

SEHAB update Kevin Ryan October 2024

North Shore, Port Moody and Maple Ridge

DFO CA Brian Smith (Port Moody, Maple Ridge)

DFO CA Gillian Steele (North Shore)

North Shore (CA Gillian Steele)

Seymour Hatchery Report from Shaun Hollingsworth

Seymour River rockslide project finished

The Seymour Salmonid Society, meanwhile, has put the finishing touches on a years-long project to reopen the Seymour River after a 2014 rockslide blocked any hope of fish returning to spawn. Since the slide, specialists have been using low-velocity explosives to break apart the larger boulders into smaller ones, which the winter rains wash into the canyon below. The slide first became passable again in 2019, but society president Shaun Hollingsworth said in years with low rainfall, the fish still find themselves stuck. That's exactly what happened in drought conditions in 2023. "Pink salmon only spawn every two years, and the pink salmon didn't make it through last year. They stayed in the bottom of the river, and whether they spawned or not, I'm not sure," he said. "What we felt was water levels were too low, and the incline that they had to climb was too high." Crews recently finished breaking apart rocks at the "lip" of the slide, which should lower it by 1.5 metres. With that done, Hollingsworth said he has every confidence in the river's future as fish habitat. "It's come back to as good as, if not better, than prior to the slide," he said. "We're getting good runs of fish. And you know, if things go well, in four years, we should be able to open it to fishing."

North Shore Streamkeepers

Update from Keegan Cassidy

Excerpts taken from North Shore News; A spider excavator contractor moves boulders into place on West Vancouver's Cypress Creek to restore salmon habitat. | Courtesy of West Vancouver Streamkeepers Contractors hired by the Seymour Salmonid Society prepare to break rocks that continue to block fish from passing on North Vancouver's Seymour River. | Courtesy of Seymour Salmonid Society Previous Next 1 / 3 North Shore Streamkeepers president Keegan Cassidy looks over recently completed habitat improvements in lower Mosquito Creek. | Paul McGrath / North Shore News Expand Listen to this article 00:05:50 Salmon that spawn in three North Shore creeks this fall are returning to much better habitat than they left, thanks to the work of local stewardship groups. The West Vancouver Streamkeepers, the Seymour Salmonid Society and the North Shore Streamkeepers spent the summer moving boulders and logs to recreate the conditions that once drew in thousands of salmonids per year, but thanks to human activity, have left the creeks bordering on barren in modern times. North Vancouver's Mosquito Creek coming back to life The North Shore Streamkeepers, with the help of a walking spider excavator, manoeuvred dozens and of logs and hundreds of boulders to 130 metres of Mosquito Creek beyond the Bewicke Avenue bridge. Because the creekbanks have been armoured with rap-rap over the years, water flows through at a much faster rate, taking all of the natural gravel, woody debris and biological material that fish need with it and making the creek bed "like concrete," said Keegan Casidy, president of the North

Shore Streamkeepers. "If they can't dig in there, there's no nest. If there's no nest, there's no eggs and no fish," he said. "There was no shelter, no cover, no ability for that area of the stream to recruit sediments and finer materials. It couldn't even really recruit spawning gravel. No organic matter means very little life." With the logs and boulders in place, the creek will look and behave much more like it would have had humans never interfered with the riparian area. Salmon in the inlet will sense the woody debris and come in. The project builds on the "shocking" success the group already had on the lower section of the creek, which they rehabilitated in 2021. Most years, volunteers on Mosquito Creek would go without spotting a single salmon. Since the project was completed, they've been getting at least 20 per year. Casidy said he has a goal of 100 chum salmon swimming around in Mosquito Creek when they return from their four-year cycle in 2028, and 100 pinks in 2027. But if the groups continue their restoration work on the creek all the way up to the highway, the potential is hard to imagine by today's standards. "I'm hoping that one day we're going to eclipse the 1,000-fish-per-year mark," he said. "There was certainly years where there were thousands upon thousands returning." West Vancouver's Cypress Creek restored West Vancouver's Streamkeepers have cleared a way for salmonids to make their way past a barrier on Cypress Creek, said Keith Pelletier, co-chair for the group. The concrete weir was installed by the federal government, ironically, to divert fresh water to a laboratory, known today as the Pacific Science Enterprise Centre on Marine Drive. Today, the Department of Fisheries and Oceans has been highly supportive of helping mitigate its impacts on fish, Pelletier noted. Using the same spider excavator, contractors built a series of pools, each one slightly higher than the one below it, "so the fish can just naturally jump over the weir." "There's fantastic spawning and rearing habitat just above that," Pelletier said, adding that volunteers have already spotted the first returning coho of the fall run to make it above the weir. Historically every salmonid species, with the exception of sockeye, have relied on Cypress Creek. "The old-timers tell us it was one of the biggest pink runs on the North Shore," Pelletier said. In 2025, if the Streamkeepers can net all the necessary approvals and grant funding, they have plans to make big improvements to the creek below Marine Drive, which suffers from the same degradation that most urban creeks have. "When that river floods in the fall and winter, it just scours it out so there's no spawning habitat left. It's just run on all the gravel right out to the estuary," he said. "What we'd like to do is restore it back to the productive stream that it once was and that's our ultimate goal."

Lynn Creek:

Previous work done on side channel held up over the heavy rains over winter however a few large cottonwood trees have blocked the side channel and sediment has built up. More work needed to restore proper flow.

Neptune Terminals are doing some work and have offered to provide 100 boulders to be placed into the lower areas of the creek.

All three projects were planned in detail by Northwest Hydraulics Consultants, a North Vancouver-based firm.

Vancouver Pile also doing work in the creek there needs to be coordination between the two groups hoping Port of Vancouver will provide this.

Morten Creek

New doors installed but not working properly.

Port Moody (CA Brian Smith)

Noons Creek

Noons project to reline the walls of the pond completed by DFO and volunteers.
First coho returns Sept 25-27 very early large prob over 100

Mossom Creek hatchery

Community Events:

Open House every Sunday: Average # visitors 30-40

Spring Break and Summer Camp

This year we did something different. Rather than hire our educator and do all the administration required, we teamed up with a newly formed group called The Salmon Forest. Simone and Danette provided 2 amazing educational weeks during spring break as well as 4 weeks in the summer for K-3 students. They spent their time in the forest (literally all day) only to come inside to have lunch. Amazing success.

Student Community Involvement Program:

2nd year we will be using Heritage Woods Secondary students to do returning salmon spawner counts. They will also be doing yellow fish stamping of storm drains. They will also be involved in all egg takes.

PIT tagging 2024 5-year Research Project:

All Equipment in place and working. Waiting for tagged coho to start returns in 2025-26

Tags to be purchased for next 2 years 2025/26 releases.

Coho that were released in the creek in June equipment captured 98% passing into the Burrard inlet.

Objective of this project is to find best release locations for coho. In 2024 we used Mossom Creek, Mossom Sea pen and location near Indian Arm. We would like to go further and release west past Lions Gate Bridge.

DFO production team have sent a list of questions about our request to release a small number of coho near West Van. BIMES and UBC will respond with scientific data supporting test to use release location in West Van.

Maple Ridge

Alouette River Management Hatchery (ALLCO)(ARMS)

Everything on target no issues.

Kanaka Creek (KEEPS) - Bell Irving Hatchery

We hit the start of July this year having recorded 3,151 program attendees, which puts us on a pace for 5,000 for the year. And while those numbers are impressive, they pale in comparison to the shared experiences we have had. From our explorations of Albion Park and beyond with Samuel Robertson students, to our frequent programs at the Stewardship Center, we have had it all during the first half of this year. As in the past, we have partnered with Metro Vancouver Regional Parks staff during certain programs, and the association and sharing of ideas with the interpretive staff is always a shot in the arm. We even fit in two Pro-D day workshops; one on February 20th and the second one May 15th. Another highlight reel was the weekend of July 6-8, when we took our traveling show to Camp Kanaka in Whonnock with 80 plus Girl Guides.

Although spring to summer at Bell-Irving Hatchery has many long-standing routines, no two years are alike, and this year has been no exception. March's meager 83 millimeters of rain was followed by 297 millimeters through April and May before the traditional January brought us some time heading into dry July. What was cool about this spring is that 21,800 Kanaka origin pink salmon fry were released to the creek, and this was followed by the later timed chum fry, with 80,000 going to Kanaka and the remaining 205,000 to streams in Burnaby and Vancouver. For coho, 5,000 smolts each went to Brunette, Stoney, and Byrne Creeks in Burnaby while the remaining 15,000 were released to Kanaka. 31,000 2023 brood coho fry remain onsite, as they continue their full first year in fresh water as is the way of this species.

Fish Fence

DFO did a complete review of the fish fence identified major work is required probably costing over \$150,000. Discussions ongoing between DFO and Metro Van and society to figure out how money will be raised.

Kevin Ryan
Oct. 2024