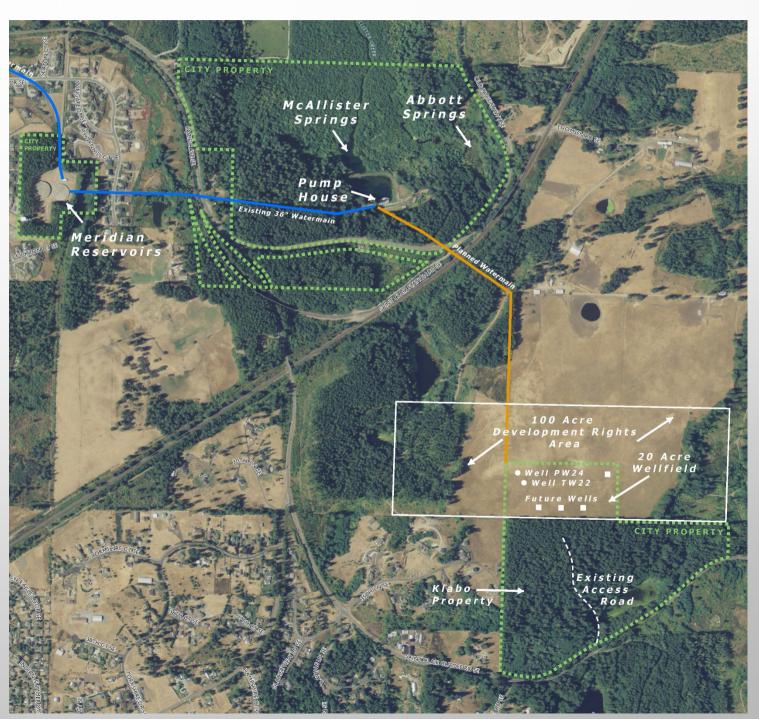
# McAllister Wellfield Water Rights Mitigation Projects Update



# Utility Advisory Committee March 7 2019

## WATER RIGHTS TIMELINE

- Early 1990s Start
- 2008 Tribal and Cities Agreements
- 2008 Initial Mitigation Plan
- 2010 Revised Mitigation Plan
- 2011 Smith Ranch purchased
- 2012 DOE Approval
- 2013 Woodland Creek Online
- 2014 Wellfield Online
- 2015 Springs transferred to Tribe
- 2018 Deschutes Ranch Mitigation
- Ongoing Annual Reports



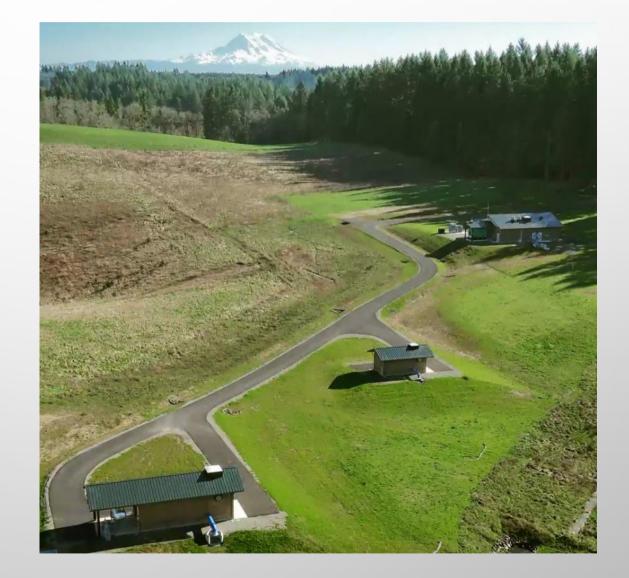
# WATER RIGHT OVERVIEW

#### • IN-KIND

- Relinquished Water Rights
- Recharge reclaimed water

#### • OUT-OF-KIND

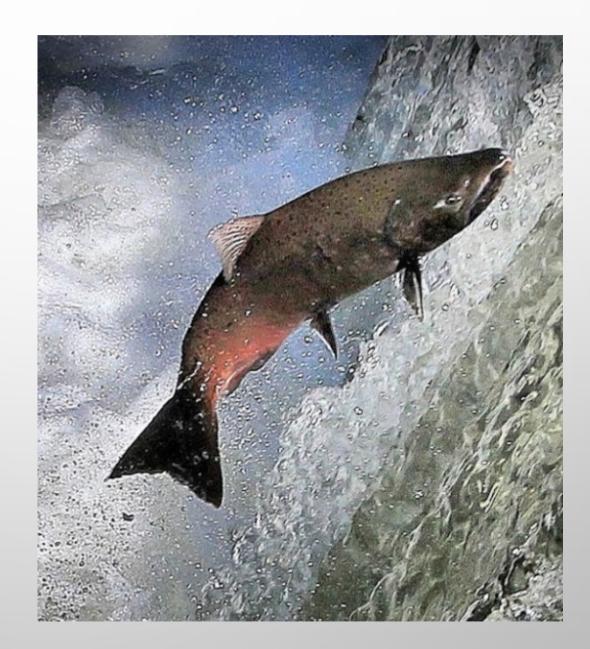
- Habitat Restoration
- Riparian buffers
- ANNUAL REPORT



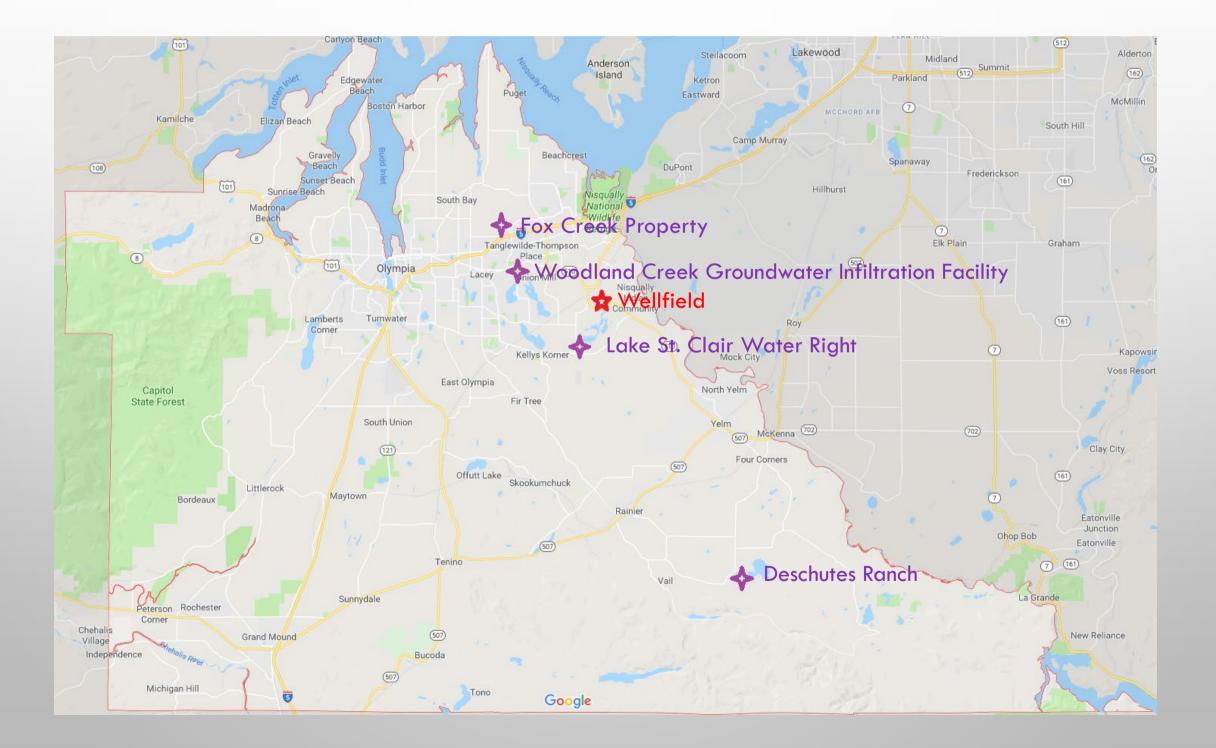
### OLYMPIA'S PREDICTED DEPLETIONS

#### • MODELED

- Nisqually River 7.2 CFS
- Deschutes River 0.37 CFS
- Woodland Creek 0.23 CFS
- Lake St. Clair 0.12 CFS



#### WELLFIELD AND PROJECT LOCATIONS



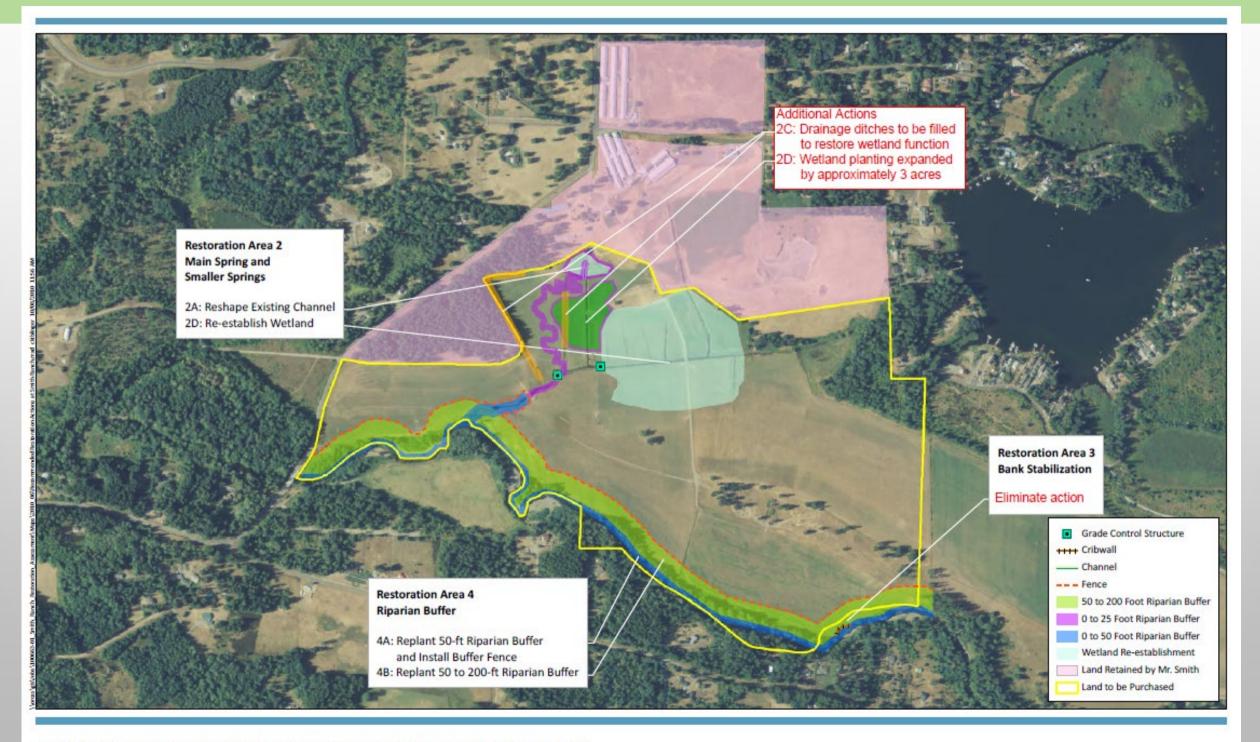
### DESCHUTES RANCH OVERVIEW

- Collaboration with Lacey and Yelm
- Purchased in 2011
- ~190 acres
- >1 mile riverbank
- Water right relinquished 0.37 CFS
- Property management



Additional Jensen water right relinquished – 0.50 CFS

#### **DESCHUTES RANCH MITIGATION**



From Anchor QEA's Initial Acquisition and Restoration Assessment of the Smith Ranch dated October 2010





#### Habitat Restoration

1+ mile long - 200' wide Deschutes River Riparian Forest Planting



#### Restored a meandering spring-fed channel





Minor grading and filling 4000' of ditches enhancing wetland hydrology over 27 acres



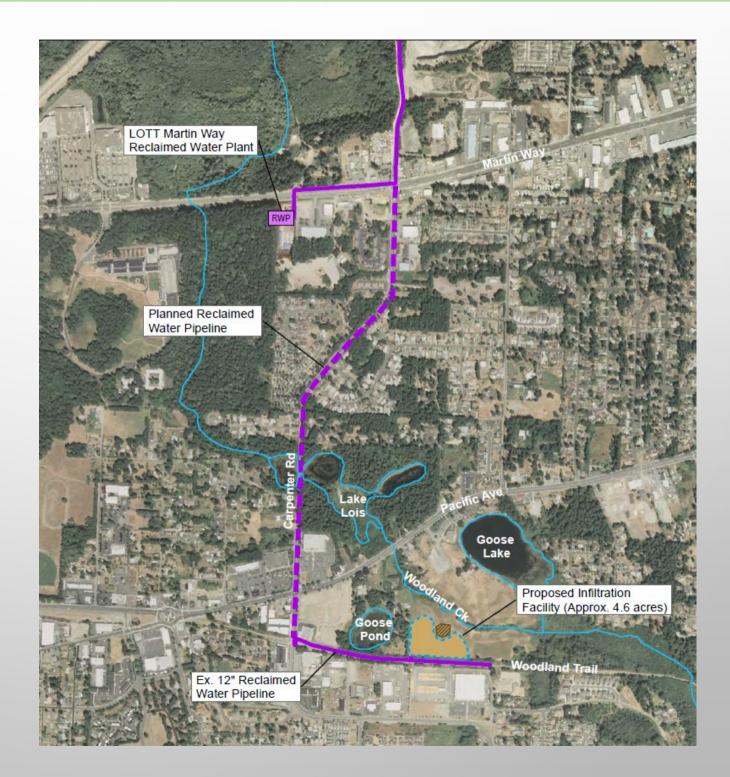
- COSTS
  - INVESTIGATION AND PURCHASE \$611,000
  - DESIGN AND CONSTRUCTION \$580,000
  - PROPERTY MANAGEMENT \$140,000 BUDGETED
- CONSERVANCY
  - LONG-TERM TRUST FUND

#### WOODLAND CREEK MITIGATION

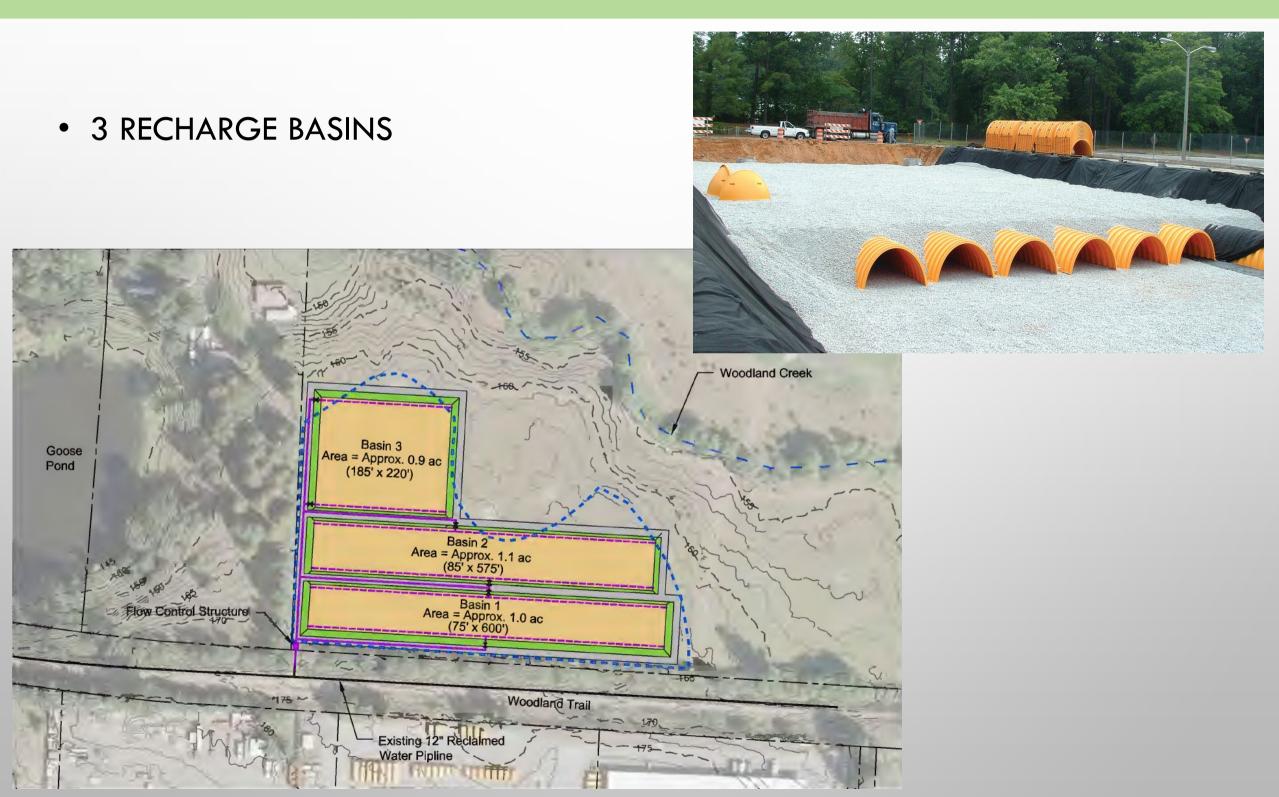
- DEPLETIONS
- IN-KIND RECHARGE DEPLETIONS TO WOODLAND CREEK THROUGH INFILTRATION OF CLASS A RECLAIMED WATER FROM THE MARTIN WAY RECLAIMED WATER PLANT
- OUT-OF-KIND PURCHASE OF UNDEVELOPED RIPARIAN PROPERTY (FOX CREEK) – RESTRICT ACCESS – MANAGE HABITAT

# WOODLAND CREEK GROUNDWATER INFILTRATION FACILITY

- COLLABORATIVE EFFORT WITH
  LOTT AND LACEY
- RECHARGES DEPLETIONS TO
  WOODLAND CREEK THROUGH
  INFILTRATION OF CLASS A
  RECLAIMED WATER FROM THE
  MARTIN WAY RECLAIMED
  WATER PLANT



### WOODLAND CREEK GROUNDWATER RECHARGE FACILITY



#### WOODLAND CREEK GROUNDWATER RECHARGE FACILITY

#### OPERATIONAL DATA

Year	Total Infiltrated (MG)	5-yr Rolling Average	Comment
2013-2014	134	134	
2015	113.04	123.5	
2016	40.4	95.8	
2017	27.0	78.6	Needed 65
2018	114.8	85.8	Needed 62
2019	115	82.0	Goal for 2019
2020	75	74.4	Minimum need
2021	60	78.4	Minimum need
2022			Planned shutdown

### WOODLAND CREEK GROUNDWATER RECHARGE FACILITY

- RECHARGE FACILITY INVESTIGATION, DESIGN AND CONSTRUCTION \$401,000
- FOX CREEK LAND PURCHASE \$144,000
- BUDGETED ANNUAL OPERATIONAL COST OF \$8,000

#### FOX CREEK SITE





# QUESTIONS?

