



# Environmental, Policy and Legal Barriers to Implementation

Yakima River Basin Study Task 5.2

# Approach to Analysis

- Identify environmental barriers
  - Major impacts that could prevent or delay a project
  - Does not include all potential environmental impacts
- Identify potential policy or legal barriers
  - Laws or regulations that could prevent or delay a project
  - Cultural and public perception barriers
- Propose mitigation strategies for major barriers

# Environmental Barriers

- Major impacts that could prevent or delay a project
  - Impacts that cannot be mitigated by permit compliance or other usual means
  - Does not include all potential environmental impacts
- All projects will undergo additional environmental review

# Construction Impacts

- Temporary, would end when project is complete
- Can generally be mitigated by employing standard “BMPs” and permit compliance
- Several of the Integrated Plan projects only have construction impacts

# Cultural Resources

- Several projects have high potential for historic and cultural resources
  - Yakama Nation ceded territory
  - Historic structures
- Cultural resource studies and consultation with the Yakama Nation and DAHP
- Not necessarily a barrier, but may require additional mitigation

# Fish Passage Element

- Cle Elum, Bumping and Clear Lake Dams
- Environmental Barriers
  - Most impacts would occur during construction
  - Historic and cultural resources
- Policy and Legal Barriers
  - None
  - Operation of fish passage facilities would not affect TWSA or Reclamation contracts

# Structural and Operational Changes Element

- Wapatox, Roza and Chandler Power Subordination, KRD Canal Modifications, Cle Elum Pool Raise, K-K Pipeline
- Environmental Barriers
  - Most impacts would occur during construction
- Policy and Legal Barriers
  - Replacement of lost power
  - Coordination of K-K with I-90 wildlife corridors
- Mitigation Strategies
  - Identify replacement power and be cost neutral for irrigation districts

# New or Expanded Storage Element

- Wymer Reservoir and Conveyance, Bumping Lake Expansion, Kachess Inactive Storage
- Environmental Barriers
  - Wymer Reservoir
    - Shrub-steppe habitat and greater sage-grouse
  - Bumping Lake Expansion
    - Old-growth habitat and northern spotted owl
    - Bull trout spawning habitat
    - Inundation of recreation facilities
  - Kachess Inactive Storage
    - Bull trout passage

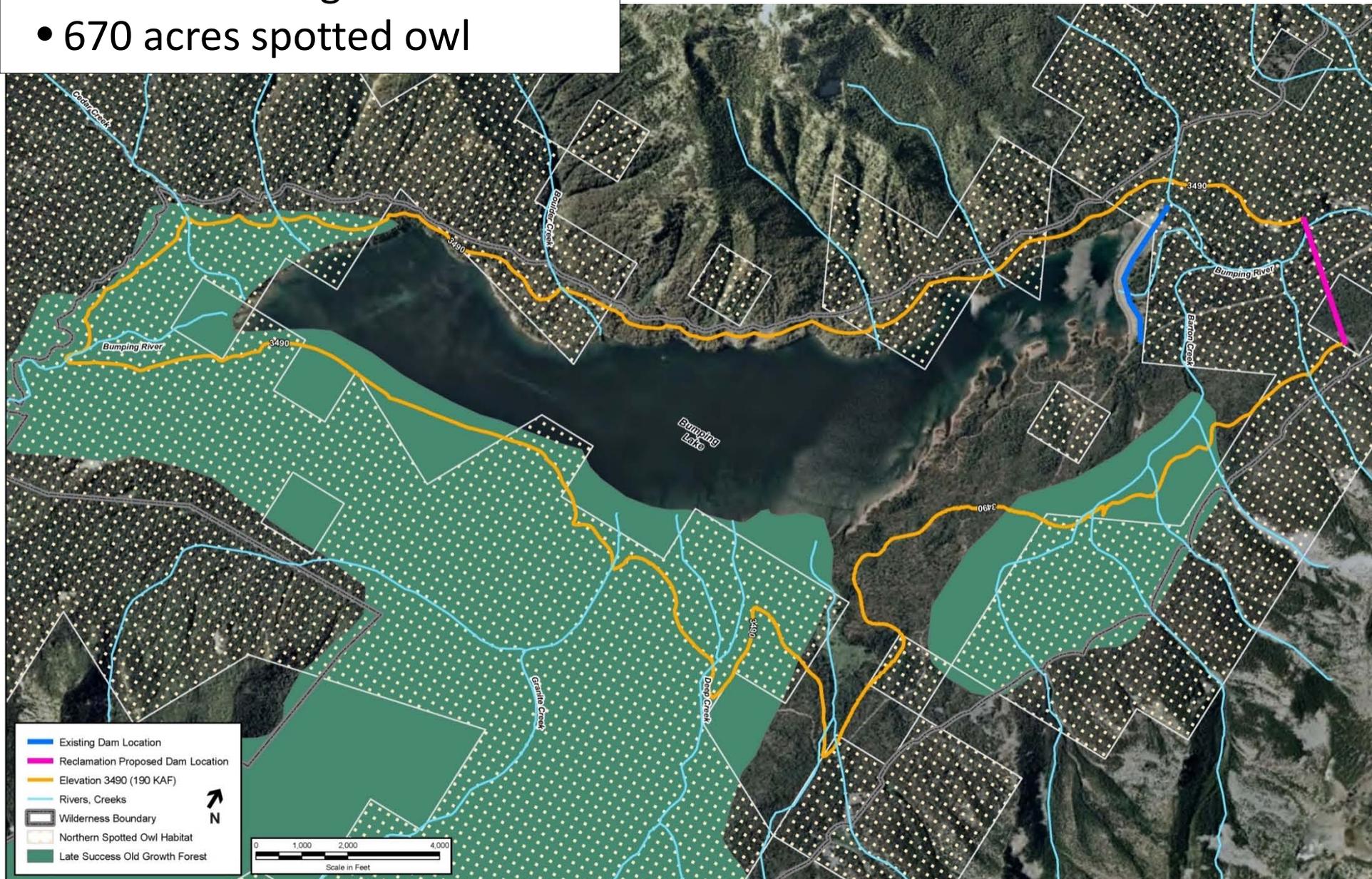


## Habitat Inundated

- 1,055 acres shrub-steppe
- 167 acres grassland

# Habitat Inundated

- 693 acres old growth
- 670 acres spotted owl



# New or Expanded Storage Element

- Policy and Legal Barriers
  - Wymer Reservoir and Conveyance
    - Lengthy environmental review and permitting
    - Property acquisition, coordination with WSDOT and DOD
  - Bumping Lake Expansion
    - Lengthy environmental review and permitting
    - Public opposition

# New or Expanded Storage Element

- Mitigation Strategies
  - Coordinated program involving interested parties
  - Develop program to protect and restore shrub-steppe and old-growth habitat in the Yakima basin
  - Conduct feasibility study of bull trout supplementation
  - Coordinate with the Forest Service for mitigation of impacts to recreational facilities at Bumping Lake

# Groundwater Storage Element

- Municipal ASR and Groundwater Infiltration
- Environmental Barriers
  - None
- Policy and Legal Barriers
  - Requires new water rights
  - New concepts could lengthen time for agency approval, especially groundwater infiltration project
- Mitigation Strategies
  - Work closely with regulatory agencies in developing pilot studies and monitoring program

# Fish Habitat Enhancements Element

- Mainstem Floodplain Restoration and Tributary Habitat Enhancement
- Environmental Barriers
  - None—impacts would primarily occur during construction
- Policy and Legal Barriers
  - Requires landowner participation
  - Need to be coordinated with other regulations

# Enhanced Water Conservation Element

- Agricultural Conservation and Municipal Conservation
- Environmental Barriers
  - None—some construction related impacts
- Policy and Legal Barriers
  - Need to revisit YRBWEP allocation of conserved water
  - Public resistance to cultural change of reducing lawn watering
- Mitigation
  - Include incentives and education in municipal conservation programs

# Market-Based Reallocation of Water Resources Element

- Legislative and funding proposals to create a flexible water market system
- Environmental Barriers
  - Third-party impacts, land following
- Policy and Legal Barriers
  - Current regulations and administration of water transfers
- Mitigation
  - Legislative proposals would include measures to overcome barriers

# Next Steps

- Finalize technical memorandum
- Posted to web site end of November

## Disclaimer

- Environmental barriers identified do not represent the full environmental impacts that would occur
- Additional environmental review would be required for specific projects as they are carried forward