



Volume 8, Number 2

The Gumboot Gazette



Summer 2017

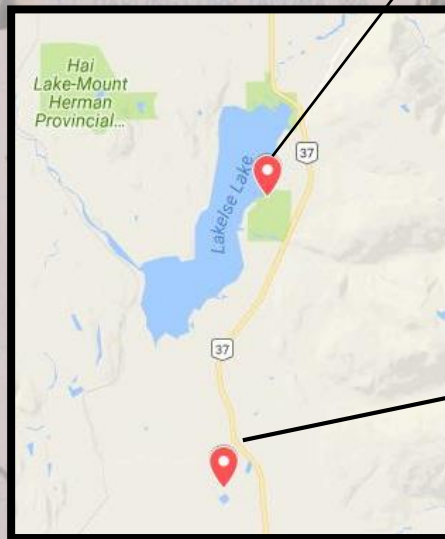
The Lakelse Watershed Newsletter

Bat Condos!

The installation of the first two bat condos was a success!

One bat condo was installed at Furlong bay near the amphitheatre, and the other in the second growth of the Onion Lake trails.

In the future the bat boxes will be monitored to see if they are being used.



Want To Get Involved?

If you are interested in building or installing bat boxes please contact Olivia Gray at olivia.hrem@gmail.com or (604) 366-5552.

Invasive Plant Species

An invasive species is a non-native species to the ecosystem. Invasive plant species can disrupt ecosystems by overtaking native plant species.

Invasive plants can be introduced to an ecosystem in a variety of ways, such as by humans, weather events, or animals.

BC has a number of invasive plant species that were brought over to North America by immigrants. Some invasive plants were brought over on purpose, to be planted in gardens for show or as crops. Other plants were brought over by accident, such as an aquatic plant caught on the hull of a boat.

If interested in reading more about invasive plant species in our area look at the Spring 2014 Newsletter on the LWSS website.



An example of an invasive plant species is the Oxeye Daisy, as pictured.

Interested in learning about invasive plant species?

Come out on July 18th and 19th and participate in our Invasive Plant Species Course! Learn about both terrestrial and aquatic invasive plants, and how to properly remove them!

Any members wishing to participate please contact Alison by July 10th.

Contact Alison Grover at 1-250-254-2848 or by email

Furlong Bay Walks



-All Ages Welcome-



Interpretive walks are being held at Furlong Bay this summer.

Come walk along the Twin Spruce Trail and learn about fish species, local vegetation, birds, and invertebrates!



Meet @
Amphitheatre

Upcoming Dates

July 15th @ 7:00pm

August 5th @ 1:30pm

Volunteer Opportunities

Come out and learn about our local Sockeye Salmon stocks!

Seining on Williams Creek

We will be seining and gill netting adult sockeye salmon once again on Williams Creek to collect information for adult sockeye surveys. Sponsored by the DFO, volunteers are welcome to come and participate in the fun!



"When you see someone putting on their Big Boots, you can be pretty sure that an Adventure is going to happen."

[A.A. Milne](#), [Winnie-the-Pooh](#)



Contact Olivia Gray at olivia.hrem@gmail.com or (604) 366-5552.

Scully Creek Camera

The Scully Creek aquatic camera will also be reinstalled this summer. This will allow us to monitor Sockeye Salmon stocks in the creek. Volunteers can help count Sockeye in the video clips from the comfort of their own homes, or come out to help maintain the camera!



Skunk Cabbage



Ever been in the bush and got a whiff of a skunk?

What you are actually smelling is Skunk Cabbage! The skunk cabbage produces this distinctive smell to attract pollinators, such as flies, bees, and beetles. The insect mistakes the odour for rotting meat, and will attempt to lay their eggs on the flower. In doing so they transfer pollen between the plants.

Skunk Cabbage is found growing in swamps, and along the banks of streams. One of the first plants to sprout out of the ground in the spring, the Skunk Cabbage acts as a laxative to bears after they come out of hibernation. So if you're out hiking or fishing and see a lot of Skunk Cabbage be aware that bears may be in the area!

Odd Fact: Skunk Cabbage is an invasive species in Europe. Many Europeans came to America and took skunk cabbage back to the United Kingdom for their gardens! They thought the Skunk Cabbage was beautiful with its large leaves, and bright yellow colours. They were also intrigued by its interesting smell. But the Skunk Cabbage spread from the gardens eventually into the wild, and is now considered a problem species in many areas of Europe.



THE Gumboot Gazette



Volume 8, Number 1

The Lakelse Watershed Newsletter

Winter/Spring 2017

Bat Condos!

Bats of B.C. are becoming increasingly at risk for habitat loss and the fatal White Nosed Syndrome (WNS). We are initiating a project to build and install bat housing throughout the Lakelse watershed providing information on how locals and volunteers can contribute to keeping WNS out of British Columbia.

Bats of British Columbia are insectivores and contribute billions of dollars worth of pest control each year. We therefore want to ensure bats have plenty of habitat available for their roosting sites. Preferential roosting sites include first-growth forest stands and man-made roost boxes.

Continued on the next page



Also in this Issue

- The water sampling continues
- New guidelines for dock construction on Lakelse Lake
- Local BioBlitz!
- New oil refinery coming to the Lakelse Watershed

Bat Condos!

Because of the extensive forest harvesting that has occurred in the terrace area, bats have very few old growth forest stands left available to use for roosting sites. That's why we are initiating a project to build bat roosting boxes that will be installed throughout the Lakelse Lake watershed. Anyone interested in building or installing bat boxes can contact Olivia Gray at olivia.hrem@gmail.com or (604) 366-5552. You can also find blue print designs and building instructions in [A Homeowner's Guide to Northeastern Bats and Bat Problems](#).

White Nosed Syndrome is a type of fungus that appears on bat wings and noses during hibernation. The death rate of infected bats is extremely high, at 80-100% mortality. More than 6 million bats have died in eastern and central North America since 2006, and the first western case has just been documented in Washington in March 2016. This means that transmission of WNS into British Columbia is likely, and a number of B.C.'s bat species are susceptible. It is important to be on the



lookout for signs of WNS in bats to prevent the spread of this fungus through our province. Signs of infection can include finding dead bats with no apparent causes of fatality and the appearance of a white fungus on the face or wings of bats. While humans are not susceptible to WNS, they are a major vector for transmission of the fungus, second to bats themselves. If you find a dead bat that you believe is contaminated, please follow the steps outlined in this [educational brochure](#).

The Water Sampling Continues

Volunteers of LWSS continue to do weekly sampling in the waterbodies of the Lakelse watershed. Data collected include water temperature, depth, pH, conductivity, and turbidity. These factors all affect habitat quality for salmonids and other species, and monitoring these values can help to understand causes of fish population fluctuations. With this data the LWSS can work to maintain ideal habitat quality in the Lakelse watershed.



For the first time since baseline sampling began, water quality measurements were taken in Lakelse Lake through the ice! Heading out from Ernie Kuehne's property on a snowmobile and quad we headed to the deepest part of the Lake, keenly listening for any cracks along the way. Using an ogger Ernie drilled a hole in the ice and measurements were taken at one meter intervals until hitting bottom at 27 meters.

Provincial Regulations for Dock Construction



https://www.cottagespot.com/images/articles/Muskoka_Chairs_1.jpg

Those considering building a dock on Lakelse Lake adjacent to their property should be aware of the regulations that are in place for doing so. As of January 2017 some minor amendments have been made to the previous regulations. Below are some of the most prominent regulations and changes.

- Docks must be constructed at least 5 meters from the property line, unless the property line is adjacent to public property (such as a public beach), in which case the minimum distance is 6 meters.
- Docks must be either floating or suspended above the water, and may not be constructed of cement or steel sheeting, or of materials containing toxic substances.
- Dock construction must not cause unnecessary damage to riparian vegetation.
- Dock walkways must be no more than 1.5 meters wide, and dock moorage platforms must not exceed 3 meters wide.
- Dock length must not exceed 42 meters from shore.

Be sure to consult the [Provincial Regulations](#) when planning and executing the construction of your dock on Lakelse Lake!

BioBlitz

We have exciting news! Kitimat will be officially hosting it's own BioBlitz this year. Scientists and volunteers will be coming together to do an exciting species-inventory Blitz in the Kitimat estuary in May, June, and August. Come join us as we explore nature and find all sorts of fascinating species! We will be documenting everything from the area's favorite species to its most rare, and maybe even some new ones!



<http://02b93fb.netsofhost.com/blog/wp-content/uploads/2012/08/BioBlitz.MiddleRun.8.26.12.derekstoner.548.jpg>

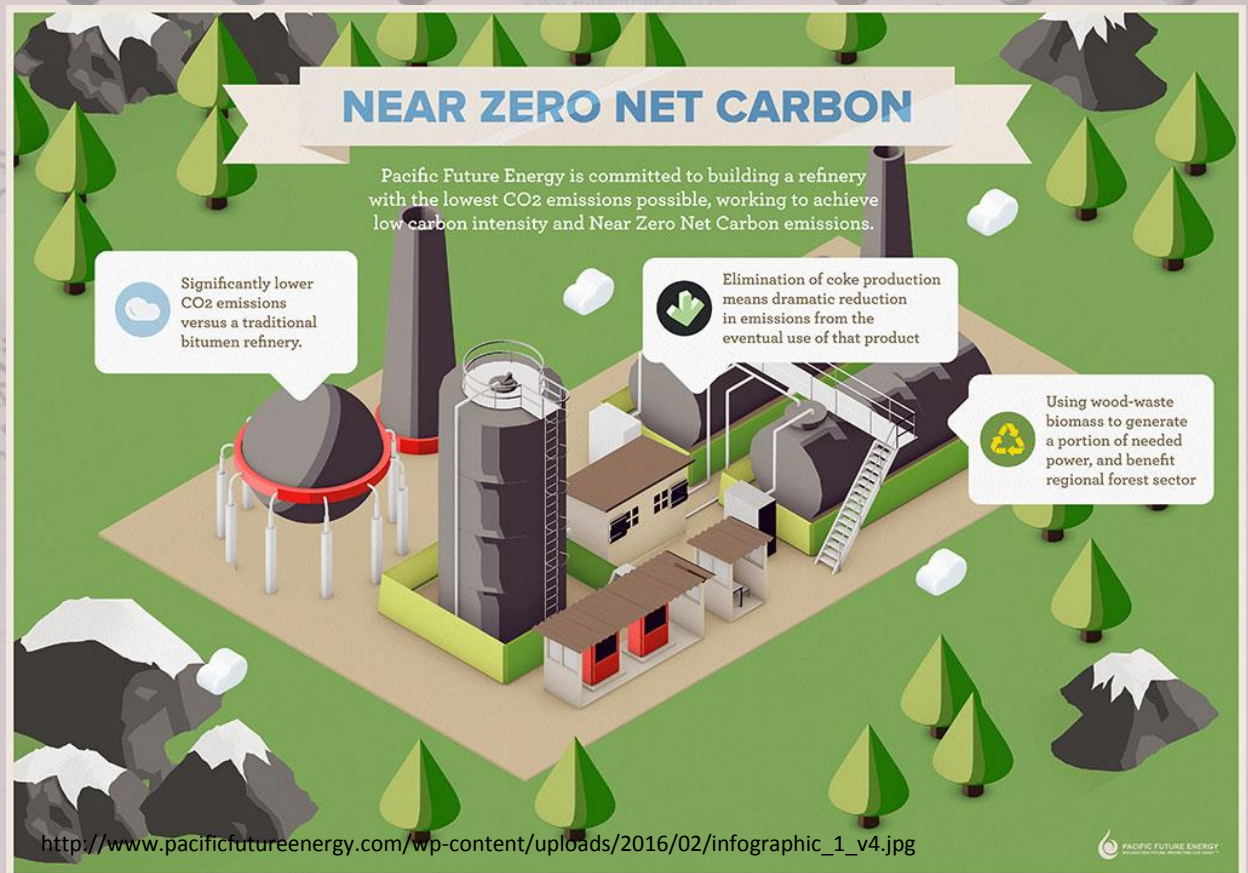
Are you entranced by the colours in a butterfly's wings? Or maybe by the shining scales of a salmon? The furry face of a rabbit? The waggle dance of a bumble-bee? The looming height of the Cedars? Nature has something for everyone. No experience necessary, just curiosity! This BioBlitz will not only help scientists understand the species composition of the Kitimat Estuary, but will also help break the barriers between the layman and science, giving an opportunity for volunteers and scientists to be in the same room (Nature's biggest room!) and make connections. The BioBlitz will also just be a fun opportunity for people to get outdoors and appreciate their community and their environment! Find out more, and see how you can be involved, at [BioBlitz Canada](#).

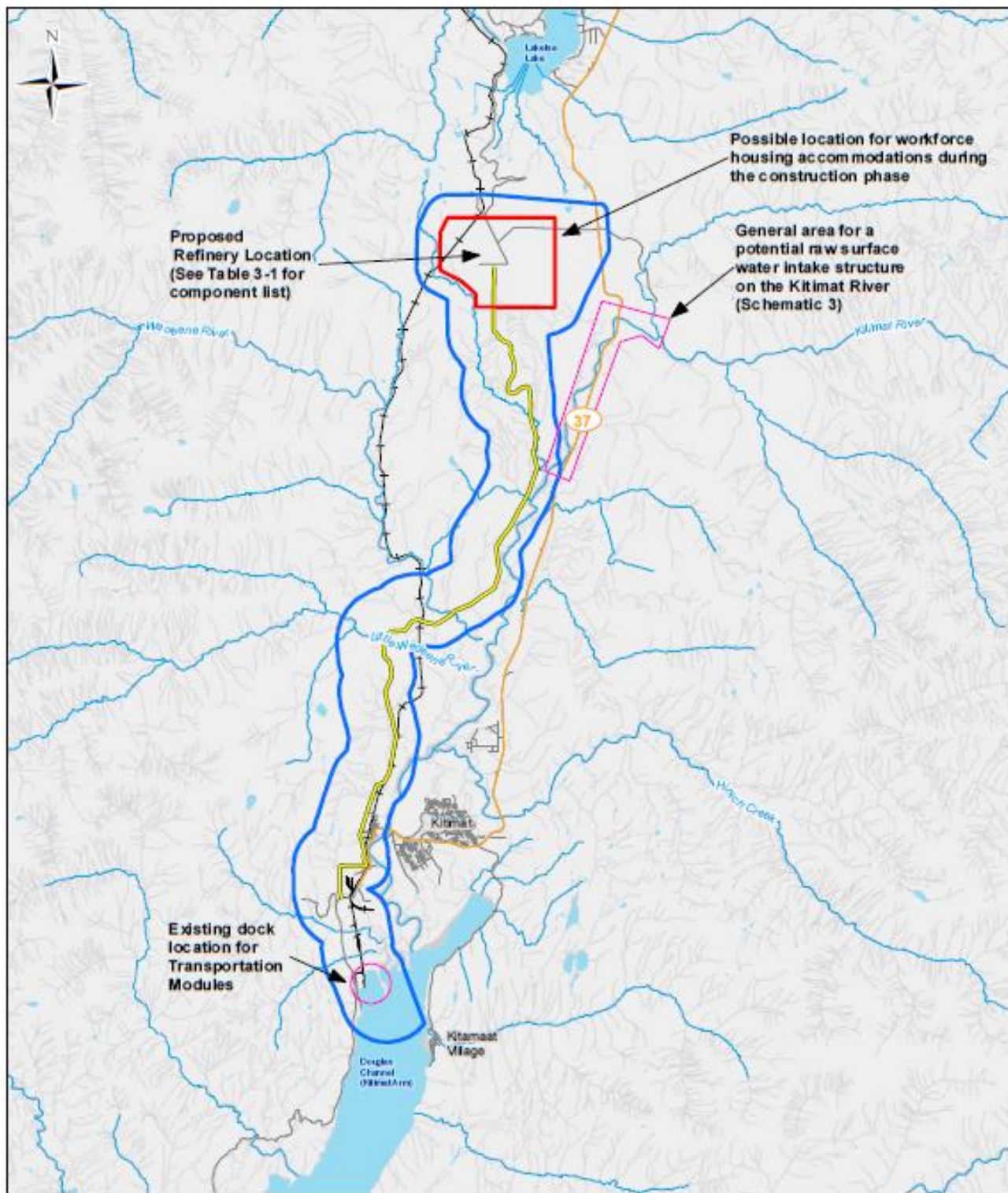
Pacific Future Energy Refinery

Pacific Future Energy (PFE) has proposed the “world’s greenest refinery” to be constructed south of Terrace. This refinery will bring “neatbit” bitumen by rail west to the refinery where the main products will be diesel, gasoline, and jet fuel. These products will be shipped out by tankers to Asian markets. PFE claims that their refinery will have “Near Zero Net Carbon” emissions, and that the refining process of the bitumen products will allow for safer travels through Pacific waters. The refinery itself will encompass approximately 1,000 ha of land (see next page). For more information, please check out the [Refinery Project Summary](#).

LWSS will be hosting a meeting for members to attend and discuss their views on the proposed refinery. The meeting will be on

Saturday, March 18th at 2 pm at the Arena Conference Room.





Legend

- Refinery Location
- Project Area
- Potential Module Access Road
- Highways
- Other Roads
- Rail Tracks
- Watercourses
- Water Bodies

- Notes:**
1. Intended for illustration purposes only.
 2. Original in colour.
 3. Site location is approximate.

References:
 Esri, HERE, DeLorme, MapmyIndia, ©
 OpenStreetMap contributors, and the GIS user
 community
 ©2016



**Pacific Future Energy Refinery
 Project Area**



By: ECH	Date: 2016.06.16	Scale: 1:250,000	Figure Number: 3	Rev: 2
GW: GM	Coord. Sys: NAD 1983 UTM Zone 9N	Reference No.: 631180-101-0-02		



Volume 8, Number 3

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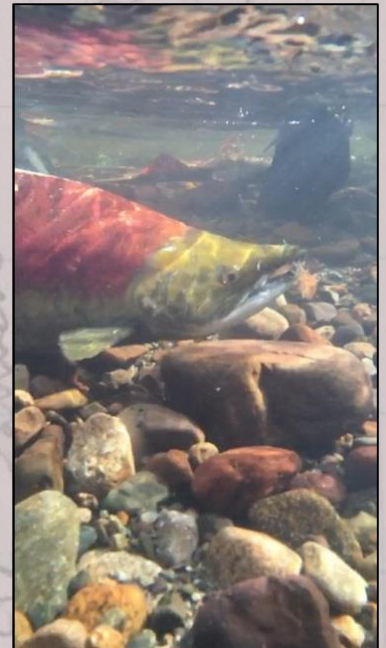
Fall 2017

The Lakelse Watershed Newsletter



William's Creek Sockeye Sampling was a Success!

The seining and gillnetting project that took place on Williams Creek from August to September was a huge success. Many volunteers took part, and the final estimate for this year's escapement population size in Williams Creek is **3,668**. The sampling on August 17th was followed by a catered Volunteer Appreciation Dinner at the Lakelse group campsite, where numerous volunteers from throughout Northern BC received acknowledgement for their efforts. Awards were handed out and generous amounts of good food, good friends, and good beer were available. Join us next year for our final sampling season of the 5-year study towards Population and Fry Outplant Monitoring!



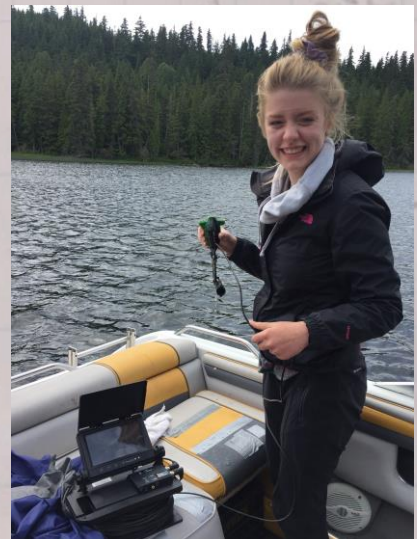
It's a mystery? Does anyone know this man? He randomly shows up to volunteer, but never leaves his name.



Please contact Olivia at olivia.hrem@gmail.com if you can help us track him down! **If you see him do not approach him!!!**

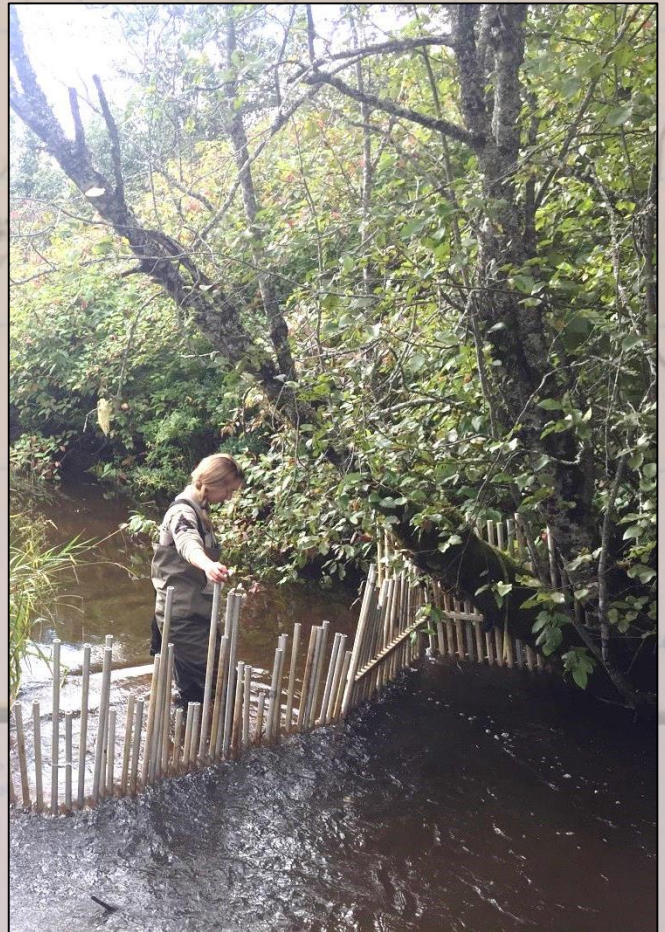
GOOD LUCK AT UNBC SUMMMER!!!

Summer Schulte was the summer student for many of the activities in the Lakelse watershed this year including leading the charge on the interpretive walks. She is going into her 3rd year of environmental studies. We wish her luck and already miss her!

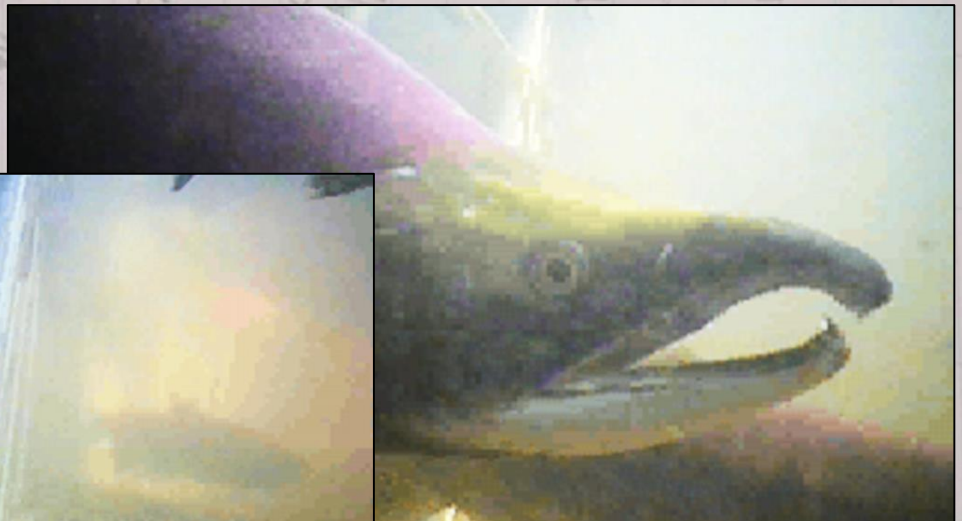


Scully Camera

The season for this year's sockeye run count in Scully Creek is coming to a close. The camera will remain in place to count coho salmon entering Scully Creek. The last two month's worth of sensor activated video files will be reviewed and sockeye entry into the Scully Creek system will be quantified.



The live streaming of the underwater camera will be available [here](#) until the camera is disassembled for the season, and will be back up next August for another season of sockeye spawning.



Furlong Bay Interpretive Walks

The second consecutive year of interpretive walks along the Furlong Bay trails over the summer season has come to a close. Families and individuals of all ages came out to learn more about their local environment, from how to use skunk cabbage to estimate grizzly bear emergence in spring to what kind of plants are edible and even good for you! From fish to birds to trees, there is something for everyone to learn.

We are excited to announce that we will be hosting interpretive walks again next summer! Hope to see you there!



Volunteer Opportunities

Bat Boxes –There are still opportunities and sites available for bat box construction and installation throughout the Lakelse watershed. The more habitat and roosting sites we offer our local bat species, the healthier their populations will be. And let's not forget, the more bats we have, the smaller our mosquito population will be! 😊



Lake and Watershed Sampling – We are hoping to continue collecting baseline water quality data for Lakelse and its tributaries until they freeze over. This will depend on volunteer availability.



We would love to hear from you! If you are interested in volunteering or learning more about our opportunities, please do not hesitate to contact us. Call or email Olivia Gray at (604) 366-5552 or olivia.hrem@gmail.com

BioBlitz Bonanza



LWSS members took part in the first inaugural BioBlitz in the Kitimat Estuary! Other participants included representatives from the Haisla Nation, DFO, LNG C, RTA, the Kitimat Valley Naturalists, NWCC, UNBC, the Minette Bay Lodge, and a number of independent biologists. In total over 70 people came out, over the span of two days, to try their hand in identification of birds, invertebrates, fish, and plants. Besides the participants, funding from CWF, the Department of Canadian Heritage, and LNG made the event possible. The data collected will eventually be made publicly available on sites like [iNaturalist](#).



Canada

The Dreaded Goldfish!

Goldfish are a common domestic fish species that people enjoy having in their outdoor ponds. In the Terrace area there are a number of residents that have backyard goldfish.

While they do offer a colorful feng-shui to any backyard, they threaten to do more harm than good.

Because goldfish have been bred in controlled aquarium environments, they have the capacity to become extremely invasive in the wild.

Once placed in the wild, their cap on growth disappears and they are able to grow to enormous proportions, larger than any local fish species, including our salmon!



Continue reading on the next page for more information...



The Dreaded Goldfish!

Continued...

Not only do people often intentionally release goldfish without knowledge of the impacts, but sometimes unintentional releases occur if ponds are within the floodplain or if the ponds have a direct outlet to a natural watercourse. These unintended releases usually come with severe rainfalls causing flash floods or lake elevations to rise quickly. It is crucial that we show extreme diligence not to let this happen at Lakelse as many of the residential properties are in the floodplain.



While it may seem minor if a goldfish or two get washed into Lakelse, the impacts are more severe than one would expect. Numerous cases have been documented on the outcome of such incidents. Dragon Lake, for example, which is near Quesnel, BC, has been overrun by thousands, if not millions, of goldfish.

Check it out for yourself [here!](#)

In conclusion, we would like to warn locals of the threats to our Lake systems through the stocking of goldfish in backyard ponds. We strongly urge any landowners to consider eliminating goldfish stocks or relocating their ponds to safe zones where there is no risk of escape.

For more information, check out [this](#) and other YouTube videos describing the dangers of goldfish invasions..

*“More the knowledge lesser the ego.
Lesser the knowledge more the ego...”
— Albert Einstein*

LWSS AGM

Lakelse Watershed Stewards Society *Annual General Meeting*

Oct. 15th @ 12:00pm

Terrace Sportsplex
– Rich McDaniel Conference Room –



Come out to the Annual General Meeting in October to learn about projects completed this year as well as upcoming projects for 2018. Some topics to be discussed:

- Pacific Futures Refinery
- Lakelse Tributary Boating Regulations
- Invasive Species