StreamTalk

The Newsletter for Stewards of Salmonids and their Habitat

IN THIS ISSUE

VOL 23 > #5 > SPRING 2018

Celebrating nature

It's wonderful when we can celebrate good news and positive developments in the world of protecting and sustaining B.C. salmon and their habitat.

Whether it's the progress of the *Wild Salmon Policy Implementation, Fisheries Act* amendments, outstanding stewardship leaders of the future, successful community involvement projects or the upcoming dominant year Adams River sockeye run, we have lots to talk about and to celebrate.

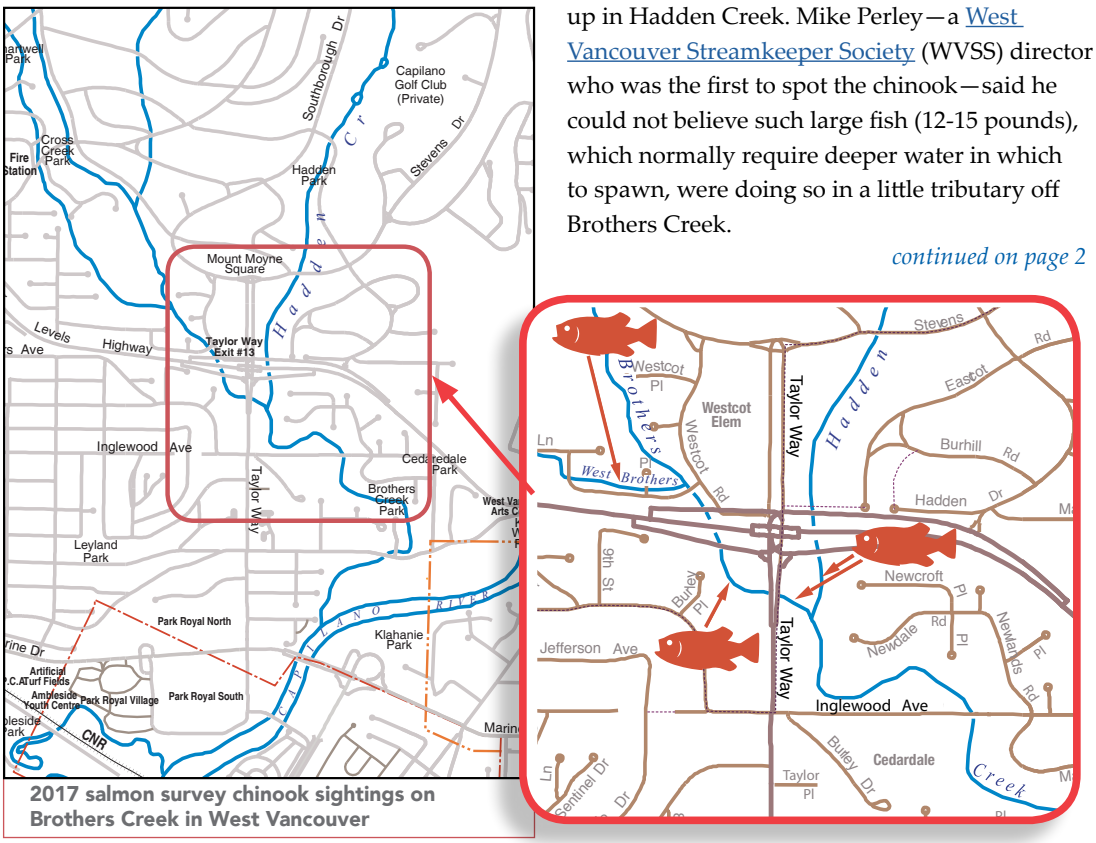
One such celebration is due to what many are calling a "small miracle of nature", with chinook making a new home in West Vancouver's Brothers Creek this past fall.

In 2014, spawning chinook were observed for the first time in the West Vancouver watershed: in Hadden Creek, a small creek that flows into Brothers Creek. The theory is that the salmon had been trying to return to the Capilano River to spawn, but the water was highly turbid due to a series of recent mudslides north of Capilano Lake. As the water in Brothers Creek was clear, the salmon changed course, taking a left turn away from the Capilano River, eventually ending up in Hadden Creek. Mike Perley—a West Vancouver Streamkeeper Society (WVSS) director who was the first to spot the chinook—said he could not believe such large fish (12-15 pounds), which normally require deeper water in which to spawn, were doing so in a little tributary off Brothers Creek.

continued on page 2

Photo: John Barker

Chinook salmon in Brothers Creek



2017 salmon survey chinook sightings on Brothers Creek in West Vancouver

Student Streamkeepers–Counting on the future

For the past 11 years, the West Vancouver Streamkeeper Society (WVSS) has teamed up with students from environmental clubs at five West Vancouver secondary schools to conduct the annual Spawner Salmon Survey. Held each fall, the most recent survey involved 65 students organized into 13 teams, paired up with a WVSS sponsor. More than 700 students have taken part since the program began.

West Vancouver Secondary School student, Fumika Noguchi, shares her experiences being involved in the program for four years:

The Environmental Protection Network (EPN) has been running at West Vancouver Secondary School for many years. I was first introduced to the club and through it, the Spawner Salmon Survey, when I was in Grade 9, and since then, became the co-leader in my last year of high school. I was very excited to discover and take part in the EPN as I had enjoyed environment-focused activities in elementary school. The Spawner Salmon Survey, however, was a completely new project for me. I had done nothing like it before and it launched my journey with the Streamkeepers organization.

When I first began the survey, I knew nothing about salmon in B.C., but the weekly surveys we did for seven weeks each year taught me so much. I learned about the cycles of chinook, pink, chum and coho salmon, as well as the different wildlife that live along the riverbanks. Over the four years I volunteered I was fortunate to work with two knowledgeable Streamkeeper sponsors—Nora Gambioli and Hugh Hamilton—who

continued on page 2

Celebrating nature

continued from page 1

WVSS streamkeepers and students conducting salmon survey in Brothers Creek

The salmon reported spawning in the fall of 2017 were offspring from the 2014 run of 100 or so three-year-old chinook that entered the creeks, believed to be descendants of fish originally released by the Capilano River Hatchery as part of the DFO's efforts to introduce a self-sustaining chinook sport fishery in the area. The salmon only travelled as far as Brothers Creek in 2017, likely due to lower water levels in Hadden Creek than in 2014.

It was an exciting time for WVSS volunteers as they were busy surveying and being interviewed by local media on the "miracle of nature". It was equally exciting for the high school students who made the discovery while taking part in the annual WVSS Spawner Salmon Survey (see sidebar article from Fumika Noguchi). This year, in particular, provided an excellent opportunity to observe nature in action and to learn how new salmon runs can be established when favourable habitat conditions are available to support the salmon successfully spawning and overall survival so that they can return to their home waters.

While Mother Nature may have been at work creating a new salmon run, the WVSS has been doing restoration work on Brothers Creek since the 1990s, including installing baffles on culverts to allow returning coho, pink and chum salmon to get north of the Upper Levels Highway. Their commitment to preserving habitat and maintaining access across the West Vancouver watershed has been vital to the health and survival of salmon that call the area home. Burnaby North-Seymour Member of Parliament Terry Beech, Parliamentary Secretary to the Minister of Fisheries, Oceans and, the Canadian Coast Guard recently recognized the WVSS for their leadership role in protecting and sustaining wild salmon stocks.

When people live in an urban environment, they often lose their connection to nature. Opportunities such as witnessing salmon spawning right in our "backyards" can help reconnect us to the wonders and show us the value of nature. The West Vancouver Streamkeepers bring that message home: there is so much raw power and magic in small miracles such as the chinook making their way to Brothers Creek. These experiences can be inspiring and provide encouragement to local residents to make small changes in their day-to-day lives to help the long-term survival of the salmon.

While the numbers may have been small, the sight of spawning chinook gives hope for another generation of Brothers Creek chinook. And, something for all of us to celebrate. ●

—Joanne Day,
Stewardship and Community Involvement
Fisheries and Oceans Canada

Additional photos can be viewed in the gallery accompanying the North Shore News article.

WVSS volunteers Nora Gambioli and Hugh Hamilton with student Fumika Noguchi.

Student Streamkeepers

continued from page 1

made the surveys enjoyable and safe for us. Despite the often rainy weather, I came out to every survey regardless if I got wet.

After the end of each salmon run, I realized how much I missed it and looked forward to it the following year. My new-found dedication to the program led to my position as the lead statistician this year. In this role, I learned more about the process behind compiling the data and had the great opportunity to present our yearly summary to West Vancouver District Municipal Council. This experience was extremely insightful to the preservation of the wild salmon run and how we, as the future generation, can ensure their safety.

Over my time volunteering with the Spawner Salmon Survey, protecting the environment has become an integral part of my vision for a future I want to promote. As a result, I want to marry my passion for environmental protection and aspirations to be an architect, to influence a modernized urban design that co-habits with nature. Perhaps my weekly salmon counting could spawn a future where we can be sure of taking care of our backyard neighbours.

Fumika was part of a joint student/WVSS delegation that made a presentation on the 2017 Spawner Salmon Survey to West Vancouver District Municipality Council in January of this year. In 2016, she was one of three EPN students who received a Youth Appreciation Award from the District of West Vancouver after being nominated by the WVSS for their contributions to the Spawner Salmon Survey. She plans to attend the University of British Columbia this fall.

"This type of work provided real-world experience for students in statistics and presenting materials to local council as a delegation. It's the joy of what we do—giving back and providing that experience to the students."

—John Barker,
WVSS president

The Pull of the Net: Commercial Fishing in Canada

The Gulf of Georgia Cannery Society's current feature exhibit, *The Pull of the Net: Commercial Fishing in Canada*, celebrates the people, places, and achievements of the commercial fishing industry on both the East and West coasts of Canada. Featuring visual and interactive displays, the exhibit engages visitors of all ages and backgrounds as they think about the historical and contemporary importance of commercial fishing in Canada.

The early years of the commercial fisheries were filled with immense promise. Rivers and oceans teemed with fish and people willing to work hard could make a good living. Not surprisingly, people from many sea-faring nations were drawn to the opportunity for wealth. The early industry focused on two key products – canned salmon and salt cod. Western Europe's hunger for these products was insatiable because they provided cheap, nutritious food for people in continental Europe and its colonies around the world.

The Pull of the Net touches briefly on the changes the fishing industry has seen over time. Canada's commercial fisheries are more diverse now than they were 150 years ago for many reasons. Increased regulations, licensing and quotas, new technology, fluctuating environmental conditions and fish stocks, and increasingly knowledgeable consumers have changed the commercial fisheries on both coasts.

A shopping cart filled with seafood products, an interactive magnetic map, a dining table, and a fishing net each invite visitors to participate in different ways to explore their own connections to the fishing industry.

The Pull of the Net is just one of the Gulf of Georgia Cannery National Historic Site's interactive exhibits which also include a recreated salmon canning line and a herring reduction plant.

***The Pull of the Net: Commercial Fishing in Canada* exhibit at the Gulf of Georgia Cannery.**

The Pull of the Net exhibit is supported by the Province of British Columbia's Community Gaming Program, and the Pacific Salmon Foundation. The feature exhibit will show daily until 2019.

Location: 12138 Fourth Avenue at Moncton, Richmond (Steveston Village).

Hours: Open daily, year-round from 10am-5pm.

Call 604-664-9009 for details.

www.gulfofgeorgiacannery.org. ●

— Submitted by Shannon King, Manager of Audience Engagement, Gulf of Georgia Cannery Society

IN MEMORIAM: Gavin Keith Grubb

November 28, 1985 – October 20, 2017


Photo: Sandie Hollick-Kenyon

Gavin Keith Grubb began his career with Fisheries and Oceans Canada in 2001 and worked as a field technician and education coordinator in the Salmonid Enhancement Program in Smithers, B.C. Sadly, Gavin passed away at 31, peacefully at his home in Smithers on October 20, 2017, with family at his side after a short but courageous battle with cancer.

Gavin obtained a technical certificate in Forest Ecosystem Technology and Applied Coastal Ecology. He spent the better part of his childhood in the Bulkley Valley and transferred his local knowledge to those he educated. Gavin loved working with K-12 students in the Stream to Sea Program and enjoyed sharing his knowledge about salmon life cycles and ecosystems, ecological footprints, and sustainability. And kids loved the man they called "Mr. Gavin." He was amazingly patient with his students and had a way of commanding respect.

He also had a keen sense of what makes a stream healthy for salmon. His technical expertise went a long way within the SEP program—from designing hatcheries, enumerating salmon, assessing habitats and fish populations, to measuring stream flows, designing informative, creative signage and writing concise, well-written technical reports. His skills and contributions to the DFO were many and valued.

Gavin was a loving husband, son, friend, colleague and educator who will be dearly remembered and missed by all who knew him. A memorial service is planned for June 2018. Rest in peace, Gavin. ●

— Helena Grubb & Natalie Newman, SEP Community Advisor , Smithers & Northwestern BC

Looking and moving forward

Returning to the office after yet another meeting, my mind wanders from where we are, to how we got here, to what lies ahead. Fisheries and Oceans' Salmonid Enhancement Program, Stream to Sea and Streamkeepers have opened the door to British Columbians wishing to learn about our natural environments and learning to care and share in their health and protection. Engineers and biologist teams from DFO's Resource Restoration Units are available to help plan projects beneficial to salmonids when we find an area in-stream that is no longer functioning as well as it did in the past and is online for restoration works. Municipalities and regional districts have taken notice of this trained Streamkeeper "workforce" and are encouraged that community members are willing to come out and assist in water quality sampling and monitoring in areas where groups have concerns.

Coming out of shared sciences meeting at the Pacific Science Enterprise Centre(PSEC)—where community, Streamkeepers, Indigenous group representatives and DFO scientists gathered to discuss next steps in working together—it feels a bit like we are in a track meet and have just completed the running broad jump. Scientists have come together to merge with the citizen science programs, review our past data collected on our local streams, and help us to gain a better understanding of the changes we have seen and documented. They will link the questions we want to answer, with the associated Streamkeeper monitoring protocols that will help us focus our efforts. The monitoring pilot project seems like a great way to land firmly quite a distance from our starting point.

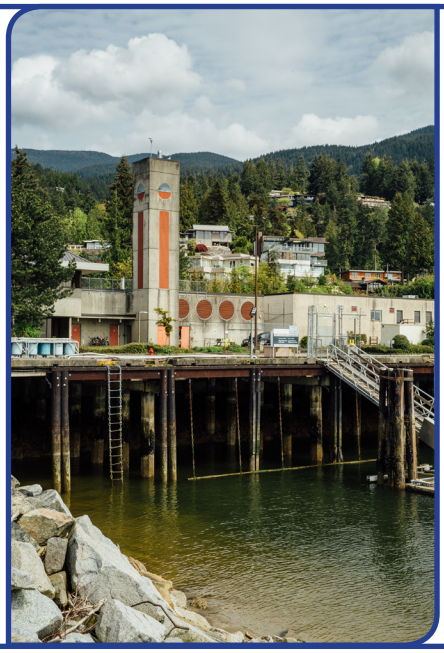
There will be members of our volunteer groups who will work closely with DFO scientists and municipal environment staff to discover more about the scientific world and be conduits from stream to scientists to community and back. Our work over the years has been noticed and will continue to be appreciated and, is positioned to become the norm. With our data and local knowledge, others will be able to determine in-depth monitoring stations. Streamkeeper protocols are for monitoring change over time and groups have been involved in this and have seen *oh so many* changes. With new regulations and Acts at the provincial and federal levels, new funding opportunities and new partners in science, many new opportunities will present themselves. With a solid core of Streamkeeper groups throughout the province continuing to come forward, continuing to take the training so as to collect data using these science-based protocols, they will continue to question, to be in awe, to gather friends and neighbours into the fold of those who care. This foundational movement has the attention of many—let's keep the momentum going to move forward while keeping our foundations strong. ●

—ZoAnn Morten, Executive Director, Pacific Streamkeepers Federation

To keep up to date on PSKF activities, news and events, join our Facebook community.

Neither sleet nor snow will keep a Streamkeeper from monitoring their local streams. Glen Parker takes on water monitoring with the North Shore Streamkeepers and District of North Vancouver

> *"The DFO Laboratory on the Caulfield waterfront in West Vancouver has long conducted world-class scientific research. Today we mark the beginning of significant community involvement in this important work, with the creation of the Pacific Science Enterprise Centre. Here, citizens, scientists and the federal government will join together to envision and create a research and education facility that will address 21st century challenges and opportunities."*
>
> —Pamela Goldsmith-Jones, Member of Parliament for West Vancouver/Sunshine Coast/ Sea to Sky Country



Ian Ferester at Pacific Science Enterprise Centre

Steve MacDonald

Coming this fall - A drama of epic proportions unfolds: The 2018 Adams River Sockeye Run

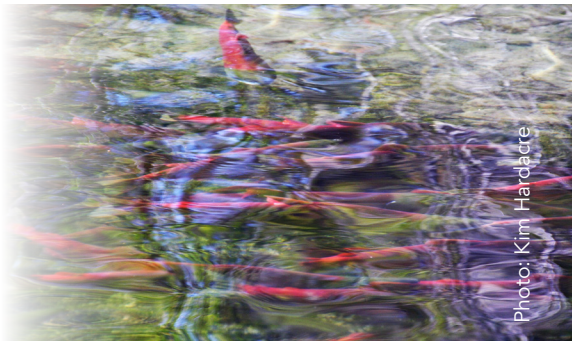


Photo: Kim Hardacre

Every year, sockeye salmon return to spawn in the Adams River, a tributary of the Fraser and Thompson rivers. Every four years is a dominant run which sees millions of sockeye make the journey from the Pacific Ocean back to their birthplace – a 12-kilometre stretch of the Adams River at the mouth of Shuswap Lake – to reproduce before dying in what is one of the greatest spectacles of nature.

Sockeye born in the Adams River spend about a year in the fresh water before heading out to the ocean for the next three years where they struggle against insurmountable odds, including seals, orcas, and fishing. In mid-September of their fourth year of life, the adult salmon enter the mouth of the Fraser River. Over 17 (or so) days they travel 485 kilometres upstream to the Adams River, once again battling fishermen, predators and strong currents to reach the exact spot where they were born. Once in fresh water, they stop feeding and lose their silvery scales, creating a "crimson tide" as they transform into their iconic deep shade of red with olive-green heads. Males develop a hump and large, hooked jaws with prominent teeth they use when defending their spawning sites.


Photo: John Barker

Adams River

As estimated 20 million sockeye embarked on the 2014 migration. Only one out of every 2,000 to 4,000 fish hatched from eggs laid in the Adams River by each female lives to return to their birthplace as a spawning adult.

Prime viewing location to watch this display of nature is a park on the banks of the Adams River, a 45-minute drive east of Kamloops. BC Parks built a new viewing platform in 2014 and upgraded the trail system to handle the increased foot traffic during spawning season. And, like the return of the sockeye, every four years the park is the site of the Salute to the Sockeye to celebrate the salmon's return (which usually peaks around Thanksgiving weekend) and the renewal of life that follows. The festival runs from September 28 to October 21, 2018, with opening ceremonies on Sunday, September 30. Salmon Enhancement Program (SEP) staff have been working with The Adams River Salmon Society committee planning activities and learning stations for school groups, and interpretive walks and sessions on salmon biology.

2018 will mark the 16th year of the festival, expected to draw up to 250,000 visitors from around the globe, including student groups and international media, to witness the world's largest return of sockeye salmon to a single river.

The Adams River sockeye run in dominant years is an amazing sight, and one that leaves a lasting impression on your soul long after the last salmon has spawned for the season and the cycle of life and death has begun again. What makes the run even more awe-inspiring is that although there are many theories about why it occurs, the exact reason is a mystery. The Adams River sockeye run is a bucket list experience–mark your calendars, start planning your trip, and don't forget your camera. ●

—Joanne Day,
Stewardship and Community Involvement
Fisheries and Oceans Canada

If you're unable to make the trip to the Adams River, there are a number of other viewing spots where you can catch a glimpse of the sockeye on their journey upstream:

Watch the videos on the 2014 run produced by National Geographic and Maclean's magazine.

Fisheries Act Amendment Update

On February 6, 2018, the Honourable Dominic LeBlanc, Minister of Fisheries, Oceans and the Canadian Coast Guard, announced amendments to the Fisheries Act that would restore lost protections and incorporate modern safeguards to protect our fish and their habitat for generations to come. (watch the announcement video).

On the same day, Bill C-68 entitled *An Act to amend the Fisheries Act and other Acts in consequence* was introduced into the House of Commons after months of public consultation. While in the parliamentary process, the Bill will pass through the House of Commons and the Senate where it will undergo extensive examination and possible revision. The Bill would become law with Royal Assent.

An overview of proposed amendments can be found on *A Fisheries Act for the Future* website. A comparison of the proposed changes is also available.

If passed into law, the proposed changes to the updated *Fisheries Act* would improve the protection of our fisheries and their ecosystems.

Proposed amendments would:

- restore lost protections by returning to comprehensive protection against harming all fish and fish habitat;

continued on page 6

Reflections on a DFO career

Judy Hillaby, a restoration biologist with the Salmon Enhancement Program (SEP) in Williams Lake, recently retired and shares some of the highlights over many decades working at the DFO.

How did you come to work at the DFO? Describe your first experiences?

I was first hired by DFO in 1974 as a UBC summer student. I counted fry at the Fulton River camp in the Babine Project and met the most interesting people in the universe. Then I worked at the Prince Rupert office on catch statistics during the commercial salmon season. By the time I returned to school in the fall, I knew what I wanted to do. When I graduated, I walked right into a job at DFO.

Describe your career with the DFO.

My first stint at the DFO was for 10 years, during which I had many golden opportunities handed to me. I worked for Al Wood and Bill Schouwenburg (planning biologists) in the development and realization of the overall SEP program. I sat on geographic planning groups that blended fishery management, current research, CEDP (Community Economic Development Program) interests and hatchery design features to create some kind of cohesive plan that would guide us all. I wrote the first two SEP annual reports. I went to Ottawa and shepherded Treasury Board submissions for the big hatcheries. I got involved with CEDP projects in the central coast, where my husband, Bruce Hillaby and I developed a floating incubator at Oweekeno. I also worked on a proposed enhancement program for the prairie provinces in cooperation with the Freshwater Institute in Winnipeg.

My second stint came after we moved to the interior of B.C. in 1997, and I applied for a job as a restoration biologist, starting off in Prince George, and then Williams Lake, where I worked until I retired.

Describe your self-employment work outside the DFO

I became restless, so in 1985 I left for the private sector and went into business with Thyra Nichols who ran tagging programs with SEP for decades. We did a number of smaller field projects, some report writing, toyed with the idea of starting a salmon farm (rejected!) and we ran a little trout hatchery up in Hudson Hope. While our partnership didn't last, my self-employment did—for nearly 15 years, during which I worked with First Nations groups, engineering firms, logging companies, and different government agencies.

What are some of the experiences, accomplishments and contributions you found most rewarding?

DFO and SEP provided me with the opportunity to see nearly every salmon-bearing stream in B.C., and more. I have been up close and personal with some really, really big fish. After forty years we have opened communication using the language of fish, fisheries and watersheds and brought together a broad group of people. I am most proud of the interesting and rewarding work I have done with First Nations communities, for example, with the Ditidaht people on the west coast of Vancouver Island. I am particularly honoured by the friendships I have made and will miss those I worked with. ●

Fisheries Act Amendment Update

continued from page 5

- strengthen the role of Indigenous peoples in project reviews, monitoring and policy development;
- recognize that decisions can be guided by principles of sustainability, precaution and ecosystem management;
- promote restoration of degraded habitat and rebuilding of depleted fish stocks;
- allow for the better management of large and small projects impacting fish and fish habitat through a new permitting framework and codes of practice;
- create full transparency for projects with a public registry;
- create new fisheries management tools to enhance the protection of fish and ecosystems;
- strengthen long-term protection of marine refuges for biodiversity;
- help ensure that the economic benefits of fishing remain with the licence holders and their community by providing clear ability to enshrine current inshore fisheries policies into regulations;
- clarify and modernize enforcement powers to address emerging fisheries issues and to align with current provisions in other legislation.

What happens next?

Engagement with Indigenous groups, provinces and stakeholders will take place to support the development of regulations and policies to support the implementation of the amendments. As part of the parliamentary process Canadians will have the opportunity to comment and share their views about the Bill. The public can file written submissions to parliamentary committees or contact their Member of Parliament.

Bringing a shine back to yellow fish signs in the Comox Valley

If you live in the Comox Valley or travel along the local roadways, you may have noticed the yellow fish signs are looking a little "fresher" these days. Found on every road crossing of every salmon-bearing river and stream noting the name of the waterway, the signage is an important reminder to protect fish habitat.

Over the years, many of the signs had become difficult to read due to exposure to weather, built up layers of dirt, and in some cases, graffiti. Sandra Poole, an adult support worker from the Beaufort Association for the Mentally Handicapped in Courtenay, connected with SEP Community Advisor Dave Davies and proposed the Association take on the much-needed task of restoring the signs as part of the local SEP Community Involvement Program (CIP).

The Beaufort Association provides a variety of programs for adults with developmental disabilities, focusing on personal development and community involvement opportunities. They are well known in the community for their caring manner and the way they provide support and nurture people to reach their personal best (and for the Pet Treat Bakery —owned by the Association and operated as a social enterprise—that employs 14 people).

Twice a week, from June to August last summer, nine participants and staff from the Beaufort Association scrubbed dirt and graffiti from the signs. They also affixed new yellow fish stickers to the signage logos to replace those that were faded or worn away.

The group also helped create a detailed inventory of the 170 signs in the Comox Valley for Dave to keep track of. This is especially helpful as the number had grown over the years and we did not know we had that many in the area. "The signs are an integral part of the stewardship effort to inform the public that salmon and salmon habitat are valuable and sensitive resources," commented Dave. "The refurbishment of these signs by this community group was an extremely valuable project, not only to the stewardship and enhancement groups in the Comox Valley, but also to the general public. This project shows the public that the stewardship effort to protect salmon and salmon habitat is alive and thriving."

Sandra, who happens to also be a member of the Roy Creek Salmonid Enhancement Society, was equally enthusiastic about the project. "It was a valuable experience for program participants to contribute and raise awareness in the community, and to get out in the sunshine and fresh air." The program participants have also helped out with activities at the Roy Creek Hatchery.

Many thanks to the group! They inspired everyone with their dedication and we appreciate the many hours of hard work it took to bring a shine back to the signs which are now more noticeable to people driving by. The effort also brought a smile to many of the participants and to the local streamkeeper groups who feel a bit happier being able to read the signs clearly.●

Participant from the Beaufort Association shining up a yellow fish sign on Dove Creek in the Comox Valley.

—Joanne Day,
Stewardship and Community Involvement
Fisheries and Oceans Canada

Wild Salmon Policy (WSP) Update

The Implementation Plan for Canada's Policy for Conservation of Wild Pacific Salmon (Wild Salmon Policy/WSP) describes the state of Pacific salmon and the history of the WSP as well as that of salmon management in Canada. It outlines the timeline of events, promising annual progress reviews and an evaluative review at the end of the five-year implementation period. It also describes how the principles of the WSP will be implemented and in what ways the progress will be measured as it fulfils its goals.

The WSP Implementation Plan (WSP IP) consultation process includes four phases:

Phase 1 (Fall 2016 - Spring 2017) DFO met with representatives of over 150 First Nations groups and stakeholder organizations across B.C. and Yukon to understand and document key interests and activities that could inform a five-year implementation plan.

Phase 2 (Spring - Summer 2017) Key partners, including the BC First Nations' Salmon Coordinating Committee, Yukon Salmon Sub-Committee, Province of BC and the Pacific Salmon Foundation, worked with DFO and offered ideas and advice in developing an initial draft plan.

Phase 3 (Fall 2017) Over 32 consultation sessions held across B.C. and Yukon with Indigenous groups, stakeholders and other interested parties on the initial draft of the 2018-2022 WSP IP. Feedback from these sessions, and suggestions received electronically will help shape the final document which will be posted to the website when finalized.

Phase 4 (Ongoing) WSP IP review to ensure that it remains current, as well as reporting out on progress against the plan.

What's next:

- Based on input from the fall 2017 consultation sessions as well as extensive feedback submitted online, a final draft of the five-year WSP IP is now being developed and is anticipated for release publically later in 2018.
- A summary of consultation sessions and received electronically will also be posted to the Wild Salmon Policy consultations website once the review of input is complete.
- Following the public release of the final WSP IP document, there will be annual reporting collected and published on implementation to track progress.

Follow up questions on the draft WSP IP should be directed to the WSP inbox at WildSalmonPolicy@dfo-mpo.gc.ca

Salmon Site-ings

Videos – Metro Vancouver restoration projects

Metro Vancouver has produced a video on the blasting project taking place on the Seymour River to help migrating salmon get up the river to their spawning area after the 2014 rockslide. Another chronicles the restoration of a creek in Vancouver's Pacific Spirit Park to make it more habitable for coho salmon. Both feature DFO Community Advisor Sandra Hollick-Kenyons.

App – *Run Salmon Run*

Children's entertainers Bobs & Lolo have created an educational app about the lifecycle of Pacific salmon based on their popular *Run Salmon Run* book and song. DFO's Salmonids in the Classroom program contributed fun facts for the app which also features videos, interactive games, and songs. You can watch a demo on the Bobs & Lolo website and download the app for iOS devices. Partial proceeds benefit the Pacific Salmon Foundation. (Read more about the app in the *Bowen Island Undercurrent*).

Website – Turtle Island Restoration Network

While it was an unexpected off year for pink and chum salmon in B.C. waters, these species made a rare appearance in a creek in Marin County, California in the fall of 2017. The Turtle Island Restoration Network, an advocacy group that mobilizes people in local communities around the world to protect marine wildlife and their habitat, shares the story of the sightings.

Video – *Salmon Release*

The release of salmon fry in Stocking Creek by Chemainus Elementary Community School students, as part of the Stream to Sea Salmon in the Classroom Incubation Program is captured in a video featuring an underwater perspective of what happens when wild salmon are returned to their natural habitat. The footage was shot and compiled by a student who is the son of Nanaimo River Hatchery Manager Brian Banks.

Website – NOAA Ocean Explorer

NOAA (National Oceanic and Atmospheric Administration) Office of Exploration & Research website offers a number of resources for educators and students on their website. Featured themes include seamounts—remnants of extinct underwater seamounts, while their collection of lesson plans include how to build models of methane hydrates – chemical compounds trapped beneath permafrost and ocean.

Upcoming Event – Stewardship Roundtable

The Stewardship Centre for BC is hosting a Stewardship Roundtable on Aug. 24 in collaboration with the 27th International Ornithological Congress and the Vancouver International Bird Festival running concurrently at the Vancouver Convention Centre, Aug. 19-28. The forum will showcase innovative practices championed in B.C. and the rest of North America.

Website – I2SEA

The Inquiry to Student Environmental Action (I2SEA) project promotes international collaboration among high school and secondary school students as they learn about, discuss, and envision solutions to shared environmental challenges including climate change and ocean acidification. The website offers free, interactive digital learning activities such as a Virtual Marine Scientist and tools such as a carbon footprint calculator.

StreamTalk

To receive *StreamTalk* by e-mail, please contact Joanne Day at Joanne.Day@dfo-mpo.gc.ca with the subject line "StreamTalk by e-mail."

StreamTalk
is published collaboratively by Fisheries and Oceans Canada and stewardship, enhancement, education and streamkeeper groups in B.C. and Yukon that care for salmon and their habitat.

You will find past issues of *StreamTalk* here.

The current issue can be viewed here.

For more information or to submit an article, please contact:
Joanne Day
Stewardship and Community Involvement
Fisheries and Oceans Canada

Phone: 604-666-6614

Fax: 604-666-0417

E-mail:
Joanne.Day@dfo-mpo.gc.ca

Website: www.streamtosea.ca
www.pac.dfo