Bighill Creek State of the Watershed Report, Update

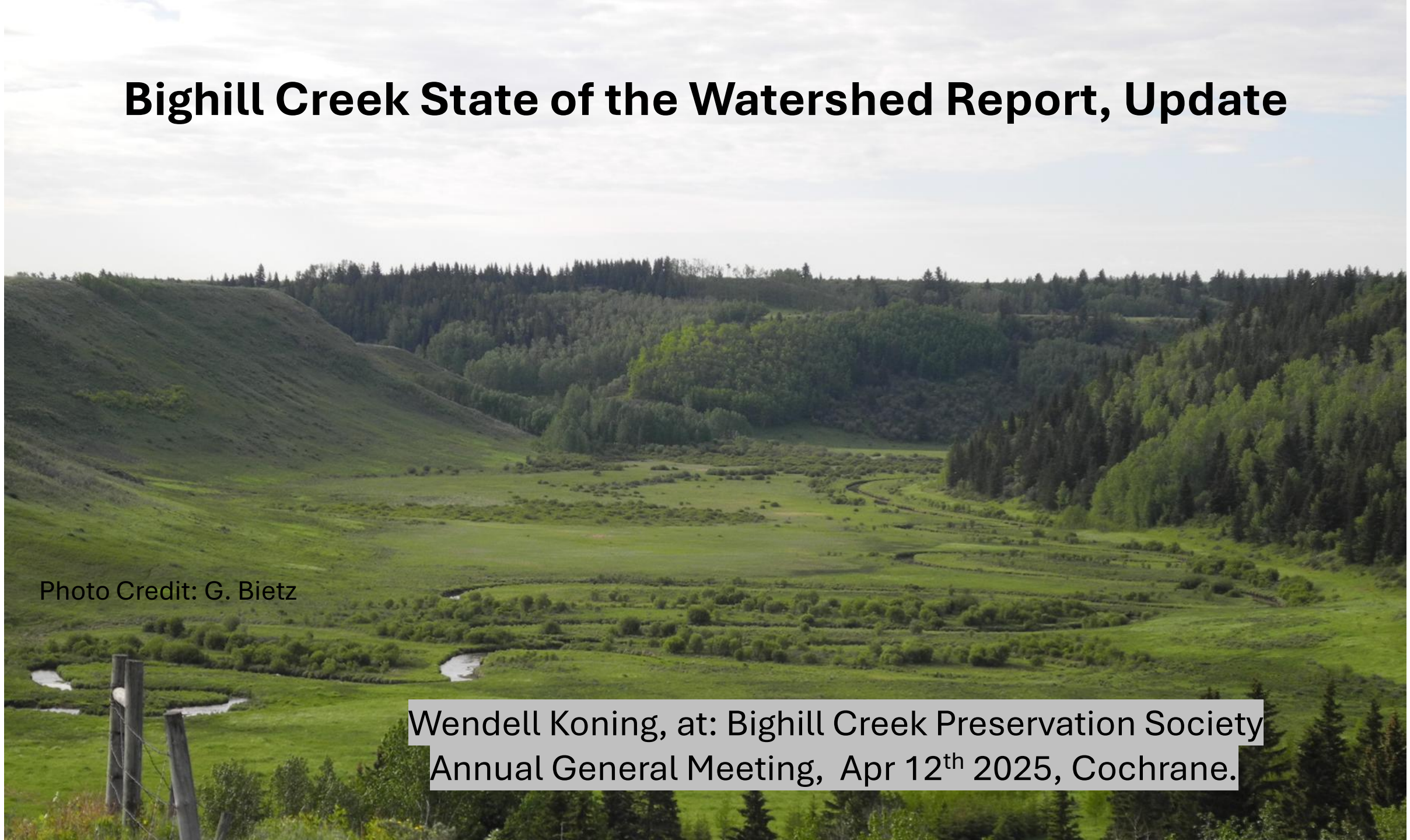


Photo Credit: G. Bietz

Wendell Koning, at: Bighill Creek Preservation Society
Annual General Meeting, Apr 12th 2025, Cochrane.

Outline of Today's Presentation

Brief description of Bighill Cr watershed

Background to initiation of SOW report

BCPS vision, mission, objectives, SOW report

Draft Table of Contents

The role of BRBC in creating the Bighill Creek SOW report, working together

SOW Reporting timeline, future steps

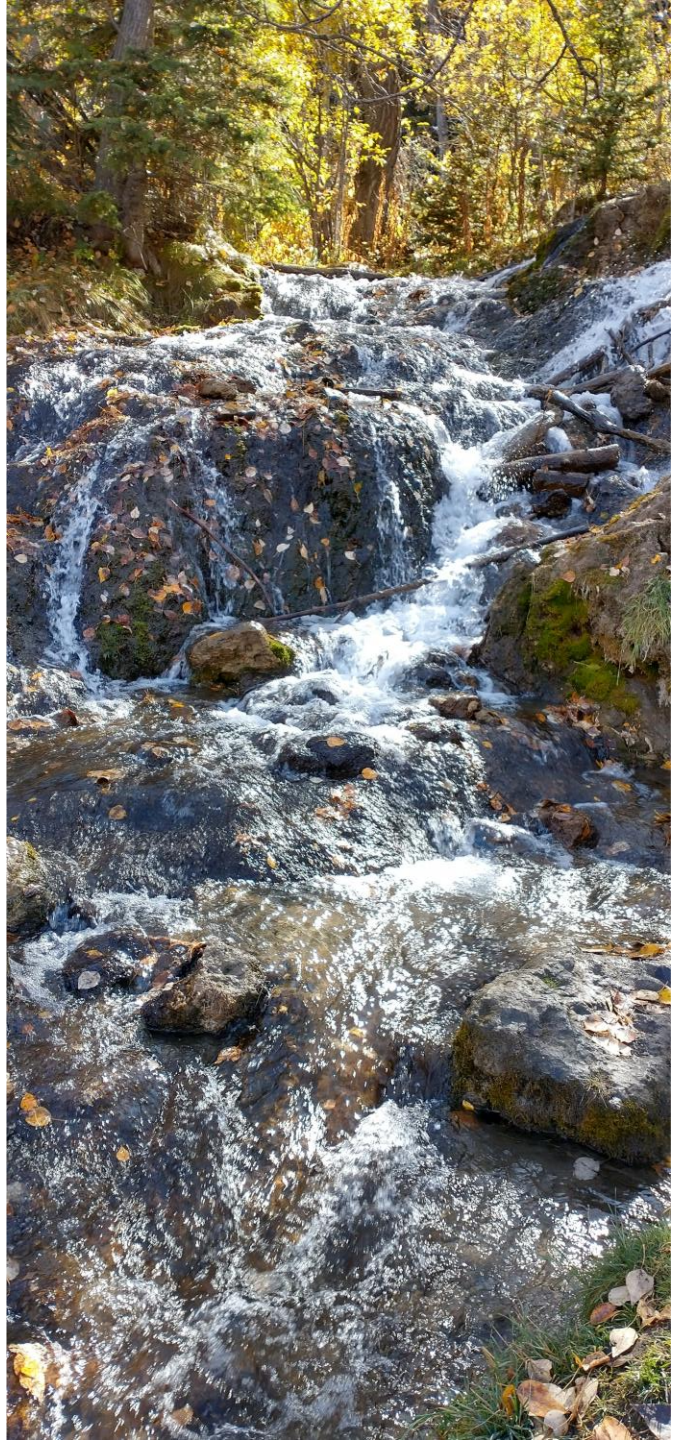
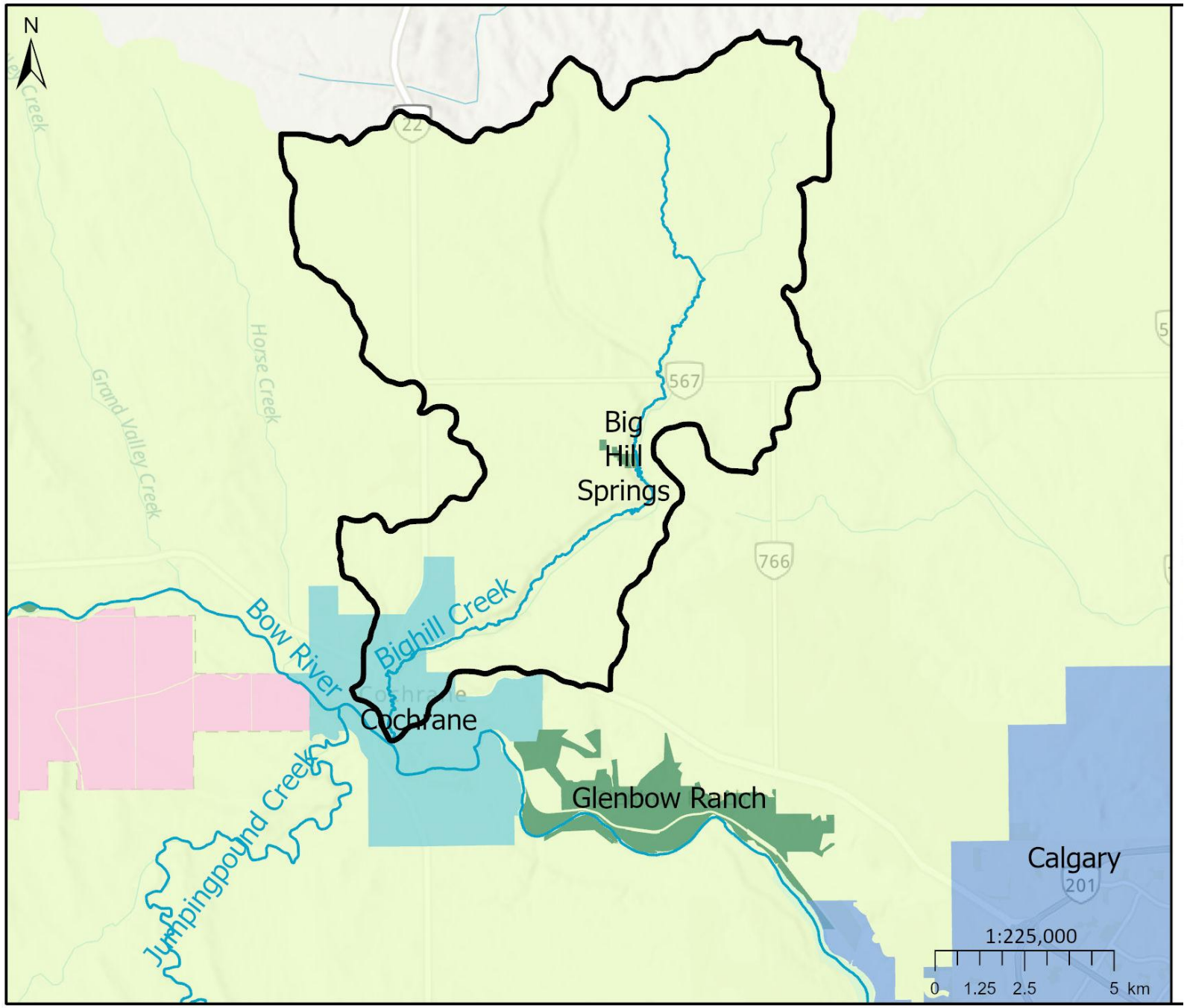
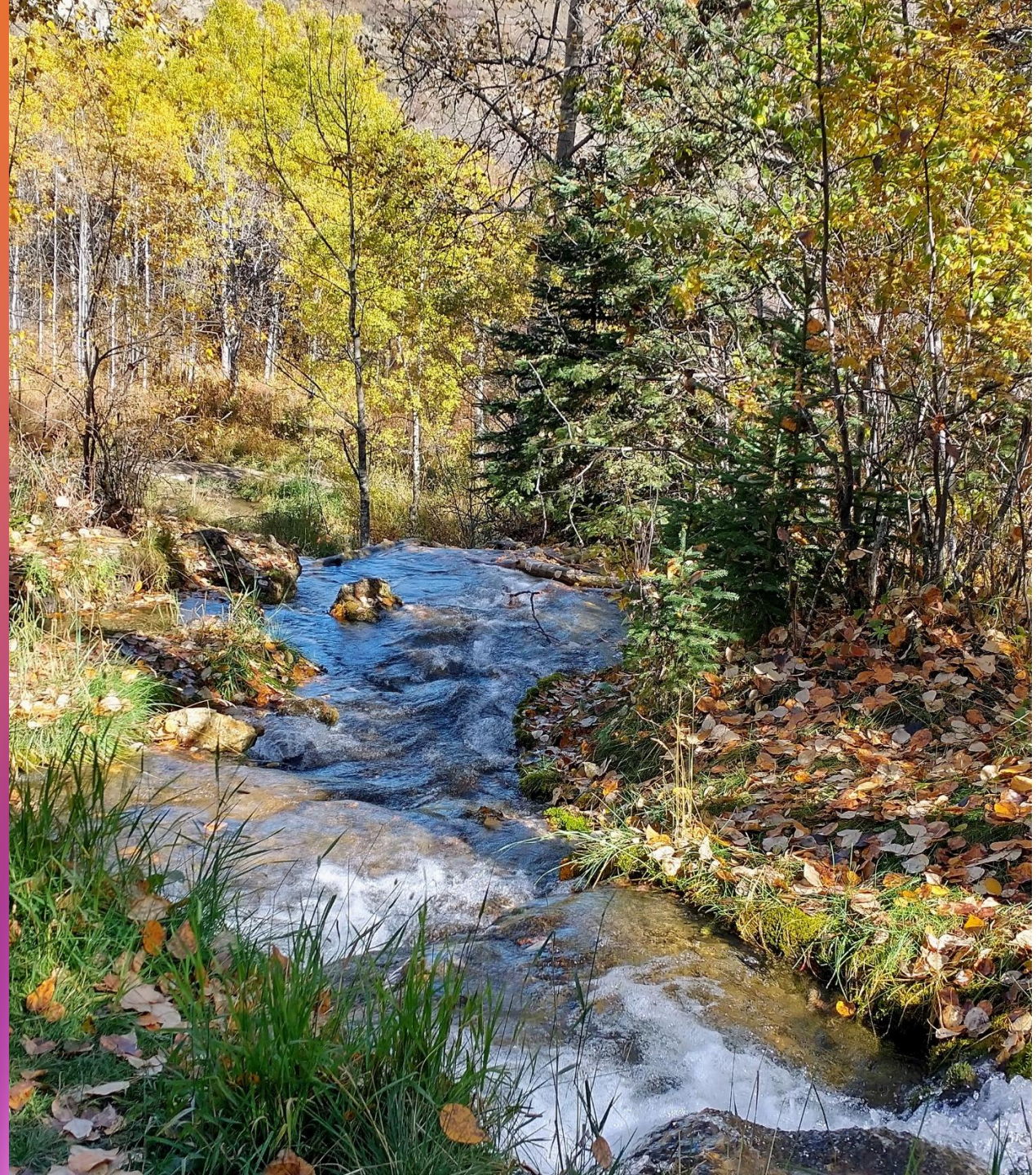


Photo credit: A Dinnendaal, Big Hill Springs Creek

Where is Bighill Creek?





Bighill Creek Preservation Society

- Bighill Creek Preservation Society (a registered entity) is a group of local residents who recognize that ongoing development and population pressure from the town of Cochrane and the surrounding Rocky View County have the potential to significantly erode the many beneficial attributes of the watershed.

Photo credit: A. Dinnendahl, Big Hill Springs Creek

BCPS Mission:

“To ensure the natural and historical values of Bighill Creek Watershed are preserved for this and future generations.”

Photo credit: BCPS website

BCPS Objectives:

- Maintain and enhance the full range of biodiversity including interconnection to the Bow River valley.
- Identify, maintain or improve watershed health, including springs, riparian aspects and water quality.
- Encourage a system of stewardship throughout the watershed.
- Establish a library of the ecological, geological, archaeological and historical data of the Bighill Creek area.
- Educate the public as to the full range of natural and historical values and of their national, provincial and local significance.
- Undertake development of a State of the Watershed report and Implementation Plan.

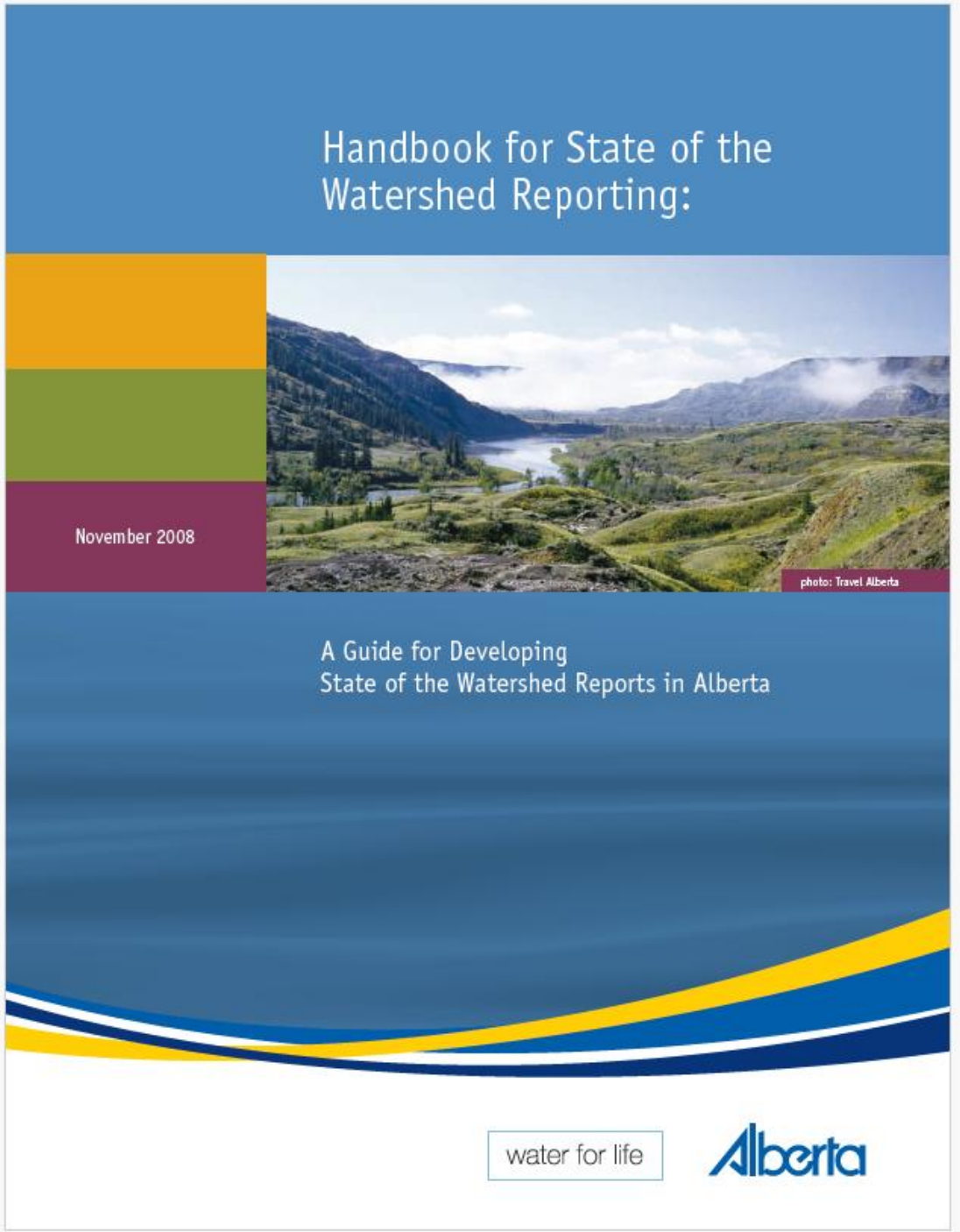
NCC Lake, along RR34 north of Hwy 567

WQ testing, Bighill Cr in winter

- **BCPS Actions for Achieving Objectives:**
  - Plan and institute public access and gateway information in keeping with the Society's mission.
  - Initiate a stewardship program for the watershed, beginning with the established Environmental Reserve and lands downstream as far as Cochrane.
  - Gather existing baseline data and undertake any necessary studies to support a State of the Watershed Report and Implementation Plan
  - Establish partnerships for the planning and development of a State of the Watershed Report *and* its implementation.

Bighill Creek along Ranche Rd. Photo Credit: W. Koning

Handbook for State of the Watershed Reporting: A Guide for Developing State of the Watershed Reports in Alberta. 2008, 89 pp.



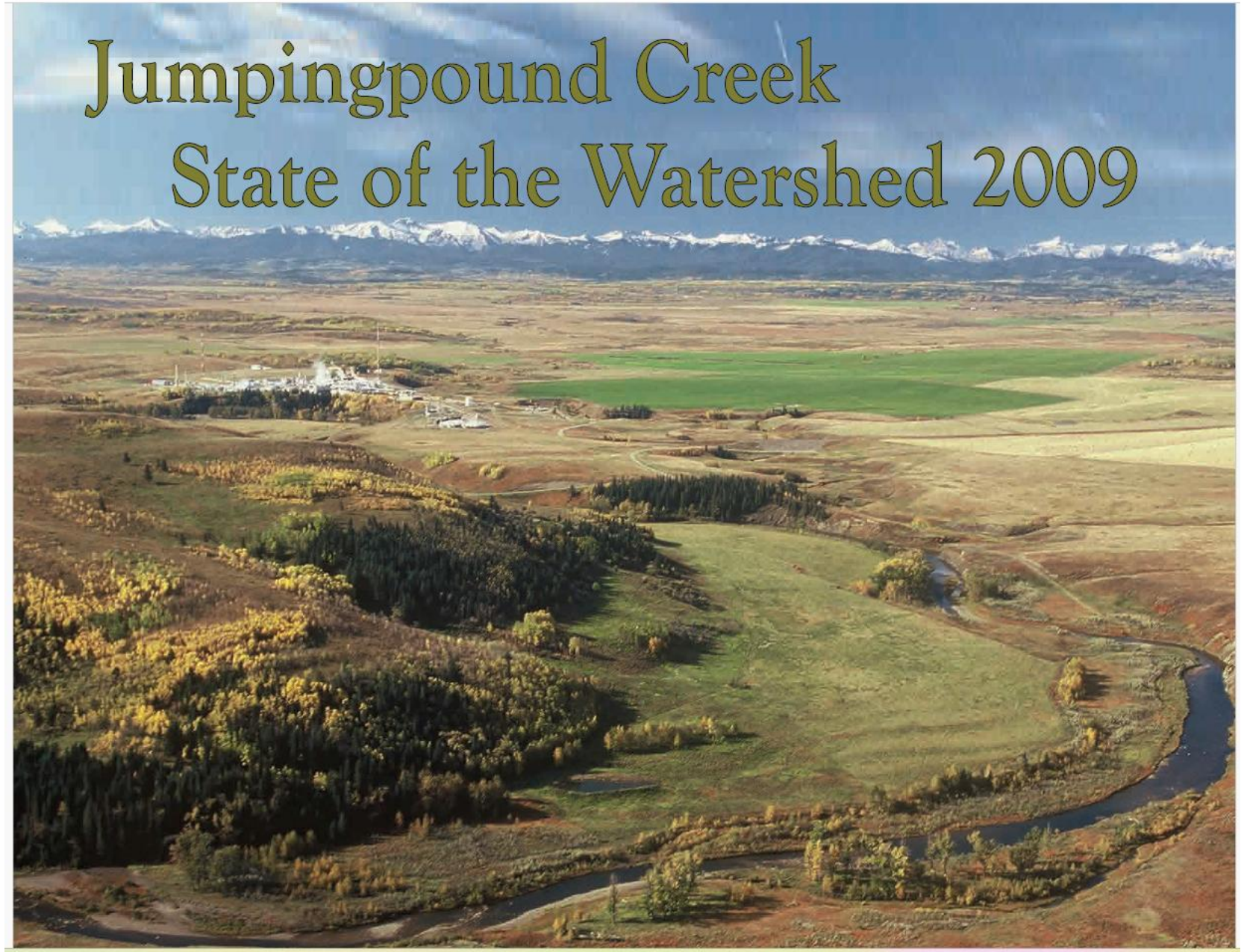
1.1 Purpose of the State of the Watershed Reporting

Getting a clear understanding of the current state of our watershed is an important and insightful exercise as it will help to identify potential problems and concerns in a watershed.
Building a SOW report introduces a basic process that can be undertaken at any scale and/or on any landscape to gather and evaluate information to understand past and current watershed conditions and the influencing factors.

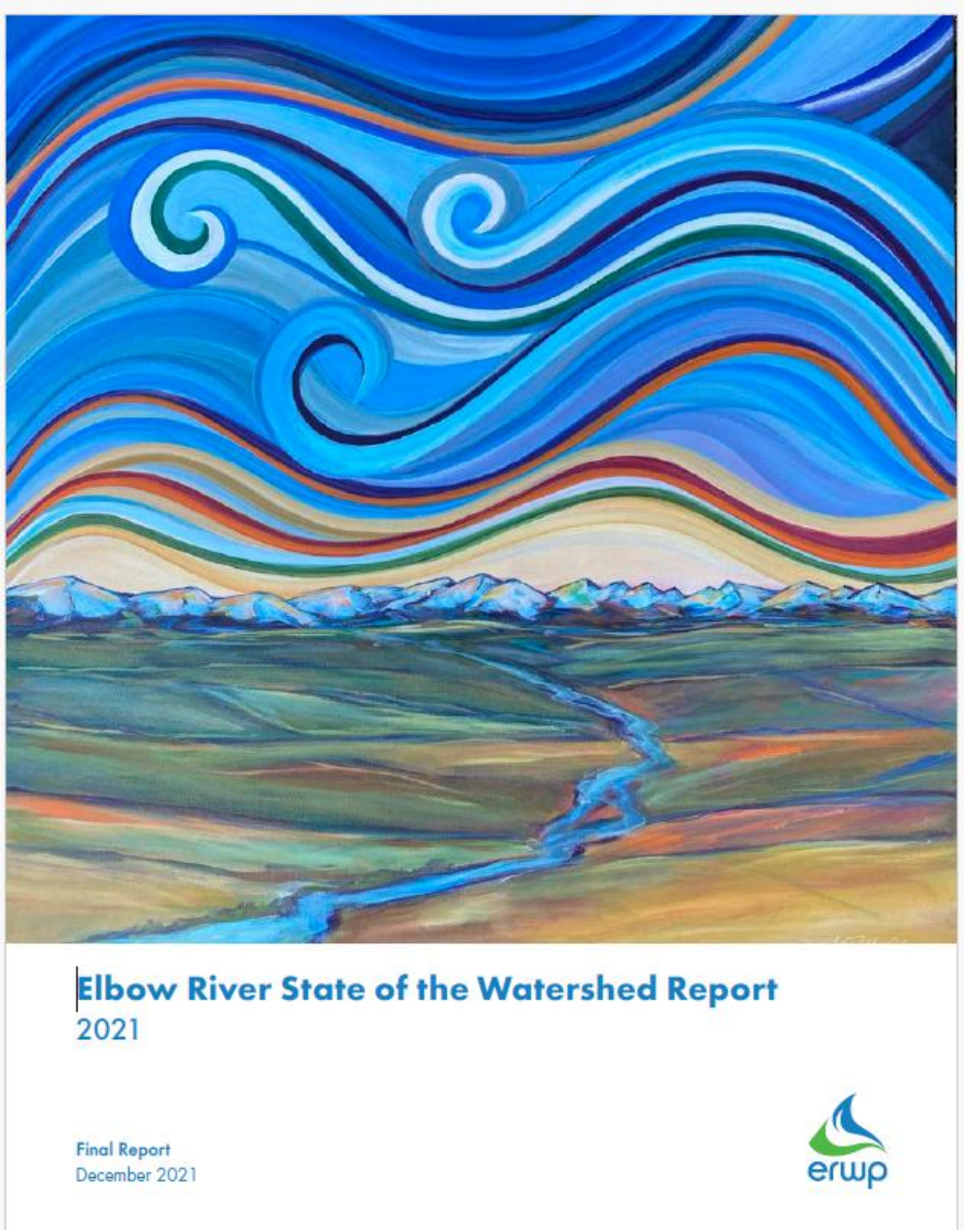
1.2 Intended users of State of Watershed Reporting

The information and guidance described in this State of the Watershed report will be useful to government and agency representatives, consultants, researchers and academics, and other stakeholder groups interested in assessing environmental conditions and setting and achieving environmental outcomes within their watershed.

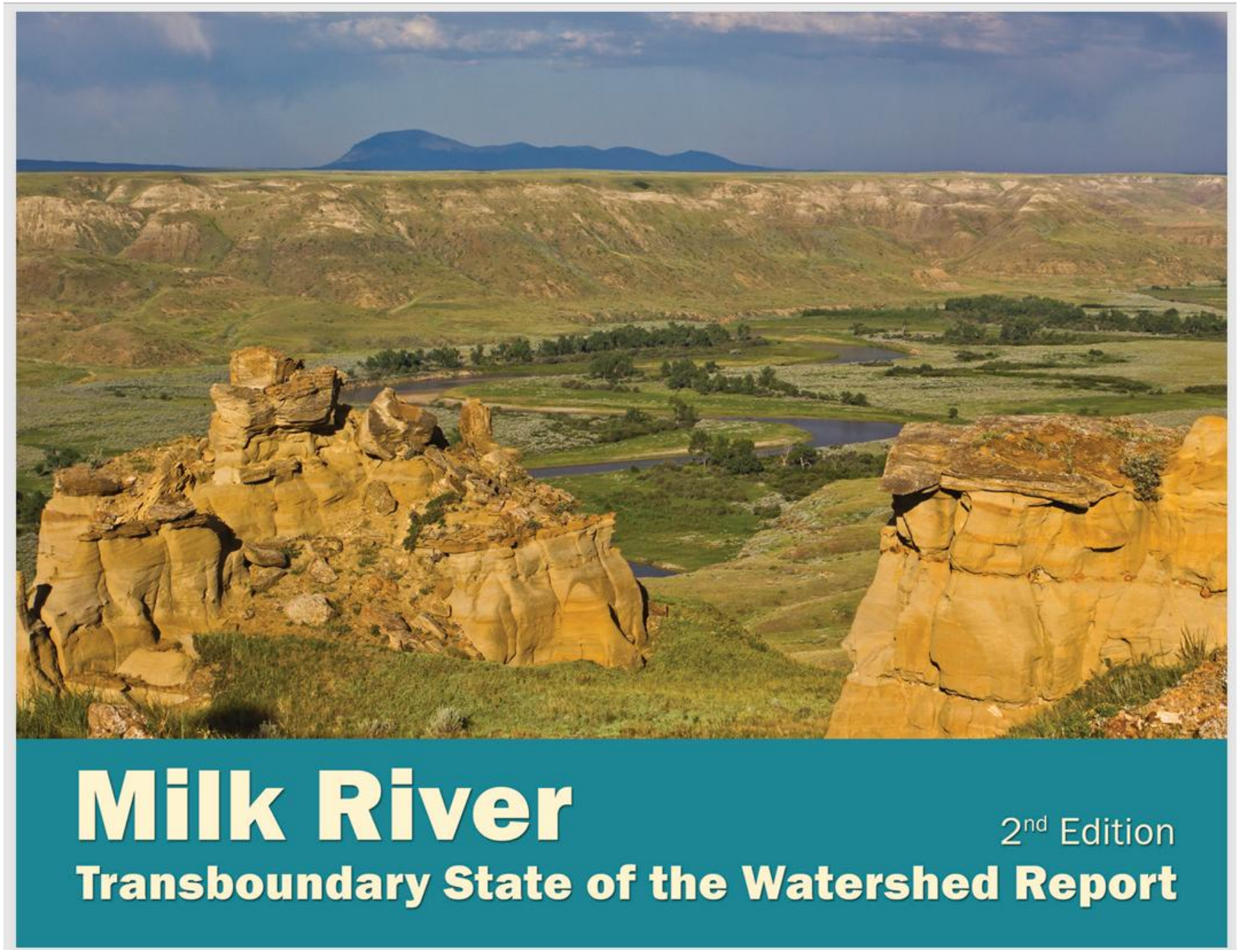
2009, 100 pg



2021, 328 pg

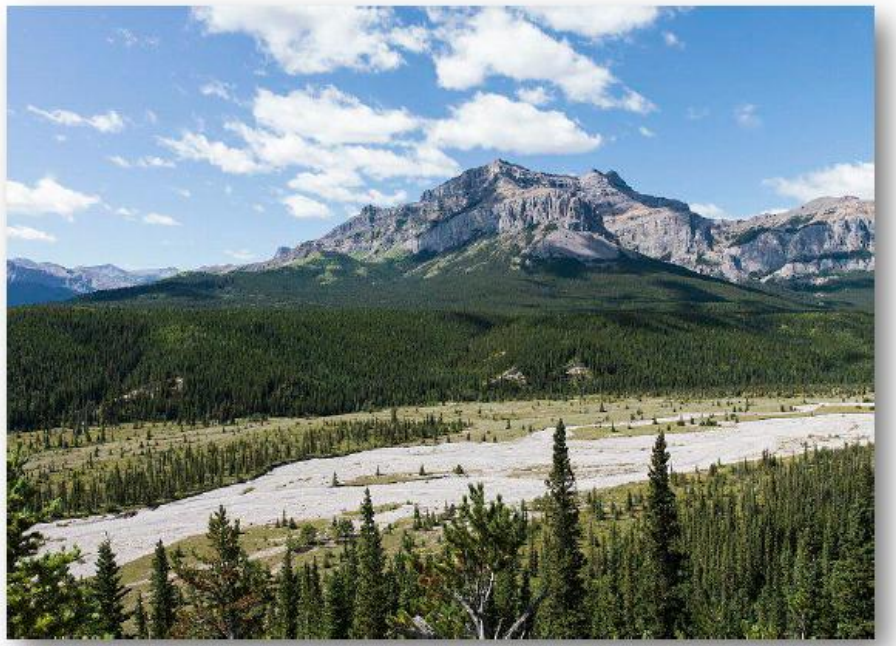

Elbow River State of the Watershed Report
2021
Final Report
December 2021
erwp

2013, 248 pg


Milk River
2nd Edition
Transboundary State of the Watershed Report

219 pg

GHOST RIVER
STATE OF THE WATERSHED REPORT
2018



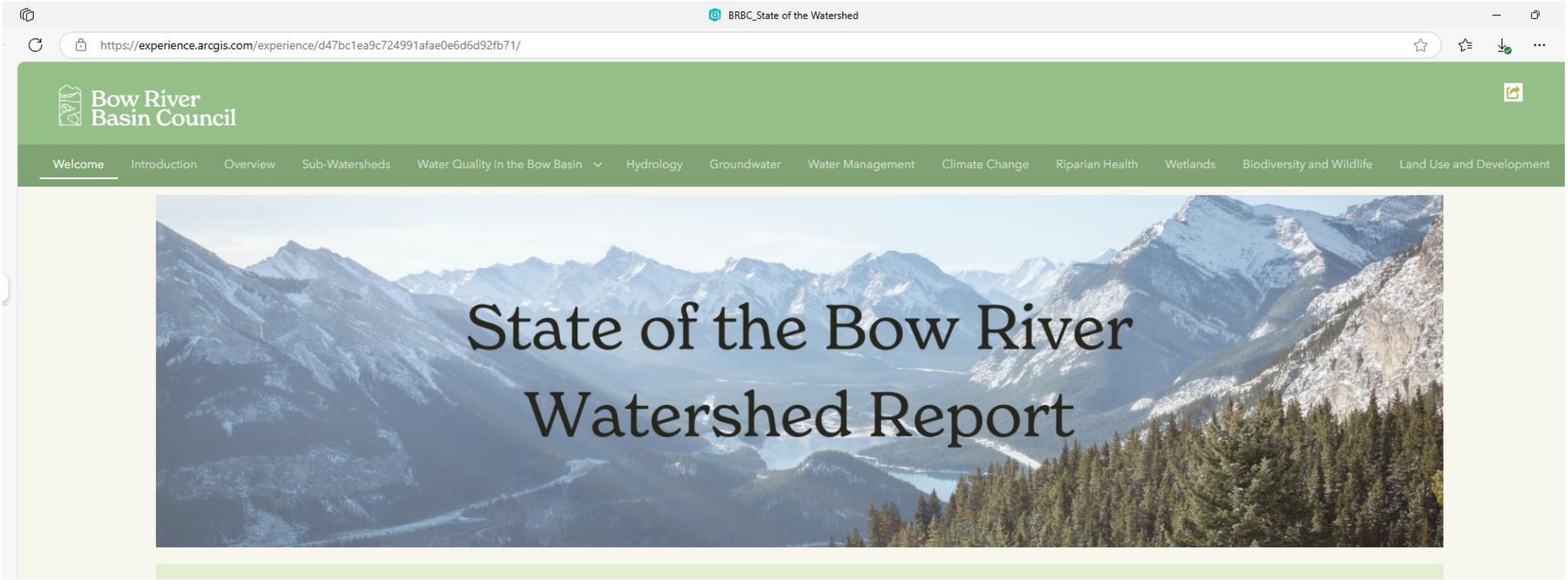
FINAL REPORT

(Revised version December 2018)

Ghost Watershed Alliance Society

ALCES

2021, 79 pg



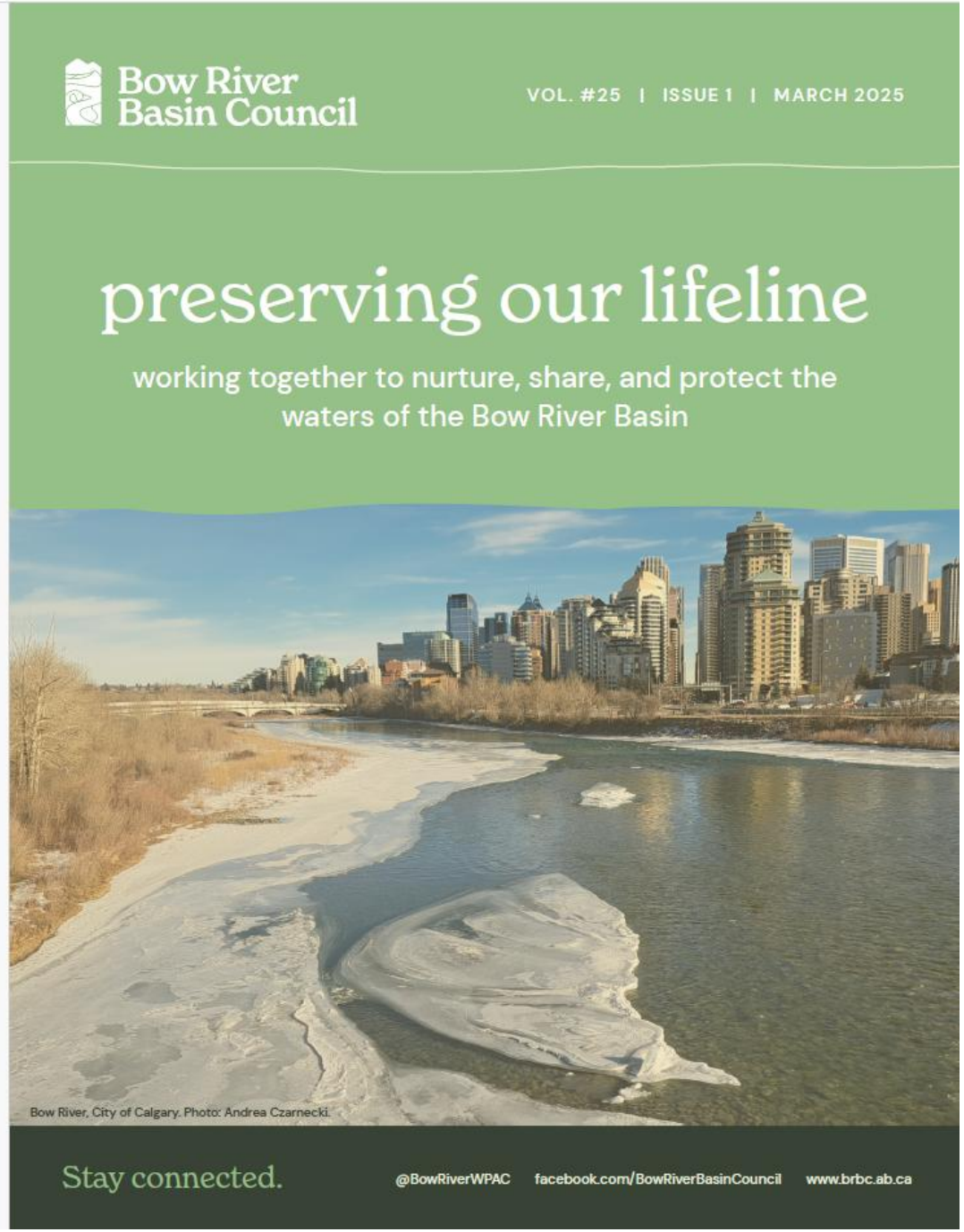
BRBC Bow-Basin-wide SOW, 2025 edition
- on-line, interactive, includes Bighill Creek watershed

Go to: Sub-Watersheds | BRBC_State of the Watershed

Releasing the State of the Bow River Watershed Report

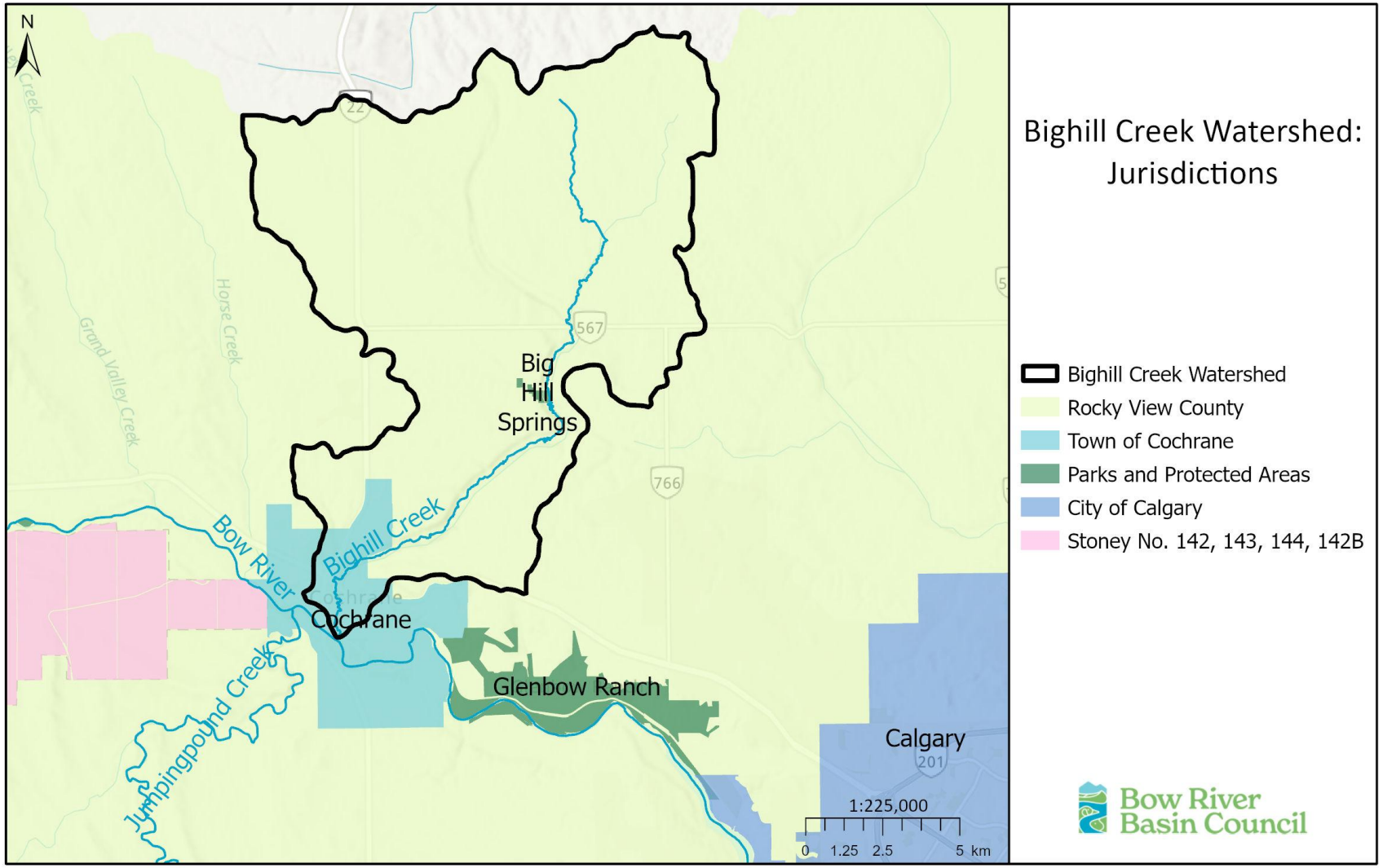
Sub-Watersheds Scale

20 subwatersheds, included in current BOW SOW report:
Ghost River
Elbow River
Fish Creek
Pine Creek
Jumping Pound Creek
Nose Creek
Bighill Creek
Sheep River, and
Highwood River.



Bow Basin SOW Subwatershed Exe Summaries Content, example: Bighill Cr.

1. Overview
2. Landuse Authorities
3. (Jurisdictions)
4. Water Quantity
5. Water Allocation
6. Surface Water Quality
7. Natural Regions
8. Climate
9. Land Cover
10. Biodiversity
11. Human Footprint
12. Challenges and Responses



Note, the above topics are addressed at the Executive Summary level with details found in the individual sub-watershed SOW reports

Bighill Creek State of the Watershed Report – TofC

Foreword (L. Fitch)
BCPS mission statement
Acknowledgments (incl funding agencies)
Exe Summary
1. Introduction
2. Geology: Bedrock and surficial geology, aquifers
3. Geography: Topography, climate, ecozones, soils, land cover, Natural Regions
4. History: Indigenous /Pre-Settlement; Early European Tenure to present
5. Surface Water: quantity and quality
6. Ground Water: quantity and quality
7. Water Management: Surface and groundwater licenses, allocations, uses
8. Riparian Areas and Wetlands: Presence, assessment, protection, improvement
9. Biodiversity: Vegetation, wildlife, fish, aquatic insects, and invasive species, BioBlitz results
10. Land use: Agriculture, oil&gas, tourism, rec, prov/muni parks, aggregate pits
12. Watershed Stewardship: Town of Cochrane, Rocky View County, Gov Alb, NCC lands, CEAC
13. Summary and Data Gaps
14. Recommendations and Next Steps
15. References
Appendices

The work of the Bighill Creek Preservation Society, since 2015

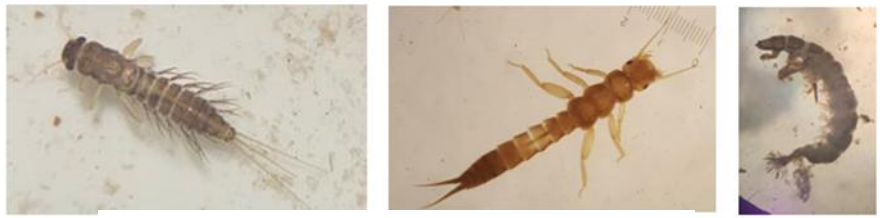
1. **Cows and Fish**

Alberta Riparian Habitat Management Society

Riparian Health Summary Report – 2018
Bighill Creek

2. **Benthic Macro-Invertebrate Biomonitoring Study**

Bighill Springs Creek, Cochrane, Alberta
Research Target Area: Environmental – Water



Prepared By:
Tobin M. Benedict

Prepared For:
Bighill Creek Preservation Society
January, 2020

3. **Preliminary DNA Data**

Bighill Creek (Bow River), AB
December 2019

Photos obtained from: https://bighillcreek.ca/photo-gallery/

STREAM

www.STREAM-DNA.com

Hajibabaei Lab, Centre for Biodiversity Genomics, University of Guelph

Bighill Creek Water Quality Sampling
Baseline Study

By

Ymène Fouli*, Ph.D., P.Geo.
Environmental Soil Scientist
Independent Consultant
Calgary, Alberta

Prepared For:

55 pg

September 2018

Electrofishing Investigations in Bighill Creek, June 2018

Trout Unlimited Canada Technical Report

Prepared for:
Bighill Creek Preservation Society

Prepared by:
Haley Tunna
Elliot Lindsay

19 pg

June 2018

Trout Unlimited Canada Truite Illimitée Canada

Bighill Creek Water and Sediment Quality Baseline Study Phase II: 2019-2020

By

Ymène Fouli*, Ph.D., P.Geo.
Environmental Soil Scientist
Independent Consultant
Calgary, Alberta

Prepared For:

59 pg

August 2020

Bighill Creek Water Temperature Logger Installations, June 2020

Trout Unlimited Canada Technical Report

Prepared for:
Bighill Creek Preservation Society

Prepared by:
Elliot Lindsay

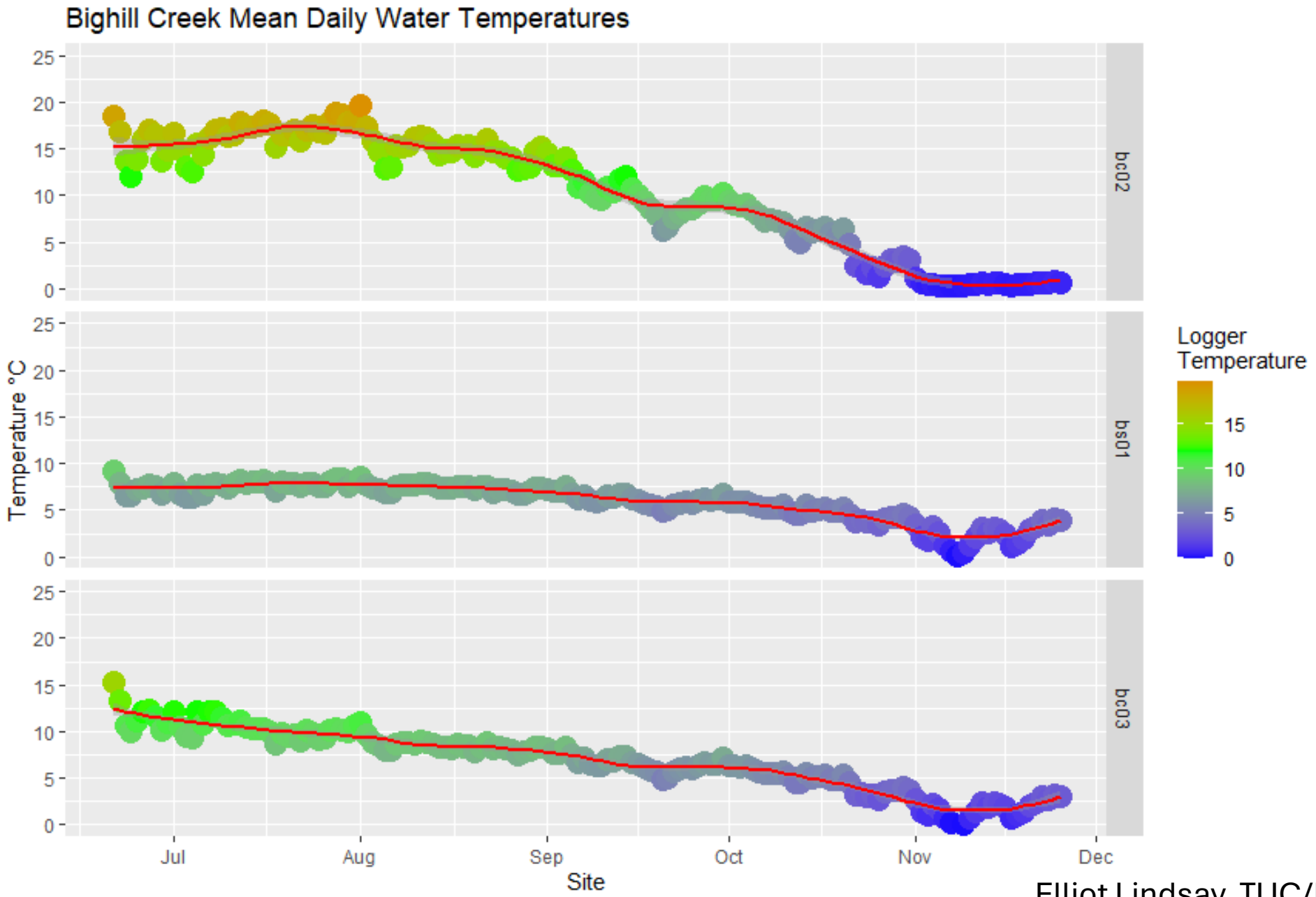
17 pg

June 2020
Revised October 2020 to update site names

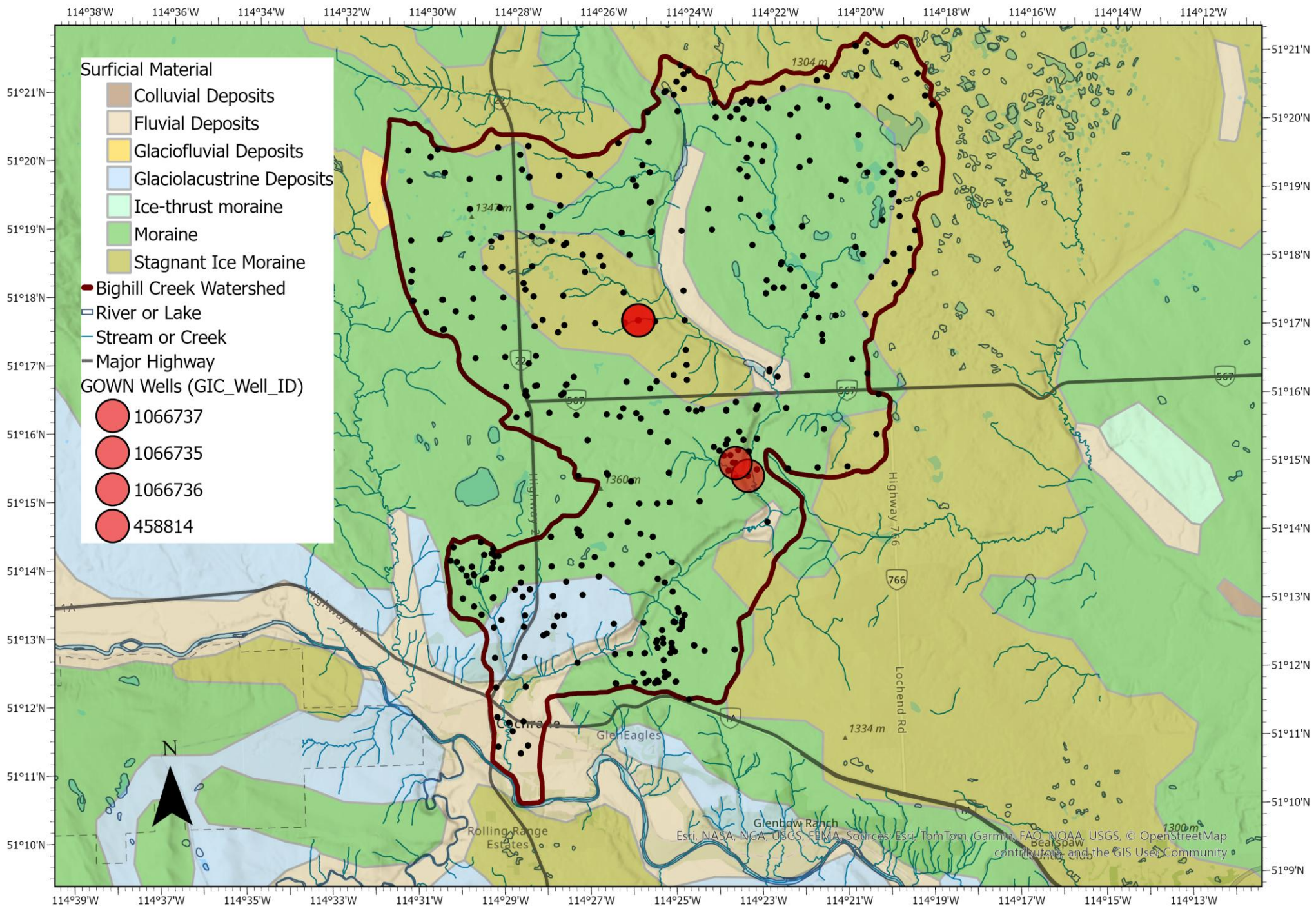
Trout Unlimited Canada Truite Illimitée Canada

Installation of Temperature Data Loggers

Elliot Lindsay, TUC/FWRC



Elliot Lindsay, TUC/FWRC


Surficial Material
Colluvial Deposits
Fluvial Deposits
Glaciofluvial Deposits
Glaciolacustrine Deposits
Ice-thrust moraine
Moraine
Stagnant Ice Moraine
Bighill Creek Watershed
River or Lake
Stream or Creek
Major Highway
GOWN Wells (GIC_Well_ID)
1066737
1066735
1066736
458814
N
1304 m
1347 m
1360 m
1334 m
1300 m
Highway 22
Highway 1A
Highway 766
Lochend Rd
Cochrane
GlenEagles
Rolling Range Estates
Glenbow Ranch
Bearspaw
Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
114°38'W
114°36'W
114°34'W
114°32'W
114°30'W
114°28'W
114°26'W
114°24'W
114°22'W
114°20'W
114°18'W
114°16'W
114°14'W
114°12'W
114°39'W
114°37'W
114°35'W
114°33'W
114°31'W
114°29'W
114°27'W
114°25'W
114°23'W
114°21'W
114°19'W
114°17'W
114°15'W
114°13'W
51°21'N
51°20'N
51°19'N
51°18'N
51°17'N
51°16'N
51°15'N
51°14'N
51°13'N
51°12'N
51°11'N
51°10'N
51°9'N

- Citizens of the Bighill Creek watershed can utilize the data coming out of GOWN wells to see if industry or municipal use of groundwater is influencing water levels. The same can be said for drought – as the climate gets drier, aquifers will replenish more slowly, so knowledge of the state of the aquifers allow for responsible allocation of groundwater.

- Unfortunately, due to limited chemistry data, the impacts of agriculture, oil and gas, and gravel mining on the chemistry of groundwater are largely unknown in the watershed.

- Having more publicly available data on the water quality of these wells will be crucial for responsible management of activities in the watershed.

Parke Fontaine, UofC, 4th yr, Hydrogeology, March 2025

Groundwater Licences (cubic metres)

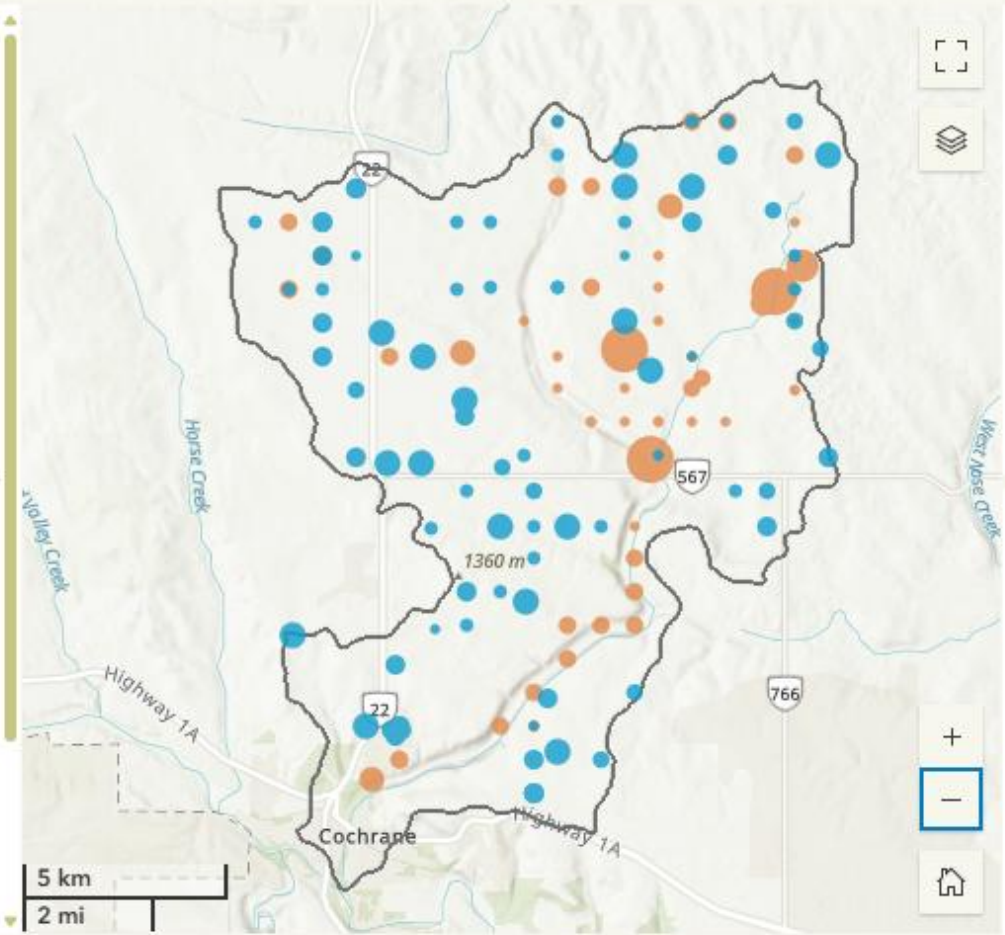
LicenceVol

- 20 - 295
- 295 - 792
- 792 - 1230
- 1230 - 2470
- 2470 - 10000

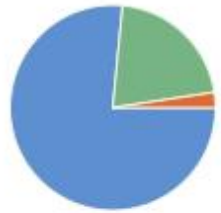
Surface Water Licences (cubic metres)

Licence Volume

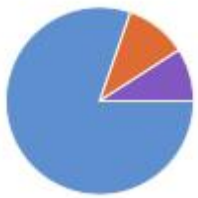
- 15 - 364
- 364 - 1477
- 1477 - 12330
- 12330 - 24670
- 24670 - 48110



Surface Water Licence Volume (cubic metres)



Groundwater Licence Volume (cubic metres)



Water Allocation

Within the Bighill Creek watershed, there are 64 surface water licences and registrations. Agricultural use makes up 76.5% (156,779 m3) of the total surface water licence volume. The largest agricultural surface water licence holder is Circle J Ranches Limited (49,398 m3), or about 32% of the total agricultural surface water licence volume. Municipal use and Management use account for 2.4% (4,933 m3) and 21.1% (43,170m3), respectively.

There are 112 groundwater licences and registrations within the watershed. Of the total groundwater licence volume, 80.3% (120,929 m3) is licenced for agricultural use. The remaining 10.6 % (15,966 m3) is allocated for municipal use, and 9% (13,678 m3) for commercial use.

UNIVERSITY OF CALGARY

Hydrogeological Characterization of Springs in the Bighill Creek Watershed

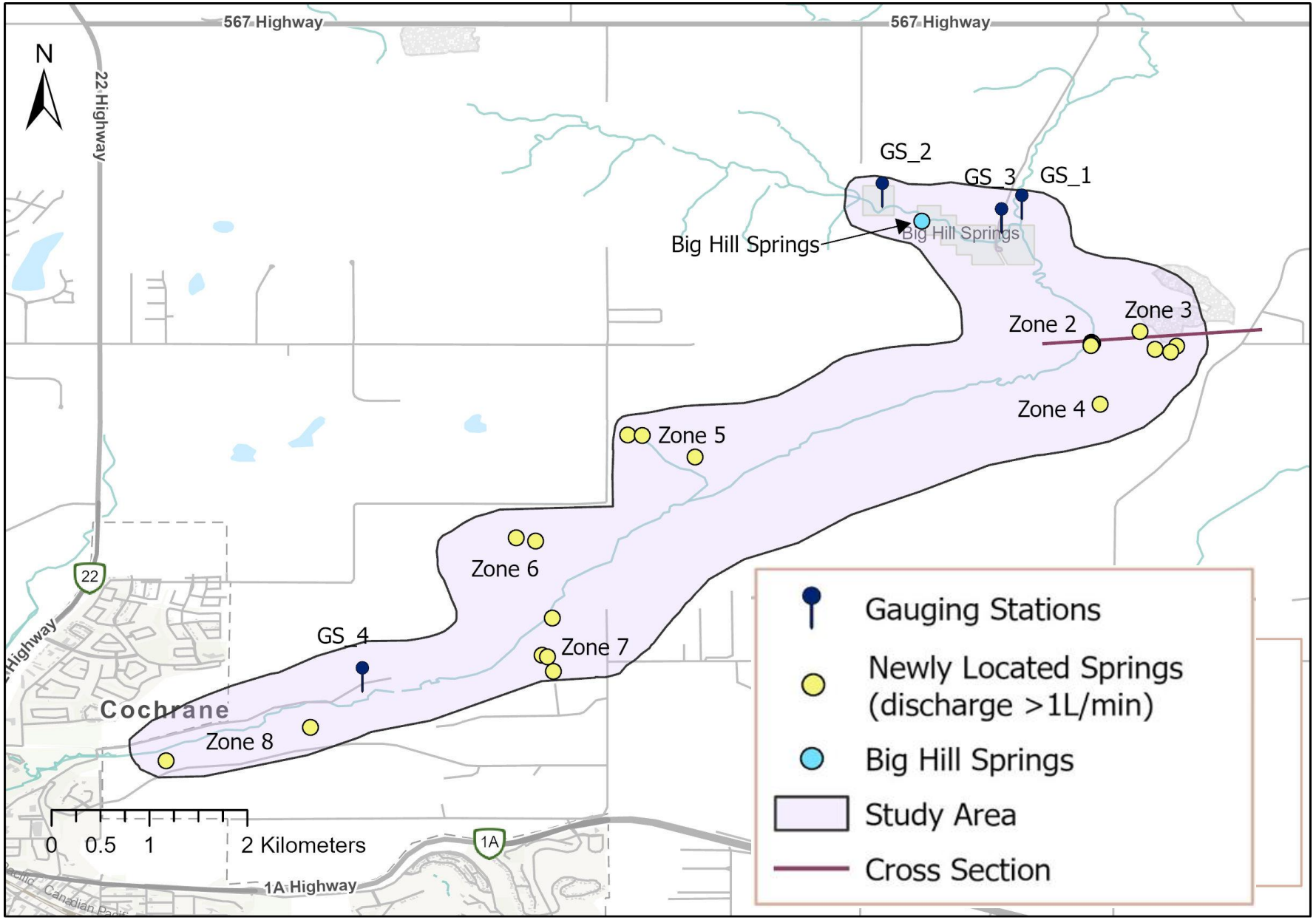
by

Sophie I. Prevost

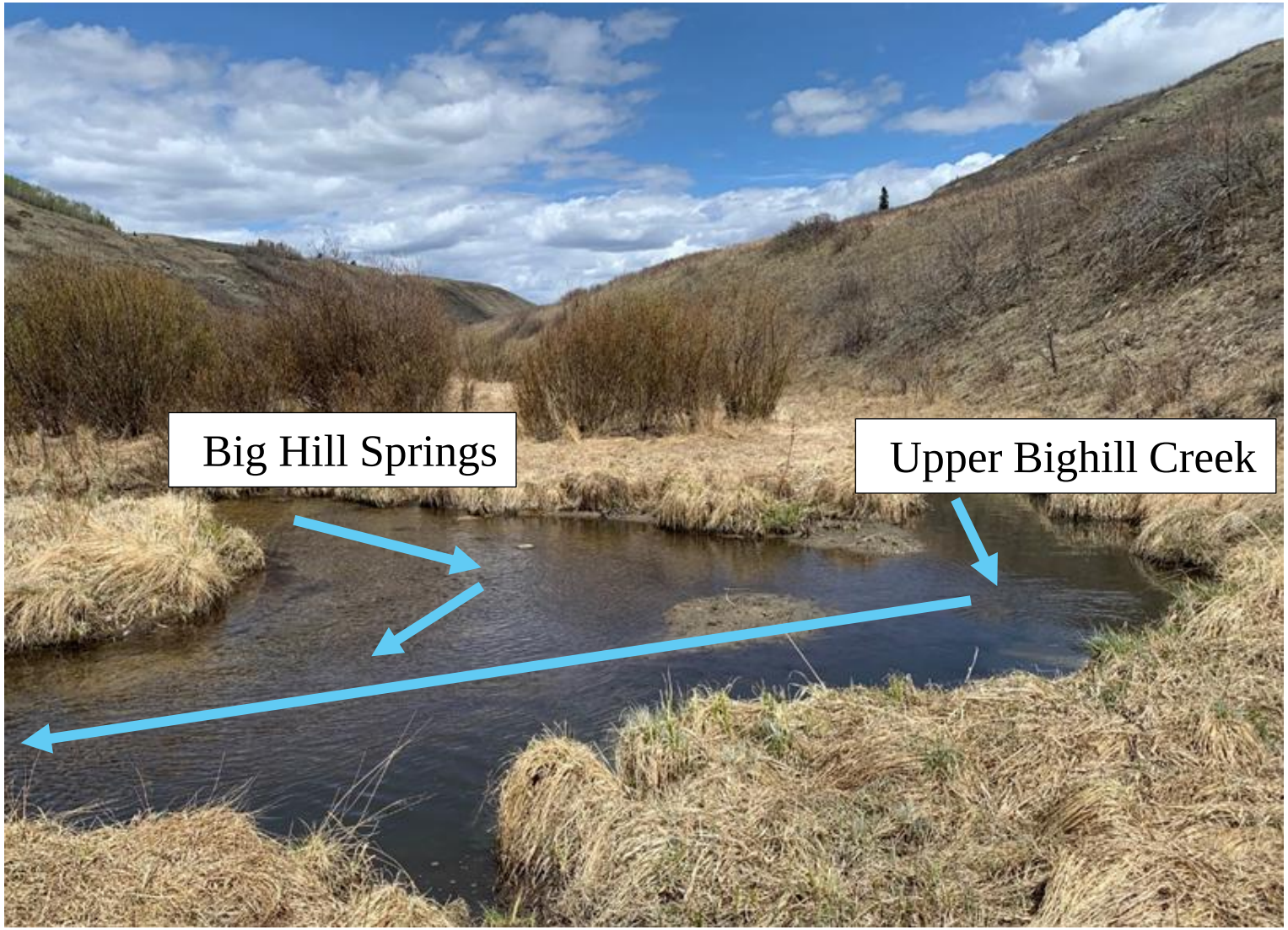
AN INDEPENDENT RESEARCH PROJECT SUBMITTED TO THE FACULTY OF SCIENCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE

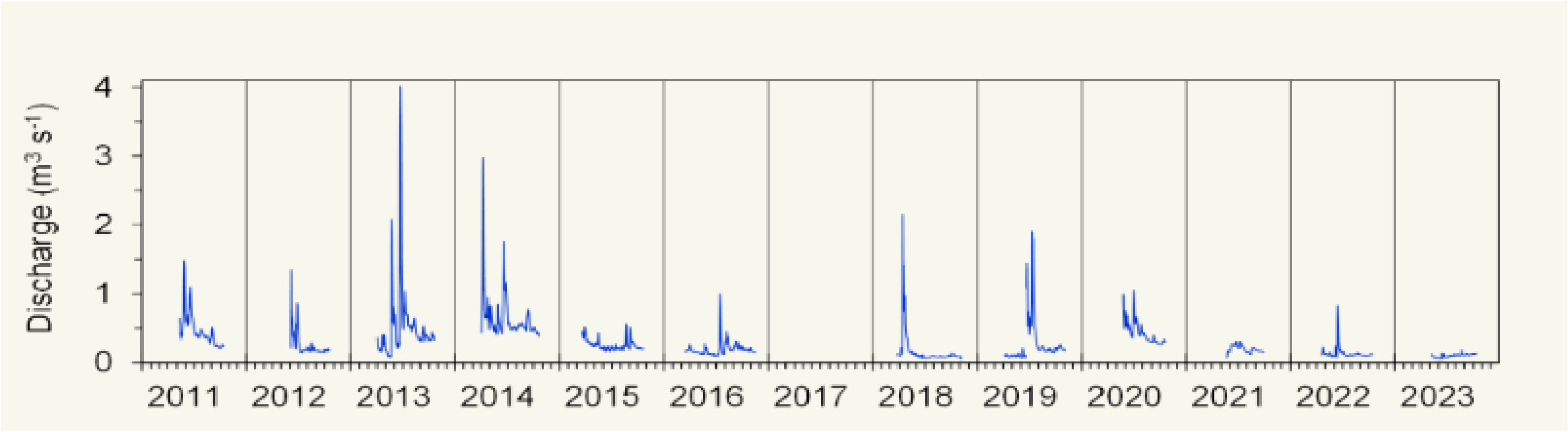
DEPARTMENT OF GEOSCIENCE
CALGARY, ALBERTA
2023

Study Site – Context Map



Confluence of BHS with Bighill Creek

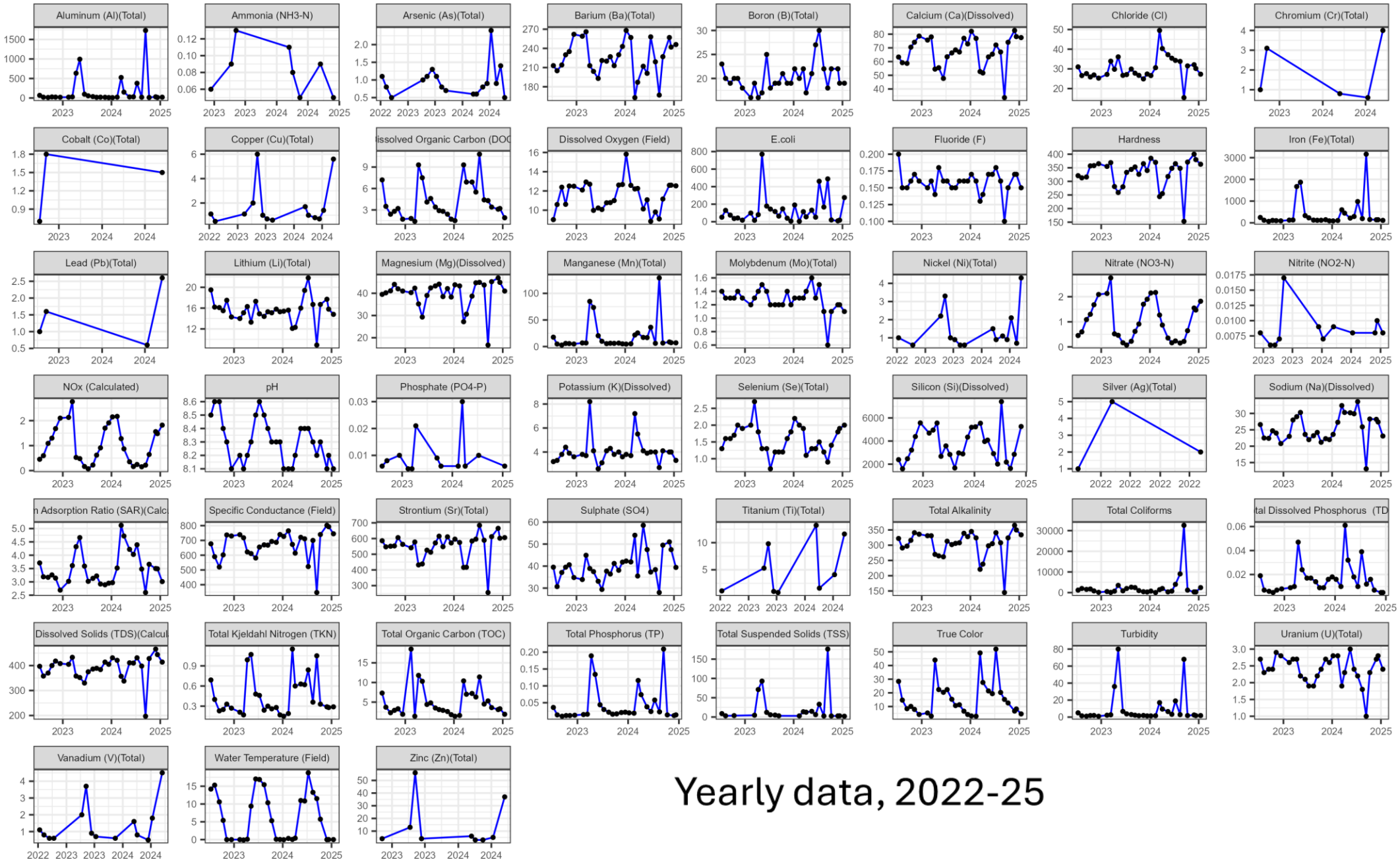




Ave daily discharge, Bighill Creek by upper end, Ranche Rd
Dr. Masaki Hayashi, UofC

Bighill Creek near Mouth

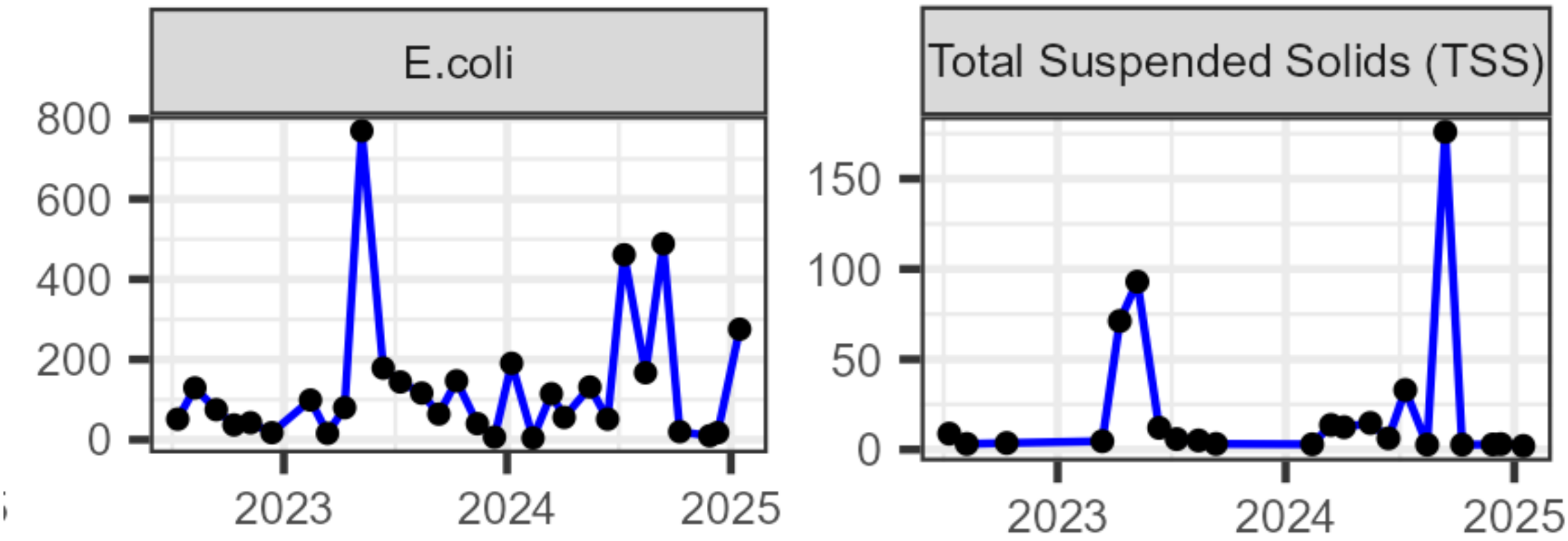
City of Calgary Watershed Monitoring Program: Jul 2022- Jan 2025



Yearly data, 2022-25

Bighill Creek near Mouth

City of Calgary Watershed Monitoring Program: Jul 2022- Jan 2025



Yearly data, 2022-25

Bighill Creek adjacent to Big Hill Springs Prov Park, showing cattle grazing next to the creek in August 2022, - the same month with high ruminant feces markers at the monitoring site downstream

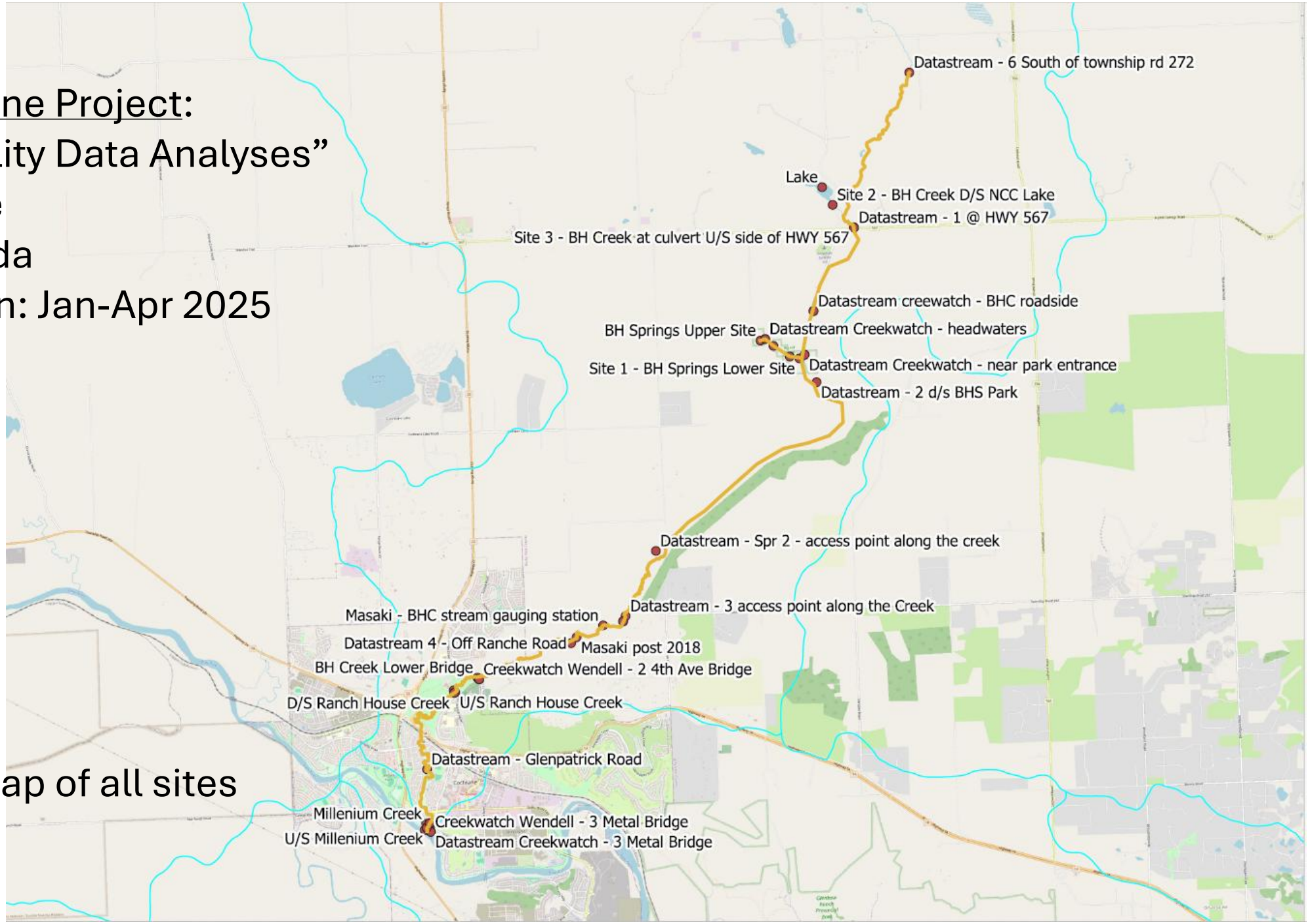

Bighill Creek near confluence with the Bow River, looking downstream

SAIT Capstone Project:

“Water Quality Data Analyses”

- Alex Whale
- Fabio Ueda

Proj Duration: Jan-Apr 2025



Draft map of all sites

16 January, 2025

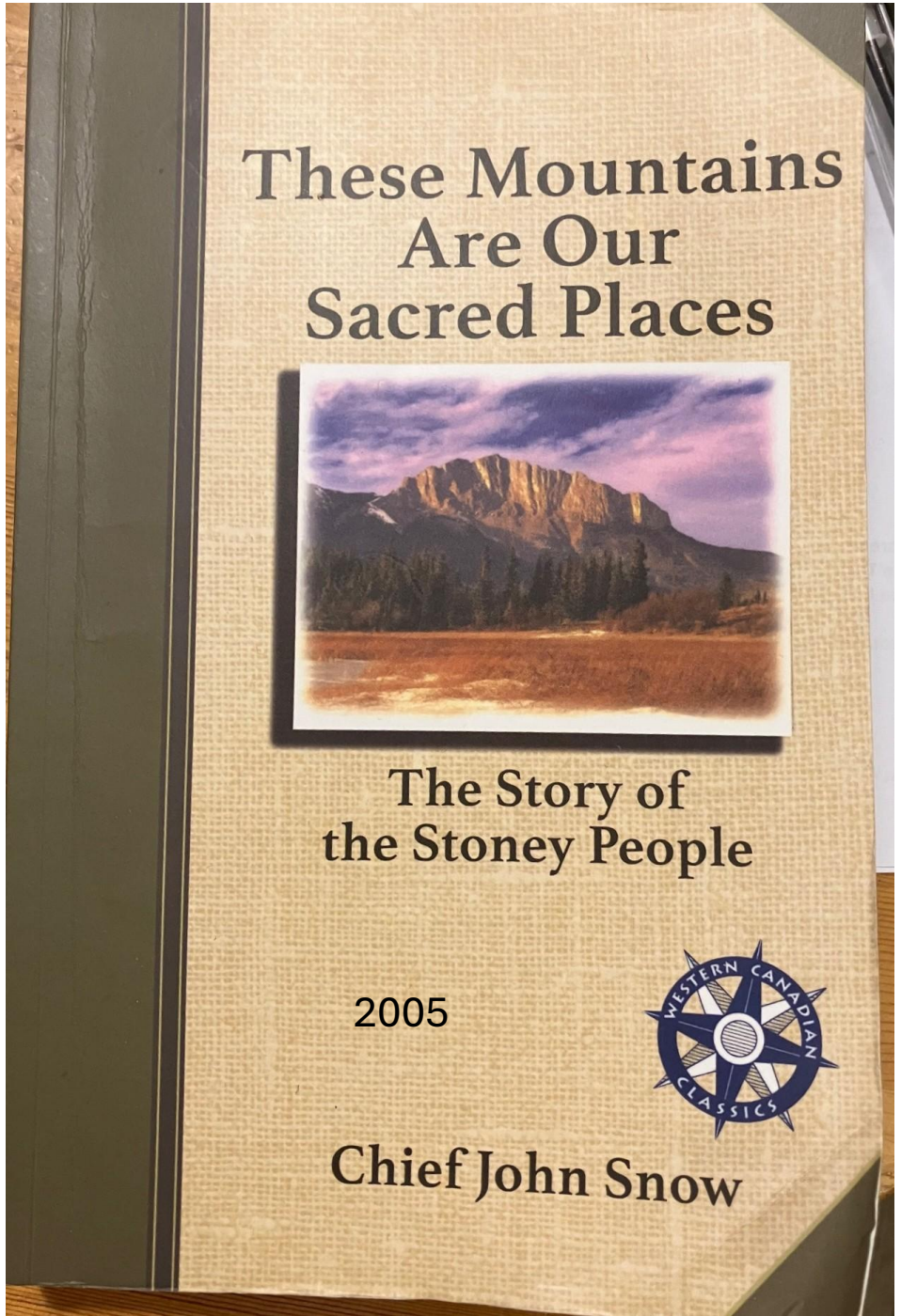
Confluence of Bow R and Bighill Cr

Alex and Fabio
SAIT Capstone Project
Jan-Apr 2025

Alex Whale (left) and Fabio Ueda (right), finish their first day in the field, while taking YSI readings at the confluence of Bighill Creek and the Bow.

Archeology, pre-European Contact

Tony Snow lecture on Reconciliation, 17 Jan 2025



2024, 195 pg

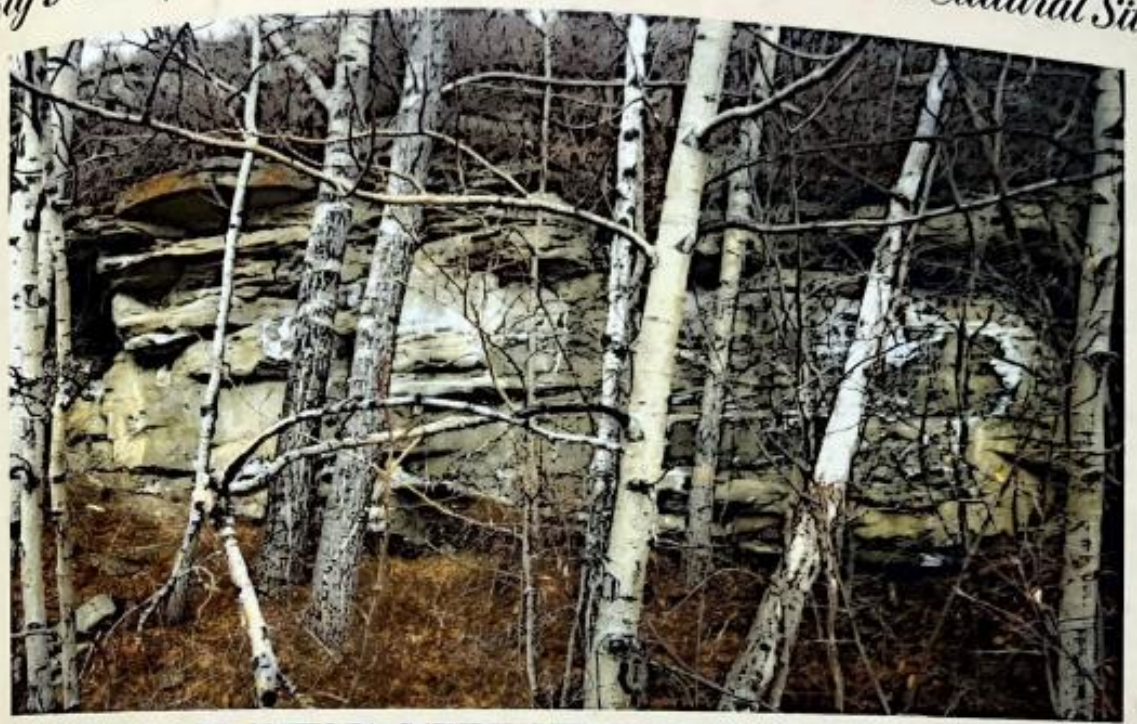
The ART of MAKING

REDISCOVERING *the* BLACKFOOT LEGACY

JARED TAILFEATHERS

Foreword by Rebecca Many Grey Horses

Big Hill Springs/Cochrane Ranche, Known Cultural Site



Cochrane Petroglyphs and Pictography Site, Alberta

When I went looking

For: Biodiversity chapter

Missing mammals: black bear, grizzley bear, cougar, elk, deer, etc

Alberta Environment and Parks

Fish and Wildlife Internet Mapping Tool (FWIMT)

(source database: Fish and Wildlife Management Information System (FWMIS))

Species Summary Report

Report Date: 06-Jul-2024 11:33

Species present within the current extent

Fish Inventory

- BROOK STICKLEBACK
- BROOK TROUT
- BROWN TROUT
- BULL TROUT X BROOK TROUT HYBRID
- CUTTHROAT TROUT
- LAKE CHUB
- LONGNOSE DACE
- LONGNOSE SUCKER
- MOUNTAIN SUCKER
- MOUNTAIN WHITEFISH
- RAINBOW TROUT
- WHITE SUCKER

Wildlife Inventory

- GREAT BLUE HERON
- LEAST FLYCATCHER
- PRAIRIE FALCON
- WANDERING GARTER SNAKE

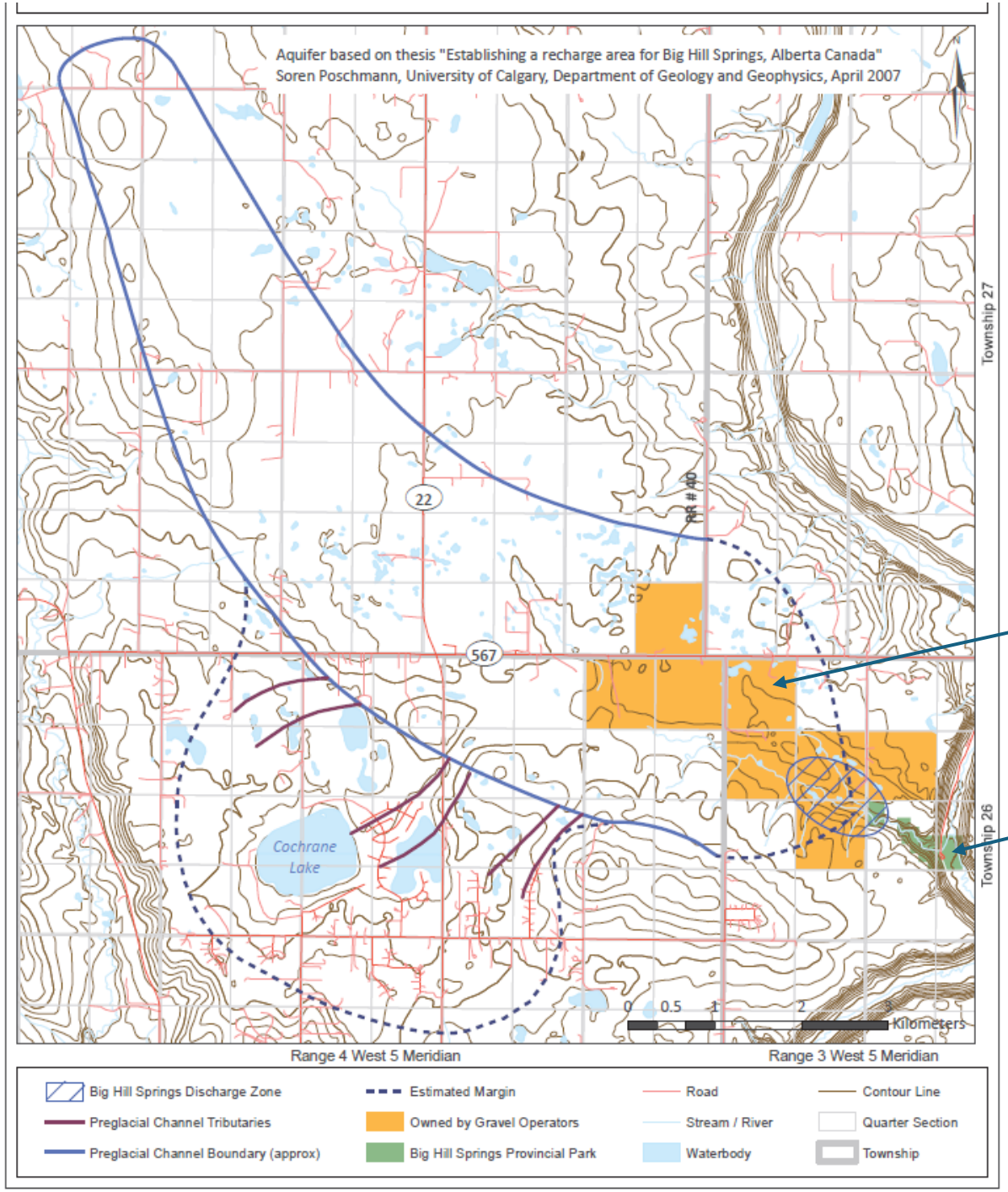
Stocked Inventory

- BROOK TROUT
- BROWN TROUT
- CUTTHROAT TROUT
- RAINBOW TROUT

Part of Fisheries and wildlife management

Fisheries and Wildlife Management Information System FWIMS

Access this government-maintained online fisheries and wildlife database.



Potential impacts and challenges

The Big Hill Springs Aquifer

Orange blocks are owned by Gravel Pit Operators (5)

Big Hill Springs Prov Park

In: Soren Poschmann. 2007. Establishing a recharge area for Big Hill Springs, Alberta, Canada. Thesis in Dept Geol and Geophysics, U of Calgary

Dr Jon Fennell, 2021:
“Review of hydrogeology, geochemistry, fish and aquatics, and climate change”

Re - MALP Summit Gravel Pit
57 pg

Mountain Ash Limited Partnership

Summit Gravel Pit

Review of hydrogeology, geochemistry, fish and aquatics, and climate change

Prepared by:

Dr. Jon Fennell, M.Sc., Ph.D., P.Geol.
Hydrogeologist and Geochemist
Water Security | Climate Resiliency

On behalf of:

Friends of Big Hill Springs Provincial Park
and
Bighill Creek Preservation Society

For:

Rocky View County Council
Re: Bylaw C-8051-2020

January 2021

Gravel trucks, Oct. 31, 2023

Sixty minutes of gravel trucks on Hwy 567 by Bill Hill Springs Provincial Park, mid-day, 31 October. 2023

- Close to 1 truck per 2 minutes, 30 trucks per hour, 300 trucks per 10-hour shift from just 1-2 gravel pits.

Gravel trucks, Jun 8, 2024

<u>June 8, 2024</u>, 12:10-12:35 pm on Hwy 567 by Big Hill Springs Prov. Park:
17 tandem gravel trucks recorded in 25 minutes = 2 trucks per 3 minutes – just over 40 trucks in one hour. Over a 10 h operating day = 400 trucks – passing by the park, from 1 or 2 gravel pits, Hwy 567.

Gravel trucks, Sept 9, 2024





Truck tally in 62 minutes between 11 am and 2 pm.
Location: **Hwy 567 by Big Hill Springs Prov. Park, and west to Hillstone Aggregates.**
Result: 45 gravel trucks were recorded in just over 60 minutes = 2 trucks per 3 minutes. Over one 10-hour operating day = 450 gravel trucks passing by the park. If two more gravel mines are approved adjacent to and near the Prov Park – there could be 1 gravel truck / 30 seconds on the road, past the park - 120 trucks/h; 1120 trucks per 10 h gravel mining shift.



















Trucks and “Caution– Wildlife Corridor”, Hwy 567, 31 October, 2023

More gravel mines: Increased truck traffic, noise, human safety, wildlife impacts.

In the future: 120 gravel trucks / hr, unless cumulative impacts are finally seriously considered.

2 gravel trucks / 3 minutes counted on one date, 450 gravel trucks per 10 shift – a danger on a wildlife corridor, this could double, triple with more mines currently in the application process.

Another potential impact and challenge:

Having both healthy fish and cattle habitat is possible *if* recognized and addressed properly.

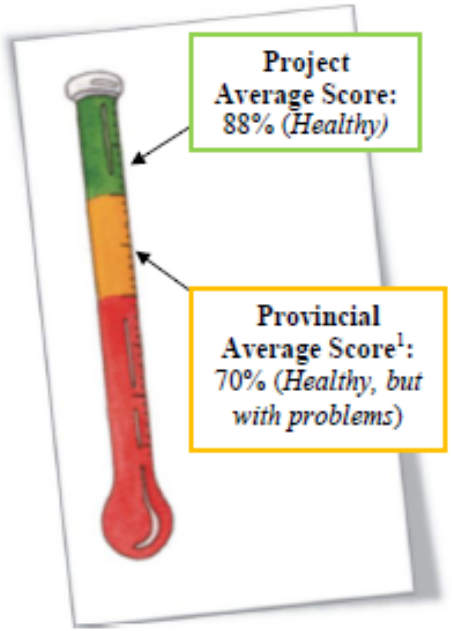
Cows and Fish

Alberta Riparian Habitat Management Society

Riparian Health Summary Report – 2018

Bighill Creek

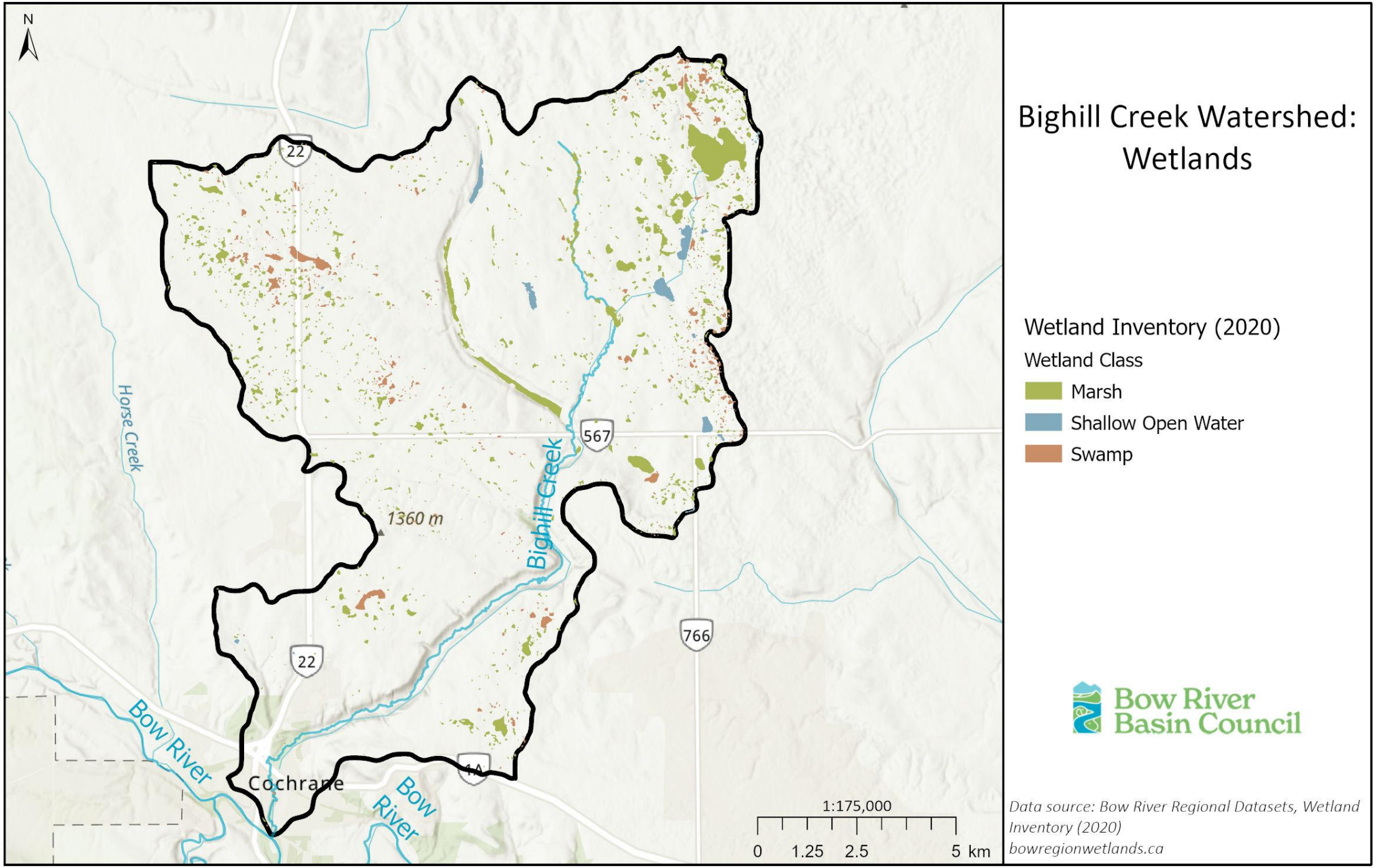
A Riparian Health Assessment is a tool designed to help individuals and organizations evaluate and understand the health of riparian areas within their landholdings and watersheds. This information is intended to document the current state of riparian health and help direct future efforts to promote important riparian functions, such as improved water quality, forage production, and fish habitat. To assess a trend in riparian health, we recommend that riparian health assessments be repeated every three to five years to track progress and riparian recovery in response to a management change.



This summary report provides information on the riparian health of **3 sites** along Bighill Creek, based on data we collected in **July 2018**. Information obtained from the assessment of riparian health in the watershed will help to inform and facilitate landscape management planning within the local municipality, and further encourage private landowners to understand and effectively manage riparian areas under their care.

This project was initiated by the Bighill Creek Preservation Society (BCPS) and funded by Alberta Ecotrust with in-kind support from Cows and Fish.

The Bighill Creek watershed and associated riparian areas provide important fish and wildlife habitat, improve water quality, and maintain water quantity on the landscape. The project area encompasses two riparian sites on private landholdings and one site on County owned land along Bighill Creek. The riparian sites were assessed using the *Alberta Lotic Health Assessment (Survey)*. Overall, all sites assessed as part of this project rate *healthy*, as shown in Table 1. The average riparian health rating for all three sites in the project area is 88% well above the provincial average (70%, *healthy, but with problems*)[1]. The project area includes



Bighill Creek Watershed: Wetlands

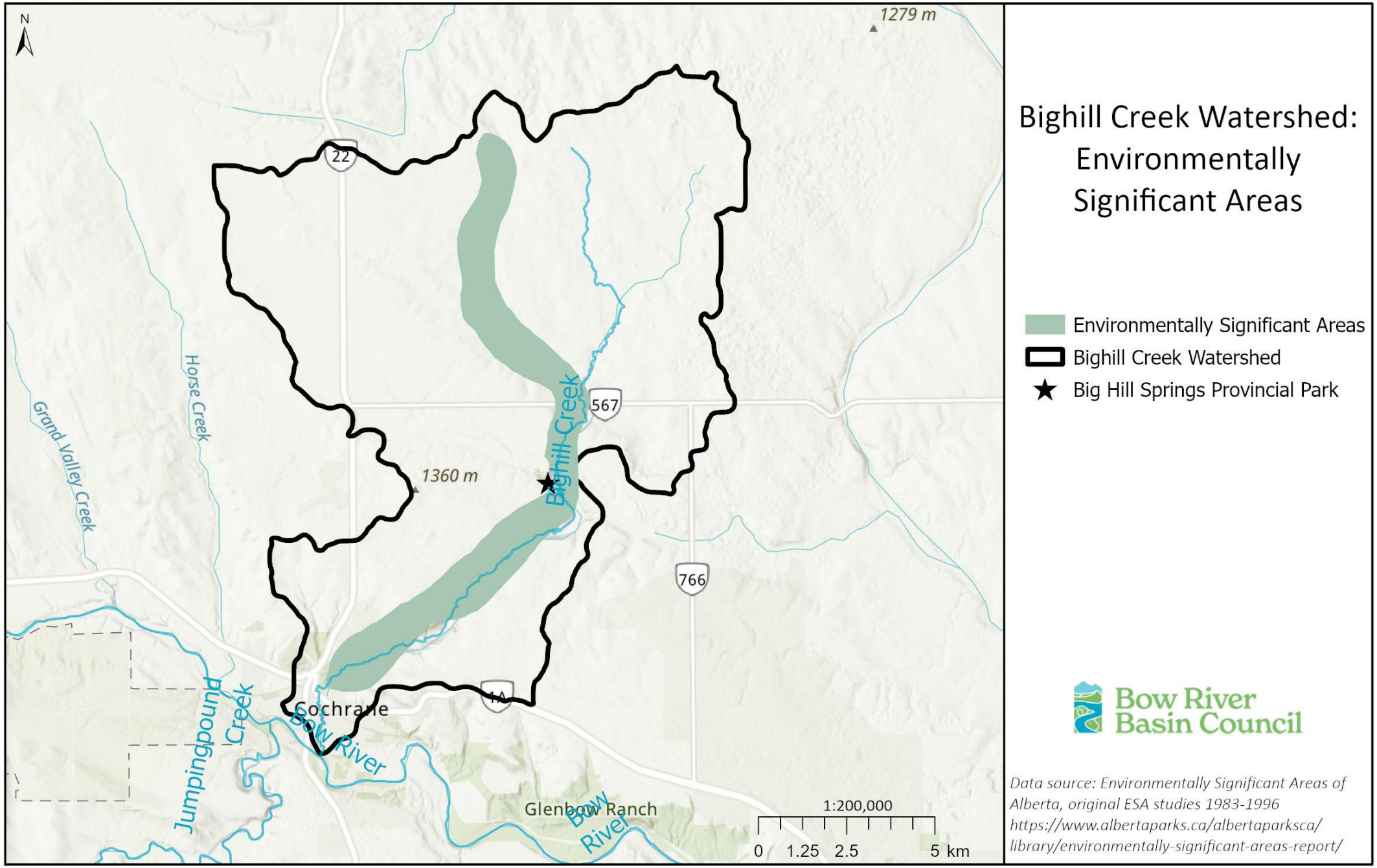
Wetland Inventory (2020)

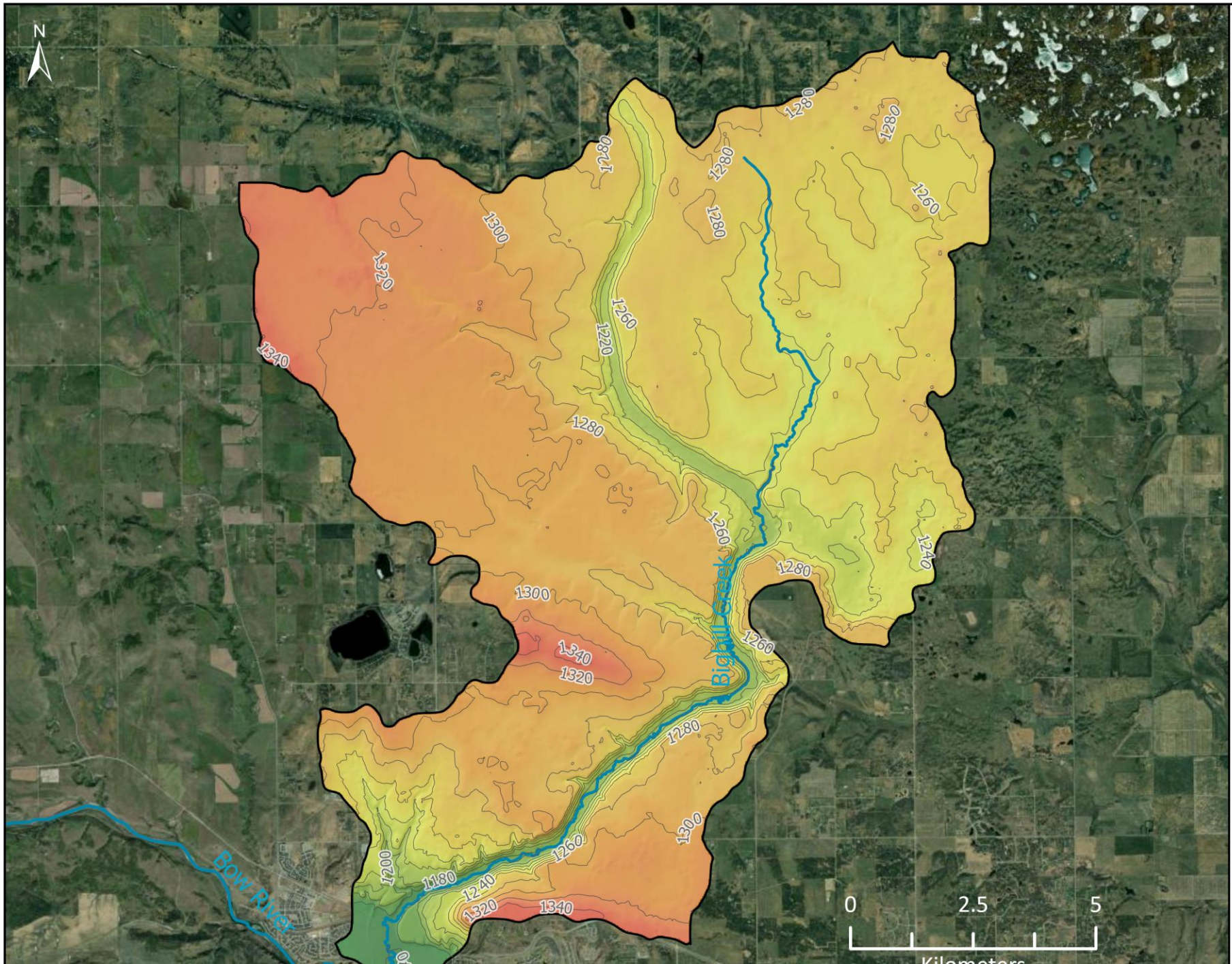
Wetland Class

- Marsh
- Shallow Open Water
- Swamp

Bow River Basin Council

Data source: Bow River Regional Datasets, Wetland Inventory (2020)
bowregionwetlands.ca


N
1279 m
22
567
766
1360 m
Bighill Creek
Horse Creek
Grand Valley Creek
Cochrane
Bow River
Jumpingpound Creek
Glenbow Ranch
Bow River
1:200,000
0 1.25 2.5 5 km
Bighill Creek Watershed: Environmentally Significant Areas
Environmentally Significant Areas
Bighill Creek Watershed
Big Hill Springs Provincial Park
Bow River Basin Council
Data source: Environmentally Significant Areas of Alberta, original ESA studies 1983-1996
https://www.albertaparks.ca/albertaparksca/library/environmentally-significant-areas-report/



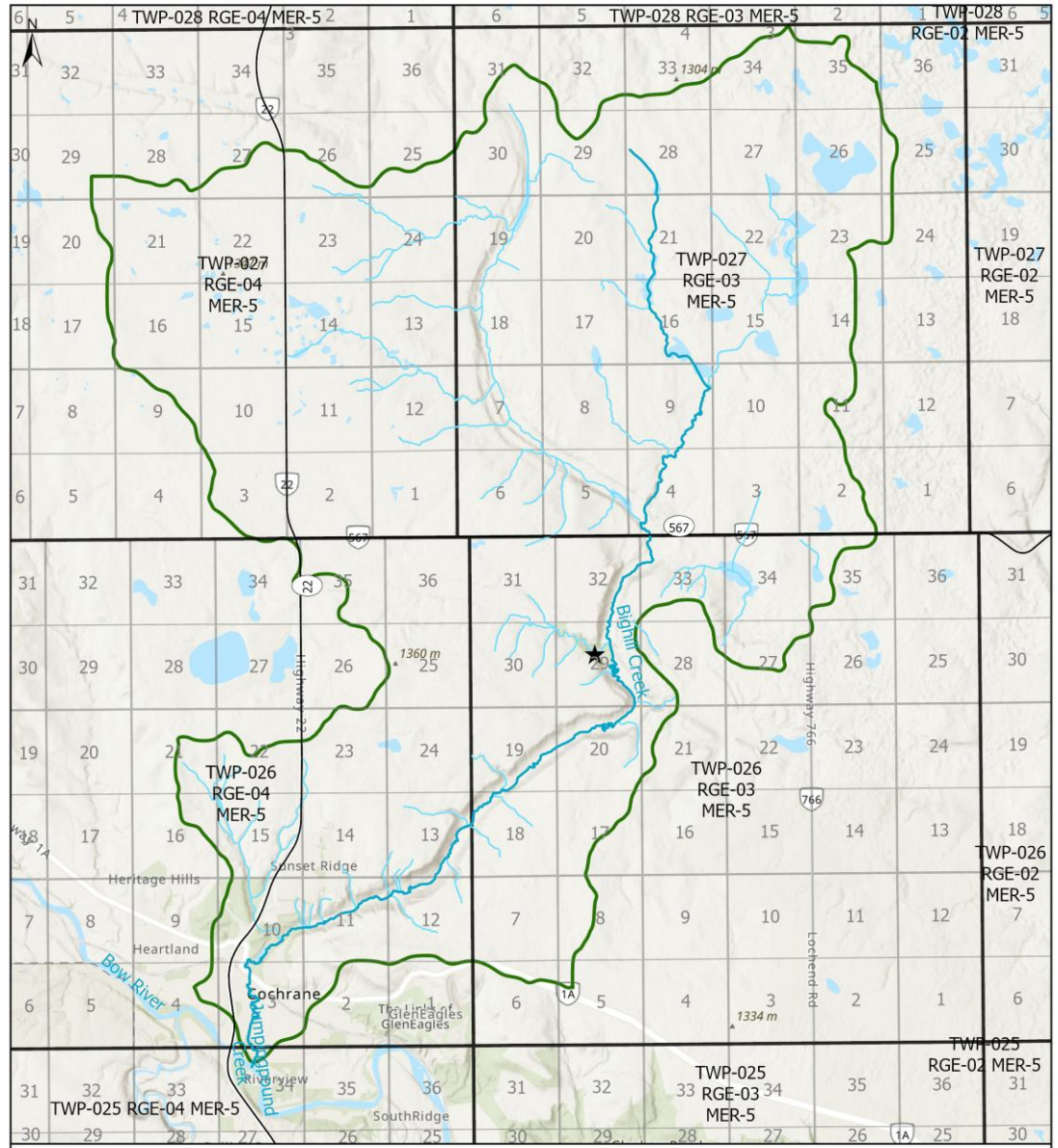
Bighill Creek Watershed:
Topography

Elevation (m)

1354.24

1120.92

Bow River



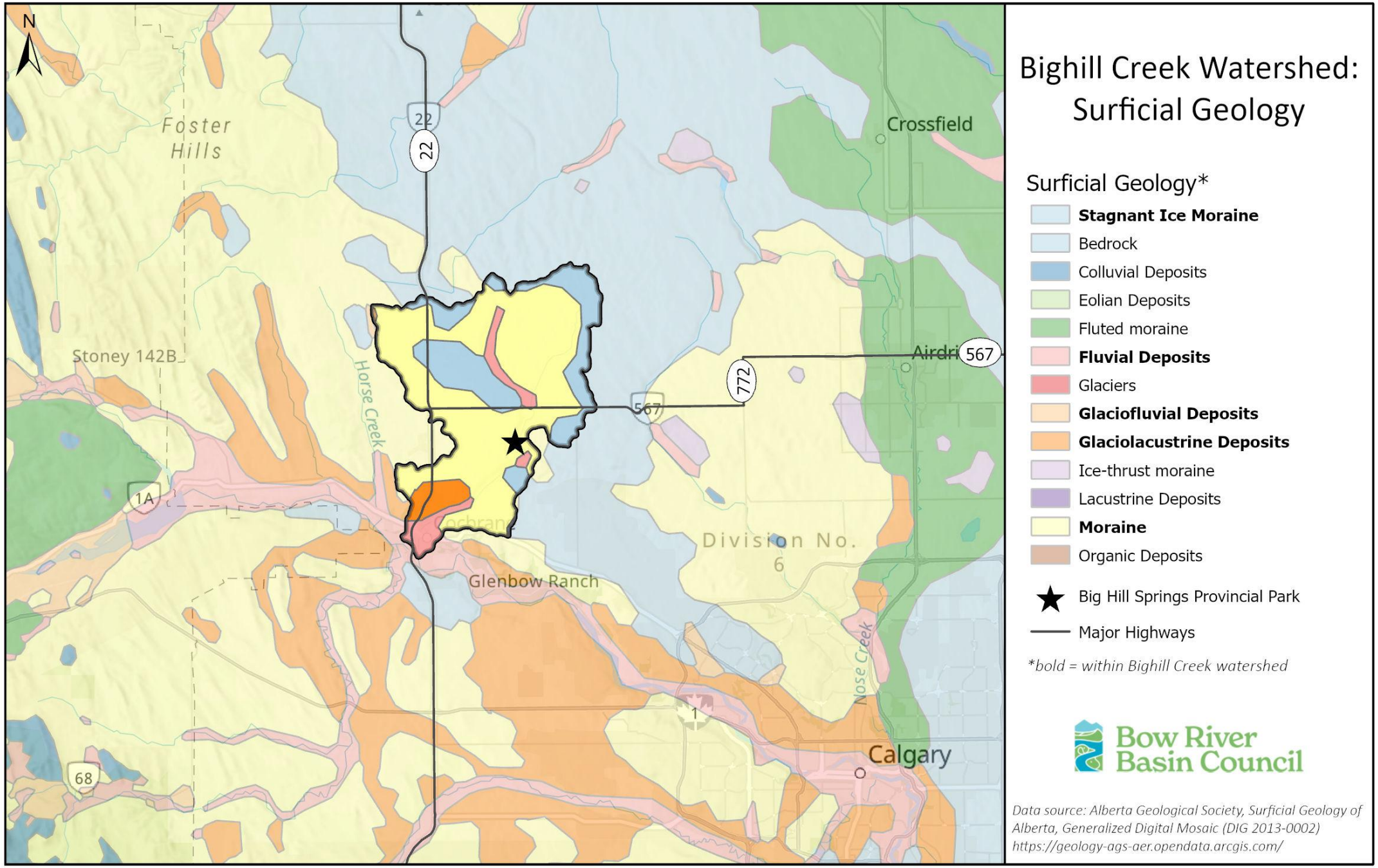
Bighill Creek Watershed: Reference Map

- Township
- Section
- Bighill Creek Watershed
- ★ Big Hill Springs Provincial Park
- Bighill Creek
- Base Hydrology
- Highways

0 1.25 2.5 5 km

Bow River Basin Council

Data sources:
Township and Section: Altalis, Alberta Township System
Base Hydrology: Altalis, Base Hydrography



Bighill Creek Watershed: Surficial Geology

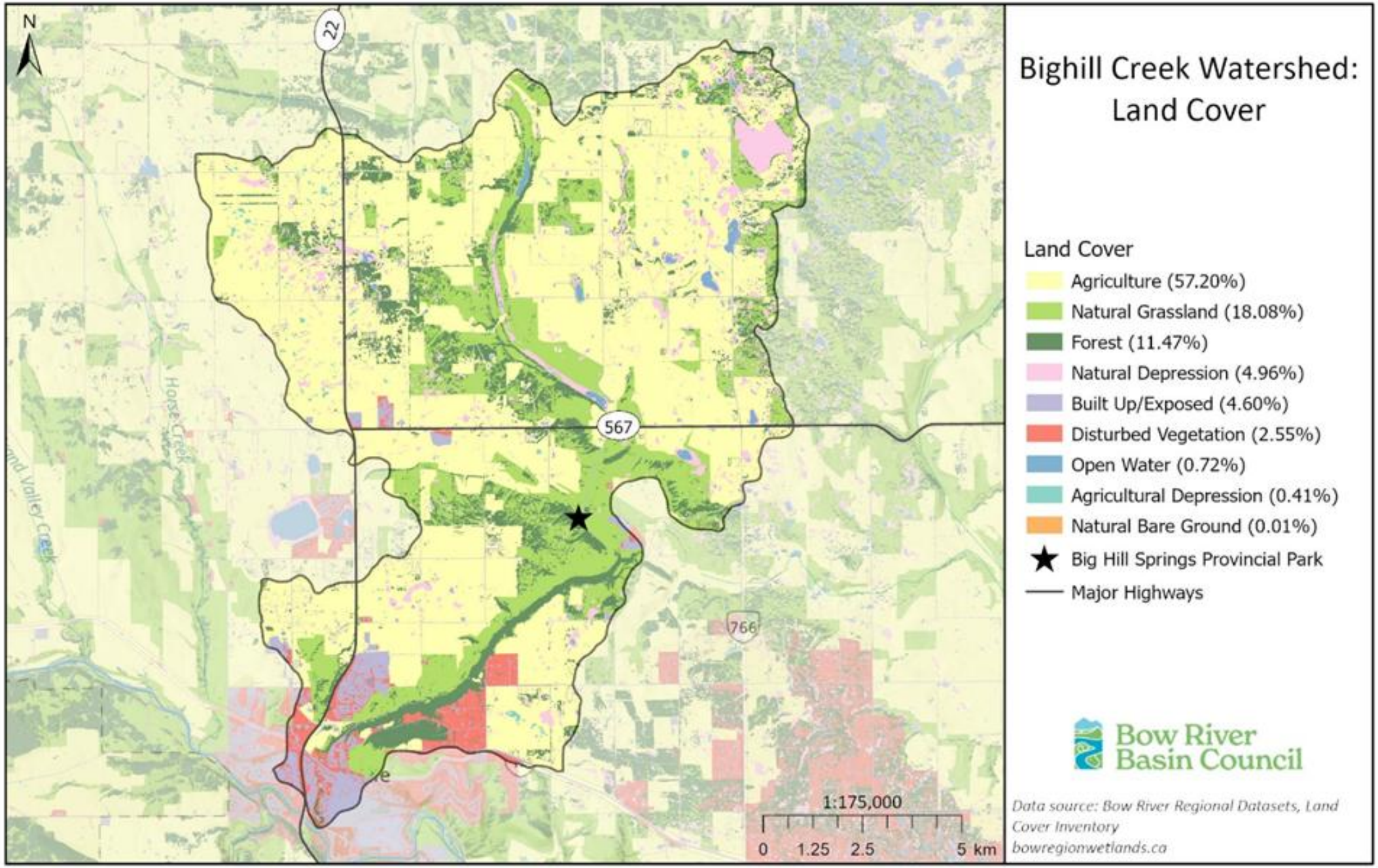
Surficial Geology*

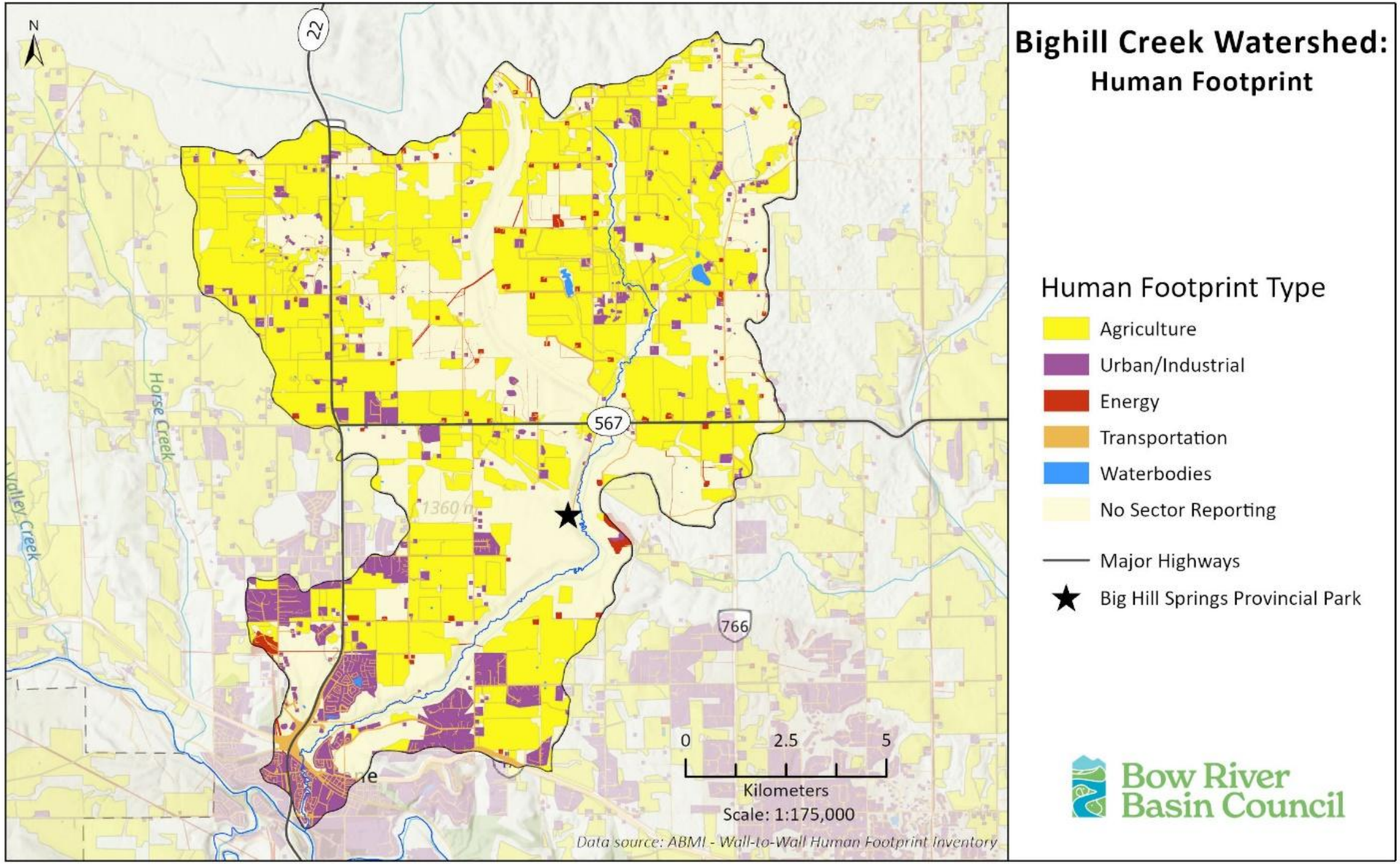
- **Stagnant Ice Moraine**
- Bedrock
- Colluvial Deposits
- Eolian Deposits
- Fluted moraine
- **Fluvial Deposits**
- Glaciers
- **Glaciofluvial Deposits**
- **Glaciolacustrine Deposits**
- Ice-thrust moraine
- Lacustrine Deposits
- **Moraine**
- Organic Deposits
- ★ Big Hill Springs Provincial Park
- Major Highways

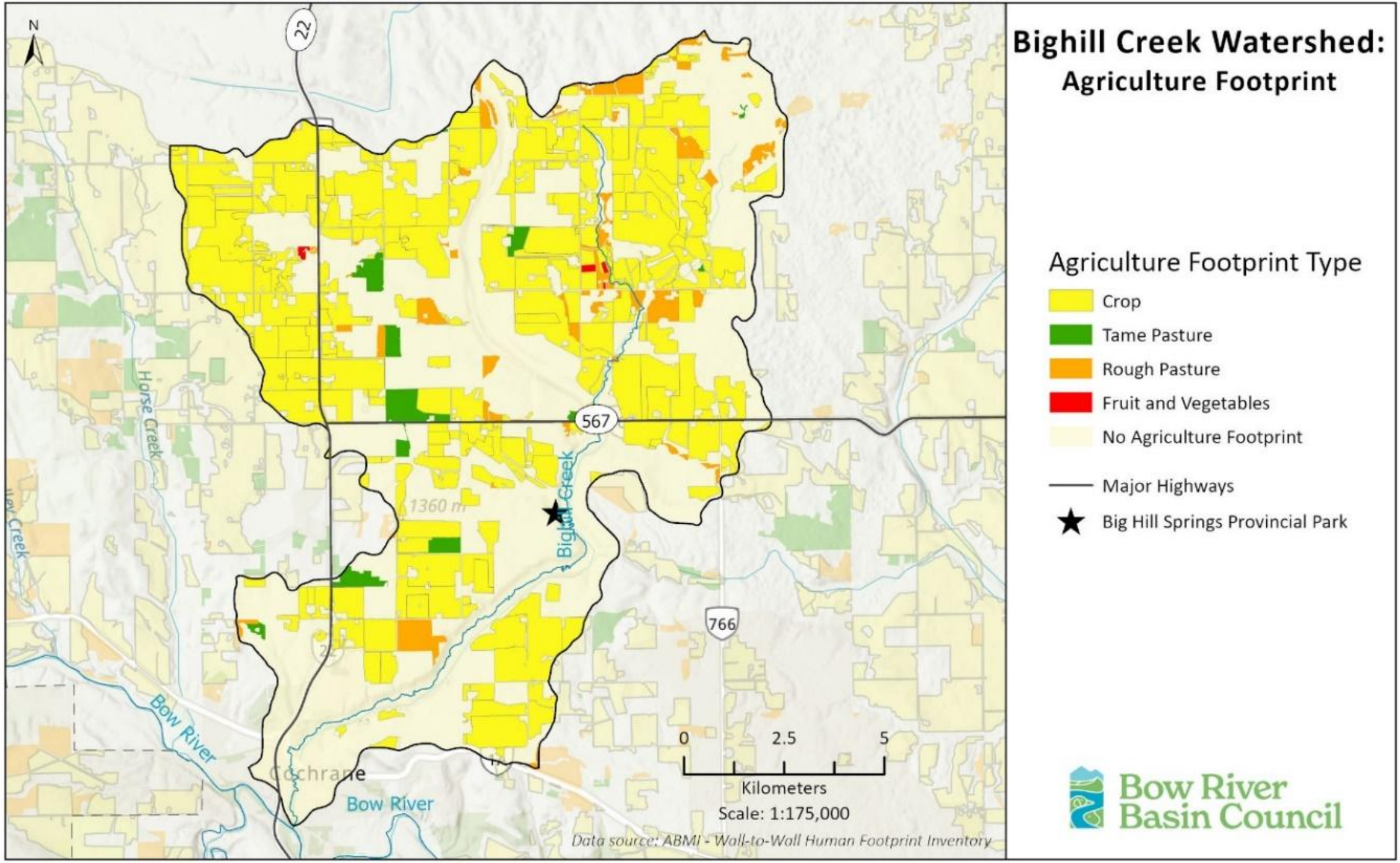
**bold = within Bighill Creek watershed*

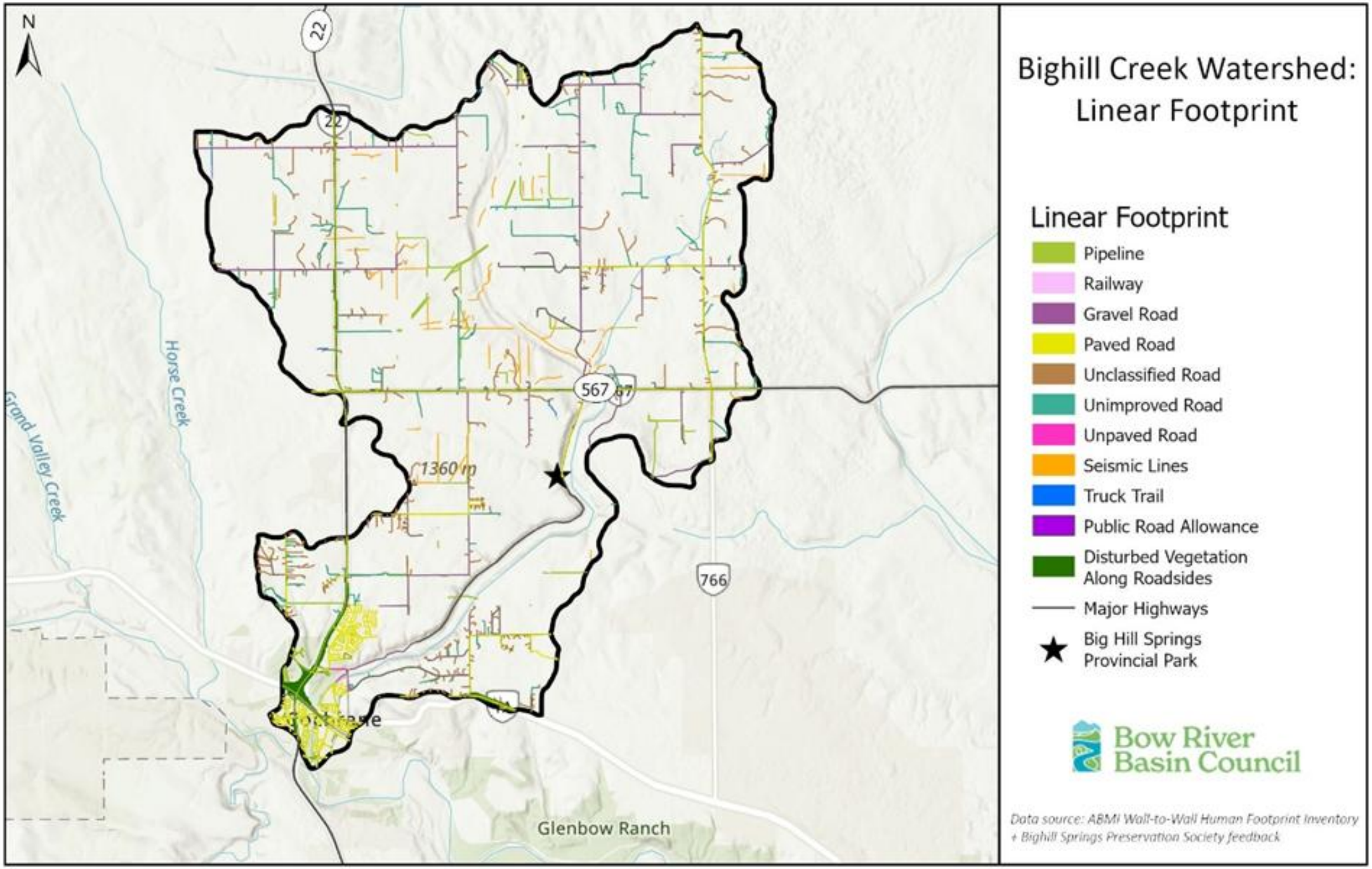
Bow River Basin Council

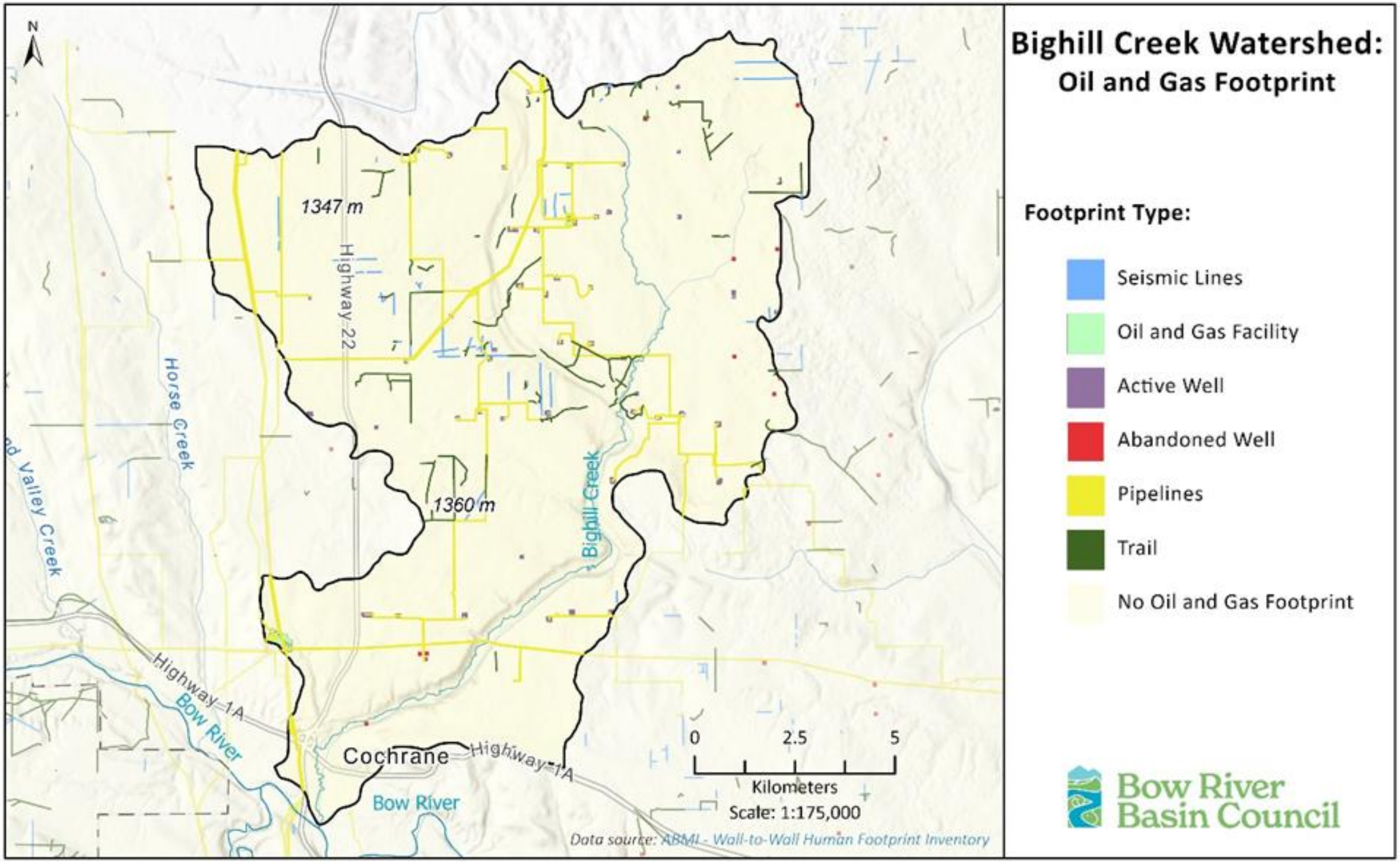
Data source: Alberta Geological Society, Surficial Geology of Alberta, Generalized Digital Mosaic (DIG 2013-0002) https://geology-ags-aer.opendata.arcgis.com/


N
22
567
766
Horse Creek
1:175,000
0 1.25 2.5 5 km
Bighill Creek Watershed:
Land Cover
Land Cover
Agriculture (57.20%)
Natural Grassland (18.08%)
Forest (11.47%)
Natural Depression (4.96%)
Built Up/Exposed (4.60%)
Disturbed Vegetation (2.55%)
Open Water (0.72%)
Agricultural Depression (0.41%)
Natural Bare Ground (0.01%)
Big Hill Springs Provincial Park
Major Highways
Bow River Basin Council
Data source: Bow River Regional Datasets, Land Cover Inventory
bowregionwetlands.ca


Bighill Creek Watershed:
Human Footprint
Human Footprint Type
Agriculture
Urban/Industrial
Energy
Transportation
Waterbodies
No Sector Reporting
Major Highways
Big Hill Springs Provincial Park
N
22
567
766
Horse Creek
Valley Creek
0
2.5
5
Kilometers
Scale: 1:175,000
Data source: ABMI - Wall-to-Wall Human Footprint Inventory
Bow River Basin Council


Bighill Creek Watershed:
Agriculture Footprint
Agriculture Footprint Type
Crop
Tame Pasture
Rough Pasture
Fruit and Vegetables
No Agriculture Footprint
Major Highways
Big Hill Springs Provincial Park
N
22
567
766
Horse Creek
Bighill Creek
Bow River
Cochrane
1360 m
0
2.5
5
Kilometers
Scale: 1:175,000
Data source: ABMI - Wall-to-Wall Human Footprint Inventory
Bow River Basin Council


N
22
22
567
67
766
Horse Creek
Grand Valley Creek
1360 m
Glenbow Ranch
Bighill Creek Watershed:
Linear Footprint
Linear Footprint
Pipeline
Railway
Gravel Road
Paved Road
Unclassified Road
Unimproved Road
Unpaved Road
Seismic Lines
Truck Trail
Public Road Allowance
Disturbed Vegetation
Along Roadsides
Major Highways
Big Hill Springs
Provincial Park
Bow River
Basin Council
Data source: ABMI Wall-to-Wall Human Footprint Inventory
+ Bighill Springs Preservation Society feedback


N
1347 m
Highway 22
Horse Creek
Valley Creek
1360 m
Bighill Creek
Highway 1A
Bow River
Cochrane
Highway 1A
Bow River
0
2.5
5
Kilometers
Scale: 1:175,000
Data source: ABMI - Wall-to-Wall Human Footprint Inventory
Bighill Creek Watershed:
Oil and Gas Footprint
Footprint Type:
Seismic Lines
Oil and Gas Facility
Active Well
Abandoned Well
Pipelines
Trail
No Oil and Gas Footprint
Bow River Basin Council

- *“Working with the BRBC on the Bighill Creek State of the Watershed report has been a very beneficial experience for the Bighill Creek Preservation Society*
- *The BRBC contributions of mapping, graphs, diagrams and text has been super-helpful.*
- *We’re so fortunate that the Bighill Creek watershed can be an integral part of the larger Bow Basin SOW report.”*

Wendell Koning, BCPS SOW Report Coordinator

In: Preserving our Lifeline, Vol #25, Issue1, March 2025

THANK YOU, BRBC!

Buffalo jump along Bighill Creek. Photo credit: W. Koning

Next steps

- Finalize the BCPS Bighill Creek full SOW report.

- Construct a communications and roll-out plan, to include limited print copies of the full report, printed brochures with map of watershed and key information.

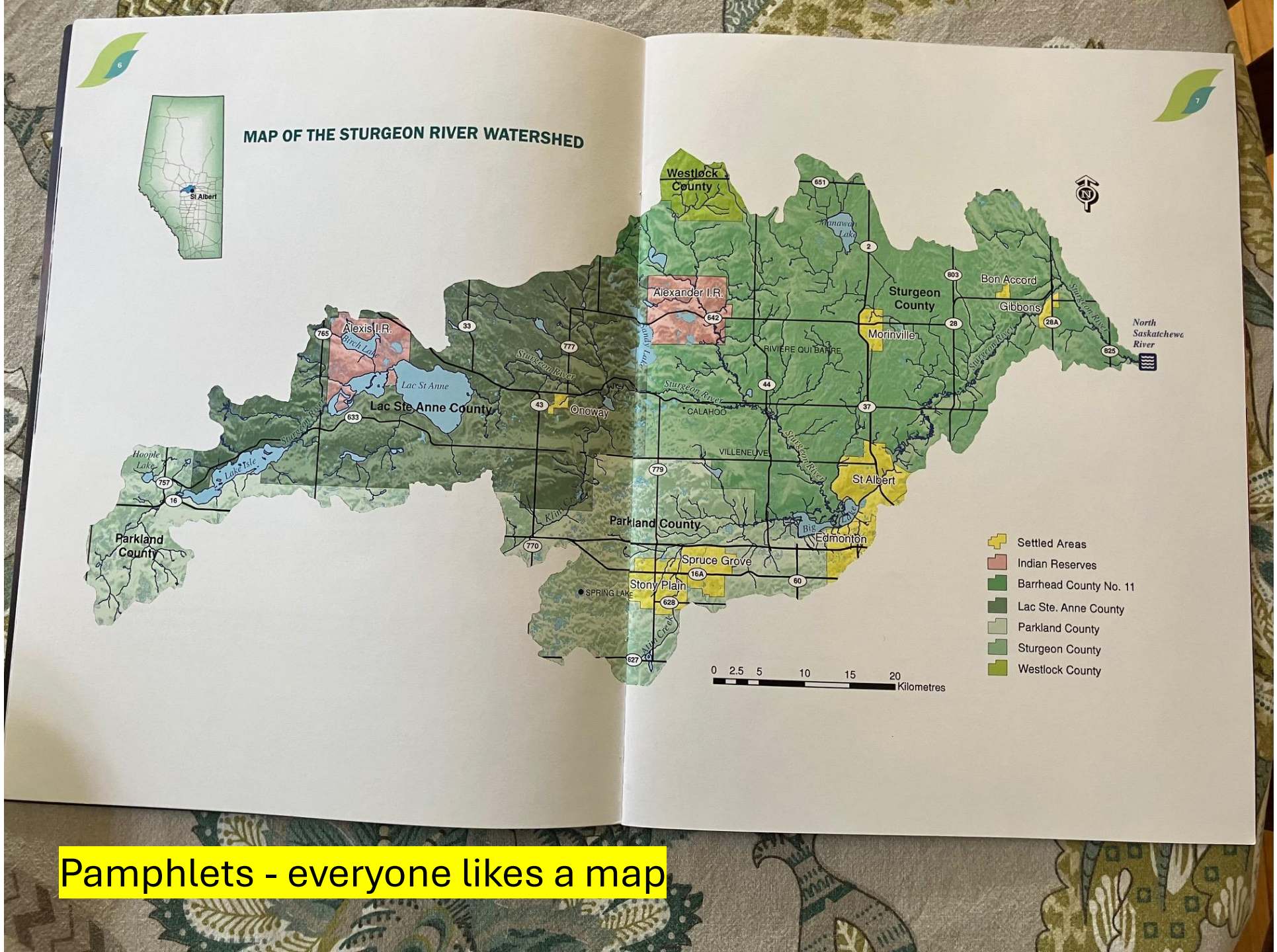
- Upload full report to the BRBC website with electronic linkages to background reference materials.

- Initiate a roadshow across the watershed to share the report.

- Initiate a multi-stakeholder Integrated Watershed Management Plan

- Ongoing: add material, make changes to the electronic form of the SOW report.

Produce pamphlets, Easy to handout, inexpensive



Pamphlets - everyone likes a map

IWMP
2014, 69
pg

Jumpingpound Creek

Integrated Watershed Management Plan - Final

May 2014

Jumpingpound Creek Watershed Partnership

Palliser Environmental Services Ltd.

ACKNOWLEDGEMENTS

Steering Committee

John Buckley, Landowner, Chair
Tom Arnett, Landowner
Rick Butler, Landowner
Tim Dietzler, Rocky View County
Lori-Anne Eklund, Landowner
Kevin France, Alberta Environment and Sustainable Resource Development
Billy Oulton, Landowner Representative
Laura Laing, Landowner Representative
Dwight Tannas, MD of Bighorn
Gary Wagner, Town of Cochrane
Zulfiqar Khowaja, Town of Cochrane
Chad Willms, Rocky View County

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Amanda Bogen-Halawell, Cows and Fish
Dr. Masaki Hayashi, University of Calgary
Jon Jorgenson, Alberta Sustainable Resource Development
Stefan Price, Town of Cochrane
Pat Young, Alberta Environment and Sustainable Resource Development

Financial Sponsors

Agriculture and Agri-Food Canada (Prairie Farm Rehabilitation Administration)
Alberta EcoTrust
Alberta Stewardship Network
Bow River Basin Council
EcoAction
Rocky View County
Shell Canada
Town of Cochrane

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The Buckley Family
C. Arnett
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JPC IWMP

JCWP

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Thanks again

Watch

- Small Creek: Lake Chub, Brook Stickleback, and White Sucker

Location : Bighill Creek upstream of the confluence with Big Hill Springs Creek.

Credit: Elliot Lindsay, TUC, 2020