

A BRIEF VISUAL OVERVIEW OF THE DAMAGE TO THE LARGE MID-CHANNEL
HEART OF THE FRASER ISLANDS

July 8, 2018



8/17/2016

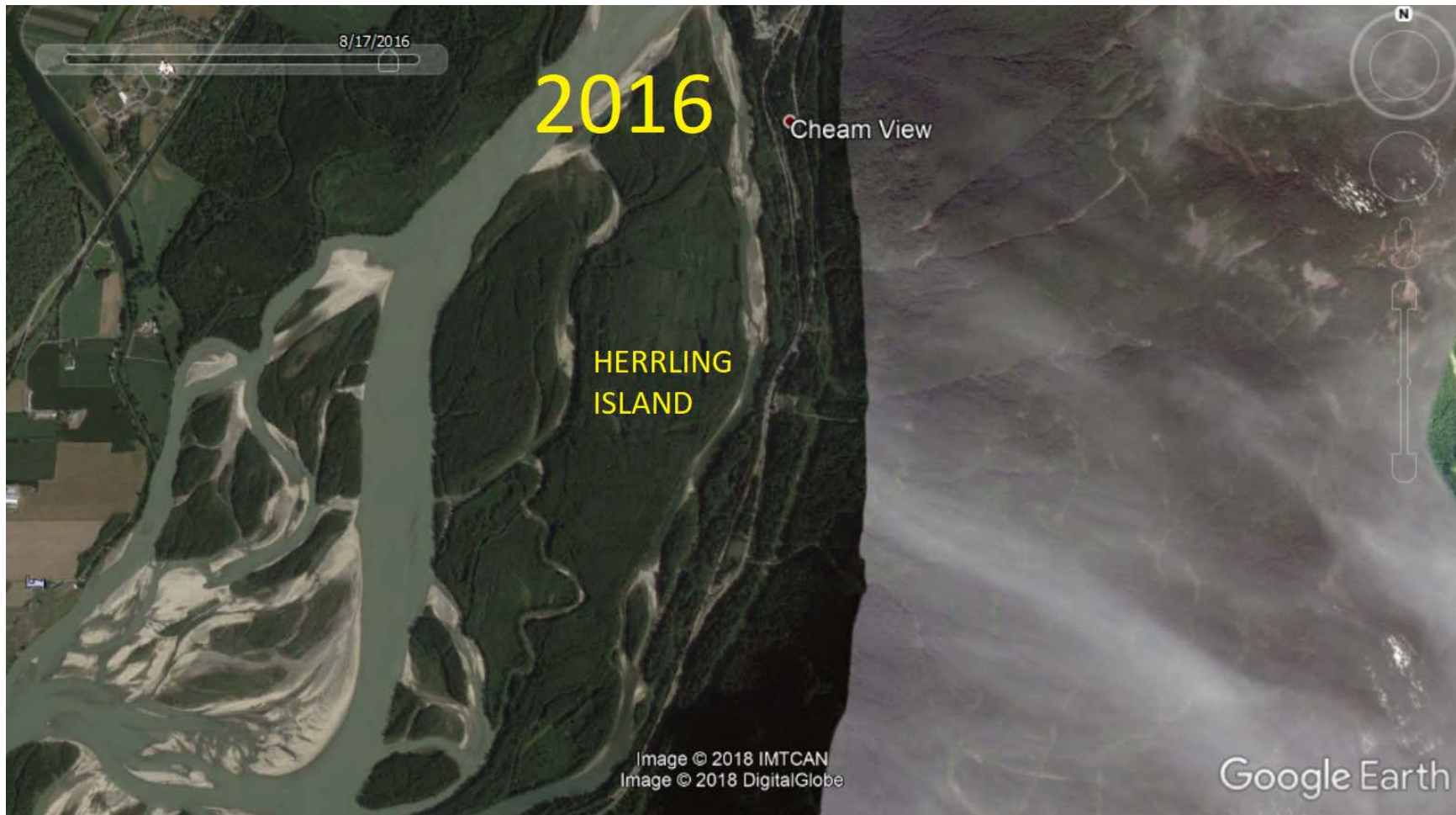
2016

Cheam View

HERRLING
ISLAND

Image © 2018 IMTCAN
Image © 2018 DigitalGlobe

Google Earth



7/28/2017

2017

Cheam View

juvenile Chinook salmon rearing during overbank freshet flooding

0.18 km riparian loss

4.62 km riparian loss

0.75 km riparian loss

HERRLING ISLAND

1.23 km riparian loss

Herrling Side channel-- the most important white sturgeon spawning and incubation channel in the lower Fraser River, extensive chum salmon spawning, juvenile Chinook salmon rearing

proposed bridge crossing

Image © 2018 DigitalGlobe

Google Earth

Tour Guide

2004

Imagery Date: 7/28/2017

49°14'08.91" N 121°41'02.78" W elev 19 m eye alt 7.50 km

Windows taskbar showing icons for File Explorer, Google Chrome, Outlook, Word, and other applications. System tray includes a 100% battery indicator, network signal, and the date/time: 12:28 PM, 2018-07-06.

2018

extensive Serious Harm damage
to juvenile Chinook rearing habitat and putative recently
emerged free-feeding white sturgeon larval rearing habitats

proposed bridge crossing location

location of
extensive
redd (chum)
aggregations observed
in helicopter flight, March
7, 2018

HERRLING ISLAND (lower)



2018

extensive over-island freshet
flooding and Serious Harm of
juvenile Chinook salmon rearing
habitat

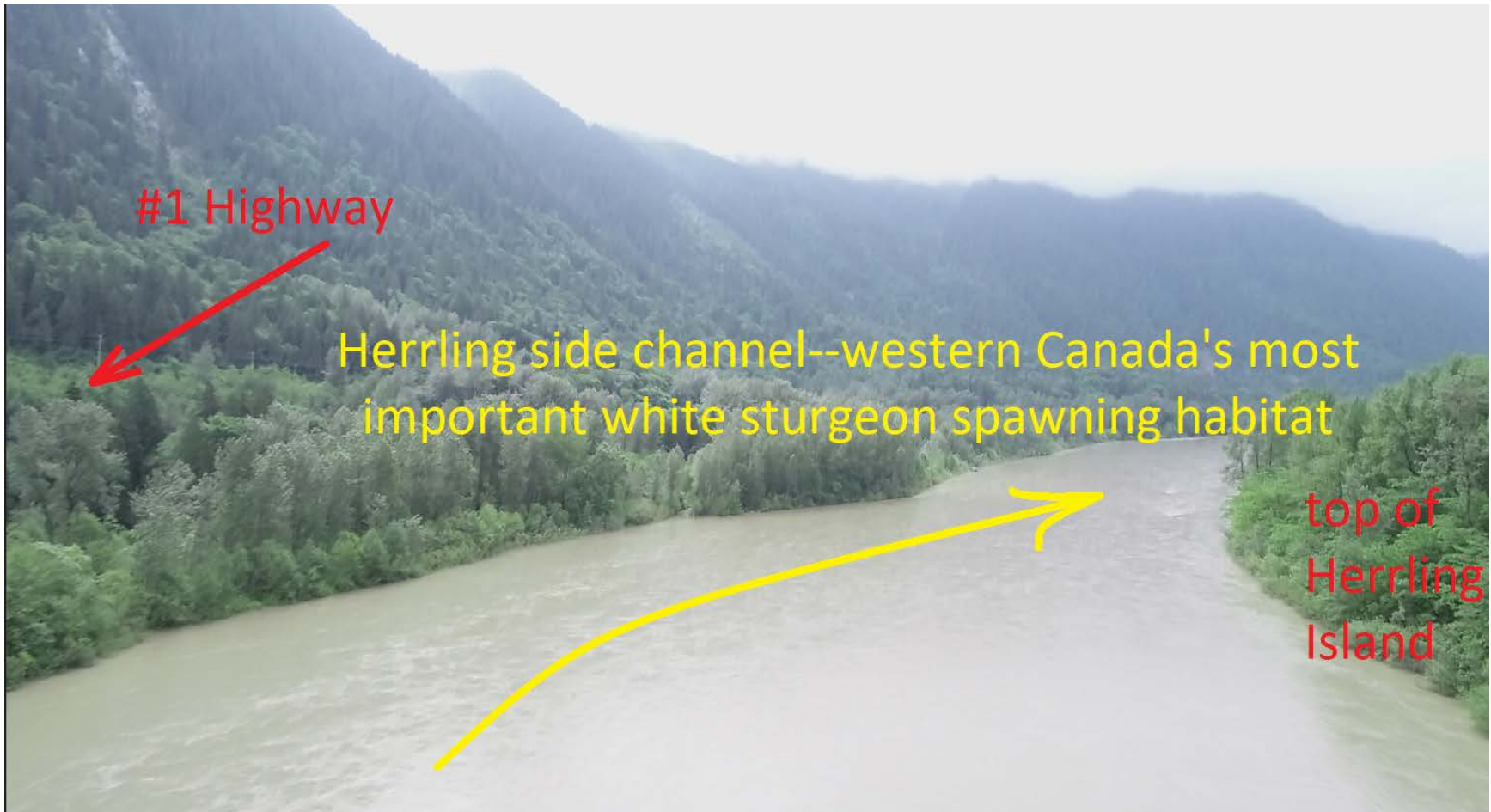
UPPER HERRLING ISLAND



2018

extensive damage to upper Fraser River juvenile Chinook salmon rearing habitat

HERRLING ISLAND (mid)



#1 Highway

Herrling side channel--western Canada's most important white sturgeon spawning habitat

top of
Herrling
Island



8/17/2016

2016

CAREY ISLAND

Google Earth

Tour Guide



2003

Imagery Date: 8/17/2016 49°12'44.87" N 121°51'18.59" W elev 30 m eye alt 3.33 km



2017

extensive upper Fraser juvenile Chinook rearing during freshet over-island flooding

extensive upper Fraser juvenile Chinook rearing during freshet over-island flooding

CAREY ISLAND

Jespersion Channel-- extensive White Sturgeon spawning, incubation and early rearing (freshet period), chum salmon spawning, and cutthroat trout rearing and juvenile Chinook rearing

Tour Guide

2003

Imagery Date: 7/28/2017 49°12'44.87" N 121°51'18.59" W elev 30 m eye alt 3.33 km

Google Earth

2018

extensive Serious Harm damage to juvenile Chinook salmon rearing habitat

CAREY ISLAND (lower)





2018

over-island flow and habitats used by juvenile Chinook salmon
impacted by vegetation clearing

CAREY ISLAND (upper)

6/12/2015

2015

STRAWBERRY ISLAND

Image © 2013 DigitalGlobe

Ruler

Line Path Polygon Circle 3D path 3D polygon

Measure the distance between multiple points on the ground

Length: 3.23 Kilometers

Show Elevation Profile

Mouse Navigation

Save Clear

Google Earth

Tour Guide

Imagery Date: 6/8/2015 49°08'50.88" N 122°10'04.88" W elev 27 m eye alt 2.48 km

2017

Nicomen Slough

critical juvenile white sturgeon freshet period rearing habitat

extensive top-of island upper Fraser and Harrison River juvenile Chinook and Harrison sockeye rearing habitat during freshet flooding

Bert Brink Ecological Reserve

STRAWBERRY ISLAND

Fraser River

Ruler **RIPARIAN CLEARING**

Line Path Polygon Circle 3D path 3D polygon

Measure the distance between multiple points on the ground

Length: 3.23 Kilometers

Show Elevation Profile

Mouse Navigation

Save Clear

Google Earth

Guide

2004

Imagery Date: 7/28/2017 49°08'50.88" N 122°10'04.88" W elev 27 m eye alt 2.48 km



**STRAWBERRY ISLAND
FRESHET 2018
DISCHARGE 10,600
CUBIC METERS PER
SECOND AT HOPE WSC
HYDROMETRIC STATION**

**Fraser
River**

Nicomen Slough

**known juvenile
white sturgeon habitat**

**extensivley damaged wetted
areas comprise extra-ordinary
juvenile Chinook and sockeye
salmon rearing habitat**

STRAWBERRY ISLAND FRESHET 2018

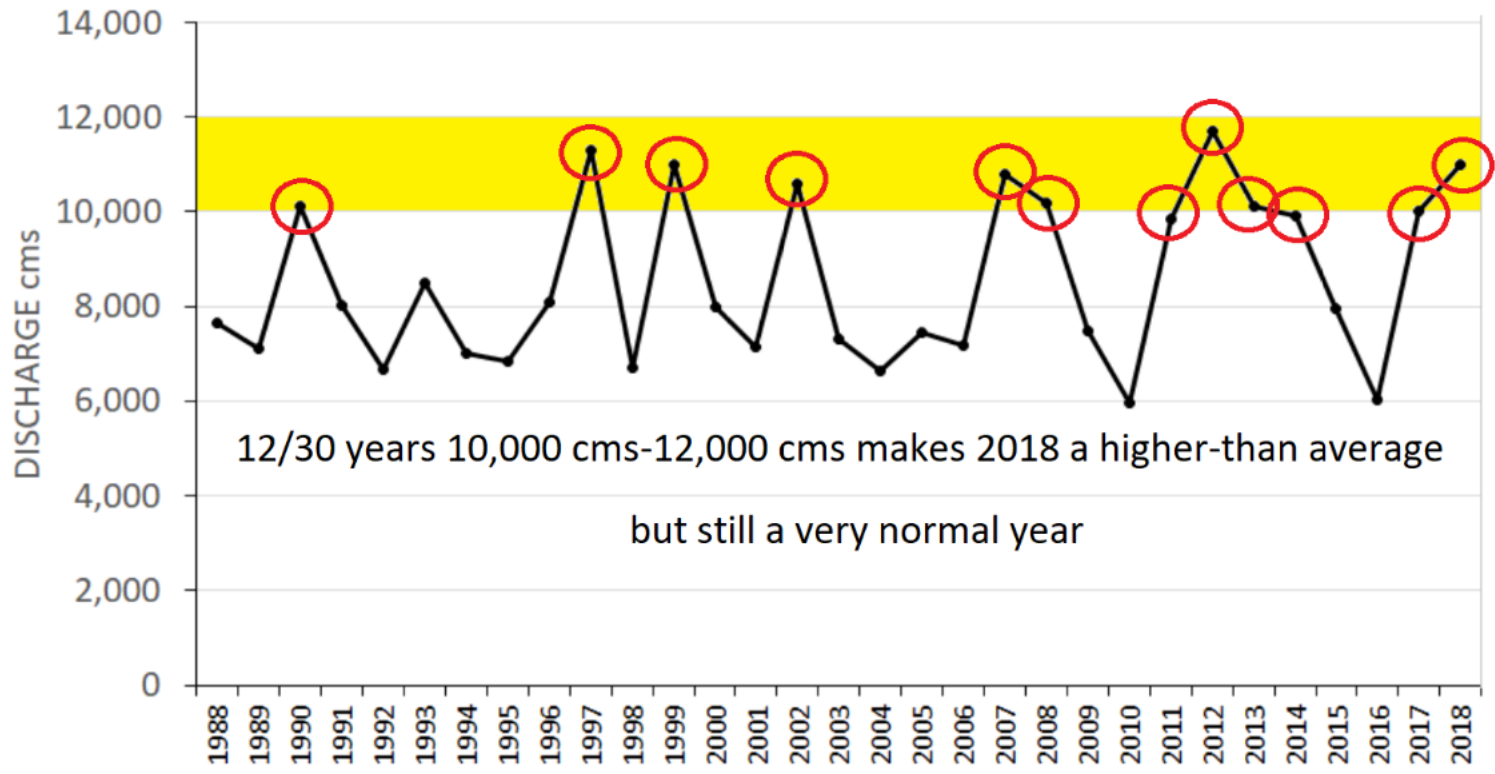


OBLIQUE VIEW

TOP VIEW

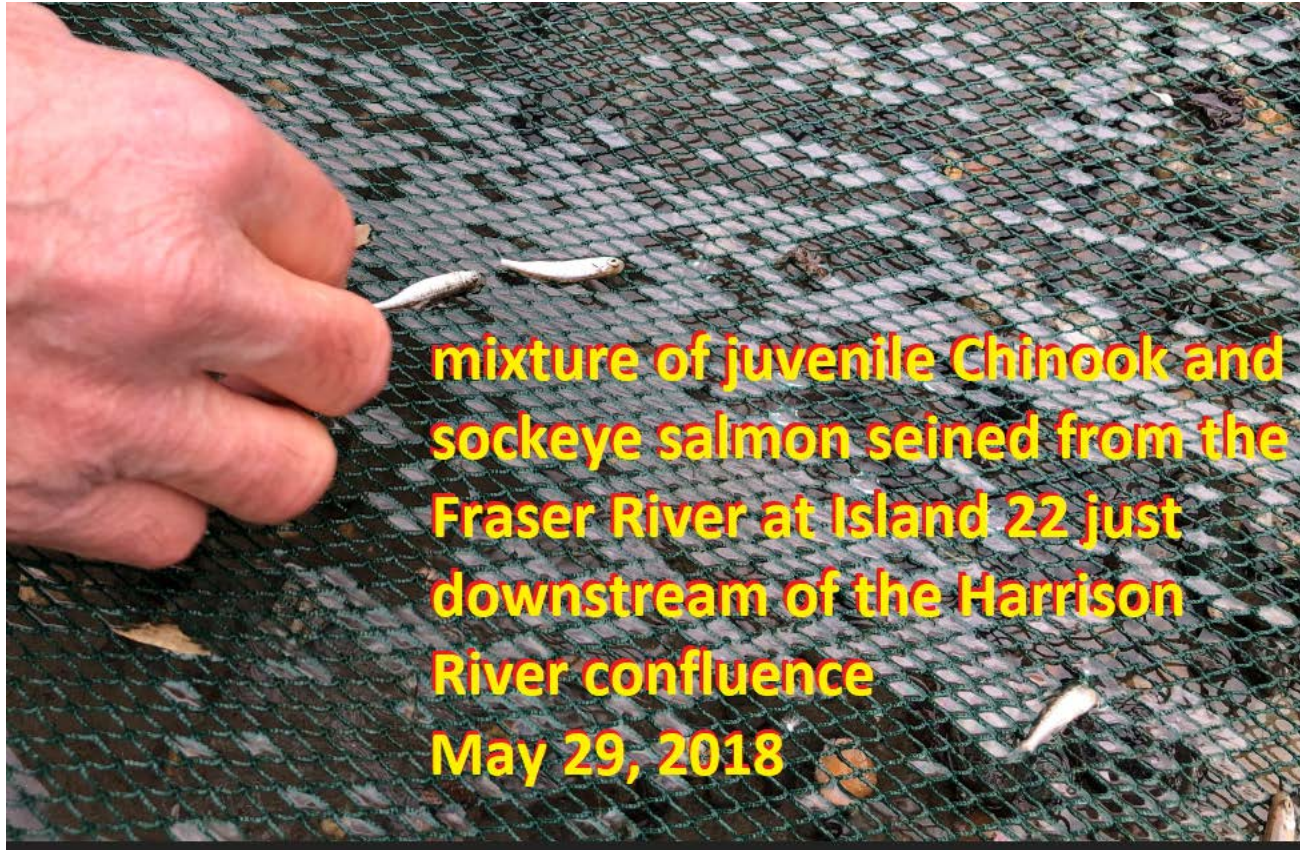
large volumes of wood waste left within the flood perimeter by the land clearing

Fraser River Peak Flows at Hope WSC hydrometric station



Fraser River seining, May 29, 2018





**mixture of juvenile Chinook and
sockeye salmon seined from the
Fraser River at Island 22 just
downstream of the Harrison
River confluence
May 29, 2018**

upper Fraser River juvenile Chinook salmon seined at boat launch near Agassiz May 29, 2018

