

Central Coast Indigenous Resource Alliance



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Update from CCIRA

The past several months have been exciting and eventful, with much to report on stewardship efforts in Central Coast First Nations.

Along with planning partners across the Northern Shelf Bioregion, Central Coast stewardship leaders have made great headway on long-term collaborative planning efforts to create a Marine Protected Areas network (page 6).

Work is underway on the National Marine Conservation Area Reserve Feasibility Assessment (page 8), with CCIRA project manager Jean-Phillip Sargeant in his new role coordinating Central Coast input and supporting Nations' Steering Committee members.

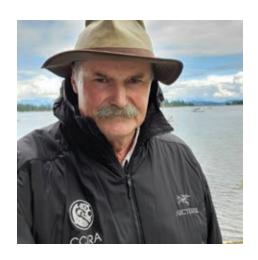
After securing new funding from BC Salmon Restoration and Innovation Fund, Central Coast Nations have brought on Megan Adams as the new CCIRA Salmon Programs Coordinator to help coordinate two new projects aimed at understanding and rebuilding declining salmon populations across the Central Coast (page 10). Megan joins a growing team of CCIRA folks supporting Central Coast Nations stewardship work, including Kyle Wilson, CCIRA's Applied Quantitative Biologist, who started in 2021 and supports our salmon and rockfish files among other fisheries management topics.

In this newsletter, we also provide an update on ongoing work to improve First Nations access to Dungeness crab for food fisheries (page 13), as well as collaborative efforts to enhance and expand marine response planning throughout the Central Coast (page 14).

Please join us in welcoming our new staff, who have already hit the ground running in support of Central Coast stewardship efforts!

Respectfully,

Rich Chapple CCIRA President





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Welcoming New Staff to the Team!

Megan Adams

As Salmon Programs Coordinator, Megan supports Central Coast Nations in multiple salmon initiatives, including habitat restoration, catch monitoring, and expanding knowledge of genetic baselines in the region. Prior to this role, Megan worked with Central Coast Nations and other partners to assess cumulative effects on salmon and other key species in the Central Coast. She also spent much of the past decade working on a grizzly and black bear monitoring program that spans the region, including monitoring bears and salmon alongside stewardship staff in Wuikinuxv territory.



Geneviève Reynolds

As CCIRA's Monitoring Coordinator, Geneviève Reynolds will be supporting the Central Coast Guardian Watchmen and Coordinators to build capacity for implementing marine monitoring and compliance programs, data management, collaborating with Coastal Stewardship Network, and participating on the MaPP regional monitoring subcommittees. Previously, Geneviève's extensive research work included a partnership with the Heiltsuk Nation to investigate the ecology of Pacific yew on ancestral village sites of the Central Coast.



Kyle Wilson

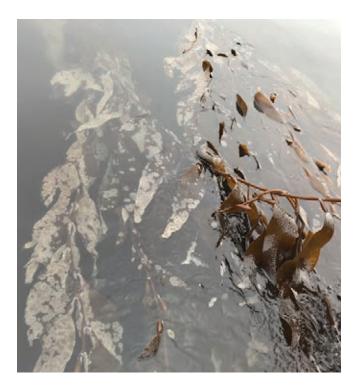
Kyle started in 2021 as CCIRA's Applied Quantitative Ecologist, working largely on Central Coast's longest standing fisheries research program on rockfish abundance as informing marine conservation planning, as well as the Central Coast Salmon Catch Monitoring Program. Kyle brings significant experience and expertise in building and managing fisheries research programs, collaborating with First Nations and DFO, and is well situated to support the Nations' strategic science work to advance fisheries reconciliation. Kyle's past research efforts aimed to inform sustainable co-management plans by understanding the social and ecological processes that shape the resilience of iconic fisheries along the Pacific Coast.





CCIRA News and Publications

We continue to work with scientists, stewardship staff and other partners on new research to support effective resource management throughout the Central Coast. Below is a summary of some of our latest reports and publications. To download the reports, visit: ccira.ca/reports



Hidden Impacts of Climate Change on Canada's Undersea Forests

Collaborative research between Central Coast First Nations and Simon Fraser University examined how the amount and quality of kelp responds to the combined effects of environmental factors, herbivory by crabs and snails, and outbreaks of bryozoans (a crust-forming invertebrate). The work was funded by the Pacific Institute for Climate Solutions and uplifted by knowledge and guidance from Sandie Hankewich (Kitasoo Xai'xais Fisheries) and Mike Reid, Desiree Lawson, and Michael Vegh (Heiltsuk Nation). The results highlight that harvesting kelp at locally cooler, wave-exposed areas can help maintain sustainable harvests as ocean temperatures continue to rise.

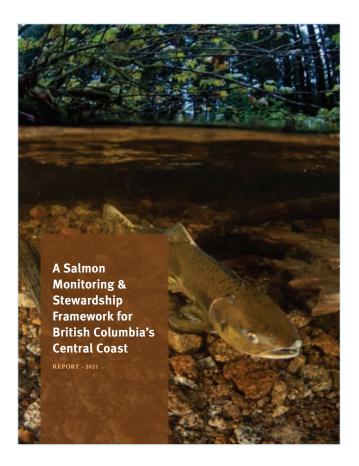


Biological Hotspots Along the Central Coast

Collaborative research between CCIRA and DFO scientists identifies biological hotspots—places with outstanding biodiversity or ecological features—along the Central Coast. Published in the journal *Scientific Reports*, the analyses contribute new and essential information to the ongoing design of a network of marine protected areas (MPAs) for Canada's Northern Shelf Bioregion.



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Salmon Monitoring Report for BC's Central Coast

With contributions from local scientists, fisheries managers and independent salmon experts, this report — a collaborative effort from CCIRA, the Heiltsuk, Kitasoo Xai'xais, Nuxalk, and Wuikinuxv First Nations, the Pacific Salmon Foundation, DFO and Charter Patrolmen — identifies more than 200 tangible actions to improve local salmon monitoring efforts, including hiring seasonal staff, creating salmon monitoring internships for local youth, utilizing new technologies for escapement monitoring and expanding First Nations led monitoring of recreational fisheries.



Kitasoo Xai'xais Declares Gitdisdzu Lugyeks (Kitasu Bay) a Marine Protected Area

The Kitasoo Xai'xais Nation has declared a new Marine Protected Area (MPA) in Gitdisdzu Lugyeks (Kitasu Bay), a unique and ecologically rich area that has long been a place of great cultural, medicinal and nutritional importance for community members. The MPA Declaration was made by Hereditary Chiefs of the Kitasoo Xai'xais Nation, with support from the elected Chief and Council, and in accordance with Kitasoo Xai'xais laws, customs, principles and values. The 33.5-square-kilometre MPA will act as a permanent safe haven for fish stocks and other marine life, ensuring the region's richness and abundance is preserved into the future.





Creating a Marine Protected Areas Network on the Central Coast

After years of community engagement and gathering the best available science and traditional ecological knowledge, our Nations have completed a draft network action plan that will guide implementation of a Marine Protected Areas (MPA) network for the Northern Shelf Bioregion, which includes the Central Coast and all coastal waters from Campbell River to Alaska.

As co-leaders planning for the Central Coast sub-region, the Heiltsuk, Kitasoo Xai'xais, Nuxalk and Wuikinuxv Nations are are working with federal and BC governments, and 13 other First Nations, in collaborative efforts to establish the MPA network. (The graphic on page 7 shows how the MPA network fits within broader marine planning goals.)

Benefits of MPAs

These MPAs will preserve biodiversity and healthy marine ecosystems, while supporting sustainable fisheries and long-term food security for our communities. They will protect important cultural and ecological areas by restricting industrial and other activities, such as commercial and recreational fishing, aquaculture and forestry, allowing stressed ecosystems to recover over time.

"MPA networks are essential because they help to rebuild marine ecosystems by protecting interconnected areas that support a diversity of marine species," says Gord McGee, CCIRA's Marine Planner. "This includes protecting juvenile rearing habitats, larval sources and dispersal corridors for culturally important or depleted species."

Gord says these protected areas have already proven beneficial in other temperate coast countries around the world, with MPAs having worked well in New Zealand, South Africa, Australia and the United States. "Beyond the obvious benefits of protecting marine species and ecosystems," he adds, "MPAs have been shown to benefit local fisheries as well, and all evidence suggests they would yield the same results here on the Central Coast." He says MPAs can also provide an ecological buffer against climate change impacts and a baseline of unfished populations, informing better fisheries management decisions.

Central Coast Nations' marine use coordinators and marine planners have spent a great deal of time assessing how MPAs will benefit coastal communities, as well as the important cultural and ecological factors that determine which species need protection, and in what areas. For example, collaborative research undertaken by CCIRA and other partners, which merged a scientific approach with local Indigenous knowledge, helped to identify important "biological hotspots" throughout the Central Coast, which, if protected through MPAs, would maximize biodiversity conservation.

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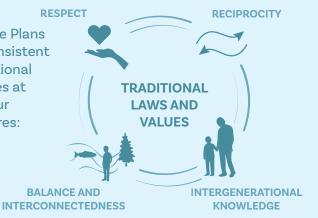


Marine Stewardship in the Central Coast of British Columbia

For thousands of years, we the Heiltsuk, Kitasoo Xai'xais, Nuxalk, Wuikinuxv Nations have been caretakers, responsible for maintaining the health of our local oceans. When we take care of our marine ecosystems first, they take care of us, but increasing pressures from climate change and overfishing are threatening the future of our coasts and communities. We have developed Marine Use Plans for our territories that are critical to protect biodiversity and ecologically important areas.

NUMBER OF FISH TIME

Our Marine Use Plans (MUPs) are consistent with our traditional laws and values at the heart of our Nations' cultures:



A well-designed and enforced Marine Protected Area (MPA) Network that is built from our Marine Use Plans in Partnership with 13 other First Nations, Canada and British Columbia, can help mitigate these impacts, benefiting both Indigenous and non-Indigenous peoples.







The proposed MPA Network has been developed after years of local community and stakeholder engagement, and by combining Indigenous, local, and scientific knowledge. INDIGENOUS KNOWLEDGE

LOCAL KNOWLEDGE

SCIENTIFIC KNOWLEDGE

LOCAL COMMUNITY
AND STAKEHOLDER
ENGAGEMENT



OLANING AND REINOR

MPAs along with integrated fisheries management in collaboration with First Nations, will help protect our coast, communities, and economy for everyone—now and into the future:



REBUILD FISH
POPULATIONS AND
ECOSYSTEMS



CREATE GREATER RESILIENCE TO CLIMATE CHANGE



LONG-TERM
ECONOMIC STABILITY
WITH BENEFITS FOR
COMMUNITIES











For more information, please visit https://www.ccira.ca/marine-protected-areas/



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Planning Based on Traditional Knowledge

The proposed MPA network is strongly informed by the protected areas identified in the Central Coast First Nations Marine Use Plan, which was completed collectively by the Nations in 2011. Proposed MPAs were also assessed extensively during community-based marine use planning committees, which involved elders, elected councillors, hereditary chiefs, local fishers, as well as marine biologists and reps from federal and provincial agencies.

In developing a rationale for creating MPAs, Central Coast leaders identified a range of long-term benefits for local communities. These include restoring threatened or declining species, such as abalone, eulachon, rockfish, herring, salmon and others; enhancing local eco-tourism and conservation initiatives; reducing overfishing, especially in culturally

important harvesting areas; supporting sustainable coastal fisheries from species moving into unprotected areas; and increasing ecosystem resilience in the face of climate change.

The draft network action plan still requires a public review process and endorsement by the 17 Partner Nations, Canada and BC. This will be aided by ongoing community engagement and consultation, along with a campaign to increase awareness about the crucial importance of MPAs. Once the network action plan is completed and endorsed, the aim is to work toward full network implementation as early as 2025.

As a key pillar supporting our Nations' ecosystem-based management approach, the MPAs will be a major part of sustainable marine management, responsible fisheries and cultural harvesting into the future.

National Marine Conservation Area Reserve Feasibility Assessment

In August 2021, Central Coast Nations' Leadership, the federal Minister, and BC Ministers, signed the *Memorandum of Understanding for the Feasibility Assessment for a National Marine Conservation Area Reserve in the Central Coast.*

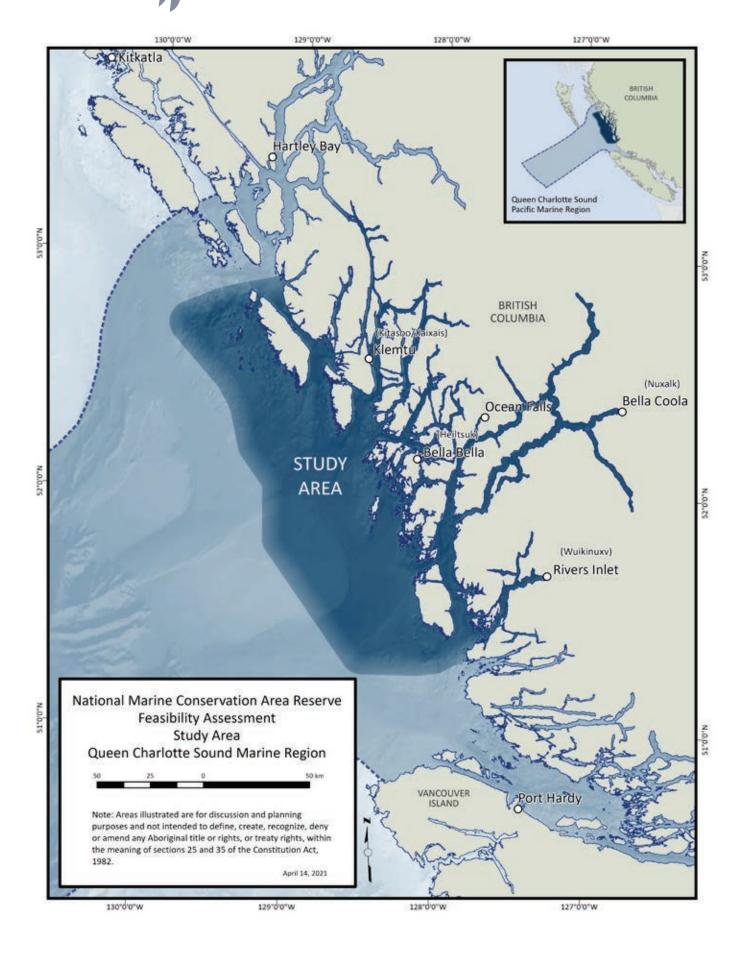
National Marine Conservation Area Reserves (NMCAR) are based on a unique model of collaborative governance and management between Parks Canada and First Nations, with a zoning system that provides for enhanced ecosystem protection, multiple use, and sustainable commercial fisheries management. NMCARs contribute to mitigating climate change impacts, and provide long-term community socioeconomic benefits and opportunities. This model for marine conservation will be considered as a legislative approach to use on the Central Coast.

The feasibility assessment for the NMCAR, funded by Parks Canada, will cover a study area of about 14,200 square kilometres, including the offshore and nearshore marine waters (see map on page 9). The assessment will

incorporate outputs from sub-regional and regional marine planning efforts, including MaPP, the MPA network, as well as archeological, mineral, shipping, tourism, tenures and other relevant topics. The assessment will be guided by a Steering Committee, which includes: William Housty (Heiltsuk), Evan Loveless (Kitasoo Xai'xais), Richard Hall (Nuxalk), Andra Forney (Wuikinuxv), Charlie Short (BC), Brett Hudson (BC), Kevin McNamee (Parks Canada), and Ernie Gladstone (Parks Canada).

The feasibility assessment work and report are expected to be completed by March 2024. The report will include a recommendation to proceed or not to proceed to establish a NMCAR through government-to-government negotiations. The Steering Committee will submit the report to the Nations' leadership, and federal and provincial ministers, for their decision.

CCIRA's Jean-Phillip Sargeant will support the Nations' Steering Committee members and community input throughout the feasibility assessment.





Supporting Salmon Populations on the Central Coast

As the cumulative effects of fishing, climate change and habitat degradation continue to impact salmon populations across the Pacific Coast, Central Coast Nations are taking initiative by implementing salmon catch monitoring and restoration programs to help the species.

For years, salmon abundance has been on a steady downward trajectory, and addressing this decline is no simple matter. To date, funding and capacity limitations have restricted our ability to address salmon declines in a comprehensive way. In 2021, Central Coast Nations successfully acquired funding to invest in two new salmon programs: one, to improve recreational and food fishery catch monitoring;

and two, to invest in restoration planning and restoration activities in priority watersheds.

With a grant from BC Salmon Restoration and Innovation Fund (BCSRIF), Central Coast Nations are expanding catch monitoring to increase understanding of current fishing pressures. Currently, little is known about the impact of recreational fisheries on salmon populations. This Nationled project will help build capacity to fill major gaps in salmon catch monitoring as well as population dynamics in order to inform better fisheries management decisions. It's a critical step in supporting salmon populations and addresses some of the Nations' most pressing objectives within the Integrated Marine Use Plan.



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What Does this Program Look Like?

Each Central Coast Nation will conduct interview-based fishing effort surveys based on their management needs and information gaps (e.g. recreational fishing effort, community perceptions, food security concerns). Surveys are paired with overflights that count fishing effort on the water, and genetic sampling, which allows us to trace the salmon populations that a catch is coming from. This work is supported by Megan Adams, CCIRA's salmon programs coordinator, including coordination, sourcing equipment, field capacity, and data management. CCIRA analyst Kyle Wilson provides the end-of-season analyses that compile survey effort information, so we can estimate recreational and food fishing effort on Central Coast salmon.

Being able to trace caught salmon in this way provides adequate baseline information about the genetic make-up of each salmon population in each river. In some cases, that baseline information has never been collected. This summer and fall, the Nations are also sampling baseline genetic information on Central Coast salmon populations in under-studied streams and rivers, to link back to the genetic sampling being done with the fishing effort surveys. By understanding which fish are caught and where, the Nations can better understand and manage the impacts of mixed-stock recreational and commercial fisheries in the ocean.

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Restoring Salmon Systems

Central Coast Nations also secured additional funds to develop restoration plans and implement restoration actions in priority watersheds and for priority populations. Supported by Megan Adams and CCIRA, Central Coast Nations are investing in restoration planning and activities for important salmon-bearing streams informed by habitat quality indicators, mapping and Indigenous knowledge. An initial assessment of habitat quality and population status will determine the most effective restoration activities for each impacted watershed. Restoration activities will be



implemented starting in 2022, while ongoing community engagement, planning and monitoring will evaluate success or the need for further improvements in the future.

Looking Ahead

This is just the beginning of this work—we know that restoration takes time and fisheries management requires a lot of effort and capacity. By building a strong foundation, we aim to create lasting benefit for Central Coast salmon and salmon people. Of course, both programs build on years of work by each Nation's Fisheries, Guardian Watchmen, and research programs, who have long been working on stewardship projects monitoring salmon populations, including creek walking and collecting DNA baselines.

Overall, these two multi-year, Nation-led programs will build capacity within Central Coast Nations to improve our understanding of recreational and food fishing, advance salmon habitat restoration, and provide opportunities for stewardship staff and community members to engage and participate in sustainable management of salmon populations. Together, these projects provide a foundation for a coordinated strategy to improve monitoring and management of Central Coast salmon, with clear leadership by Central Coast Nations.

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Sustaining the Harvest for Dungeness Crab

Since the 1990s, Central Coast Nations' food fishers have observed accelerating declining numbers for Dungeness crab. Commercial fishing had increased in the area and, following the expansion of GPS tools, recreational fishers started navigating the Central Coast's smaller bays and inlets. According to traditional knowledge in the area, declines often follow specific fishing events, after which the legal male crab population is slow to recover.

What Does this Look Like?

From 2017 to 2021, Central Coast Nations engaged with DFO in a collaborative management process to improve access for Dungeness crab for food fisheries, which resulted in closing 17 sites to recreational and commercial crab fishing to allow crab populations to rebound in important and accessible fishing areas for Central Coast Nations.

The collaborative management process, initially developed as a pilot project, is now a part of the broader Coastal First Nations' Fisheries Resources Reconciliation Agreement—a landmark framework for collaborative governance in fisheries between North and Central Coast First Nations and DFO.

What's Next?

Sustaining sufficient First Nations food fisher access to crab is a multi-year effort, involving initial surveys and research, ongoing data collection, as well as enforcing and monitoring any resulting closures. It will take multiple years to demonstrate changes in crab population abundance.

Just over a year into the process, it's still too early to tell whether these closures will meet Nation-led objectives of improving crab abundance and food fishery access to crab. Accordingly, the Nations have implemented a monitoring and evaluation strategy to assess whether the closures are working, since the long-term goal is to ensure sufficient food fisher access year-round at culturally and historically important crab fishing sites, using a target catch rate of 7.5 legal male crab per trap.

Why Does this Matter?

Ensuring sufficient crab for food fishers is just one objective within our Nations' broader goal of being equal decision makers in all aspects of fisheries management across the Central Coast. Through holistic, Nation-led management, we are working to ensure healthy marine ecosystems and populations for all future generations.





Building Marine Response Capacity on the Central Coast

When it comes to marine emergencies, response time is critically important. It could be the difference between a small, contained fuel spill versus a major disaster with long-term negative impacts, or an accident with minor injuries versus the tragic loss of loved ones on the water.

The distance from the Central Coast to emergency response stations and equipment caches increases the amount of time it takes for responders to arrive during an emergency. Past marine incidents, including the *Nathan E. Stewart* catastrophe, have demonstrated these limitations, and highlighted that Coastal Guardian Watchmen and other community members are usually first on scene.

Building local response capacity is essential for Central Coast Nations. To increase capacity, we have developed response plans, trained community members and stewardship staff, and created up-to-date equipment inventories for Nations to use. These actions and future work will contribute to clear, efficient communications between and within organizations, to help ensure emergency response roles are known for future situations.

On May 11 and 12, 2022, the first joint emergency response simulation on the Central Coast occurred at Serpent Point, near Waglisla (Bella Bella). Members of the Heiltsuk, Kitasoo Xai'xais, Nuxalk and Wuikinuxv Nations came together to help lead the exercise with the Canadian Coast Guard, DFO, Environment and Climate Change Canada, and other response partners.

The scenario involved a tug and barge grounding, with an initial 25,000-litre diesel spill, plus other ship lubricants, and a continuous spill of 5,000 litres per hour. The joint exercise required participants to determine and then implement the best course of action over the first 24 hours of such a spill, aiming to increase collaboration between other partners and agencies and Central Coast Nations, and to make sure that when accidents and spills ultimately do happen, our Nations will be ready.



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In addition to confirming roles and responsibilities during an oil-spill response, the exercise also built on the localized spill response plans developed by the Nations over the past three years. Serpent Point is just one of over 150 specific locations in the Central Coast that has a Nation-developed spill response plan. These plans

identify the environmental, cultural and socio-economic sensitivities of the site and the most effective response tactics to protect them. The exercise also helped find areas of improvement, including communication between governments and the need to grow equipment capacity for the Nations.



More training and exercises are slated for 2022, with the Nations looking forward to coming together again, showing their strength and unity in this critically important work for the Central Coast.



CCIRA



About this Newsletter

Our Nations created CCIRA to help develop and implement our Nation-level Marine Use Plans and the Central Coast Integrated Marine Use Plan. Today, CCIRA is involved in a wide array of projects and initiatives across the Central Coast. The Common Voice newsletter provides an update on specific projects that CCIRA is working on, and is distributed to all Central Coast First Nations to ensure our communities stay connected with CCIRA's work and with each other. For more information about CCIRA and what we do, please visit www.ccira. ca or contact us at info@ccira.ca.









Board Members

Earl Newman, Heiltsuk Nation Jeremiah Robinson, Kitasoo Xai'xais Nation Blair Mack, Nuxalk Nation Danielle Shaw, Wuikinuxy Nation

Your CCIRA Team

Megan Adams – Salmon Projects Coordinator

Tristan Blaine – Field Technician

Rich Chapple - President

Alejandro Frid – Science Coordinator

Cindy Hanuse – Administrator

Desiree Lawson – MaPP Implementation Coordinator

Fraser Los – Communications Specialist

Gord McGee – Marine Planner

Madeleine McGreer – FRRA Implementation Coordinator

Jane Posner – Accountant

Geneviève Reynolds – Monitoring Coordinator

Vicki Sahanatien – Program Director, Marine Planning & Conservation

Jean-Phillip Sargeant – Project Manager, NMCAR Feasibility Assessment

Charlotte Whitney – Program Director, Fisheries Management & Science

Kyle Wilson – Applied Quantitative Biologist

Check out CCIRA Online!

- www.ccira.ca
- facebook.com/CCIndigenousResourceAlliance
- twitter.com/coast_resource
- instagram.com/coast_resource

How to get involved

- » Visit your Community Coordinator or Resource Stewardship Office and ask about your Nation's marine use plan.
- » Attend upcoming local marine use planning open houses and community meetings.

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