

StreamTalk

The Newsletter for Stewards of Salmonids and their Habitat

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Appreciating and recognizing the work of volunteers

The Community Involvement Program (CIP) volunteers are a dedicated group of individuals. They come from all walks of life and have varied experiences, but they all share a passion for nature and taking part in a program which has spanned four decades. One way we recognize their work is through a biennial thank-you event called the Ugly Bug Ball, held in partnership by Fisheries and Oceans and the Pacific Streamkeepers Federation (PSkF). Most streamkeepers would agree that insects are fascinating creatures (and a great food source for young salmon); the name of this event comes from a [song](#) and a cartoon from many moons ago. People don fishy attire and bring their displays and their enthusiasm. A lovely farm in Surrey operated by the environmental stewardship group, A. Rocha, provides the backdrop. People arrive mid-afternoon and stay well into the evening, sharing stories, successes and receiving updates and acknowledgment from DFO and the PSkF. Brigid Payne, (acting regional director of Oceans and SEP) attended and spoke about what the commitment of volunteers means to the department and the resource.

At this year's Bug Ball, Senior Fisheries Protection Biologist and Team Lead, Pacific Review of the Changes to the Fisheries Act Fisheries Protection Program, Tola Cooper, shared a presentation on the new Fisheries Act, how things have changed and how long it will take for the revised legislation to be passed. The volunteers had many questions and concerns and wish to see more "boots on the ground" in the form of fishery officers. It was exciting to see a renewed feeling of optimism for the future of salmon in B.C. Thanks to everyone who came out to the Bug Ball, making it such a fun event, and to those involved in organizing.

Groups such as the PSkF are leading the way in keeping B.C.'s salmon culture at the forefront of federal decision makers. Stewardship increases through education and consultation; the more that we share, the stronger the bonds



The Ugly Bug Ball, June 2018

in each community. PSkF participants have taken the training; they've known all along that for conservation and restoration programs to succeed, they must be tied to their communities.

The Community Involvement Program and Resource Restoration Unit components of SEP have succeeded and evolved largely because of the commitment, support and trust provided by the volunteer community. The Pacific Streamkeepers Federation was spawned from this enthusiasm in 1995 as a non-profit society committed to training volunteers in proper streamkeeper methodology. A streamkeeper is someone who has taken an active interest in preserving and enhancing their local waterways. They are willing to [learn more about](#) their streams, and partner with other organizations that have a similar focus, including CIP groups under guidance of regional community advisors, as well all levels of government.

Throughout this edition of *StreamTalk* you can read about how those involved in stewardship are being recognized in their communities for their vital work on the restoration and recovery of fish habitat and stocks. We appreciate, and recognize the many contributions of all the dedicated, passionate and hard-working people who are helping to fulfill the goals and mandate of SEP.

Jonathan Wilkinson New Minister of Fisheries, Oceans and the Canadian Coast Guard

On July 18, 2018 the Honourable Jonathan Wilkinson was named Minister of Fisheries, Oceans and the Canadian Coast Guard. Minister Wilkinson spent more than 20 successful years in the private sector and held leadership positions with a number of companies dedicated to the development of green technologies.



A Rhodes Scholar, Minister Wilkinson made use of his educational background in public policy when he worked as a constitutional negotiator and a federal-provincial relations specialist. He has served on several industry and charitable boards, including the United Way of the Lower Mainland, the B.C. Technology Industry Association, and the Walter and Duncan Gordon Foundation.

Minister Wilkinson has deep roots in North Vancouver, where he has spent the last 16 years raising his family alongside his wife Tara. An avid runner and outdoorsman, he has also served as a coach for the North Shore Girls Soccer Association.

Minister Wilkinson previously served as a parliamentary secretary from 2015 until his appointment as Minister of Fisheries, Oceans and the Canadian Coast Guard. He takes over the role from the Honourable Dominic LeBlanc who served as minister from 2016 until his appointment as Minister of Intergovernmental and Northern Affairs and Internal Trade.

A diverting tale on the Salmon River

The ultimate solution to improve fish passage after years of research was to decommission the dam

In 1958, BC Hydro constructed the Salmon River diversion dam between the towns of Sayward and Campbell River as part of its Campbell River system facilities. The dam sent water from the Salmon watershed to the Campbell reservoirs, supplementing the power generation before flowing out to the ocean. When BC Hydro constructed the dam, there was little knowledge of accessibility to the upper Salmon River for anadromous salmonids. In the 1970s the

spawning migration, the adults would try to gain access but water velocity at the sluice gate and the steep dam face were barriers to passage.

DFO, BC Hydro, the Provincial Government the Sayward Fish and Game Club entered into the very first Fish Passage Decision Framework process. BC Hydro requested this team to conduct a review before they would consider fish passage improvements at the site. The issues were much bigger than just the provision



Before and after photos of the same location looking upstream on the Salmon River at the Salmon River Diversion Dam site. Left: October 31, 2007 Right: October 13, 2017

provincial government blasted a large rock slab downstream of the dam to improve access for returning steelhead and coho. A concrete fishway was added to the diversion canal structure in the 1990s to try to improve access upstream. During

of upstream access for spawning. Five years of meetings, helicopter flights, and studies tracking coho and steelhead near the dam convinced BC Hydro of the need for better fish passage by late 2012.

The search for the best design then began, again taking a team approach with BC Hydro engaging Indigenous communities, consultants, and government to help with the process. After another few years of planning and meetings and studies, all the other complicating factors at the site were more fully recognized, including, dam safety; seismic requirements; routine maintenance; contribution to power generation; debris management; the age of the infrastructure, including the diversion dam and canal, as well as required works on the downstream fish screen, all resulting in the cost-benefit pendulum swinging in favour of total removal.

[Watch videos produced on the project by BC Hydro.](#) ●

—Submitted by *Shannon Anderson, SEP Resource Restoration Biologist, Campbell River*



Shannon receiving a *Regional Director Distinction Award* from Rebecca Reid, Regional Director General of DFO Pacific (left), with Bonnie Antcliffe, Associate Regional Director General of DFO Pacific in recognition of her work in advocating for and supporting the BC Hydro Salmon River Diversion Decommissioning Project.

The art of salmon

Artists have long reflected the influence of salmon on the heritage, culture and environment of British Columbia through artwork in our communities. A great example is this whimsical stainless-steel sculpture entitled *Salmon Cycle*,



installed in a rain garden at the Delbrook Community Centre in North Vancouver near the banks of Mosquito Creek. The interactive piece of a salmon on a bicycle by Vancouver artist [Bruce Voyce](#), suggests the struggle of salmon.



When out and about in your community, have you spotted salmon-inspired artwork? We want to hear about it to share in future editions of *StreamTalk*. Send photos of your fishy finds, including details about the artist and location, to joanne.day@dfo-mpo.gc.ca

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Do you recognize this sculpture in your neighbourhood?



B.C.'s longest-running Community Economic Development Program project celebrates 40 years

Congratulations to the [Tla'amin First Nation](#) for 40 years operating the Tla'amin Hatchery as a Community Economic Development Program (CEDP) project in partnership with the Salmonid Enhancement Program (SEP).

A delegation from DFO Pacific regional headquarters in Vancouver travelled to Powell River this spring to join local and regional DFO staff—both current and retired—in recognizing the hatchery staff for their contribution to SEP. The occasion was marked by the presentation of a metal salmon sculpture now on display in their Governance House. A special plaque was given to Lee George in recognition of his close to 30 years as hatchery manager. Twelve specially-made vests were presented to hatchery staff (past and present) and those in attendance received hats and tumblers. Gifts and awards were presented by Brigid Payne, acting regional director of Oceans and SEP; Laura Brown, area director, South Coast; Dale Desrochers, section head, resource restoration and community involvement, South Coast; Laura Terry, acting community advisor, Powell River/Sunshine Coast; Cindy Harlow, past community advisor, Powell River/Sunshine Coast; Jim Wilson, fisheries technician and Dianne Sanford, education coordinator. Dave Bates, a local Registered Professional Biologist who has worked with the Tla'amin First Nation, also attended.

Special thanks to Cindy Harlow who championed the recognition of this milestone and for her role in the planning and coordination of the event and dinner.

Located alongside Sliammon River just north of Powell River, the hatchery is the principal business for the band, producing more than 1.5 million chinook, chum and coho salmon annually.

Objectives of the current CEDP project are:

- Continue enhancement initiatives in the Sliammon Creek;
- Continue enhancement initiatives of Theodosia Creek;
- Conduct stock assessment for Sliammon River, Theodosia River and Okeover Creek Systems; and
- Perform water flow monitoring and off channel and riparian habitat assessment within traditional territory.

The project uses conventional hatchery techniques such as Heath tray stacks, Atkins boxes, tubs, raceways, circular incubators, and enumeration fences to produce chum. The hatchery building houses incubation and egg take rooms and storage. A spawning channel, aeration tower, water distribution system, and concrete raceway are also on site. The Nation installed a viewquarium in 2004, with funding from multiple sources. The site also houses a community smokehouse.



Hatchery staff (l-r): Floyd George, Lee George, Roy Francis, Vern Wilson, Scott Galligos, Leonard Harry, Tyrone Wilson. (Missing from photo: Phillip Galligos & Vern Pielle)

Visitors from around the world are welcomed to the hatchery each year which operates as an educational facility offering cross-cultural awareness programs for school children each fall. The hatchery also hosts Canada World Youth students on an annual basis.

The Tla'amin First Nation have played a vital role in salmonid enhancement on the Sunshine Coast over the past four decades. We look forward to their continued good work and future collaboration. ●

[Watch this 2012 video of the hatchery in action.](#)



Green Toolkit

Fisheries and Oceans Canada (DFO) has prepared a variety of communications materials to promote awareness of select species protection in B.C. waters and would appreciate your assistance in helping to spread our message.

Rockfish Conservation Rockfish Conservation Areas

Rockfish conservation is a DFO priority, to protect declining populations of B.C.'s inshore rockfish species. Both recreational and commercial anglers play an important role in rockfish recovery.

Information on the 164 [Rockfish Conservation Areas](#) (RCAs) including locations, the fishing activities not permitted within, and the inshore rockfish species that inhabit RCAs.

Yelloweye Rockfish

Information on Yelloweye Rockfish, found on B.C.'s outer coast, one of the primary rockfish species of concern, includes four things recreational anglers can do to help rebuild Yelloweye stocks in outer areas by avoiding, identifying, releasing Yelloweye with a descending device, and reporting both rockfish catch and releases.

Invertebrates & Shellfish—Prawns & Clams Prawns

Information on prawn biology, life stages and what to expect in terms of catch success throughout the seasons; how to set prawn traps for safety and success, and current catch limits in the recreational prawn fishery.

Clams

Information on popular intertidal clam species and their biology; what to expect in terms of catch success and being aware of, and respecting, shellfish contamination closures.

If you are interested in helping the Department share this information and would be willing to post any of these materials at your facility, please contact shane.petersen@dfo-mpo.gc.ca with types and amounts of each product you would like and details on where they can be delivered:

- [Rockfish Conservation Area posters](#)
- [Rockfish Conservation Area pamphlets](#)
- [Yelloweye Rockfish posters](#)
- [Prawn posters](#)
- [Intertidal Clam posters](#)

World Oceans Day focuses on plastic pollution

Working together to reduce ocean plastic

“The sea, the great unifier, is our only hope. Now, as never before, the old phrase has a literal meaning: we are all in the same boat.”

—Jacques Cousteau, oceanographer



Photo: Joanne Day

Whale sculpture, entitled *Skyscraper*, in Bruges, Belgium, made of plastic picked up along the shoreline to demonstrate the urgent issue of plastic in our waterways. May 2018

In 2009, the United Nations (UN) officially declared June 8 [World Oceans Day](#). Held annually since 2002, it's an occasion to reflect on the importance of our oceans—from regulating the climate to providing food and oxygen, to connecting all life on our blue planet. This year's theme and action focus was preventing plastic pollution and encouraging solutions for a healthy ocean.

Canada has the longest coastline in the world at 202,080 kilometres. With eight provinces and all territories bordering on oceans, we are surrounded by water that supports a vast and intricate marine life; from the largest whales to the most delicate corals.

There is an urgent need to raise awareness of the use of plastic in our daily lives and how to prevent plastic from entering the ocean. Approximately eight million metric tons of plastic end up in oceans each year, with devastating effects on our marine life, such as whale entanglements. These plastics are also polluting our ecosystems, littering our beaches and finding their way into the food we eat.

In response, a coordinated national effort to increase ocean literacy across

Canada is underway. Canada is striving to contribute to the targets under the [UN Sustainable Development Goal 14](#). The Canadian Network for Ocean Education ([CaNOE](#)) organized a national symposium in Saint John's, Newfoundland in July, bringing together experts from across the country to share knowledge and develop a plan. The group worked on a uniquely Canadian perspective on what it means to be ocean literate in a country with such a vast coastline and relationship with the ocean. An ocean literate person understands that the oceans and humans are bound together and that all Canadians can learn more about [Ocean Literacy](#) and how they can help.

Canada has long played a leadership role on the world stage in protecting our oceans; in fact, the concept of a World Ocean Day was first proposed by the Government of Canada at the 1992 Earth Summit. This September, Canada hosted a meeting of G7 (Group of Seven: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) Environment, Energy and Oceans Ministers in Halifax on the theme of [“Working Together on Climate Change, Oceans and Clean Energy”](#). In addition to promoting the Canadian-led [Oceans Plastics Charter](#), Canada committed to banning single-use plastic in government operations. A parallel Oceans Partnership Summit was held, bringing together over 200 stakeholders across non-governmental organizations (including CaNOE), academia and industry, with discussions focused on ocean plastic pollution, building resilient coastal communities and sustainable oceans and fisheries. A public G7 Oceans Inspiration Expo was also held featuring filmmaker [Alexandra Cousteau](#), granddaughter of Jacques Cousteau, and the legendary oceanographer and National Geographic Society explorer-in-residence, [Sylvia Earle](#).

We all have a connection to the ocean and a responsibility for its care. Take the [National Geographic Plastic Pledge](#) to reduce plastic in your life and “skip the straw.” ●

Check out these additional websites to find out more about what Canada is doing to address the impact of plastics on our ocean environment:

[Canada's Ocean Agenda](#)

[DFO World Oceans Day](#)

[Ocean Plastics Education Kit](#) (joint Government of Canada, Ocean School, Ocean Wise, Sea Smart, Students on Ice, and WE initiative)

[Canada joins United Nations CleanSeas campaign to combat ocean plastic pollution](#)

DFO and CaNOE Newfoundland

Coast to coast! Our Stream to Sea education staff participated in the 2018 CaNOE (Canadian Network for Ocean Literacy) symposium on ocean literacy in Newfoundland in July. For updates on CaNOE, follow on Twitter and Facebook at @OceanLitCanada



Joanne Day and Education Coordinators Terri McClymont and Christy Wilson in Saint John's.

Prince George hatchery back in the swim

Dustin Snyder and Steve Hamilton, president and vice-president of the [Spruce City Wildlife Association](#) (SCWA) in Prince George came together three years ago and started inspiring volunteers with the idea of raising salmon again at the hatchery. They turned to their local DFO Community Advisor, Guy Scharf—known for being a passionate salmon steward—and suggested that they get things back in the swim and re-open the facility after almost a decade no salmon production.



Second annual salmon send-off, Nechako River

Under Guy's expert and watchful eye, volunteers captured their first broodstock

in 2016 to harvest. The group took more than 4,000 eggs from a ripe Nechako River chinook female and successfully fertilized them. They distributed half to local schools and kept half to educate residents and tourists from around the globe on stewardship and salmon enhancement.

The visitor from farthest away was a Korean exchange student who stayed and talked about fish for two hours with the volunteers. It turned out her name translated into English meant 'fish', so she was quite excited to see her namesakes.

Over the seven months the group had the salmon in their care, Guy provided instruction on everything from picking a ripe fish, monitoring oxygen levels, to weighing out food and more.

In April 2017, the SCWA organized a 'salmon send-off' and invited the community to lend a hand to release the fry on their journey to the Pacific. The release took place on the banks of the Nechako River less than 200 meters from the hatchery where they were raised.

The number of people of all ages who came out to help caused Dustin to remark "I hope we have enough fish!"

The SCWA held the second annual



Dustin Snyder (left) Steve Hamilton (right)

salmon send-off and hatchery open house in June of this year, releasing over 2,000 chinook fry with even more anticipated in 2019. The efforts of the SCWA are encouraging the next generation of stewards by providing a voice to conservation and land stewardship in northern B.C. ●

International Year of the Salmon launched with release of Wild Salmon Policy 2018–2022 Implementation Plan

The [International Year of the Salmon](#) aims to raise awareness and inspire action to protect salmon populations around the world.

On October 11, the Honourable Jonathan Wilkinson, Minister of Fisheries, Oceans, and the Canadian Coast Guard launched Canada's celebration of the International Year of the Salmon in Vancouver. As part of the launch, Minister Wilkinson introduced the Government of Canada's [Wild Salmon Policy 2018-2022 Implementation Plan](#) (WSP)

The *Wild Salmon Policy 2018-2022 Implementation Plan* is a five-year plan outlining 48 concrete activities and 9 overarching approaches the Pacific Region—led by various DFO branches—will undertake towards maintaining and restoring Pacific salmon populations and their habitats. These activities are clustered under

three overarching themes: Assessment, Maintaining and Rebuilding Stocks, and Accountability. The overall success in advancing the WSP will require ongoing collaboration going forward with all levels of government, First Nations, and stakeholders.

Thanks to those who took part in the 45 consultation sessions across B.C. and Yukon in 2016 and 2017. DFO listened to the valuable feedback provided in person and in writing and considered all the recommendations in formulating the WSP.

Final Cohen Response 2018 Status Update released

Minister Wilkinson also announced the release of the third and final *Cohen Response 2018 Status Update* detailing actions taken on all 75 recommendations of Justice Cohen's 2012 *Commission of Inquiry* into the

Decline of Sockeye Salmon in the Fraser River.

The *Wild Salmon Policy 2018–2022 Implementation Plan* (WSP) and the *Cohen Response 2018 Status Update* are part of an integrated strategy over the next five years to protect and rebuild the five species of wild salmon in B.C. Check out the new [DFO Salmon webpage](#).

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The International Year of the Salmon is a five-year outreach and research initiative of the [North Pacific Anadromous Fish Commission](#) (NPAFC) and the [North Atlantic Salmon Conservation Organization](#) (NASCO), with a focal year in 2019. Stay tuned for more information in future editions of *StreamTalk* and follow the conversation on social media at #YearoftheSalmon.

Linking Indigenous culture and community involvement

An extraordinary carved house post now stands at Noons Creek Hatchery thanks to the [Welcome Post Project](#) supported by the [Port Moody Ecological Society](#) (PMES) which operates the hatchery.



James Harry at work

The post was designed by Squamish First Nation artist [James Harry](#) (Nexw'Kalus-Xwalacktun), son of hereditary chief and master carver Rick Harry (Xwalacktun).

Harry consulted with the community on the symbols to incorporate in the carving. The design features elements such

as the Coast Salish eye, a blue heron, clams and appropriately, a pair of salmon. The post, carved from a 10-foot, 600-pound yellow cedar felled in the upper Squamish Valley, took four months to complete.

As part of the year-long initiative, Dave Bennie of the PMES worked with Welcome Post Project organizer Tasha Faye Evans to coordinate opportunities to share Indigenous teachings and traditions in the community, inviting artists and storytellers to lead talks and workshops. Events, primarily hosted at the hatchery's gazebo, included a welcome feast, youth night, cedar weaving workshop and an open community forum discussing reconciliation with participation by artist Brandon Gabriel-Kwelexwecten. Descendants of the late Chief Dan George attended the presentations and took part in the discussion.

Harry's welcome post was raised in a traditional Coast Salish blessing ceremony, held June 21 on National Indigenous Peoples Day. Chief Maureen Thomas of the Tsleil-Waututh Nation presided over the event marking the first time a post had been raised since the area became Port Moody.

The house post welcomes visitors in its permanent home at the Noons Creek



Photo: Doug Lofthouse

Hatchery (once home to a Tsleil-Waututh village) which opened in 1993 as a Salmon Enhancement Program (SEP) Community Involvement Project. The Welcome Post Project has brought people together and created excitement about learning more and sharing more about local history, the teachings of elders and the importance of salmon to all British Columbians. ●

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

Rob Bell-Irving: A life dedicated to salmon

[Rob Bell-Irving](#) has retired after 37 years with the DFO—19 as a Community Advisor. Rob worked out of Squamish alongside the stewardship community in the region of West Vancouver and Howe Sound up to Anderson Lake, which encompasses the communities of West Vancouver, Bowen Island, Squamish, Whistler, Pemberton, D'Arcy and Mt. Currie.

When asked to identify his career highlight, Rob cited his time spent on the Stream to Sea Education Program. Interacting with students from the 20 schools in his area and educating them about salmon, and ocean and watershed stewardship has been an important aspect of his work. Under Rob's guidance, all schools took part in Salmonids in the Classroom with several taking on special projects such as salmonid assessments and fry release, storm drain marking and creative programs adapted to their ecosystems, while others participated in field studies and trips involving DFO biologists. No doubt his passion and knowledge inspired more than a few young people to follow his footsteps and

pursue a career in a related field.

Rob's contributions and support as a member of the Stream to Sea steering committee are much appreciated, especially his work on making the lesson plan for [The Nearshores](#) possible.

As the public face of the DFO, Rob worked on many community projects and helped build partnerships with First Nations and the communities he served. He brought invaluable advice and support for "all things" salmon including vital habitat rehabilitation and restoration projects. He also provided operational assistance for the [Capilano Hatchery](#) and [Tenderfoot Creek Hatchery](#) in Brackendale.

Rob will be greatly missed by those who worked with him. We wish him all the best in his retirement and happy fishing!

Rob shares his musings about his life in conservation (which pre-dates his time at the DFO) and some of the milestones and people he worked with along the way—including as a Community Advisor—in this attached article he authored.



Photo: Bev Bowler

Rob at a SEP Community Workshop



Recognizing the importance of community

At this summer’s biennial Ugly Bug Ball—a SEP volunteer recognition event for volunteers from Pemberton to Hope, our guest speaker was Tola Cooper. Tola came to speak to the changes to the Fisheries Act as the revised Act is now before the Senate. The group was fully engaged in listening to her presentation and then the question period began. Watching from the audience, again I was amazed and in awe of the questions being put to Tola and the answers she provided. Two-way, in-depth conversations ensure our community is up to date on issues; knowledgeable on salmon, life cycles and habitat needs, as well as the policies, Acts and regulations that should be there to protect all of the above. In typical SEP/ Streamkeeper style this event was held in a hayloft, with great friends gathered, a meal shared and the chance to network among ourselves and DFO Community Advisors and staff from a variety of positions within the Salmonid Enhancement and Habitat Programs.



ZoAnn (right) sharing her knowledge, and polarized sunglasses, at the Salute to the Sockeye Festival

[Module 10](#) of the Streamkeepers Program is about Community Awareness and gatherings such as this show just how far we have all come. We are the result from past community awareness initiatives and each of us takes our knowledge and enthusiasm for the environment and salmon out into our own communities to share with others. We have influenced our Federal, Provincial and Municipal governments, worked with First Nations,

non-profit societies, neighbours and friends to take an interest in, and tread lightly on our environment. We are community and we are aware. Well done all!

Spawner Survey training and surveys are in full force

One of our favourite times of year is here again—our chance to view and count salmon. [Module 12](#) of the DFO Streamkeepers Program gives us the Stream Inspection Log (SIL) protocols which are the Federal and Provincial standard for counting our returning Pacific salmon.

Download the [SIL field sheets](#) and share your numbers, stream conditions and successful spawning rates [here](#). In some streams it is far too easy to count the number of salmon returning. And as part of our ongoing community awareness, please take the time to share photos and information with your local media, local government and friends. As we saw with the recent Salute to the Sockeye Festival, sometimes the whole world comes to view the salmon! ●

Pacific Salmon Foundation George Hungerford Award

Pacific Streamkeepers Federation’s ZoAnn Morten 2018 Recipient

The [Pacific Salmon Foundation](#) (PSF) established the *George Hungerford Award* in 2010 to recognize and reward outstanding achievement, dedication and leadership in the stewardship community, and benefits to Pacific salmon.

Named for founding PSF board chair, George Hungerford, PSF grants the prestigious award every two years. The award provides a \$10,000 prize to a worthy B.C.- or Yukon-based individual or organization that has displayed innovative approaches to salmon conservation projects or programming; a successful, ground-breaking salmon project, or in recognition of longevity and success in salmon and watershed conservation.

Recipients are chosen based on nomination by PSF staff and directors, and once selected, must propose a use for the prize aligned with PSF’s salmon conservation and restoration mandate. ZoAnn Morten—founder and executive director of the Pacific Streamkeepers Federation—is the recipient of this year’s *George Hungerford Award*. Morten was a long-time board member with PSF and ineligible to receive the award. However, she has recently finished her term and was unanimously voted in as a recipient by PSF’s board of directors. The Pacific Streamkeepers Federation has been the catalyst for ZoAnn’s passion and energy and as such, she will be donating the \$10,000 towards expansion of community based water quality / quantity studies, creation of graphing tools for the



ZoAnn Morten receiving her award from Brian Riddell, president and CEO of PSF

Streamkeepers community data base to allow for enhanced reporting for groups and as leverage funding for the Federations’ “Creek View” photo monitoring of our waterways.

Congratulations, ZoAnn, on your well-deserved award! And thank you to you and past recipients for your passion, dedication and hard work in protecting salmon.

Past George Hungerford Award recipients and their prize awardees

- 2016 Louise Towell (Stream of Dreams Murals Society)
- 2014 Dr. Elaine Golds, environmental steward (Prize recipient: Mossom Creek Hatchery)
- 2012 Wayne White & Jack Minard (Tsolum River Restoration Society)
- 2010 Jennifer Atchison (Stoney Creek Environment Committee)

Minister Wilkinson visits the Salute to the Sockeye

Minister Wilkinson was one of more than 200,000 visitors to the [Salute to the Sockeye Festival](#) who witnessed the spectacular dominant year Adams River sockeye run. He discussed stock-assessment with DFO biologists and field technicians and met with representatives from the Little Shuswap Lake Indian Band and the [Adams River Salmon Society](#) to discuss the importance of Pacific salmon and their protection.

[Watch some of the TV news coverage of this year's Festival.](#) ●



Photo: Christy Wilson, Education, Education Coordinator, DFO

Minister Wilkinson, Community Advisor Dave Davies and Fishery Officer Barry Zuni participate in a salmon dissection with two young visitors. Close to 10,000 students took part in either the school interpretive program or guided walks

Exploring future careers in stewardship

An exciting program in the Comox Valley School District (SD71) is engaging Grade 11 youth in the stewardship aspects of the [Stream to Sea](#) education program. Students who express an interest in pursuing science and biology as their

Vanier science and biology teacher Grayson Pettigrew and DFO Stream Assessment Biologist, Dave Clough.

The first component of the lesson plan is an introduction to the world of aquatic macro-invertebrates and fresh-water food chains: "The Fragile Web." Sarah's second visit introduces students to fish anatomy through a salmon dissection. The group learns about body parts and organ function, plus an in-depth natural history of the salmon. Sarah also highlights the importance of salmon as a [keystone](#) to other life forms that share their environment. They also cover osmoregulation and how it is of biological significance for an anadromous species.

Sarah and Dave feel this field day is one of their favourite activities. Sarah describes Dave as "a force to be reckoned with." She further remarked, "he is passionate, dedicated, knowledgeable and has a fantastic sense of humour. He makes the occasion a great opportunity for fun and easy learning, and an unforgettable experience."

The school district has offered the Explore program for the last 15 years, with several students moving on to become contributors in the science or conservation field. Case in point, Spencer Lapp, an Explore student at GP Vanier in 2013. After the field-trip he approached Dave and asked, "how do I get into a position like yours? Or, how can I work for you?" Dave gave him advice on courses to take and Spencer went on to enroll in the Fisheries and Aquaculture diploma program at



Photo: Dave Clough

Spencer Lapp and Dave Clough in the San Juan River

career path are selected to be part of the Explore program—an integrated outdoor education program that incorporates leadership, learning, and outdoor skills. To quote DFO Education Coordinator Sarah Wolfe, an Explore instructor, these students "naturally aspire to learn about nature, wildlife conservation, and stewardship." The goal of the program is to instill a desire for continued learning in young adults.

Forty-eight students from three high schools—Highland, Georges P. Vanier, and Isfeld—took part in the 2018 Explore program. In addition to Sarah, instructional partners in the program included GP

A one-day stream assessment field-trip to the Tsolum River was organized to release salmon fry reared in the class aquarium. The students also had the opportunity to meet Dave Clough in an outdoor classroom and see first-hand what makes a creek a healthy habitat for salmon. The students don waders and wet-gear and take part in a stream survey, looking for velocity, water quality (pH), temperature, spawning gravel-size, cut-banks, erosion, shady canopy, tree and shrub species, and food requirements. The students then give the location a score out of ten to gauge whether it is healthy or unhealthy.



Photo: Dave Clough

Dave and Spencer at the Koksilah River

Vancouver Island University. He then did a practicum with Dave this spring and this summer, Dave hired him as his full-time assistant. Such examples make Sarah proud of the students and how the Stream to Sea program inspires them to play a greater role in salmon stewardship. ●

@ Salmon Site-ings



Vancouver Aquarium Vortex Exhibition

Internationally-renowned author and visual artist [Douglas Coupland](#) has collaborated with Ocean Wise to highlight ocean plastic pollution in an interactive sculpture exhibition at the Vancouver Aquarium called [Vortex](#) that takes visitors on a journey to the "[Pacific Trash Vortex](#)". On until April 2019.



Uclulet Aquarium Guide to Rockfish

[The Ucluelet Aquarium](#)—Canada's first catch and release aquarium—offers a [rockfish identification guide](#) to the nine species found in nearby waters, to support efforts to create awareness about sustainable and responsible fishing methods to help return rockfish populations to healthy levels.



Nechako White Sturgeon Recovery Initiative

The [Nechako White Sturgeon Recovery Initiative](#) offers a library of downloadable resources for educators and students to assist their efforts in recovering declining stocks of Nechako White Sturgeon upstream of the confluence of the Nechako and Fraser Rivers at Prince George.



Kelp Restoration at Maude Reef

[Video](#) of the work the Comox Valley Project Watershed Society has been doing with Hornby Island Diving around Maude Reef off Hornby Island to restore the kelp beds which are marine sanctuaries, providing some of the most productive ecosystems on the planet and serving as critical habitat and refuge for many species.



Salmonids in the Classroom now in Newfoundland

SEP staff have been supportive of Salmonids in the Classroom being adopted on the east coast. [Read](#) about one elementary school's experience after the existing program was expanded upon to broaden the reach of the program throughout the province.



Salmon Habitat Restoration Program (SHaRP)

[Salmon Habitat Restoration Program \(SHaRP\)](#) is a City of Surrey initiative to educate businesses and community members on salmon stewardship while employing local youth to enhance Surrey's fish habitat. More than 600 people have been involved in active stream restoration works since the program began in 1996.

Sharing stories about salmon people

To help raise awareness of the [International Year of the Salmon](#), retired DFO Biologist and Area Manager Matt Foy shares a series of 10 short salmon stories on the Fraser Valley Watersheds Coalition [website](#). Entitled *Salmon on the Rough Edge of Canada and Beyond*, the stories feature individuals striving to protect and enhance Pacific wild salmon.



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."

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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

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