National Indigenous Fisheries Institute First Nations Fisheries Council of British Columbia

BC Salmon Restoration and Innovation Fund: Increased First Nations Involvement in Science Partnerships, Innovation, and Infrastructure Investments

BCSRIF Workshops with AAROMs and First Nations January 21-23, 2020 - Vancouver









Three-Day Session

- Proposed Projects: From concept paper to funding proposal
 - Confirm alignment with First Nations' priorities
 - Confirm/outline economic benefits to communities
 - Identify any/all changes required
 - Identify lead organization(s)/communities, participants & partners
 - Work through the Expression of Interest
 - Timeline: start/end dates, key milestones, other key dates
 - Deliverable(s): each year of the proposed project
 - Budget: project expenses/total project costs, other funding sources
- BCSRIF Application Process and Funding Parameters
 - Expressions of Interest and funding priorities & criteria
- Institute-FNFC BCSRIF Project
 - Objectives and work plan elements

Shared Priorities



FEDERAL + PROVINCIAL

BC Salmon Restoration and Innovation Fund

INDIGENOUS

FEDERAL Wild Salmon Policy Implementation Plan

INDIGENOUS, PROVINCIAL, INDUSTRY/RECREATIONAL

Recommendations for a Made-in-BC Wild Salmon Strategy



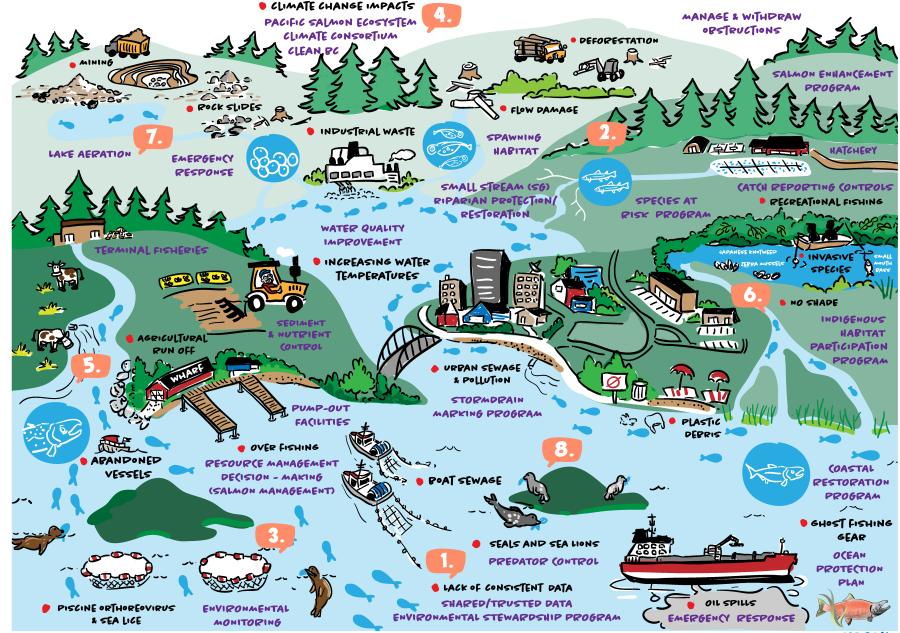


SALMON RESTORATION INHIBITORS AND ASSISTERS









Institute-FNFC BCSRIF Project & Work Plan

Project objectives

- Engage Indigenous communities in identifying potential large-scale,
 multi-Nation initiatives that could be supported by BCSRIF
- Encourage increased Indigenous involvement in science partnerships, innovation, and infrastructure investments that would improve productivity, sustainability, and safety across the sector
- Key work plan elements
 - Research to determine at least six large-scale potential initiatives on which to engage Indigenous groups and communities
 - Consider what has been funded in the past few years & currently by DFO and the Province, as well as potential Expressions of Interest for other funds that were not actioned (efficiencies)



Your Input

- Consistent with First Nations' priorities?
- Benefits to First Nations groups and communities?
- Any concerns with the proposed project? Subject matter, timing, etc.
- Who would like to lead?
- Who would like to participate?
- Potential partners?
- Other programs: complementary and/or duplicative?



Developing an Expression of Interest

- Timeline
 - Estimated start and end date(s)
- Deliverables
 - Year one, two, three and four
- Budget
 - Project expenses (by year)
 - Project funding sources
- Initiative description
 - Lead(s), participants and partners
 - Location of activity



Standardizing Monitoring/Data Collection

- Proposed timeline: three to four years
- Proposed project elements
 - Inventory existing tools used by AAROMs and communities
 - For fish stocks, fisheries, habitat & water quality, flow damage/obstruction, land changes and vulnerabilities to riparian zones and habitats
 - Establish best tools for these activities and those who need them
 - Bring together AAROMs and gov't partners to agree upon:
 - Standardized tools for monitoring and data collection and job description
 - Training required *linked to another Institute project
 - Establish data-sharing protocol *Nation to choose, re: Pac. Salmon Explorer
- Existing programs to support in future (national AAROM network)
 - Aligned with Indigenous Habitat Participation program, Environmental Stewardship Initiative, BC Fish and Fish Habitat Inventory Standards
 - All future monitoring/data collection activities

GIS Mapping to Inform Risk Vulnerability

- Proposed timeline: three to four years
- Proposed project elements
 - Two to four pilots with AAROM groups gathering GIS data using advanced technologies:
 - Unmanned aerial vehicles (UAV), such as drones
 - Light Detection and Ranging (LiDAR) remote sensing method
 - Initial flight for baseline data and subsequent ones to compare landscape shifts
 - Using interpreted GIS data, development of community-based watershed maps (informs long-term risk vulnerability mitigation/disaster response planning processes)
 - Interpreted data to be shared on an online platform
- Proposed partnership with U. Victoria's Map Shop Collaborative
 - Collaborative decision-making also needed to establish where central online platform would rest and lead coordinator of broad framework tool

First Nations Disaster Response Network

- Proposed timeline: three to four years
- Proposed project elements
 - Build and maintain BC-wide First Nations contact list for federal, provincial and municipal governments to more easily (and quickly) collaborate during natural disasters and environmental events
 - Establish parameters of the network: contact role, training certification, etc.
 - Develop network (Employment opportunity for First Nations student)
 - Develop online system to maintain up-to-date information
 - Build and maintain relationships and opportunities to address events together
 - Annual verification of contact information
 - Identify and meet incident command training needs
 - Ensure response readiness through regular response drills
- Potential partnerships
 - First Nations' Emergency Services Society of British Columbia

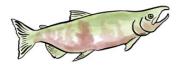
National Indigenous Fisheries Institute First Nations Fisheries Council of British Columbia

BC Salmon Restoration and Innovation Fund: Increased First Nations Involvement in Science Partnerships, Innovation, and Infrastructure Investments

January 22









Aquaculture Water Quality Monitoring

- Proposed timeline: four years
- Proposed project elements
 - Monitor marine aquaculture facility water quality and wastewater disposal
 - Collect data, re: water usage and environmental health of operations
 - Undertake scientific research to inform water quality related decision-making
 - Increase the transparency of aquaculture operational information
 - Build and maintain First Nations technical capacity and involvement in aquaculture management and decision-making
 - Centralize aquaculture monitoring and scientific information
 - Develop constructive partnership with industry
- Parallel to other BCSRIF funding of Nations, re: Broughton Archipelago Nations

Responding to Changing Climate Impacts

- Proposed timeline: two to four years
- Proposed project elements
 - AAROMs review past studies/research partnerships on climate impacts on salmon and habitat to inform one- or two-day technical session
 - First Nations in MaPP already track climate change in marine plans
 - DFO Ecosystems Science/Oceans Sciences and academic partners at the session
 - Final report outlining work plan for First Nations monitors identified in Concept
 #1 data collected to inform broad salmon rebuilding/habitat restoration work
 - Phase two: implement work plan and other watershed partnership research
- Proposed partnership with UVic's Pacific Climate Impacts Consortium
 - Three-component BCSRIF project: hydrologic modelling, software tools
 - International Year of the Salmon Initiative partnership



Estuary Habitat Management Planning

- Proposed timeline: two to four years
- Proposed project elements
 - Assess current estuary habitat management planning (and plans, if they exist)
 to identify any best practises and gaps related to traditional fisheries
 - Leverage FN best practises and fill gaps as MSP activities accelerate
 - Support development or update of estuary habitat management plans to include more First Nations fisheries-focussed information
 - Times of year when access required
 - Areas that should be closed to shipping or energy exploration due to salmonid lifecycle or habitat needs
 - Align estuary habitat data collection and monitoring needs to community monitor work plans to leverage expertise/provide more work opportunities
- Potential partnerships
 - Nature Trust: Marsh Resilience to Sea-Level Rise (MARS) tool

National Indigenous Fisheries Institute First Nations Fisheries Council of British Columbia

BC Salmon Restoration and Innovation Fund: Increased First Nations Involvement in Science Partnerships, Innovation, and Infrastructure Investments

January 23







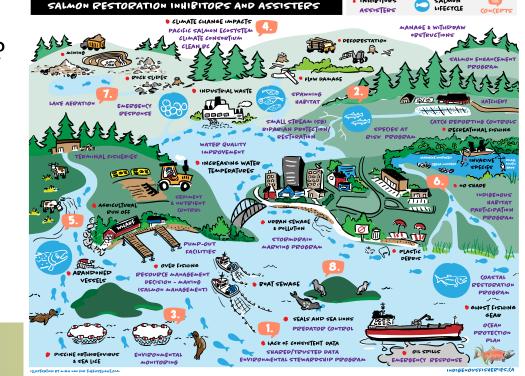


Habitat Remediation Opportunities

- Proposed timeline: two to four years
- Proposed project elements
 - Capacity-ready First Nations involved in salmonid habitat remediation economic opportunities (including through procurement contracts)
 - Phase one: Information collection
 - Inventory of existing habitat remediation programs/partnerships
 - Inventory of innovative tools used in habitat-remediation activities
 - Inventory of habitat-remediation employment
 - Survey of First Nations habitat-remediation businesses/entrepreneurs
 - Phase two: Business and skills development, training and mentorships
 - Best practises workshop or conference with AAROMs/First Nations
 - Phase three/four: Enabling business and employment successes
- Proposed partnerships
 - Canadian Council for Aboriginal Business

Advancing a Salmon Rebuilding Strategy

- BC First Nation Salmon Rebuilding Strategy
 - Concept open for AAROMs and First Nations to propose their ideas
 - Build from Made-in-BC Wild Salmon Strategy and Wild Salmon Policy Implementation Plan
 - Collect success stories streams, lakes, rivers, estuaries, etc. conservation units or runs – that have seen change as a result of programs and activities?
 - Consider this illustration for other (overarching) ideas?
- Open Dialogue

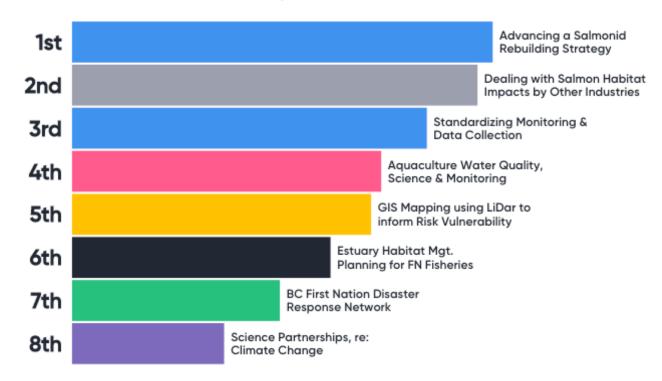




Proposed Projects: Order of Priority

Mentimeter polling of workshop participants

Proposed Projects: Order of Priority





Next Steps

* BASED ON POLL & STRATEGY *** STRATEGY *** STRATEGY *** STHIS DUPLICATIVE? > IS THIS DUPLICATIVE? > IS THIS DUPLICATIVE?	
WHAT do to CONTINUE -> FNFC CONVERSATION to DO? WE WANT to DO? TO CONTINUE CONVERSATION CONVERSATION CONVERSATION WATER FOR FISH?	
• LAB NETWORK	
FOLLOW UP WITH PROVINCE	W 188 H
TELECONFERENCE WITHIN 3 WEEKS WITHIN 3 WEEKS WITHIN 2 WEEKS	BD.
STEPS CONCEPT CONCEPT CONCEPT CALL IN 2 WEEKS TO 2 WEEKS IF PRIORITY PRIORITY PRIORITY PRIORITY PRIORITY	SESS IN NEEKS IF YORITY
PARTICIPATION DOESN'T MEAN ENDORSEMENT OPEN COMMUNICATION CHECK-INS PARTICIPATION ACTIONS PARTICIPATION CICCUMSTANCE) SEND OUT POST WORKSHOP FORM PROVIDE PROVIDE APPLICATIONS & DECISION - MAKING	·



Live graphic recording by: Tanya Gadsby



Contact Information

- National Indigenous Fisheries Institute
 - Shannon Sheil, <u>comms@indigenousfisheries.ca</u>778-528-3258, m: 250-508-7763
- First Nations Fisheries Council of BC
 - Astrid Niemann-Zajac, <u>astrid@fnfisheriescouncil.ca</u>
 778-379-6470



Thank you for participating!







