

“Salmon on the Rough Edge of Canada and Beyond”

Salmon
People



This series of [10-short stories](#) has been written to honour the salmon, the beautiful rivers that they exist in and some of these memorable people who have worked tirelessly over the past decades on the task of conserving and restoring these iconic species.

The author, Matt Foy, as a biologist with the Fisheries and Oceans Canada (DFO), Salmonid Enhancement Program(SEP) for 35 years (now retired), has tried to capture small glimpses into their world and the world of salmon.



“Welcome Home”

By Matt Foy



Brunette River Chum Salmon, Burnaby, BC, Canada (Photo Courtesy Joe Foy)

Living in the economically vibrant and fast developing Lower Mainland of south-western British Columbia one might think that our natural resources such as the iconic salmon are soon to be just a distant memory. But contrary to common belief, here on the West Coast salmon continue to survive. Sometimes they thrive and even once in a while, surprise.

If given just half a chance with safe passage home, clean water, some shade from an overhanging tree, unimpeded access through waterways, a patch of gravel to lay their eggs in and a bug or two to eat, these species will refuse to leave us. They remain with us because they have always been part of us. They have been with us since time immemorial when the first peoples walked in the shadows of the receding glaciers.

Salmon led the way to new valleys and lands. They fed us and supported us as we went forward into the future. We are salmon people. Salmon have always been celebrated in stories along the entire west coast of Canada and in countries around the Pacific Rim.

Even today new stories of these iconic species can make us pause and respect their ability to survive within the new human dominated world they now must exist in. The Lower Fraser Valley supports one of the fastest growing metropolitan regions in Canada. This region is home to over 2.5 million people. It provides economic opportunities to both residents and new arrivals alike but the requirements of this economy put pressures on the finite natural areas that salmon need to thrive.

Yet even in this fast-changing environment salmon continue to refuse to give way. The lower mainland of BC continues to be home to millions of spawning salmon each year.

Salmon have evolved to quickly take advantage of suitable habitats as they become available. Salmon have successfully dealt with ice ages and can survive us with a little consideration. While it can be relatively easy to push salmon out of a portion of their habitat, if given a decent chance they can recover and come back to their ancestral homes. This is a message that needs to be repeated, over and over and over again.

The small, local stories of the salmon's ability to recover lost glory can inspire salmon people around the world to attempt great things.

The Beauty in Chaos

Chaos theory is the field of study in mathematics that studies the behavior of dynamical systems (such as global weather) that are highly sensitive to initial conditions—a response popularly referred to as the “butterfly effect”.

The **Butterfly Effect**:



This effect grants the power to cause a cyclone in the Philippines to a single butterfly flapping its wings in Costa Rica. It may take a very long time, but the connection is real. If the butterfly had not flapped its wings at just the right point in space/time, the cyclone would not have happened. A more rigorous way to express this is that small changes in the initial conditions lead to drastic changes in the results. Our lives are an ongoing demonstration of this principle.

Blue Morpho (Photo Courtesy Tony Hisgett)

I would argue that human behavior can act in somewhat similar fashion. The power of simple ideas has been shown over and over again to be able to change the course of human history. We know that it is our actions that are the greatest threat and the greatest hope for many species survival-including species such as salmon.

Recently, a delegation of salmon restoration experts from the Pacific Salmon Foundation, based out of Vancouver, Canada were invited to north-east China to share their ideas and experiences with restoring salmon populations. For those not aware the Heilongjiang-Amur River basin, shared between China, Russia and Mongolia was the greatest Chum salmon river the world has ever seen. At the beginning of the twentieth century, over 40 million Chum salmon are believed to have returned each year to this one of the world's great river basins. By the end of that century these great runs to the Heilongjiang (Black Dragon) River were but a faint reflection of their past abundance.

In the last couple of years or so, a China based salmon restoration group (Salmon Ecological Environmental Protection Association -SEEPA) has formed with aspirations to recover the salmon legacy of China. I do not know why this group chose to reach out to Vancouver based experts, but I would like think the idea was helped along by stories such as those below.

I like to think this because there is great comfort in the idea that simple local acts of kindness toward our fellow species such as salmon may indeed have the potential to change the extinction curve for salmon in other rivers around the Pacific Rim. This can be a powerful and motivating force for all those who dare to dream of restoring salmon in their own back yards and neighbourhood streams.

So, in the spirit of doing great things for the world, I embrace the chaos theory and would propose the addition of the "Salmon Effect".

The Salmon Effect:



With a sweep of a single salmon's tail in a little stream in East Van, an idea is born that salmon recovery under the most difficult conditions is possible. This simple idea inspires a cascade of hope, passion and commitment in people working to restore salmon in rivers all around the Pacific Rim. This increased effort for positive change leads to success in making what was once lost, to be found. Glory comes to those that strive to make the world whole again, abundance, abundance, oh sweet abundance.

Chum salmon (Photo Courtesy Bob Turner)

November 5, 2013. CBC News Vancouver, Canada. - *“Chum salmon make a miraculous appearance in East Vancouver- Return to Still Creek for second year running after an 80 Year absence.” Chum salmon are spawning again at an urban creek in the heart of East Vancouver. The salmon returned this week to Still Creek, which sits in a ravine surrounded by warehouses and a nearby SkyTrain line. The creek — running into Burnaby and through pipes to the Brunette and Fraser rivers — was once one of the most polluted streams in the province, thanks to urban garbage, sewage and toxic chemicals. According to area resident Carmen Rosen, last year was the first time in 80 years salmon had spawned at Still Creek. **She's thrilled they're back now, proving that last fall's occurrence wasn't a fluke...***

The return of this small group of salmon, into the urban neighbourhoods of a modern Canadian metropolis, after almost a century of absence, resonated around the world and deep into the heart of China. The idea that salmon recovery could be possible, against such long odds, captured the imaginations of all those who would dare to dream.

November 8, 2013. South China Morning Post, Hong Kong, China. **“Salmon Return to Heart of Vancouver after 50-year absence.”** *The salmon, scarred and exhausted, swim slowly around each other as they near the end of their final journey. Hook-jawed males snap at each other as they joust for position alongside female fish, which thrash on their sides in the shallows to clear a spot in the gravel bed in which to deposit their precious eggs, before dying. It's a poignant scene that has played out in countless wildlife documentaries. But the backdrop to this drama is not some remote Canadian wilderness. These chum salmon are spawning in the heart of metropolitan Vancouver, for only the second time in at least half a century...*

“They’re Chum salmon”

As a knot of people stood quietly huddled under a grey sky along the banks of a small channel that flowed between the industrial and commercial buildings of East Vancouver, other workers on their lunch break, some in business attire, some in coveralls, were slowly walking in ones and twos from the nearby film studios, warehouses and retail offices to see if it was true what they had heard and read.

This was the uppermost section of Still Creek in the fall of 2012. This watercourse began its life where it emerged from an underground series of culverts and pipes that collects groundwater from headwater springs and storm water from properties and catch basins in the neighbourhoods of East Vancouver. “What type of salmon are they?” asked the guy in the cool runners. **“They’re Chum salmon”** the lady said.

For the first time in living memory, Chum salmon had found their way into this small stream and were actively spawning in full sight of the people that had come to witness this unique event.

No one present would have likely known the journey these fish had taken to regain their lost ancestral spawning grounds. No one present would have likely known the stories and hard work of the people that had persevered for decades to see such an event unfold. All that mattered was that salmon had returned there and it moved people deep inside.

Still Creek, flowing downstream from the City of Vancouver, enters Burnaby Lake which itself discharges into the Brunette River. It then flows downstream through the urban areas of Burnaby, Coquitlam and New Westminster before finally discharging into the Fraser River. The Brunette River Watershed (80 km²) contains some of the most heavily urban impacted streams in south-western British Columbia and has a long history of intensive industrial and residential development.

Still Creek and the Brunette River were dredged and channelized. Each had a series of rock weirs installed which denied salmon access to areas upstream, and the outlet of Burnaby Lake was dammed (Cariboo Dam) in the very early years of the twentieth century. All these large river drainage projects resulted in the loss of the Brunette Chum salmon runs at least 80 years ago.

The Long Road Back

The road to salmon recovery in the Brunette watershed was uncertain and fraught with potential failures and disappointments. It took a community of committed and dedicated individuals to dream of a better future. Back in the 1960’s the inspirational goal-to bring the salmon back home- was simply a dream. But what a dream it was.

The first steps on this long road to recovery were made in the 1960s and 1970s by municipal and BC governments to reduce pollution discharges in the watershed. These actions did lead to improving water quality throughout the watershed. The Brunette Basin Watershed Plan- prepared as a guide for restoration of this river system- later

provided that vision that would lead to further steps toward recovery of some of what had been lost. All these important actions opened the door for an attempt to restore the Chum salmon to their historic habitats within the watershed.

By the late 1970s, Elmer Rudolph and the Sapperton Fish and Game Club (SFGC), who are long time advocates for the restoration of the Brunette River watershed, partnered with the newly launched DFO Salmonid Enhancement Program (SEP). Their thirty-five-year journey together would ultimately lead to the return of the Chum salmon to the upper Still Creek on that fall day in 2012.

The SEP Community Advisors: First Bryan Allen, then Gary Taccogna and for the last 26 years, Maurice Coulter-Boisvert (MCB) had supported the broader community, in their desire to see the salmon come home. It really was Maurice who over almost three decades had been that guy in the rain, on the river, and at the meetings that had worked tirelessly with the many willing partners to make the program a success. The Brunette recovery program would not be what it has become without his dedication and single mindedness to see it through.



MCB was a bit of a legend on the river for his ability to conjure up just about any part from the back of his magic truck. He could always seem to find the right part to fix just about anything. “Hey, Maurice, the pump is not working it looks like the thing-a-ma-jig is busted.” “Just a minute” he would say as he headed off in his signature long, black raincoat, to forage around in the back of his DFO truck.

MCB hard at work

There could not have been another vehicle in the entire federal government fleet so stuffed to the gills with this and that and with who knows what. Maurice would re-appear in that long, black raincoat through the gloom of a fall drizzle, like a scene from “Gorillas in Mist.” **“I found it, we’re good”** he’d say.

Over the course of the next three decades important projects were undertaken by the community and government partners to overcome barriers to upstream migrating



salmon returning on their spawning runs. In the lower watershed, a fish way was built to bypass an impassable lower river weir. This work and additional habitat restoration initiatives in the form of shallow weirs and spawning platforms allowed salmon access up to the base of the Cariboo Dam and the lower reaches of Stoney Creek.

Lower Brunette River Fishway

One Stone, Two Stones, Three

Stoney Creek contains the best and most extensive salmon spawning grounds remaining in the lower Brunette watershed. A volunteer-built fish way in the 1980's, had allowed Coho salmon but not Chum salmon above the railway culvert for a number of years but was now failing. In 1994, the Stoney Creek Environmental Committee (SCEC) was co-founded by a lady named Jennifer Atchison, that originally like to watch birds but was not so sure about these salmon. Fortunately, this did not last long and Jennifer with her committed and growing band of nature defenders took on the cause of this little stream with passion and persistence. One of their first tasks was to get the old fishway under the railway rebuilt. In 1998, a new fish pass was constructed that allowed Chum salmon passage past the Burlington Northern and Santa Fe Railway (BNSF), which crosses Stoney Creek.

Dave Nanson DFO ex-habitat (now SEP) biologist, working with SCEC, remembers well the challenges of getting this fish pass agreed to by the BNSF and finally constructed. But he also knew it was important to keep pushing forward. To the best of Dave's recollection; "I recall being on the phone with the BNSF lawyer in Texas that had a serious southern drawl and him saying", **"can you send me a picture of a salmon - we want to see this fish that you Canadians get so upset about....and maybe send us a copy of that Fisheries Act too"**. Dave, always the northern gentleman from the mellow Sunshine Coast, was only too happy to oblige.

The Stoney Creek Environment Committee, kept up the advocacy for this precious urban stream over the years working with Metro Vancouver, Coquitlam and Burnaby through the Stoney Creek Working Group on a whole raft of issues that threatened the health of this waterway and all the life it supported.

With the fish pass at long last built the Chum salmon now had access to the 3.0 km of excellent spawning habitat that had been inaccessible since the construction of this rail line in 1890. Working with Metro Vancouver in 2004, further difficult fish passage issues in Stoney Creek at Lougheed Highway and just below North Road were resolved.



SCEC- Jennifer Atchison

At first the Chum salmon were somewhat reluctant to swim upstream since there had been a rumour that they would not be welcome there. It was common knowledge that a great gathering occurred every year on this stream with a distinctly unfriendly message if you were a returning Chum salmon.

For some twenty years, the SCEC had organized **“The Great Salmon Send-off “** <http://burnabylakepark.ca/event/stoney-creek-gssso-2017/>

which sure sounded like they were happy the salmon were leaving. But that was far from the truth and with a little encouragement, by the beginning of the twentieth-first century Chum salmon had full access to their entire historic spawning range in Stoney Creek. Chum salmon can often be seen spawning far upstream above North Road and Gaglardi Way, deep into the heart of Burnaby and Coquitlam.

In 2002, the City of Vancouver developed a 50-year vision and plan to improve the health of the upper Still Creek. One component was to improve previously damaged sections of the stream. In the Grandview-Boundary Industrial Area just upstream from Boundary Road, the eastern limit of the City of Vancouver, a section of the stream was rehabilitated, creating natural features attractive to salmon.

Gravel and streamside plants were added to provide the needed spawning habitat, shade and cover that Chum salmon would need if they ever were to return to this part of the watershed. The salmon had not been in this section of stream for almost a century. The long culverts under Boundary Road were not passable to salmon, denying them access to their City of Vancouver, ancestral grounds. Yet the stream upstream was restored anyway and there was hope for the future.

The table was now set, but the honoured guest had yet to arrive.



Upper Still Creek, Vancouver, BC, Canada

“Here they come!”

Year by year, decade by decade, restoration projects were planned, designed and implemented. Others worked to restore Chum salmon back into the watershed so they could take advantage of newly accessible and restored spawning grounds.

The first modern day observation of Chum salmon spawning within the Brunette River watershed occurred in 1982, when 30 Chum salmon were recorded as spawning in the lower river that year. The neighbourhood kids all came down to see those darn salmon they had heard about in the fall of 1982. **“Where are they?”** asked one kid. **“Here they come!”** yelled the little girl standing on the North Road Bridge. She pointed down excitedly into the tea- coloured water.

The 1982 Chum salmon spawning return was a result of hatchery Chum fry released in the spring of 1980. The Chum salmon eggs had been collected in the South Alouette River, a nearby lower Fraser River stream. Incubation of the eggs occurred at the newly built Alouette River (Allco) Fish Hatchery, in Maple Ridge, operated by the BC Corrections Ministry in partnership with DFO. <https://www.alouetteriver.org/bc-corrections-and-allco-fish-hatchery>

The hatchery was located at the minimum security Alouette River Corrections Camp (ARCC) and operated by the staff and prisoners of this facility. The “Boys in Red” of the “doing time” hatchery crew, were all volunteers, hand-picked by the hatchery manager, and dedicated to the cause. Working on the salmon programs was seen as “good time” and they worked hard and delivered “good work”, often their most rewarding work up to that point in their troubled lives. I now know “salmon people” come in all colours.

Jim Jose, the legendary ARCC hatchery manager, was a big, BIG, personality. Jim was a Senior Corrections Officer, tall and ram rod straight, with a flat top crew cut. If you wanted something from Jim, just ask and he got it done, right now and I mean now!!! His mission was to get Chum salmon back into the Brunette River and him and his crimson crew delivered, as no one ever doubted they would.

For the next three decades the Allco(ARCC) Fish Hatchery (Ron Mclean and Mike Islander) with more than a little help from their friends, the Kanaka Creek- Bell-Irving Hatchery folks, continued to provide critical enhancement support to the Chum salmon recovery effort on the Brunette River.

The Bell-Irving Fish hatchery is nestled within the boundaries of the Metro Vancouver Kanaka Creek Regional Park. <http://www.keeps.org/>

The hatchery is a partnership between Metro Vancouver Regional Parks, and the Kanaka Education and Environmental Partnership Society (KEEPS). Dave Smith, Ken Williams and other KEEPS members with Wendy DaDalt, Metro Vancouver Regional Parks East Area Manager and her staff, have poured their blood sweat and tears into the salmon program and ensured it kept its “eye on the prize”. Their raison d’être has been to help communities to bring back salmon to all the little streams within the metropolitan area that had lost salmon runs over the years. This included the Brunette watershed.

By the first decade of the new century the Chum salmon run to the lower watershed numbered up to 2200 spawners in a good year. Salmon could be seen spawning all along the lower Brunette River wherever there was gravel and far up Stoney Creek as far as they could swim. When the salmon started to come back in some abundance, very soon after a new sign went up. It was located along the “Central Valley Greenway” commuter trail beside the lower Brunette River. “Caution Bear in Area” caused quite a stir with the bikers and walkers along the corridor since something new had been added to their morning commute or daily walk.



Just about the time the sign was put up, what you know our dear brother bear also showed up. This “Brunette Bruin” could often be seen lying partly hidden in the bushes immediately behind the “Caution Bear in Area” sign. He didn’t bother any of the passers-by; he calmly minded his own business. He seemed to be waiting patiently for the sun to go down. I figure he was just a good old Canadian bear, always read the signs and followed the rules and did what they told him to do. But when it was dark

enough and he thought no one would notice he snuck out of the “Bear in Area” and headed down to the river to meet up with some of his “old chums” and welcome them home.

With the recovery of Chum salmon in the lower Brunette watershed well underway, there remained two difficult barriers that denied Chum access to their upper river spawning grounds. Passage past the Cariboo Dam at the outlet of Burnaby Lake was not possible for Chum salmon. The passage through the culverts that convey Still Creek under Boundary Road was also an impasse to all salmon.

Alley Oop-Up they go!

In the summer of 2011, Metro Vancouver engineers installed a semi- natural rock and concrete fish way at the Cariboo Dam that allowed weaker swimming fish, including Chum salmon, to easily migrate upstream. The new fish ladder had been a recommendation from the multi-jurisdictional “Integrated Storm Water Management Plan for the Still Creek Watershed “From Pipe Dreams to Healthy Streams”.



Metro Vancouver Cariboo Dam Fishway under Construction

The Plan was a long collaborative effort led by Vancouver, Burnaby, and Metro Vancouver and included important participation from DFO, MoE, and local Streamkeeper groups. Corino was the DFO rep on this committee.

Corino Salomi had been my boss back in my last years in DFO. He was always the “the kid” in my eyes, even though he was feeling the bite of his early forties, bright, dynamic,

idealistic, and personable. People like him made me proud to work with the DFO and be optimistic about its future.

I also knew he had a hard time sitting still. He had that exuded energy, whether it was talking through some problem in a committee or ripping down the mountain bike trails of the North Shore of Vancouver. Corino was built for speed and liked to go fast. For these reasons I knew it must have been a challenge for him to work through the tedious process that had to be done with any multi-party planning committee. But I also know he would have walked barefoot over glass to do the right thing for this river and the salmon that demanded their right of return.

Later that fall, a site visit had been arranged with the various interest groups, to view the new Cariboo Dam fish way and for Metro representatives to answer questions related to its operation. Sure enough, more familiar faces that brought back good memories. Fish folks don't fade away they just seem to congregate down by the river.

"Hey Barry long time no see. This new fish way of yours is surely is a thing of beauty!" I said. Barry Chilibeck was an ex-DFO engineer, who was now a senior engineer with North-West Hydraulic Consultants, a Vancouver firm specializing in water structure design and flow modeling. He was part of the team that designed the new Cariboo Dam fish way.

"Much of the thanks should go to Larry and the Metro Vancouver team who pushed this thing through the system, which wasn't an easy task", he said, pointing over my shoulder.

To my right was the Metro Vancouver senior engineer Larry Yee who led the Metro team on getting the \$350,000 fishway built on budget and in a very short time window.

"**Lovely job**" I said. "Thanks" he said. You could see the in way he stood that he was proud of the work that had been done. I was just thinking of next thing to say about the fish way, the really neat concrete work, and the creative, natural boulder fish pass design or the stylish metal salmon artwork bolted to its side. Then Larry surprised me.

As the glow of my initial compliment wore off he leaned over and said quietly, "Hey ...do you know a DFO engineer named Rheal Finnigan. I worked for him in the SEP for a year and a half when I was first out of BCIT back in 1979. He was so unforgettable. I have all these stories. "You're kidding, I thought. Another "fish guy", I could get use to this.



Metro Vancouver Cariboo Dam Fishway

Larry recounted story after story about working with Rheal (and his partner biologist Dave Marshall) my old boss and mentor from the 1980's. It was just typical DFO stuff from that era. He talked about flights in small planes to remote areas of the north; he talked about rivers and wild places and about restoring Chum salmon habitats up on the Chehalis River and other such projects around the backwoods of BC.

With great difficulty we had to work to bring ourselves back to earth and the present task at hand of inspecting the newly constructed fish way. It truly is a small, small world, and I guess once salmon get into your soul there really is no turning back. You are hooked, for life.

The Green and Purple Wave

By that fall of that year, waves of Chum salmon were moving through the spanking new fish way at Cariboo Dam and working themselves farther upstream, nosing into the various tributaries of the Burnaby Lake.

Spawning Chum salmon created quite a stir in Eagle Creek that fall. The stream runs down from the largely forested Burnaby Mountain. Much respected Simon Fraser University (SFU) lies perched on top of its highest knob and on a clear day can be seen by all residents of the Eagle Creek watershed, including I assume the Chum salmon down below. Eagle Creeks little headwater rivulets slide off this mountain of higher learning, coalescing into the stream we know and then passing through the urban neighbourhoods of Burnaby and Coquitlam before finally emptying into Burnaby Lake.

From the professors and students on the “knob”, to the mountain bikers, the residents and the just plain curious, everyone seemed to come down from the mountain to see these green and purple salmon spawning at its feet. Five years later the word had even gotten around to the local wildlife. Like any good Metro Vancouver resident, a family of Bobcats brought the kids down to the creek to check out what’s on the menu at the new sushi restaurant.

November 6, 2016. CBC News Vancouver, Canada. - “North Vancouver Photographer Snaps Bobcat Feeding on Salmon”- Many British Columbia salmon runs are doing better than they have in years. Even local creeks are experiencing bountiful returns. And it's not just human fishermen reaping the benefit. A bobcat stopped at a Burnaby, B.C. river bank recently to take a few bites of salmon... "It was attracted to come out to the river bank for the chum salmon run. It wanted to get some food. There's lots of salmon around. Some are dead, some are in the last stages and some are still swimming around..." Bates said the bobcat seemed to be enjoying its fishing expedition... "It just seemed at that moment to be like a young cat or a kitten, it seemed very playful to me..."

Who would have thought?



Even more excitement was generated when Chum salmon entered the very urban Deer Lake watershed and swam up Buckingham Creek, a short little stream that emerges from a neighbourhood of multi-million-dollar homes before flowing into Deer Lake itself.

Brunette River chum in a hurray!

A crowd of curious residents and visitors alike filled the parking lot at the City of Burnaby- Deer Lake Park, just to spy the new celebrities. Not too many places where the number of green and purple Mercedes, BMW’s and the Audi’s matched the number of the green and purple Chum salmon, quite a show.

At least the Chum salmon were all wearing the right “colours” and felt right at home in the “hood”.

When they showed up in lower Guichon Creek, which flows right through the centre of the Burnaby based-BC Institute of Technology (BCIT) campus, most people were gob-smacked and at a loss for words. Mark Angelo was the head of the Fish and Wildlife Program at BCIT and a long-time river advocate and founder of BC and World Rivers Day. He's no small potato when it comes to rivers or salmon.

Mark is a big supporter for the full restoration of this small waterway through the campus. He is quite a dreamer. Mark is also a great communicator and never lost for words. He knew this was a big, big deal, decades in the making, and he was going to do his best to spread the word to everyone that would listen.

Meanwhile down on little Silver Creek, the Chum had arrived and everyone seemed to notice and want in on the party. Local Silver Creek Stream keeper Ed von Euw had fielded a number of media inquiries related to salmon in this very small stream that flowed into Burnaby Lake. Ed was the type of guy that meant what he said about caring for the environment. He lived it day to day.

In his regular job he is a senior engineer with Metro Vancouver and helped model the effect of flood flows for the very first wooden fishway over the Cariboo Dam constructed by Metro, SEP and the SFGC back in 1993. It had passed coho salmon but not the weaker swimming Chum salmon. He worked later with these same partners and SCEC to get salmon above the Lougheed Highway culverts at the Stoney Creek crossing and the highway crossing of Eagle Creek, the next stream up the lake from Silver Creek.



Ed and friends doing the good work for salmon.

Ed was also heavily involved in the Integrated Stormwater Management planning for the Brunette basin, working with Corino and many others in that complicated process. In short, he was the sort of guy that spoke from the heart, thought with his head, and delivered real progress as much as he was able.

But Chum salmon were still denied access to upper Still Creek and the City of Vancouver.

The Long Dark and then the Light

Later that year, Bob Guerin, an elder and fishery liaison with the Musqueam Nation, stood on the banks on the Brunette River, with a small group of community and

government restoration advocates. In Bob's gentle way, he explained to everyone why the restoration of salmon in the watershed was so important to his community.

His words did not speak to the technical challenges of recovering the salmon. They spoke to the deep emotional feelings of the Musqueam community that something important had been lost. A promise to honour salmon for all time had been broken and he asked everyone to do their best to do what could be done to bring salmon back into the watershed. His quiet words had an impact on everyone present that day.

Robin Taylor was present on the banks of the river that day and she did not forget the depth of feeling in Bob's words. This diminutive dynamo was an environmental manager on the Port Mann/Highway 1 Improvement Project (PMH1). Robin had worked for DFO back in the 1980's but had moved into a varied environmental career in the private sector over the past thirty years.

We had reconnected over the past five years working together on some of the compensation fish habitat projects being funded under the PMH1. She led the charge on a number of salmon focused restoration projects along the Fraser River corridor, Colony Farm Tidal Channel Restoration, Surrey Bend Tidal Channel Restoration, Brae Island - Sqwalets Tidal Channel Restoration and lower Brunette River spawning gravel riffle restoration to name a few.

Robin was a force to be reckoned with and, together with a topnotch design and construction team; she was going to lead the final push to see salmon gain access to their Vancouver birthright.

The next summer as part of the PMH1, in partnership with the Musqueam Nation, modifications were made to the 290-meter-long culverts that pass Still Creek under Boundary Road. Baffles were added to make them passable to upstream migrating salmon for the first time in decades. The last barrier to salmon entering their historic upper spawning grounds was now breached.

Chum salmon, in the fall of 2012, migrated out of the muddy waters of the Fraser River and into the peat stained waters of the lower Brunette River. They migrated over the improved weirs in the lower Brunette River, climbed up through the natural boulder fishway at the Cariboo dam, and swam through Burnaby Lake entering Still Creek.

They entered the newly baffled culvert under Boundary Road, swam 290 meters through this dark passage, to emerge into the bright lights of the busy industrial area. Finally, they swam to the naturalized section of upper Still Creek, to quietly build their nests and lay their eggs, as if they had never left, some 80 years ago.

Since that year, they continue to return each fall, home again. As of early November 2016, 1700, Chum salmon had passed above the Cariboo Dam heading for spawning grounds upstream.

Take Me Home

Back in far off China the journey to reclaim the Chum salmon legacy of the mighty Heilongjiang (Black Dragon) River is just beginning. SEEPA's motto to raise awareness of their salmon restoration program is "Take Me Home." This expresses their feelings of loss and yearning for the salmon to return to their home waters. Just as our history with salmon goes back to the beginning of the human experience in our land, so does theirs. We share similar feelings of what it is like to lose our history and the wish to see it returned.

Like the Brunette story, their road to salmon recovery will be long and uncertain and fraught with potential failures and disappointments. It will take a community of committed and dedicated "salmon people" to realize the dream of a better future. Perhaps a few words of encouragement and this story, from your distant "salmon cousins" will make the road a little less long and a little less uncertain.

Thankfulness

Thanks to Bob, for the Musqueam, for reminding us all why it was important to try.

Thanks to Elmer, for the Sapperton Fish and Game Club, for reminding us that nothing important and worth doing comes without effort.

Thanks to the guy in the cool runners, the lady, Bryan, Gary, Maurice, Dave, Jennifer, the kid, the little girl, the "Boys in Red", Jim, Ron, Mike, Dave, Ken, Wendy, Corino, Barry, Larry, Rheal, Dave, Mark, Ed and Robin for reminding us that "salmon miracles" can happen. But they often require strong minds and strong backs to set out the welcome mat.

Thanks to all the other good people who went that extra mile; to see salmon come back into all the little streams of this very urban river.

Thanks to all the people who dream of restoring the salmon legacy on their own home streams-from the Black Dragon River in Heilongjiang Province, China across the great north arc of the Pacific Ocean down to the little Still Creek in the Province of British Columbia, Canada... and beyond.

We are all salmon people.

Honour to us all

November 2, 2016. Front page- Vancouver Sun, Vancouver BC, Canada. *"Our old chums are back: Biggest return in a decade called "a salmon miracle". A bumper return of chum salmon to BC's south coast is flooding urban streams in Metro Vancouver, inspiring dedicated Streamkeepers, providing easy viewing for the public and offering hope for nature in a modern metropolis..."*

That year, in Metro Vancouver, there was a celebration for the reunion of old friends and a job well done.

Welcome home, Chum...Welcome Home.

You have inspired a world.

A promise has been kept and it does honour to us all.