

Annual 2023 Report



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development



Ocean Decade
Collaborative Center
Northeast Pacific

Tula
TULA FOUNDATION

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From the Executive Director

As urgent challenges continue to face people and the ocean they depend on, effective collaboration is needed to create innovative solutions that center on community priorities. Innovation and solutions in the public interest are the cornerstone of the Tula Foundation. With the launch of the UN Decade of Ocean Science for Sustainable Development (“Ocean Decade”) in 2021, the Tula Foundation saw an opportunity to expand collaboration and transform the way we work together to solve the challenges facing the ocean and people along the coastal margin - from Alaska to California, and around the world. In June 2022 Tula launched the Ocean Decade Collaborative Center for the Northeast Pacific as a contribution to the Ocean Decade.

At the close of our official first year in operation, the Ocean Decade Collaborative Center for the NE Pacific team is taking a moment to reflect on our work and the results of the implementation of the Ocean Decade in our region. Our greatest accomplishment over the past year was attracting an amazing team of people with a diversity of skills and strengths. This talented group enriched our ability as an organization to enhance collaboration and coordination across the region, engage in meaningful conversations and relationship building, and advance dialogue to identify key gaps, barriers, and opportunities across a broad array of topics of interest to partners and communities across the NE Pacific.

This report describes our role in the region and the Ocean Decade, highlighting the expanding collaborations and networks we have built over this year, and tells the story of our work as connectors, coordinators, and communicators. It is a balancing act to catalyze and support the coordination of many Ocean Decade programs and projects and also meet the needs of a diverse set of actors in our region, including Canadian, US, and Indigenous governments, industry members, NGOs, academic researchers, and early career professionals across an array of issues. We are proud of our accomplishments and remain excited about and committed to supporting co-designed and co-produced knowledge towards collaborative solutions to the challenges facing the ocean and people in our diverse region throughout the Ocean Decade.



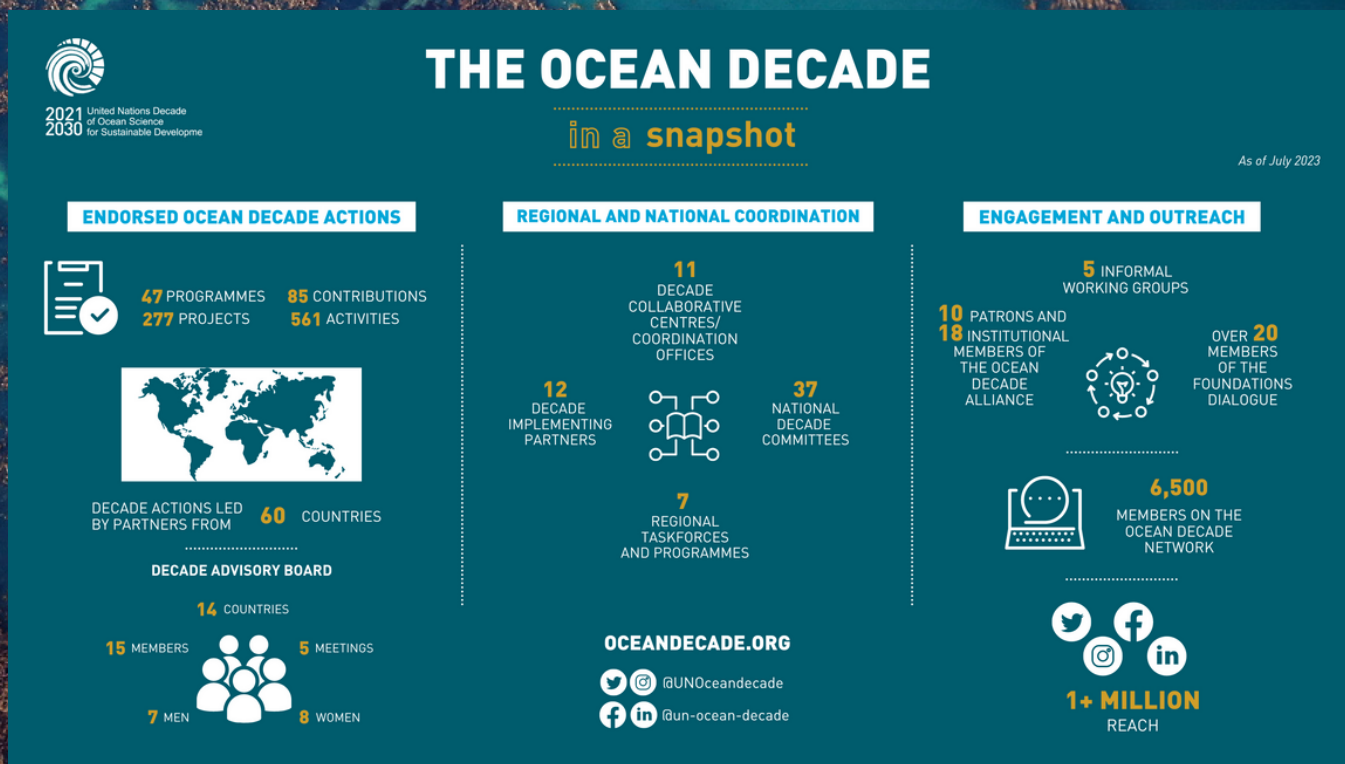
Rebecca Martone, PhD



UN Decade of Ocean Science

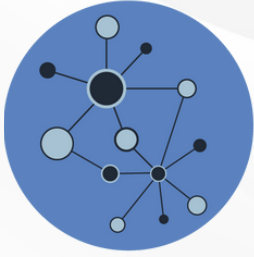
Proclaimed in 2017 by the United Nations General Assembly, the UN Decade of Ocean Science for Sustainable Development (2021-2030) ('the Ocean Decade') seeks to stimulate ocean science and knowledge generation to reverse the decline of the state of the ocean system and catalyze new opportunities for sustainable development of this massive marine ecosystem. The vision of the Ocean Decade is 'the science we need for the ocean we want'.

The Ocean Decade provides a convening framework for scientists and stakeholders from diverse sectors to develop the scientific knowledge and the partnerships needed to accelerate and harness advances in ocean science to achieve a better understanding of the ocean system, and deliver science-based solutions to achieve the 2030 Agenda. The UN General Assembly mandated UNESCO's Intergovernmental Oceanographic Commission (IOC) to coordinate the preparations and implementation of the Decade.



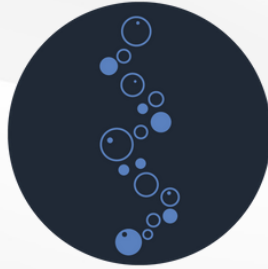
Our Role in the Ocean Decade

Connect



Cultivate connections and exchanges across communities, knowledge systems, and boundaries.

Catalyze



Identify ocean knowledge gaps and opportunities to catalyze actions centered on community needs.

Share



Share the stories of ocean actions, raising awareness and highlighting diverse work in the Northeast Pacific.

Mobilize



Mobilize knowledge and resources to accelerate transformative solutions.

Our mission is to support and facilitate co-designed, and co-produced knowledge for collaborative solutions to ocean challenges in the Northeast Pacific region.



The Decade Collaborative Center for the Northeast Pacific along with 10 other regional and thematic decade collaborative centers, Decade Implementing Partners, Regional Taskforces and National Decade Committees support and inform UN Decade Actions against a complex landscape.

The mandate region of the Northeast Pacific Ocean (NEPO) covered by our DCC stretches from Gulf of Alaska down the coast to Baja California, from the coastal mountain ranges and rivers out to the deep ocean.

Principles

- Cultivate productive and respectful relationships
- Facilitate diversity, inclusion, justice, and equity in ocean science, governance, and sustainable development
- Listen to and serve the needs of multiple rights-holders, sectors, and stakeholders
- Incorporate Reconciliation (UNDRIP) and foster Indigenous leadership and stewardship
- Enhance capacity, access to, and impacts of ocean science and knowledge
- Nurture innovative, evidence-based solutions that serve the needs of communities and weave in multiple ways of knowing
- Promote a culture of learning, reflection, and growth
- Foster ocean literacy and people's connection to the ocean



Building the Collaborative Center

Over our first year we have established a strong staff team with diverse expertise. Starting from a team of three, the DCC has grown to a team of 8. Members of our team come to the DCC with varied expertise, interests and skill sets essential to, and reflected in, our work.

The DCC is supported by the Tula Foundation, we work closely with the Foundation's administrative team, as well as with the skilled research, scientific and media teams of the Hakai Institute.



Rebecca Martone

Executive Director (ED), Marine and coastal ecology, coastal and marine planning and management, knowledge mobilization, community engagement.



Naomi Boon

Ocean observing deep ocean observing, project management, Early Career Ocean Professionals (ECOP) programming. Cross-appointed as CIOOS Project Manager.



Kathryn Sheps

Effective group facilitation, workshop design, climate change and blue carbon, codesign, community engagement.



Colleen Kellogg

Ocean observing, molecular ecology, plankton, harmful algal blooms, coastal resilience. Cross-appointed as Research Scientist at Hakai Institute.



Romney McPhie

Protecting and restoring biodiversity, especially species at risk, participatory science, Art, Cross-appointed as Science Coordinator at Hakai Institute.



Oriana Smy

Communications lead, facilitation, marine pollution and debris specialist. Graduate student in Anthropology at UBC.



Nicole Smith

Cultural Heritage Initiatives, climate change, traditional mariculture. Cross appointed as Archaeologist with Paleoecology and Cultural Heritage at Hakai Institute.



Nina Nichols

Climate Ready BC Seafood Programme, program management, fisheries and aquaculture, food security.

Advisory Committee

The DCC has appointed an advisory committee to provide guidance to the Executive Director and the DCC staff team. This diverse committee is representative not only of the region in which we work, but also has expertise in diverse aspects of ocean science, community engagement, and policy. In this first year, the focus of the advisory committee was on understanding the Ocean Decade and its systems of work, advising the DCC team as we set strategic direction and goals, and helping to cement a vision statement for the DCC.



Building our Network

The Ocean Decade is a complex interlocking set of Decade Actions and actors. Our mandate, supporting Decade Actions in our region, catalyzing interest in developing new Decade Actions, and sharing the results, developments, and opportunities emerging from Decade-endorsed work in our region, requires a strong communications and engagement portfolio. The DCC has launched a number of strategies to reach diverse audiences across our region:



Website

16,000+ visits from over 6000 unique visitors



Newsletter

Over 1000 unique subscribers



Social Media

450 new Twitter followers and 150+ followers on LinkedIn



Ocean Decade Network

Community of Practice Launched
144 Members

From June 2022 to June 2023 our DCC staff participated in...

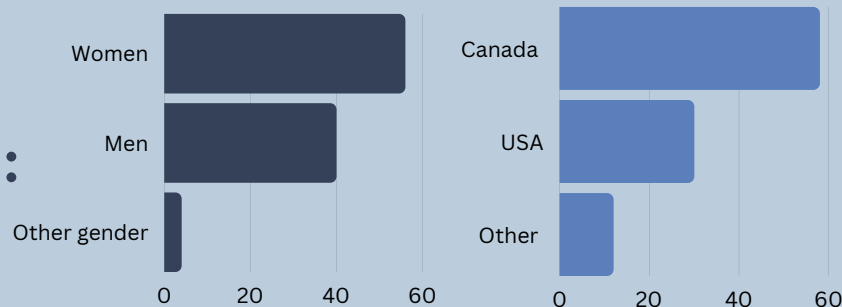


253 events



reaching close to 10,000 people

Participant breakdown:



Supporting & Catalyzing Decade Actions

A major focus of the DCC's mandate is to support Decade Actions in our region. We do this by convening people and groups to identify gaps and opportunities, and by supporting various actors to catalyze new Decade Actions to meet the region's needs through equitable and co-designed solutions.

We support these initiatives by helping to ensure that local and community voices, expertise, and needs are included and understood in regional and global conversations and initiatives on a number of topics. We also strive to introduce best practices, innovations, technologies, and techniques that may be applied to local and regional needs as appropriate. The following pages showcase some examples of our work supporting Decade Actions over the last year.



Regional Themes

To ensure that our work is focused on the needs of coastal communities in our region, the DCC undertook an outreach and engagement project to connect with and better understand the plans of Endorsed Decade Actions, starting with the 48 Programmes Endorsed as of summer of 2022. We sorted these endorsed Decade Programmes into groupings we call “Regional Themes”. This categorization enables our staff team to dive deep into topic areas, and connect the dots between Decade Programmes and Projects, as well as the experts, knowledge-holders, stewards, and communities in our region that might engage with them.



Coastal Hazards and Resilience



Cultural Heritage



Deep Ocean Observing and Management



Fisheries and Food Security



Marine Pollution



Ocean Literacy and Behavior Change



Ocean Observing



Ocean Solutions to Climate Change



Protecting, Monitoring, and Restoring Marine Biodiversity



Featured Activities: Decade Dialogues

In early 2023, the DCC launched a new webinar series intended to convene conversations among ocean scientists, practitioners, and community members in the Northeast Pacific region, highlighting timely topics and new advances in ocean science through the lens of the UN Decade of Ocean Science and grounded in the interests and priorities of coastal communities. Named 'Decade Dialogues', these are online collaborative conversations hosted virtually by the Tula Foundation/Decade Collaborative Center team. These sessions engage participants in dialogue on diverse topics while also serving to build the DCC's networks and expose ocean professionals to critical perspectives.

We have hosted three Decade Dialogues to date, covering diverse topics including Deglaciation, Kelp Farming, and the use of eDNA to inform stewardship in the Northeast Pacific region. Recordings for these events are available as resources on our website.

In partnership with ECOP (Early Career Ocean Professionals) Canada, we have hosted ECOP focused sessions immediately following each 1-hour webinar. These sessions are facilitated by an Early Career Ocean Professional with some expertise on the selected topic. They facilitate a conversation with the invited speakers to discuss topics such as career paths, capacity development, science and knowledge needed for next generation solutions, and climate anxiety and solutions.

We plan to host a minimum of 3 Decade Dialogues in the Fall of 2023, and expand our ECOP sessions to the newly launched US node of the ECOP Programme. For details on upcoming sessions, visit our website.



March 1st, 2023

**From Icefields to The Ocean:
Predicting Deglaciation for
Coastal Resilience**



April 11th, 2023

**Kelp Farming: Promises,
Pitfalls, and What We Still
Don't Know**

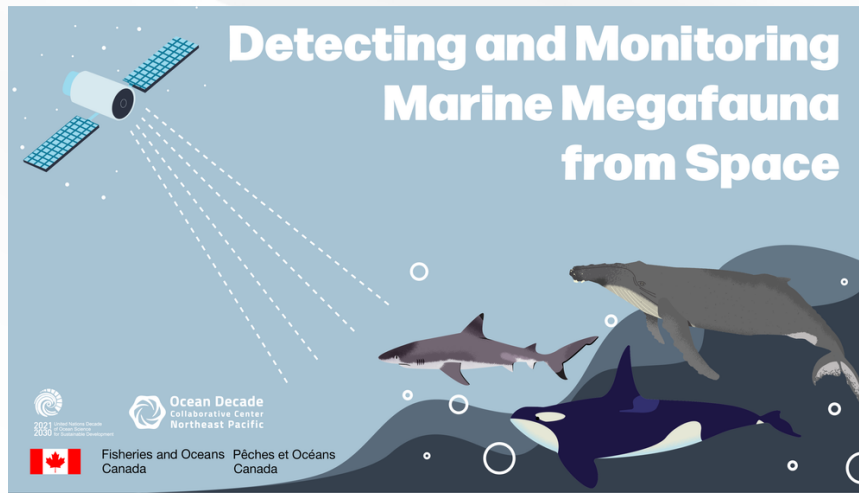


May 17th, 2023

**Using Environmental DNA
for Monitoring Stewardship
in the NE Pacific**



Detecting and Monitoring Marine Megafauna from Space



Novel technologies for detecting and monitoring large-bodied animals – or ‘megafauna’ – are becoming increasingly important for assessing presence, abundance, density, distribution, and health status, and for mitigating threats to at-risk species. To explore the potential development and applications of this innovative emerging technology in the Northeast Pacific, with a particular focus on the Pacific coast of Canada, DFO Canada in collaboration with the Tula Foundation’s DCC NEP hosted a virtual knowledge sharing webinar and workshop, setting the stage for future partnerships and collaborations to detect, monitor, and forecast marine megafauna using space-based data and advanced analysis methods.

Early Career Professionals Programme (ECOP)

The Tula Foundation is the administrative home of the ECOP Canada program, part of the UN Decade Early Career Ocean Professional Programme, a capacity building and exchange program intended to provide leadership opportunities and career development for the next generation of ocean practitioners. ECOPs are self-identified ocean practitioners in their first 10 years in the field. The DCC is working closely with the ECOP nodes in Canada and the US to support the development of training and workshops specifically for ECOPs, including a proposed training on research data management.



Basin-Scale Events to Coastal Impacts



BECI (Basin-Scale Events to Coastal Impacts) was among the first endorsed Decade Projects active in the NE Pacific region. This project intends to link increasingly extreme ocean basin-scale events (such as marine heatwaves) to their impacts on socio-ecological and coastal systems in the NE Pacific, with a special interest in managing key fisheries species (e.g. salmon). BECI is administered by the North Pacific Marine Science Organization (PICES) and attached to the SMART-NET endorsed Decade Programme. The DCC supported the BECI secretariat by helping organize and convene participants for the BECI Science and Implementation Plan development workshops. The DCC also worked to connect the BECI project with other endorsed Decade Actions from around the world, in order to share key data and research needs and identify shared priorities.

International Marine Protected Area Conference (IMPAC) 5

At IMPAC5 the DCC co-hosted a conference session with endorsed Programmes Marine Life 2030 and MPAs as Sentinels, and other partners including Lenfest Ocean Program, on Co-Designing Ocean Science To Inform Decision Making: Sharing Insights And Approaches. An international group of participants with experience in managing Marine Protected Areas (MPAs) and Indigenous Protected and Conserved Areas (IPCAs) shared best practices and lessons learned, and discussed the ocean knowledge and information needs important for siting, monitoring, and managing MPAs and IPCAs. Participants joined this session from Mexico, Chile, Canada, the Costa Rica, and Europe both in coastal oceans and high seas. A publication describing this session and the outcomes co-created in dialogue with participants is forthcoming.



Looking Ahead

The DCC's second year of work is shaping up to be another productive one focused on expanding collaboration with a number of partners, both in our region and internationally. We plan on hosting six more Decade Dialogue events over the course of the next year, working to support the Decade Actions in our region and share their work.

We will continue to advance our work at conferences and gatherings both regionally, nationally, and internationally, with plans to engage groups in developing a shared understanding of the underpinnings for successful, equitable co-design and co-development of knowledge at the North Pacific Marine Science Organization (PICES) 2023 conference in Seattle as well as the Ocean Decade Conference in Barcelona in 2024.



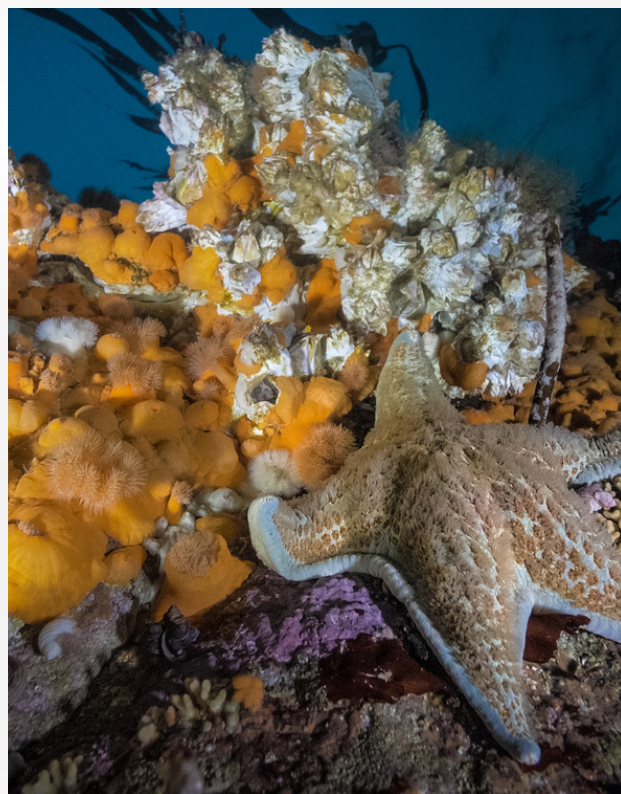
Cultural Heritage and Climate Change



Just as natural resources, biodiversity, public health and infrastructure are at risk from climate change, so too is cultural heritage. Flooding, fires, erosion, extreme weather events, and sea level rise all put the tangible and intangible cultural heritage of our coastal zones at risk. In late 2023, the DCC will convene a workshop with ocean and climate practitioners, cultural heritage practitioners, climate scientists, and government workers in the NE Pacific region to explore the impacts of climate change on cultural heritage. The goal of the workshop is to open a conversation on a topic that has received little focused attention in our region, and to identify needs, gaps and opportunities around this topic.

Environmental DNA

The use of environmental DNA (eDNA) is becoming increasingly popular across the NE Pacific Region. eDNA approaches are providing rapid, accurate, and cost-effective means of taxonomically identifying marine organisms, and are being used by scientists as well as trained community members to build baseline datasets. The incorporation of eDNA-approaches into environmental management applications continues to evolve. Applications of interest to coastal and Indigenous communities in the NE Pacific include MPA biodiversity monitoring, invasive species detection, and fisheries management, among others. Along with the endorsed Ocean Decade Programme, OBON, and the eDNA Collaborative, the DCC will be co-hosting a webinar and workshop exploring the applications of eDNA to marine conservations, management, and stewardship practices in the Spring of 2024.



Engaging in Vision 2030 and Ocean Decade Conference 2024



As part of the preparation for the first Ocean Decade conference to be held in Barcelona in 2024, the Ocean Decade is engaging global experts to define key metrics towards a research agenda outlining what could and should be accomplished to meet the Ocean Decade Challenges. The DCC team is participating in 3 of these global working groups: Challenge 1, Understand and Beat Marine Pollution, Challenge 2, Protect and Conserve Marine Biodiversity and Challenge 10: Ocean Literacy. We are keen to contribute our expertise and that of the region's ocean knowledge holders to help define a research agenda for the world's ocean by 2030.

Climate Ready B.C. Seafood Program

The DCC-NEP has been asked to lead the Climate Ready B.C. Seafood Program, a \$1.7 million fund aimed at supporting actions from the B.C. Ocean Acidification and Hypoxia Action Plan (BC OAH). This endorsed project aims to support coastal communities in understanding, mitigating, and adapting to the impacts of climate change on B.C.'s oceans and coasts. Over the next two years, the Climate Ready B.C. Seafood Program will deliver targeted funding across four program areas outlined in the BC OAH Action Plan:

- Collaboration, knowledge transfer, awareness, and understanding related to Ocean acidification/hypoxia (OAH)
- Scientific understanding of OAH
- Marine Carbon Removal Technologies
- OAH Mitigation and Adaptation Strategies

The Request for Proposals was launched August 22, 2023 for decisions and awards made in January 2024.



Acknowledgements

From the coast to the deep water and across boundaries and borders, we acknowledge the traditional, ancestral, and unceded territories of all the Indigenous Peoples that have called the Northeast Pacific region home since time immemorial.

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We would like to thank the following partners and supporters of our work: Hakai Institute, Hakai Magazine, Tula Foundation, especially the administrative team that enables our work, our advisors, both formal and informal, the Decade Coordinating Unit at IOC-UNESCO, the Decade Coordinating Offices with whom we work, and all of the participants who have joined us in meetings, dialogues and events.

Special thanks and gratitude to Kate Henderson for being an instrumental part of our first year.

We envision a Northeast Pacific Ocean Region where ecosystems and coastal communities are thriving, connected, and resilient, now and into the future. The relationships, knowledge, and caretaking of the Northeast Pacific Ocean include diverse worldviews, and are informed by ancestral and lived experience, collaborative learning, and equitable partnerships.

