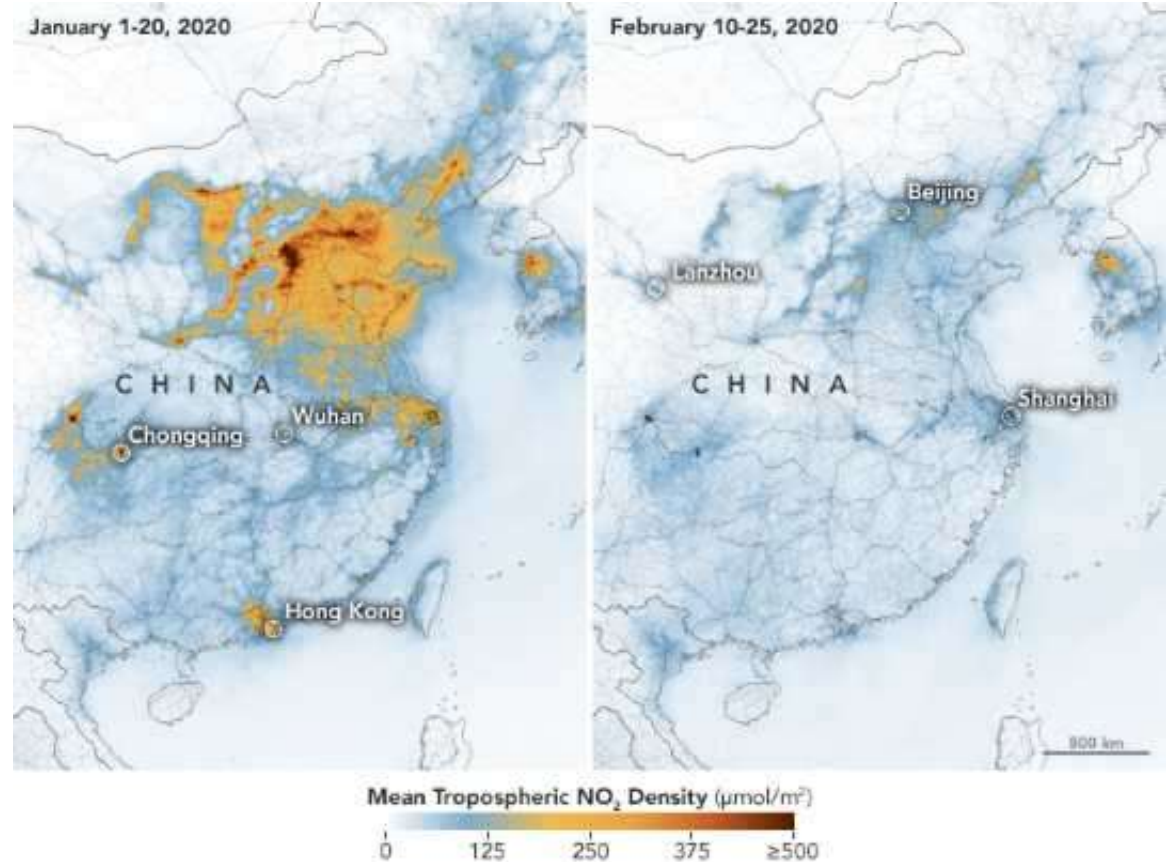


Environmental Change – Oct 21, 2020

- Kyle
- Serenah
- Teal
- Mackenzie M
- Gavin
- Mackenzie H
- Daniel
- Kyra
- Chris
- Dylan
- Brook
- Hayley
- Tyler

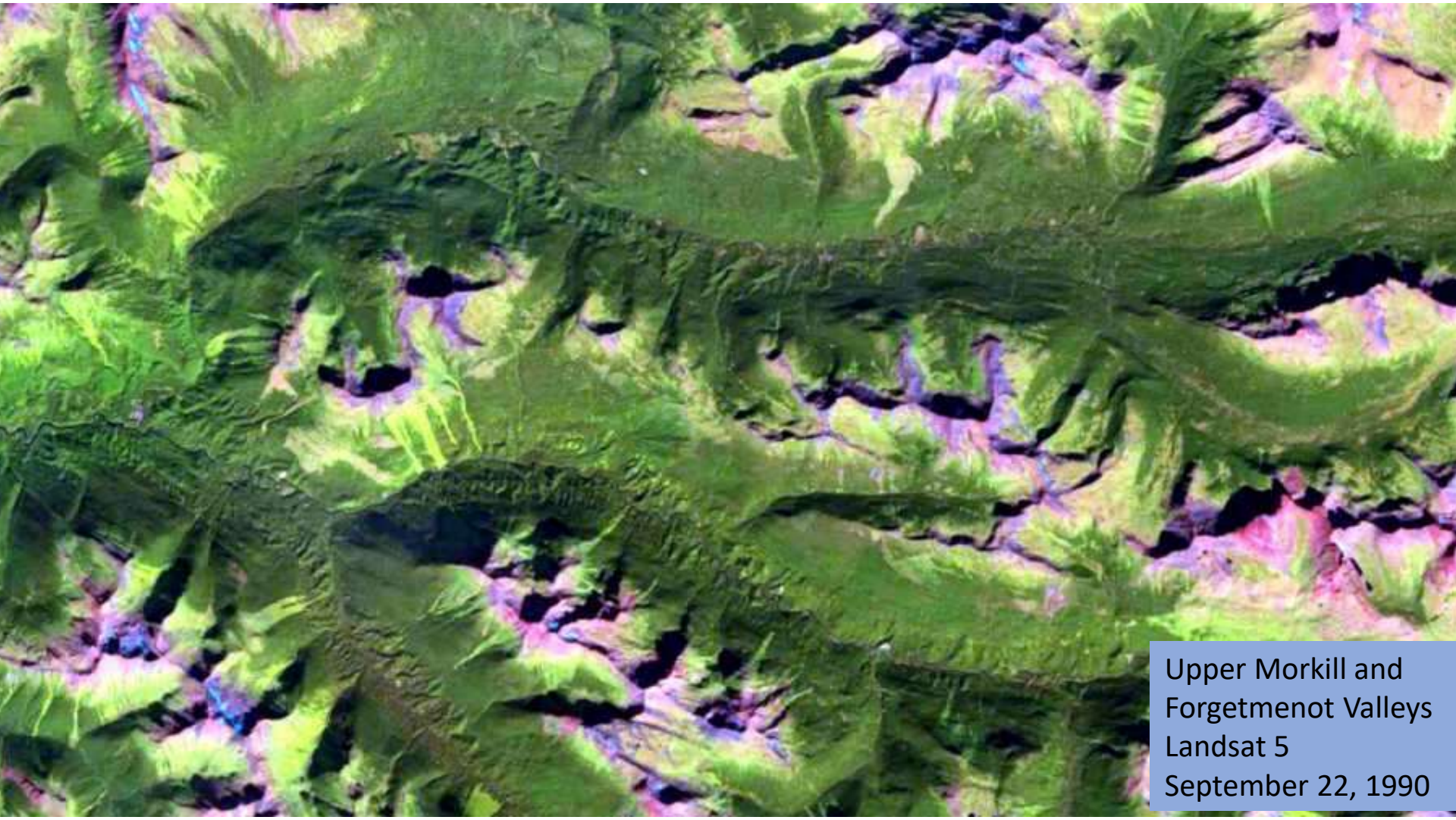




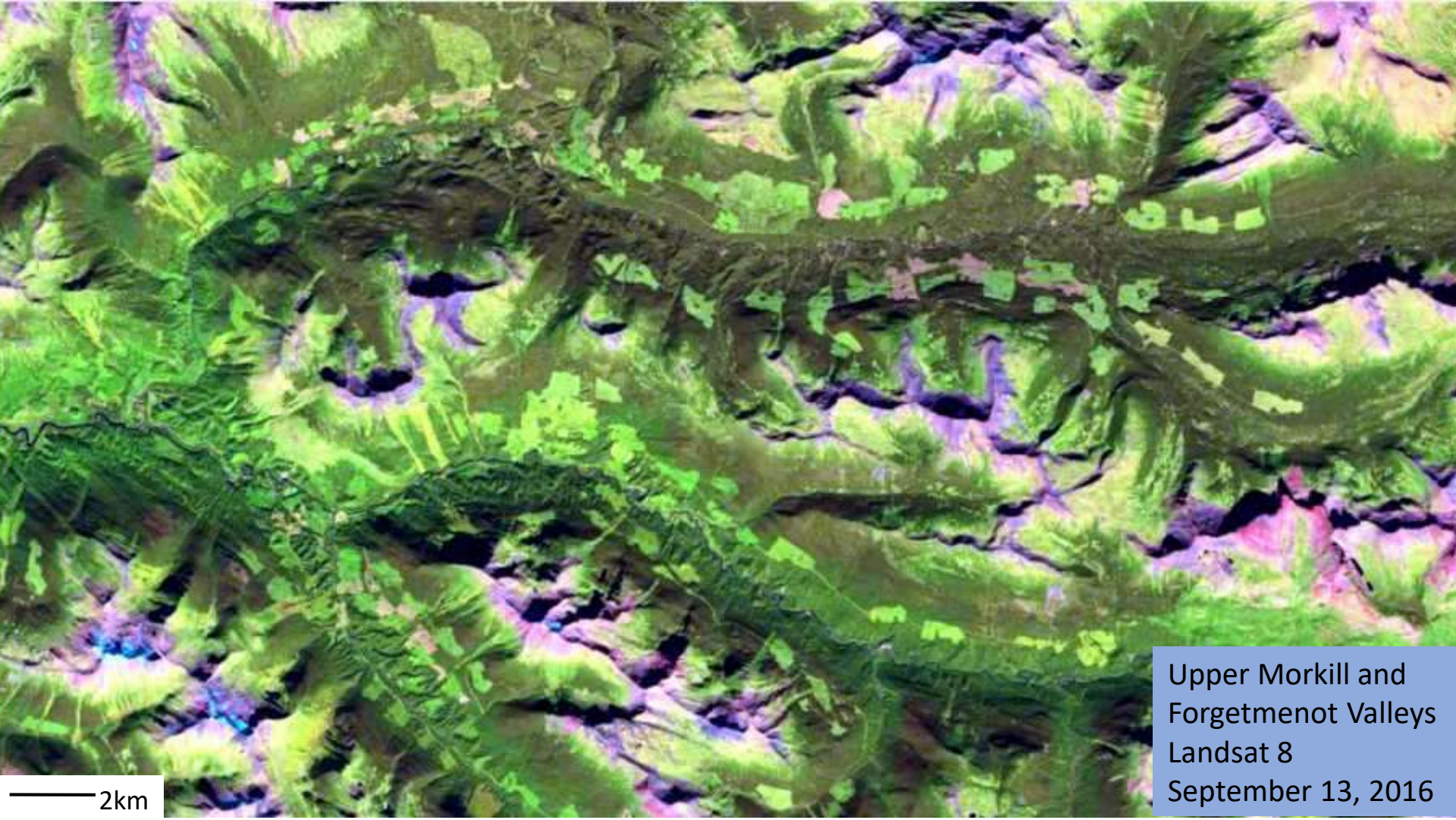
Logging in the Morkill and Forgetmenot Valleys

Daniel Haag

The Morkill and Forgetmenot valleys are located within the Canadian Rocky Mountains, directly east of Crescent Spur BC. The combination of rich soil and species composition rich in Spruce and Cedar makes the timber in these valleys very valuable. In the early 1990's, Carrier Lumber began developing forest service roads to access this timber. Since then, the Morkill and Forgetmenot have become one of Carrier's biggest sources of timber within the Robson Valley Timber Supply Area. The slides show the extent of forestry activities within these valleys.



Upper Morkill and
Forgetmenot Valleys
Landsat 5
September 22, 1990



Upper Morkill and
Forgetmenot Valleys
Landsat 8
September 13, 2016

— 2km

The Disappearing Aral Sea

Kyra Egan

.First became interested in this area during a project on fast fashion

–Growing cotton takes a lot of water

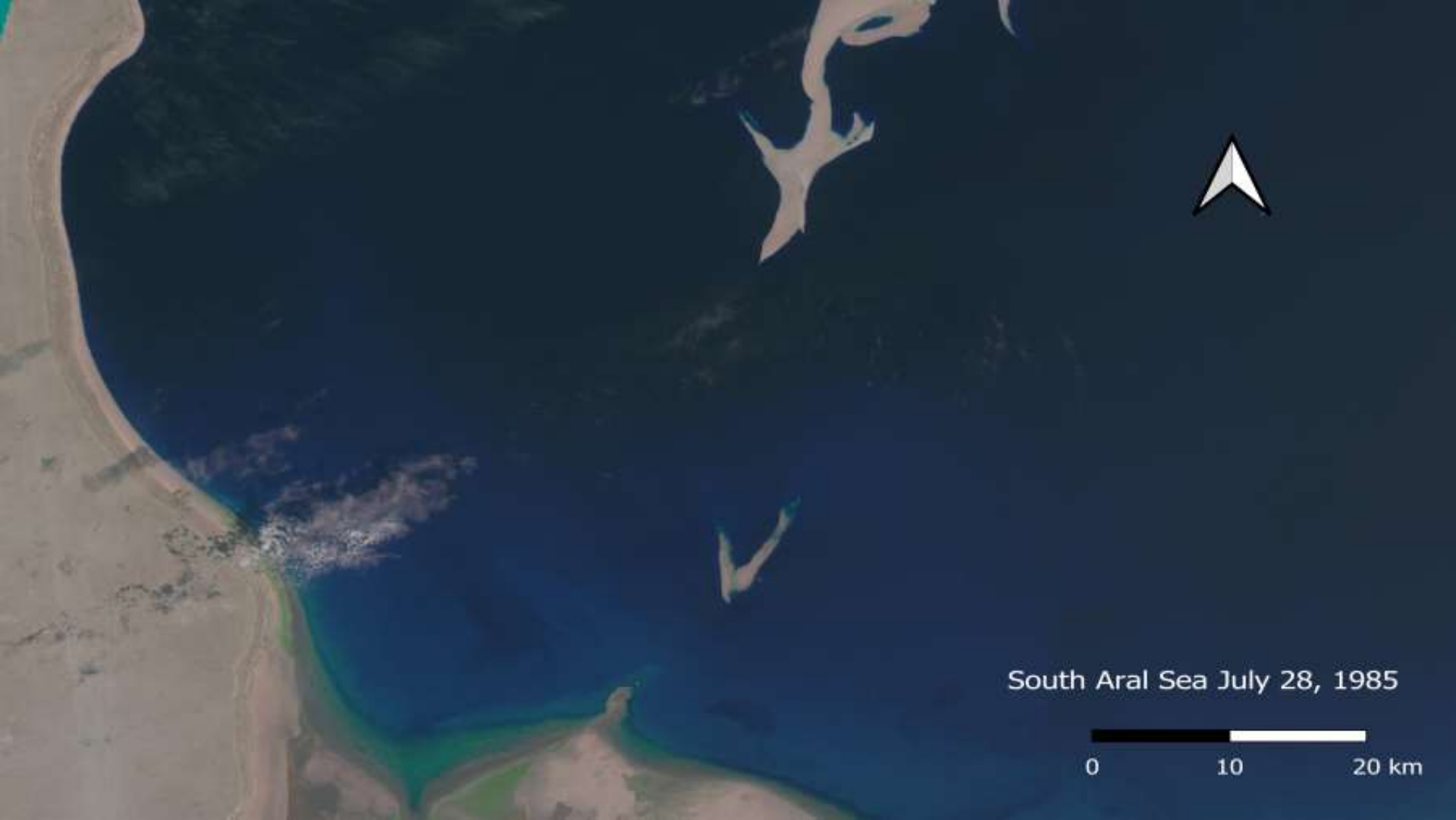
.Located between Southern Uzbekistan and Northern Kazakhstan

.Has been decreasing in size since the 1960s due to the Soviet Union diverting water for cotton and wheat crop irrigation

.Parts of the sea are now considered to be a desert

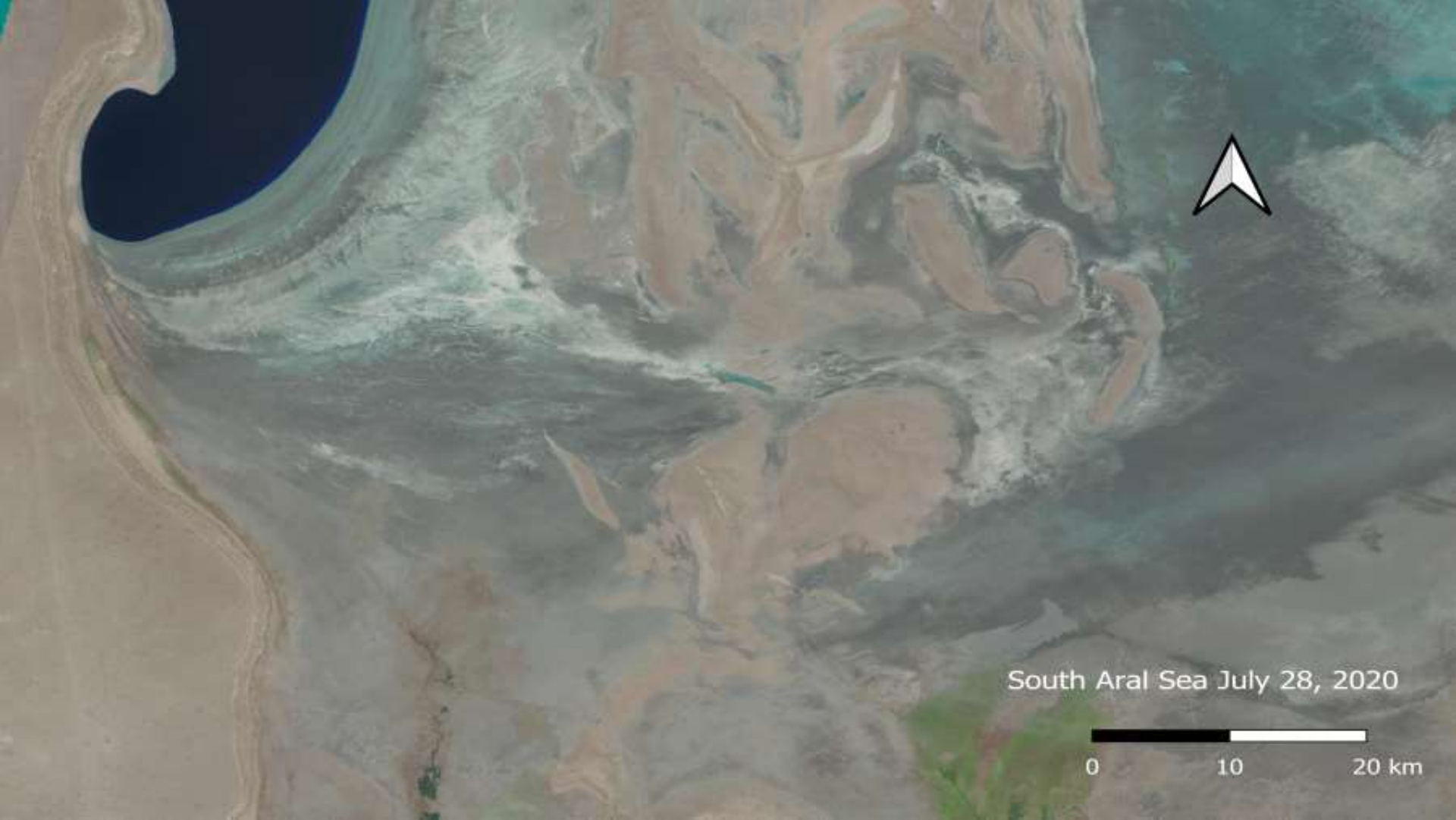
.Efforts to revitalize the sea started in 2005, with positive results for the northern part of the Aral Sea. Due to the size of the sea, only the southern part will be demonstrated

Source: <https://www.nationalgeographic.com/news/2014/10/141001-aral-sea-shrinking-drought-water-environment/#close>



South Aral Sea July 28, 1985





South Aral Sea July 28, 2020

0 10 20 km

Mount St. Helens Eruption

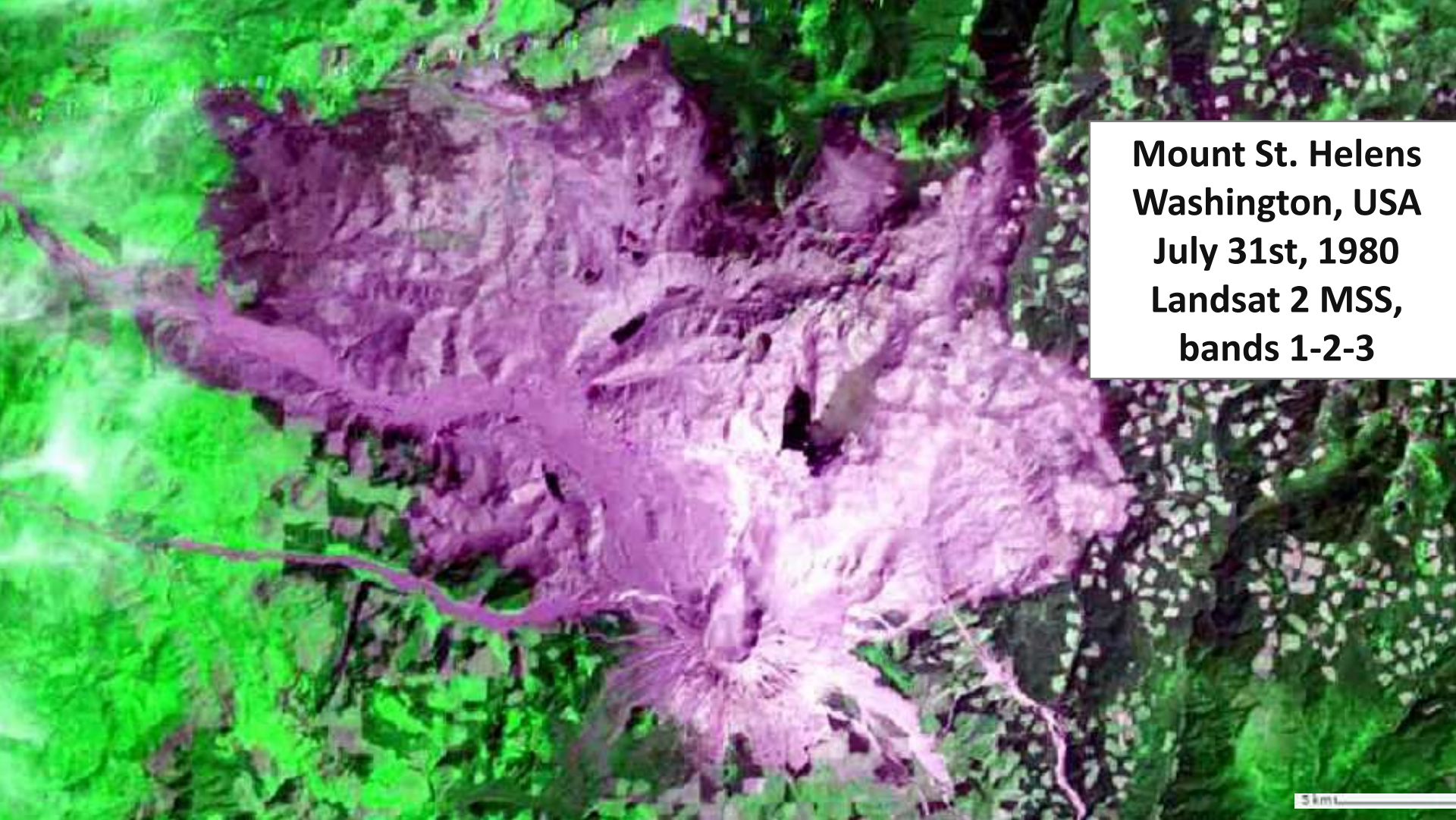
Chris Coleman

- .May 18th, 1980 – Washington, USA
- .Mount St. Helens erupted, causing the northern side of the mountain to collapse.
- .It is one of the largest known debris avalanches.
- .Personal Interest:
 - .I've always been fascinated by plate tectonics and volcanoes. It's like popping the cork on a cosmic bottle!





**Mount St. Helens
Washington, USA
July 19th, 1979
Landsat 2 MSS,
bands 1-2-3**



**Mount St. Helens
Washington, USA
July 31st, 1980
Landsat 2 MSS,
bands 1-2-3**

Whistler ski/mountain bike resort

.I wanted to see the growth of Whistler as it is close to home and an interest of mine

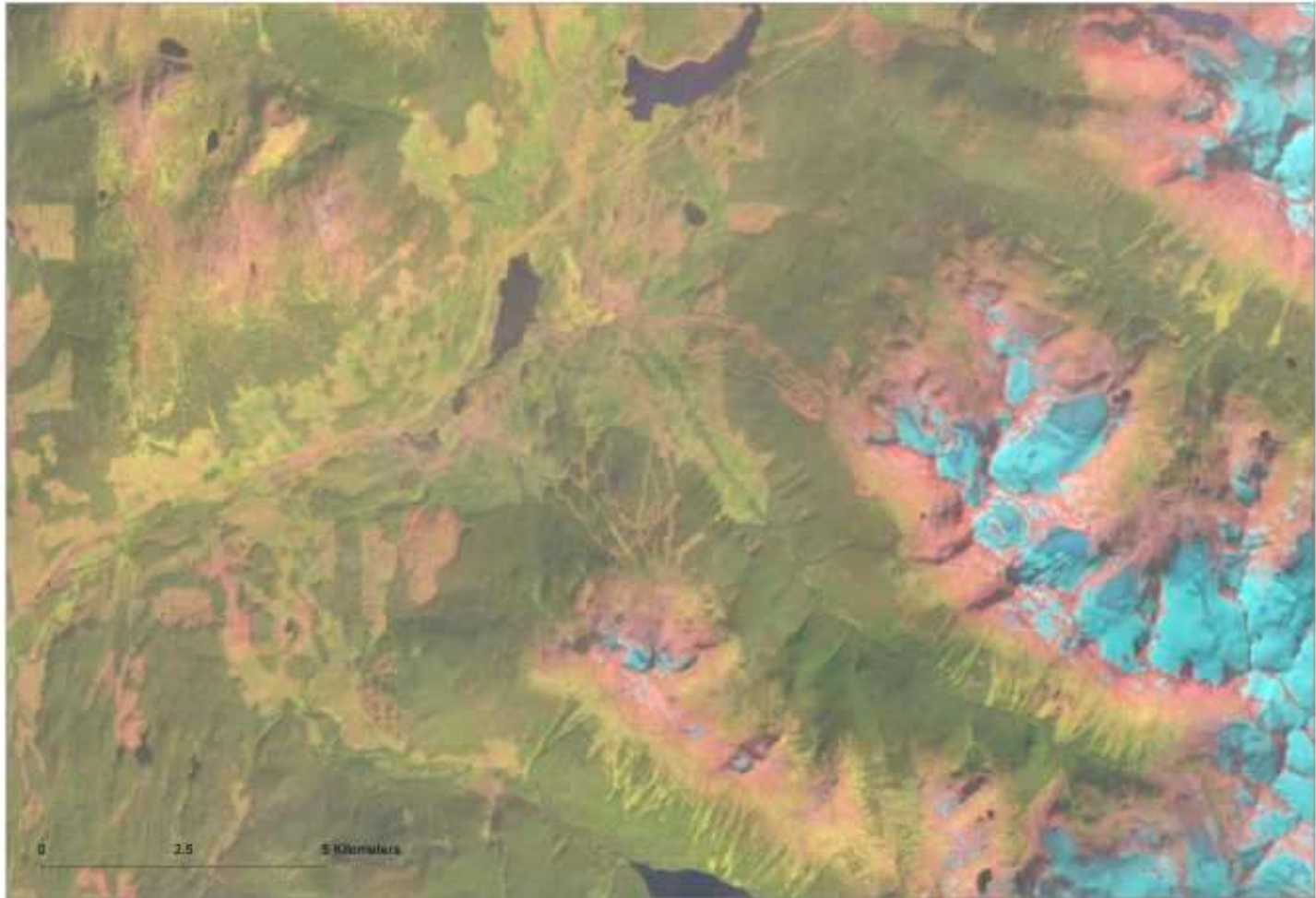
.I love mountain biking/snow boarding so I wanted to see if I could visualize the change and growth of the resort

.The residential area grew significantly. Over this time, many new ski runs, and bike trails were added.

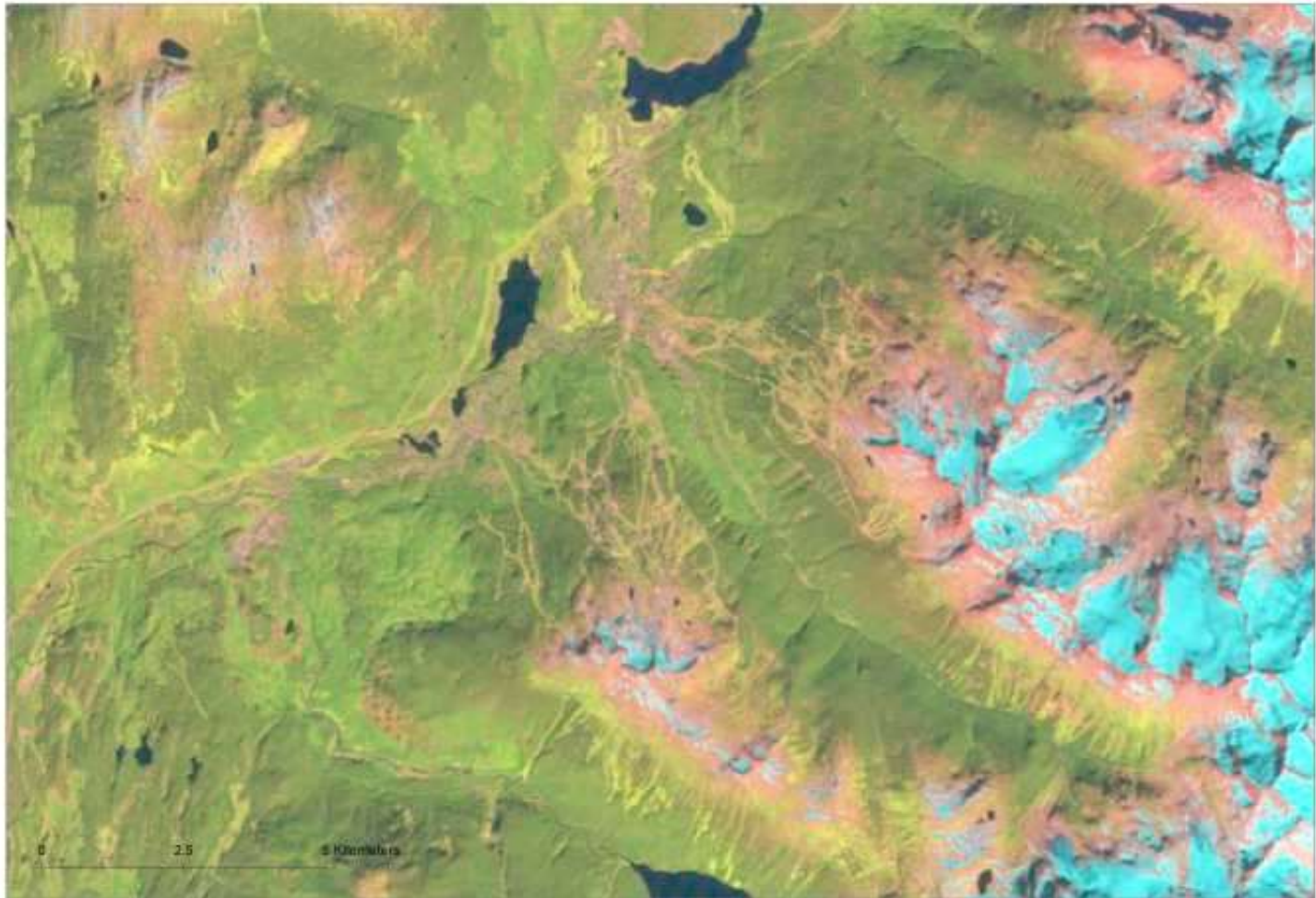
New clear cuts and logging areas were added as well as old clear cuts from the 1980s are filled with new growth.

Dylan Broeke

Whistler, 1984, September 19



Whistler, 2011, September 7



2003 Okanagan Mountain Park Fire

Brook Allard

- .This fire started in the Okanagan Mountain Provincial Park southwest of the city of Kelowna, British Columbia Canada.
- .The fire was started on August 16, 2003 around 4 a.m. by a lightning strike.
- .The fire was fuelled by winds and dry vegetation, eventually creating a firestorm (maintains its own wind system). The fire burned 25,915 hectares burning most of the trees in the park.
- .I lived in Kelowna for 13 years. I was not living in Kelowna when the fire occurred but had family in town.
- .Landsat 5 imagery was limited, so my before and after images are two years apart. Most of the difference seen is the change from coniferous forest to deciduous brush. Effects of the fire can still be seen today.

Landsat 5

July 17, 2003



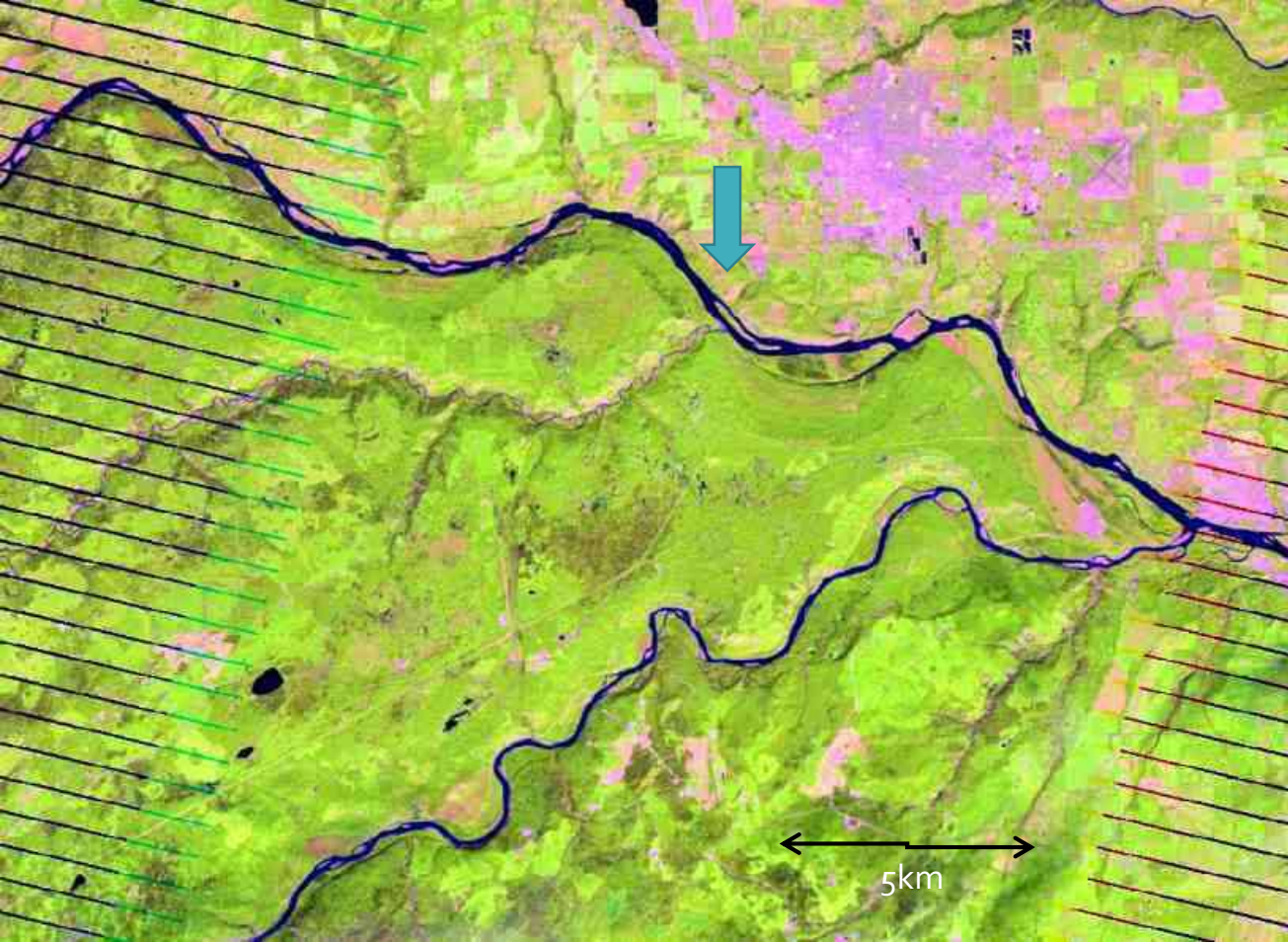
6.5 3.25 0 6.5 Kilometers

Landsat 5

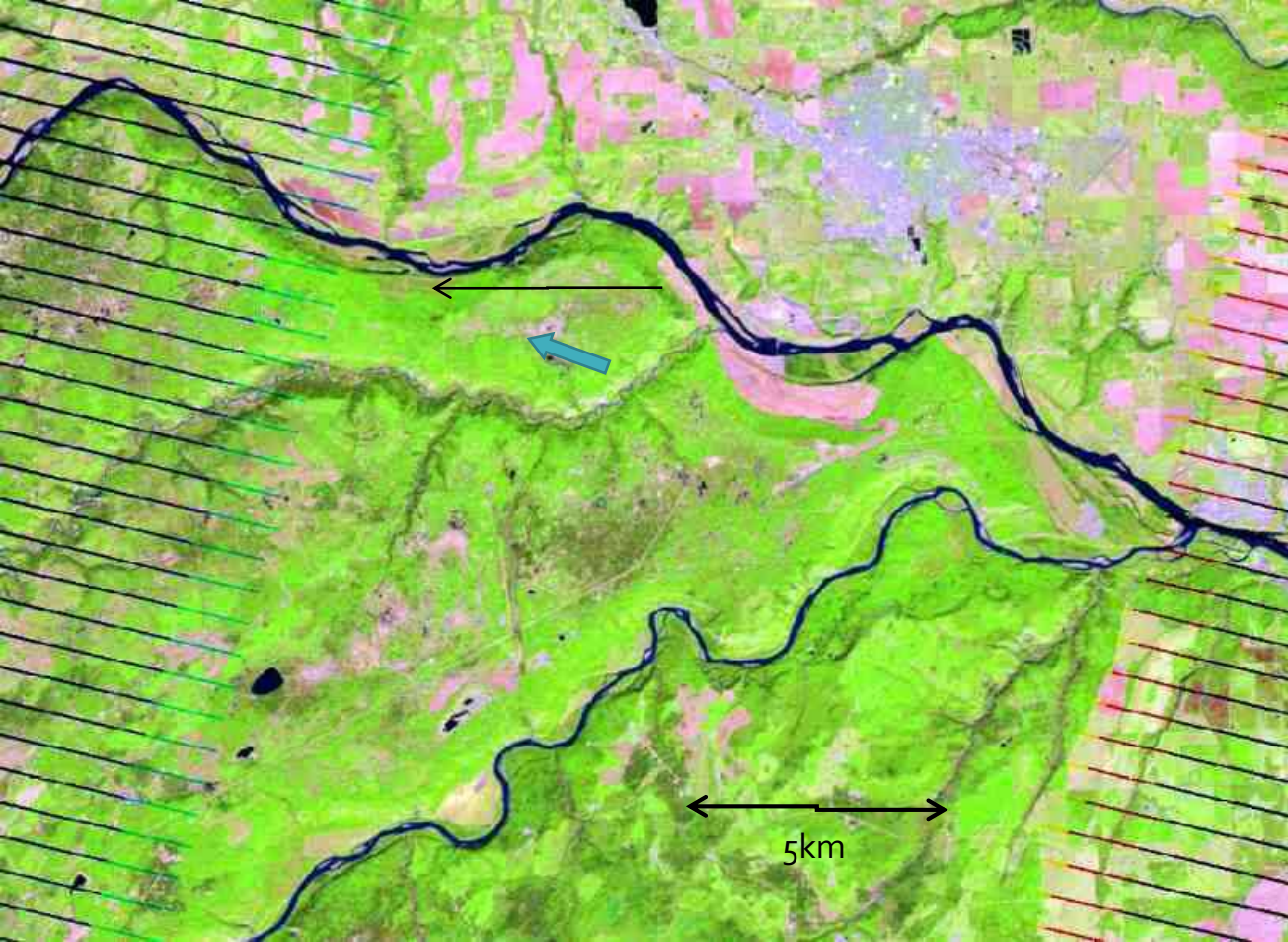
August 8, 2006



6.5 3.25 0 6.5 Kilometers



Landsat 7:
June 29, **2015**
Peace River / Fort
Saint John, BC



Landsat 7
May 14, **2016**
Peace River/Moberly River
Site c Dam
-Flooding to commence 2024
– over 100km of river valley
and agricultural land
-Ongoing Legal battle with
west Moberly First Nations
-BC hydro began construction
without consultation to get
to the point of no return
-Lots of construction was
completed in a short amount
of time

Palm Oil Plantations in Borneo

After seeing palm oil in the ingredients list of almost everything I ate, I decided to look at what it even is.

Hint: It's not oil from coconut trees like I thought.

Although it's incredibly efficient as an oil crop, the continuous expanding of operations in very volatile land is concerning. Eg. Borneo has ~8,000,000 acres of Palm Oil crops, roughly the size of Switzerland.

The next slides demonstrate a small look at what the dubious 'Big Palm' is up to. In the Limbang district in Borneo (Pictured to the right), indigenous populations in Borneo have been displaced through clearing of forests.



Comparison of global oil yields by crop plant
Oil yields in tonnes per hectare (t/ha)



Borneo,
Limbang

LANDSAT5
June,2020



Borneo,
Limbang

LANDSAT8
Feb, 2020

