ICRI General Meeting held in Belize City, Belize in October 2013 revealed that:

- Co-management can be achieved successfully through different arrangements, including (1) the complete delegation of management powers to a single entity such as a Non-Government Organisation (delegated co-management); or (2) the establishment of a decision-making committee which would include representatives from each stakeholder group with government acting a secretariat (collaborative co-management); or (3) the inclusion of stakeholder perspectives in decision-making processes through advisory bodies (consultative co-management).
- Whatever form co-management takes, it is important that co-management arrangements are clearly described in legal instruments to ensure that the identification of roles, responsibilities and powers is clearly understood and agreed by all parties and can be evaluated/audited against.
- For co-management arrangements to be effective, government departments involved should ensure they collaborate closely to avoid contradictions and/or conflicts in co-management arrangements and to streamline relevant regulations and processes. This applies to different levels of governments (i.e. local, regional, federal etc.) and to departments within the same level of governance (e.g. fisheries vs. forestry vs. environment).
- Support of co-management systems, and associated management plans among community members is essential to ensure effective levels of voluntary compliance and to reduce enforcement costs.
- Effective co-management arrangements should be based on existing social networks and stakeholder dynamics, and provide enough flexibility to cater for their evolution over time.

- Co-management arrangements should be supported by targeted capacity building programs (e.g. compliance, monitoring) for co-managers.

For both delegated and collaborative co-management:

- Sound funding arrangements (e.g. trust funds or tailored banking systems) should be established to ensure efficient and financially sustainable co-management.

For delegated co-management:

- The duration of co-management agreements should be long enough to ensure long-term, outcome-focussed management actions and provide a sense of security to co-managers involved.
- The selection of parties involved in co-management by government(s) should be based on sound criteria, including financial sustainability, management expertise, geographic location and credibility.

These findings underpin ICRI's cornerstone principle of 'capacity building', which the ICRI Framework for Action 2013, notes as encouraging: "*reef stewardship through partnerships between governments, communities and the private sector, and encourage community-based management approaches*".

Accordingly, the International Coral Reef Initiative requests its Members to:

Consider the merits of co-management arrangements to manage their marine protected areas or other mechanisms for managing coral reefs and associated ecosystems.

Ensure that these arrangements adequately reflect existing local social constructs and have a perceived high level of legitimacy among communities.

Adopt and implement systems which permit regular review of these arrangements, in order to allow changes which can reflect an adaptive approach to management.

Engage indigenous and local communities and other stakeholders in such reviews.

Support increased capacity and awareness of co-managers to improve or increase stewardship and compliance.

Foster high levels of trust with co-managers and communities to break down barriers, reduce conflicts and facilitate high compliance rates; which in turn increase management success of coral reefs.

Communicate success stories, lessons learnt and best practices in co-management with other reef managers facing similar challenges around the world, including through the ICRIforum and other ICRI media.

APPENDIX 6

RESOLUTION on the 'Continuing Call to Action' and 'Framework for Action 2013'

Adopted on 17 October 2013, at the 28th ICRI General Meeting (Belize City)

Reiterating the four pillars of the 1995 ICRI Call to Action:

1. integrated coastal management;
2. capacity building;
3. research and monitoring, and
4. review.

Recalling with gratitude the enthusiasm, collaboration and vision that was the hallmark of the inaugural meeting of ICRI members in Dumaguete City, Philippines in 1995 that gave rise to the original 'Call to Action' and its companion document the 'Framework for Action';

Noting that both documents were reviewed at the 1st International Tropical Marine Ecosystems Management Symposium (ITMEMS) held in Townville, Australia in 1998;

Recognizing that much has changed and advanced since the ICRI Call to Action was adopted in 1995;

Further recognising that, in spite of those changes, the fundamental tenets and purpose of the "Call to Action" and the "Framework for Action" remain relevant to ICRI's work;

Noting with thanks the work of the ICRI *Ad Hoc* Committee, initiated by France and Samoa in 2010 that reviewed the text of the 'Call to Action' and the 'Framework for Action';

The Membership of the International Coral Reef Initiative (ICRI):

Adopts the '*Continuing Call to Action*' and its associated '*Framework for Action 2013*', both dated October 2013 to guide the work of the ICRI Secretariat and ICRI members in addressing the continuing and emerging challenges facing the sustainable use of coral reefs and related ecosystems.

APPENDIX 7 RESOLUTION on the revised Organisation and Management Procedures 2013

Adopted on 17 October 2013, at the 28th ICRI General Meeting (Belize City)

Recalling the adoption by ICRI members at the 17th General Meeting (Seychelles, 2005) of the initial Organization and Management Procedures for the International Coral Reef Initiative (the Procedures) compiled by the then ICRI co-hosts the United Kingdom and the Seychelles;

Noting the valuable revisions to the Procedures undertaken by the United States/Mexico co-hosts at the 22nd General Meeting (Fort Lauderdale 2008) and further refined at the 23rd General Meeting (Phuket, 2009);

Noting with thanks the work of the ICRI Secretariat, co-hosted by France and Samoa in conjunction with the Principality Monaco in 2010 that sought ICRI members' views on the currency of the Procedures;

Recalling that the operation of ICRI is based on principles of cooperation and consensus;

Wishing to maintain effectiveness and efficiency of ICRI in general and the rotating ICRI Secretariat in particular;

The Membership of the International Coral Reef Initiative (ICRI):

Adopts the revised Organisation and Management Procedures for the International Coral Reef Initiative (the Procedures) dated October 2013 to guide the administration of ICRI.