

11th Annual BC Interior Stewardship Workshop



Workshop Summary

Hosted by the Fraser Basin Council in partnership with Fisheries and Oceans Canada

Workshop summary prepared by the Fraser Basin Council

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Fraser Basin Council



**Fisheries and Oceans
Canada**

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- Lower Shuswap Stewardship Society, in particular Jean Clark, for her assistance and local's insight in workshop planning
- Kingfisher Interpretive Centre Society, in particular Neil Brookes and Shona Smith, for co-hosting the workshop tour
- Trinity Valley Dairy Farm, Ralph and Heather Vandalfsen, for welcoming workshop participants to their farm and for co-hosting the workshop tour
- Pacific Salmon Foundation for financial support of the workshop

Workshop Summary

The eleventh annual BC Interior Stewardship Workshop was held in Grindrod and Enderby on November 4th and 5th. 54 people attended over two days, with strong representation from the Shuswap region (see Appendix II for a list of workshop participants).

Following the workshop format from previous years, the workshop included sessions for learning, networking, and getting out in the field. There were presentations from two first nations, the provincial government, and updates from non-government organizations and the Department of Fisheries and Oceans. The tour for the workshop took the group to Trinity Dairy Farm, the Kingfisher Interpretive Centre, and the new Splotsin Community and Recreation Centre (see Appendix I for the detailed workshop agenda).

A highlight of the workshop was the presentation of Fraser Basin Council's *BC Interior Stewardship Award for Ecosystem Excellence* to the Adams River Salmon Society.

A summary of the workshop sessions follows on the succeeding pages, in the order they were conducted. Workshop presentations are posted on the Fraser Basin Council website (www.fraserbasin.bc.ca).

Yucwmenlucwu – Caretakers of the Land **Presented by Adam Neil, Randy William, & Daniel Joe**

The presentation began with an overview of Splat-sin's Community Comprehensive Plan (CCP), the purpose of which is to think and plan for the future to ensure a sustainable community. The CCP process began in 2009 and was completed in 2013; however, the process involved looking back at initiatives from Council, administration, and the community from as much as twenty years ago. The plan is being implemented (with ongoing monitoring and evaluation) and includes goals and actions for items such as governance, human and social services, land and resources, economic development, culture and language, and infrastructure.

Next, the Splat-sin's caretaker responsibility – *Secwepemc'ulucw* – was described as being a balancing act of caring for the land and the people, while pursuing opportunities for economic development and ensuring sustainable resource management.

Next, a few projects were highlighted that are underway by Splat-sin's Lands and Resources department, in collaboration with a number of different community partners including local government, first nations, industry, and stewardship groups. These projects include a recently completed Sensitive Habitat Inventory and Mapping (SHIM) on the Eagle River; restoration projects on the Eagle River and Bessette Creek; and mountain caribou recovery. The presentation closed with a final thought: the desire to shift the stewardship community from an *impair and repair* response to *conserve and protect* actions.

Update from SEHAB and FRISP representative **Presented by Lee Hesketh, BC Cattlemen's Association**

Lee is a representative for the Salmon Enhancement Habitat Advisory Board (SEHAB) for the BC Interior. SEHAB is the voice of the stewardship and volunteer community, and provides advice to the federal and provincial governments on such issues as strategies to manage salmon stocks with a conservation priority; effective habitat protection and restoration policies; public understanding and education on the environmental, social and economic benefits of BC's salmon resource; and ensuring adequate government resources are allocated to restoring and maintaining habitat. As a representative on SEHAB, Lee encouraged all workshop participants to bring forth their concerns so he can elevate them to DFO and other government agencies.

Lee is also the program coordinator for BC Cattlemen's Farmland Riparian Interface Stewardship Program (FRISP) that builds stewardship capacity within the agriculture industry. Also a rancher himself, Lee's program helps ranchers and farmers minimize or restore the impacts of agriculture to streams and fish habitat. Over the years, FRISP has worked with dozens of landowners on countless restoration projects of various size and scope.

2015 Drought: Impacts and responses with Coldwater River case study

Presented by Rich McCleary, BC Ministry of Forests, Lands and Natural Resource Operations

Drought may simply be defined as a shortage of water, or an inadequate supply of water to satisfy the needs. In the Coldwater River case study, Rich explained the water requirements for two of the primary uses: in-stream needs (i.e., fish) and agriculture (i.e., irrigation). In 2015, the drought on the Coldwater was extreme, and there were detrimental impacts to fish and fish habitat. The in-stream flow requirements and temperature were less than adequate for rearing juvenile rainbow and steelhead trout and Chinook salmon fry; stress on the juvenile fish was apparent. By July 21 2015, the Nicola watershed was classified as Level 4 drought (extremely dry).

Next, Rich explained that in extreme drought conditions, communication from the BC Ministry of Forests, Lands and Natural Resource Operations, the BC Ministry of Environment, and the BC Ministry of Agriculture regarding water use is very important. Early notices urging water conservation are a useful tool, and preferential to implementing fishing or irrigation closures. Rich explained that staff from the three agencies work together on a drought response team to deliver the best, earliest communication to water clients.

Despite good voluntary compliance with conservation notices, the Minister of Forests, Lands and Natural Resource Operations signed a Fish Protection Act Order on July 31 2015. This was the second order of its kind in BC history, had the largest number of clients affected, and occurred earliest in the irrigation season. For the months of August and September, the water use reduction order changed few times from night-time irrigation only to full reduction to protect fish habitat during critical times, while still enabling some irrigation. Overall, the effect on the drought was as follows: 50 days below the 'critical rearing flow', impacting Coho, Steelhead and Chinook fry and migrating/spawning early run Chinook; and, the five main irrigators in the Coldwater were shut down for 13 full days and 24 partial days, with an estimated economic impact of \$200K.

Representatives from provincial agencies, first nations, and agriculture producers are continuing to meet, learn from the 2015 experience, and prepare for future extreme drought events.

Introduction to the Water Sustainability Act

Presented by Andy Oetter, BC Ministry of Forests, Lands and Natural Resource Operations

The Water Sustainability Act, whose development began six years ago, will come into force in 2016 and replace the century-old Water Act. The new act will be implemented in phases, with an initial set of regulations as early as January 2016 and additional regulations thereafter.

Some of the critical components of the new Act that Andy highlighted include:

- Groundwater regulation – this will be included in the initial set of regulations implemented in 2016
- Continuation of water rights based on First In Time, First In Right (FITFIR) with some modifications (see below)
- Environmental flow needs will be included in decision-making
- New tools for protecting water, including water objectives and temporary protection orders
 - A temporary protection order is meant to ensure the critical environmental flow (CEF) needs for a stream are met. The CEF supercedes existing rights on the FITFIR scheme.
- Essential household use is protected (250 L/day) and supercedes existing rights on the FITFIR scheme

Stewards Field Tour

After lunch on the first day of the workshop, participants travelled by carpool to Trinity Dairy Farm. Hosts Ralph and Heather Vandalfsen, along with the Kamloops-Okanagan Dairy Association president and Grindrod-area dairy farmer Henry Bremer, welcomed the group and led a tour of the farm. Several aspects of dairy farming and land stewardship were discussed such as animal health and nutrition, manure storage, soil and nutrient management, cropping and fertilization, and water diversion and irrigation efficiency. One of the notable features of the farm is the manure storage located under the barns, where it doesn't pose a risk to water contamination. Ralph explained that there's adequate storage for up to 7 or 8 months of storage; the manure is used as the sole source of fertilization for the farm's corn crops. Heather explained the sophisticated nutrition balancing for the cattle to ensure the animals are optimally nourished (which means the manure isn't overly nutrient-rich). Ralph also explained the efficient pivot irrigation system, an improvement from the old-style gun irrigators that were used on the farm by earlier generations.



Workshop participants listen as Ralph Vandalfsen explains improvements in irrigation efficiency

The next stop on the tour was the Kingfisher Interpretive Centre (KIC). Neil Brookes and Shona Smith, who were ready with a bonfire at the centre, welcomed workshop participants. KIC serves double-duty as an education centre – welcoming thousands of visitors a year – as well as a hatchery and home-base for seasonal salmon stock assessment crews. Neil started by explaining the Cooke Creek debris torrent of 2014 which nearly destroyed the interpretive centre. The rallying together of the community at that time to clean, repair and re-vitalize the centre was incredible. Next, the group toured the site to check out the keculi and the river-front, now very different due to the deposit left by the torrent. Lee Hesketh toured the group to Cooke Creek to explain the restoration work that was done there in 2015 to repair fish habitat, stabilize the bank and protect the centre from future flood events. Some workshop participants lent a hand and did some planting to further stabilize the creek bank. All in all, it was a great tour afternoon and the early November weather held out as well as anyone could ask for.



(left) Workshop participants gather in the Kingfisher Interpretive Centre; (right) Aaron Deans, Robyn Laubman, Daniel Joe, and two others plant shrubs on the Cooke Creek berm adjacent to the Kingfisher Centre

The last leg of the tour was held the following day. Splatsin offered a ‘sneak peek’ tour of their new community centre, which will officially open in December. Built in the style of a traditional kekuli, with a living roof, the large open centre of the building can be used for sports or large events. There is also office space, meeting rooms, a track around the upper floor, and a commercial kitchen. Everyone agreed it is a spectacular building.

Stewards Banquet

Following the afternoon tour, workshop participants gathered at the Howard Johnson Inn in Enderby for dinner, socializing, and musical entertainment provided by Kingfisher resident Murray MacDonald.

Erin Vieira presented the 2015 BC Interior Stewardship Award for Ecosystem Excellence to the Adams River Salmon Society. Society volunteer Brenda Melnychuk accepted the award on behalf of the Society. The Society was nominated by BC Parks supervisor Wes DeArmond, who described the Adams River group as a leading force in the promotion of salmon habitat protection, restoring the important river ecosystem, and providing public recreation and interpretation for nearly 20 years. While the Society's most noticeable achievement is perhaps the quadrennial "Salute to the Sockeye" event at Roderick Haig-Brown park, hosting as many as 150,000 visitors over a three-week period, they have many other achievements including a dedicated volunteer community, a positive partnership with the Little Shuswap Lake Indian Band, and communications and education about the virtues of clean land, water and air. Congratulations to the Adams River Salmon Society on your successes, and thank you for all that you do!



Brenda Melnychuk, a volunteer with the Adams River Salmon Society, accepts the Ecosystem Excellence award from Erin Vieira

Update from the Salmonid Enhancement Program **Presented by Michael Crowe, Department of Fisheries and Oceans**

Michael presented an overview of the Salmonid Enhancement Program (SEP) objectives, operations, and staff contacts. Within the BC Interior (DFO's operating area in BC that is roughly the entire province east of the Coast mountains), the SEP has two divisions: the Resource Restoration Unit which consists of an engineer and three biologists, and the Community Involvement Program which consists of a partnership coordinator and two community advisors. These staff are situated in Kamloops, Williams Lake, and Prince George.

SEP's objective is to sustain salmon populations and provide harvest opportunities for recreational, aboriginal, and commercial fisheries. It does this through four main operations:

- Salmon hatcheries and spawning channels supplement wild stocks and are a very useful tool for education
- Restoration projects such as riparian planting, installation of large woody debris, bank stabilization, fencing, and others
- Education programs for school children and the public at large, including the Stream-to-Sea program and interpretive centres and programming
- Community Economic Development Program, which works toward any of the above objectives while also providing local jobs and training

Re-introduction of Sockeye Salmon to the Okanagan Valley, BC **Presented by Amanda Stevens, Okanagan Nation Alliance**

Amanda began her presentation by briefly describing the history of the Syilx people, for whom salmon was an integral part of the culture. There was once an abundance of salmon returning to the Okanagan via the Columbia River, but that changed in the early part of the 20th century with the construction of dams. The Okanagan River, specifically, has changed drastically in the last century with much of the river length and habitat lost due to the channelization of the river. Coho and Chum salmon have been extirpated from the Okanagan, and Sockeye, Chinook, Steelhead, and other species have been reduced in numbers. In addition to loss of habitat, fish access is impeded on the Okanagan River by dams and vertical drop structures and there are issues related to water quantity and release timing from structures.

The Okanagan Nation initiated by the sockeye re-introduction in 1997. Taking a 'step-wise' approach, the re-introduction program was developed including a three-year risk assessment. In 2004, hatchery fry (broodstock source near Oliver) were introduced to Skaha Lake. In 2014, another step of the process was completed with the construction of the Skaha Dam fish ladder that enables the passage of migrating salmon into Skaha Lake and upstream. This opens up more habitat for spawning and for rearing juvenile salmon.

The next steps for the re-introduction program are continued fry release, expansion of the telemetry program, habitat restoration, and planning for Okanagan Lake re-introduction.

Amanda explained that revitalizing the fishery has been a win-win situation. The juvenile sockeye have had good growth, abundance and survival in Skaha Lake; there has been minimal impact to native fishes (e.g., Kokanee), and Okanagan people of all generations have reconnected with an important cultural food source.

Next, Amanda spoke briefly about a separate project that ONA is part of: Wilsey Dam fish passage. Wilsey Dam is located on the Middle Shuswap River, upstream of Lumby. It was built in 1928; although a fish ladder was in the original design for the dam to enable salmon passage, it was not built. The fish passage project is a collaborative effort by many partners including the Shuswap Nation, Splitsin, Okanagan Indian Band, DFO, BC Ministry of Forests, Lands and Natural Resource Operations, municipalities, regional districts, BC Hydro, and concerned citizens. The goal of the project is to achieve fish passage at the dam site to restore access for Chinook, Coho, and Sockeye into the Shuswap River as far as Sugar Lake. The project began in the 1970s; a formal fish passage committee is in place and BC Hydro has completed a fish passage decision framework. There is still work to be done; there are many uncertainties – both political and biological. One of the issues that the ONA fisheries department is working on is an entrainment study to estimate how Chinook smolts can survive passing through the dam during out-migration (i.e., what proportion pass through turbines vs. spillway).

Strategic Review of Fisheries Resources for the South – Thompson Shuswap Presented by Erin Vieira, Fraser Basin Council

Erin introduced the *Strategic Review of Fisheries Resources for the South – Thompson Shuswap Habitat Management Area* as being a document that summarizes the condition of salmon stocks and habitat, activities impacting habitat, and management recommendations and priorities – in other words, a useful ‘one-stop shop’ document for stewards working in any order of government, industry or organization. The document was prepared in 1997 and is now in need of an update to reflect current conditions in order to maintain the document’s utility. The review – along with similar review documents for other watersheds – can be found online in the DFO library at www.waves-vagues.dfo-mpo.gc.ca.

Erin explained that the FBC is updating the document by reviewing new threats to salmon, documenting current knowledge and recent changes to the condition of stocks and habitat, reviewing progress made against the 1997 recommendations, and offering new management recommendations and priorities. As part of this update, Erin led workshop participants through a group exercise that engaged everyone and gave them an opportunity to share their knowledge about the conditions of stocks and habitat, and their

perspectives on management recommendations. Not specific to any one sub-basin of the Shuswap or South Thompson, participants' comments and recommendations included:

- Ongoing habitat restoration (many locations cited)
- Water quality monitoring
- Ongoing support for public education and interpretation
- Agricultural intensification noted as a concern
- Urban settlement noted as a concern
- Ongoing and improved collaboration with first nations
- Stewardship capacity has increased in last ~ 20 years
- Utility of SHIM work done on Lower Shuswap, Eagle, and S. Thompson Rivers

The Strategic Review update will be completed in Spring 2016. It will be posted online at www.fraserbasin.bc.ca, among other places.

ELEVENTH ANNUAL
BC INTERIOR STEWARDSHIP WORKSHOP

November 4th – 5th 2015
Grindrod Community Hall, 6920 Highway 97A, Grindrod BC

AGENDA: November 4th
Grindrod Community Hall

- 8:30 Doors open, coffee available
- 9:00 Welcome and introductions
Councillors Daniel Joe and Randy William, Splatsin
Director Herman Halvorson, Regional District of North Okanagan
TBD, City of Enderby
- 9:30 Care-takers of the land
Adam Neil, Title & Rights Operations Manager, Splatsin
Councillor Randy William, Splatsin
Councillor Daniel Joe, Splatsin
- 10:10 Update from SEHAB representative (Salmon Enhancement and Habitat Advisory Board)
Lee Hesketh
- 10:25 Refreshment break
- 10:45 2015 Drought – impacts and responses
Rich McCleary, Regional Aquatic Ecologist, BC Ministry of Forests, Lands and Natural Resource Operations
- 11:30 Water Sustainability Act – update
Andy Oetter, Director of Authorizations, BC Ministry of Forests, Lands and Natural Resource Operations
- 12:00 Lunch (provided)
- 12:45 Field Tour – via participant carpool
12:45 PM: Depart for Trinity Valley Dairy Farm, 3357 Trinity Valley Road, Enderby
1:15 PM: Arrival at Trinity Valley Dairy Farm
2:30 PM: Depart dairy farm for Kingfisher Interpretive Centre, 2550 Enderby-Mabel Lake Road
3:00 PM: Arrival at Kingfisher Interpretive Centre. Tour of site, Cooke Creek restoration, and group planting activity
4:45 PM: Depart Centre for Howard Johnson Inn, 1510 George Street, Enderby
5:15 PM: Arrival at Howard Johnson Inn
- 6:00 Banquet Dinner – Howard Johnson Inn, 1510 George Street, Enderby

Presentation of the *Ecosystems Excellence Award*
Entertainment by Murray MacDonald

Appendix I: Workshop Agenda

AGENDA: November 5th Grindrod Community Hall

- 7:00 *Breakfast at the Howard Johnson Inn (provided for motel guests)*
- 8:00 Doors open, coffee available
- 8:30 Welcome and review of highlights from Workshop Day 1
Update on Salmon Enhancement Program
TBD, Fisheries and Oceans Canada
- 9:00 Re-introduction of Sockeye Salmon to the Okanagan
Amanda Stevens, Fisheries Biologist, Okanagan Nation Alliance
- 10:00 Refreshment break
- 10:20 “Strategic Review of Fisheries Resources: South Thompson – Shuswap”
Overview of project and small group discussions
Erin Vieira, Fraser Basin Council
Bob Harding, Fisheries and Oceans Canada
- 11:40 Open floor: stewardship announcements
- 12:00 Lunch (provided)
- Closing remarks
 Farewells and departure
- 1:00 Tour of new Splitsin Recreation Centre

Workshop Participants (listed alphabetically by last name)

Rob Aylard	Kingfisher Interpretive Centre Society
Tundra Baird	City of Enderby
Bernie Bauer	University of British Columbia - Okanagan
Sean Bennett	Department of Fisheries and Oceans
Neil Brookes	Kingfisher Interpretive Centre Society
Brad Clark	Kingfisher Interpretive Centre Society
Jean Clark	Lower Shuswap Stewardship Society
Nancy Clark	Kingfisher Interpretive Centre Society
Michael Crowe	Department of Fisheries and Oceans
Aaron Deans	Allan Brooks Nature Centre
Wes DeArmond	BC Parks
Denis Delisle	Rural Enderby resident
Kevin Duncan	Nlaka'pamux Nation Tribal Council
Barb DuTot	Kingfisher Interpretive Centre Society
Louise Eccles	Bonaparte Watershed Stewardship Society
Doug Edwards	Department of Fisheries and Oceans
Bruce Fowler	Lower Shuswap Stewardship Society
JoAnn Fowler	Lower Shuswap Stewardship Society
Kim Fulton	School District 83 and WildBC
Jeff Guerin	Department of Fisheries and Oceans
Herman Halvorson	Regional District of North Okanagan
John Haugen	Nlaka'pamux Nation Tribal Council
Lee Hesketh	BC Cattlemen's Association and SEHAB
Daniel Joe	Splatsin
Janice Lacko	Lower Shuswap Stewardship Society
Robyn Laubman	Splatsin
Gerry Leering	
Emily Lomas	City of Kamloops
Chad Marsh	BC Ministry of Transportation and Infrastructure
Rich McCleary	BC Ministry of Forests, Lands and Natural Resource Operations
Brenda Melnychuk	Adams River Salmon Society
Al Midgley	Bonaparte Watershed Stewardship Society
Andrew Mishue	Northern Shuswap Tribal Council
Adam Neil	Splatsin
Tom Nevin	Department of Fisheries and Oceans
Andy Oetter	BC Ministry of Forests, Lands and Natural Resource Operations
Sarah Ostoforoff	Department of Fisheries and Oceans
Valerie Poulin	BC Parks
Gene Puetz	Salmon River Watershed Roundtable
Mike Simpson	Fraser Basin Council
Pete Spencer	Environmental Farm Program
Amanda Stevens	Okanagan Nation Alliance
Rene Talbot	Columbia Shuswap Regional District

Appendix II: Workshop Participants

Tracy Thomas	Fraser Basin Council
Valerie Van Tine Janzen	Gardom Lake Stewardship Society
Erin Vieira	Fraser Basin Council
Cristina Weiler	Rural Enderby resident
Randy William	Splatsin
Barry Wilson	CE Analytic Ltd
Elizabeth Winter	Gardom Lake Stewardship Society

Summary of Workshop Evaluations (submitted via online survey)

1. One of the objectives of the annual BC Interior Stewardship Workshop is to recognize and celebrate the work of stewards in BC's interior regions. Based on the presentations, tour, and award ceremony, how much did the workshop achieve that objective? (choose one)

Answer choices	Responses
5 (very much)	7
4	10
3	1
2	0
1 (not at all)	0

2. The other objective of the BC Interior Stewardship Workshop is to provide a venue for networking, peer-to-peer learning, collaboration and/or training. How well did the workshop achieve that objective? (choose one)

Answer choices	Responses
5 (very much)	8
4	9
3	1
2	0
1 (not at all)	0

3. To what degree will the workshop help you in your stewardship efforts (considering new information/tools, new people in your network, or inspiration)?

Answer choices	Responses
3 (very much)	12
2 (somewhat)	6
1 (not at all)	1

4. How well did the workshop balance time allocated to presentations, time for networking and relationship building, and the tour? (you may choose more than one response)

Answer choices	Responses
It needs more time for presentations and structured learning	0
I needs more time for a tour (for longer stops, or more stops)	0
It needs more unstructured time for networking and relationship-building	5
Everything is just right	12

Comments:

- Workshop was very well-balanced (x3)

Appendix III: Workshop Evaluations

- Always a challenge to have relevant topics; there was a good cross-section of presentations
- One tour stop in the afternoon would have been fine (as opposed to two)
- Appreciate the effort to keep the workshop on schedule. Personally would have liked more time for networking; disappointing that some presenters had to leave early
- Very worth-while event; would have liked more time for Q&A after presentations
- Scheduling is always very well done
- More interactive – yet structured – learning
- Build a ‘mixer’ into the Stewards Banquet
- Include more short activities that require people to shift around during the workshop

5. Overall, how do you rank the workshop?

Answer choices	Responses
Excellent	11
Good	7
Okay	0
Poor	0

6. What were the most useful or interesting parts of the workshop?

- Presentation/update on the new Water Sustainability Act (x5)
- Presentation on re-introduction of Sockeye from the Okanagan Nation Alliance biologist (x3)
- The field trips (x3)
- Tour of the dairy (x2) – learned a lot about the modern dairy industry
- Presentation on the drought response on the Coldwater (x2)
- Networking (x2)
- Enjoyed Councillor Randy Williams presentation
- Information on the different impacts on fish and rivers
- Lectures, tours and networking – all very interesting and useful
- Good to hear updates from the Province
- It was all great
- I’d never been to Kingfisher Creek, so that was important
- Kingfisher’s achievements and tour

7. Do you have any other comments?

- Thank you; appreciate the ability to participate (x6)
- Very well organized (x3)
- Thanks for continuing to provide this great workshop – well done and really appreciate emphasis on local (i.e., presentations, tour, catering, etc.)
- It’s too bad more of the public don’t attend – the meeting is top-heavy with government types

Appendix III: Workshop Evaluations

- Presentations were fewer and attendance was smaller than in previous years
- More healthy foods next year – local produce such as apples and carrots would be nice. But don't get rid of the treats, either!