

Beaver Surveys 2022

Presented by Johnson Creek
Watershed Council





Agenda:

Intro to JCWC
Beaver Ecology Basics
Reasoning behind beaver surveys
What we survey
Data collection protocols
Questions



Johnson Creek Watershed Council

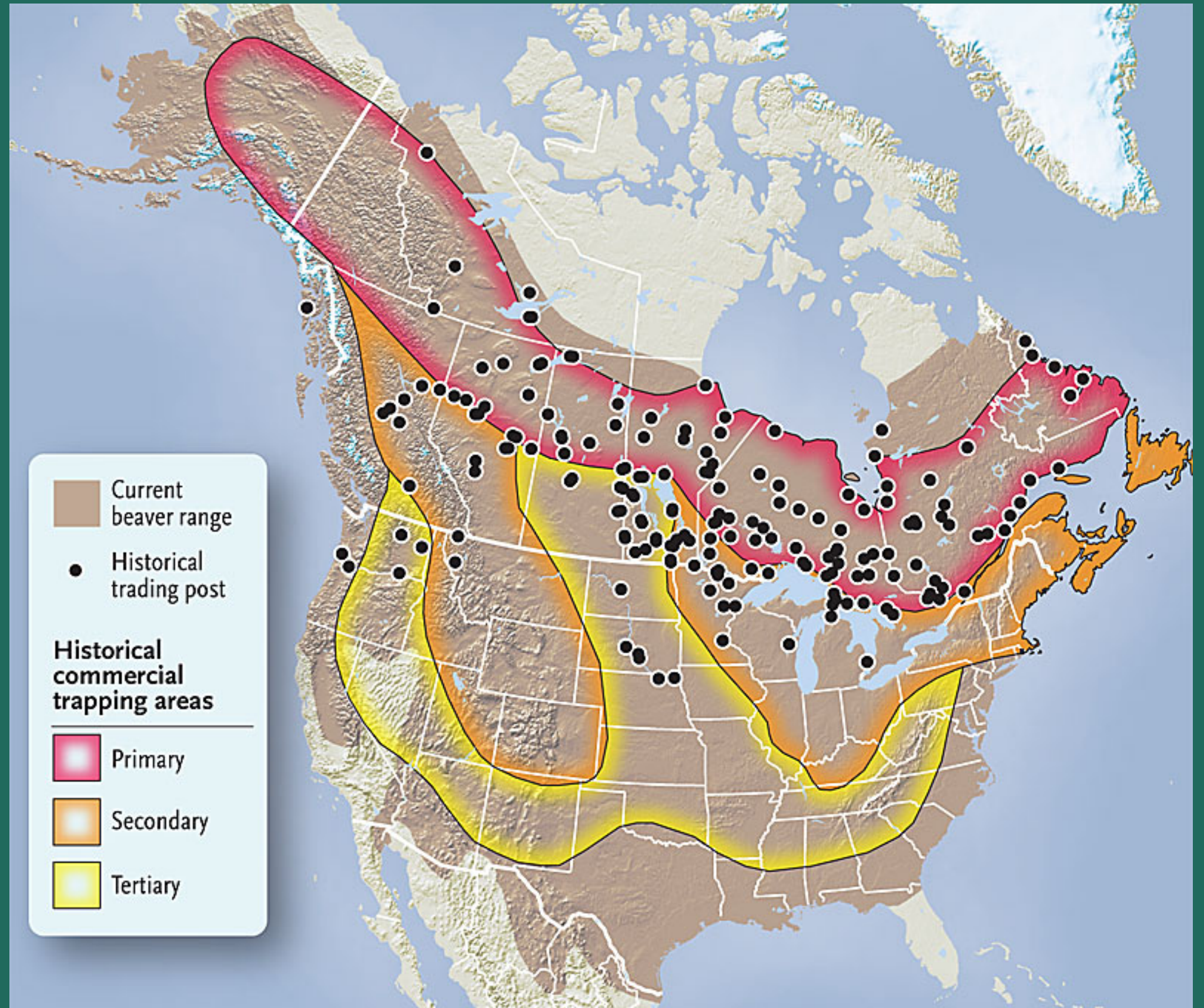
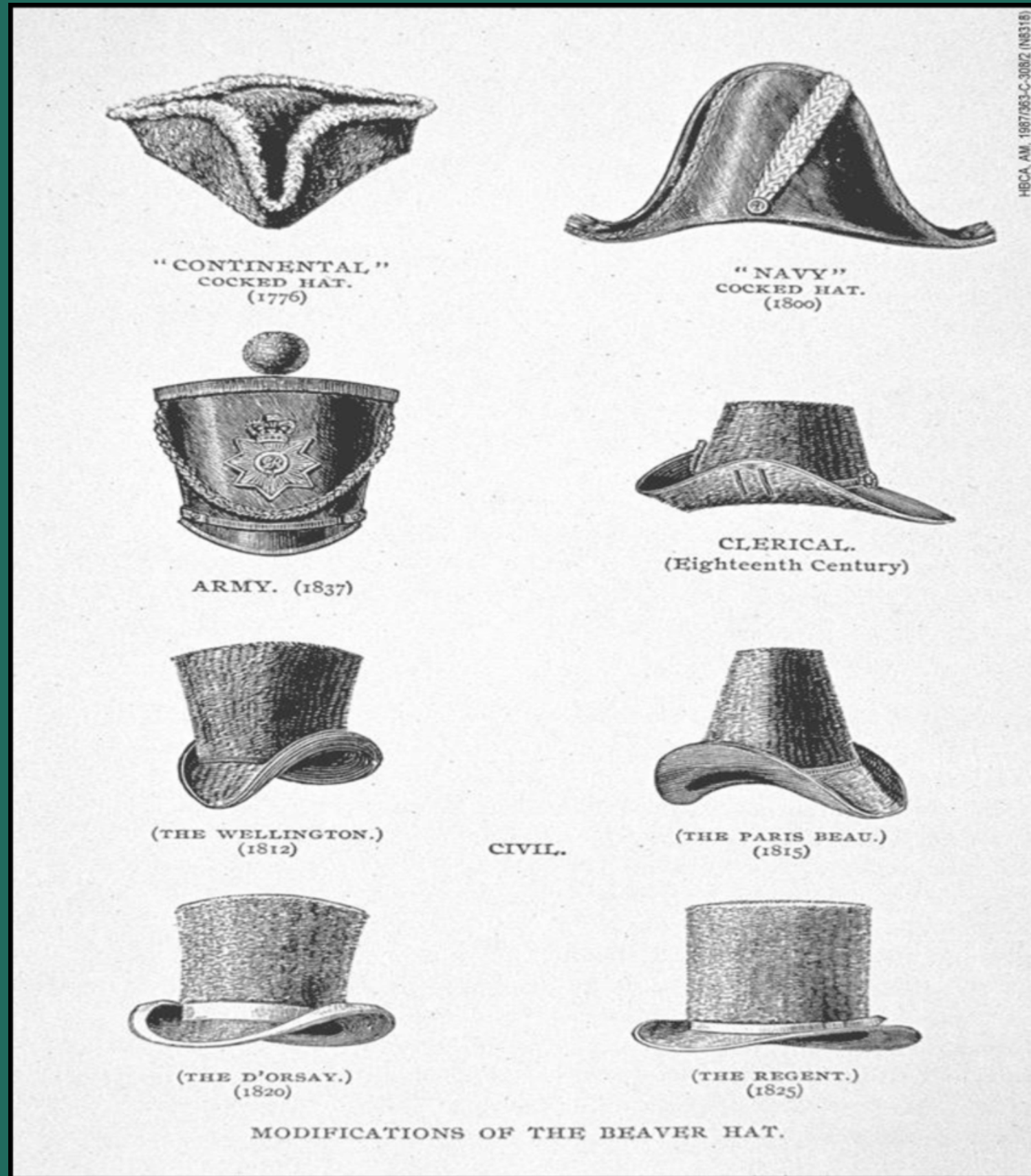
- Johnson Creek runs 26 miles from Boring to Milwaukie
- Restoring the creek through sound science and community engagement





Beaver Ecology

- Beavers once lived all over North America before the fur trade
- Fur trade occurred from 1600-1830
- North American beaver went nearly extinct, used for hats and castorium
- Estimated populations before the fur trade are between 60-400 million. Now, estimated 6-12 million





Beaver Ecology cont'd.

- Beavers live and work in family groups
- kits (young) stay with their parents for 2-3 years
- Beavers leave home in search of a mate, then settle down into suitable habitat
- Generally work independently but may work alongside each other
- Families may change their homebase if they deplete resources
- Beavers eat tree bark and other vegetation, but not the inner wood of trees.



More Beaver Ecology

- They are safer in water than on land, building dams creates more safe space
- Beaver create wetlands! Wetlands are vital for clean water, flood/drought/fire mitigation and habitat for many species



Why BEAVERS Are The Smartest Thing In Fur Pants



Share

SMARTEST THING IN FUR PANTS



Watch on  YouTube

The background features a light green gradient with stylized illustrations of trees in various shades of green and brown, and a large orange circle with a smaller dark green circle overlapping it, resembling a sun or moon.

Why are Beaver Surveys important?

- develop appropriate plant lists for enhancement projects
- see where beavers are returning every year
- be alerted to population fluctuation
- research relationships between beaver activity and other species that use the creek
- volunteers increase our capacity and help contribute to community knowledge about natural areas!



What are we looking for?

- Beaver dams
- Beaver lodges

Objectives:

- Know where beavers are living
- Map beaver built structures
- Track activity and structures over time.



Beaver Dams in the Wild



Beaver Dams in Urban Areas



Beaver Lodge at Errol Heights



Signs of Beavers





Signs of Beavers



Signs of Beavers





Survey Protocols

- We provide gear and instruction, you complete the survey with your team
- Surveys typically last from 2-3 hours
- You will be walking in water from anywhere between ankle to hip/waist depth
- Possibly climbing up and down banks, climbing over fallen trees and log jams, climbing over rocks



Survey Protocols

- Using a Tablet/Phone
 - Need a phone w/ cellular data turned on and a camera
 - Anecdata app loaded, logged-in
 - Whiteboard, dry erase pen
- You will also have paper data sheets
 - if you choose to use a paper data sheet you still need to take pictures and record latitude and longitude



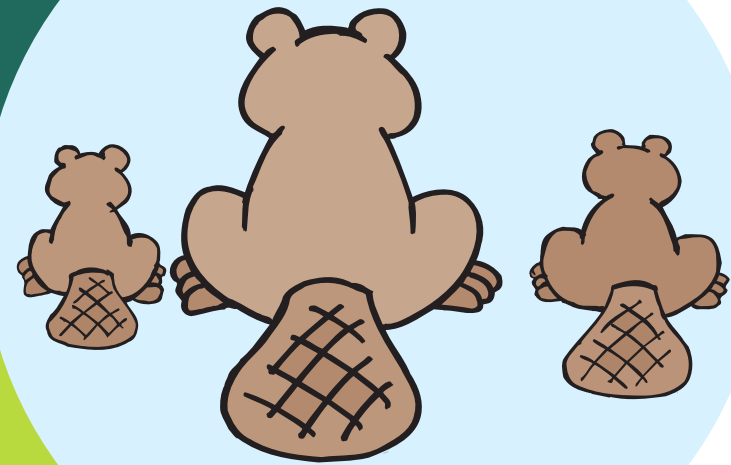
Survey Protocols

- What to wear?
 - Long pants and Long shirt
 - Recommend wearing leggings or breathable hiking pants, no jeans or Carhart's
 - It will be hot and sweaty and lots of long vegetation
 - Leave a change of dry clothes in your car!
- Bring a backpack!
 - There is potential for your backpack to get wet so do not bring anything valuable consider using an old pack you don't care much about
- Cellphone
 - if you have a waterproof holder, great! If not, a couple plastic sandwich bags is also good!



Survey Protocols

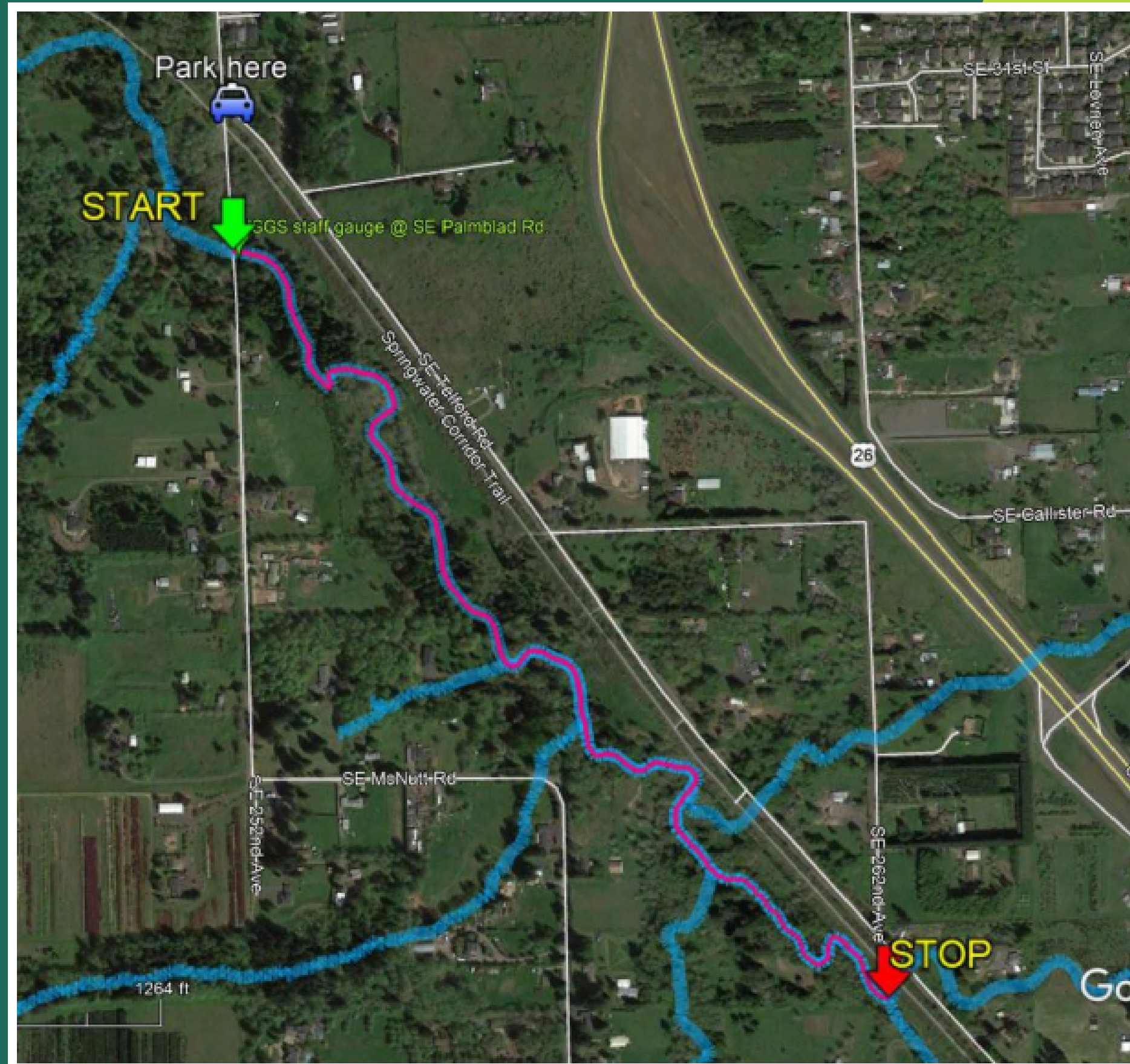
- Be prepared to talk to people about what you are doing!
 - we are allowed to be conducting these surveys, we have permits!
 - people are often very curious about what we are up to!
- Houseless people
 - there is a chance you will run into houseless people, you can say hi and let them know what you are doing and then move on

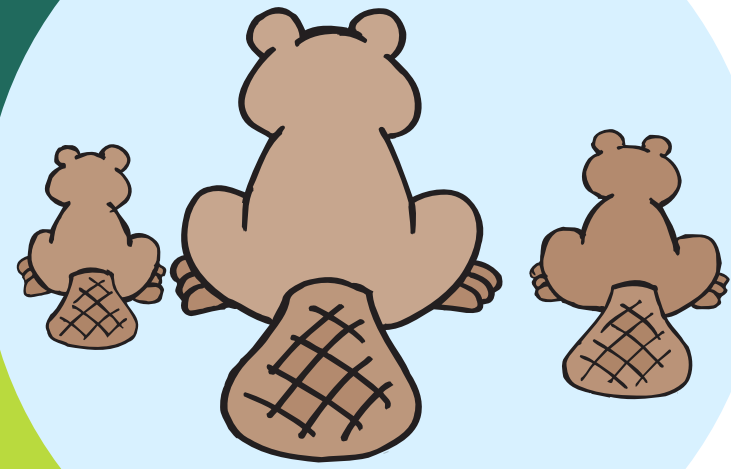


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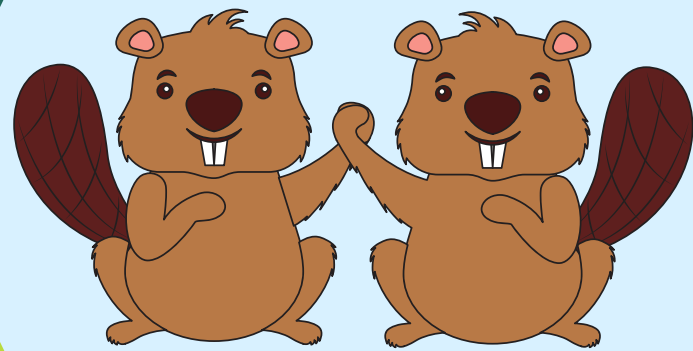
Orient Yourself to the Reach





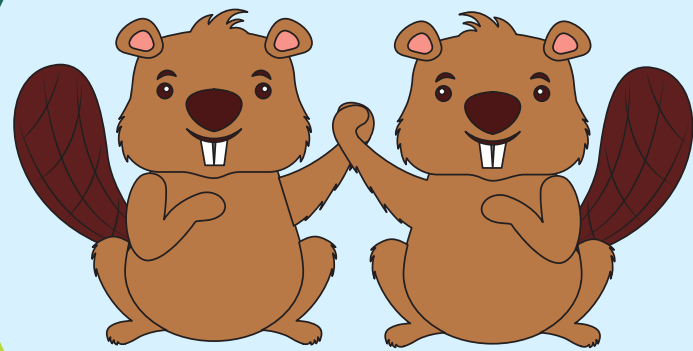
Survey Protocols

- Avoid going in the stream as much as possible
 - however, most of the surveys you will do are mostly in the water
 - there are areas with steep banks
 - a lot of the stream is bordered by private landowners and we want to avoid walking on their property
- Move carefully and methodically up-stream



Survey Safety Protocols

- Watch where you step and use your walking pole to test water depth
- Be careful around blackberry and other pokey plants because it will rip your waders
- Remember to have quick release buckles accessible at all times
 - Do not wear anything over your waders



Recording Data

1. When a dam or lodge is located stop to record data
2. On whiteboard write date, stream name, and site code (A, B, C....)
3. Take a photo with the whiteboard close (readable) to the photographer, include the person holding the board near the top if the dam/lodge for scale. Try to capture entire feature in the photo

Recording Data



Look at Survey Protocol

Look at Anecdotal



Where to Find All this info??

1. In Beaver Surveyor Toolkit that is shared with you (google drive)
2. On the Website (jcwc.org)



Let's Sign-up for surveys!

1. Check your email!