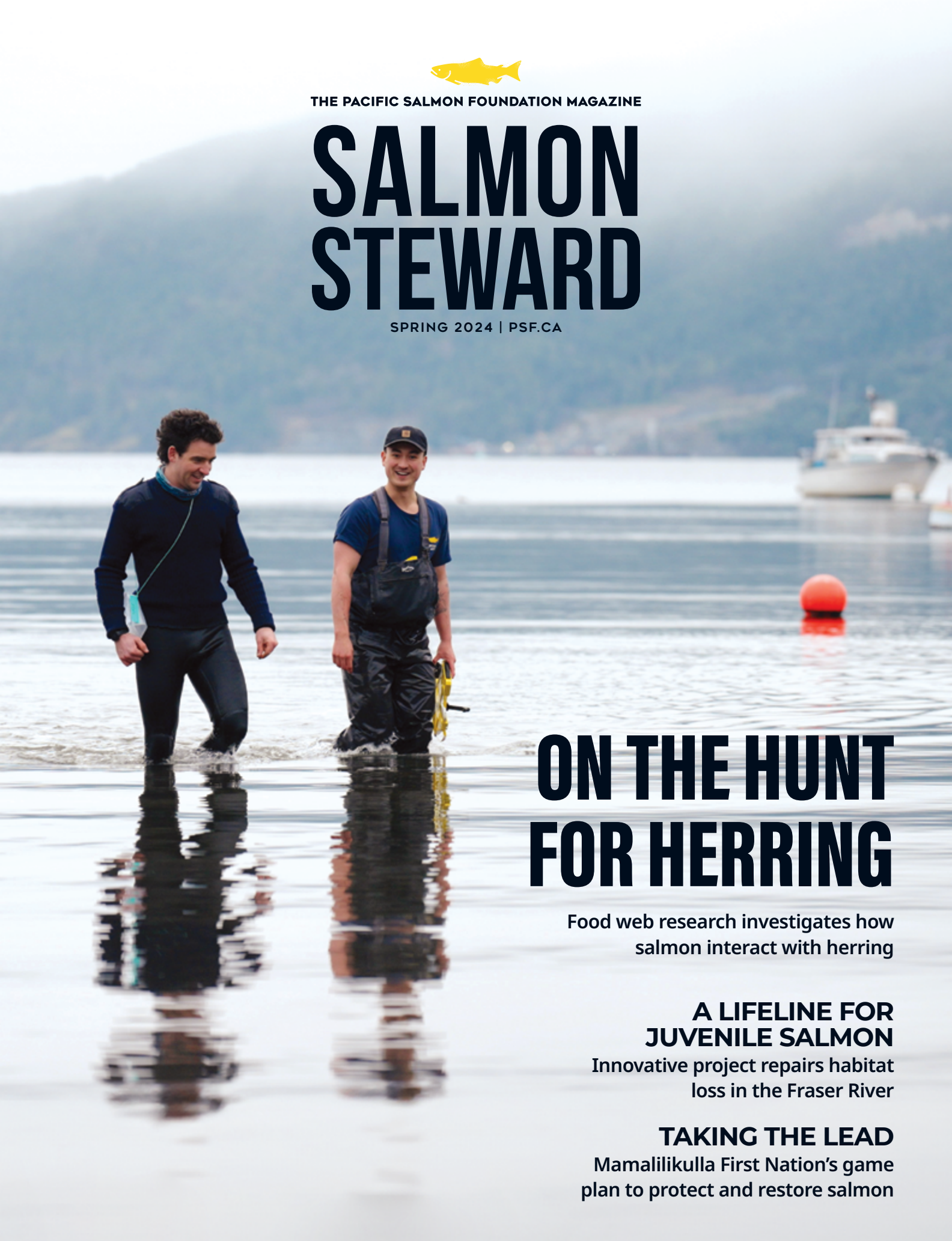
THE PACIFIC SALMON FOUNDATION MAGAZINE

# SALMON STEWARD

SPRING 2024 | PSF.CA



## ON THE HUNT FOR HERRING

Food web research investigates how salmon interact with herring

### A LIFELINE FOR JUVENILE SALMON

Innovative project repairs habitat loss in the Fraser River

### TAKING THE LEAD

Mamalilikulla First Nation's game plan to protect and restore salmon

# SALMON STEWARD

SPRING 2024

PACIFIC SALMON FOUNDATION


**ABOUT US**

We're salmon first, salmon always. Our vision is healthy, sustainable, and naturally diverse populations of Pacific salmon for the benefit of ecosystems and people for generations to come.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Ronna-Rae Leonard, Michael Meneer, Hon. Sheila Malcolmson, and Hon. Nathan Cullen.

## CEO'S MESSAGE

We know many wild Pacific salmon populations are in decline in the face of climate change, habitat degradation, pollutants, disease, and fishing pressures. For Pacific salmon, it's death by a thousand cuts.

Yet, we are energized by the public support for salmon, humbled by the deep history and commitment of Indigenous communities, and grateful for the dedication of our many community partners.

To address the complex challenges facing salmon, we've developed a new strategic plan that focuses on salmon resilience and recovery in the face of climate change and reconciliation (read more on page 11).

To accomplish our collective goals, partnerships and coordinated action will be paramount. The challenges facing Pacific salmon populations know no borders.

In February, we partnered with U.S. Consul General Jim DeHart to host a reception acknowledging the Pacific Salmon Commission's vital efforts uniting salmon expertise across Canada and the U.S.

With Seattle-based Long Live the Kings, PSF is scoping a Pacific Coast Salmon and Climate Initiative. The initial workshops in 2023 focused on developing purpose and strategy to inform future collaborative actions that will foster climate resiliency for salmon populations from California to the Arctic.

For salmon resilience now and into the future, we have to address factors that are within our control. PSF and many trusted partners have completed a decade of extensive monitoring and research on the impacts of open-net pen salmon farms on wild Pacific salmon.

This collaborative science indicates that the risks posed by B.C.'s open-net pen salmon farms ripple across the West Coast, informing PSF's position that open-net pens need to be removed from B.C. waters to closed containment in order to reduce the risks to wild populations.

However, PSF is very concerned about DFO's consideration of extending licence durations between two and six years. PSF wrote to Hon. Diane Lebouthillier, Minister of Fisheries, Oceans and the Canadian Coast Guard, stating unequivocally that extending the licences up to six years is in direct conflict with the open-net pen transition plan promised for 2025.

Collaboration is key for success. Leveraging existing partnerships and forming new ones will be at the heart of PSF's work over the next decade.

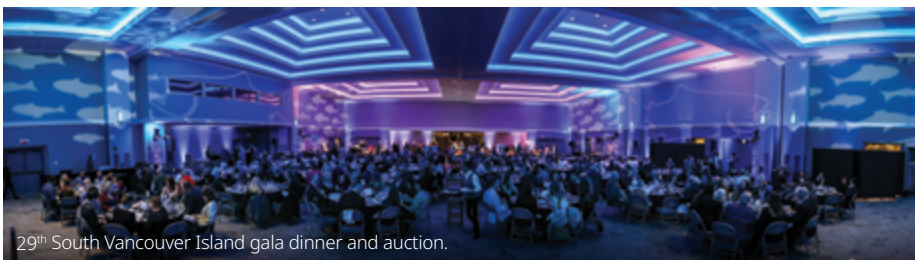
Working together, we can push beyond the status quo and toward a future of salmon recovery and resilience.

Michael Meneer
President & CEO,
Pacific Salmon Foundation

**ON THE COVER:**
Researchers study the salmon food web (pg.8).

Photo (top): Brandon Deepwell and Graham Dorsay

## COMMUNITY CORNER



29th South Vancouver Island gala dinner and auction.

### SUPPORTING SALMON ON VANCOUVER ISLAND

Thank you to everyone who supported recent PSF events on Vancouver Island! On March 9, we held our 29th South Vancouver Island gala dinner and auction. We were joined by more than 320 attendees and raised $125,000! A special thank you to our volunteer dinner committee, donors, and volunteers for their continued support of this longstanding fundraising event.

On Feb. 28, salmon supporters from Qualicum Beach, Parksville, and the Oceanside community gathered at Fern + Cedar Brewing Company for a special evening. Presented by Mosaic Forests, the event launched a new beer release with proceeds benefitting PSF.

### MLA RECEPTION

PSF and the First Nations Fisheries Council of B.C. brought together MLAs for a reception focused on the need for coordinated and collaborative salmon recovery efforts. In 2023, the Province awarded a $7.5 million grant to PSF to advance our innovative salmon recovery and resilience efforts.

### ESTUARY RESILIENCE

PSF sponsored an Estuary Resilience Celebration Symposium in Nanaimo, co-hosted by the Nature Trust of B.C. and Snuneymuxw First Nation. Representatives from PSF spoke about our multi-year nearshore and estuary projects.

### PACIFIC SALMON ACTION DIALOGUES

In February, PSF and First Nations Fisheries Council of B.C. co-hosted the latest session of the Pacific Salmon Action Dialogues — a forum that brings together salmon leaders across the province. At the latest gathering, biologist Tom Rutherford presented the concept of a 'made-in-British Columbia salmon recovery model.'

***psf.ca/BCMODEL***


### WILD SALMON DAY

Mark your calendar on June 1! Join us on *#WildSalmonDay* to celebrate the iconic species we all depend on.

***psf.ca/WILDSALMON***

## TABLE OF CONTENTS

# A HABITAT LIFELINE FOR JUVENILE SALMON IN THE FRASER RIVER

A unique solution to reverse decades of marsh degradation in the Fraser River estuary and improve habitat for juvenile salmon.

**Sturgeon Bank — a stretch of the Fraser River delta located off the west coast of Richmond, British Columbia — has lost at least 160 hectares of tidal marsh habitat over the last three decades due to dredging, dikes, and other human interventions.**

This has resulted in significant marsh recession along the Fraser River delta, which is critical habitat for hundreds of millions of out-migrating juvenile salmon, including endangered Fraser Chinook, as well as coho, sockeye, and steelhead.

An innovative multi-year project led by Ducks Unlimited Canada (DUC) aims to rehabilitate the tidal marsh habitat that juvenile salmon depend on as they prepare to transition from freshwater conditions to life in the ocean.

For tidal marshes to thrive, a continuous supply of sediment deposition is needed to allow vegetation to grow — a natural process that has been drastically reduced by human activities. This has converted productive marshes into mudflats that are not suitable habitat for fish and other wildlife.

> **We've been studying this marsh recession for more than a decade and looking for inspiration to address this challenge. Given the massive scale of ecological loss, we need to locally customize the restoration solution and test it on a pilot scale to understand the response of the foreshore to this innovative method of sediment addition.**
>
> — **Eric Balke**

Photo: Braela Kwan

Nearly **two million cubic metres of sediment** are dredged annually from the Fraser River and dumped at sea. DUC is recycling a fraction of this so-called 'waste' and using it for habitat recovery.

DUC is depositing re-purposed sediments along the Sturgeon Bank foreshore to mimic natural sedimentation processes in partnership with Fisheries and Oceans Canada, the Province of British Columbia, Raincoast Conservation Foundation, Tsawwassen First Nation, and the Lower Fraser Fisheries Alliance.

"We've been studying this marsh recession for more than a decade and looking for inspiration to address this challenge. Given the massive scale of ecological loss, we need to locally customize the restoration solution and test it on a pilot scale to understand the response of the foreshore to this innovative method of sediment addition," says Eric Balke, senior biologist with DUC and project lead of the Sturgeon Bank Sediment Enhancement Pilot Project.

PSF provided approximately $275,000 in time-sensitive funding to the Sturgeon Bank project in February 2024 to help DUC and partners complete a significant amount of sediment addition.

### INNOVATIVE SEDIMENT USE

Since 2023, DUC and partners have added 15,000 cubic metres of sediment to Sturgeon Bank. This volume is comparable to six Olympic swimming pools.

It's no easy feat to transport such a high volume of sediment.

The temporary pipeline deposits sediment slurry on the tidal flats of Sturgeon Bank.

Photo: Fernando Lessa

DUC and partners used a temporary kilometre-long pipeline to transport a slurry of water and sediment to the foreshore. Waves, tides, and currents distribute these nourishing sediments across the Sturgeon Bank tidal flats over time.

The project repurposes sediments that were already dredged from the Fraser River to decrease marine navigation congestion. These sediments are typically discarded in the ocean, but DUC's unique habitat rehabilitation project effectively diverts them from being dumped into the Strait of Georgia.

"With this innovative project we are trying to supply the ecosystem with the sediment it needs to remain resilient," says Balke.

The long-term plan of the project is to continue adding sediment to the Sturgeon Bank foreshore over the next decade while tracking the progress of marsh recovery.

"The short-term success of this pilot will show the feasibility of this method in adding sediment to Sturgeon Bank to support tidal marsh restoration. In the long term, we would like to potentially scale up the project and apply the concept more broadly across the Fraser River delta," says Balke.

***The Sturgeon Bank project received support from the British Columbia Salmon Restoration and Innovation Fund, jointly funded by Government of Canada and the Province of British Columbia. PSF is proud to support this game-changing habitat project. Additional funding for this project was provided by Tsawwassen First Nation, the Vancouver Fraser Port Authority, and the Nature Force.***

The sediment addition at Sturgeon Bank addresses habitat loss for salmon and birds, and supports **coastal flood protection** for the **City of Richmond** by mitigating the effects of rising sea levels.

Photo: Braela Kwan

# CLIMATE EMERGENCY FUND

**"Salmon are facing so many challenges — the newest yet most devastating impacts relate to climate change. Salmon stranded in a pool of water after flooding or unable to get up the river due to blockages can't wait. This is why the Pacific Salmon Endowment Fund Society provided an emergency fund of $1 million to PSF to work quickly with partners to address the problem and get the salmon moving. When action is taken immediately, the outcomes for salmon are better."**

— **Anne Kinvig**
Director, Pacific Salmon Endowment Fund Society

British Columbia's snowpack was 34 per cent below normal in March 2024, which led the Province to forecast 'significantly elevated drought hazards' for the spring and summer.

Climate extremes such as drought, flood, and wildfires create significant challenges for salmon.

These extreme climate events are only increasing in frequency and intensity across British Columbia. From altered water flows to high water temperatures, salmon are on the frontlines of climate change.

PSF's Climate Emergency Fund – launched in 2023 – was established to help salmon in climate distress. This fund will be used to help First Nations, stewardship groups, and local streamkeepers advance time-sensitive efforts to help salmon navigate extreme climate conditions.

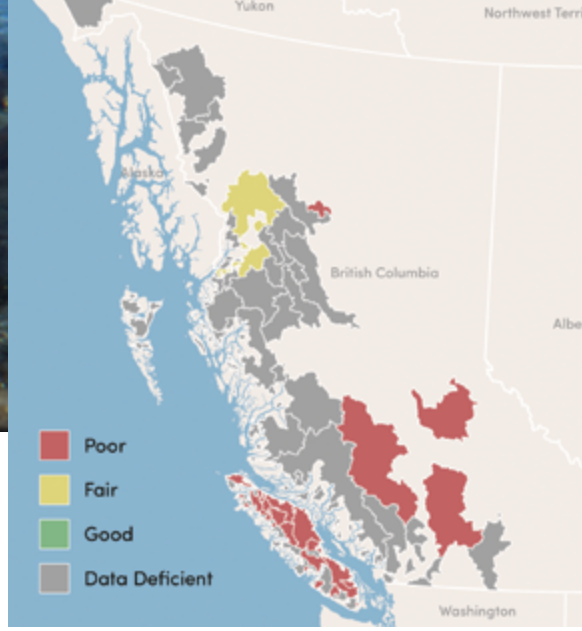
In 2023, PSF approved more than $330,000 with support from the Province of British Columbia, the Pacific Salmon Endowment Fund Society, and generous donors to help salmon populations in overcome record-breaking drought conditions.

With PSF's emergency funding, local groups were able to activate immediate on-the-ground solutions to prevent mass fish die-offs and help tens of thousands of salmon overcome migration barriers.

You can help sustain this fund and protect salmon against the looming threat of climate change. Together, we can give salmon the best chance of adapting to climate challenges.

***psf.ca/DONATE***

Photo: Fernando Lessa




**The status of steelhead in British Columbia.**

# PREVENTING SILENT STEELHEAD EXTINCTIONS

PSF compiled the best available steelhead data to assess their conservation status in B.C.

**The decline of Interior Fraser steelhead is well-documented, with less than 1,000 steelhead returning to the Chilcotin and Thompson Rivers in recent years. New status assessments from PSF now indicate that steelhead declines are occurring across the province, not just in interior B.C.**

In Gitksan Lax'yip (territory) near Smithers, the poor state of steelhead has significant cultural ramifications.

"Steelhead are very important historically to our people, and as the populations decline, their significance diminishes, as well as our food security. I can't remember the last time somebody brought steelhead to my door. It takes away from our rights to the resource, and our ability to meet social and cultural needs," says Charlie Muldon, Gitksan Watershed Authorities Coordinator.

PSF's new report outlines that among the steelhead population groups with sufficient data available for assessment, 86 per cent face major conservation concerns.

Due to limited monitoring, just 19 of the 429 steelhead populations in B.C. have data on the number of steelhead returning to spawn in the last decade. PSF experts say these data gaps could hinder efforts to implement the appropriate recovery strategies, and lead to "silent" extinctions of unique steelhead population groups.

This hits close to home for Muldon, who recalls ice fishing for steelhead with his father decades ago.

"Steelhead was the fresh food you could get year-round. In the winter and spring, having fresh fats and nutrients was critical to survival. When families went fishing, they had more than what they needed, and they'd share with each other. Steelhead are a very special meal now," says Muldon.

Declining steelhead abundance in B.C. has been linked to low survival rates in the ocean, harvests in commercial fisheries, and degradation of freshwater habitats due to logging, water extraction, and other human activities.

"Because steelhead spend more time in freshwater than salmon, up to six years, they are more sensitive to freshwater habitat pressures. Steelhead could be the canary in the coal mine for the state of these habitats," says Katrina Connors, Director, PSF's Salmon Watersheds Program.

PSF's report recommends major investments in steelhead monitoring, assessment, and conservation. The team has also published steelhead datasets on the Pacific Salmon Explorer, an online tool that provides free access to comprehensive data for salmon and steelhead. The project was funded through the British Columbia Salmon Restoration and Innovation Fund, a joint initiative by the Province of B.C. and the Government of Canada.

"I welcome PSF's inclusion of steelhead data on the Salmon Explorer tool that will increase public access to data on this iconic species," says Hon. Nathan Cullen, Minister for Water, Land and Resource Stewardship and Minister Responsible for Fisheries.

"There is now a window of opportunity to catalyze future investments to improve steelhead monitoring in B.C., address conservation risks, and work more collaboratively towards both ends," adds Connors.

***View steelhead data at SalmonExplorer.ca***

Photo: Chase White

### ALL ABOUT STEELHEAD

Steelhead are genetically identical to rainbow trout. However, they are anadromous like Pacific salmon, meaning they migrate to the ocean and return to freshwater to spawn. Yet unlike salmon, some steelhead can spawn multiple times.

For many First Nations, steelhead are an important food source and part of their culture and stewardship practices. Some steelhead runs in B.C. are world-famous among recreational fishers. Steelhead also provide essential ecosystem benefits — when they die after spawning, their carcasses release nutrients from the ocean into freshwater environments.

# PSF CALLS FOR INVESTIGATION OF COHO-KILLING TOXIN

PSF has joined a coalition asking the federal government to assess the toxicity of a tire preservant chemical linked to coho salmon deaths.

**Four years ago, researchers from Washington State discovered that a chemical called 6PPD, commonly used in tires, was killing coho salmon during heavy rain events. Since then, experts in British Columbia have been studying the tire toxin in salmon-bearing waterways in the province.**

6PPD is used to prevent tires from degrading or cracking. When 6PPD is exposed to air, it creates a by-product called 6PPD-quinone. Rain can transport this micro-particle into urban rivers and waterways by road run-off through storm drains, catch basins, or water run-off points.

PSF has taken an active role on the issue since 2020 by leading targeted outreach with tire manufacturers and government agencies, connecting with researchers across the province who are studying 6PPD at workshops and meetings, and funding monitoring efforts of the tire toxin across Vancouver Island.

In February, PSF and other environmental non-profits sent a request to Hon. Steven Guilbeault, Canada's Minister of Environment and Climate Change, to investigate the toxicity of 6PPD.

"Many salmon populations are in serious condition, particularly those who spend more time in freshwater habitat. Researchers in Canada and the United States have identified that 6PPD in tires can kill coho salmon when it breaks down in the environment," says Michael Meneer, CEO and President, PSF.

"The Pacific Salmon Foundation is calling on the Canadian government to take urgent action and revisit this chemical based on findings from current research related to the deadly impacts on coho salmon."

More than five years ago, Canadian agencies determined 6PPD was only moderately toxic in the environment. However, a detailed individual assessment of the chemical was not conducted.

Since this assessment, new research has been published on the environmental risks of 6PPD.

A 2020 study from the University of Washington, for example, identified 6PPD-quinone as a cause of 'urban runoff mortality syndrome' in coho salmon. The seminal study determined the 6PPD-quinone concentration causing acute toxicity in coho salmon, offering an essential reference point for local samples.

Further studies have indicated that 6PPD-quinone is harmful not only to coho but also to Chinook salmon and rainbow and steelhead trout.

Several research teams are now conducting 6PPD monitoring across British Columbia to determine where the compound is present and at what concentration levels.

With support from PSF, the British Columbia Conservation Foundation (BCCF) is monitoring 6PPD-quinone in streams during storm events on the east coast of Vancouver Island in collaboration with First Nations, volunteer stewardship groups, and Vancouver Island University's Applied Environmental Research Lab.

BCCF's monitoring efforts are ongoing, but their preliminary samples indicate toxic levels of 6PPD-quinone above the lethal concentration limit for juvenile coho present in salmon-bearing streams on Vancouver Island.

"This harmful toxin is something we must take action on now, and we hope that the federal government will prioritize this investigation and work with us to find a new solution that will protect wild Pacific salmon," says Meneer.

PSF, Ecojustice, Raincoast Conservation Foundation, and Watershed Watch Salmon Society look forward to receiving an official response from Environment and Climate Change Canada by May 2024, regarding whether they will consider the chemical for assessment.

Photo: Brandon Deepwell and Graham Dorsay

Peninsula Streams Society monitors 6PPD-quinone at Gabo Creek, a salmon-bearing tributary of the Colquitz River, near Victoria, B.C.

Herring spawn near Qualicum Beach in March 2024.

Photo: Loic Dallaire

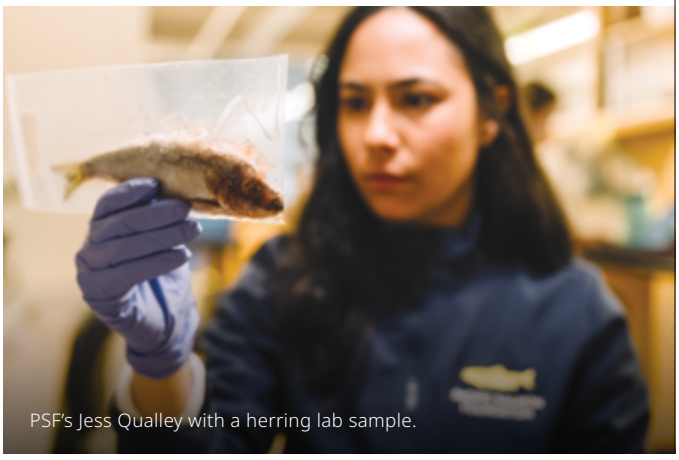
# GROUNDBREAKING HERRING RESEARCH BEGINS IN B.C.

The Pacific Salmon Foundation is launching a multi-year research project to understand the role of herring in the salmon food web in partnership with First Nations communities.

**Pacific salmon need herring to survive.**

The small, silver forage fish — which can be found throughout the Pacific Ocean from Baja California to Japan — make up the majority of adult Chinook and coho salmon's diet in the Strait of Georgia.

Healthy herring populations also divert seals away from targeting salmon for food.



PSF's Jess Qualley with a herring lab sample.

Photo: Brandon Deepwell and Graham Dorsay

By supplementing food supply for salmon and reducing predation pressures, there is evidence that abundant herring can boost juvenile salmon's chances of survival.

That's why PSF's Marine Science Program is launching a new research project to study salmon and herring interactions, thanks to funding from the British Columbia Salmon Restoration and Innovation Fund.

"If we understand what drives long-term changes in herring abundance and distribution, and how that impacts salmon in the Strait of Georgia, we can better inform salmon conservation and rehabilitation efforts," says Jess Qualley, project manager of PSF's herring project.

The team will be filling in key knowledge gaps, like assessing how juvenile salmon feed on juvenile herring, tracking changes to the Strait of Georgia's resident herring populations, and evaluating herring spawn habitat.

The multi-year project will employ innovative fieldwork methods, including satellite imagery and underwater robots to assess spawn habitat, and interpreting sound waves to estimate the size of herring populations.

## WORKING WITH FIRST NATIONS

Another key element of the project is working with First Nations to preserve traditional ecological knowledge of herring populations.

Historically, abundant herring supported a healthy food web and were an important food source for First Nations communities in the Strait of Georgia.

But in the last century, some herring populations in B.C. waters have declined dramatically. Commercial herring fisheries began in the 1800s before continual overfishing led to a catastrophic crash in the 1960s. Many traditional spawning sites disappeared completely.

To explore the traditional cultural value of herring to coastal First Nations, PSF will provide funding for Indigenous groups to organize events and workshops that celebrate herring and bring elders and youth together. It's an opportunity for community members to exchange knowledge about how herring has influenced the traditions, distribution, and settlement of First Nations surrounding the Strait of Georgia and inspire the next generation of marine stewards.

One of the communities that PSF will be partnering with is Tla'amin Nation, located on B.C.'s Sunshine Coast. Tla'amin Nation is a coastal community that depends on ocean resources for not only sustenance, but also cultural practices and teachings.

"Our name for our community is t̓išosəm — calm and milky waters from herring spawn," says Denise Smith, Director, Lands and Resources Department of Tla'amin Nation. "Sadly, we don't often see herring spawn in these waters anymore."

By participating in PSF's herring project, Tla'amin Nation hopes to be part of a collaborative process that broadens knowledge of the status of herring and explores how today's populations continue to be impacted by contamination and climate change.

"It is our hope to be part of the exploration, restoration and rejuvenation of herring," says Smith.

## NATURAL PHENOMENON

Every year between February and April, schools of herring spawn all along B.C.'s coast.

It's a spectacular event which produces a turquoise water colour so vibrant it can be seen from space. This annual natural phenomenon provides a massive pulse of food and energy to the marine food web and attracts many species to nearshore areas including seals, sea lions, whales, and of course, salmon.

PSF's Jake Dingwall completing herring fieldwork at Coles Bay Regional Park.

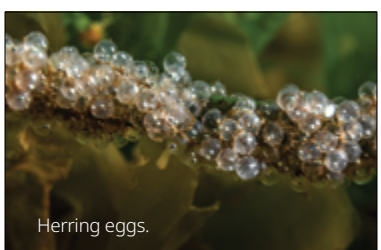
Photo (left): Eiko Jones. Photo (right): Brandon Deepwell and Graham Dorsay

**"Our name for our community is t̓išosəm — calm and milky waters from herring spawn. Sadly, we don't often see herring spawn in these waters anymore."**

— **Denise Smith**

In the past, Pacific herring would spawn broadly across the Strait of Georgia, but in the last 40 years or so, scientists have seen a shift in where herring lay their eggs.

It's still the early stages of PSF's study, but herring experts have already identified key historical and current spawn sites and will compare them to see what is potentially driving changes in spawning behaviour over time.



Herring eggs.

Photo: Eiko Jones

### WHERE CAN YOU SEE HERRING SPAWN?

The area around Denman and Hornby Island in the northern stretches of the Strait of Georgia is one of few remaining locations with consistent annual spawning events, usually peaking in March.

One of these sites is Coles Bay Regional Park, located on Pauquachin First Nation land near Victoria airport on Vancouver Island. Here, human activity has likely impacted herring's ability to spawn.

The quiet beach that looks out into Saanich Inlet is picturesque, but concrete hardening of the shoreline has degraded important eelgrass habitat.

"Herring need vegetation to spawn on," says Jake Dingwall, who is leading habitat assessment for the herring project. "It's an easy equation: if the vegetation is unhealthy, or missing entirely, there won't be a successful spawn."

Dingwall is also deploying temperature loggers in intertidal zones at several sites across the Strait of Georgia, from Powell River to Denman Island.

By monitoring ocean temperature levels, in conjunction with vegetation and chemical contaminant surveys, he hopes to understand why herring spawning patterns have shifted and how that might impact salmon who feed on herring larvae.

"It's undeniable how important herring are to a salmon's diet," Dingwall explains. "Without herring, you're not putting dinner on the plate for salmon."

***The British Columbia Salmon Restoration and Innovation Fund is funded by the Government of Canada and the Province of British Columbia.***

# THE MAMALILIKULLA'S GAME PLAN TO RECOVER SALMON POPULATIONS

In 2021, Chief Winidi (John Powell) led the Mamalilikulla First Nation in declaring an Indigenous Protected and Conserved Area (IPCA). Now, they're taking steps to restore salmon populations.

Photo: Taylor Roades

**Indigenous-led conservation has existed since time immemorial. But in recent years, a new tool has helped secure the stewardship authority of Indigenous governments across Canada. Several First Nations in B.C. have now declared Indigenous Protected and Conserved Areas (IPCAs).**

For the Mamalilikulla, establishing an IPCA was an opportunity to spearhead stewardship efforts on their territory, located just north of Vancouver Island.

"We recognized the incredible potential for the Mamalilikulla to reconnect their dispersed membership to the traditional territory, and to re-establish their inherent stewardship responsibilities. It was humbling and exhilarating when elected and hereditary leaders publicly declared the IPCA in November 2021," says John Bones, advisor to Mamalilikulla First Nation.

Their new IPCA is roughly the size of Vancouver and includes both land and marine components around Gwa̲xdlala (Lull Bay) and Nala̲xdlala (Hoeya Sound), northeast of Port McNeill. It's an area of deep cultural and ecological importance to the Mamalilikulla, who value its unique underwater corals, sea sponges, and estuaries.

Photo: Taylor Roades

Mamalilikulla Chief Councillor Winidi (John Powell).

Streams in the IPCA have historically supported abundant salmon populations, as evidenced by ancient villages and fish traps. However, a combination of timber harvesting and landslide events has now degraded salmon habitat.

**"Salmon runs have dropped significantly in the past 100 years. A few years ago, the salmon returns were so low that our Grizzly bears were starving," says Mamalilikulla Chief Councillor Winidi (John Powell).**

"A key objective in our IPCA Declaration is to protect and restore salmon, and our management plan for the IPCA includes strategies and zoning that promote salmon habitat restoration."

## WHAT IS AN IPCA?

IPCAs are lands and waters where Indigenous governments commit to leading long-term conservation efforts in accordance with their own priorities, knowledge, and laws. The concept was first introduced in 2018, and could be an important step toward implementing the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in Canada.

With support from PSF's Community Salmon Program, the Nation is planning restoration activities alongside partners and Indigenous Guardians. In early 2024, they aim to develop site restoration plans for the IPCA's eight salmon streams.

Proposed projects include stabilizing paths of recent landslides by planting riparian vegetation, removing large debris to allow fish passage, and improving gravel bed conditions for salmon spawning. Grant funds will support this fieldwork through 2024.

Restoring salmon streams is part of the Mamalilikulla's commitment to lead conservation efforts under new collaborative governance agreements and management plans with Crown governments. Notably, a Land Act Reserve already prevents land use that contradicts their management objectives.

"We're close to signing a joint management plan with B.C. that includes support for stream and watershed restoration activities. We're also close to a formal agreement with B.C. for collaboratively managing the IPCA," says Chief Winidi.

The Nation has successfully advocated for Fisheries and Oceans (DFO) to close the IPCA to all fisheries, and initiated an eelgrass restoration project in the Lull estuary to support juvenile salmon.

"With funding from organizations like PSF, we're cautiously optimistic about the future of salmon in the IPCA."

**ABOUT THE COMMUNITY SALMON PROGRAM:**

In the 34 years since its inception, PSF's Community Salmon Program has distributed $27.4 million in grants to more than 3,200 projects across B.C. and the Yukon and engaged thousands of volunteers.

***psf.ca/DONATE***

# FORWARD THINKING

**Leading salmon recovery and resilience in the age of climate change and reconciliation.**

**The Pacific Salmon Foundation is pleased to release a new strategic plan that will guide our work over the next five years, aiming to focus our efforts in the areas where we can have the greatest impact for salmon.**

Informed by our PSF board of directors and staff, as well as external experts and partners, the plan focuses on three collective impact areas: Salmon Resilience, Systems Transformation, and Salmon Recovery.

The systems that govern salmon management were developed in times of abundance and stability and no longer fit today's context. We are living in an age where climate change is massively shifting the conditions for salmon. At the same time, First Nations are increasingly asserting their rights in the governance of natural resources, underscored by the United Nations Declaration on the Rights of Indigenous People (UNDRIP), and are involved and leading salmon recovery efforts.

**SALMON RESILIENCE:**
Supporting salmon populations and habitats to be resistant to future degradation or decline.

**SALMON RECOVERY:**
Restoring habitat and populations and addressing factors that have led to their decline or degradation.

**SYSTEMS TRANSFORMATION:**
Acting as a transformative force to redefine the landscape for Pacific salmon recovery and resilience.

Our greatest strength, as articulated by our board, staff, and external experts, is our value as a 'neutral broker' focused on Pacific salmon recovery and resilience. Acting independently and wholly focused on Pacific salmon keeps us unbiased and allows us to balance our research, programs, and influence. We look holistically at the needs of restoring at-risk salmon stocks and future-proofing the ones doing well. We know salmon impact people and places around B.C. We know everything is intertwined, and do our best to connect the dots and leverage partnerships. Challenges in the system come with opportunities for collaborative and coordinated action.

This strategic plan sets out the unique role of PSF and what we are excited to focus on over the next five years to drive a greater positive impact for the future of Pacific salmon.

## PSF'S BLUEPRINT FOR CHANGE

*Learn more at psf.ca/ABOUT*

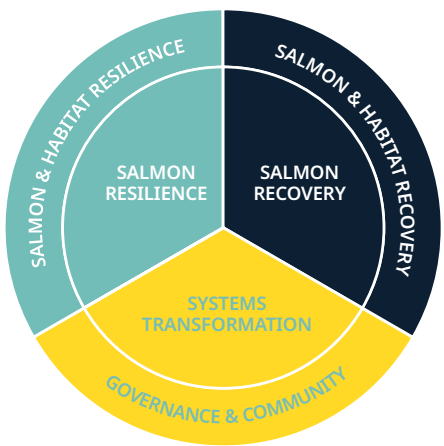
**WE APPLY OUR ASSETS...**

- TEAMS
- PARTNERSHIPS
- REPUTATION
- INDEPENDENCE
- DONOR BASE & FUNDING
- WORK AT DIFFERENCE SCALES
- DATASETS & STUDIES

**TO CARRY OUT OUR ACTIVITIES...**

- CONVENE
- EDUCATE, INFLUENCE & ADVOCATE
- SCIENCE, DATA & INNOVATION
- MOBILIZE & INVEST
- FUNDRAISE
- BUILD CAPACITY

**TO SUPPORT OUR SHARED GOALS...**




**...AND REALIZE OUR VISION!**

Healthy, sustainable and naturally diverse populations of Pacific salmon for the benefit of ecosystems and people for generations to come. Effective stewardship of natural resources in B.C. and the Yukon that involve communities in decisions affecting Pacific salmon.


Conserving and restoring the natural habitats of wild Pacific salmon
Wheaton Precious Metals is proud to support the Pacific Salmon Foundation. Together, we are making a difference in preserving salmon populations for future generations through conservation, restoration and research.
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