

HABITAT RESTORATION HIGHLIGHTS

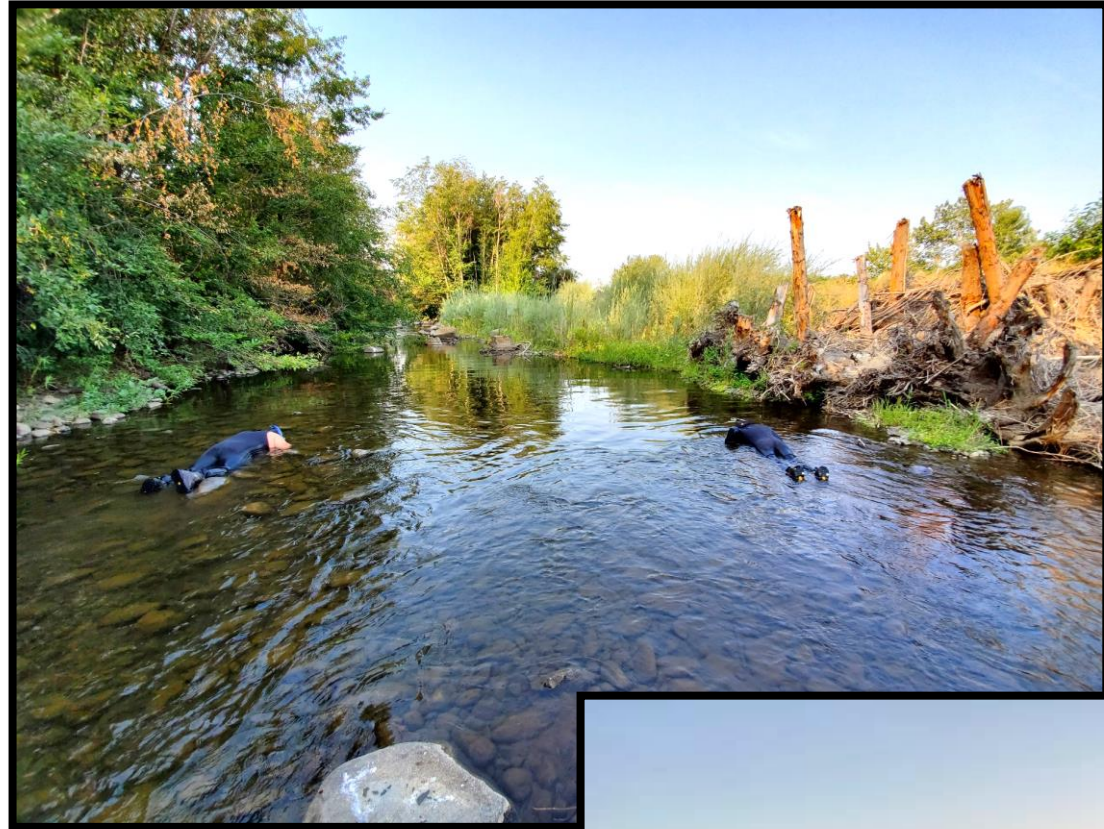
Shawna Warehime

Yakama Reservation Watersheds Project



Scope of Work

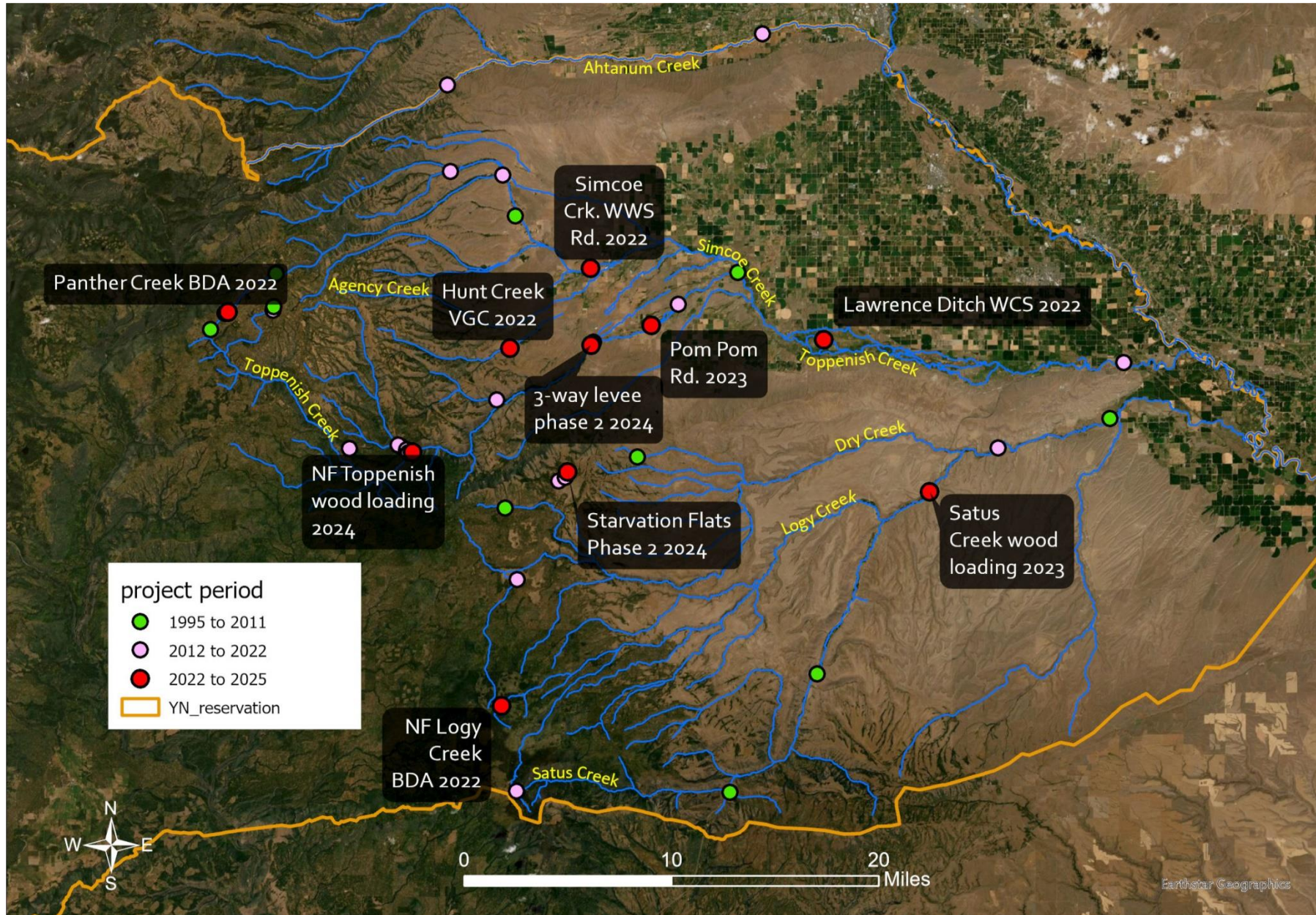
- Project scale has grown for YRWP
- Range: Beaver Dam Analogues to large bridges
- Selection Criteria: creek / habitat assessments
 - Ranking of priority reaches
 - Reassessing those priority reaches
 - 5 year and 10 year plans
- Learning from previous restoration phases to improve restoration efforts



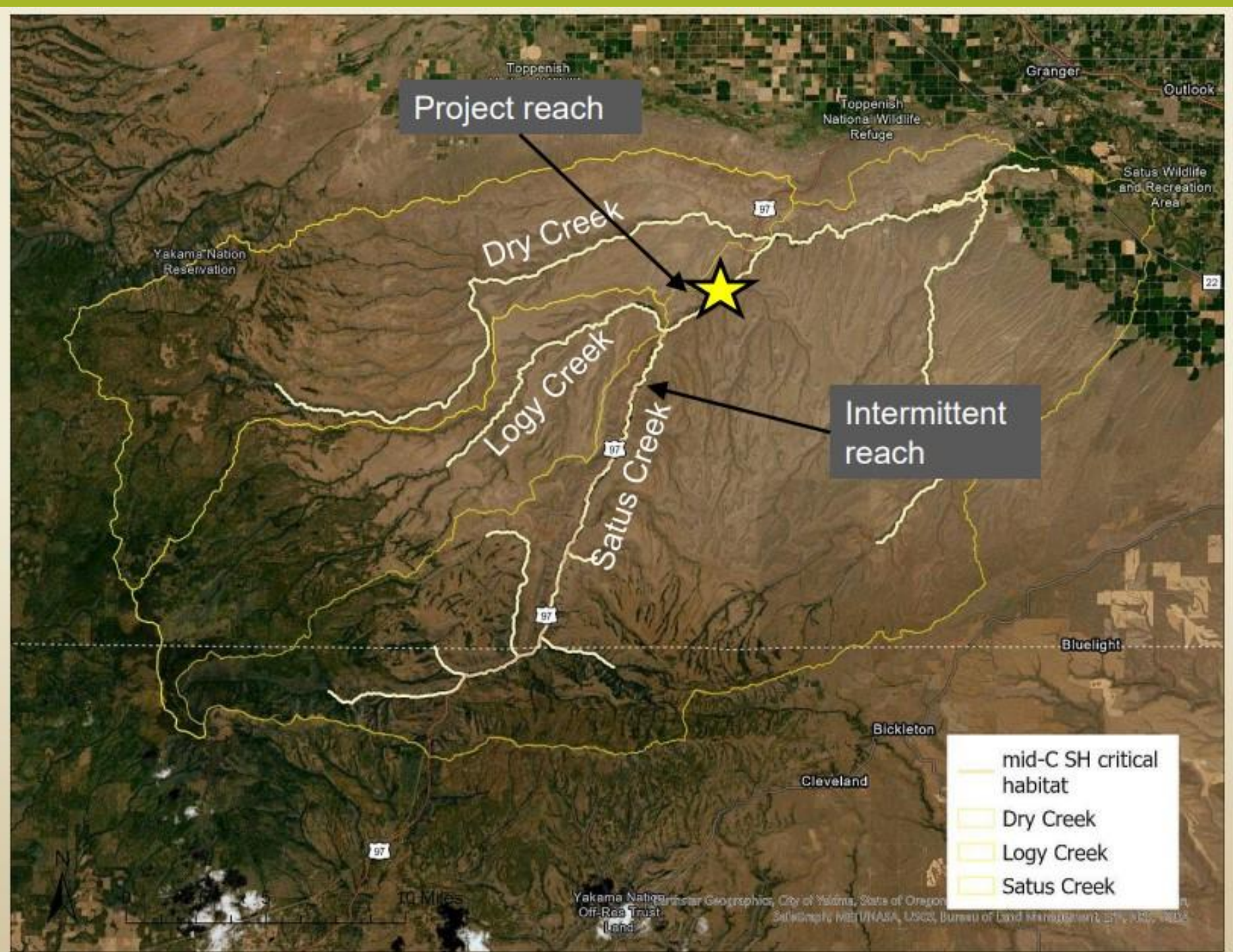
Objectives / Goals

- Mission Statement: To honor, protect, and restore culturally important fish populations and their habitats throughout the Zone of influence of the Yakama Nation and to protect the rights of Yakama Nation members to utilize these resources as reserved by them in the Treaty of 1855
- Site specific goals and objectives



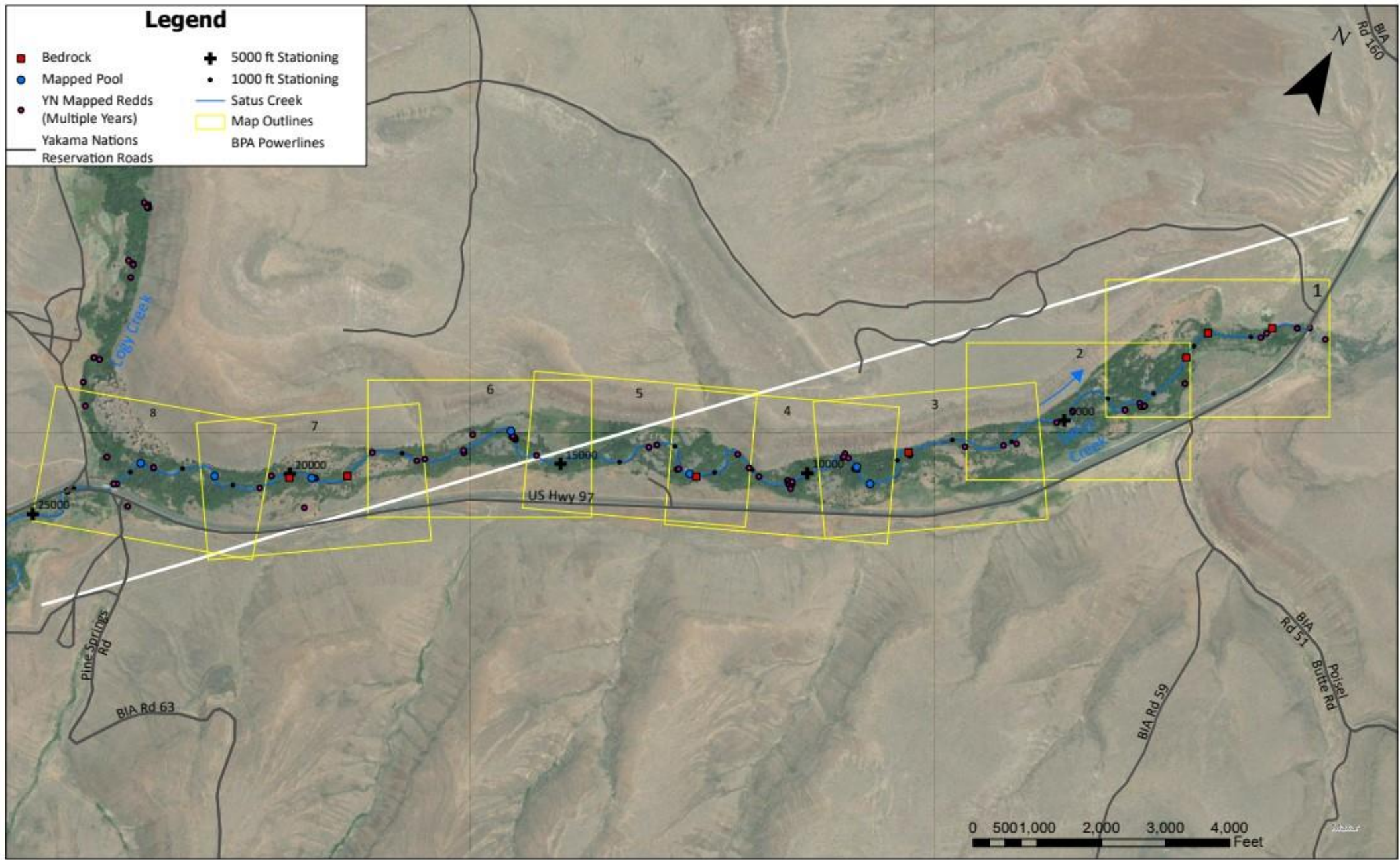


SATUS Creek RM 20 - 25



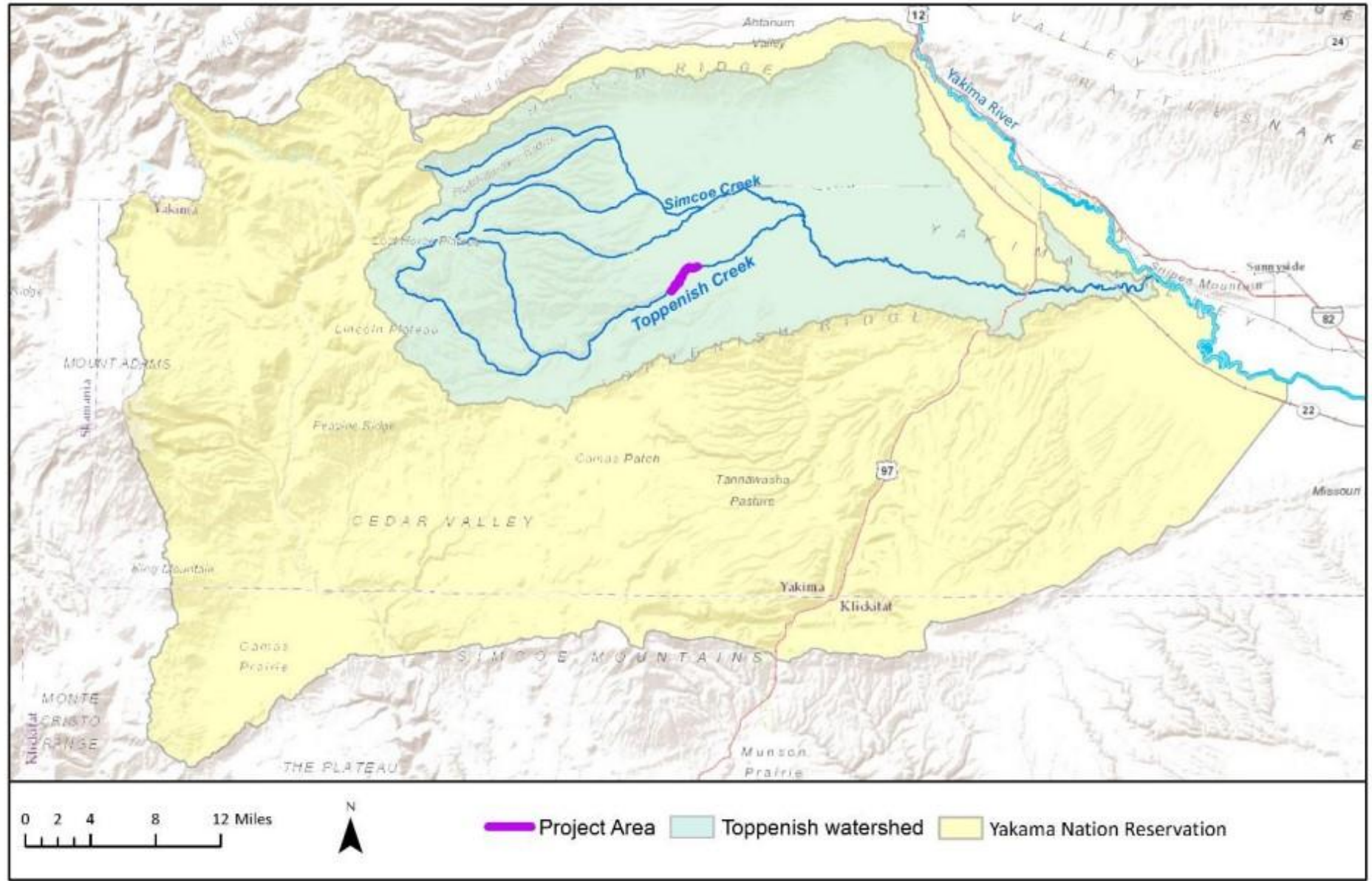
Legend

- Bedrock
- Mapped Pool
- YN Mapped Redds (Multiple Years)
- Yakama Nations Reservation Roads
- ⊕ 5000 ft Stationing
- 1000 ft Stationing
- Satus Creek
- Map Outlines
- BPA Powerlines





3-Way Phase 2 Levee Removal



Two Years Post Phase I



Removal of Levee, Phase I, 2018



Potential Restoration Actions – Scalable Concepts Only



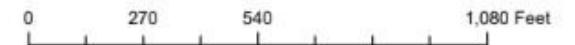
Restoration treatment alternatives in this map are conceptual. Location, extent, and type will be defined during the design process, which will require survey, analysis and modeling.

Toppenish Creek: 3-Way Phase II
Alternative 3



Alternative 3 - Treatments

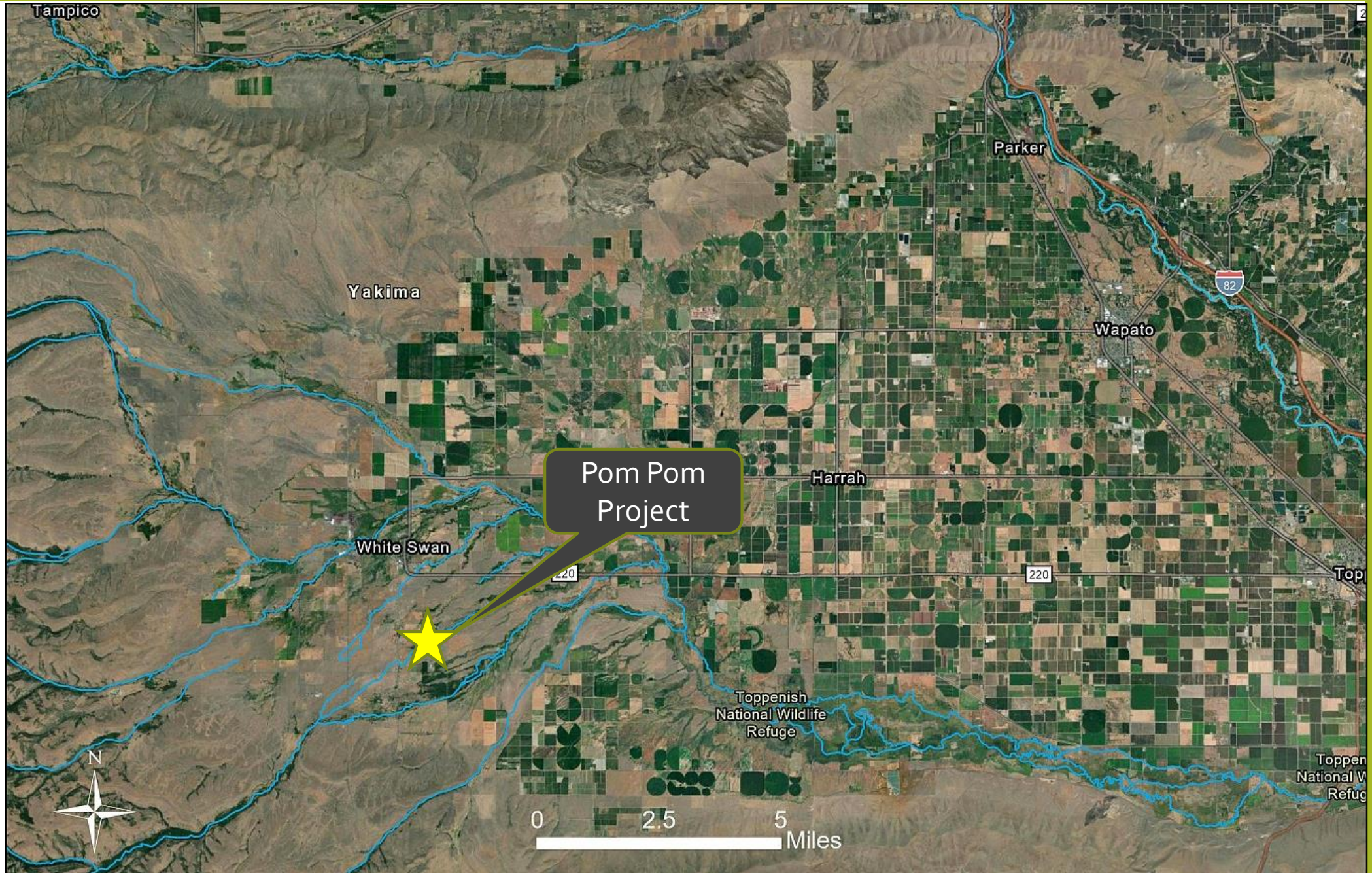
- | | |
|------------------------------|---------------------------|
| Large Wood Structures | Alcove |
| Apex | Channel Fill (partial) |
| Bank Buried | Levee Removal |
| Channel Spanning | Floodplain Grading |
| Floodplain Roughness | Inset Low |
| Side Channels | Inset to 2yr Q |
| New Mainstem | |



Section to be removed, Phase II



Pom Pom RM 40



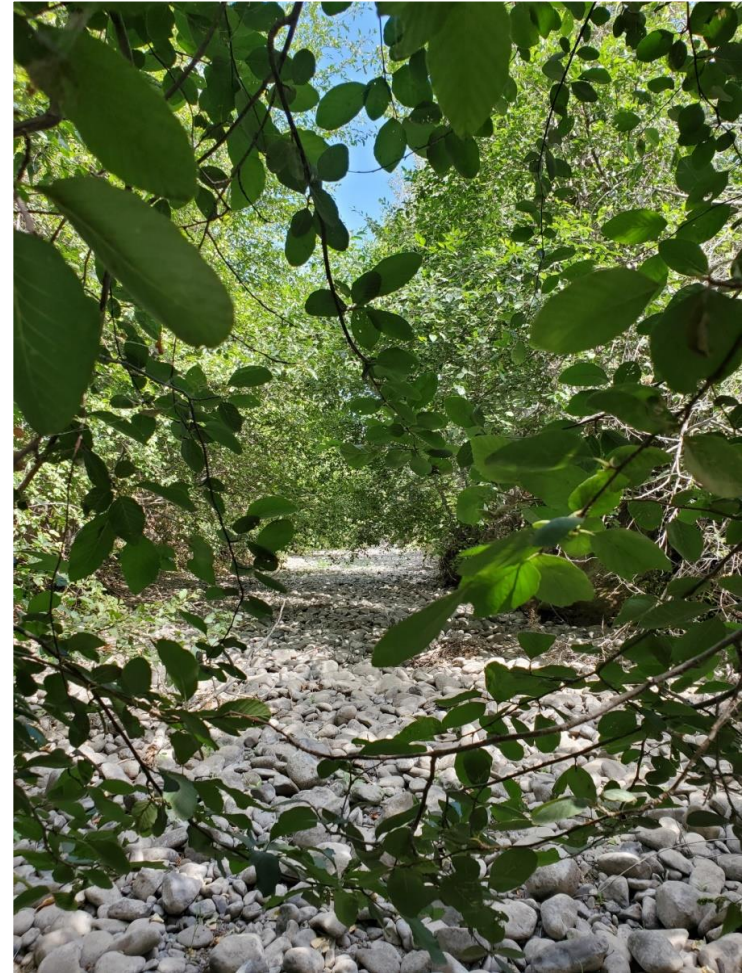
Pom Pom (RM40) Toppenish Creek



South channel
upstream of bridge

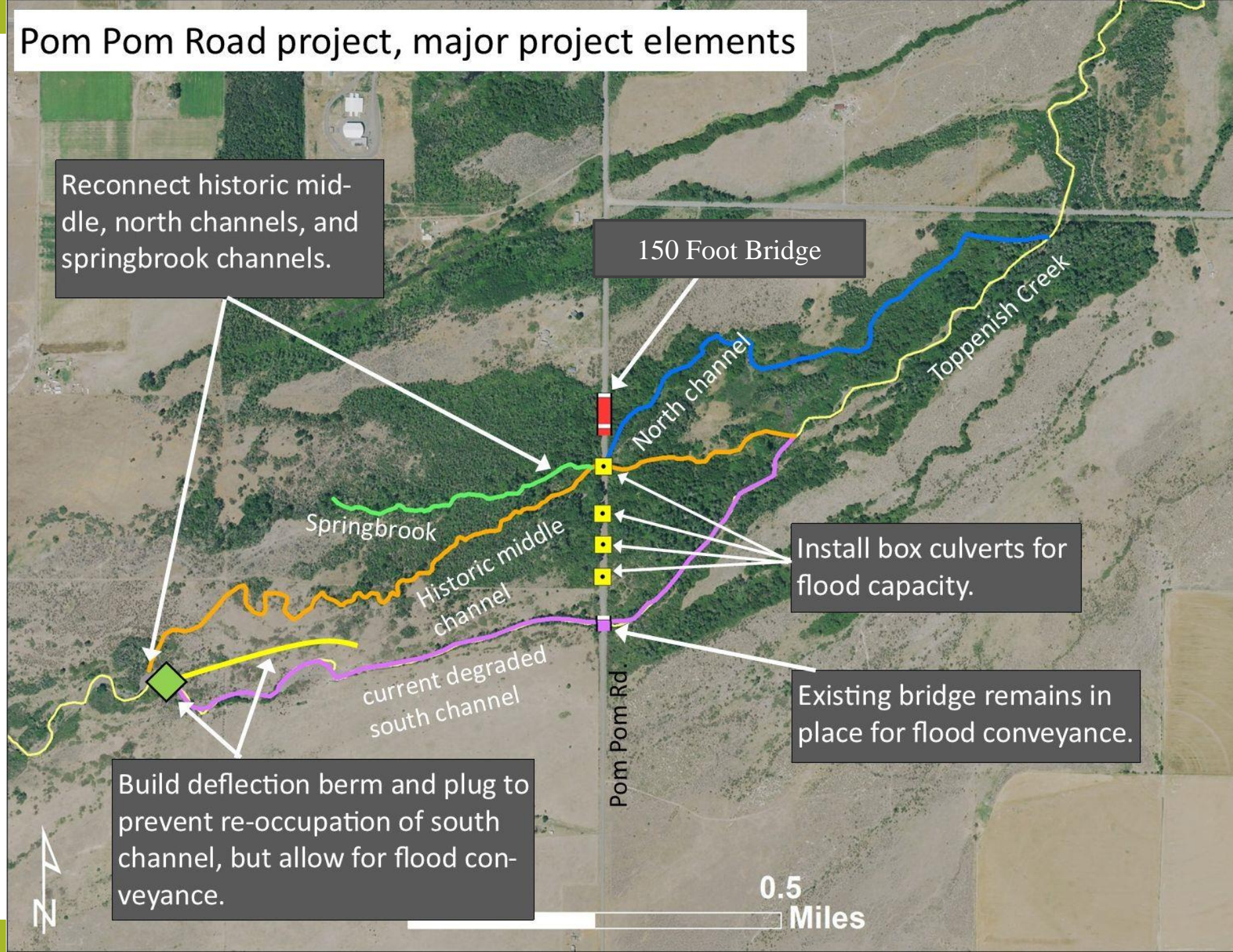


Showing channel
incision



South channel
downstream of bridge

Pom Pom Road project, major project elements



Reconnect historic middle, north channels, and springbrook channels.

150 Foot Bridge

North channel

Toppenish Creek

Springbrook

Historic middle channel

current degraded south channel

Install box culverts for flood capacity.

Existing bridge remains in place for flood conveyance.

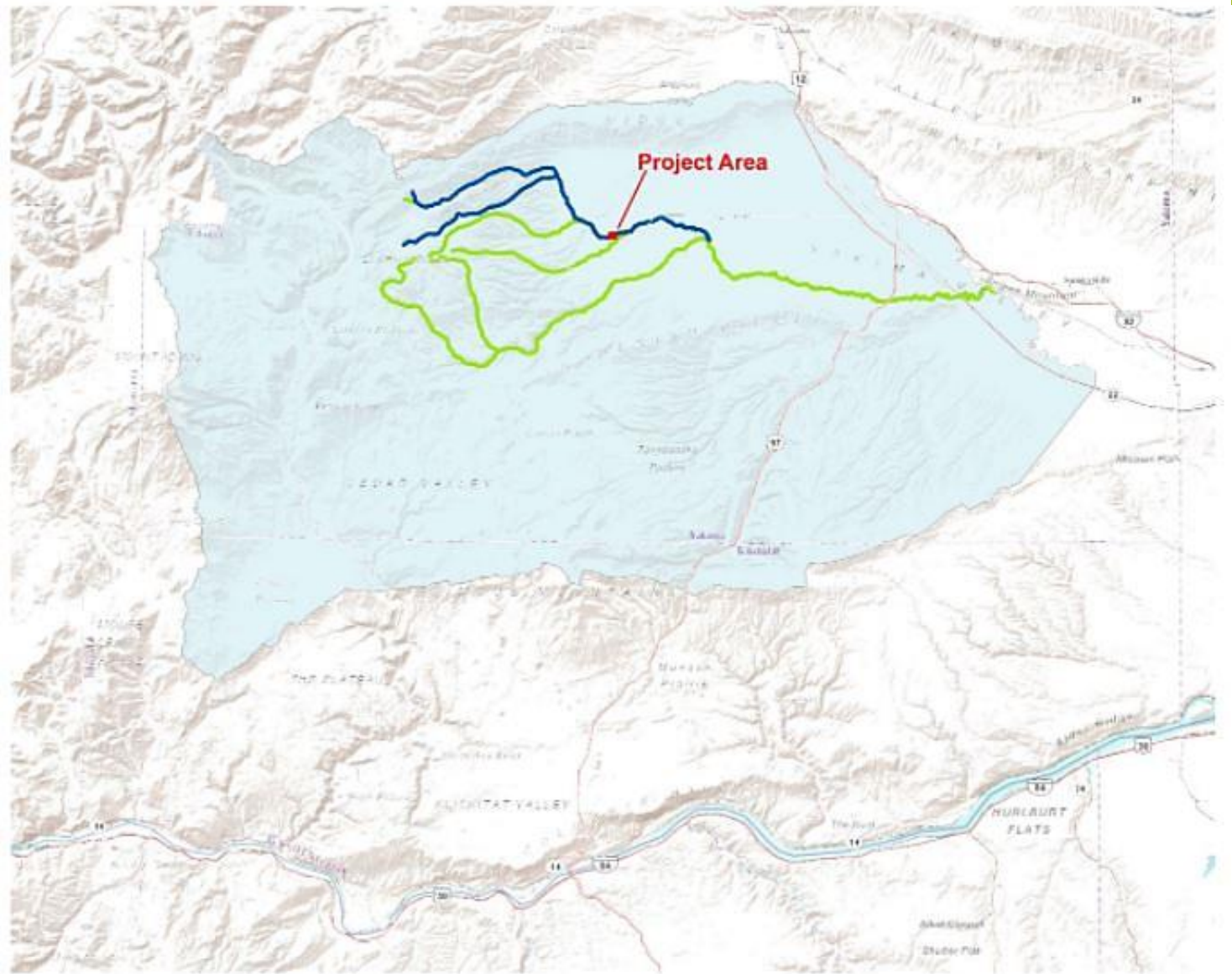
Build deflection berm and plug to prevent re-occupation of south channel, but allow for flood conveyance.

Pom Pom Rd.

0.5 Miles

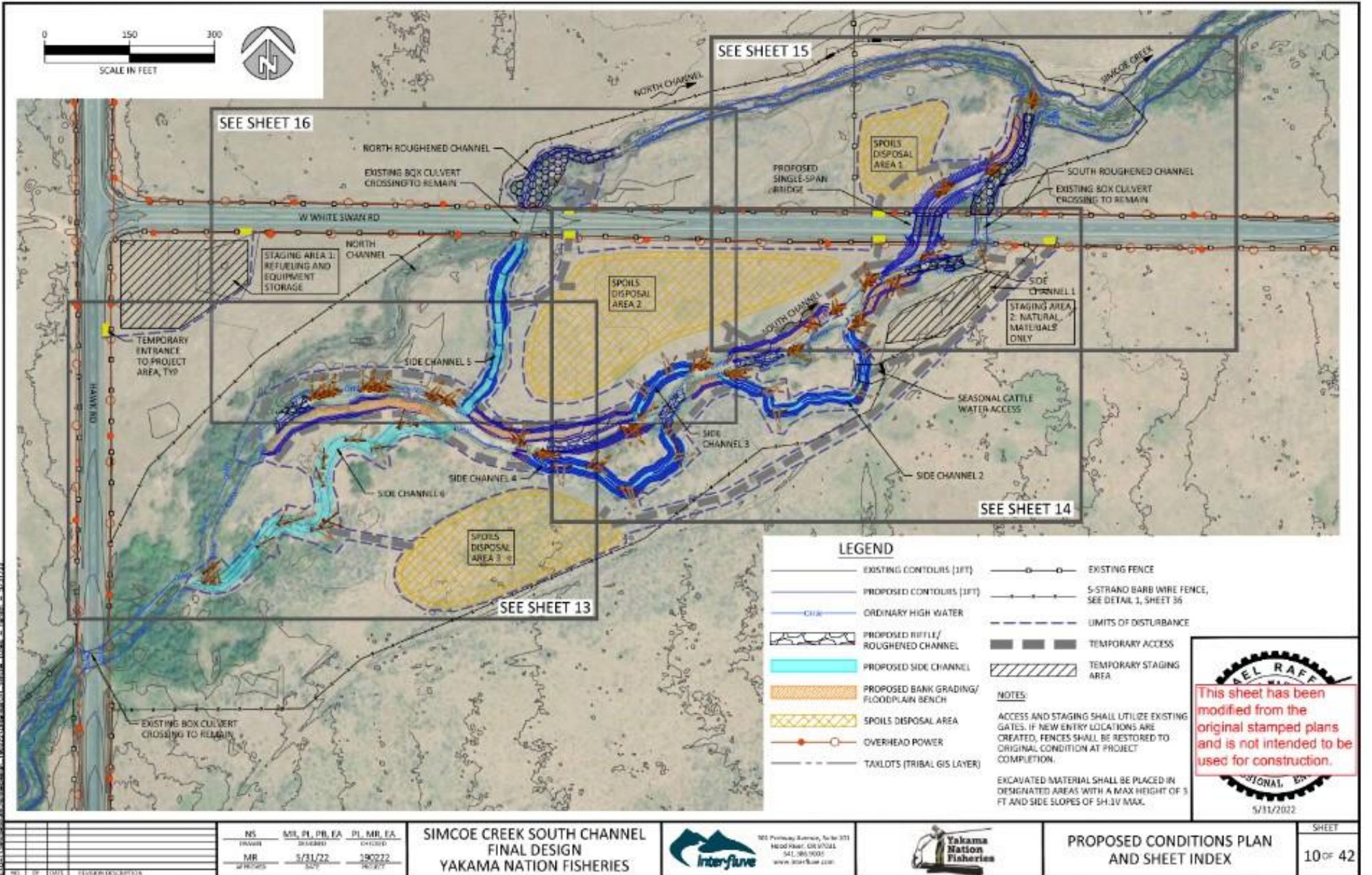


Simcoe West White Swan



-  Yakama Nation
-  Simcoe Creek
-  Toppenish Creek

Major Elements



SIMCOE CREEK SOUTH CHANNEL
FINAL DESIGN
YAKAMA NATION FISHERIES



PROPOSED CONDITIONS PLAN
AND SHEET INDEX

SHEET
10 OF 42



Figure 2. Simcoe South Channel Project Area. Photo (April 2019. IFI).

Pre Project

Unique Challenges During Project







April 30th,
2023
Post Project





Questions?

