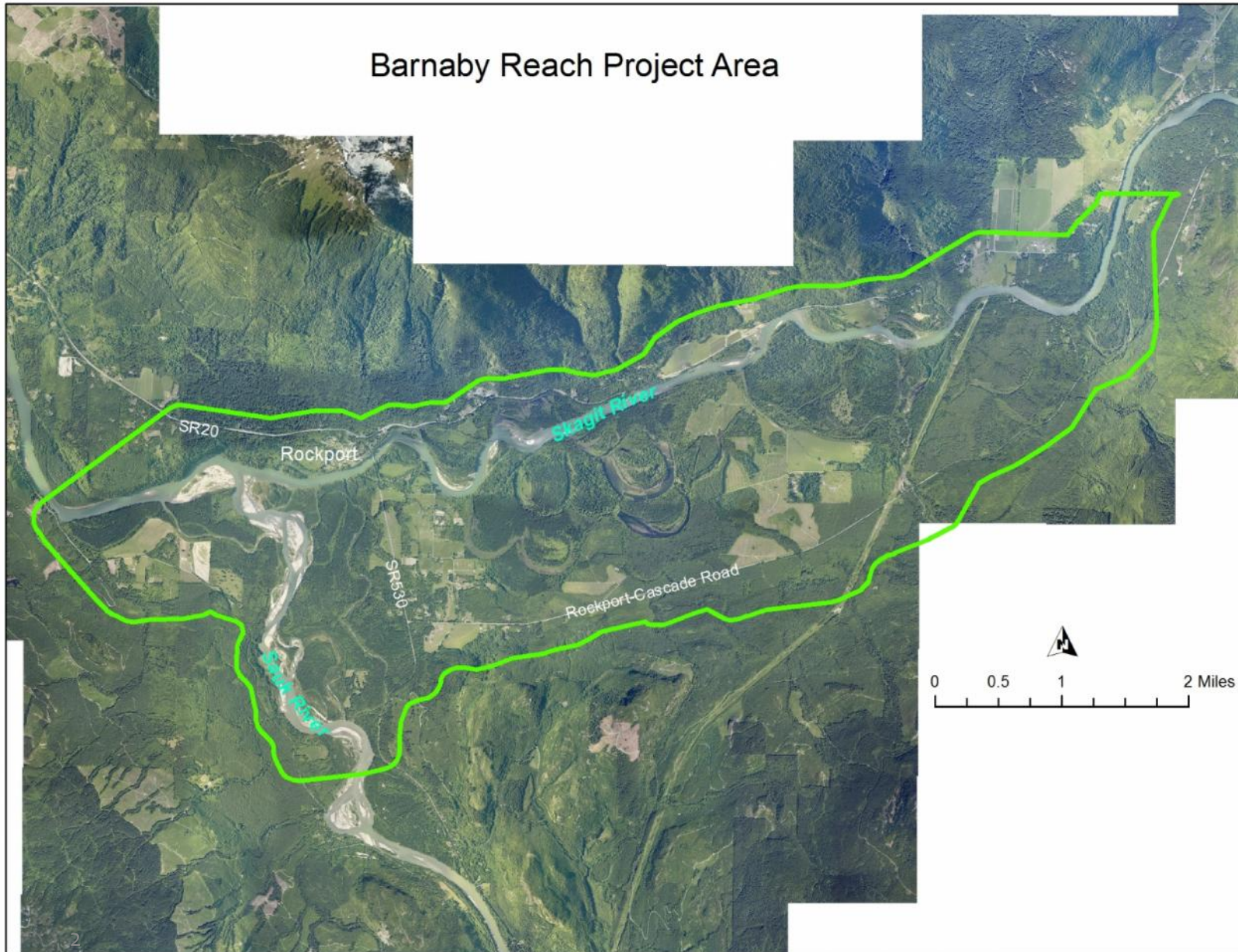


# Introduction to project

### Barnaby Reach Project Area



# Completed data collection

- New topography and bathymetry
  - ▶ Green LiDAR
  - ▶ Selected ground survey
- Groundwater and surface water loggers (17 sites)
  - ▶ Dry season and wet season for all sites
- Sediment sampling along sloughs and river
  - ▶ Erosion/avulsion potential
  - ▶ Age of landscape features
- Culvert/roadway surveys
- Survey heights for past floods including Nov 2017
  - ▶ Community records

# Existing Conditions

- South Rockport drainage evaluation
- Hydraulic model
  - ▶ Includes expanded area of Skagit River and also lower Sauk River
  - ▶ Considers tributary inputs
  - ▶ Separate groundwater analysis
  - ▶ Will be calibrated with 2003 flood and validated with 2006 flood
  - ▶ Includes a broad range of flows including very low flows and catastrophic/climate change flows
- Geomorphology
  - ▶ Understanding erosion, channel changes and role of large log jams
- Habitat for multiple fish and wildlife species
- Stakeholder and community involvement
- Completed prior to alternative analysis

# Schedule

- Dec 2017 Results from local flood and drainage study (tonight!)
- Jan--April 2018 Existing conditions analysis
  - Groundwater
  - Hydraulic Model
  - Geomorphology
- July- Dec 2018 Develop and analyze project alternatives
- 2019 Design and permitting
- 2020 Project construction starts

# South Rockport drainage study

- Community residents reported localized flooding, drainage, and problems with culverts
- Drainage study
  - ▶ Localized flooding related to roads and culverts
  - ▶ Road access during floods and drainage after flood events
  - ▶ Identify possible projects to reduce problems
- Questions about larger scale flood risks addressed in upcoming analyses

# Illabot creek

- Public meeting February 15<sup>th</sup>