A message from our executive director.

Here in the Skeena, salmon are in our imaginations, our stories, our freezers. As the salmon crisis deepens, we need to step back, appreciate what we have and build a future where our connections to the fish remain strong.

While it is true that the future will not look like the past, this does not mean that salmon will not continue to benefit our communities. We have the tools; we know what we need to do to manage salmon in an uncertain future.

Our new reality means less certainty over how many salmon will return each year, which populations and species will do well—and which won’t. Being adaptable in-season and ensuring our fisheries are selective is the only way we will be able to maintain harvest opportunities.

To this end, SkeenaWild has been working with local partners and governments to improve in-season monitoring, support selective fishing initiatives, develop more adaptive fishing plans, improve in-season decision making, and reduce the significant interception of our salmon and steelhead in Southeast Alaska.

With warming oceans and more extreme weather events, protecting habitat is more important than ever before. Healthy habitat is the foundation of healthy salmon. This means we need to do the hard work of land use planning and ensure development is done responsibly.

(continued on the next page)
This past year, SkeenaWild partnered extensively with Indigenous communities on developing and implementing land use plans that protect salmon habitat and clean water. We worked to understand mining impacts, improve monitoring and push for best practices for existing and proposed mines. We continue to protect critical salmon habitat in the Skeena estuary and call for more sustainable port development. SkeenaWild led efforts to better understand cumulative impacts to salmon habitat and push governments to implement tools to reduce impacts from forestry and linear developments while making space for these important industries.

We’ve celebrated many positive outcomes and all are due to the hard work of those inside and outside our organization. Our diverse partnerships and supporters are key to our success and allows us to respond quickly as issues arise while remaining focused on our bold, forward-looking projects working towards systemic change. There are many in our communities and beyond who care deeply about salmon and are willing to step up to help—we cannot do this work without you.

Looking ahead, we know the challenges are not going away. Our hope lies in the amazing resilience of wild salmon and our communities’ unrelenting connection to this amazing place. SkeenaWild is committed to providing solutions, leadership, and capacity to ensure salmon and steelhead have a future in the Skeena.

-Greg Knox, Executive Director, SkeenaWild
2021 AT A GLANCE

A few highlights from the year:

YOUTH PROGRAMS We held 69 educational programs reaching over 2,000 students and adults.

REBUILDING SALMON We worked with Indigenous partners to develop and implement salmon rebuilding plans, undertook watershed restoration work, and worked with government and partners to reduce fishing impacts.

NEW VOLUNTEER PROGRAM We created a new volunteer program, The Skeena Squad, with a roster of 45 volunteers (and growing) who participate in a variety of stewardship activities.

MINING REFORM We published well-received reports highlighting the top 12 polluting or risky mines in BC, mapped out contaminated mine sites, and worked with Lake Babine Nation to reduce impacts from mines on Babine Lake. We greatly expanded our capacity to do this work and supported Indigenous and local groups in understanding impacts and pushing for improved practices that protect water and fish.
Salmon are the backbone of the diverse cultures, economy and ecosystem in the Skeena region. Protecting this iconic species is fundamental to maintaining and building a healthy watershed and local communities.

**SkeenaWild’s mission** is to make the Skeena watershed and nearby coastal communities a global model of sustainability.

This means bringing rigorous science to communities and all levels of government to inform decisions and strategies which protect and rebuild our wild salmon populations.
Program Update

Fisheries

We collaborate with First Nations, the Department of Fisheries & Ocean, harvesters and conservation partners to reduce impacts on small vulnerable stocks and develop and implement rebuilding plans.

Through the Integrated Harvest Planning Committee, a multi-stakeholder process, SkeenaWild continues to advocate for the development of abundance-based management plans for all species. We continue to push for a precautionary approach to all fisheries unless in-season abundance allows for increased opportunities.

Throughout the season, we participate in weekly calls with DFO, providing feedback on fishing activity and monitoring the health of returns for all species.

We’re working with our partners to ensure that DFO is integrating more ecosystem and climate change assessments into decision-making, and implementing rebuilding plans for populations of salmon in the red zone.
This year, DFO forecasted a return of 1.7 million sockeye. As of October, current numbers estimate that approximately 1.2 million sockeye returned to the Skeena Watershed.

This was the worst year on record for steelhead return, with an estimate of just over 5,400—that’s about 20% of average return. The poor numbers triggered the province to instate a bait ban in early September and close the fishery in October. The past two years of steelhead returns were also low, and if this continues urgent action will be needed.

Skeena Chinook return was slightly lower than last year at about ¼ of the historical average while Skeena coho fared better and Nass salmon returns were decent.
[The Skeena] is a world-class system. All of us who care about these fish need to band together, figure out solutions and implement them.

– Angler
The story of the season for Skeena fisheries was poor. But despite the challenges, we continue to work hard for all species of salmon and steelhead. We know how resilient salmon are, and if given a chance, they will thrive. That’s our mission.

**Hatcheries**

As salmon declines become more serious, governments and fishing interests are looking to hatcheries as a quick fix. However, releasing huge numbers of hatchery salmon increases competition on our wild fish for the limited food in the North Pacific ocean. Hatchery salmon can also reduce the genetic fitness and increase fishing pressures on wild salmon. This past year SkeenaWild ramped up efforts to address these threats. We understand that hatcheries have a role in community engagement and, done carefully, can help rebuild at-risk populations. We’re working with a coalition to educate governments and the public on hatchery impacts to wild fish and ensure a cautious approach.

**Pacific Salmon Commission**

SkeenaWild has held a seat on the Northern Panel of the Pacific Salmon Commission for the past 14 years. We are working diligently inside the process to pressure Alaska to reduce interception of BC salmon and steelhead. Recently, we received commitments in the new treaty to reduce impacts on Skeena and Nass sockeye during low return years. We’ve also been collecting and improving information on Alaskan harvests of BC salmon. This information will be critical in bringing conservation measures into the Pacific Salmon Treaty in the future.

**First Nations Selective Fisheries**

SkeenaWild continues to support the Lake Babine Nation and Gitxsan in developing their selective fisheries programs.

We also continue to support Lake Babine Nation in implementing their stock assessment program. Increased assessment is allowing the value of the fishery to improve through improved precision, better timing and increased production.
Alaskan fisheries. Alaska fisheries cause one of the greatest threats to Skeena salmon.

Our salmon swim through Southeast Alaska before entering Canadian waters, but an increasingly large portion of Skeena salmon and steelhead are caught in Alaskan fisheries.

This issue is becoming even more prominent as we take action to rebuild our salmon while Alaskan fishers maintain high harvest levels just across the border.

Heading into 2022 we are releasing a state of knowledge report, building a diversity of partners to address this issue, and preparing for a major education and international markets campaign.
Percentage of Commercial Skeena Sockeye Catch, United States versus Canada.
SkeenaWild conducts and sponsors rigorous and applied scientific research to better understand salmon ecosystems. We catalyze and support planning processes which advocate for ecologic, economic, social sustainability, and resiliency. In addition to ongoing fisheries and Wild Salmon Policy-related research, we have four science programs underway:

- Rebuilding plans for at-risk salmon populations
- Skeena Sockeye Century Project
- Characterizing sockeye distribution in the Upper Bulkley River
- Millennial changes in salmon populations
We helped put five radio receivers at key salmon spawning locations throughout the Morice Watershed. In partnership with Wet’suwet’en Fisheries, we deployed 180 radio tags in sockeye at Witset Canyon.

This information is critical to better understand critical habitats within the Morice and protection mechanisms needed to ensure their long-term health and success.

The Nanika River has been heavily impacted by deforestation over the past 75 years, causing major habitat health concerns for this at-risk population of sockeye.

We conducted an aerial survey of the lower Nanika River, comparing recent images with photos dating back to 1950 to determine the change in habitat and identify areas of dewatering or channel instability. This will help us identify the current state of habitat and areas for restoration. This information will inform rebuilding and land use planning efforts.

In partnership with Gitksan Watershed Authority, we generated a status assessment report for Kispiox sockeye in hopes that DFO will come to the table and formally develop a recovery plan. The results show that the population as a whole is highly diminished in abundance and is in need of rebuilding.

Most of our science efforts this year have been directed at the rebuilding plan for Morice Sockeye. Skeenawild helped secure over $1M in federal funding for the Office of the Wet’suwet’en to undertake a three-year project to implement the Morice Sockeye Recovery Plan. We work closely with Wet’suwet’en Fisheries to carry out this work and conduct our own in-field research and assessments to support the recovery of this fishery.

2021 Highlights

Tracking Sockeye Salmon

Habitat Assessment Nanika River

Gitksan Assessment Report
Update from Mike Price, SkeenaWild's Science Director.

SkeenaWild’s Science Director Michael Price is in the homestretch of completing his doctoral thesis at Simon Fraser University. His research explores the influence of climate, fishing, and artificial enhancement on Skeena sockeye populations over the last century. To do so, Mike uses fish scales as a window into the past. Through extensive DFO archives, he accessed a unique collection of sockeye salmon scales and biological information extracted from fish caught in commercial fisheries at the mouth of the Skeena River beginning in 1913, and compared the information concealed within these scales with fish from the modern era. Mike’s results show that Skeena sockeye populations were far more abundant and diverse in the past, though existing freshwater habitat diversity is helping to mediate the negative effects of increasing temperature for some populations. Mike continues to merge his PhD research into SkeenaWild initiatives, including Salmon Rebuilding Plans and the Skeena Sockeye Century Project.
This deep historical research has enlightened our understanding of how salmon populations have responded to a century of human influence, which in turn provides resource managers and conservation scientists with a better understanding of how these populations may persist and thrive in the future.

—Mike Price
Policy and legislative reform touches everything we do at SkeenaWild. Reforming outdated policies and ensuring good legislation that centers salmon and people are key to achieving the long-term systemic changes needed to secure the health of our communities and the resources that we depend on, be it forests, clean water, salmon, and mining.
Several of SkeenaWild’s recommendations were reflected in last spring’s $647M federal budget announcement. The budget doubled the BC Salmon Restoration and Innovation Fund, providing an extra $100M. A Pacific Salmon Secretariat and a restoration center of expertise will be developed and there is a commitment to improve management of commercial and recreational fisheries.

**Federal Pacific Salmon Strategy**

Several of SkeenaWild’s recommendations were reflected in last spring’s $647M federal budget announcement. The budget doubled the BC Salmon Restoration and Innovation Fund, providing an extra $100M. A Pacific Salmon Secretariat and a restoration center of expertise will be developed and there is a commitment to improve management of commercial and recreational fisheries.

**BC Wild Salmon Strategy**

SkeenaWild is working with partner organizations and the provincial government to help ensure the new BC Wild Salmon Strategy does not act as a vehicle for increased hatchery and Alaskan-style ocean ranching production.

We are also encouraging the province to include more resources to support habitat monitoring and protection, and to integrate government-approved Wild Salmon Policy habitat assessment information into land use decision-making.

**BC Mining Law Reform**

The Mining Law Reform Network (BCMLRN) includes the UVic Environmental Law Centre, WestCoast Environmental Law, Northern Confluence and Mining Watch Canada. Many of Canada’s mining laws are over 100 years old and are in desperate need of modernization. In collaboration with this network, we continue to push for policy reform recommendations for mine water management and environmental monitoring. We are also helping to refine BCMLRN’s policy recommendations for mine financial assurances and reclamation security.
We continue to work with communities and the provincial government to increase our understanding of the impacts from existing and proposed industrial development, provide solutions and inform strategies to mitigate impacts from proposed projects, and support sustainable, community-led land use planning.
Indigenous community-led land use planning is where reconciliation can be operationalized. Our long-term goal is to move from outdated forestry practices and land use plans that do not protect functioning habitats to detailed spatially-explicit land use plans that protect culture, wildlife, ecosystems and local economies. Land use plans provide a clear path forward for how, when, and where development can occur on the land base. With some Indigenous-led land use plans already operationalized in the Skeena Watershed, it’s clear that they provide guidance and certainty for sustainable rates of resource development while simultaneously protecting shared values.

**Timber Supply Review (TSR)**

SkeenaWild worked closely with Indigenous and community partners to push for more sustainable harvest levels in the mid-Skeena watershed. We submitted a salmon habitat impact assessment and watershed sensitivity analysis as part of the official comment submission for the Kispiox TSR.

These analyses provide a measure of the Timber Supply Area’s health with respect to ecosystem function and risk of negative impacts to salmon habitat using scientifically rigorous and government-approved indicators from the federal Wild Salmon Policy.

**Healthy Watersheds Initiative**

Throughout spring and summer 2021, SkeenaWild worked (along with partners) on a stream habitat restoration work on Willow Creek and a riparian restoration survey on four streams north of Terrace.

These projects involve restoring salmon habitat and assessing stream characteristics on a total of 42.9 kilometres. We’re working closely with Kitumkalum First Nation to carry out this work.
Mapping impacts to salmon.

Protecting salmon habitat is more important than ever in the face of the climate crisis. We’re seeing impacts from industrial development, steady deterioration and degradation of the remaining forests, wildfire, disease outbreak, landslides, and drought (to name a few).

Land use decisions that impact salmon habitat largely fall under provincial jurisdiction yet salmon are managed federally. This policy gap has left salmon falling through the cracks for too long. Alongside our partners, we’re mapping impacts to critical salmon habitat using the Wild Salmon Policy indicators. We’re working with the provincial government to incorporate data and readily available habitat health assessment information into the new BC Wild Salmon Strategy (BCWSS) and decision-making.

To see some of the work we’ve been doing around habitat assessment mapping, click here.
Impacts from mining is a growing concern in the Skeena Watershed. Open pit mines pose significant threats to salmon and steelhead due to metal and acid contamination, as well as communities dependent on nearby water sources. In collaboration with our many partners, we’ve doubled our efforts to bring 100-year-old mining laws into the 21st century and better understand impacts on fish and water.
2021 Highlights

We’ve increased our capacity to work on mining reform and research. Requests to SkeenaWild for mining-related expertise and support has increased and we’re taking on new types of projects, including assessing impacts on water and fish from mines in the region, working with Indigenous partners to implement better monitoring and treatment, bringing new mining protocols into Indigenous-led land use plans, pursuing academic publications, and researching compliance violations from a variety of mines in BC.

Transboundary Mining

In collaboration with Northern Confluence, Salmon Beyond Borders, Rivers Without Borders, University of Montana, and the Southeast Alaskan Indigenous Transboundary Commission, we’re working on a variety of transboundary mining issues.

We submitted a letter to DFO regarding planned destruction of fish habitat for the KSM mine project and contributed to a rebuttal to the Mining Association of BC’s open letter to Alaskan lawmakers.

We performed a technical review of Eskay Creek Revitalization Initial Project Description and helped develop a joint submission to the BC Environmental Assessment Office.

Dirty Dozen Report

In May, we published a report highlighting the top 12 polluting or otherwise risky mines and mine proposals in BC in partnership with BC Mining Law Reform Network. The report provides policy reform suggestions for each mine, and links to other expert guidelines and recommendations for responsible mining in BC.

Read the Dirty Dozen report.
Program Update

Community Engagement

SkeenaWild has a profound relationship to this place and this place has a profound relationship with salmon. Our job is to defend those relationships.

We strive to build connections, create dialogue, solicit feedback, and share stories about SkeenaWild’s work and salmon-related issues.

We do this increasingly through digital media (videos, podcasts, social media and newsletters), social and educational programs, annual events, and conversations with neighbours, friends, and colleagues.
Thanks to the vision of our eager team and demand from our community to create more hands-on engagement opportunities, SkeenaWild put significant effort into shifting how we show up in our communities. With so much of our work happening behind the scenes, we were really excited to get our feet wet and hands dirty with our neighbours.

### The Skeena Squad

We developed a new volunteer program called “The Skeena Salmon Stewardship Squad” (or “Skeena Squad” for short). Our roster of 45+ volunteers meet on the last Sunday of every month for riverside stewardship work events, including cleanups, invasive plant removal, and small habitat restoration projects.

We hope to expand this program in the coming year to include more citizen science initiatives.

### Skeena Salmon Arts Festival

Once again, SkeenaWild helped to organize and sponsor the annual Skeena Salmon Arts Festival. This year’s festival saw approximately $250K investment into community art projects, with several large and mini murals created, along with banners, sculptures and a beloved art collective exhibit that traveled the Northwest throughout summer and fall.

This locally-curated, place-based art festival continues to generate energy and excitement through the region and is quickly becoming a celebrated attraction.

### Upstream: A SkeenaWild Podcast

This year, we were thrilled to launch of Upstream, our six-episode podcast series that explores the Skeena region through its ecology, science and culture around salmon. It features interviews with SkeenaWild staff, highlighting who they are and the work they do, as well as our partners throughout the watershed.

All six episodes are available to listen on Apple, Spotify or SoundCloud. SkeenaWild is currently looking into production for a second season.
A note about the SkeenaWild Film Festival.

Out of respect for the challenges that our small and remote Skeena communities are facing due to the Covid-19 pandemic, the SkeenaWild team made the difficult decision to put the film and photo festival on hold for the year.

We’re eager to relaunch the festival in 2022 with new film and photo categories, and a new look!

We’re excited to once again celebrate and showcase the incredible and inspiring work of northerners for northerners in the coming year.
Since 2018, we’ve been inspiring the next generation of Skeena Watershed stewards by reaching youth in the classroom and community.

Our Environmental Educator shares her passion for science, salmon and our watershed with hands-on, educational (and fun!) activities and demonstrations for K-12 students to teach them about the importance of protecting and conserving our valuable resources.

We do this through engaging in-class and extra-curricular workshops, outdoor day camps and field experiences, and online lesson plans and educational resources.
2021 Highlight

Classroom

1,061

Students and adults were reached through 39 virtual, in-classroom and outdoor field workshops in 10 different schools.

Community

900+

Youth and adults directly reached through 30 Watershed Nature Science Events.
In the classroom.

We’re inspiring the next generation of Skeena stewards by reaching youth in the classroom, and delivering on the biology and importance of our salmon.

In-Class Workshops

Despite the challenges of the ongoing pandemic, our Environmental Educator was able to deliver 39 workshops (virtual and in-classroom) with eight schools, directly reaching 762 students and teachers. Workshops covered several theme areas, including salmon life cycle and habitat, watersheds and water cycles, local ecosystems, climate change, and invasive species.

Outdoor Field Experiences

This past spring, 252 students and teachers from 12 classes and four schools participated in our first outdoor field experiences at Howe Creek in Terrace, undertaking water quality testing and aquatic macroinvertebrate surveys. An additional 47 students and teachers from four classes in two schools also participated in service learning projects, learning about and removing invasive plant species from our local waterways.
In the community.

Homeschool Program
This past fall, we launched a new program to reach homeschool students and their families. We held three monthly, outdoor environmental education sessions at Howe Creek, directly reaching 15 youth and their parents.

Youth Conservation Leadership
This past fall, we also launched a new program for youth ages 12 to 17 to involve them in conservation projects, teach them about watershed science, and help them to develop the leadership skills necessary to become future stewards.

Watershed Science
We developed and delivered several watershed science outdoor camps for youth ages five to 13 years during the summer months, on non-instructional days, and after schools, directly reaching 78 youth in the Terrace area.

Pop-Up Nature Science Events
We launched a new program of free pop-up events, featuring hands-on educational activities, that were held at nine community spaces and provincial parks in the Terrace area directly reaching 900+ youth and adults.
Lauren, Age 8

“I love SkeenaWild summer camp so much! I wish I could live here!”

Parent of Esben, Age 5

“My son LOVED his time at Ferry Island with your team. He still talks about all the snakes, bugs and salamanders he explored.”
“...Even if they may not realize it now, these opportunities and experiences are incredibly valuable for the kids. It was also very valuable for me as a new teacher. I am so thankful for the availability of a resource like SkeenaWild.

– Grade 8 Teacher
Our team.

- Greg Knox, Executive Director
- Julia Sorochan, Operations Manager
- Nita Back, Office Administrator
- Michael Price, Salmon Ecologist & Science Director
- Adrienne Berchtold, Aquatic Biologist & Mining Impacts Specialist
- Daphnee Tuzlak, Geologist & Mining Impacts Researcher
- Kirby Muldoe (Hup-Wil-Lax-A), Indigenous Engagement Director
- Sarah Railton, Forester & Forestry Lead and Land Use Planner
- Fred Philpot, Forester & Land Use Planner
- Kate Dillon, Biologist & Assistant Land Use Planner
- Len Vanderstar, Habitat Biologist
- Christine Slanz, Education Program Director
- Cassie Groves, Education Program Assistant (summer student)
- Dan Mesec, Communications Director
- Julia Crawford, Communications Specialist
- Joele St-Gelais, Communications Coordinator
- Greg Taylor, Senior Fisheries Advisor

A few members of our incredible SkeenaWild team.
In September, we threw on some gloves and boots and cleaned up our local waterways.

Our BC Rivers Day cleanup crew consisted of SkeenaWild staff and their families, along with our colleagues at the Steelhead Society (Northern Branch), Terrace Conservation Office, and DFO, who joined us for our annual cleanup in honour of World Rivers Day.

Through events like cleanups, we demonstrate conservation in action. SkeenaWild staff is committed to this on-the-ground work and with plenty of grit (and a few grins), we lead by example in helping to contribute to a healthier watershed for all.
Want to get involved?

Together, we can help Skeena salmon.

MAKE A TAX-DEDUCTIBLE CONTRIBUTION  There are many ways to donate to SkeenaWild, whether you're a business, individual or live outside of Canada. Your tax-deductible contribution goes towards on-the-ground stewardship work in the Skeena Watershed.

VOLUNTEER  Get out there! Your participation can be wide and deep or short and focused. Whatever works for you, we invite you to join us through our volunteer programs.

SIGN UP FOR OUR NEWSLETTER  Sign up for our monthly newsletter The Stream to stay informed of our programs and how you can become part of the solution.

SHOP OUR MERCHANDISE  Support Skeena salmon and look good while doing it. We have SkeenaWild swag and merch for adults, youth and kids.
Breakdown of organizational time spent on program areas in 2021
Thank you.

To all of our funders, donors and supporters. Without you, we wouldn't be able to carry on this work. Your support and financial contributions allow us to continue to support Skeena salmon and the health and resilience of our watershed and all who exist within it.