

CCIRA



The Common Voice

CCIRA Newsletter
December 2020
www.ccira.ca

John Sampson gets set up for the Nuxalk Crab Survey. Photo by Tristan Blaine.

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Central Coast
Indigenous
Resource
Alliance





Introducing new staff to the team!

This summer, CCIRA was thrilled to welcome two new program directors to the team!

Vicki Sahanatien and Charlotte Whitney have been working hard over the past few months—building new relationships, or just re-establishing long-held ones, and getting set up to support marine and fisheries conservation and management for Central Coast Nations.

With their diverse and broad backgrounds (see profiles on pages 4 to 7), Vicki and Charlotte each bring a wealth of knowledge and experience to these important roles.

They both possess proven skills in developing collaborative approaches and solutions to complex challenges in fisheries and marine management, which will be crucial as Central Coast collaborative management plans progress further into the implementation phases. And with loads of experience



Vicki Sahanatien: Program Director,
Marine Planning & Conservation



Charlotte Whitney: Program Director,
Fisheries Management & Science

in management and community engagement, Vicki and Charlotte thrive in navigating the all-important interface between science and ancestral knowledge that forms the backbone of CCIRA's work.



Rich Chapple
CCIRA President

Meet Nicole Kaechele, Marine Implementation Coordinator

This fall, CCIRA was also happy to bring on Nicole Kaechele, who will be filling in for Anna Gerrard (on leave) as our interim Marine Implementation Coordinator.

With more than a decade of experience working on strategic planning initiatives, Nicole is passionate about working with people—in the places they live and on issues that matter most to them. She has worked with and for Indigenous governments and organizations, and other government agencies, legal firms and research institutions, and has managed several community-engaged research projects—often supporting knowledge translation between larger institutions and remote communities.



A big thank you to Aaron Heidt

When Aaron Heidt first started with CCIRA, Stephen Harper was sworn in as Canada's Prime Minister, Apple had just launched its first iPhone and the seventh and final Harry Potter book had just been completed. Needless to say, he's been working with us a long time!

Aaron's contributions over the past 14 years cannot be overstated; his skills, knowledge and work ethic have played a major role in CCIRA's success, and in helping Central Coast Nations develop and implement effective land and marine use plans. However, all good things must come to an end.



On behalf of the CCIRA team, Central Coast leaders and all those who had the pleasure to work with him, we sincerely thank Aaron for all his hard work and offer him the very best in his future endeavours!

CCIRA reports and publications

We continue to work with stewardship staff and researchers from Heiltsuk, Nuxalk, Kitasoo/Xai'xais and Wuikinuxv Nations, along with other scientists and 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. See our website for more: ccira.ca/reports

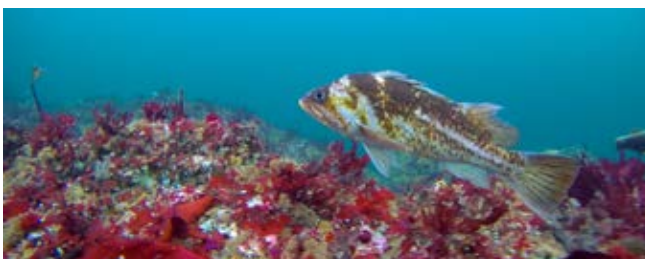
Fisheries framework obscures declining populations

In an article published in *Policy Options*, CCIRA's science coordinator Alejandro Frid and co-author Will Atlas wrote that DFO's Sustainable Fisheries Framework uses shifting baselines to determine if a fish stock is healthy, which fails to account for historical declines. They also proposed alternative management approaches that are more consistent with restoring and maintaining resilient ecosystems, Indigenous traditions and other intrinsic values appreciated by Canadians at large.



Examining the effectiveness of Rockfish Conservation Areas (RCAs)

Dive surveys conducted by CCIRA and technical staff from Central Coast First Nations found signs of rockfish recovery inside only two of six RCAs examined, where fish were bigger in protected than in fished areas. Increasing resources for monitoring and enforcing compliance by recreational fishers would likely improve the conservation effectiveness of the RCA network. Authors include Sandie Hankewich and Ernest Mason from Kitasoo/Xai'xais Fisheries and Mike Reid from HIRMD.



Prioritizing conservation actions for Pacific salmon in Canada

This collaborative research, involving Simon Fraser University, the Pacific Salmon Foundation, CCIRA and Central Coast Nations, examined the financial investments that would promote salmon recovery on the Central Coast. Removal of artificial barriers to fish migration, watershed protection and stream restoration would cost \$11.3-million per year, providing a high chance of recovery in nearly half the spawning areas. An additional \$6-million per year might promote recovery in the remaining areas.



Examining the ecological role of rockfish and lingcod

Recent findings from this collaborative research, involving CCIRA, the Hakai Institute, and the University of Victoria, suggest that overfishing of large individuals degrades food webs, and that fisheries should be managed more conservatively to mitigate these impacts.





Vicki Sahanatien: Arctic to the Central Coast

With a deep-seated love for nature and life-long commitment to protecting wild areas, Vicki Sahanatien has been immersed in protected areas and wildlife management her entire career. And that dedication has taken her to some incredible places!

A member of Wahta Mohawk First Nation in Central Ontario, Vicki grew up amongst the mixed forests, lakes, rivers and ancient granitic outcrops that dominate the landscape near Georgian Bay. Throughout her education in ecology and natural science, Vicki complemented her academic learning with research into Indigenous knowledge systems, plus direct experience in gathering and incorporating that into decision making.

“I’ve had the good fortune to work in the field most of my life, and in some of the most remote wilderness areas and national parks of Canada,” says Vicki. “Experiencing

new places, cultures and ecosystems continues to inspire me.” Starting her career as a patrol person at Georgian Bay Islands National Park, Vicki has worked in many roles with Parks Canada: park warden, park ecologist, park planner and resource conservation manager, and she was the first woman Chief Park Warden in Canada at Ivvavik National Park on the Yukon Beaufort Sea coast.

A life-long learner, Vicki completed her PhD in 2015 studying polar bear spatial ecology and climate change impacts on sea ice habitat. During her 28 years in the Northwest Territories and Nunavut, she led conservation programs and multi-disciplinary research teams. “It was an enlightening and exciting time to work in the Arctic,” she says. “Researchers received the funding needed to develop fundamental ecological knowledge and study climate change, and both territories were initiating new co-management protected



areas regimes prescribed by land claim agreements, which required governments to acknowledge and incorporate Indigenous rights, approaches and ownership.”

Throughout her time in the Arctic, Vicki worked with a diversity of people and organizations, including Indigenous organizations, wildlife and park management boards, and hunter and trapper groups. Drawing upon her in-depth understanding of Indigenous histories and worldviews, Vicki ensured that traditional ecological knowledge was incorporated in research and management decisions.

“Although the marine ecosystems and landscapes are different, there are similarities between the Arctic and the Central Coast,” says Vicki. “In both regions, the same oceanographic processes drive the marine system and communities are located at the interface of the land and sea, relying on marine resources for sustenance. I see the people

being similarly motivated by the struggle for sovereignty over their territories and creating marine use agreements and management systems to reflect that.”

Although the COVID-19 pandemic will delay travel, Vicki looks forward to spending time in each community and on the water to gain first-hand experience of the Central Coast Nations’ territories, as well as the day when she can finally connect with CCIRA team members in person!

“For now, I’ll absorb as much information as I can,” she says, adding that building relationships will be a major part of her work going forward. “It’s so important to learn directly from community members and to use that knowledge to make further progress on the Nations’ priorities.”





Charlotte Whitney: Back to the Central Coast

Charlotte Whitney is no stranger to the many channels, bays and inlets that stretch along BC's North Pacific Coast.

Her family operated a sailboat-based tour business on the Central Coast and Haida Gwaii during the 1980s, and were involved in supporting early conservation efforts that ultimately led to the collaborative agreements to protect Gwaii Haanas. That meant much of Charlotte's early childhood was spent traveling these interlocking waterways.

"During my time at university, studying conservation and ecology, I began to gravitate back to these areas," says Charlotte. "At the same time, I also started to recognize that ecology and natural science often leaves out some key social aspects—the people and culture—that are really important for creating positive change."

So, after taking some time off during her Master's degree in salmon ecology to sail back up to Haida Gwaii, Charlotte decided her future education and eventual career would focus more on the social science aspects that influence fisheries and marine management, and how that intersects with conservation issues.

While completing her PhD on climate change adaptation and marine planning at the University of Victoria, research had brought Charlotte back to the coastal areas of her youth and eventually to collaborative work with Central Coast Nations. She worked directly with CCIRA and the Heiltsuk, Kitasoo/Xai'xais, Nuxalk and Wuikinuxv Nations, conducting interviews with stewardship leaders, fisheries managers and other community members to discuss their



perspectives on climate change adaptation planning (see story on page 12).

Although she's made a lot of connections and built solid relationships along the Central Coast, Charlotte says there's still so much more to learn. "It's a complex and dynamic work space," she says, adding that to succeed in this kind of work, it's important to be open, honest and in some cases vulnerable. "If you want to bring people together and find consensus, you have to listen, acknowledge history and look for common ground," she says. "I always try to remember—it's not about me, it's about improving the bigger picture."

Working for more than a decade in fisheries science and management, Charlotte has already applied those strategies with positive results. Prior to joining CCIRA, she contributed

to salmon conservation and management with the Salmon Watersheds Program at the Pacific Salmon Foundation, building key partnerships with coastal and interior communities along the way. And she's already bringing that proven knowledge to the table here, seeking out new funding opportunities for salmon research and conservation efforts along the Central Coast, specifically focused on habitat restoration and First Nations catch monitoring.

As she continues to settle into her new role, Charlotte is keen to advance the stewardship efforts of Central Coast Nations as much as possible. "It's a really an amazing space to be working in," she says. "Reconciliation and conservation are both so important, and the great thing about CCIRA is that it's really tying those together in exciting and important ways."





Tracking salmon abundance in the Pacific Ocean

As salmon populations continue to decline across the Central Coast and beyond, researchers are looking to the open ocean to help understand salmon survival dynamics.

Salmon are a “keystone species” within BC’s coastal ecosystems—a critical food source for many land and marine species, and vital part of the culture, social structures and economies of Central Coast Nations.

For years, salmon populations have been in decline, leading to profound negative impacts on other species, such as orcas and bears, and on the fisheries that remain so important for coastal communities—including food, social or ceremonial (FSC), commercial and recreational fisheries. To help seek answers, Tristan Blaine, CCIRA Field Technician, was asked to join an international research expedition far off the Central Coast—in hopes of learning more about the dynamics of salmon growth and survival in the open ocean, and reporting back to Nations.

Led by world-renowned Canadian scientists Richard Beamish and Brian Riddell, the late-winter expedition (March 11 to April 7, 2020) was a follow-up to the first winter research trip undertaken in 2019. “We have a lot of data on salmon in their coastal phase of life, but so much of their life cycle is spent offshore,” says Tristan. “This research aims to learn what’s happening in the ocean that may be affecting salmon stocks.”

In his online presentation providing a recap of the trip, Tristan first described some of the trials that can often hinder such a long journey out at sea. “Lots of bad weather and nine-metre swells; some sleep deprivation and seasickness,” he recalled with a laugh. “We were hauling in a load of fish every seven hours, which meant working around the clock, collecting data on the health, diet and stock identification of each salmon. Plus, of course, there was a pandemic to contend with.”



Members of the international team not only spoke different languages, they also had different ways of doing their jobs. “If we hauled in a load of fish, there was no time to wait; we had to analyze it right away,” says Tristan. “Eventually, we found ways to work together effectively and merge our different methodologies. It was a great example of people working together to do the best science in the world.”

Continued on page 11.



Pacific Legacy travels 600 nautical miles offshore to search for salmon in the open ocean. Inset photos, top to bottom: Chum salmon returning to Kynoch to spawn; Juvenile chinook at the Percy Walkus Hatchery, Wuikinuxv Territory. Juvenile salmon photo by Billie Johnson; Ship and chum photos by Tristan Blaine.

For years, salmon populations have been in decline, leading to profound negative impacts on other species, such as orcas and bears, and on the fisheries that remain so important for coastal communities—including food, social or ceremonial (FSC), commercial and recreational fisheries.



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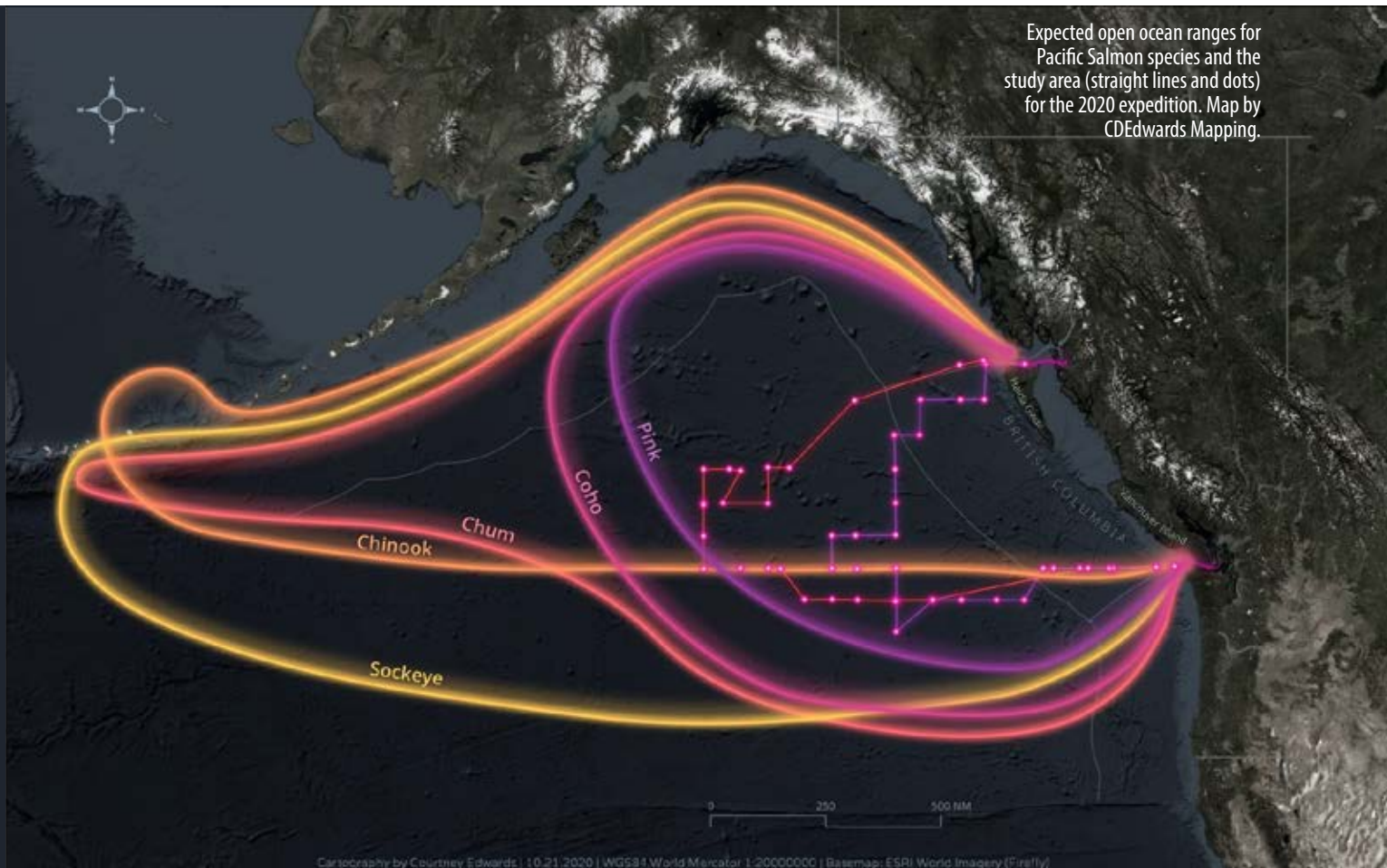
The two expeditions are the first comprehensive attempt at understanding the factors that impact Pacific salmon in winter—the least studied period in the species' life history, yet a time that many believe may strongly affect their abundance. The unprecedented research effort—part of the International Year of the Salmon initiative—covered a vast area (more than 600,000 square kilometres), and will help to identify mechanisms affecting salmon survival in the face of changing ocean conditions due to climate change and many other factors related to food production.

After Tristan's overview, Brian Riddell provided some more detail on the motivations for the expedition and the straightforward questions that drove their research: Is the first winter at sea a major determinant of salmon production? And if so, what can we learn about these dynamics to improve salmon forecasts of future returns in coastal waters and communities?

Having worked for decades on salmon research and conservation initiatives, Brian was the past President and CEO of the Pacific Salmon Foundation, and continues to be a

We have a lot of data on salmon in their coastal phase of life, but so much of their life cycle is spent offshore. This research aims to learn what's happening in the ocean that may be affecting salmon stocks.

Open Ocean Salmon Ranges



Science Advisor, and also a Canadian Commissioner to the Pacific Salmon Commission. He says fish that grow faster in the first months at sea are more likely to survive the winter than smaller fish, which explains the team's hypothesis, that adult salmon abundance is strongly influenced by survival of juvenile salmon at the end of their first ocean winter.

Brian says it's still too early to say with certainty that winter growth and survival conditions in the open ocean determine adult abundance of Pacific salmon. "Most of our data remains to be analyzed," he says, adding that it's critical to continue these studies if we hope to increase accuracy of forecasts. "We believe this can be accomplished," he says, "but it will require additional years of effort and more surveys than a single vessel in millions of square kilometres of ocean."

The takeaway and next steps? The researchers will continue to analyze the samples and data collected, looking to produce a more detailed final report linking oceanographic data to what they learned about salmon life in the open ocean. However, these efforts have been significantly delayed by COVID-19. The scientists are already looking into future surveys that would provide more data and more clarity; they say the open ocean surveys over the past two years highlight the need for more global research in identifying mechanisms that affect salmon populations in the Pacific.

For Central Coast Nations, these surveys could be highly useful in tandem with the salmon counts and surveys undertaken along coastal streams every year.



The 2020 expedition science team sorting and tagging salmon while the fishing crew preps the net for another trawl.
Photo by Tristan Blaine.



Adapting to climate change on the Central Coast

With the full research paper published in the journal Ecology and Society, we share insights from CCIRA's Charlotte Whitney and the Central Coast community members she interviewed about their perceptions and approaches to climate change.

It's not difficult to see impacts from climate change throughout the Pacific Coast. Warming ocean temperatures, winter storms of greater intensity and inshore waters that are less oxygenated and more acidic, these extensive changes are affecting marine species in myriad ways, and causing a general shift northward of species in search of new ecological niches.

Added to the devastating impacts of more than a century of resource mismanagement and over-fishing, and ongoing declines in salmon and other species that are vital for our Nations, climate change is an issue that simply cannot be ignored.

But perceiving these changes and adapting to them are two very different things, and there is a wide range of strategies for climate change adaptation—not just across the country but within coastal communities as well. As with resource management in general, Indigenous approaches to the climate crisis have often been overlooked by Crown governments and climate scientists alike. This is especially problematic considering how climate impacts disproportionately threaten First Nations communities, and the fact that Indigenous knowledge keepers possess a place-based understanding of long-term environmental change, passed down over many generations of first-hand observations.

To hear directly from community members about their various perceptions and approaches to climate change impacts on marine systems, Charlotte Whitney—CCIRA's new Director of

Fisheries Management & Science—undertook a comprehensive research project in 2018, which involved interviewing a diverse group of people from Central Coast Nations. Coordinated by Alejandro Frid, CCIRA's Science Coordinator, the project was a partnership between the University of Victoria and the Heiltsuk, Nuxalk, Kitasoo/Xai'xais and Wuikinuxv First Nations through the stewardship departments and supported by each Nation's Marine Use Planners.

"At the end of the day, we have to find balance. There's a very unbalanced ecosystem right now." – Kelly Brown, Stewardship Director, Heiltsuk Nation

Interview participants had experience in a range of activities related to the marine environment, including commercial fishing, traditional food gathering and preparation, and local governance and management of marine areas. "Virtually all participants shared observations of impacts they attributed to climate change," says Charlotte. "They described changes in the timing of salmon migration and spawning, rapidly melting glaciers, warmer and drier summers, and changes in river flows—all changes that have affected their way of life."

Charlotte says the majority of climate impacts have a direct effect on food security and cultural well-being. "Participants

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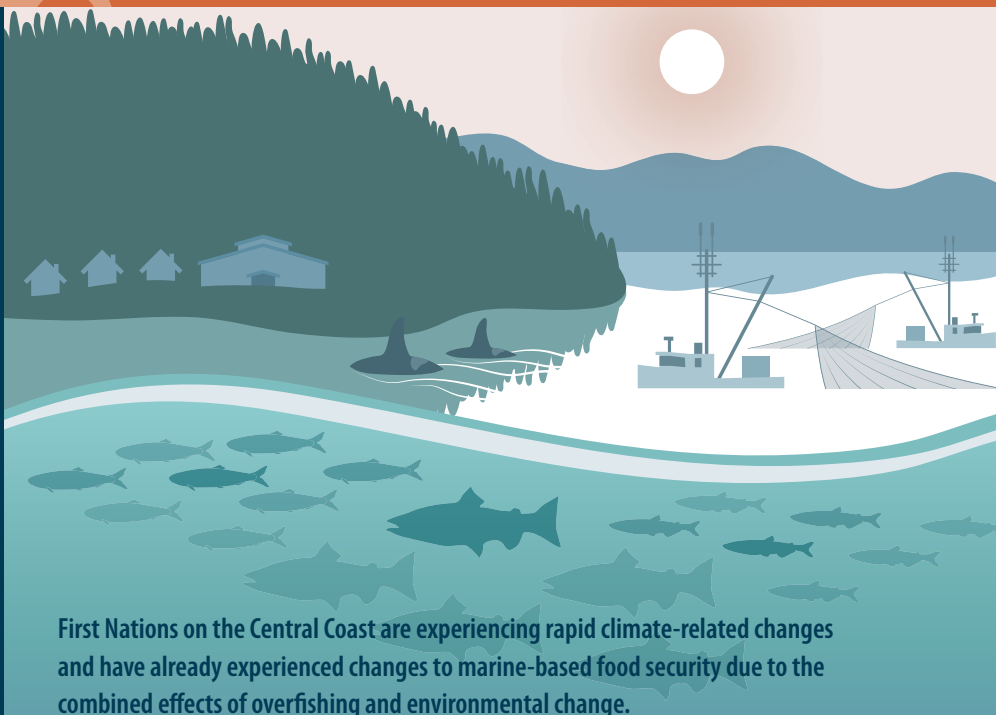
"It's terrible, we're having to travel further and that's at a higher risk to harvest the things that are necessary to us. That's a big concern of mine."

– Travis Hall, Marine Use Planner, Heiltsuk Nation

INDIGENOUS PERCEPTIONS OF CLIMATE CHANGE ON THE CENTRAL COAST



Through a collaborative partnership with the Heiltsuk, Nuxalk, Kitasoo/Xai'xais and Wuikinuxv Nations, we examined Indigenous perceptions of climate change on marine-based food security and ways of life.



First Nations on the Central Coast are experiencing rapid climate-related changes and have already experienced changes to marine-based food security due to the combined effects of overfishing and environmental change.

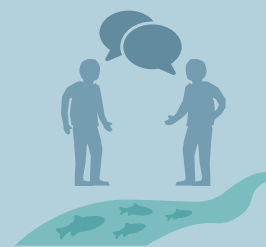
Participants felt that Indigenous governance, collaborative management, and creating opportunities for dialogue and to share traditional knowledge were important for climate change adaptation.



INDIGENOUS GOVERNANCE

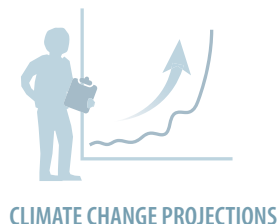
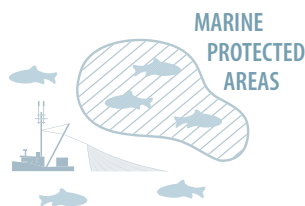


CO-MANAGEMENT



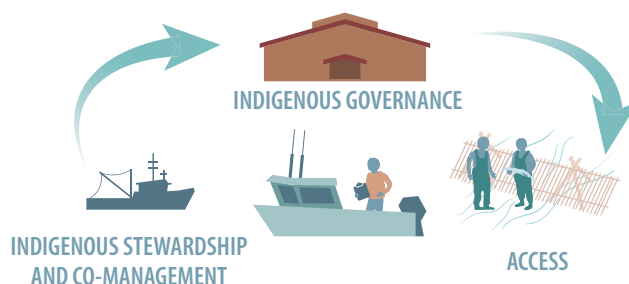
KNOWLEDGE SHARING
ABOUT TRADITIONAL HARVESTING PRACTICES

While important, participants did not prioritize marine spatial protection or additional research on climate change projections.



CLIMATE CHANGE PROJECTIONS

Instead, **participants emphasized transformative co-governance approaches** that support Indigenous stewardship and access to marine resources.



Developing Indigenous-led climate change adaptation planning, programs, and monitoring will help Central Coast First Nations adapt and maintain traditional ways of life in the face of climate change.



“I think co-management is the way governments have to go... All governments have to learn, if you can listen to First Nations of the world, you’ll be in a better place, but if you try to do it all on your own, you’ll screw up supremely. You can’t dig yourself out of it.”

– Wally Webber, Elected & Hereditary Chief, Nuxalk Nation

anticipated that further climate change would disrupt or decrease the quality of salmon spawning habitat, and reduce access to traditional food harvesting,” she says, adding that many were also concerned about how climate change will affect the ability of Elders to pass on place-based traditional ecological knowledge.

Several key themes and strategies emerged from the research, including a recognition of the critical importance of self-governance and the need for transformative change in resource management practices, which would support adaptive actions in culturally and socio-ecologically relevant ways.

“There was a clear desire for more knowledge sharing within and among communities,” says Charlotte, “and for developing better learning and communication platforms for the Nations to consider climate impacts and develop adaptive strategies.” Many participants said that developing effective strategies for climate change adaptation would only be possible once real, tangible efforts toward reconciliation were implemented from Crown governments. Another shared perspective throughout the interviews noted the reality of First Nations’ resilience and ability to adapt to environmental

changes over many centuries—including floods, past climatic shifts and resource decline.

Charlotte says there are great opportunities to build upon the research, especially given the clear call for more communication about climate adaptation strategies in each community. “Many locally-driven climate monitoring and mitigation programs are already underway, including via a team of climate action coordinators hired throughout Coastal First Nations and within the Central Coast,” she says. “One obvious conclusion from this project was that for any proposed climate change adaptation strategies to be effective, they must consider the values, knowledge and perspectives of Central Coast Nations.”



To read the full paper, authored by Charlotte K. Whitney, Alejandro Frid, Barry K. Edgar, Jennifer Walkus, Peter Siwallace, Iris L. Siwallace and Natalie C. Ban, visit www.ccira.ca/reports or [www.doi.org/10.5751/ES-12027-250433](https://doi.org/10.5751/ES-12027-250433)

“...food harvesting is a big part of our culture. Language, ceremony... Those are all cornerstones of our culture and that’s what makes us Heiltsuk people, being able to do those things.” – William Housty, Hereditary Chief, Heiltsuk Nation



Kitasoo/Xai'xais Paspatoos Potlatch.

CCIRA



About this newsletter

Our Nations created CCIRA to build upon our success in working together to develop and implement our Nation-level marine use plans. Today, CCIRA is involved in a wide array of projects and initiatives across the Central Coast. The Common Voice is one source of information about CCIRA's activities in our communities. Each issue will highlight specific projects that are underway in our communities with updates on projects and policies that CCIRA is working on. The Common Voice is distributed to all Central Coast First Nations and is one way we are working to ensure that our communities stay connected with each other. For more information about CCIRA and what we do, please visit our website www.ccira.ca or contact us at info@ccira.ca.

CCIRA Community Marine Use Planning Coordinators

Lena Collins, Wuikinuxv Nation
Julie Carpenter, Heiltsuk Nation
Peter Siwallace, Nuxalk Nation
Doug Fraser, Kitasoo/Xai'xais Nation

Your CCIRA team

Tristan Blaine - Field Technician
Rich Chapple - President
Alejandro Frid - Science Coordinator
Anna Gerrard - Marine Implementation Coordinator (on leave)
Cindy Hanuse - Administrator
Nicole Kaechele - Marine Implementation Coordinator
Desiree Lawson - MaPP Implementation Coordinator
Gord McGee - Marine Planner
Madeleine McGreer - Fisheries Coordinator
Vicki Sahanatien - Director, Marine Planning & Conservation
Jean-Phillip Sargeant - Marine Response Coordinator
Michael Vegh - Indigenous Laws Coordinator
Charlotte Whitney - Director, Fisheries Management & Science

Board members

Travis Hall, Heiltsuk Nation
Barry Edgar, Kitasoo/Xai'xais Nation
Blair Mack, Nuxalk Nation
Danielle Shaw, Wuikinuxv Nation

Hey! Did you know CCIRA is online

Find us online:

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

How to get involved

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

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