Kyle

Serenah

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

Environmental Change – Oct 21, 2020



Mount Robson Provincial Park Glacier Retreat

Kyle Whittles

- Located in the Canadian Rockies
- •Over a 27 year period the glaciers have been diminishing with some gone all together
- •The smaller glaciers with lower elevation are decreasing especially fast
- •This is likely due to the changing climate and increasing temperatures
- •These parks are great for hiking/backpacking and being able to explore glaciers, but as time goes on these glaciers are becoming smaller and smaller and one day they may not even exist for hikers to enjoy



Mount Robson Provincial Park & The Canadian Rockies

July, 1990



Mount Robson Provincial Park & The Canadian Rockies

July, 2017

12 km

36 km

1991 Volcanic Eruption of Mount Pinatubo in the Philippines Serenah Roy

Approximate latitude and longitude of Mount Pinatubo is 15.1426 N, 120.3495 E Images from Landsat 5

- Series of eruptions with the largest occurring June 15, 1991
- Rainy season + ash + no vegetation = runoff and mudflows, which created new streams
- •Today there is a lake in the caldera and it's a tourist attraction
- Vegetation grew back nicely in less than ten years according to Google Timelapse



Mount Pinatubo March 25, 1990 10km

10.

Mount Pinatubo January 26, 1992 10km

THE N

Environmental Change: Sechelt, BC.

Teal Randle | GEOG 357 | Oct. 2020

In 1988, Lehigh Hanson opened a gravel pit in the community of Sechelt. Since then, it has been a significant job provider in Sechelt, especially to the Shishalh people on whose lands its located. There has been ongoing expansion to the mine since then, including three tailings ponds visible in the image, and it is now the largest open pit gravel mine in North America. Aggregates are exported from the mine to freighters via a conveyor belt that runs under the highway.





Sechelt, BC July 29, 2020 Largest open-pit gravel mine in NA Landsat 8

Teck Coal Mine Growth

Mackenzie McLean

 Located in the Southeastern corner of BC, near the BC/AB border – The Elk Valley

Major coal mining operations

–Greenhills: started ~1983

–Fording River: started~1971

Landsat 5 (1996) and Landsat 8 (2020) images to show the growth of Elk Valley Coal Mines

Went from 4,200 ha to 7,800 ha

.Castle expansion??

Has a big impact on the economy and the environment







Chernobyl Nuclear Disaster

- Nuclear accident that occurred on April 26 1986, at the No. 4 reactor in the Chernobyl Nuclear Power Plant, Pripyat, Ukraine
- Considered the worst nuclear disaster in history
- •Estimated 9000-16,000 fatalities (direct and indirect)
- •The area now supports more life than before, with plant and animal populations flourishing



Landsat-5. Pripyat, Ukraine, and surrounding area (51.40, 30.06) June 6 1985



2km

Landsat 8. Pripyat, Ukraine, and surrounding area (51.40, 30.06) August 26 2020



Mount Polley was a gold and copper mine, located near the town of Likely, BC

It was operational from 1997-2019

•On August 4, 2014 at 1 am, the tailings pond had a breach, releasing "17 million cubic meters of water and 8 million cubic meters of tailings"

Mackenzie Hamm



Text: Environment, M. (2018, September 20). Mount Polley Mine Tailing Dam Breach. Retrieved October 20, 2020, from https://www2.gov.bc.ca/gov/content/environment/air-land-water/spills-environmental-emergencies/spill-incidents/past-spill-incidents/mt-polley

Map: Morton, D. (2014, August 05). Likely-area residents shocked by tailings pond breach. Retrieved October 20, 2020, from https://www.timescolonist.com/news/b-c/likely-area-residents-shocked-by-tailings-pond-breach-1.1295906

Landsat 8 July 29, 2014 Mount Polley Tailings Pond Breach – Likely, BC

BEFORE





AFTER