



# Shoreline Master Program Forum: Inventory & Characterization Process

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# Overview

- Requirements
- Common Information Sources
- Grant County Conditions
  - County-wide scale
  - Reach scale
- Focus on Semi-Arid Environment  
Ecological Functions
- Conclusions/Setting the Foundation



# Requirements

- Existing data and materials
- For jurisdictional waterbodies
  - Shorelands, floodways and floodplains
  - Characterization of shoreline ecosystems and their associated ecological functions
    - Ecosystem wide processes
    - Specific measures to protect or restore functions
- Set baseline for determining no net loss of ecological functions



# Requirements

- Public access opportunities
- Characterize existing and future uses
  - Water dependent
  - Water-oriented
  - Other
- Baseline other relevant existing conditions



# Inventory – Information Sources

- National data sources (NWI)
- State data sources (WHPP - DOH)
- Local data sources (parcels, etc.)
- Data limitations
- Collaborative approaches
  - ✓ County GIS staff helped with assigned tasks
  - ✓ Time and money considerations
  - ✓ Coordination efforts



# Grant County Inventory & Characterization

- Shoreline jurisdiction (80 lakes, 5 rivers/creeks in Grant County)
- Ecological conditions overview
- Public access overview
- Existing and future land use
- Shoreline improvements/modifications
- Reach characterization tables



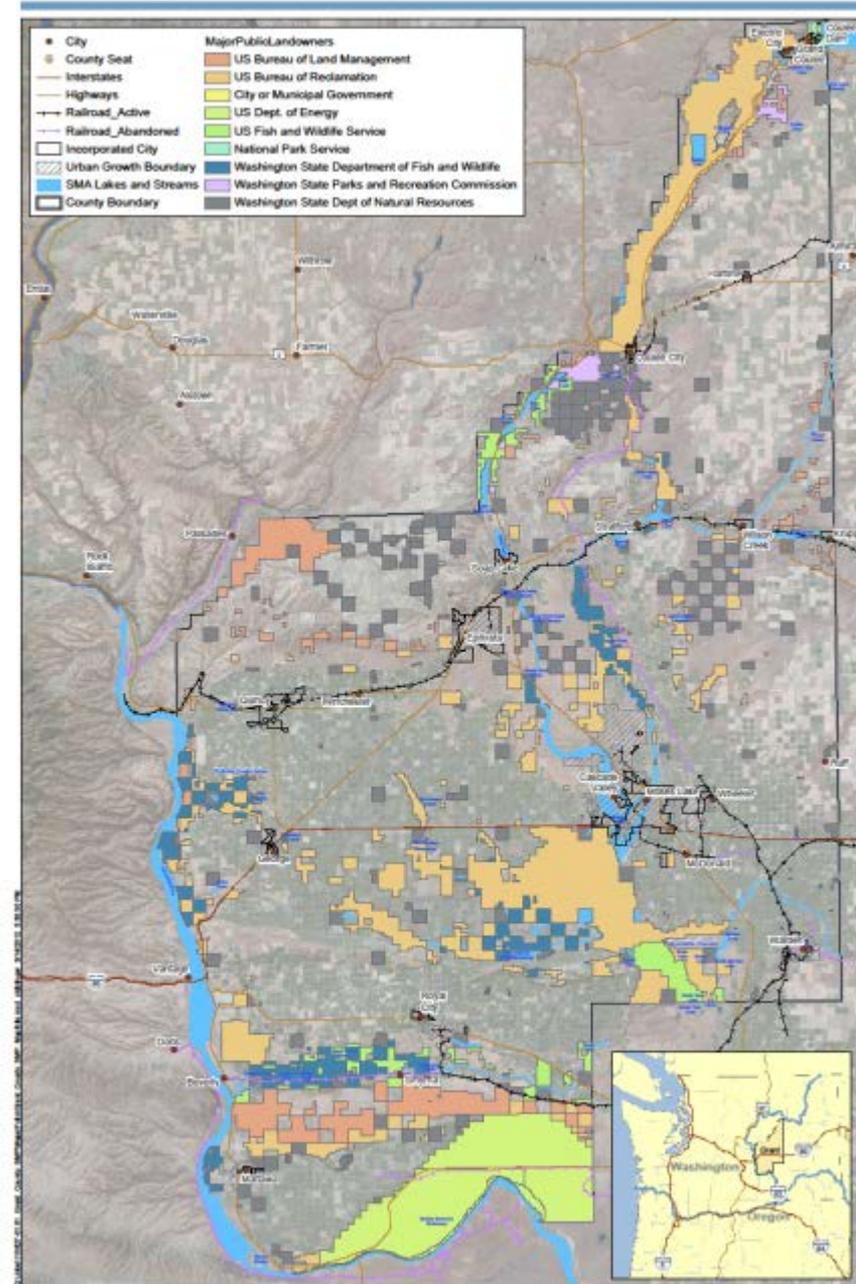
# Ecological Conditions Overview

- Hydrology - Dams and Columbia Basin Project
  - Hydrology and associated functions largely set by these major infrastructure projects/operations
  - Grant County shorelands and water bodies have been increasing
- Extensive associated wetlands
- Narrow riparian with significant shrub steppe
- Invasive plants



# Public Access Overview

- Lots of opportunity for public access
- Some localized areas have more limited opportunities
- Potential opportunities identified, as applicable



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Map 11  
Parks, Open Space, and Public Access  
Grant County Shoreline Master Program  
Grant County, WA



# Reaches



# Reaches

- Easy way to organize information
- Helps in focusing information sharing and communications
- Sets the foundation for analysis and tailored environment designations



# Conditions for Establishing Reaches

- Changes in:
  - Geomorphology Ecological functions
  - Land use
  - Ownership
  - Political boundaries
    - City limits
    - UGA boundaries



# Shoreline Jurisdiction and Inventory

Moses Lake - Reach 2 = 281 acres

## Major Features

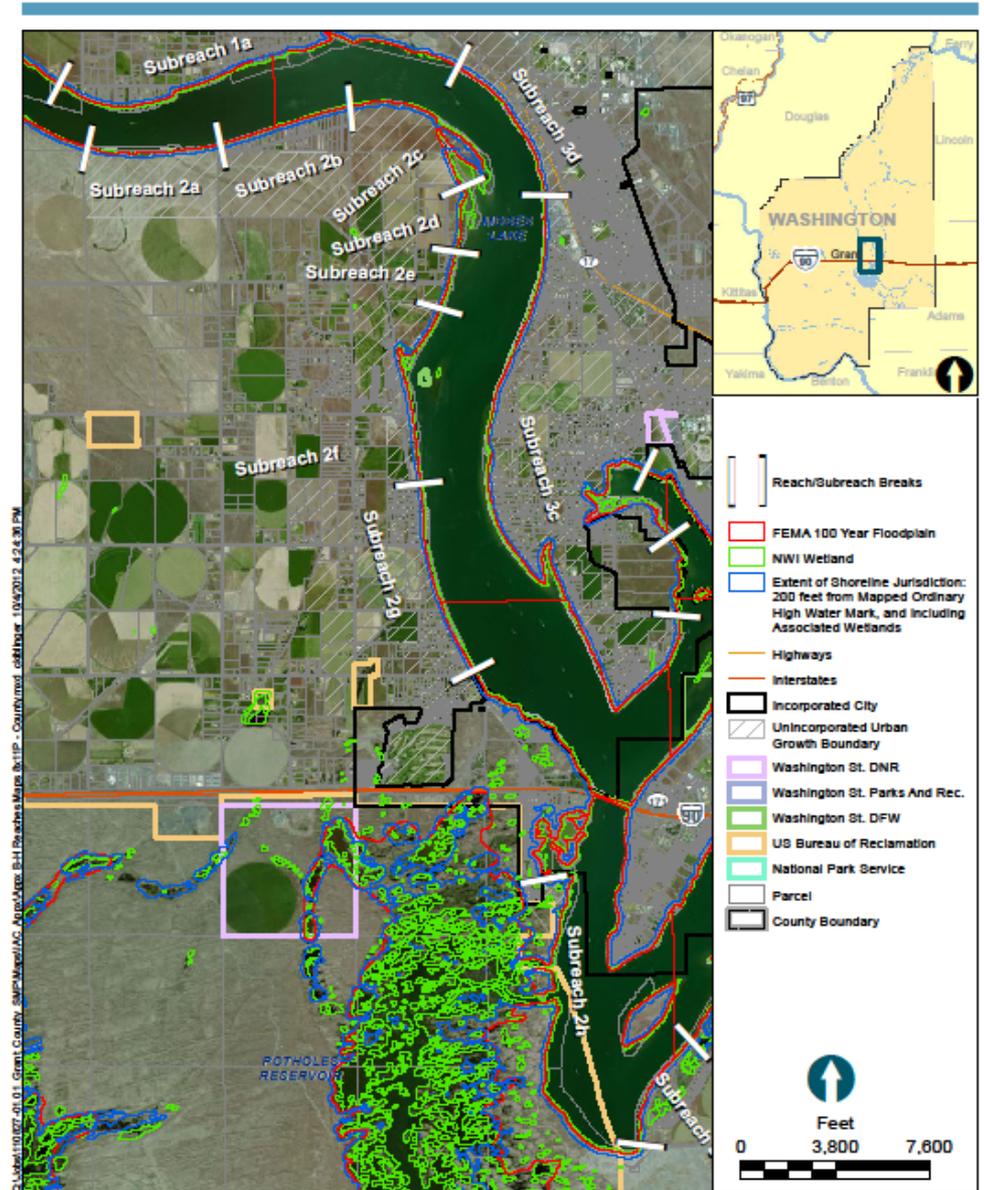
*Public Access* - Limited to southern area - USBR land

*Ownership* - 84% private

*Shoreline Use* - Residential and open space

*Functions* - Sedimentation/ water quality concerns, non-native riparian species, lack of aquatic complexity

*Stressors*: Residential development, recreation, docks, armoring

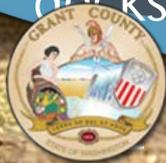


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Appendix B, Figure 17  
Moses Lake, Reach 2

Shoreline Inventory, Analysis and Characterization Report  
Grant County Shoreline Master Program Update



# Shoreline Jurisdiction and Inventory

Sun Lakes/ Blue Lake Area = 195 acres

## Major Features

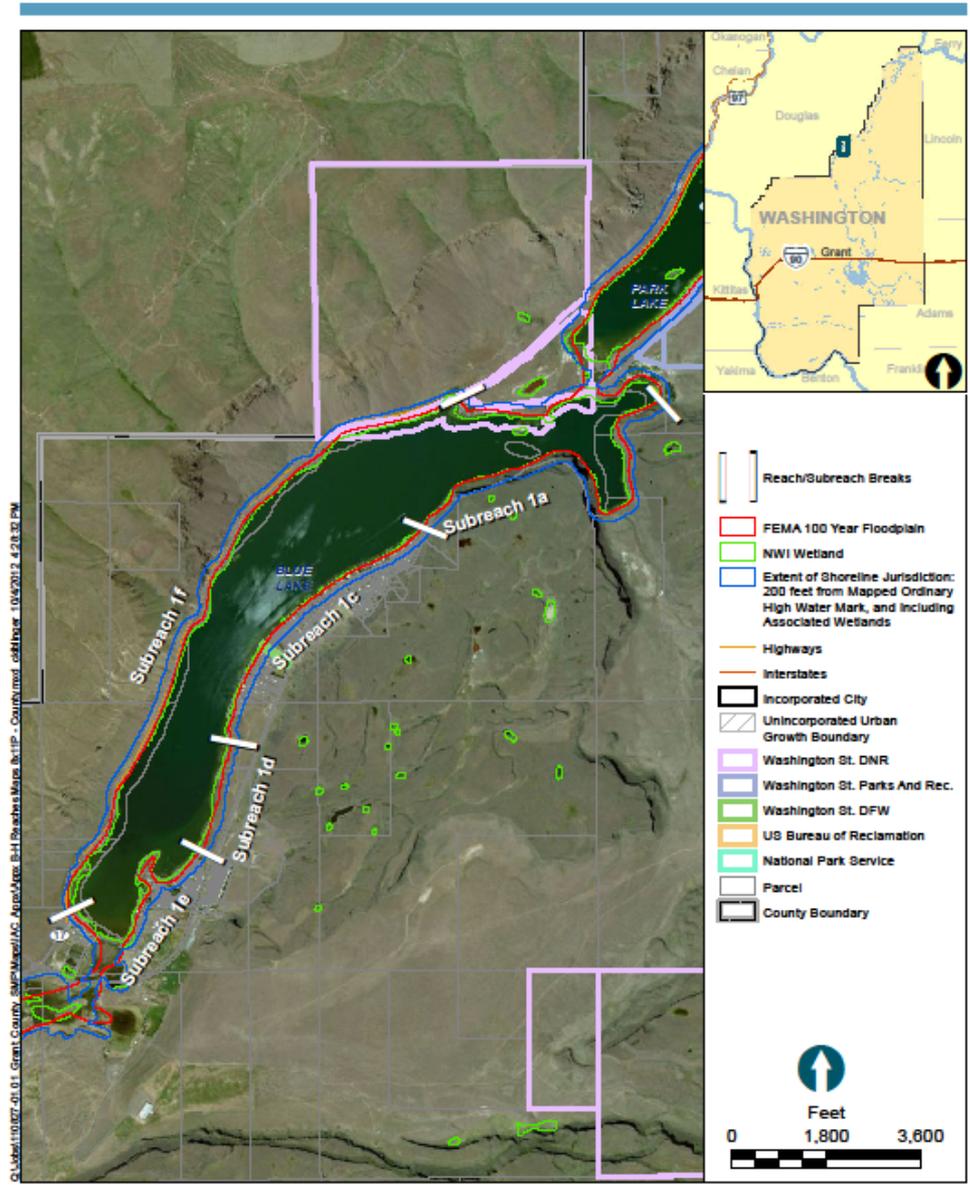
*Public Access* – Extensive

*Ownership* – 50% public

*Shoreline Use* – Shoreline dev. (resorts/state park and residential), Rural remote

*Functions* – Limited riparian, steep/rocky shoreline, migratory waterfowl, raptors

*Stressors*: Recreation/docks, residential development, roads, armoring



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Appendix B, Figure 9  
Sun Lakes: Blue Lake  
Shoreline Inventory, Analysis and Characterization Report  
Grant County Shoreline Master Program Update



# Shoreline Jurisdiction and Inventory

Krupp = 84 acres

## Major Features

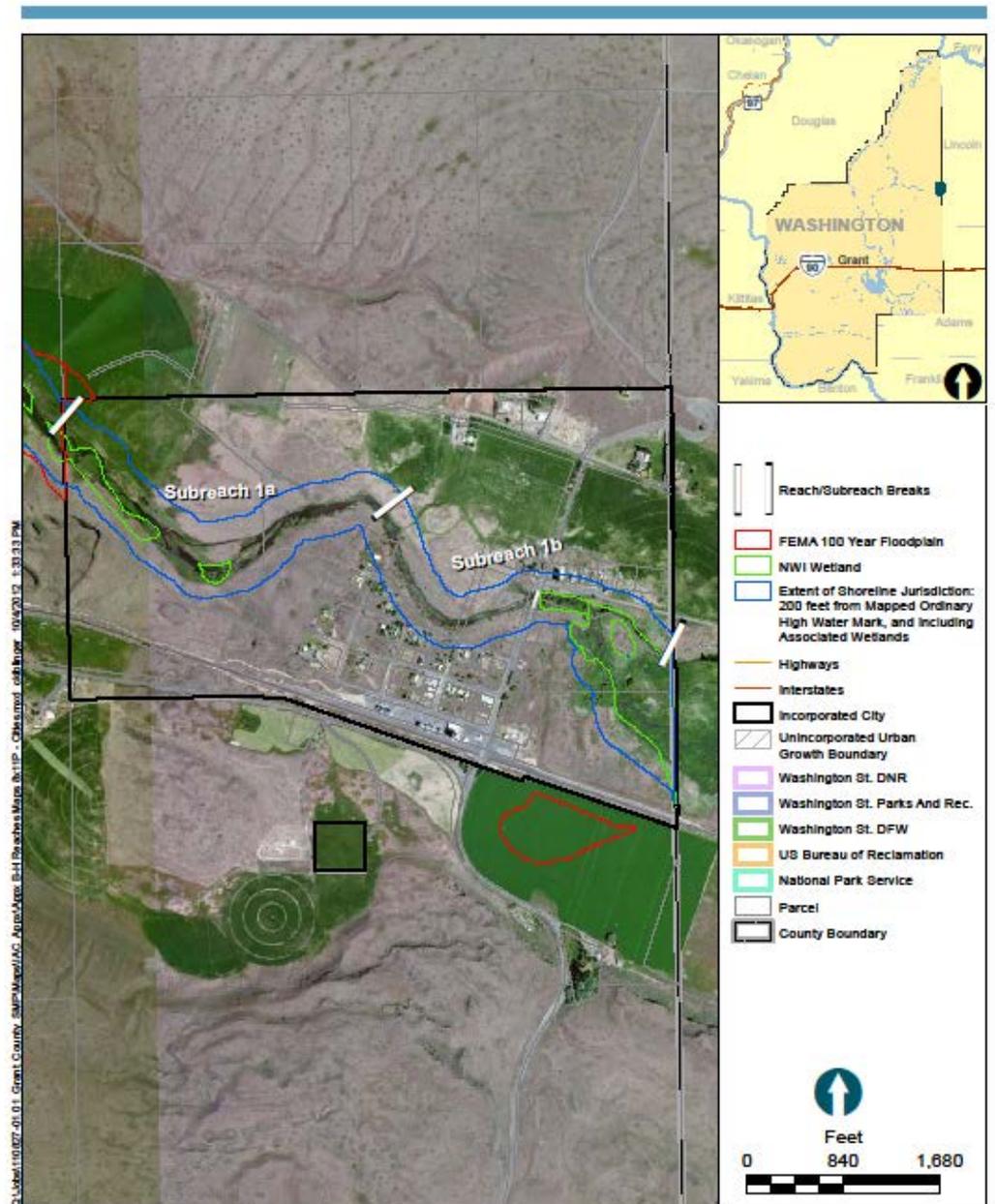
*Public Access* – Limited

*Ownership* – Mostly private

*Shoreline Use* – Ag, res. and open space

*Functions* – Riparian, wetlands, shrub steppe

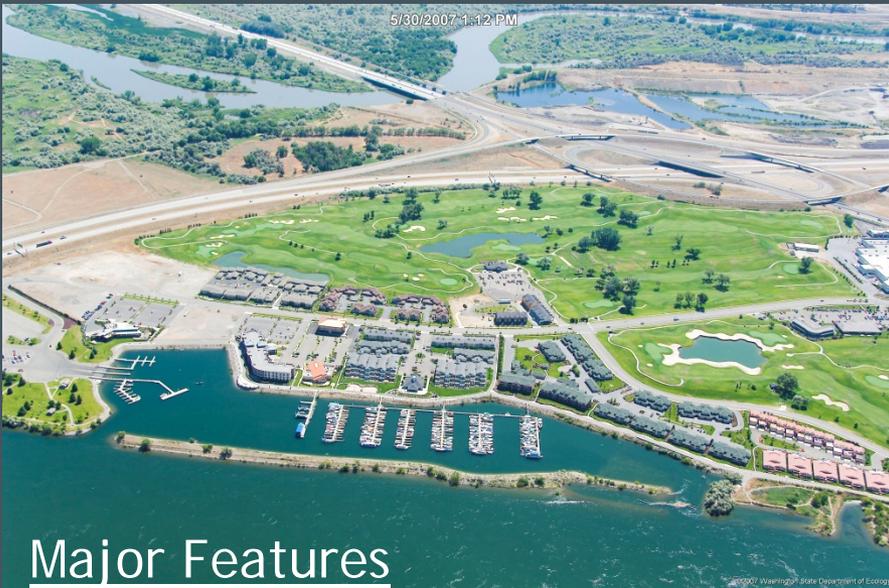
*Stressors* – ag, roads, residential development



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## Major Features

*Length/acres:* 2.12 miles and 68 acres

*Public Access* – Trail, Howard Amon & Col. Pt. parks, docks and boat launch

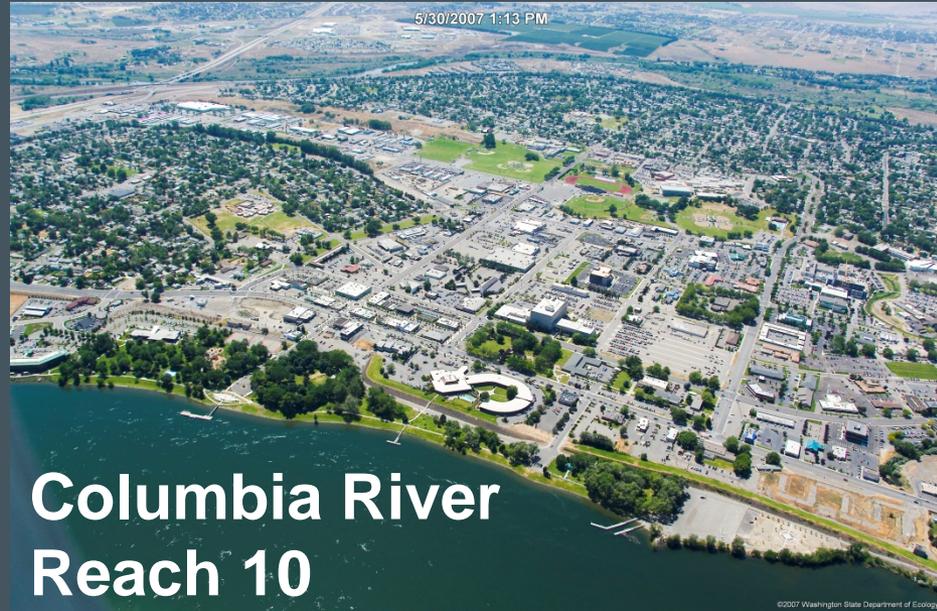
*Ownership* – Federal, City and private

*Shoreline Use (Existing/Future)* – Parks and public facility, water dependent boat launch, waterfront (mixed use)

*Functions* – Riparian vegetation, shrub steppe, natural islands

*Riparian Recommendation:* Manage public land for vegetation conservation **and recreation**; buffer to edge of trail.

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## Columbia River Reach 10

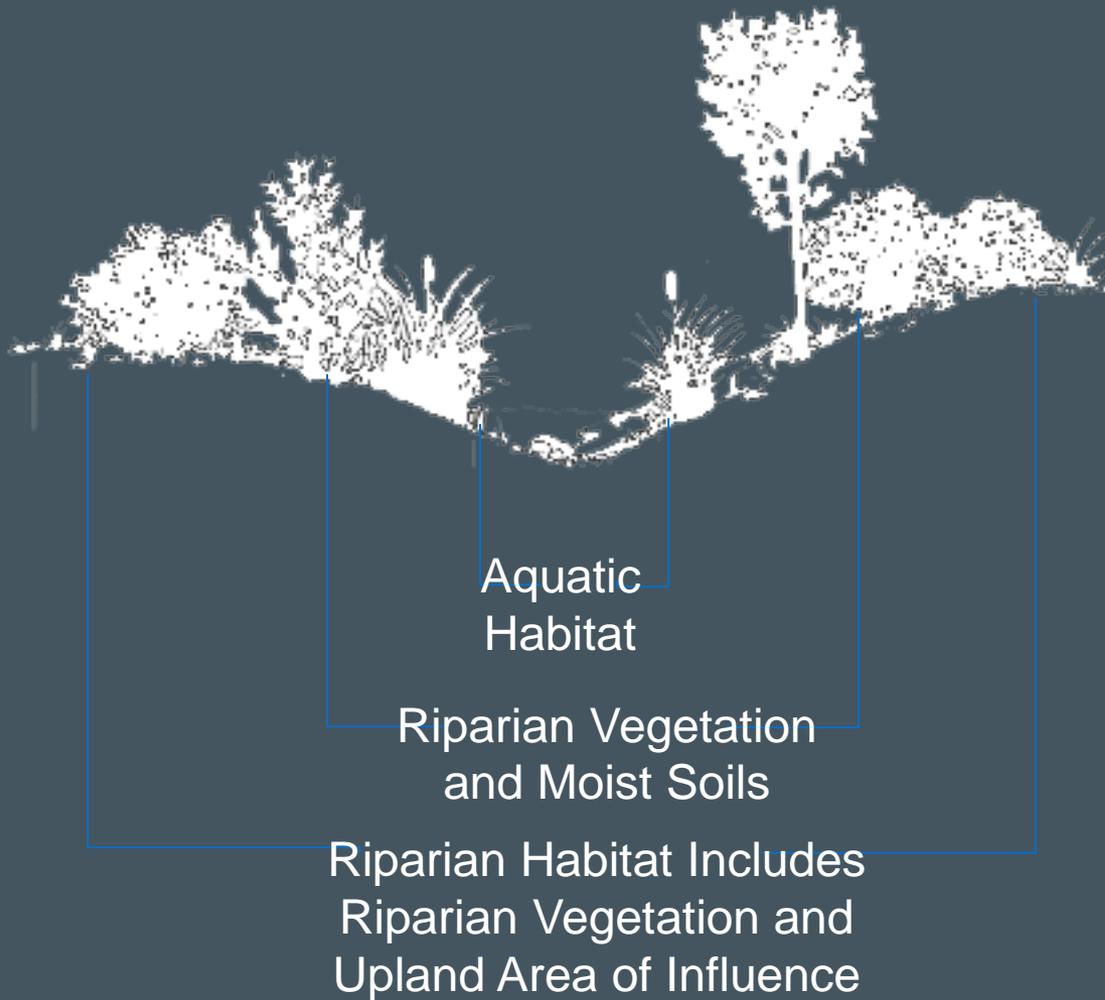
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# Focus on Ecological Functions



# Typical Semi-arid Stream and Riparian Vegetation Zones



(Knudson and Naef 1997)



# What are the Ecological Functions?



Crab Creek near Wilson Creek confluence

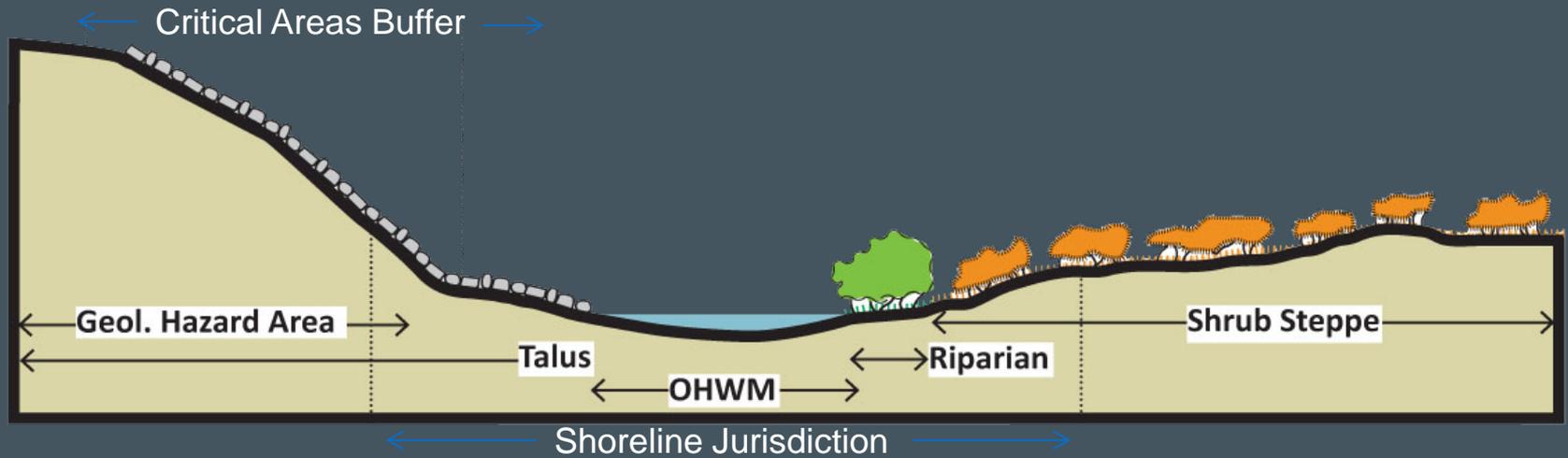


Wilson Creek near Crab Creek confluence

- Semi-arid land riparian functions occur in narrower areas (e.g., 10 to 25 feet in Grant Co.)
  - Fish & wildlife
  - Limited organic input
  - Water quality
    - Vegetation helps filter pollutants
    - Water often gets warm, naturally
  - Intermittent, declining or no flows



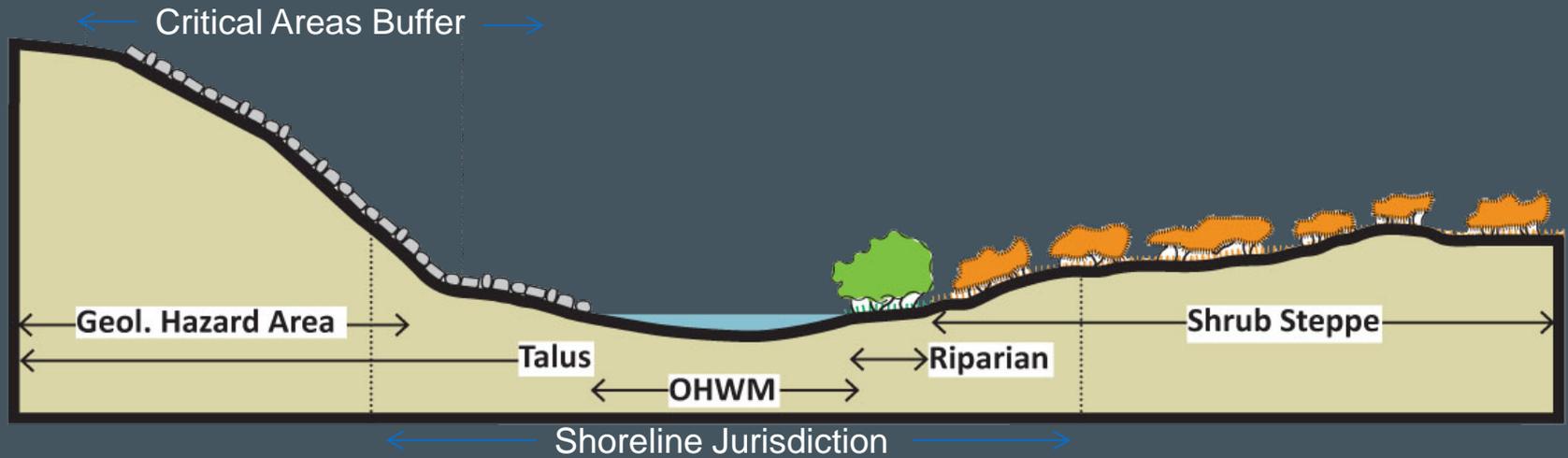
# Extent of Shoreline Jurisdiction



- Varied conditions
- Steep slopes separate land use from riparian and wetland areas
- Riparian vegetation width and tree height 50 to 75 feet



# Extent of Shoreline Jurisdiction



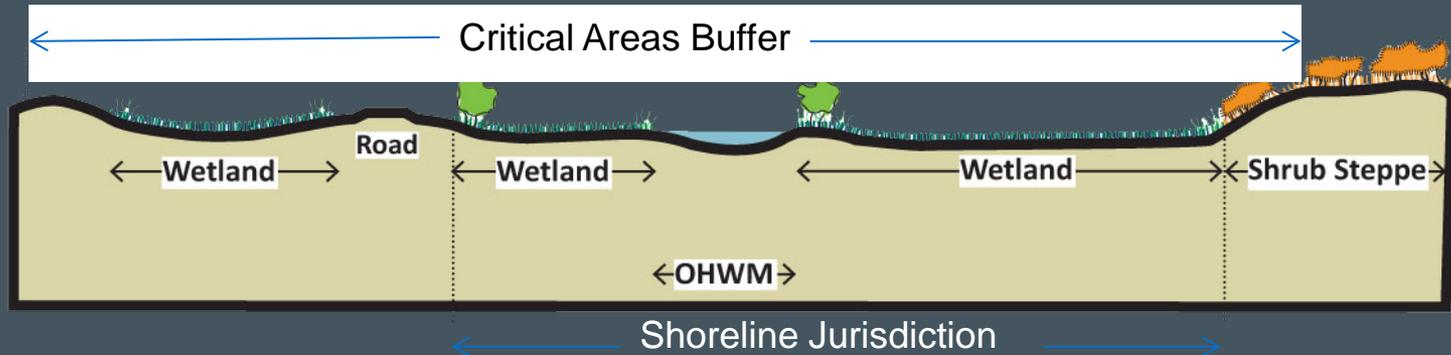
- Riparian vegetation less than 10 feet
- Shrub-steppe dominant habitat type
- Habitat and channel constrained by highway and steep slopes



Sand Hollow Creek near Vantage, WA



# Extent of Shoreline Jurisdiction and Wetland Buffers



- Extensive wetlands exist
- Riparian vegetation widths vary and limited woody vegetation exists
- Vegetation helps protect water quality
- Organic input from plants next to stream and from wind



# Inventory & Characterization Sets the Foundation for the SMP



# Inventory & Characterization

- Provides information needed to:
  - Baseline ecological functions to protect species, habitat and water quality for
    - Wetlands
    - Riparian areas
    - Shrub-steppe
- Replicate and update analysis in future SMP revisions



# Inventory & Characterization

- Tailor reach-specific Environment Designations
  - Existing and anticipated uses
  - Ecological functions
    - Protection
    - Mitigation
    - Restoration
  - Existing and public access opportunities



# Questions?

