

HABITAT RESTORATION IN PRACTICE

Nat Kale

October 7, 2021

WHY?

Empower the Board to describe,
defend, and shape the ASRP

WHAT ARE WE TRYING TO DO WITH ASRP?

Make places that fish, frogs, and other creatures want to live in.

Minimize future maintenance, as much as possible.

HOW DO WE MAKE GOOD PLACES?

- Temperature
- Gravel
- Wood
- Connectivity
- Complexity
- Shade
- Flow
- Depth
- Velocity
- Sinuosity
- Plants
- Access/Connections
- Geology
- Invasive Species
- Diversity
- Change

DIFFERENT PERSPECTIVES ON THE SAME PROJECT

- **Temperature**

- Gravel
- Wood
- Connectivity
- **Complexity**
- Shade
- Flow
- Depth

- Velocity

- Sinuosity
- Plants
- **Access/Connections**
- Geology
- Invasive Species
- Diversity
- Change

THREE RESTORATION PERSPECTIVES



Temperature

- Cooler is better (mostly)
- Shade cools water
- Groundwater is cooler



Complexity

- Places to hunt/hide/grow
- Over space *and* time



Access/Connection

- Greater resilience
- Less competition

Three Restoration Perspectives



Temperature

Water cooled by **shade** or sourced from the **ground** is better



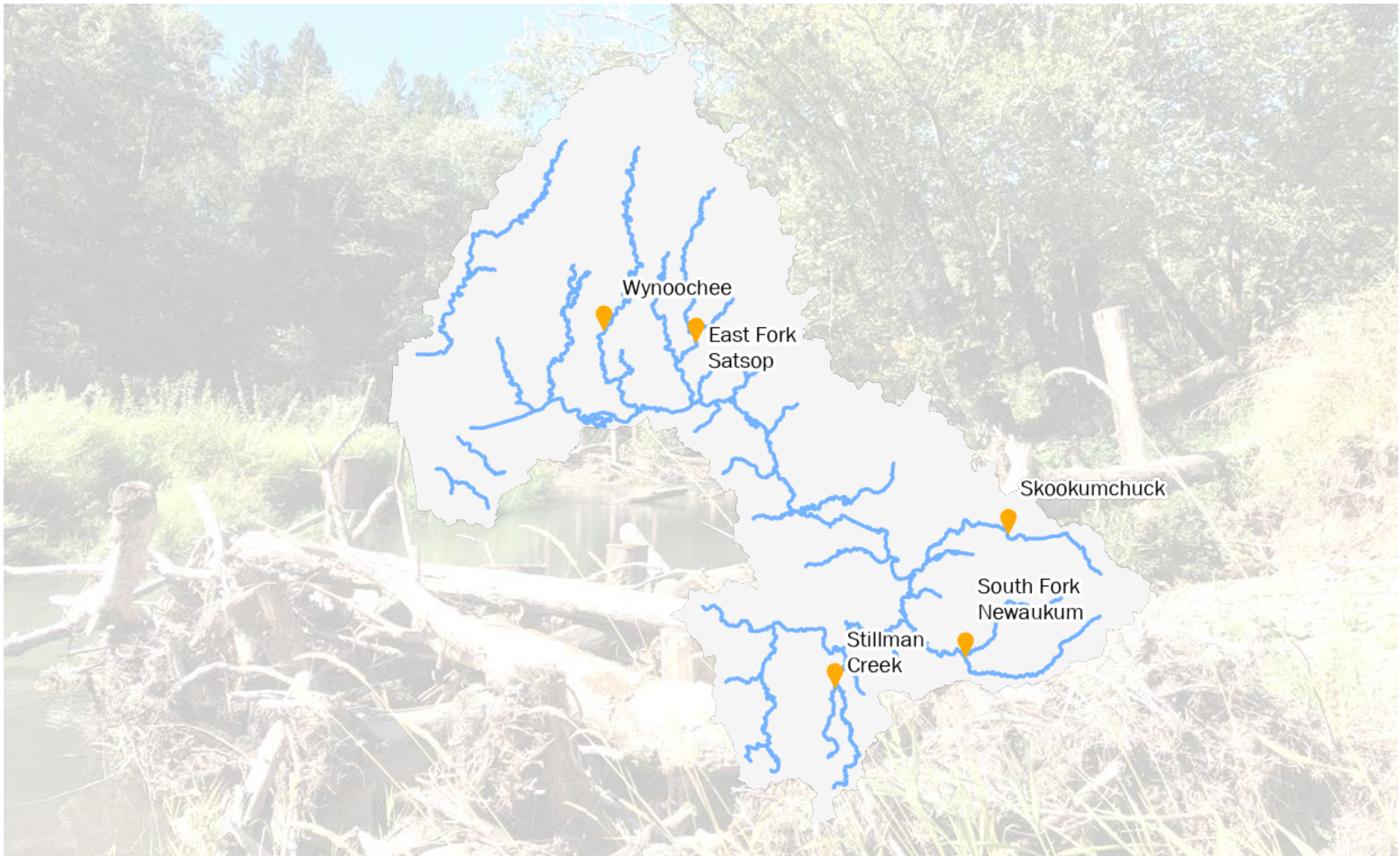
Connections

Access to off and side channel corridors enhances **resilience** and reduces competition



Complexity

Increases places to hunt, grow and hide over **time** and **space**



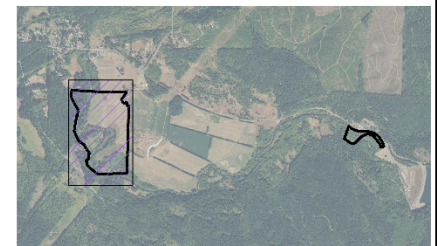
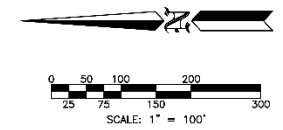
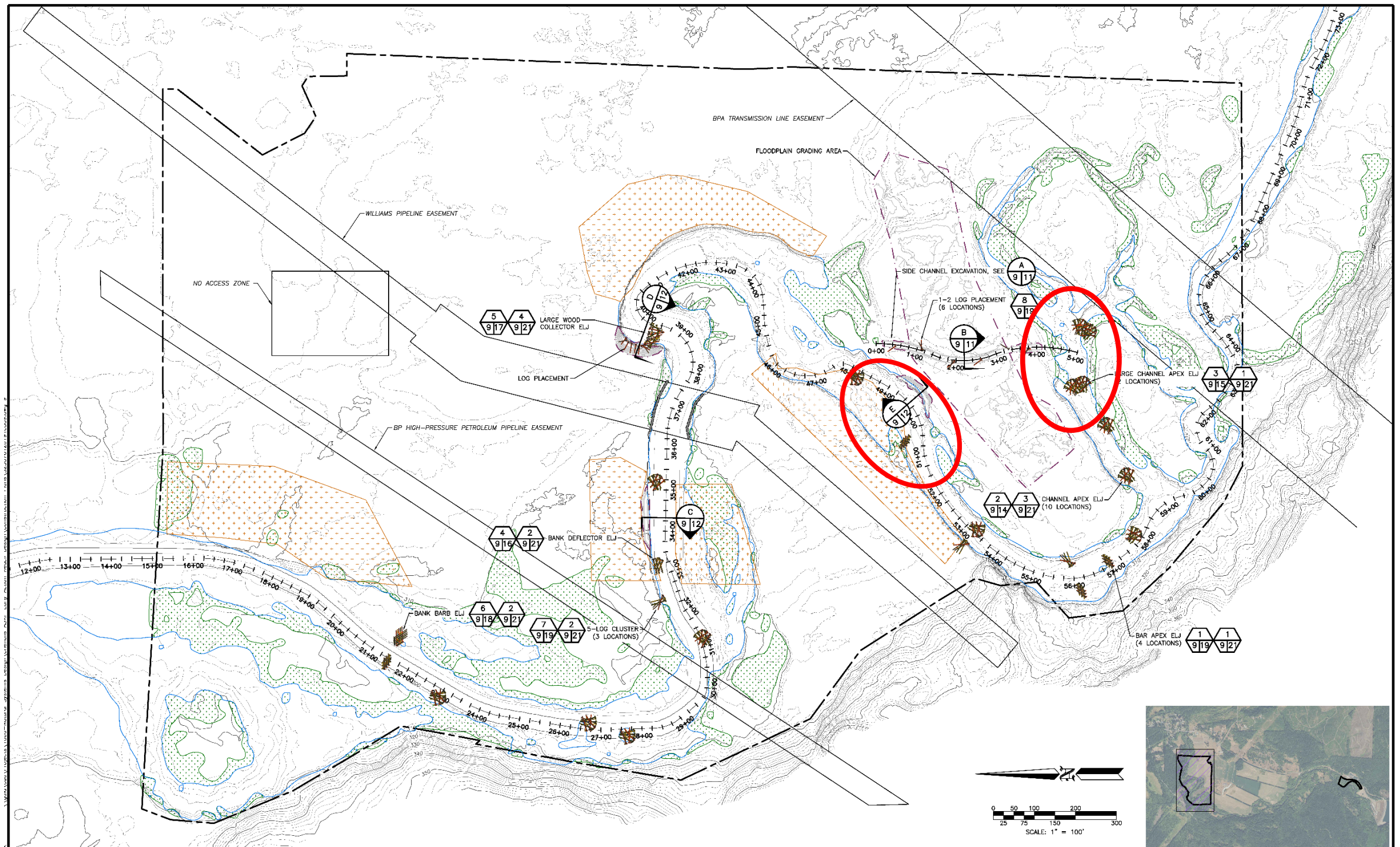
Wynoochee

East Fork
Satsop

Skookumchuck

South Fork
Newaukum

Stillman
Creek









2020



2021





THREE RESTORATION PERSPECTIVES



Temperature

- Cooler is better (mostly)
- Shade cools water
- Groundwater is cooler



Complexity

- Places to hunt/hide/grow
- Over space *and* time



Access/Connection

- Greater resilience
- Less competition

QUESTIONS / DISCUSSION

