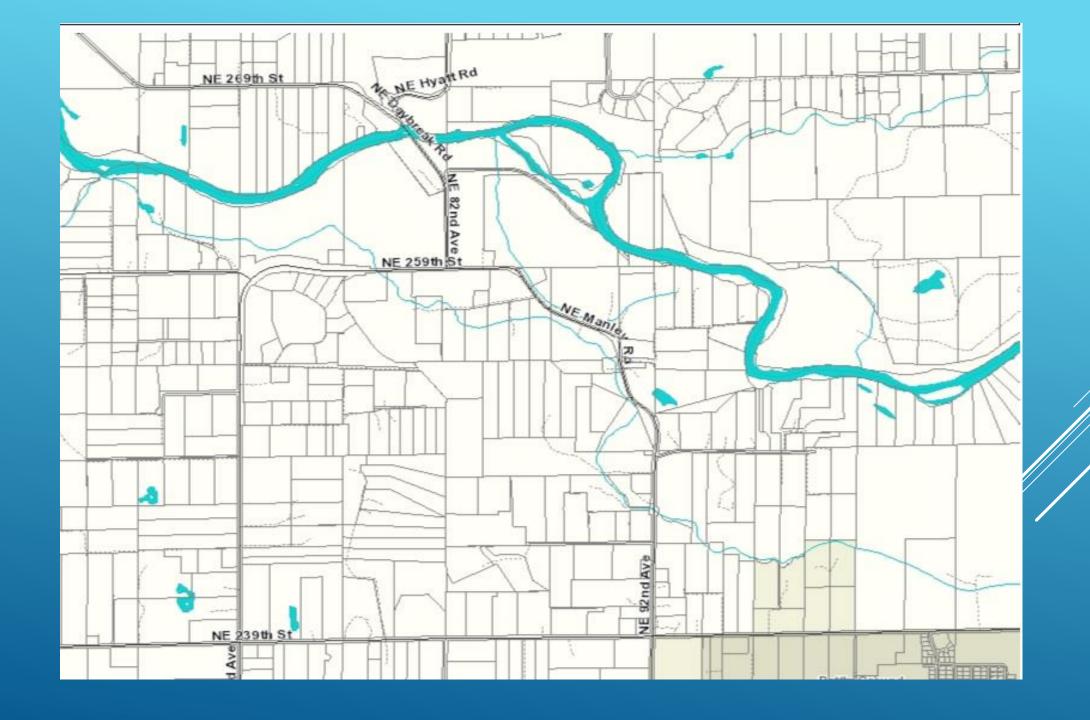


IMPROVING SHADE
AND TEMPERATURE
DEFICITS – MIDDLE
EAST FORK LEWIS
RIVER

# East Fork Lewis Water Quality Issues

- temperature and FC impairments exceed Washington State's Water Quality Standards for all tributaries of the East Fork
- RM 10.1 has a 7-DADMax value of 23.0 degrees Celsius state standard is 16 degrees
- Above 18 degrees Celsius all salmon life history stages can be effected – chinook and chum spawn in East Fork from RM 10 to mouth – winter and summer steelhead are present
- Manley Creek shows a value of 22.0 degrees at RM 10 coho present in Manley Creek
- Daily effective shade- July 1, at RM 10.1 is calculated in the Report at only 19%.
- Riparian conditions are 'very poor to non-existent' in the lower one to two miles of Manley Creek











### **MANLEY CREEK**

#### **PROJECT COMPONENTS**

- 1) Multi-year approach to riparian restoration along 2,400 feet Manley Creek owned by Clark County 10 acres
- 2) Outreach to all remaining property owners focusing on East Fork water quality issues (temperature and FC)

#### **Project Partners:**

- Clark County
- Clark Conservation District
- Friends of the East Fork
- Clark Skamania Fly Fishers

### RIPARIAN RESTORATION

#### Invasive plant control

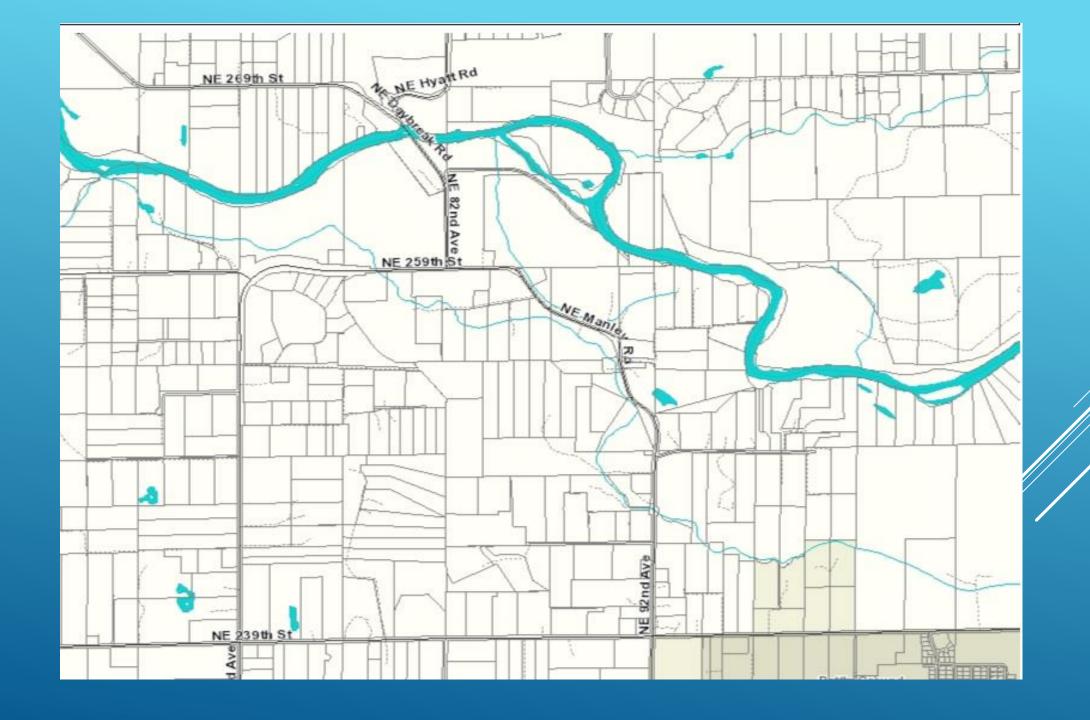
- Reed canary grass
- Initial site treatment Year 1
- site maintenance over next 2 years

#### Recreating the Forest Buffer

- 3-year planting effort
- Dense planting of early successional native trees and shrub species Year 1
- Plant survival surveys Year 2 and 3
- Replanting rate in Year 2 20%
- Replanting rate Year 3 10%

## KEY TO MANLEY CREEK WATER QUALITY IMPROVEMENTS

**PUBLIC AND PRIVATE PROPERTIES** 



### **OUTREACH TO REMAINING PROPERTY OWNERS**

- ~ 34 private property owners
- Door to door outreach
- Information on causal factors leading to temperature and FC impairments
- Septic system compliance
- Assess interest in improving shade deficit on their property
- Landowner acknowledgement form
- Future grants tackle private property issues

