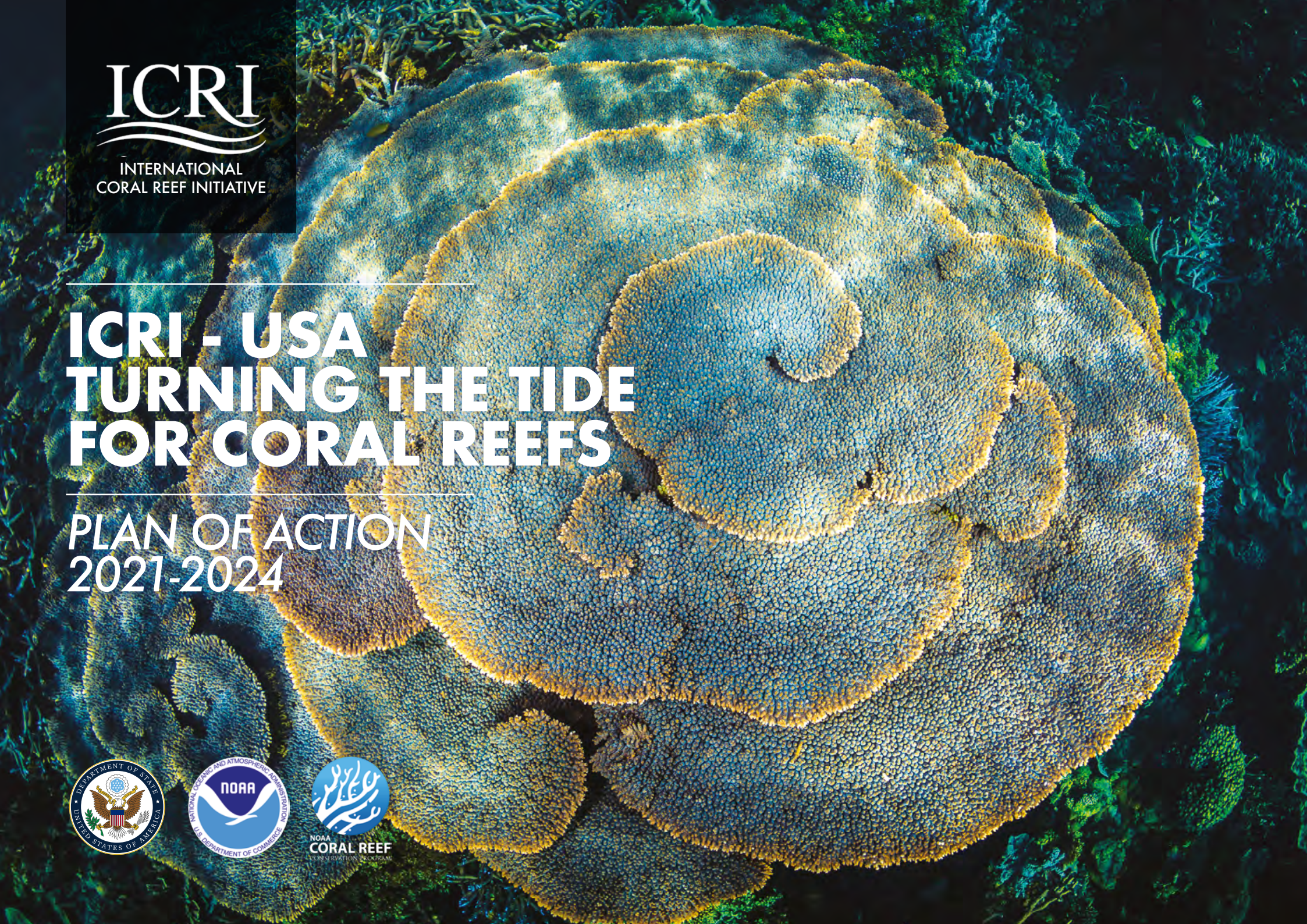

ICRI

INTERNATIONAL
CORAL REEF INITIATIVE

ICRI - USA
TURNING THE TIDE FOR CORAL REEFS

PLAN OF ACTION 2021-2024

NOAA
CORAL REEF
CONSERVATION PROGRAM

ICRI - USA TURNING THE TIDE FOR CORAL REEFS

PLAN OF ACTION 2021-2024

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TABLE OF CONTENTS

TURNING THE TIDE FOR CORAL REEFS
2021 - 2024

The twin crises of climate change and biodiversity loss have brought into stark relief the need for greater collaboration and action at the international level to conserve, manage, and restore coral reefs. Since its founding in 1994, the International Coral Reef Initiative (ICRI) has played a vital role in bringing together those dedicated to the conservation, management, and restoration of coral reefs worldwide: 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. ICRI works to build capacity among governments and policies, encourage best practices for sustainable reef management, and to raise awareness about the status, value and importance of coral reefs worldwide.

Coral reefs and associated ecosystems provide many gifts to humans but the climate crisis and other local anthropogenic stressors, such as land-based pollution, sedimentation, overharvesting, and illegal activities pose direct threats to these ecosystems. Under current trends, we risk losing irreplaceable sources of food, medicine, coastal protection, cultural and spiritual benefits as well as the foundation for numerous livelihoods. Recognizing the window for protecting our coral reef ecosystems is narrow and closing, ICRI members and the Secretariat will work to highlight the critical and urgent need for action at all levels – local, national, regional, and global.

The United States proposes to host ICRI for three years, in line with the tenure of Australia, Indonesia and Monaco. A three-year tenure also provides additional stability to ICRI, particular as ICRI has moved to an annual General Meeting. Therefore, over the course of the next three years, the ICRI Secretariat proposes to maintain progress towards 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). We will work to better incorporate science in our actions, strengthen leadership and emerging technologies, while promoting collaboration and communication among stakeholders. We will reach out to Indigenous Peoples and local communities to ensure their knowledge and the intrinsic values of coral reefs are appropriately reflected in our efforts. New technologies to augment existing monitoring efforts will provide greater understanding of coral reef health and conditions and enable managers to be more responsive to climate change impacts. We will take every opportunity to raise the plight of coral reefs with the broader international community and the actions that can be taken at local, regional, and global levels to secure their protection and recovery.

Together with ICRI members, the Secretariat will take and encourage actions under the following themes:

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THEME 1
PREPARING FOR THE FUTURE: PROMOTING RESILIENT CORAL REEFS

ICRI Desired Outcome 2024:

Actions are taken to understand and promote the resilience of coral reefs and related ecosystems through policies and conservation practices that encourage resilience-based management and recovery of coral reefs worldwide.

1.A - Strengthening policies - supporting conservation and recovery of coral reefs and associated ecosystems through resilience-based management frameworks

The consideration of activities supporting the resilience of reefs and related ecosystems in national, regional and international policies provides an opportunity to ensure their sustainable management and where needed, their recovery. Moreover, the chairmanship of the Secretariat coincides with the UN Decade of Ocean Sciences for Sustainable Development (2021-2030), UN Decade on Ecosystem Restoration (2021-2030), and other relevant international processes, as well as the adoption of an ambitious and robust Global Biodiversity Framework. Global Biodiversity Framework. ICRI will share best practices, encourage and support the development of new or improved policy frameworks grounded in resilience-based management at all relevant scales, and contribute to internationally established goals and targets.

Illustrative activities:

- Review and synthesis of existing resilience-based management plans to support and scale the application of RBM worldwide.
- Develop guidance documents and best practices to promote a methodological approach to advancing and applying RBM to existing coral conservation strategies.
- Promote awareness of RBM worldwide (through its Ad Hoc committee on RBM).
- Promote use of best practices in RBM worldwide.

1.B – Promote capacity building for applying resilience-based management approaches to coral conservation

With the increased awareness of the vulnerability of coral reefs and the vital role that they play in supporting nature and people, there is an urgent need to build coral reef resilience into marine conservation efforts globally, including in global policy frameworks. RBM is forward-looking and cost-effective in the long run. It empowers reef managers and communities to address current and future threats. Taking RBM action now will help secure a future for our valuable coral reefs.

Illustrative activities:

- Support the development of national coral reef management plans taking into account future climate conditions and threats.
- Facilitate the development of educational materials for the private sector, including financial institutions and insurance companies, on RBM, the science, and the role they can play to further reef conservation and management. This includes highlighting those commercial products that are already being used to support RBM of coral reefs.
- Facilitate the development of training materials on sustainable financing, stakeholder analysis, how to access funds for managers and community groups.
- Identify and provide guidance to potential RBM funding sources, including the Global Fund for Coral Reefs (GFCR) and the Global Coral Research & Development Accelerator Platform (CORDAP).
- Identify and promote initiatives for sustainable livelihoods that reduce pressures on coral reef resources, such as conservation of herbivores (Don't Eat Your Parrotfish or How to Maintain a Healthy Reef Ecosystem).
- Translate existing RBM tools and guidance into languages commonly used in countries with coral reef ecosystems.

Ad Hoc Committee on Resilience-Based Management

We propose to continue the work of the Ad Hoc Committee on Resilience-Based Management to further provide support for members to identify and implement resilience-based management actions, assist members to develop the necessary resources that support resilience-based management plans and policies, and continue to share knowledge and expertise. The committee will continue to be chaired by the Great Barrier Reef Marine Park Authority.

Illustrative activities:

- Maintain the ICRI Resilience Hub as a source of relevant information, key contacts, and initiatives on RBM.
- Identify RBM actions that support global biodiversity and sustainability targets, such as in the UN Sustainable Development Goals and the proposed CBD Global Biodiversity Framework.

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- Hold online capacity building workshop to help members understand RBM and how to integrate it into plans and policies.
- Share knowledge and expertise to help members develop the necessary resources to support implementation of resilience-based management.
- Develop closer linkages with the Ad Hoc Committee on Reef Restoration and the Ad Hoc Committee on developing a recommendation for a Post-2020 coral reef target.

1.C – Promote and build capacity for the restoration of resilient coral reefs

Coral reefs are threatened by rapidly deteriorating environmental conditions including warmer ocean temperatures, ocean acidification, poor water quality, and pandemic-scale disease outbreaks. Coral intervention strategies have arisen with a goal of increasing the long-term persistence and resilience of tropical coral reefs and their ecological functions. These interventions include stress-hardening, translocation of non-native coral stocks or species, manipulation of symbiotic partnerships within the coral holobiont, managed selection, genetic modification, and engineering the local environment. Accelerating and sharing innovations to increase the scale and reduce the cost of interventions is paramount if impact is to be achieved within realistic timeframes.

Ad Hoc Committee on Reef Restoration

We propose to continue the work of the Ad Hoc Committee on Reef Restoration to promote best practices in reef restoration, established at the 33rd ICRI General Meeting and extended at the 34th GM. The committee will continue to be chaired by Ian Mcleod, James Cook University and David Souter, Australian Institute of Marine Science.

Illustrative activities:

- Maintain the ICRI Restoration Hub as a source of relevant information, key contacts, and initiatives.
- Update materials based on experiences thus far and conduct mentored trainings using the *Manager's Guide to Coral Reef Restoration Planning and Design* and the report Coral Reef Restoration as a strategy to improve ecosystem services.
- Continue to work on recommendations in the National Academies of Sciences, Engineering and Medicine's *A Decision Framework for Interventions to Increase the Persistence and Resilience of Coral Reefs.*
- Train facilitators to conduct mentored trainings using the *Manager's Guide to Coral Reef Restoration Planning and Design.*
- Develop closer linkages with the Ad Hoc Committee on Resilience-Based Management and the Ad Hoc Committee on developing a recommendation for a Post-2020 coral reef target.

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THEME 2
CORAL REEF SCIENCE AND OCEANOGRAPHY: ADVANCING AND UTILIZING THE LATEST SCIENCE AND TECHNOLOGY

ICRI Desired Outcome 2024:

New technologies and rigorous scientific data are used to report on the status of coral reefs worldwide and to guide science-based management and policies.

2.A – Coral monitoring capacity building

The United Nations Decade of Ocean Science for Sustainable Development provides a foundation for ocean science to support nations in their 2030 Agenda for Sustainable Development goals (13 and 14). Baselines and continued information on the status of coral reefs are required to make management and policy decisions for the future.

The US National Oceanic and Atmospheric Administration (NOAA) has expanded its monitoring program to use aerial imaging and artificial intelligence (AI). The computer recognition software can now identify areas of live coral from photographs taken from airplanes. This in combination with traditional satellite imagery and survey data has expanded the spatial extent and resolution of coral reef mapping methods.

Illustrative activities:

- Conduct cross-ICRI workshop on the use of 3D imaging technologies such as photogrammetry (e.g., Structure-from-Motion) and other coral monitoring technology paired with artificial intelligence platforms to provide more consistency in coral monitoring data acquisition moving forward.
- Support development of guidance for assessing coral reef management effectiveness that incorporates resilience principles.

2.B – The Global Coral Reef Monitoring Network (GCRMN)

Created by ICRI members in 1995, GCRMN continues to report on the world's coral reefs under the Plans of Action for each secretariat. The Australian Institute of Marine Science (AIMS) will continue to host this network comprised of key stakeholders to establish activities to develop and implement governance plans and communication of scientific information and management policies.

As with past practice, the United States, as the ICRI host, will chair the GCRMN Steering Committee. Following the release of the *Status of Coral Reefs of the World 2020* report the focus of the GCRMN will shift to capacity development across the network. Training in coral monitoring, data collection, analysis, management, and sharing has emerged as a priority among a number of ICRI members.

This is consistent with experiences gained in developing the global data set for the GCRMN *Status of Coral Reefs of the World 2020* report, which also identified a need to build greater capability and capacity for socio-economic monitoring of coral reefs.

Illustrative activities:

- The GCRMN intends to establish task forces of experts to develop guidelines and protocols that can be implemented across the network to build capability and capacity in monitoring, data collection, analysis, management and sharing of coral reefs and associated ecosystems.
- The GCRMN will explore developing regular reporting mechanisms through task forces, regional networks and data contributors to enable annual or biennial reporting on the status of coral reefs of the world. This regular reporting will allow for monitoring, reporting and evaluation of commitments towards 2030.

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THEME 3
LOCAL THREAT REDUCTION: INTEGRATING RESPONSE PLANNING FRAMEWORKS

ICRI Desired Outcome 2024:

Various coral reef response plans are reviewed and integrated into a common framework to simplify and facilitate response for local coral managers.

For more than a decade, a common strategy for coral managers has been to develop response plans for the various threats plaguing corals. With the advent of coral bleaching response plans 10+ years ago, many managers have also developed response plans for other threats including unsustainable and destructive fishing, land-based pollution, disease, storm damage, crown of thorns (and other invasive species) outbreaks, and vessel groundings. Typically, each of these plans is a standalone document even though response efforts are often led by the same agency or supported by the same groups of people.

In scoping work conducted by the Reef Resilience Network (RRN) in 2020 on the need for storm response planning in Micronesia, managers from Commonwealth of the Northern Mariana Islands, Guam, and the Federated States of Micronesia all shared similar concerns at the amount of separate response plans being developed and asked for a process to integrate response planning efforts. This need was also documented with managers in several UNESCO world heritage sites that RRN supports through the Resilient Reefs Initiative. To meet this global priority shared by managers, we propose to work with the RRN in the development of a new online course in Integrated Response Planning.

Illustrative activities:

- Consolidate and review existing coral reef response plans including, but not limited to, coral disease, vessel groundings, bleaching, invasive species outbreaks (lionfish and COTS), large storm events: for commonalities in response actions and responsibilities to create a unified coral response framework for managers.

THEME 4
DIVERSITY AND INCLUSION: EXPANDING THE CORAL REEF COMMUNITY

ICRI Desired Outcome 2024:

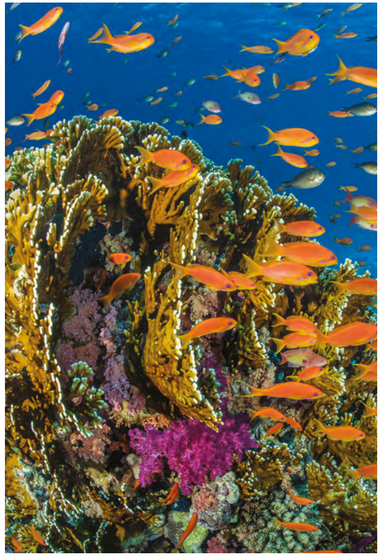
The coral reef community is broadened to include underrepresented voices, including the Indigenous, local, and youth communities.

4.A - Connect with youth audiences

More than half of the global population is now under 30, with many countries struggling to educate their growing numbers of youth. According to the UN World Programme of Action on Youth, children and young people are particularly vulnerable to climate impacts, especially when it comes to food security and health. Young people can be informed and motivated to protect Nature but need to be empowered to do so.

Illustrative activities:

- Develop outreach materials appropriate for targeted audiences that inspire change.



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4.B - Collaborate with indigenous people and seek to incorporate indigenous and local knowledge into policies and management plans

ICRI will work to engage Indigenous and local community leaders, including to explore opportunities and approaches to incorporate indigenous and local knowledge (ILK) in management approaches, and will promote efforts to ensure the effective participation of Indigenous Peoples and local communities in decision-making at all levels. The rights of the knowledge holders must be respected and protected in these endeavors.

The first step in this process must be listening. ICRI will work to involve communities and learn from their wisdom, where there is interest and consent to be involved.

Illustrative activities:

- Listening sessions with indigenous and local community leaders and knowledge holders with a view to developing, with the knowledge holders' permission, an inventory of best practices and knowledge as well as to create guidelines and suggestions for how to solicit Indigenous and local community knowledge.
- Additional activities will be designed collaboratively with communities.

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ABOUT ICRI

The International Coral Reef Initiative (ICRI) is a global partnership between Nations and organizations that strives to preserve coral reefs and related ecosystems around the world. Although the Initiative's decisions are not binding on its members, its actions have been pivotal in continuing to highlight the importance of coral reefs and related ecosystems on a global scale including environmental sustainability, food security and social and cultural wellbeing. The work of ICRI is regularly acknowledged by the United Nations and within international policy, highlighting the Initiative's important cooperation, collaboration, and advocacy role within the international arena.

ICRI Members include a mix of governments, non-governmental organisations, and international organisations. The Initiative was founded in 1994 by Australia, France, Japan, Jamaica, the Philippines, Sweden, the United Kingdom, and the United States of America. To date, ICRI has grown to a network of over 90 members, including 45 countries who are custodians of over 75% of the world's coral reefs.

ICRI continues to advocate for the protection and sustainable use of coral reefs and associated ecosystems, promoting effective and adaptable real-world solutions to the coral reef crisis. The plan of action and related initiatives are implemented through its members, Ad Hoc Committees and its operational network: the Global Coral Reef Monitoring Network (GCRMN).

As an operational network of ICRI, the GCRMN amasses a global network of scientists, managers and organisations that monitor the condition of coral reefs throughout the world. Read more about GCRMN at www.gcrmn.net

The ICRI Secretariat is hosted for a determined term by State members, on a voluntary basis. This Plan of Action 2021 – 2024, Turning the Tide for Coral Reefs, is implemented under the United States of America Secretariat (for the third time), marking the 13th Secretariat since ICRI's inception.

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