



Source: Barry Booth



Source: Nechako White Sturgeon Initiative



Source: Barry Booth



Source: Theresa Fresco



Source: Ian Picketts

Who's Doing What in the Nechako Watershed? Workshop Report

**September 16th, 2015
The Village Inn | Vanderhoof, BC**

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Acknowledgements

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This support is greatly appreciated!



1.0 Overview

Although several organizations have been, and continue to work to improve the health of the Nechako River, various activities could be better coordinated, limited resources could be pooled more effectively, and increased opportunities are needed for decision-makers and the public to become more aware and engaged with respect to the current status and desired future for the watershed.

To address these opportunities, this meeting engaged a series of watershed practitioners currently undertaking projects in the Nechako watershed. The meeting objectives were:

- To share information about who is doing what projects/initiatives and why;
- To identify gaps, discuss priorities and share future aspirations; and,
- To explore opportunities to strengthen partnerships, mobilize further action and improve coordination if/when possible.

A series of practitioners from different organizations presented on their current work in the watershed illustrating the diversity of projects and approaches aimed at advancing watershed health. This report outlines and summarizes the key points gleaned from these presentations.



The Nechako Watershed¹

¹ From the Nechako Watershed Health Atlas - <http://cmnmaps.ca/Nechako/>

2.0 Projects in the Nechako Watershed

2.1 Fraser Basin Council

Presenter: Steve Litke, Senior Manager Healthy Watersheds and Water Resources

Organization: Fraser Basin Council

Project Name: Nechako Watershed Roundtable Launch, Nechako Watershed Strategy

Website: <http://www.fraserbasin.bc.ca>; **Watershed Atlas:**

<http://cmnmaps.ca/Nechako/>

The mission, mandate, or jurisdiction of your organization

FBC's mission is to advance social well-being supported by a vibrant economy and sustained by a healthy environment.

FBC's work in the Nechako

- Historic support for the Nechako Watershed Council (1990s and early 2000s)
- Coordination, secretariat and other support services for the NWA and its evolution to the NWR (2012-2015)
- Nechako Watershed Health Indicators report and Online Atlas (2014-2015)
- Nechako Watershed Strategy (2015-2016)

The priority issue(s) you are trying to address

NWR – envisioning a watershed that is healthy for generations to come

Representatives from a diversity of interests

Guided by a core leadership committee

The goal, objective, or desired outcome of the project(s) you are working on

The Roundtable aims to direct and advise decision-makers on water stewardship activities in the Nechako River Basin

The location and timeline of your project(s)

Launch event in Prince George – Oct 21 and 22

Watershed Strategy to wrap up by June 2016

The key actions taken and/or milestones achieved to date

-Nechako Watershed Health Indicators

Deliverables and/or outcomes generated to date

-Nechako Watershed Health Indicators

-NWA group

Gaps, priorities and next steps

Roundtable Launch

Nechako Watershed Strategy

2.2 *Integrated Water Research Group, University of Northern BC*

Presenter: Barry Booth

Organization: IWRG, UNBC

Project Name: Integrated Watershed Research in the Nechako River Basin

The mission, mandate, or jurisdiction

The IWRG consists of 4 researchers in various disciplines:

- Stephen Dery, Environmental Science
- Margot Parkes, Health Science
- Phil Owens, Environmental Science
- Ellen Petticrew, Geography

The IWRG aims to link biophysical, chemical, social and human health processes to address environmental, landscape ecology and community issues.

The priority issue(s) the organization is trying to address

The IWRG focuses on 3 research themes:

1. Water security and climate change
 - a. Stephen Dery and students
2. Sediment sources and dynamics
 - a. Ellen Petticrew, Phil Owens and students
3. Tools for integration in watershed management
 - a. Margot Parkes and students

The goal, objective, or desired outcome of the project(s)

A. Water security and climate change

Research Questions:

- 1) How has climate changed in the past?
- 2) How has warming affected the availability of surface water?
- 3) How may things change in the future?

Data

- 1) Stream flow data for the main stem Nechako River and its major tributaries from the Water Survey of Canada.
- 2) Climatic (air temperature, precipitation) and snow data from a range of sources including: Environment Canada/BC River Forecast Centre, RTA, FLNRO
- 3) Installation of new climate station to help facilitate data collection in upper Chilako and upper Nechako

Methods:

- 1) Trend analysis and relation between various climatic parameters
- 2) Long term (1950s to present) water budget assessment for the basin (inputs and outputs)

Contributions:

- 1) A better assessment of climatic impacts on water resources (including snow and stream flow) in the Nechako watershed.
- 2) Improved knowledge on stream flow timing and reasons for observed changes
- 3) Integration of this knowledge to obtain the “bigger picture” of the watershed’s wellbeing.

B. Sediment sources and dynamics

Research Questions

- 1) What are the main sources of fine sediment presently being delivered to the main stem of the Nechako River?
- 2) How have these sources changed over time (ca. last 50-100 years) and how might they change in the future (50-80 years) given anticipated changes in climate and land use?

Methods

Analyze source materials (soils, bank materials) for a variety of properties (geochemical, organic properties) to establish a “fingerprint” of each source and then statistically and numerically compare to collected sediments from the Nechako and its tributaries

Contributions

- 1) Identifying the dominant sources of fine-grained sediments in the Nechako River should enable locations for targeted mitigation measures to be established (e.g. soil erosion conservation, buffer strips, bank protection)
- 2) By determining how the major sediment sources might change over time should help in watershed planning

C. Tools for integration in watershed management

Research Question

The Development of a web-based, geospatial tool to foster information exchange and to assist in land and water decision-making in the Nechako River Basin

Approach

1. How to benefit from new technologies and tools to support integrated learning, understanding and decision-making in the watershed;
2. How to modify existing tools and innovations to integrate physical, ecological, health and socio-economic parameters within the watershed?

Key Concepts of a Water Portal

- accessibility, sharing;
- capacity to expand and adapt to the knowledge base;
- built for the community, with community input and handed over to the community.

Output – An Online Water Portal

- members of the Nechako community will be able to access documents, stories, articles and information that may have otherwise be less accessible that are also geo-referenced.

- The portal aims to profile stories and experiences within the watershed, old or new in order to illustrate how the health of the watershed directly or indirectly affects environmental, community and health issues in the watershed.

The location and timeline of the project(s): Throughout Nechako watershed

The key actions taken and/or milestones achieved to date

Projects are in their early stages of development.

Gaps, priorities and next steps

- Recommendations will be derived from the data and research undertaken.
- A Water Portal workshop will be part of the Nechako Watershed Roundtable Launch on October 21, 2015. This session will engage potential user groups to elicit their input on the content of the Water Portal.
- An important role of the Nechako Watershed Roundtable will be to network university researchers with other technical people in government, NGOs and broader community interests.

2.3 *Nechako Environment and Water Stewardship Society (NEWSS)*

Presenter: Wayne Salewski

Organization: NEWSS

Project Name: Various stewardship projects (e.g riparian restoration, culvert removal/replacement, etc.)

Website: <http://newsociety.org/>

The mission, mandate, or jurisdiction of the organization

- To act in an advisory capacity for both landowners and government;
- To serve as a vehicle for the delivery of incentives and investments into the Nechako watershed; and,
- To act as a trustworthy organization that continually inspires people, landowners and industry to demonstrate high quality land and water stewardship.

The priority issue(s) the organization is trying to address

- Watershed restoration
- Barrier to fish passage (e.g. culvert replacement/removal)

The goal, objective, or desired outcome of the project(s) you are working on

- Rehabilitation of sub-watersheds in the Nechako valley to working condition

The location and timeline of your project(s)

- Over 30 sub-watersheds within the Nechako watershed
E.g. Stoney Creek restoration 2014/2015

The key actions taken and/or milestones achieved to date

- Move from Murray Creek Restoration Project to the broader NEWSS Society
- NEWSS has undertaken over 18 projects
- Project examples:
 1. Stoney Creek
 - Culvert replacement
 - Sediment removal and transport (42 truckloads!!)
 - Bridge built
 - Bank stabilization and habitat restoration
 2. Murray Creek – 16 projects undertaken
 - Habitat restoration
 - Partnership with CN Rail for culvert removal and creation of fish passage

Deliverables and/or outcomes generated to date

- NEWSS started with \$17,000 from the Cattlemen's Association
- Have over \$1 million in projects to date
- Stoney Creek is now flowing

Gaps, priorities and next steps

NEWSS needs to hire a coordinator to help support and administrate projects.

2.4 *Nechako White Sturgeon Recovery Initiative*

Presenter: Cory Williamson

Organization: Nechako White Sturgeon Recovery Initiative (NWSRI)

Project Name: Nechako White Sturgeon Recovery

Website: <http://www.nechakowhitesturgeon.org/>

The mission, mandate, or jurisdiction of the organization

- The goal of NWSRI is to restore naturally sustaining populations of the Nechako White Sturgeon.
- The NWSRI initiative has 2 areas of focus towards this goal:
 - Community Stewardship Efforts – E.g. school releases of sturgeon, incorporation of efforts in school curricula and working with First Nations releasing sturgeon
 - Hatchery and Conservation Program – Hatchery operations have scaled up with the completion of the new conservation centre. The hatchery now has 1500 sturgeon towards their 12,000 sturgeon goal. They expect to reach their goal by Christmas of this year with release in the spring. To track how the sturgeon are doing, NWSRI is working with Carrier-Sekani Tribal Council fisheries staff setting lines to capture fish.

The priority issue(s) the organization is trying to address

- Habitat and spawning challenges for sturgeon
 - Spawning takes place in the bird sanctuary reach of the Nechako River (near Vanderhoof)
 - Staff look at spawning, behavior and geomorphic aspects as well as try to understand the challenges that the sturgeon face as the river changes. The hydrology has been altered. Historically there used to full flows and a normal spring freshet but today this is altered.
- Timing of sediment flow and the timing of river flows
 - NWSRI is working with Zsolt Sary from FLNRO and students from the University of Northern BC to understand the timing of sediment flow relative to the managed flows
 - Working with NHC to understanding the relationship between turbidity and sediment movement in the Nechako both in-river and tributary inputs (e.g. Stoney Creek, Murray Creek, etc.).
 - The group also looks at the 'recruitment bottleneck' where sturgeon come to spawn in late May-early June. Originally there was gravel available for habitat and spawning but now this area is full of sand. This leaves eggs vulnerable to predators decreasing the number of juveniles. Further study is being undertaken on the biology and geomorphology of this process so that proper restoration measures can be implemented.

The goal, objective, or desired outcome of the project(s) you are working on

Restore naturally sustaining population of Nechako white sturgeon

The location and timeline of your project(s)

Areas on the Nechako River that sturgeon return to spawn (e.g. bird sanctuary reach)

The key actions taken and/or milestones achieved to date

With the completion of the new conservation centre, hatchery operations now have a capacity of 12,000 fish. This will be reached by December 2015.

Deliverables and/or outcomes generated to date

Able to release 1270 sturgeon this last spring.

2.5 *Upper Fraser Fisheries Conservation Alliance (UFFCA)*

Presenter: Michelle Tung and Thomas Alexis (president)

Organization: Upper Fraser Fisheries Conservation Alliance (UFFCA)

Project Name: Initiatives in the Nechako River Basin

Website: <http://upperfraser.ca/>

The mission, mandate, or jurisdiction of your organization

UFFCA is a non-profit, First Nations organization established in 2004 to further the fisheries and aquatic interests of First Nations communities in the Upper Fraser watershed. The UFFCA is technically focused and membership is geographically bounded with 23 First Nations eligible for membership. They currently have 20 members and a Board of 8 members.

UFFCA is funded mostly by the Department of Fisheries and Oceans.

The priority issue(s) you are trying to address

- Habitat
- Restoration
- Salmon management issues at the watershed level
- Concerns on the landscape such as conservation and maintaining healthy salmon populations

Key functions of UFFCA:

- Facilitating engagement
- Supporting First nations capacity for fisheries management
- Directly assisting UFFCA area First Nations with specific technical issues and concerns
- A model for how First Nations can work collectively as well as work with DFO. First Nations bring together their local expertise, find areas of common concern and create processes to feed that input into DFO's management processes. They are currently exploring how can their processes feed into decision-making processes related to industrial development?

The goal, objective, or desired outcome of the project(s) you are working on

- Addressing the declining sockeye stocks in the Upper Fraser
- Implementing habitat restoration projects for First Nations in territories that will be impacted by energy corridor development
- Assisting in filling critical information gaps and implementing monitoring programs
- Taking stock of decision-making processes especially in light of increased resource development such as pipelines in the northern regions of BC
 - Exploring how the work of the UFFCA can feed into other decision-making processes such as those related to industrial development?

Project in the Nechako River Basin:

- Using traditional knowledge of Nechako White Sturgeon to fill gaps in recovery strategies (working with Tl'azt'en, Nak'azdli, Saik'uz First Nations, etc.)

The location and timeline of your project(s)

Upper Fraser watershed
(However, the UFFCA's geography extends beyond the Upper Fraser watershed)

The key actions taken and/or milestones achieved to date

Received funding from Fisheries Habitat Restoration Initiative (over 5 years) in addition to DFO funding.

Deliverables and/or outcomes generated to date

Deliverables and outcomes will be undertaken over the next year

2.6 Carrier-Sekani Tribal Council (CSTC)

Presenter: Christina Ciesielski, Fisheries Program Manager

Organization: Carrier Sekani Tribal Council

Project Name: Nechako White Sturgeon projects

The mission, mandate, or jurisdiction of your organization

To better the health of all fish species in all watersheds with the Carrier-Sekani territories.

The priority issue(s) you are trying to address

Nechako sturgeon populations

The goal, objective, or desired outcome of the project(s) you are working on

- Spawn monitoring project
 - Acoustic monitoring enables staff to create a 3D picture of where the sturgeon are during spawning . This helps to identify where the these spawning areas are.
 - Egg mats (metal frames with horse hair fibre) are used to collect eggs in May/June.
 - Fike nets are used to catch larvae for sampling.
- Juvenile recruitment and indexing
 - Juveniles are 3-4 year old sturgeon
 - Staff find where juveniles are and use set lines for capture.
 - Samples are meant to determine what habitats the sturgeon are going to and the numbers of wild and hatchery fish.
- Outreach with First Nations fishers in the Food, Social, Ceremonial (FSC) fishery
 - Educating people on the importance of the release of sturgeon
 - Boat kits distributed to unravel sturgeon getting caught in nets. These kits consist of materials for handling sturgeon and net repair tools. A waterproof camera is also available for fishers to take photos of any sturgeon caught.
 - Encouraging First Nations fishers to take some information when they do catch sturgeon.
- Carrier-Sekani Tribal Council is interested in habitat restoration work but hasn't had funding to do this for a long time. With the new Fisheries Habitat Restoration Initiative, they are getting involved in some projects such as the Endako River restoration.

The location and timeline of your project(s)

CSTC territories

The key actions taken and/or milestones achieved to date

- Christina is a board member on the Upper Fraser Fisheries Conservation Alliance.
-

Deliverables and/or outcomes generated to date

- 47 sturgeon eggs have survived of the 300 collected in May.
- There have been 37 releases of Nechako White Sturgeon bycatch so far since 2009 by First Nations fishers.

2.7 Ministry of Forests, Lands and Natural Resource Operations (FLNRO)

Presenter: Zsolt Sary

Organization: FLNRO

Project Name: Sediment research and habitat designation in the Vanderhoof Reach of the Nechako River

The mission, mandate, or jurisdiction of your organization

The Ministry of Forests, Lands and Natural Resource Operations delivers integrated natural resource management services for British Columbians. With a long-term vision of economic prosperity and environmental sustainability, it is the main agency responsible for establishing the policy and conditions for access to and use of the province's forest, land and natural resources. The Ministry incorporates policy with operational resource management, aligning and streamlining operations in delivering services to enable effective stewardship and sustainable management of BC's land base for a variety of uses.

The priority issue(s) you are trying to address

The importance of the Vanderhoof Reach of the Nechako River to Nechako White Sturgeon spawning activities

The goal, objective, or desired outcome of the project(s) you are working on

- Conduct research and a series of geomorphological investigations to assess the historical and contemporary characteristics of the reach in order to understand how:
 - Patterns of flow and sediment transport have affected and continue to affect, physical habitat within the reach
 - Annual flows influence sediment mobility and transport through the reach
 - These physical processes relate to the availability of suitable larval habitat
 - Habitat restoration for sturgeon spawning may be undertaken in the future

The location and timeline of your project(s)

Vanderhoof Reach of the Nechako River

The key actions taken and/or milestones achieved to date

- FLNRO is working with Cory Williamson and the Nechako White Sturgeon Recovery Initiative and the Carrier-Sekani Tribal Council

Research looking at:

- Identifying patterns that cause sediment transport and timing
- How annual flows influence sediment mobility and transport through the spawning reach
- How these physical processes relate to the availability of suitable larval habitat
- Habitat restoration for sturgeon spawning may be undertaken in the future

Projects:

1. Gravel Placement Project
 - a. Two of the assessed sites were at the gravel pads placed in the river in 2011. These assessments addressed:
 - i. Do interstitial spaces between cobbles still exist?
 - ii. Has any of the placed materials moved downstream?
2. Gravel sampling
 - a. Prescore sampling of substrate and analysis of historical deposition of gravel
 - b. Turbidity sensor installed on the middle pier of Burrard Avenue bridge
 - c. Analysis of suspended sediment and its relation to bedload
3. Habitat Designation
 - a. Proposing restrictions on industrial development on certain parcels of land through habitat designations under Forest and Range Practices Act (e.g. areas that are high fisheries value, sensitive to development, etc.)
 - b. Working on designating certain watersheds such as the Stuart/Takla area due to the importance of fisheries in these area
 - c. This would put a cap on the amount of clear cutting, would require stream crossings to incorporate protection of riparian zones, etc.

Deliverables and/or outcomes generated to date

- Gravel Placement Project gravel pads are functioning reasonably well and the placed material did not show signs of being moved due to freshets
- Sediment research yielded that in 2013 and 2014, about 2000 m³/year more sediment was moved out of the reach than into it. In 2015, high sediment transport was observed into the reach during high flows, and sediment stores mid-reach within side-channels. As flow decreased, flow velocity actually increases at the downstream end of the reach and re-mobilizes (some) of the stores sediment.

Gaps, priorities and next steps

- This research aims to guide habitat restoration for sturgeon spawning undertaken in the future

Presenter: Ray Pillopow

Organization: FLNRO

Project Name: Nechako River bull trout distribution evaluations

The mission, mandate, or jurisdiction of your organization

(see above)

The priority issue(s) you are trying to address

5 year project to explore the source, distribution and relative abundance of Nechako River overwintering bull trout.

Funded by Habitat Conservation Trust Foundation

The goal, objective, or desired outcome of the project(s) you are working on

Goals of the project include:

- **Evaluate** the composition and natal source of the Nechako overwintering population for the purpose of determining if alternate regulations can be considered.
- **Characterize** the spatial temporal patterns of spawning stock in the upper Fraser tributaries and how they contribute to Nechako.
- **Incorporate** population demographics with occupancy modelling to better predict outcomes.

(If upper Fraser bull trout utilize Nechako as a key overwintering area from a broad natal source then risks to alternate angling opportunities in non staging area such as Nechako River may reduce risks of over exploitation to upper Fraser bull trout populations.)

The location and timeline of your project(s)

Upper Fraser and Nechako River

(The Upper Fraser watershed consists of the Stuart/Takla watersheds, Upper Nechako, Willow, Bowron, McGregor, and Upper Fraser mainstem and associated tributaries)

The key actions taken and/or milestones achieved to date

- **Mark-Recapture** To Date a total of 283 BT have been captured and ~235 have been marked and released into the Nechako River as part of the mark-recapture event. Return has been 45 recaptures thus far. 20 radio tags have been applied to assist with seasonal movement, timing, and distribution patterns within the Nechako River.
- **Radio Tagging** To date over 150 tags have been surgically implanted into Nechako/Fraser BT to assist with distribution evaluations and occupancy modeling efforts. Goal has been to radio-tag ~20% of the mature spawning population in each study system.
- **Redd Surveys** conducted annually on index streams throughout the headwaters where specific habitat exists (clean, cool, >1000m, groundwater)
- **DNA** collected throughout distribution to test contribution from other potential sources (Haggen, Bowron, Mcgregor). Fluvial vs. Resident populations
- **Telemetry** surveys assist with understanding the seasonal distribution of fish within the study areas revealing spatial patterns and habitat use. Assists with

monitoring BT staging and spawning timing, periodicity, and site fidelity. Also tag mortalities can be incorporated into estimates of survival, tag loss, and reveal areas of angler non-compliance

Deliverables and/or outcomes generated to date

- Multiple age classes found in the Nechako River
- Majority are mature fish >5 yrs and 450-650 mm size classes
- Microsatellite DNA analysis suggests the Nechako River population is an aggregate from multiple source populations (i.e. mixed-stock structure)
- Telemetry results also indicate that Headwater streams provide spawning and rearing habitat for large fluvial bull trout that overwinter in the Nechako River.
- Annual Redd Survey – used to track relative abundance of bull trout in index systems, escapement estimates and potential recruitment as well as identify reoccurring critical habitats and support establishment of habitat protection measures (e.g. WHA's).

Presenter: John Rex

Organization: FLNRO

Project Name: Watershed Health Project: Omineca Region

The mission, mandate, or jurisdiction of your organization

(see above)

The priority issue(s) you are trying to address

Understanding the ecological state of watersheds in the Omineca region in order to qualify the need for monitoring, restoration or conservation.

Development of a Watershed Health Assessment for the Omineca region that would assess and report on the ecological condition of its watersheds. This assessment will provide a baseline estimate of watershed function and the opportunity to predict future conditions using foreseeable development as well as climate change scenarios.

The goal, objective, or desired outcome of the project(s) you are working on

Hazard Risk Assessment Framework

- Geophysical condition (Interior Watershed Assessment Procedure / Cumulative Effects) (e.g. stream flow, sediment, riparian indicators) and watershed values (e.g Aquatic based values include aquatic life, potable supply, infrastructure, community/cultural) are assessed to generate a watershed health hazard score. These will then be field-validated. Once validated, the hazard assessment process can be used to identify hazard classes at the regional level to inform decision-makers about current watershed condition and potential resource risk.
- Hazard indices consider watershed sensitivity to hazard, land-use effect and attenuation. Identified as low to high.
- Future watershed condition and sustainability can also be modeled in the context of a Cumulative Effects Framework based upon projected land use and resource development in concert with climate change scenarios and hydrologic recovery projections.

****Note:** Indicators won't mean anything without taking the context into account (e.g. 30% equivalent clear cut area on a flat or steep watershed will have a different effect, depending on the kind of sediment in the watershed (fine versus bedrock) development will have a different impact)

The location and timeline of your project(s)

Watersheds in the Omineca region

The key actions taken and/or milestones achieved to date

- First run hazard indicators have been determined for all of the Ominca region
- Office and field data collected

Deliverables and/or outcomes generated to date

- First run hazard indicators have been determined for all of the Omineca region
- GIS information will be available in a few months
- QA processes are underway

Gaps, priorities and next steps

- Regional GIS Hazard Assessment QA
- Field data analysis and GIS validation and model refinement – 2016
- Risk determination – engagement of communities, resource stewards and collation of provincial data
- Regional assessment and extension of findings to regional groups – March 2017

Presenter: Chelton van Geloven

Organization: FLNRO

Project Name: Chilako watershed, Stoney creek watershed, Nechako Plateau Groundwater Monitoring

The mission, mandate, or jurisdiction of your organization
(see above)

The priority issue(s) you are trying to address

- Information on the Chilako Watershed and its tributaries

The goal, objective, or desired outcome of the project(s) you are working on

- Making information on the Chilako watershed accessible

The location and timeline of your project(s)

- Chilako River
- Stoney Creek
- Murray Creek

The key actions taken and/or milestones achieved to date

- Inflow and outflow monitoring on Murray, Chilako and Stoney watersheds
- Snow surveys in Chilako watershed
- Weather station will be installed in the Chilako
- Hydrometric monitoring station in the Chilako

Lake level monitoring stations

- Installed in Tachick and Nulki Lakes
- Staff gauges monitored by lake volunteers
- Data collected bi-weekly
- Water measurements

Groundwater Observation wells:

- Observation well 199
 - 2014 private well survey – Arsenic, Uranium

Deliverables and/or outcomes generated to date

- Secured \$25,000 of funding for a proposed new well site
- Data will be used to support the aquifer water budget analysis in the groundwater surface water interaction study – (FLNRO/UNBC and MOE)

Gaps, priorities and next steps

- Data and information can help with restoration efforts and general understanding of the Chilako watershed
- Increase number of monitoring stations

2.8 *Enviro Vikes*

Presenter: Wayne Salewski (on behalf of Enviro Vikes)

Organization: Enviro Vikes at Nechako Valley Secondary School

Project Name: Blue Dot Campaign

The mission, mandate, or jurisdiction of your organization

- Promote waste reduction
- Increase environmental awareness to fellow students on issues such as access to clean water globally

The priority issue(s) you are trying to address

- Awareness of environmental issues in the Nechako watershed

The goal, objective, or desired outcome of the project(s) you are working on

- Raise awareness about environmental issues globally and in the Nechako watershed
- Have Vanderhoof approve a Municipal Declaration of Environmental Rights

The location and timeline of your project(s)

Nechako watershed

The key actions taken and/or milestones achieved to date

- Enviro Vikes members were able to participate in some local watershed projects which brought awareness to hundreds of students (e.g. sturgeon release)

Deliverables and/or outcomes generated to date

- After attending a Blue Dot Campaign presentation by David Suzuki in November, 2014, the Enviro-Vikes wanted to bring the idea of environmental rights forward to our community. At the time, 6 Canadian communities had approved a Municipal Declaration.
- The goal of the Blue Dot campaign is to have the right to a healthy environment included in our Canadian Charter of Rights. This can be accomplished when 50% of Canadians (or 7 out of 10 provinces) are recognizing their right to a healthy environment.
- This summer, the NVSS Enviro-Vikes took a proposal to the District of Vanderhoof where they outlined the importance and benefits of accepting the rights to environmental protection.
- Our District's recent decision to approve the Municipal Declaration of Environmental Rights can help support and strengthen the many initiatives already in place in our community. It is a framework for our community leaders to provide us with a healthy, sustainable and protected environmental legacy.

Gaps, priorities and next steps

- Challenge with continuity (i.e. champions moving on to university)

Appendix A: Meeting Agenda

Who's Doing What in the Nechako Watershed?

Date: Wednesday, September 16th, 2015

Time: 10:00am – 3:00pm

Venue: The Village Inn, 144 Columbia Street W, Vanderhoof

Agenda:

1. Welcome and introductions
2. Presentations on 'Who's Doing What in the Nechako Watershed'
3. Lunch and Networking
4. Presentations continue
5. Dialogue on shared priorities and opportunities for collaboration

Appendix B: Participant List

Name	Organization/Affiliation
Kate Hewitt	University of Northern BC
Sarah Bale	University of Northern BC
Steve Litke	Fraser Basin Council
Theresa Fresco	Fraser Basin Council
Dan Boudreau	Nechako Environment Enhancement Fund (NEEF) Society
Barry Booth	University of Northern BC
Lori Borth	Ministry of Forests, Lands and Natural Resource Operations
John DeGagne	Ministry of Forests, Lands and Natural Resource Operations
Keith Prakis	Vanderhoof resident
Kevin Moutray	District of Vanderhoof
Jerry Peterson	Regional District of Bulkley-Nechako
Jon Erickson	CANFOR
Paul Collard	Vanderhoof resident
Thomas Alexis	Upper Fraser Fisheries Conservation Alliance
Ray Phillipow	Ministry of Forests, Lands and Natural Resource Operations
Zsolt Sary	Ministry of Forests, Lands and Natural Resource Operations
Chelton van Geloven	Ministry of Forests, Lands and Natural Resource Operations
Mayor Gerry Thiessen	District of Vanderhoof
Keith West	Takla Lake First Nation
Christina Ciesielski	Carrier Sekani Tribal Council
John Rex	Ministry of Forests, Lands and Natural Resource Operations
Michelle Tung	Upper Fraser Fisheries Conservation Alliance
Vivian Chui	Omineca Express