

# EAST FORK NOOKACHAMPS CREEK

## Watershed Assessment and Management Plan

Community Meeting | August 25, 2022



# Agenda & Goals for Today

6-6:10 PM	Welcome and refreshments
6:10-6:30 PM	Presentation from the project team
6:30-6:55 PM	Q&A
6:55-7:30 PM	Mapping exercise, comment opportunity, & open house
7:30 PM	Adjourn

## Goals

- Introduce the Watershed Assessment and Management Plan project
- Solicit input and feedback to help the project team make decisions through the process



# Introductions



**Curtis Clement**  
**Upper Skagit Indian Tribe**  
Project Manager  
Geologist



**Rick Hartson**  
**Upper Skagit Indian Tribe**  
Fisheries Biologist



**Paul Schlenger**  
**ESA**  
Consultant Project Manager  
Fisheries Biologist



**Jon Ambrose**  
**ESA**  
Hydrologist/Geomorphologist



**Nicole Lobodzinski**  
**ESA**  
Community Engagement Specialist



# Project Overview

The goal of this project is to characterize conditions in the watershed and develop an East Fork Nookachamps Creek Watershed Management Plan, which will include recommended actions to:

- Help minimize flood impacts to landowners and roads.
- Restore natural creek processes.
- Improve habitat conditions for anadromous fish and other important watershed species.



# Watershed Assessment and Management Plan

## Watershed Assessment

- Evaluation of existing conditions in watershed and identification of contributing factors
- Includes assessment of hydrologic, geomorphic, and anadromous fish habitat conditions

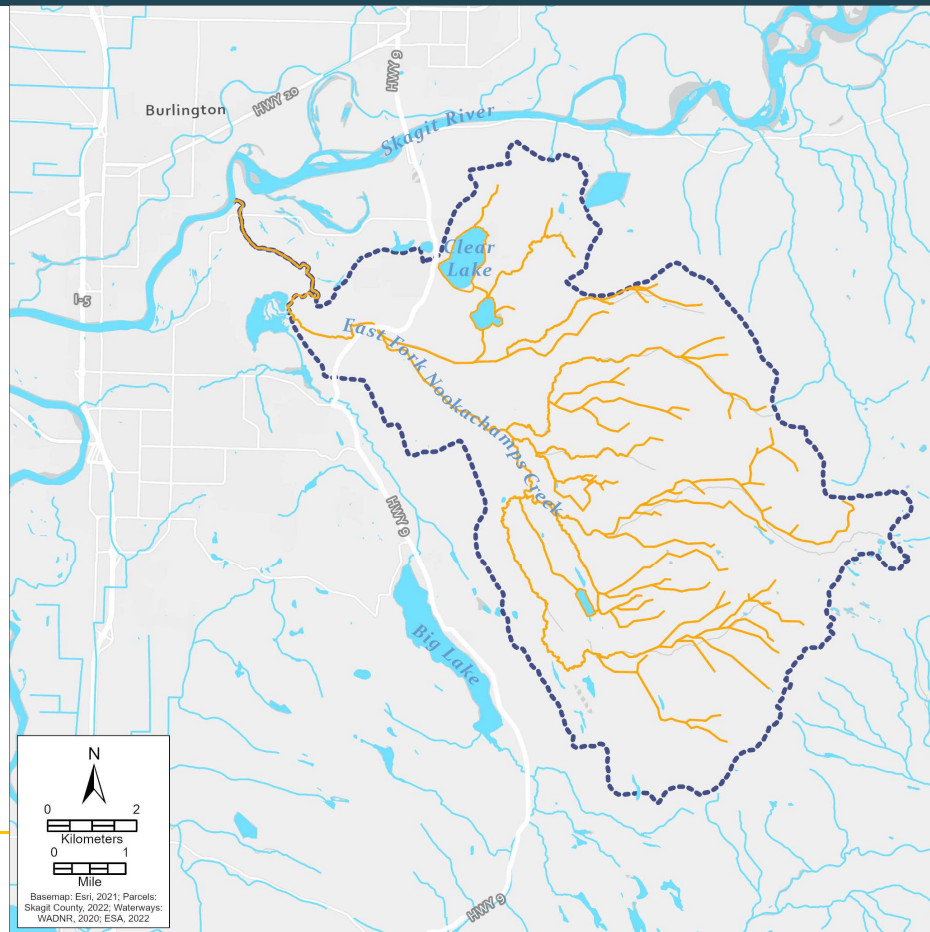
## Management Plan

- Identification of specific actionable objectives with strategies and actions to address problems in the watershed
- Development of an implementation plan detailing specific projects with recommended project leads and timeline





# Project Area

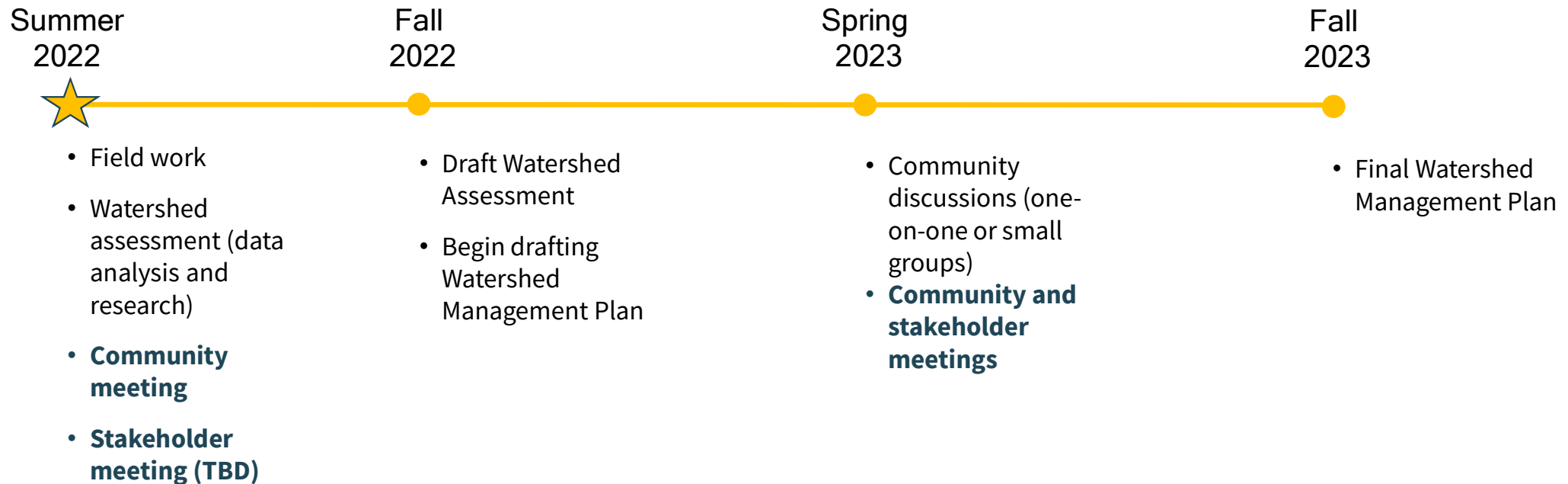


Project Boundary

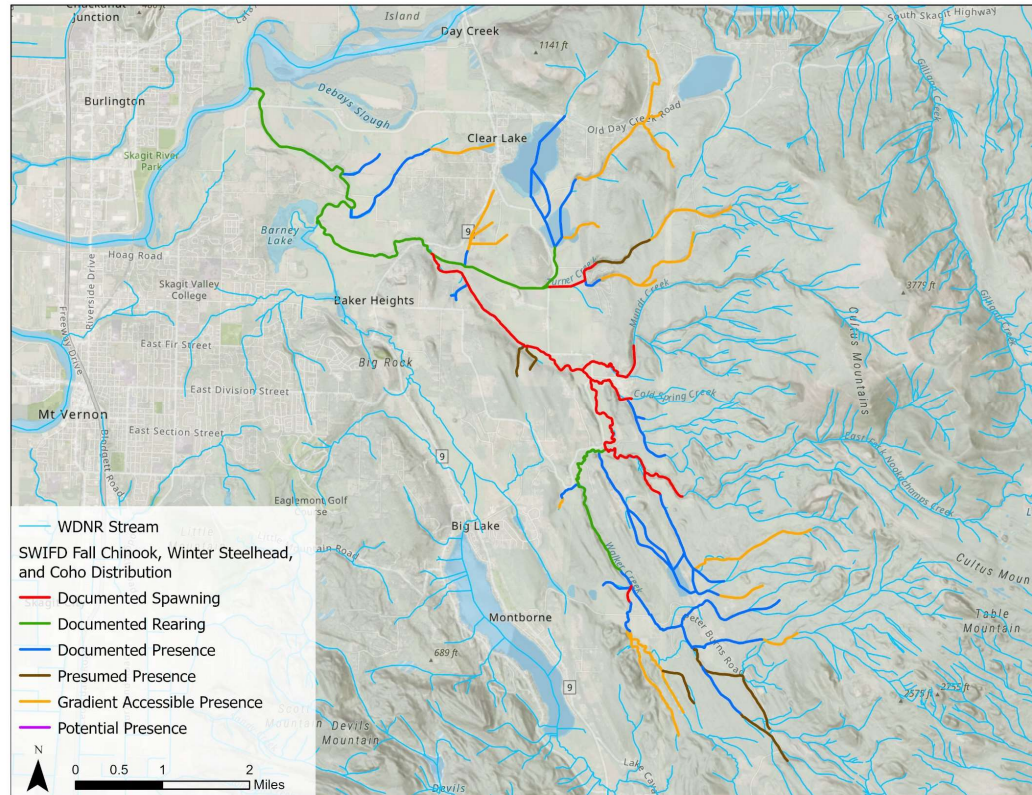
Watershed Assessment Survey Location



# Project Schedule

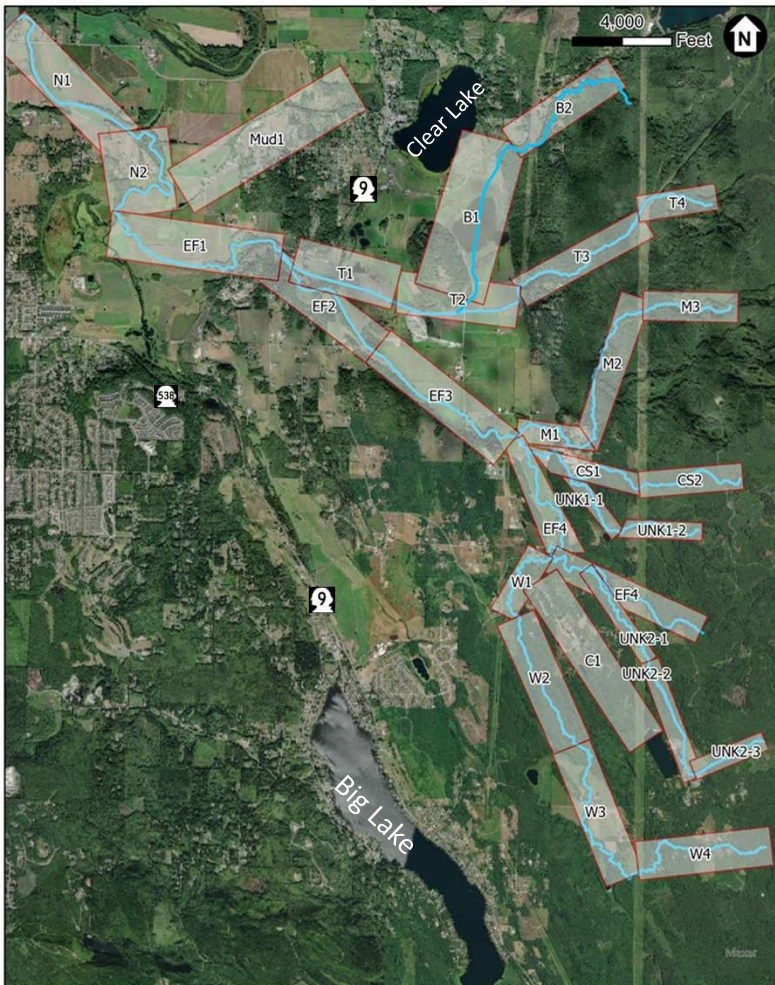


# Fisheries Context





# Watershed Assessment



- Gather available data (office)
- Collect new data (field)
  - In July 2022, ESA collected data on Nookachamps, EF Nookachamps, and 9 tributaries
- Characterize the physical processes that form and maintain aquatic habitat
- Identify impediments to successful maintenance of those physical processes or where the built environment precludes them



# Watershed Assessment

## Field Data Collection Effort

- **29** reaches identified for study
- **22** reaches visited in July 2022: mainstem, EF Nookachamps, 9 tributaries
- Data collection consisted of:
  - Topographic information: channel dimensions, slope, cross section area
  - Geomorphic information: sediment size, deposition patterns, sediment sources
  - Hydraulic information: culvert/drainage structure locations, dimensions, capacity
  - Fisheries information: habitat condition, gravel quality, temperature, riparian



# WATERSHED MANAGEMENT PLAN

Management recommendations presented in the plan may include activities such as:

- Infrastructure upgrades
- Drainage system improvements
- Forest Practices
- Managed aquifer recharge projects
- Anadromous fish passage barrier removal
- Sediment management
- In-channel and floodplain restoration
- Riparian planting



# Next Steps

1. Complete Data Reduction
2. Draft Watershed Assessment
3. Review/Comment Period
4. Initiate Watershed Management Plan
5. Finalize Plan
6. Projects!





# QUESTIONS?

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