

The Newsletter for Stewards of Salmonids and their Habitat

# Lake Babine Nation Fisheries Program: Taking the salmon by the tail

It's not an easy year with low sockeye salmon returns, changing environmental conditions and the challenge of operating a variety of monitoring and research projects aimed at answering all the questions we have.

It seems we spend our time monitoring only to monitor the demise of the environment and the salmon resource that depends on it. However, being a people who are tied to the land spiritually and for physical survival, we use the information collected to look at the big picture. We remember our past and we look to the future. We do our best to formulate monitoring and research programs that will direct us to finding solutions to stop the decline of salmon runs in the Babine watershed.

## The impacts

When a salmon stock begins to decline, the answer is never simple. There is rarely a singular impact that causes a decline and neither is there a singular solution to stop and reverse it. Impacts affecting Babine sockeye include climate change, forestry, amount of land disturbance, road crossing culverts, energy corridors, changes in zooplankton abundance in Babine Lake and harvest rates (Canadian and Alaskan).

## The monitoring and research

Lake Babine Nation (LBN) Fisheries Program is



Babine River counting fence



Mobile salmon centre

taking a multi-pronged approach by monitoring and undertaking research to assist in determining next steps.

Monitoring and research includes stock assessment by conducting stream counts for sockeye as well as operation of the Babine River Counting Fence to monitor salmon escapements. Water quality monitoring includes water temperature, flows and levels as well as monitoring nutrient levels in Babine nursery lakes. Spawner access is often an issue and is monitored annually. Sockeye fry health and condition are monitored as well as zooplankton composition and abundance. Other monitoring includes sockeye fecundity, smolt output and health, habitat assessments and searches for groundwater sources.

### **Actions and answers**

It is important to gain an understanding of impacts to salmon and their habitat and Lake Babine Nation is working with multiple stakeholders to monitor relevant parameters. Sharing of data and other information is key to ensuring that environmental planners and fisheries managers make decisions that protect and conserve the salmon resource.

Forestry impacts have been monitored on the ground and by a geographic information

# IN THIS ISSUE

Mossom Creek Hatchery 3 Wild Salmon Policy update 3 2017 Community Workshop 4 Salmon Return to Still Creek 5 Fisheries Act Changes 5 Marine Protected Areas 6 Indigenous Water Initiatives 7

Life in the classroom

Dianne Sanford, Education Coordinator on the Sunshine Coast, with some happy students.



The following are excerpts are letters written by Thornhill Elementary School (Terrace, BC) students:

June 7, 2017

The salmonid program is important because it educates kids and adults about salmon and the environment.

My dad is a logger but if he was working here I could learn from him. We could log selectively so that the habitat would not be affected.

My dad has been a faller since he was 15 and his dad trained him so it's a family tradition. I would like to have the chance when I'm older and it's the same with the salmon I want other kids to have the chance to learn about salmon and how important they are. Salmon is a main food source for Aboriginal people. They rely on the salmon for food

continued on page 2

# Taking the salmon by the tail

continued from page 1

system (GIS) analysis. GIS analysis has provided information on road density, stream crossing density, amount of riparian disturbance and total land cover alteration as well as locations of key salmon habitats. Data gaps have been identified and LBN is working to fill those gaps.

Nutrient and zooplankton in Babine Lake are being monitored in a research program led by Dr. Daniel Selbie with assistance from LBN. Zooplankton colonies in Babine Lake are changing with a shift away from the type of zooplankton preferred by sockeye fry. LBN Fisheries staff continue to monitor factors that impact sockeye survival.

Working with others includes hosting the Wild Babine Sockeye Habitat Rehabilitation Workshops. The workshops bring together experts in the Babine watershed to discuss state of salmon habitat, current and emerging impacts and next steps to restore salmon runs and habitat.

Educating LBN members is a priority. The Mobile Salmon Centre visits LBN and local communities to provide education about the salmon's life cycle and habitat, current trends in salmon survival and the LBN projects to restore Babine sockeye.

Equipping LBN members with this information assists them in understanding food fishery closures due to declining returns.

# The future of Babine Sockeye

Lake Babine Nation is working with other First Nations groups, university and government researchers and stakeholders to discuss current status of Babine sockeye. Discussions include looking at current trends, predicting future trends and formulating ideas to ensure that we have salmon into the future.

To date discussions have included ideas such as providing groundwater augmentation into sockeye streams to improve water temperature, level and flow and access for spawners. Installing simple habitat features to improve access for spawners is a priority.

Monitoring snow pack would assist with predicting summer water level and flow. Managing flows out of Fulton River Spawning Channels could moderate summer water temperatures. Managing nutrient loads entering Babine Lake may assist with zooplankton composition and abundance for rearing sockeye



Twain Creek gravel deposits

fry. Creating groundwater-fed spawning areas and improving lake spawning habitats could create high quality spawning habitat.

LBN is committed to ensuring there are sockeye salmon for future generations and we will continue to monitor, assess and find solutions.

The Lake Babine Nation is the third largest Aboriginal band in B.C. with approximately 2,500 members served through its administration office in Burns Lake. The Lake Babine Nation (LBN) Fisheries Program (Ned'u'ten Fisheries) was created in 1991 when LBN engaged Canada and Fisheries and Oceans Canada via the Aboriginal Fisheries Strategy (AFS). The CEDP projects are funded by DFO. Lake Babine Nations members work at the Fort Babine project.

-Brenda Donas, Consulting Biologist, Lake Babine Nation Fisheries Program

# Life in the classroom...

continued from page 1

and ceremony. It's not just their culture it's who they are as people... it's in their veins.

—Future logger & faller, Harry Chapman

# ••••••

# June 7, 2017

We need fish such as salmon. Salmon help to keep people healthy. I go fishing with my dad and we spend important time together. This is an important part of my life as we don't live in the same house we do not see each other every day so I cherish our time together. In a way salmon is not only a life giver but a family keeper. Thank you for telling me things that I didn't know about it's life cycle and all the important things about their habitat and environmental importance to other animals, plants and trees.

I also learned that Tsmshian people do a salmon ceremony to respect the salmon.

—Liam Mulawka, Grade 5 student Ms. Dani's class



Thornhill Elementary School poster accompanying letters. Each student added their hand print and signature. The illustration of a coho salmon stylized with a First Nations treatment was added to the background.



# Mossom Creek Hatchery rises from the ashes like a Phoenix

Community Involvement volunteers will be familiar with the challenges the stewards at the <u>Mossom Creek Hatchery</u> in Port Moody have had to overcome. The fish hatchery—managed by Burrard Inlet Marine Enhancement Society (BIMES)—was destroyed by a fire in December of 2013 and all that was saved was a badly burned hatchery sign. The hatchery was down, but it was not the end of the story. The community came together and the volunteers at Mossom Creek Hatchery worked hard to gather the necessary funds and the technical assistance to rebuild.

Coquitlam's Centennial Secondary school students first began learning and helping out at the Mossom Creek Hatchery more than 40 years ago. In the fall of 1976, teachers Ruth Foster and Rod MacVicar embarked on a student project that would inspire years of hands-on environmental work by thousands of students and community volunteers, creating lasting benefits beyond the classroom. "We know that kids who get out in nature are happier, healthier and smarter," says Ruth Foster, now retired.

The re-built hatchery and new education centre has been fully operational since March 2015, providing salmon, watershed and marine education programs for all ages through a variety of outdoor experiential school programs, community group activities, post-secondary training and other workshops. Financial and in-kind support from countless individual, corporate and community donors and partners was instrumental in the hatchery rising from the ashes like the mythical phoenix. For Lafarge Cement—one of the key construction donators to the new facility—the rebuild hit on their



three main community investment priorities: environment, education and sustainable construction. David Redfern, Lafarge's general manager for the Vancouver area was proud to say that the company donated employee time, and the products—concrete and Hydromedia®, a permeable concrete—needed for the construction of the new two-storey, 3,200 square foot facility.

When the hatchery began there were no salmon left in Mossom Creek. Director Rod MacVicar highlighted that 100,00 chum, 50,000 pinks and 4,500 coho fry are now raised and released annually and the hatchery gets 99 per cent egg survival by protecting the salmon during their vulnerable egg to fry stage. Centennial students are back providing a helping hand while learning what a healthy stream and salmon mean to the ecosystem and the food web.

"It feels great; it is giving back to nature" says student Cedric Deduque of the program.

Watch a video called <u>Phoenix of Mossom</u> <u>Creek — After the Fire</u> chronicling the hatchery rebuild by award-winning documentary film maker Eva Wunderman.

– Joanne Day, Stewardship and Community Involvement, Fisheries and Oceans Canada Over the years, two DFO Community Advisors for the Salmonid Enhancement Program (SEP)—Roy Argue and Guy Scharf, have participated in the Centennial Secondary school program.

DFO Community Advisor Sandie Hollick Kenyon also received kudos from the students—Giordano Bua highlighted that volunteering at the hatchery was such a great experience and that he looks up to Sandie as a role model. Sandie helps out so much, and she inspires him as that would be his "dream job." Helping students become aquatic stewards and to realize what they can achieve for the environment and their own career path aspirations are among the objectives of SEP.



# Wild Salmon Policy Consultations: Phase 3 Schedule

DFO has been working collaboratively with key partners to develop a detailed five-year Implementation Plan for <u>Cana-</u> <u>da's Policy for Conservation of Wild Pacific</u> <u>Salmon</u> (Wild Salmon Policy or WSP).

The goal of the WSP is to maintain healthy and diverse populations of salmon that will support sustainable fisheries now, and meet the needs of future generations, placing conservation of salmon and their habitat as the first priority for resource management. People throughout British Columbia and the Yukon are encouraged to contribute to decisions about salmon conservation that reflect ecological and societal values.

Phase 3 of the consultation process involves consulting with parties across B.C.

and the Yukon on the draft implementation plan. Information about additional WSP-related activities being undertaken by First Nations, partners, and stakeholders will be sought, and a final draft of the document will be prepared for approvals.

Additional information including the schedule of upcoming meetings can be found on the <u>WSP consultations webpage</u>.



# 2017 Community Workshop: Thanks to all participants!

The 2017 Salmonid Enhancement Program (SEP) workshop was held in Quesnel over the May long weekend (May 19-21), marking the 14th workshop held biennially since 1991. Every workshop is a special opportunity for the Community Involvement Program to come together and connect with like-minded folks to share knowledge and best practices and learn from each other and the expert speakers.

Training sessions were held throughout the day on Saturday, covering off topics of vital importance for the Community Involvement Program and SEP overall. Feedback from the 170 participants highlighted the sessions on genetic sampling by John Candy of the Pacific Biological Station; Salish Sea highlights presented by Isobel Pearsall of the Pacific Salmon Foundation, and the hands-on fish culture sessions run by DFO Community Advisors, as popular sessions.

Angela Bate, Colin Masson and Adam Silverstein from the DFO management team spoke during the dinner on Saturday night, thanking the Community Involvement volunteers for their continued dedication to the salmon resource. Pat Morten of Norlynn A/V Services created a stunning slide show utilizing photos and newsletter headlines from past decades to reflect the 40 years of SEP and the accomplishments of the program over the years. As in previous years, participants took home a coveted commemorative workshop mug!

SEP workshops are such a rewarding experience, uniting salmon and the volunteers who steward them. They are a wonderful way to celebrate

those who have played a role in the success of SEP since its inception, particularly in the year of SEP's 40th Anniversary.

A heartfelt thank you to everyone involved in the 2017 workshop: the planning team, including our host, the <u>Baker Creek Enhancement Society</u> and Community Advisors, presenters, the Pacific Salmon Foundation, Pacific Streamkeepers Federation and Paul Cipywnyk, who captured the event in <u>photos</u>.

Questions raised for the next workshop in 2019 included whether the May long



weekend would continue to be the best timing for the workshop. SEP is also open to hearing from Community Involvement Program groups interested in hosting a future workshop. Contact Joanne Day at 604-666-6614 (joanne.day@dfo-mpo.gc.ca) if you would be interested in hosting or speak with your local Community Advisor.

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



# SEP Community Workshop recap

Celebrations of 40 years of public involvement with the Salmonid Enhancement Program

(SEP) took place at the SEP Community Workshop in Quesnel. A video walked (ran!) us through the very beginning of the program with Minister Romeo LeBlanc signing the paperwork to begin this



Tom Nevin is a Community Advisor in the BC Interior, Kamloops region

innovative program bringing Canadians and the Fisheries public servants together for the betterment of salmon. The Baker Creek Enhancement Society and workshop organizing team went all out to showcase Quesnel, bringing in speakers and organizing an array of activities from gold panning and chain saw carving, to craft beer and tours of nearby Barkerville.

The presentations and speakers were top notch; as participants exited their sessions, the college was abuzz in conversations, new ideas, and solidification of thoughts, concerns and inspiration to continue on their great work for salmon and their habitat for years to come.

This excitement for the program was easily shared with Minister LeBlanc to reset the foundation of the program to bring us forward into the future with staff, programs, policy, and vision for Canada, our salmon and their habitat.

The new Fisheries Act should be coming out shortly and we hear that British Columbians came out in solid numbers to share their knowledge, hope and dreams for the protection and preservation of this iconic fish. Many believe that what we do for the salmon will have huge benefits to our society as well. The SEP, as a program, has a solid foundation, has grown over the years and our bonds are strong. New programming has been built on SEP foundations and the SEP community shared the need for this inclusive, growing, strong, caring and committed program to be entrenched into Fisheries and Oceans into the future.

-ZoAnn Morten, Executive Director, Pacific Streamkeepers Federation

# Urban Ecosystem Restoration Across Municipal Borders: The Return of Salmon to Still Creek

One of only two daylit streams in Vancouver, Still Creek flows into Burnaby Lake before draining into the Fraser River, traversing the traditional territory of several Coast Salish First Nations including the Musqueam, Tseil-Waututh, Kwekwetlem, and Squamish. The creek is influenced by the policies and management decisions of multiple levels of government, as well as private property owners.

As Vancouver developed, most waterways were placed in culverts or buried underground, including approximately 70 per cent of the original Still Creek. Land use within the watershed is primarily residential, commercial, and industrial, and the prevalence of hard urban surfaces has resulted in highspeed water flows, minimal streamside vegetation, poor water quality, and limited capacity to sustain aquatic biodiversity. Dam re-construction on Burnaby Lake in 1935 also restricted fish access to Still Creek, and by the 1960s salmon had been completely eliminated from the Brunette River system. As urbanization continued, Still Creek became one of the most polluted waterways in the Lower

## Mainland.

In 2001, a movement began to restore the health of Still Creek. Collaboration between Vancouver and Burnaby (partially made possible by Metro Vancouver policies, partly through the tireless efforts of local champions) drove widespread restoration and re-vegetation, the removal of urban barriers, and the installation of a fishway in the Cariboo Dam in 2011 that aided the passage of salmon into Burnaby Lake. In 2012, the salmon returned to spawn for the first time in decades, and have returned every year since to the delight of local residents, school children and community groups, helping to further galvanize community support for ecosystem restoration in both Vancouver and Burnaby.

ACT (the Adaptation to Climate Change Team) recently finalized a yearlong research project that visualizes how Still Creek's ecosystem health changed over time, and acknowledges the enormous benefits such restoration work has, not only for the salmon, but for climate change adaptation and mitigation as well—a win-win-win for people, planet and other



species. The findings analyze the policies that led to this memorable series of challenges and successes for transboundary ecosystem management in the urban

context. A detailed project summary as well as a <u>policy report</u>, interactive <u>story</u> <u>map</u>, <u>infographic</u>, and <u>online webinar</u>, are available on <u>the project webpage</u>.

-Edward Nichol, <u>ACT</u>, Pacific Water Research Centre, Faculty of Environment, Simon Fraser University

# Final Report on Fisheries Act changes

The Government of Canada has provided a <u>response</u> to the recommendations made in the Standing Committee on Fisheries and Oceans Report, Review of changes made in 2012 to the <u>Fisheries Act</u>: <u>Enhancing the protection of fish and fish habitat and the management of Canadian</u> fisheries presented to Parliament in February 2017.

Going forward, the Department of Fisheries and Oceans will seek to improve fish habitat protection activities in the following key areas:

- Planning and Integrated Management;
- Regulatory and Enforcement Activities;
- Partnering and Collaboration; and,
- Monitoring and Reporting Back to Canadians.

In 2016, the Government of Canada conducted a <u>Review of Environmental</u> and <u>Regulatory Processes</u> focused on restoring lost protections and introducing modern safeguards to the Fisheries Act and the Navigation Protection Act. The review included extensive public consultation, providing the opportunity for individuals and organizations to speak before the Standing Committee on Fisheries and Oceans.

<u>The Fisheries Act</u> gives government the authority to manage Canadian fisheries and to protect their habitat, and is one of the five key pieces of legislation which guide the work of the <u>DFO</u>.

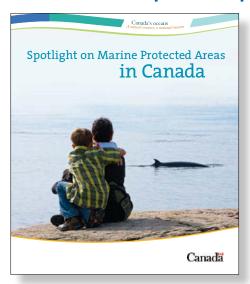




# Marine Protected Areas are special places.

What are Marine Protected Areas? While not something that many people come in contact with on a daily basis, these areas are of vital importance and benefit to all Canadians, providing environmental as well as social and cultural contributions.

Canada is an ocean-rich nation, with the largest coastline in the world linking three different oceans. A Marine Protected Area (MPA) is a designated ocean environment that is considered to be unique because of its habitats, species and features – and which needs protection because of its ecological significance and vulnerability to human interference. The establishment of MPAs are one way government helps ensure the long-term protection and management of important biodiversity in the ocean. This immense web of marine life is a priority, and these defined geographical areas in MPAs strengthen ecosystems and have scientifically proven benefits. The protection and conservation of species and fisheries stocks in MPAs are important to the Salmonid Enhancement Program (SEP) as they can provide a refuge and food source for species, contributing to



improved resilience and adaptation. MPAs also provide opportunities for people to experience and study marine plants and animals that are undisturbed by fishing and other impacts to observe and compare with the impacts from disturbance.

The Endeavour Hydrothermal Vents and the Bowie Sea Mount are two Marine Protected Areas in the Pacific Region. The <u>Endeavour Hydrothermal Vents</u> —Canada's first MPA—is located 250 kilometres southwest of Vancouver Island, 2250 metres below the ocean's surface. Approximately the size of the Eiffel Tower, they are home to 12 species not found anywhere else on earth. The <u>Bowie Sea</u>. <u>Mount</u> is an area of underwater mountains formed less than one million years ago offshore from Haida Gwaii.

An effective MPA system helps to ensure that the oceans recuperate, continue to store carbon dioxide, that fish stocks recover and that coastlines are protected from harsh climatic conditions. Bounty from these areas spills over to seed new life in other areas of the ocean.

Think about these areas as "your ocean" and what effect the ocean has on your day-to-day life. Canada has approximately eight federal and 40 provincial/territorial legislative or regulatory tools for establishing protected areas with a marine component, including those within the Great Lakes region.

Find out more by reading the DFO report <u>Spotlight on Marine Protected Areas</u> in <u>Canada</u> and visiting the <u>MPA webpage</u>.

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

# Watershed Stewardship and Natural Habitat Reads, References & Resources

### Reads

<u>Plants of The Pacific Northwest Coast: Washington, Oregon,</u> <u>British Columbia & Alaska</u>, by Jim Pojar, Andy MacKinnon

<u>A Guide to Common Freshwater Invertebrates of North</u> <u>America</u>, by J. Reese Voshell

All That the Rain Promises and More: A Hip Pocket Guide to Western Mushrooms, by David Arora

Trees, Shrubs and Flowers to Know in Washington and British Columbia, by CP Lyons

# References & Resources: Online Publications & Guides

The Tree Book: Learning to Recognize Trees of British Columbia, (B.C. Government publication)

The Streamkeepers Handbook: A Practical Guide to Stream and Wetland Care – pskf.org

Field Key to the Freshwater Fishes of British Columbia by J.D. MacPhail & R. Carveth (B.C. Government publication)

<u>Field Identification of Coastal Juvenile Salmonids</u>, by W.R. Pollard et al A Field Guide to Site Identification and Interpretation for the Vancouver Forest Region (B.C. Government publication)

The Stewardship Series educates British Columbians on protecting B.C.'s natural heritage. The 19 guides, published over the past 18 years by the <u>Stewardship Centre for British</u> <u>Columbia</u>, include scientific, legal and technical information to provide guidance on implementing stewardship practices, particularly in urban and sub-urban areas and can be downloaded from the <u>webpage</u>.

The Partnership for Water Sustainability in BC <u>website</u> includes a selection of documents that provide communities and land use professionals with guidance for implementing watershed-based planning, rainwater management, green infrastructure, and water sustainability.

The Center for Watershed Protection (CWP) has published the <u>Urban Subwatershed Restoration Manual Series</u> that provide guidance for the design, protection and restoration of urban watersheds affected by surrounding land use changes particularly in urbanized areas with contaminated stormwater runoff.

Bird Song Resources



# Indigenous Water Initiatives: Achievements and Capacity Gaps

Growing recognition exists that current decision-making processes are not working, and that ensuring clean, flowing fresh water today and for the future requires a bold shift towards new forms of governance at the watershed scale. A priority condition for watershed governance is co-governance, which involves meaningful partnerships and shared decision-making between Indigenous and non-Indigenous decision-makers and communities. However, before co-governance arrangements can be initiated, First Nations must have the internal means to develop and articulate their communities' water priorities and values.

A 2016 systematic research review of Indigenous-led freshwater planning initiatives and co-governance arrangements in B.C. revealed a widespread lack of capacity financial, human, and technical — for B.C. First Nations to engage in water and watershed governance, planning, and management. However, with enough capacity, the majority of survey respondents indicated a strong interest in engaging in these activities.

In many regions in B.C., First Nations are undertaking water and fisheries projects, including habitat restoration projects, species at risks projects, technical studies, and education and outreach workshops and events. A smaller number of nations are developing the foundations for Indigenous-led water governance processes: for example, developing water statements, plans, policies, and declarations. These initiatives can serve to inform future water policy and decision-making, as well as shape the nature of relationships between First Nations and external governments or ally organizations.

Despite this leadership, complex logistical challenges are present in First Nation

communities. Lack of technology, transportation, equipment, or training, slow down initiatives. It can also take a significant amount of time to inform and educate community members on water issues. People outside of First Nation communities do not often consider these types of barriers.

This article provides a summary of the presentations given at a March 2017 webinar hosted by the POLIS Water Sustainability Project, the Centre for Indigenous Environmental Resources, and the First Nations Fisheries Council of British Columbia. A recording of the webinar and a more detailed summary of the session can be accessed <u>here</u>. The systematic research review published by the Centre for Indigenous Environmental Resources and the First Nations Fisheries Council of British Columbia can be accessed <u>here</u>.

– Laura Brandes, Communications Director, POLIS Water Sustainability Project



Seyem' Qwantlen Annual Summer Walking Tours from a presentation by Ashley Doyle on Kwantlen First Nation freshwater planning. Presented at webinar "Indigenous Water Initiatives: Achievements and Capacity Gaps" on March 17th, 2017.

The 2016 systematic research review did identify possible solutions to address some of these challenges, including:

- Establishing government funding or delivery mechanisms to specifically support freshwater initiatives for First Nations;
- Supporting coordination of "tier 1" processes that focus on freshwater management and governance ("tier 1" indicates communication or management processes open only to First Nations); and,
- Creating processes for First Nations to engage in provincial Water Sustainability Act regulations development and implementation.



# The First Nations Fisheries Council

The <u>First Nations Fisheries Council</u> has developed A First Nations Planning Guide for Freshwater Fisheries Habitat Restoration Projects and companion Workbook to enable interested First

Nation governments or organizations to plan for successful fisheries habitat restoration projects on streams, rivers and estuaries in their territories.

With key information and tools to help determine what activities, resources and time may be required, the <u>Guidebook</u> outlines ten steps to follow when planning and implementing a successful large-scale fish habitat restoration project. For those considering smaller projects, many of the planning steps can be scaled down to suit the scope of the project. The steps outlined can be followed as is or modified as needed to suit individual project situations. The <u>Workbook</u> includes information sources for specific restoration techniques, example worksheets and other resources that may be useful in conducting habitat restoration activities.

Please note that the Guidebook and Workbook are planning guides and should not replace professional advice from qualified habitat restoration practitioners such as engineers, hydrologists, and others.

Funding to develop A First Nations Planning Guide for Freshwater Fisheries Habitat Restoration Projects was provided under the <u>Government of Canada's Fish Habitat</u> <u>Restoration Initiative</u>.

The Guidebook and companion Workbook can be viewed and downloaded on the FNFC <u>website</u>.





# Salmon Site-ings



#### Video – Kids, Creeks and Nature

With the help of a local kindergarten class, river advocate Mark Angelo talks about the importance of engaging children with nature in a three-minute video entitled, *Kids, Creeks and Nature*. A release of juvenile chum salmon along a restored section of Burnaby's Guichon Creek during SEP's 40th anniversary celebration served as the perfect backdrop. Read the story and watch the video.

#### Announcement – Canada joins UN CleanSeas campaign



Canada has joined the <u>United Nation's CleanSeas campaign</u> which is working with governments, the private sector and the general public to phase out the production and consumption of single-use plastics and microbeads within the next five years. <u>The announcement</u> was made September 11 at the Vancouver Aquarium during the World Environmental Education Congress.



## Classroom Activity – Canadian Geographic magazine

*Canadian Geographic* magazine provides <u>classroom activities</u> aimed at grades 6 to 8, including an exploration of Canada's protected areas which cover 11.5 per cent of the country. <u>Lesson</u> <u>plans</u> have been created to guide students in researching the geographic features of one of the 7,500 protected areas using the January/February 2017 issue of the magazine as well as Parks Canada and local websites.



#### Website – Uninterrupted

More than 30,000 people attended Uninterrupted recently held underneath the Cambie Street bridge. The 25-minute cinematic spectacle chronicled salmon migration, highlighting the importance of salmon in our ecosystem. You can still visit the website for background on the public art installation project, as well as articles (including about <u>PSKF's Zo Ann Morten</u> and other features including an interactive journey following the migration of salmon across B.C.



## Announcement – Coastal Environmental Baseline Program

On September 11, <u>DFO announced details</u> on the <u>Coastal Environmental Baseline Program</u> to help assess the impact of human activities, particularly vessel traffic, on our marine ecosystems including the ports of Vancouver and Prince Rupert, as part of the <u>Oceans</u> <u>Protection Plan</u>.



# 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 the Yukon that care for salmon and their habitat.

You will find past issues of *StreamTalk* <u>here</u>.

The current issue can be viewed <u>here</u>.

For more information or to submit an article, please contact:

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