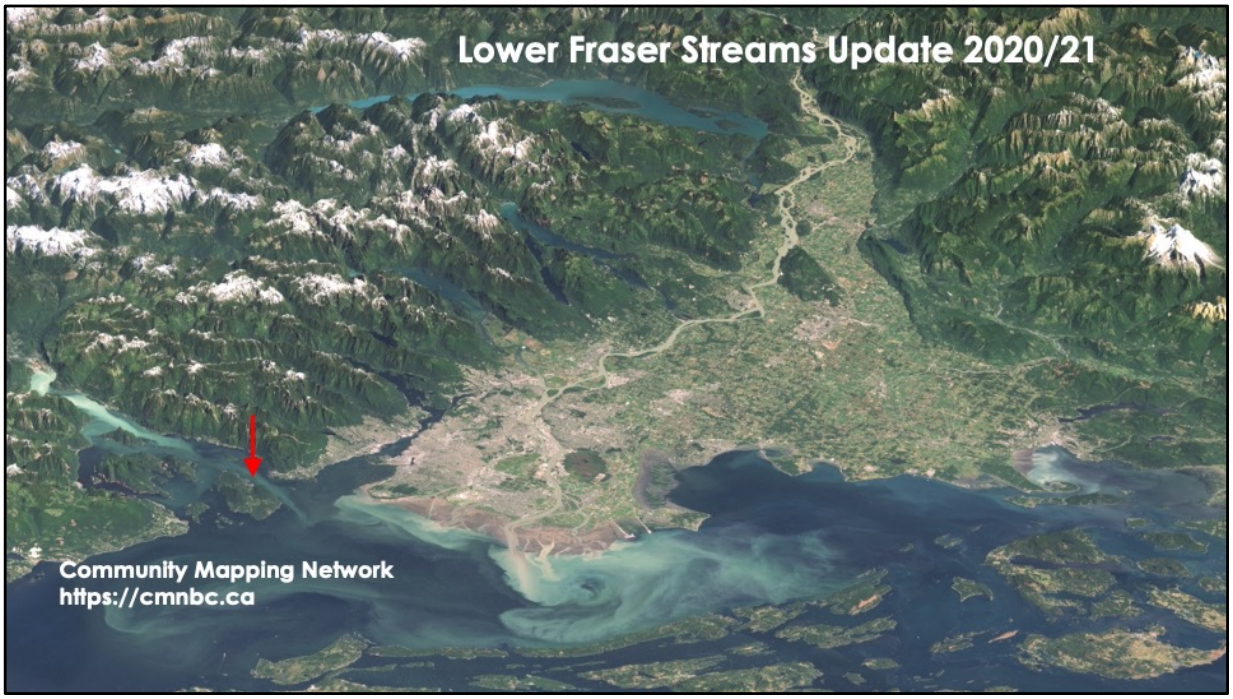
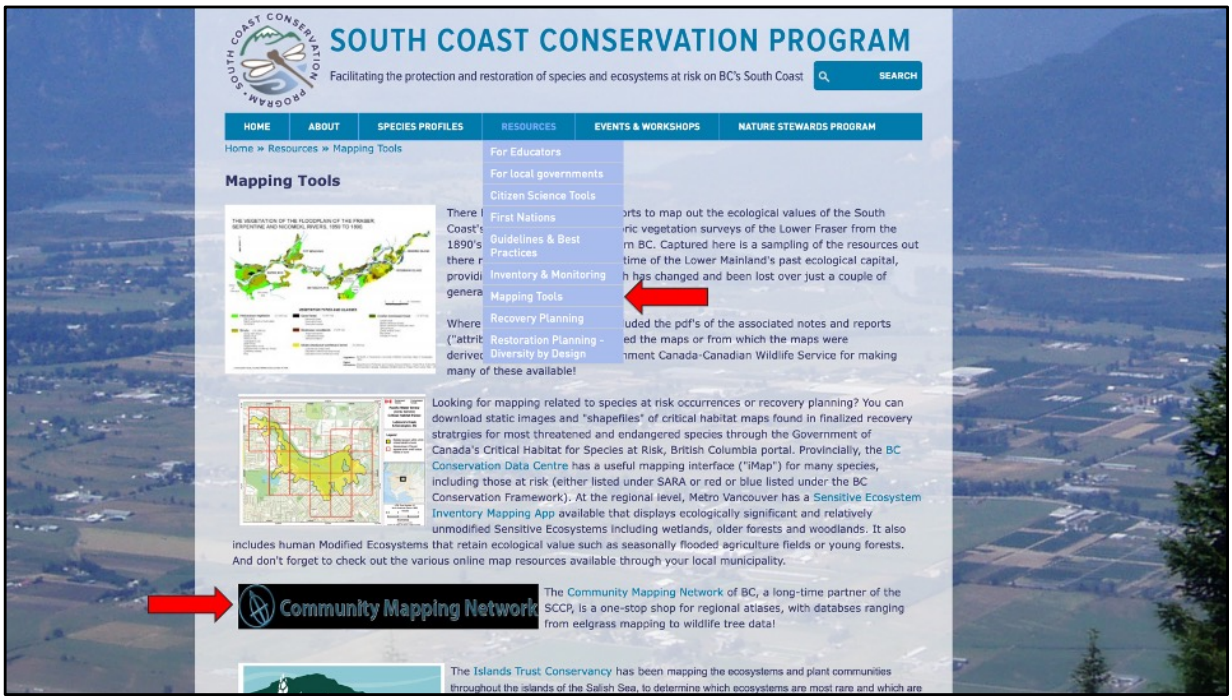


I am presenting from the mouth of Átl'ka7tsem / Howe Sound on Bowen Island, part of the traditional, unceded lands of the Squamish Nation.
As an aside Átl'ka7tsem / Howe Sound was recently designated Canada's 19th biosphere region by UNESCO on Sept.15

This two year project to update the Lower Fraser Streams was funded by the Environmental Damages Fund, administered by Environment Canada and Climate Change.
The Community Mapping Network worked with the BC Conservation Foundation to complete this update of the small first order streams for the Lower Fraser River, Hope to the estuary.

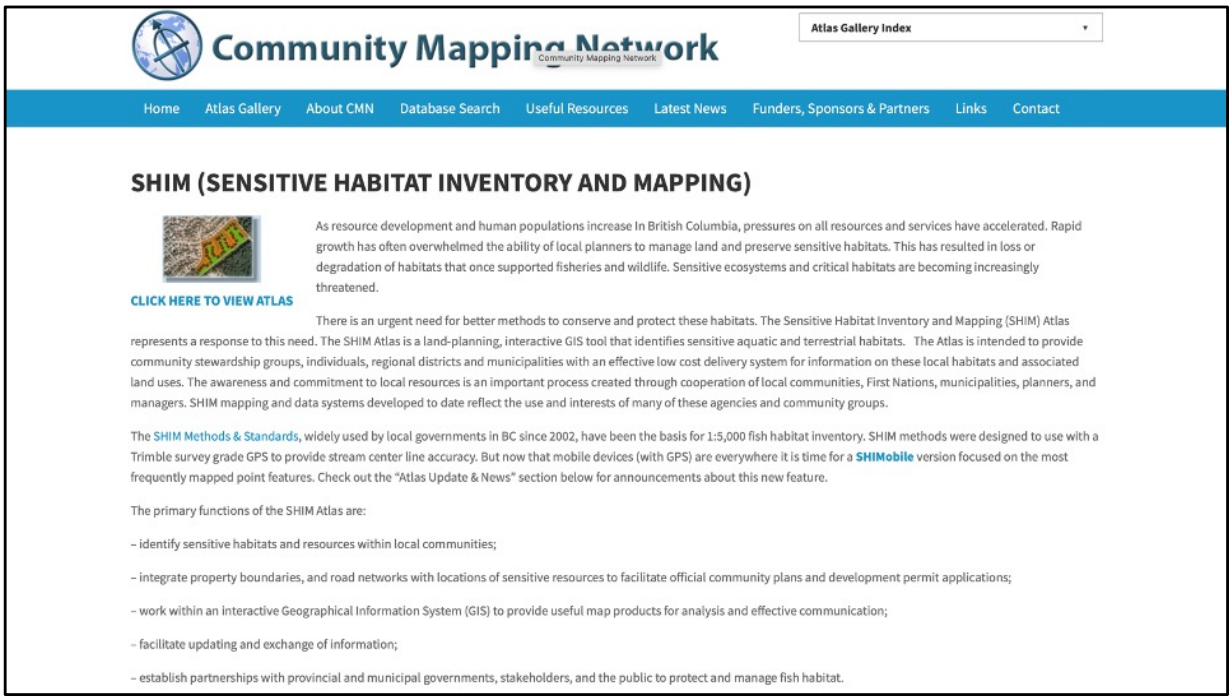
PROJECT RATIONALE:

Accurate maps of watercourses across jurisdiction boundaries are critical for many activities including ditch maintenance, water quality issues and application of the BC Riparian Area Regulations. This information is needed to prioritize fish habitat restoration projects for impacted habitat by decades of cumulative effects from human activities and to prioritize intact habitat for protection conservation.

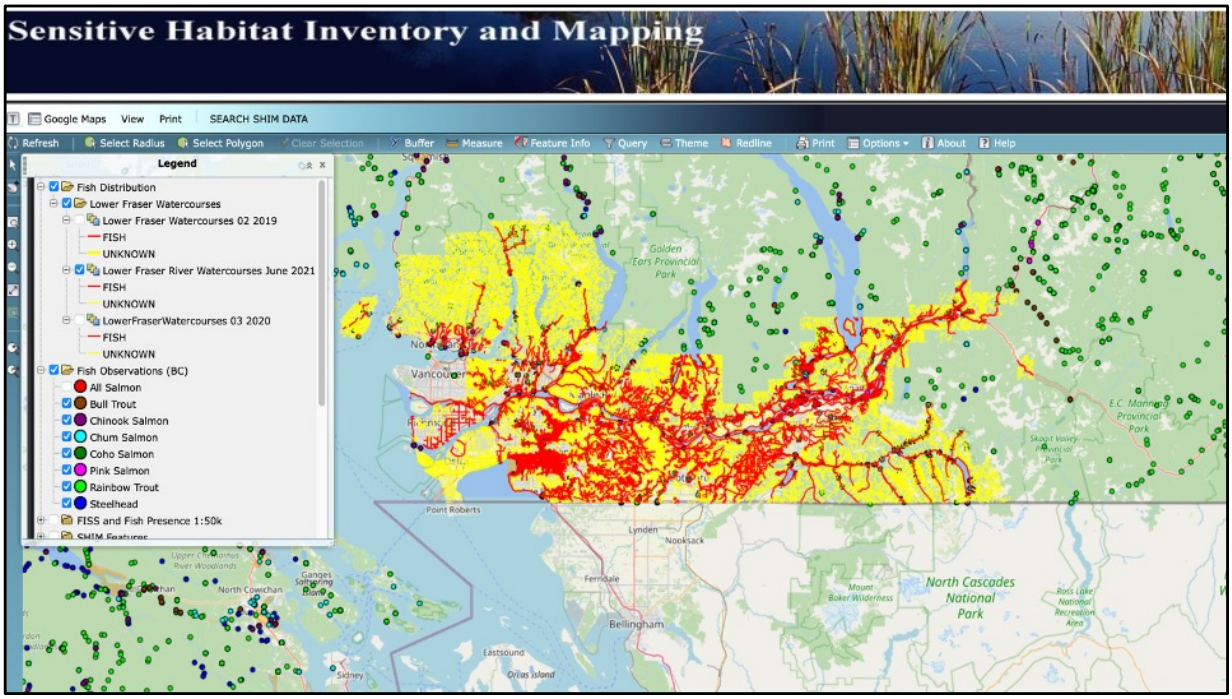


This presentation is an overview of the recent Lower Fraser Streams Update for some of the important habitats of species at risk in the Fraser Valley.
NOTE:
The SCCP web site has a wealth of SAR related information and under the RESOURCES tab, the Mapping Tools item lists the Community Mapping Network along with many other data sources.

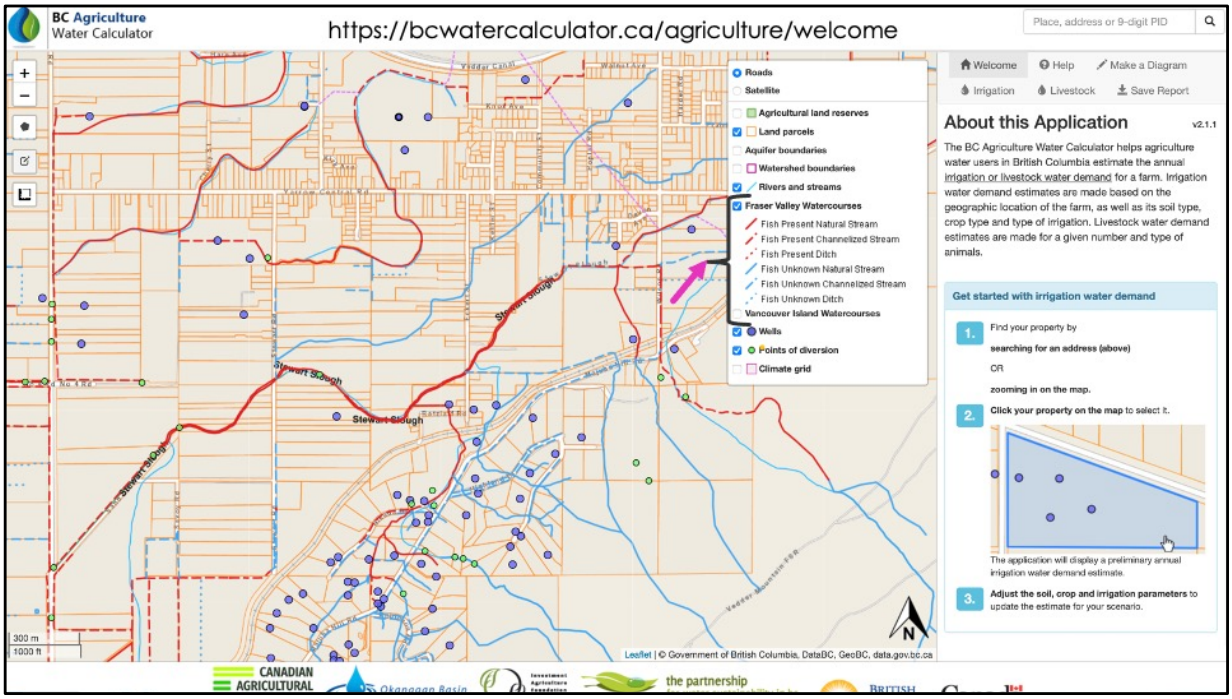
To view the web mapping for this Fraser Streams Update, go to the SHIM atlas description page from either the "Atlas Gallery" or the drop-down "Atlas Gallery Index" on the home page for CMN **https://cmnbc.ca**



This description page has lots to say about the Sensitive Habitat Inventory & Mapping (SHIM) method, used by many local governments around BC since 2001 to inventory detailed fish habitat.
SHIM mapping **and the "Lower Fraser Streams Update"** have been developed to meet the business needs of many governing agencies and community groups.

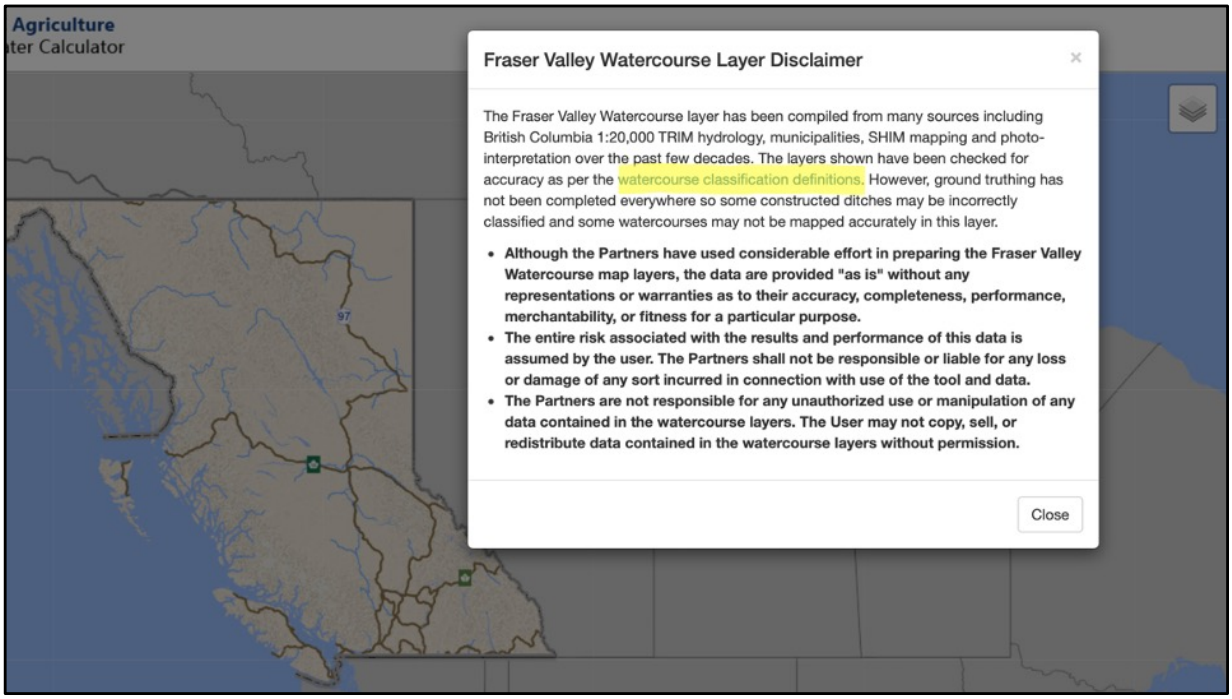


This is the current web map on CMN showing the extent of the Lower Fraser Streams Update along with BC Government documented Fish Observations. We used the latest BC Fish Observations data to validate the RED, FISH PRESENT streams. Additional local government FISH PRESENT attributes were also used to identify RED FISH PRESENT streams.

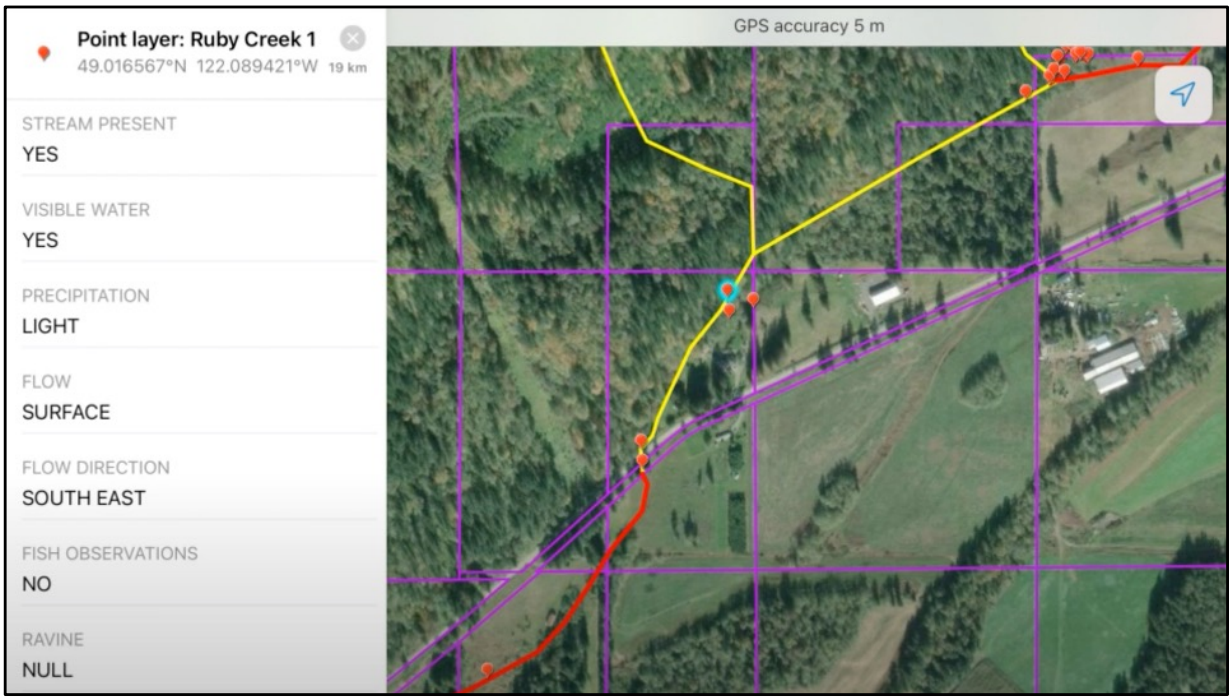


Here is an example of how these data are being used by the BC Agriculture Water Calculator, developed by the Partnership for Water Sustainability in BC. https://bcwatercalculator.ca/agriculture/welcome
The CMN provides a customized view of the Streams Update data layer using a Web Mapping Server (WMS), indicated by the bracket in this view of Water Calculator near Yarrow.

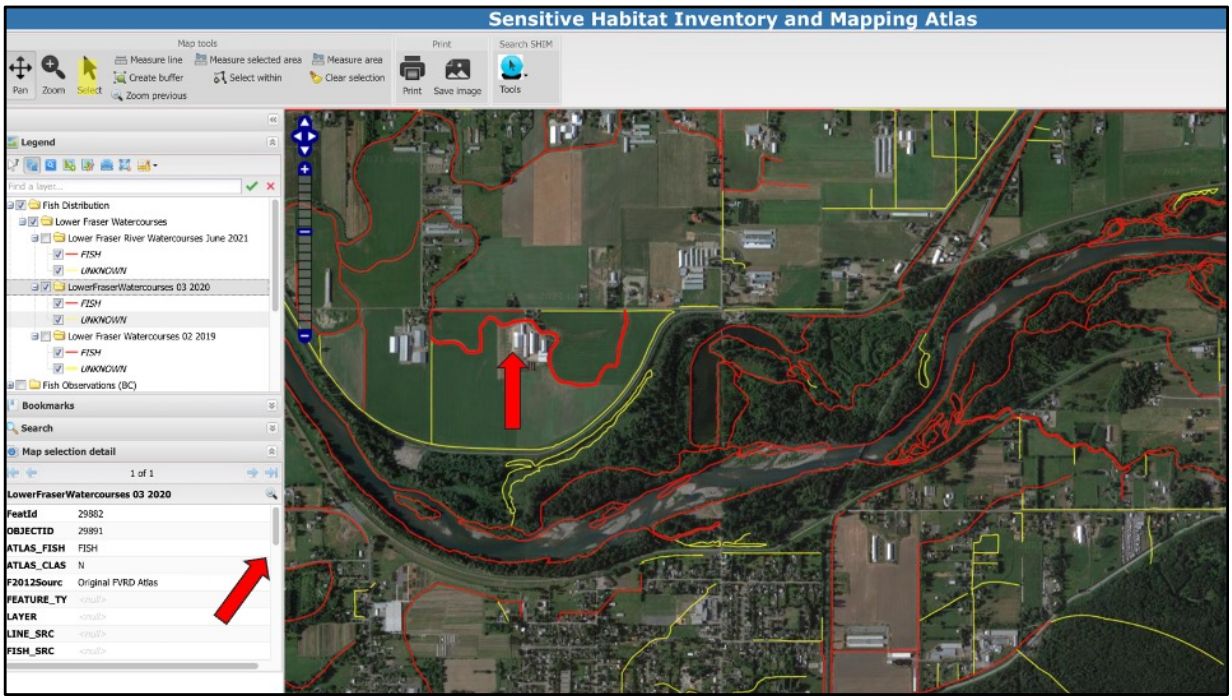
Notice there is also a second layer group for southern Vancouver Island that CMN prepared for the Water Calculator – no field verification of streams was used.



When you first turn on this Lower Fraser Streams layer in the Water Calculator (called the Fraser Valley Watercourse layer) a disclaimer pops up.
Along with the expected disclaimer it describes some of the limitations of the Streams Update project and a link to the watercourse classification definitions as in the legend in the previous slide.



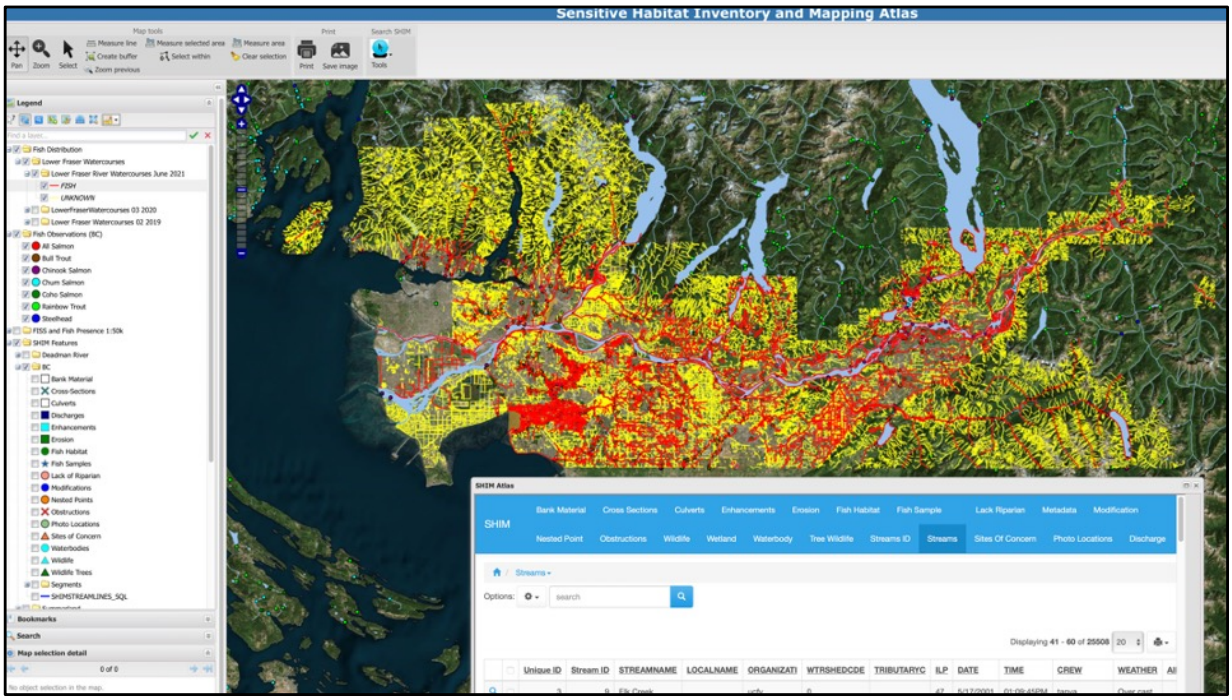
We used LiDAR visually in some cases to help verify the location of a questionable watercourse. This helped to prioritize areas where the field crew would visit.
Field observations were limited to confirming stream location, flows and possibly fish observations.
This is a view of a few field observation locations using the ESRI Collector app. The attributes on the left are for the point with a blue hallo. The purple lines are lot boundaries.



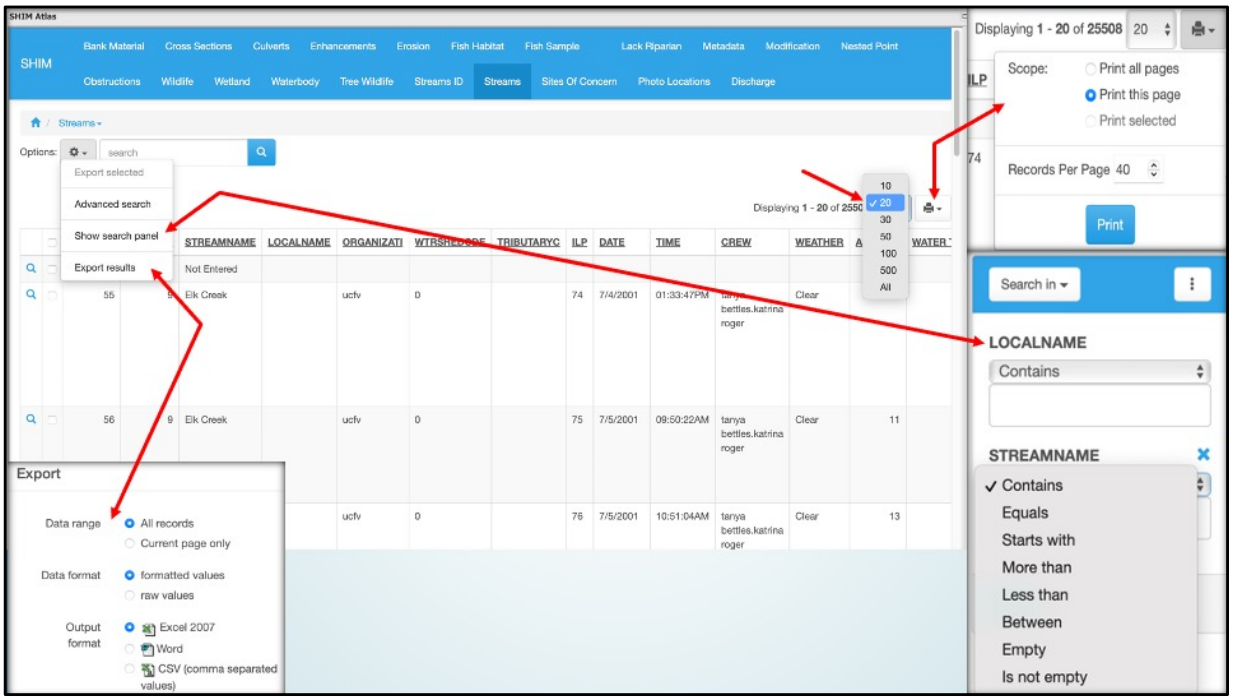
To view the attributes for a stream or stream segment use the “Selection” tool (yellow highlight, upper left in the map frame) and click/select a stream line. The attributes are displayed lower left under the Map selection detail heading.

NOTE:

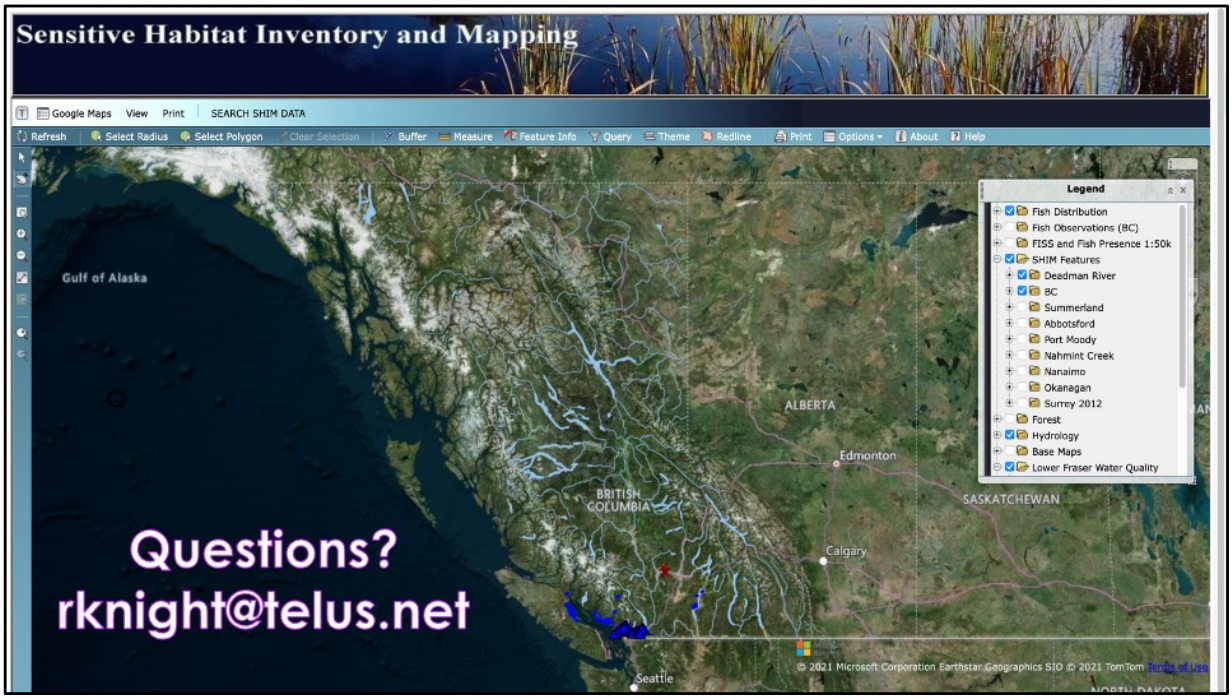
This is how the SHIM Atlas will look in the coming months and the same stream selection methods can be used on the current SHIM Atlas except the Map selection detail window will pop up rather than be anchored to the lower left.



Soon the SHIM Atlas will have a different look with improved tools to view and query data in the atlas.
But CMN was not able to build a backside database with web forms for the Streams Update as we have for SHIM data, seen here.



This is an overview of the web form's advantages which provide advanced searching of the database, data export, a range of records displayed in the main table and printing of the table view (red arrows).


Sensitive Habitat Inventory and Mapping
Google Maps
View
Print
SEARCH SHIM DATA
Refresh
Select Radius
Select Polygon
Clear Selection
Buffer
Measure
Feature Info
Query
Theme
Redline
Print
Options
About
Help
Legend
Fish Distribution
Fish Observations (BC)
FISS and Fish Presence 1:50k
SHIM Features
Deadman River
BC
Summerland
Abbotsford
Port Moody
Nahmint Creek
Nanaimo
Okanagan
Surrey 2012
Forest
Hydrology
Base Maps
Lower Fraser Water Quality
Gulf of Alaska
ALBERTA
Edmonton
BRITISH COLUMBIA
SASKATCHEWAN
Calgary
Seattle
Questions?
rknight@telus.net
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