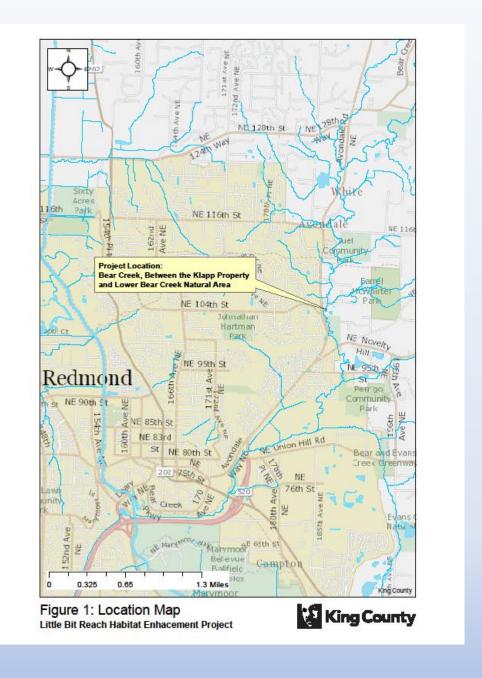


# Project Location



# Project Site



# Project Reach





#### **Site Characteristics**

- Low-functioning riparian area
- Eroded streambanks
- Sparse native riparian vegetation



- Reed canary grass dominates riparian floodplain habitat
- Japanese knotweed & loosestrife also present
- Lack of quality shadeproducing cover



#### Floodplain Areas

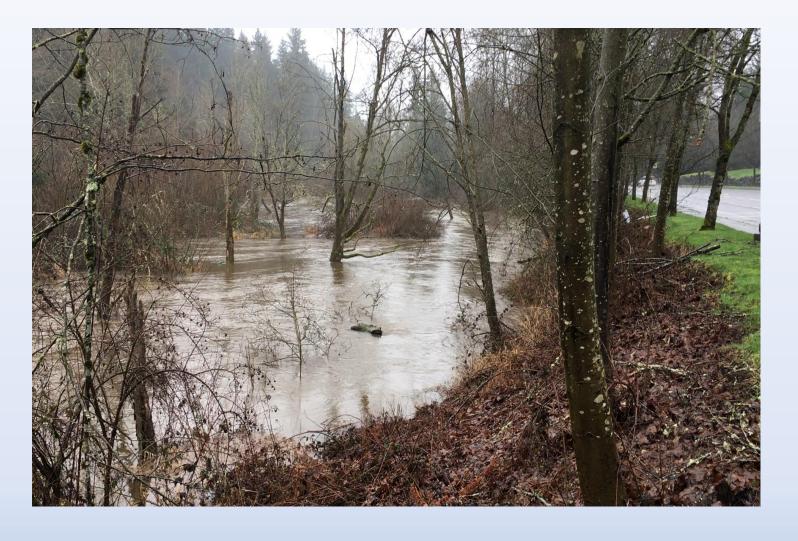
- Limited wood
- Clear opportunity to improve connectivity to floodplain habitat

# Nearby beaver activity





Flooding 02/2020



## Connecting Salmon Recovery Strategies



#### **Appendix E: Recovery Strategies**

- Protect and restore floodplain connectivity
- Protect and restore functional riparian vegetation
- Protect and restore channel complexity

# Goals and Objectives

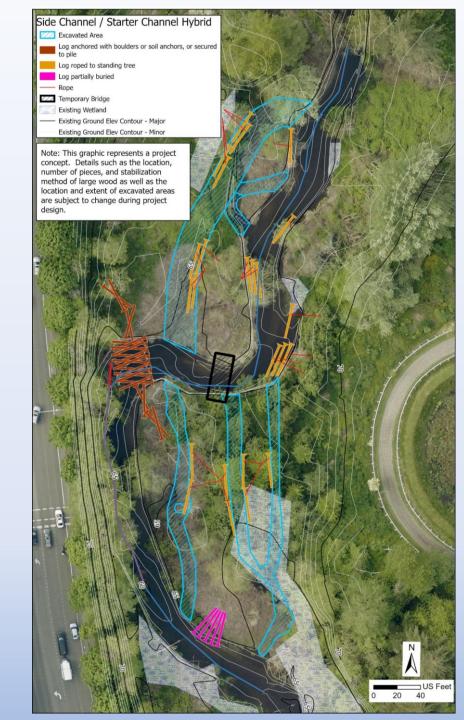
- Restore missing structure
- Provide complex instream stream habitat
- Reconnect floodplain
- Create off-channel rearing habitat
- Restore floodplain and riparian habitat
  - biodiversity and shade
  - improve summer stream temperatures

## Alternatives Evaluation Process



## Recommended Alternative

- Provide a variety of freshwater rearing habitats
- Side channel excavated in upstream segment
- Smaller "starter" channels excavated in downstream segment
- Wood placed throughout
- Jam placed to drive flow into starter channels



## Next Steps

- Approval of recommended alternative
- Preliminary design and permit applications Fall 2020
- Final design to start late 2020/early 2021
- Construction Summer 2021 or 2022

### Discussion

- Questions
- Which design elements provide higher fish benefit?
- Channel inlet elevation median rearing flows?
- Observations from other Bear Creek habitat projects