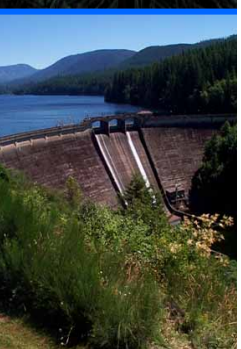
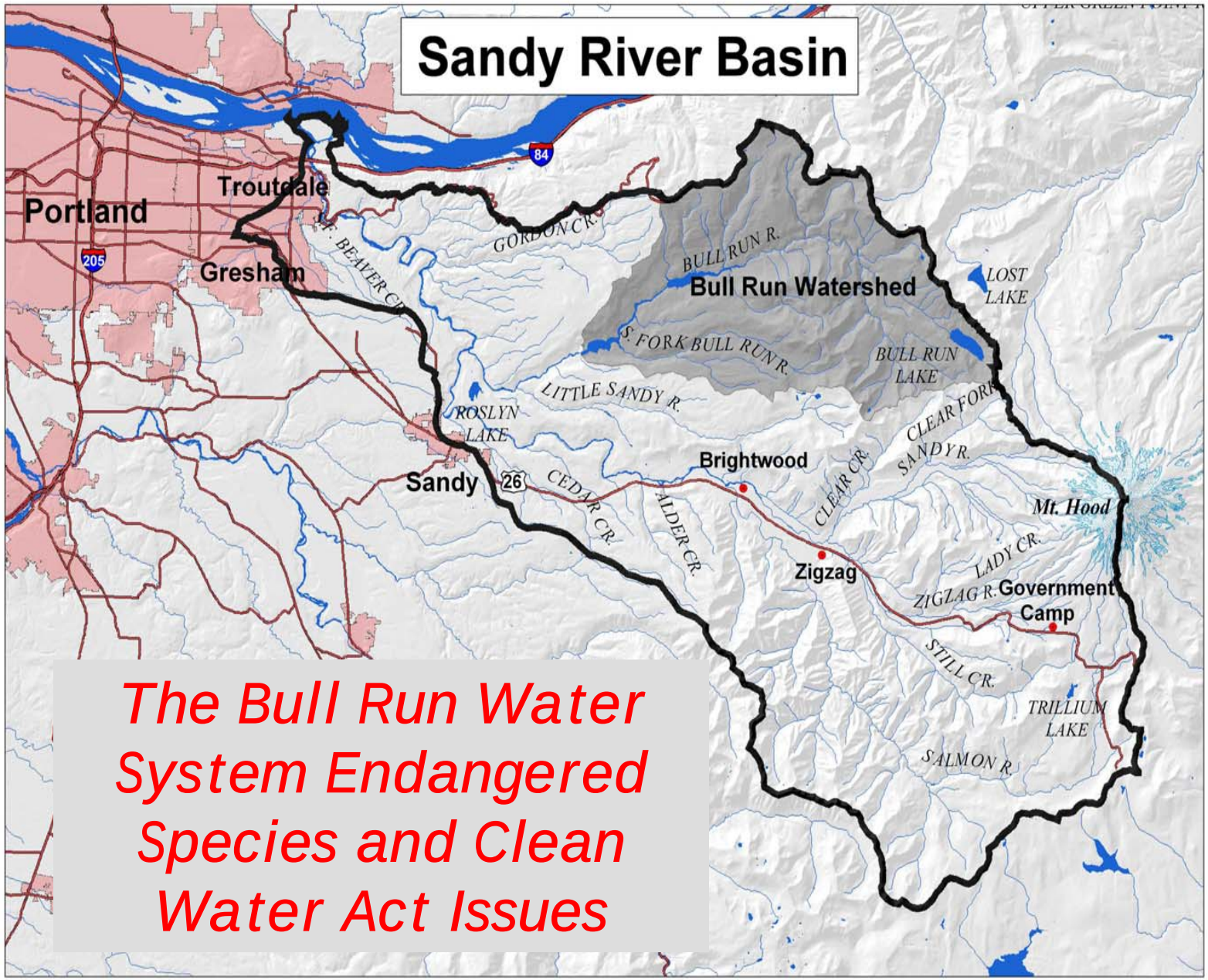
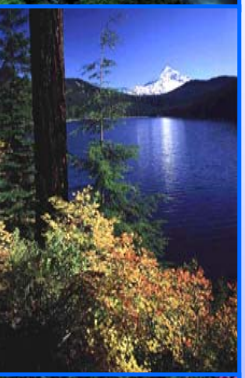
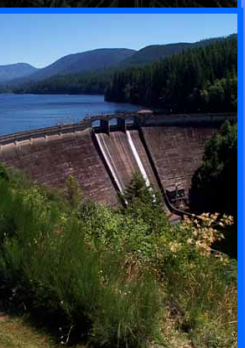




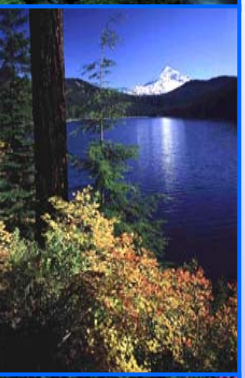
The Bull Run Water System Endangered Species and Clean Water Act Issues

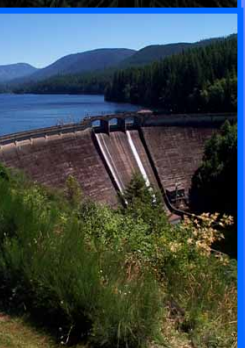





Bull Run ESA/CWA work has been a collaborative effort between the Water Bureau and the Sandy River Basin Partners

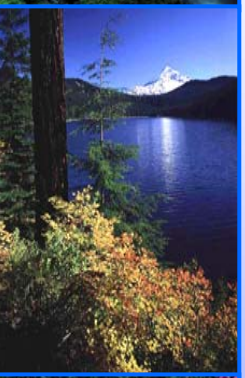
- 4 Federal Agencies
  - Forest Service, Bureau of Land Management, National Marine Fisheries Service, U.S. Fish and Wildlife Service
- 2 State Agencies
  - Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife
- Multnomah and Clackamas Counties
- 4 Non-Governmental Organizations
  - Oregon Trout, NW Steelheaders, Sandy Basin Watershed Council, The Nature Conservancy

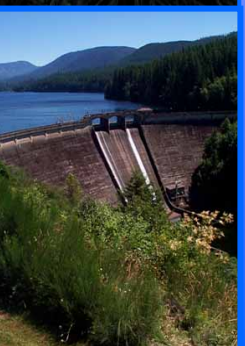





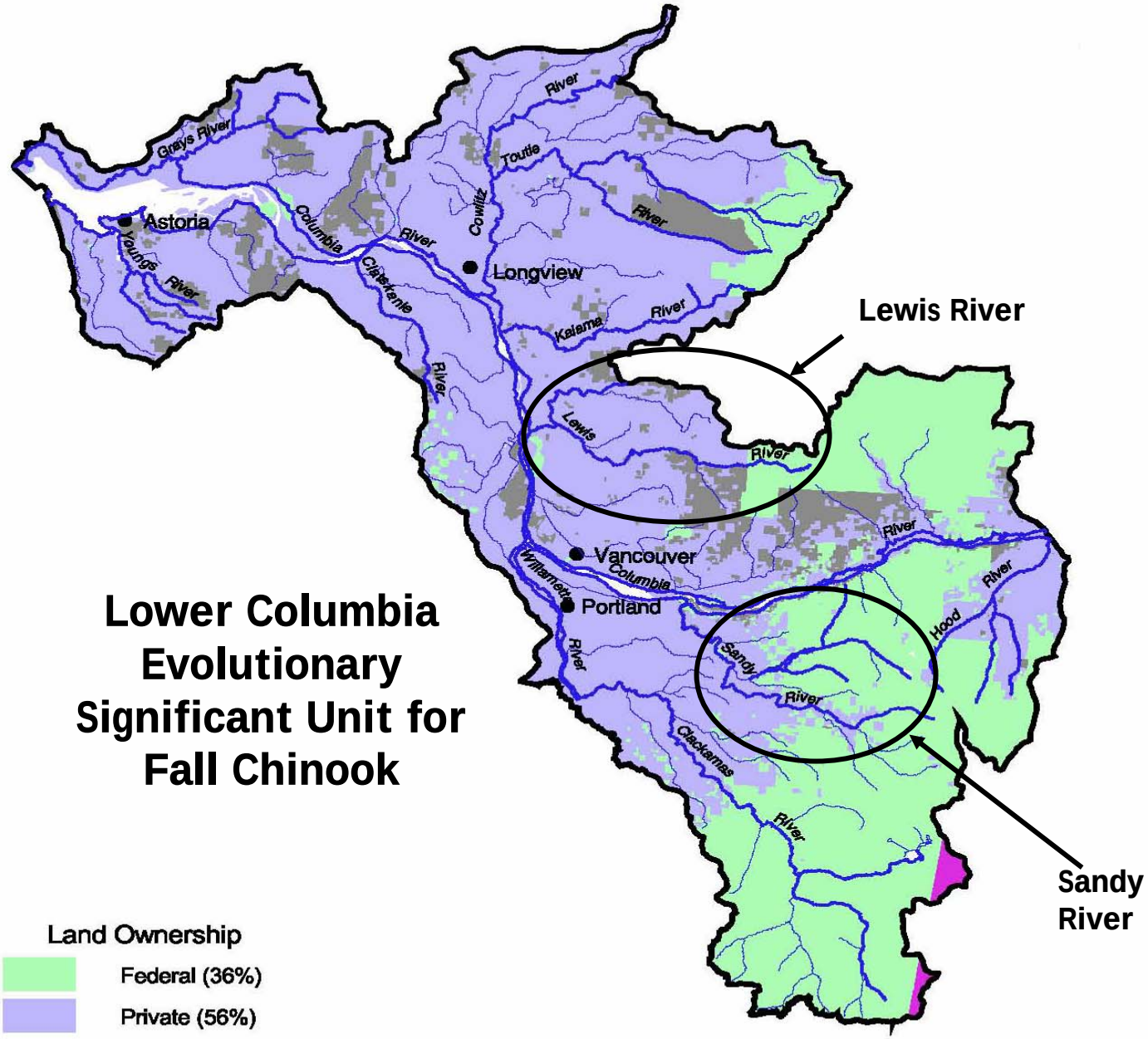
ESA species of concern in the Sandy Basin include

- Threatened Species
  - Winter Steelhead Trout
  - Spring Chinook Salmon
  - Fall Chinook Salmon
- Proposed for listing
  - Coho Salmon



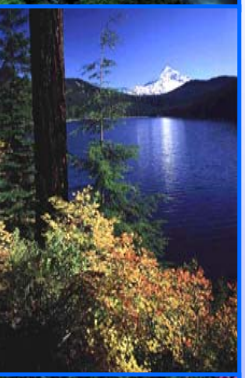


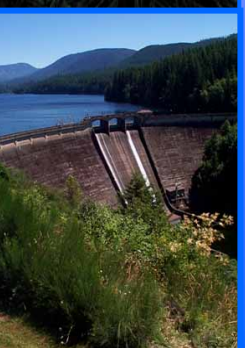
Lower Columbia Evolutionary Significant Unit for Fall Chinook



Land Ownership

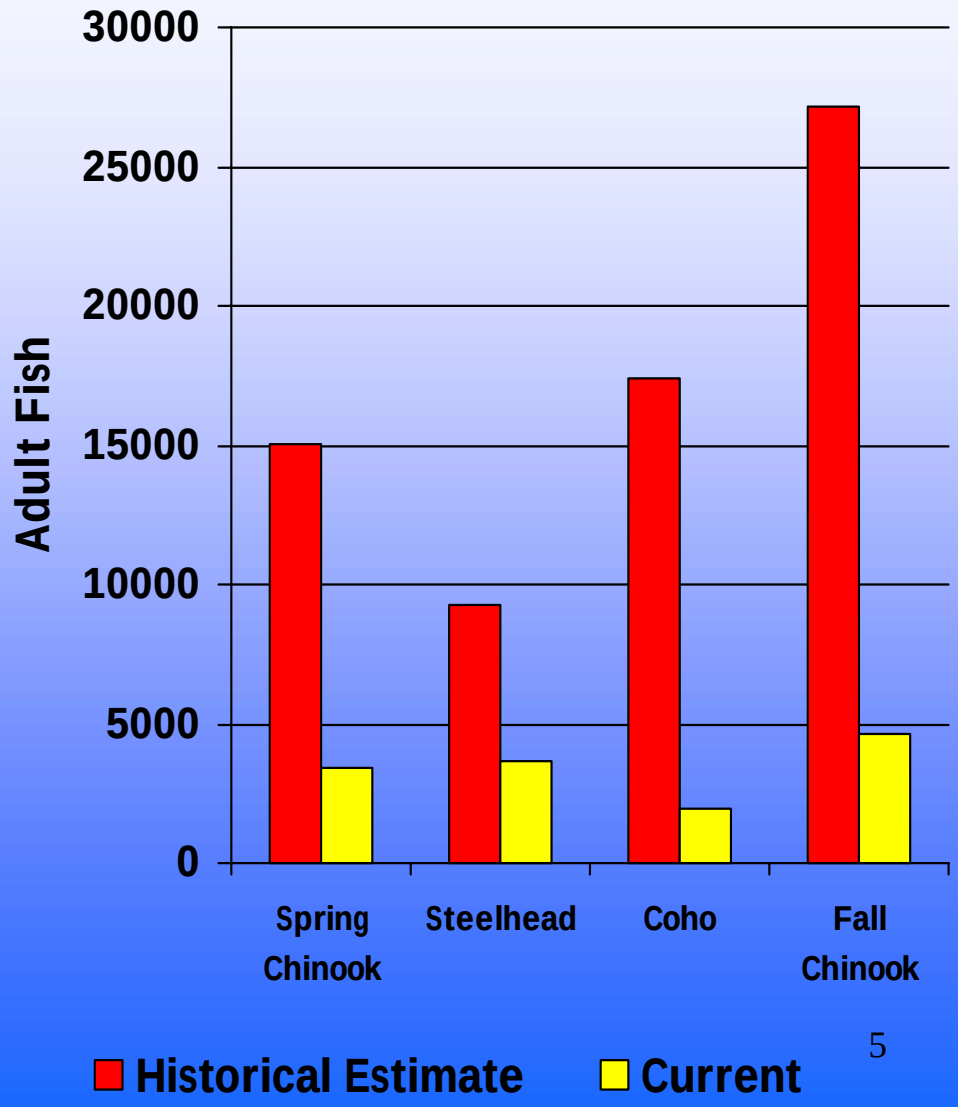
- Federal (36%)
- Private (56%)
- State/Local (7%)
- Tribal (1%)

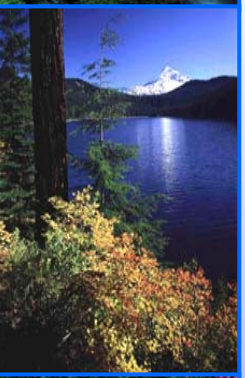



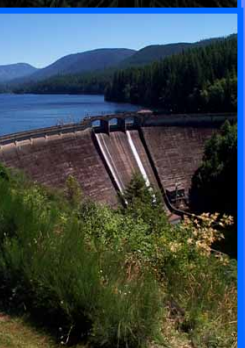


Current status of species of concern in the Sandy River Basin

- Current adult production potential is 11 to 39% of historical levels

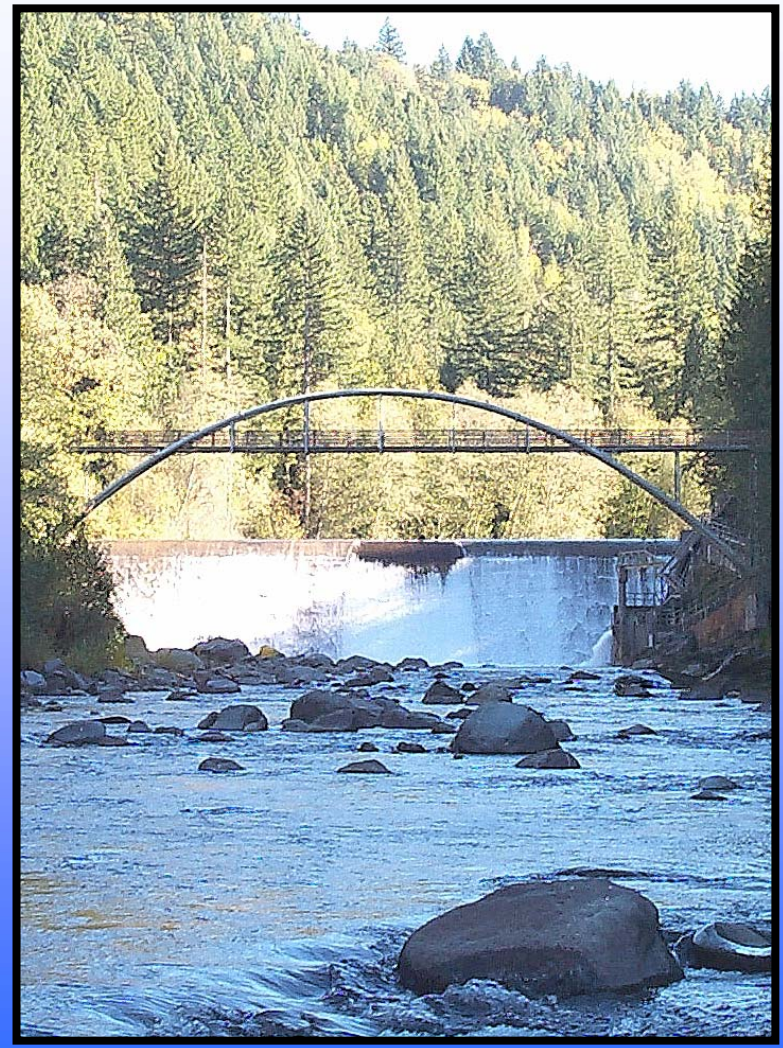


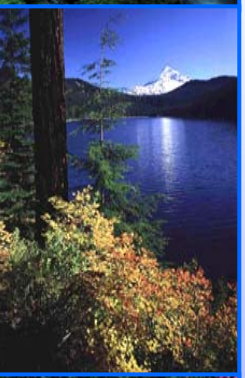


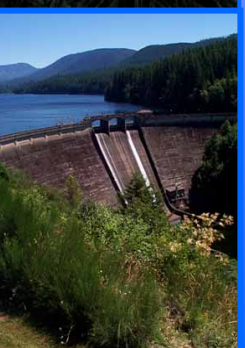
Human impacts have contributed to this decline

- City water supply
- Hydropower projects
- Channelization after 1964 flood
- Riparian habitat loss
- Culverts blocking fish passage
- Hatchery and harvest impacts



Marmot Dam

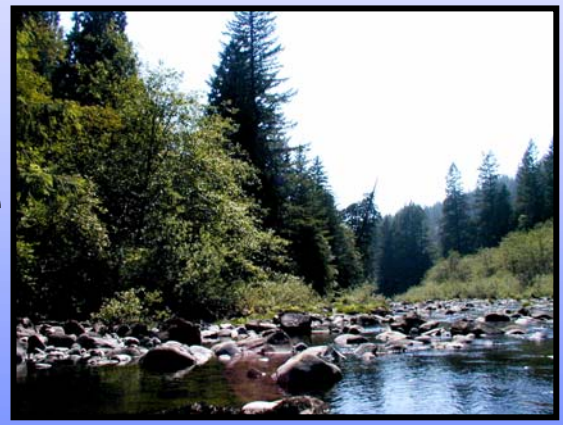





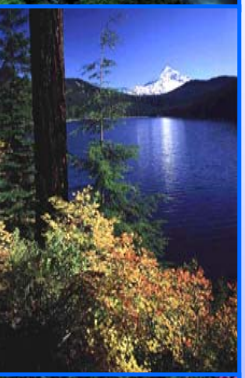
The Bull Run source has specific and definable impacts on fishery resources

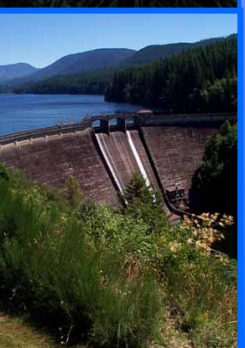
FLOW - Water storage and summer diversions reduce stream flow below the water supply intake

TEMPERATURE - Water supply diversions and storage contribute to temperatures in the lower river being too high



HABITAT – Dams block access to upstream habitat, and capture spawning gravel and large woody debris used for habitat

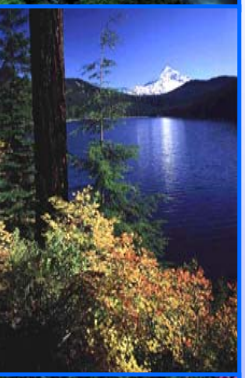



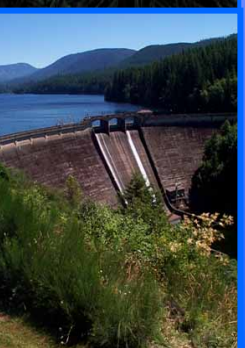


To ensure continued access to the Bull Run source, the City needs to:

- Comply with ESA requirements by obtaining a federal **incidental take permit**
- Comply with CWA requirements by implementing a **temperature management plan**

Conduits 2 and 4

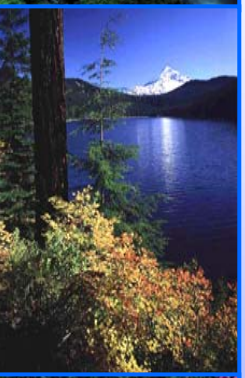



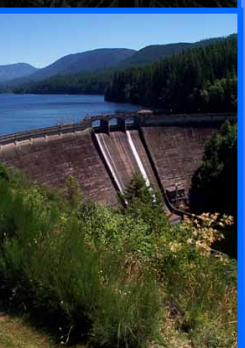


Why develop a Habitat Conservation Plan?

A HCP is recommended because it:

- provides more *regulatory certainty* than alternate compliance strategies, and
- has a *long term*, e.g., 50 years, which is important for effective water system planning

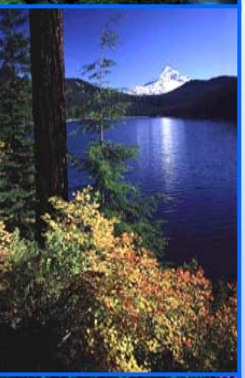



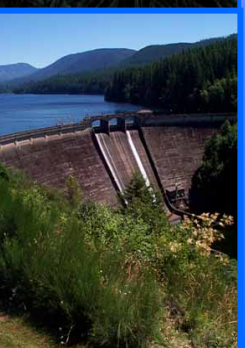


Habitat Conservation Plans typically include measures to minimize or mitigate for project or operational impacts

- A proposed package of measures to address the Bull Run's flow, temperature and habitat impacts has been developed

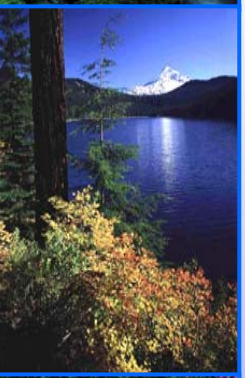
- Examples of measures include:

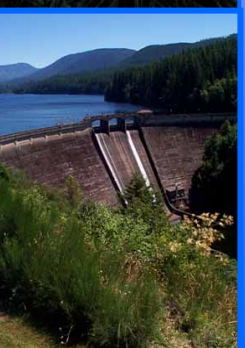





Flow

- Provide flows to the lower Bull Run to support spawning and rearing

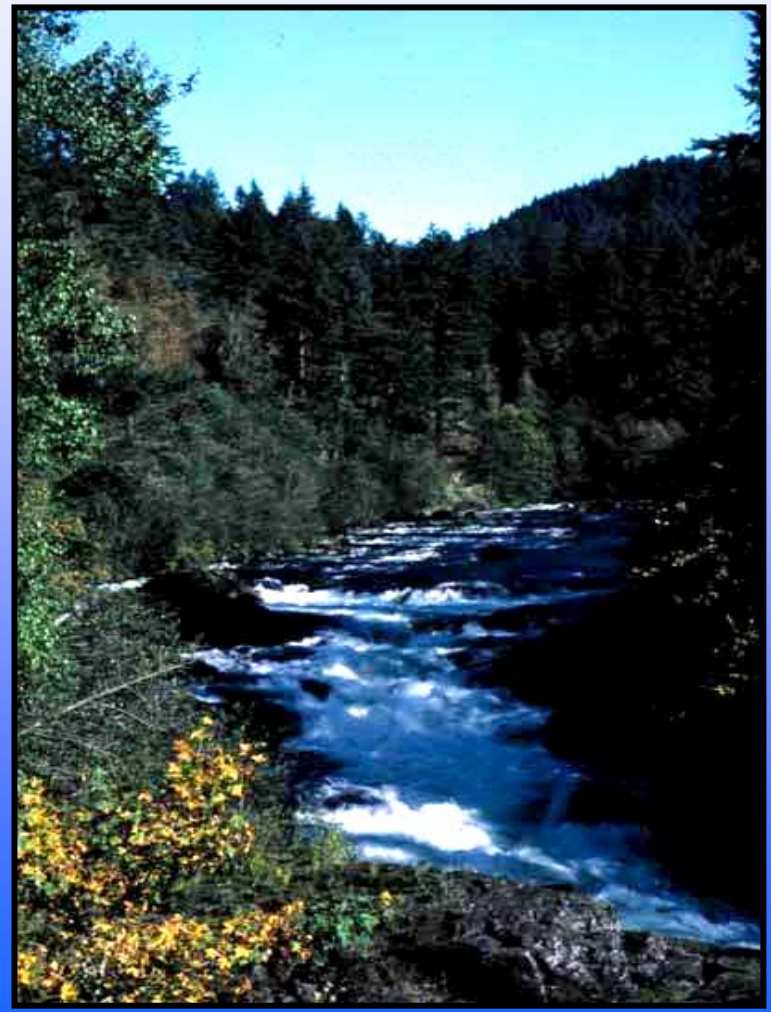


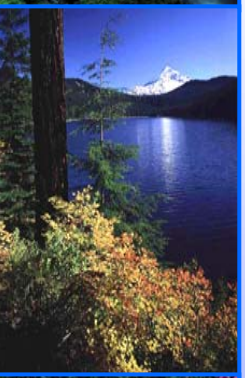


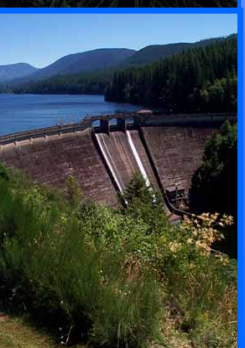
Summer flow releases provide habitat for steelhead trout rearing

Summer river conditions
before flow releases

Summer river conditions
after flow releases



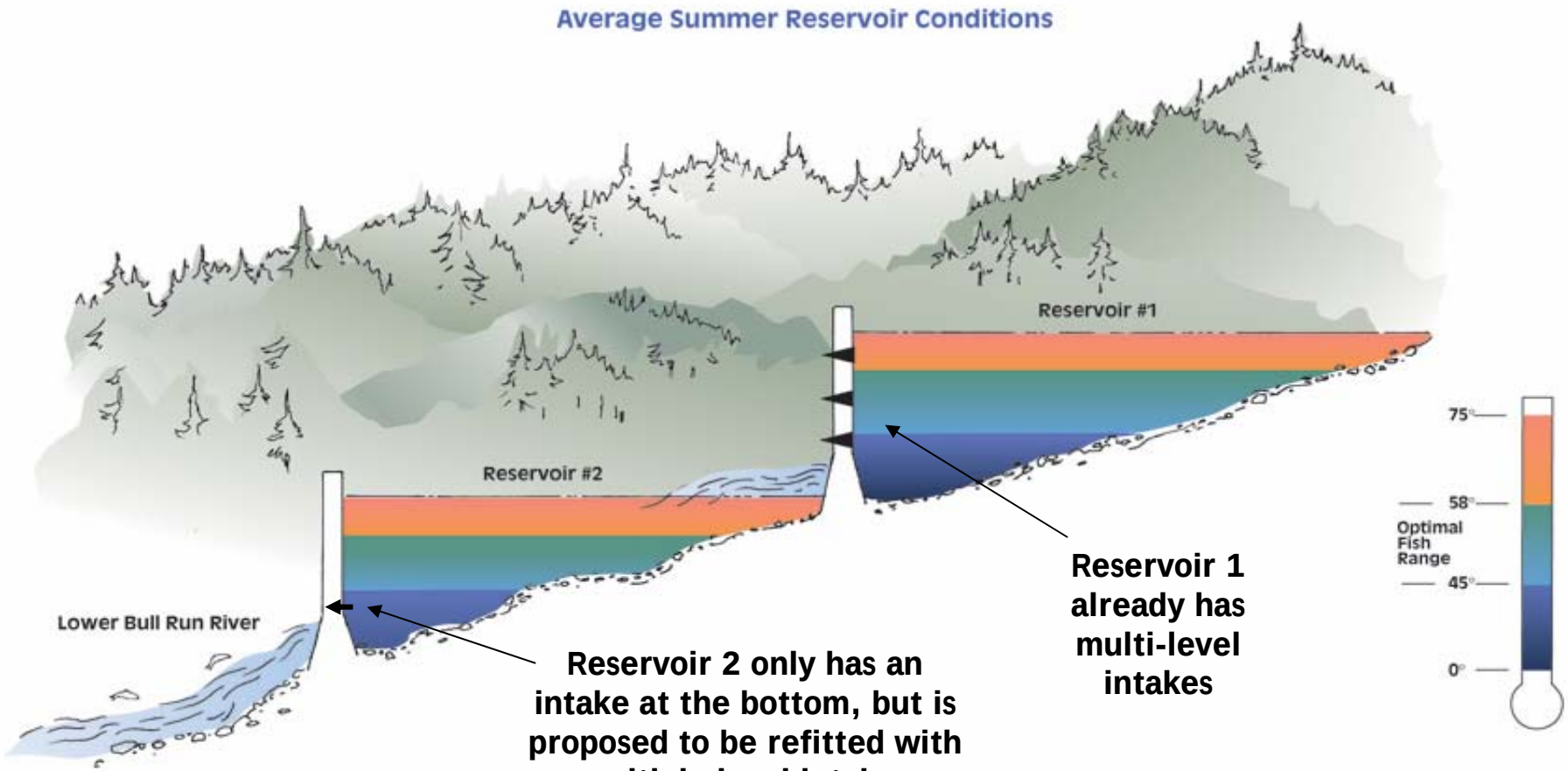


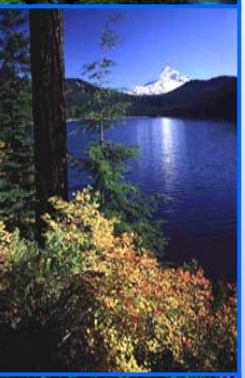
Temperature

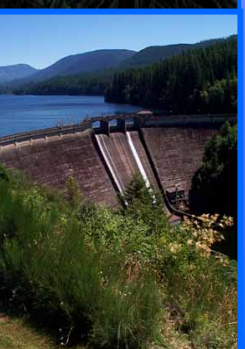
- Modify water intake structures and reservoir operations to provide cooler water during the summer and fall

Temperature Management Strategy

"bank" cold water so it can be released for fish

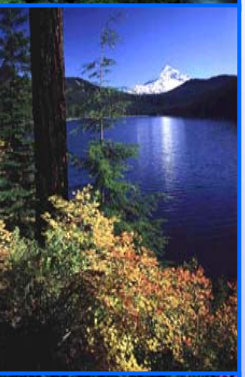


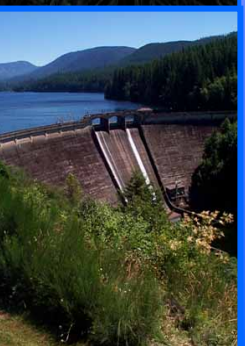





Habitat

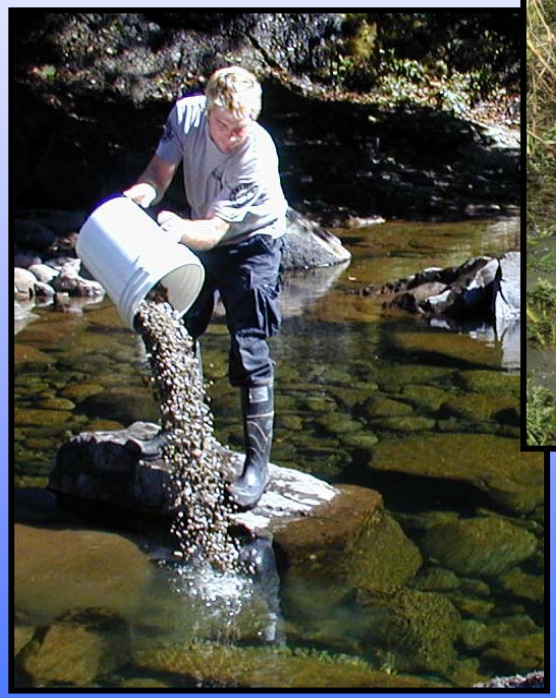
- Restore and protect habitat in Bull Run sub-basin and elsewhere in the Sandy River watershed



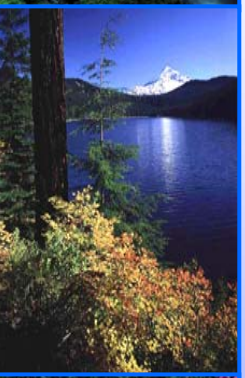
Improve habitat to provide a variety of benefits:

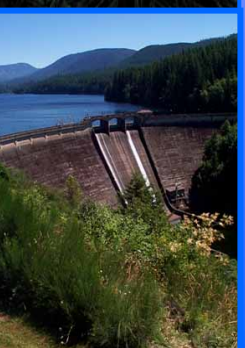
Place spawning gravel in the lower Bull Run to replenish depleted supplies



Reduce temperature and improve natural system functions by improving stream-side vegetation

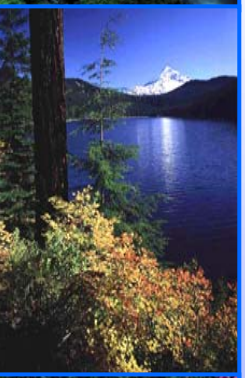
Add large woody debris to increase habitat diversity

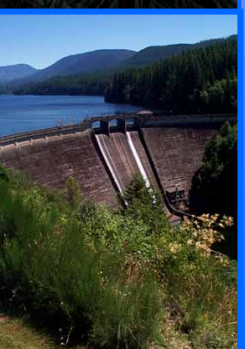





What is the estimated cost of these proposed measures?

- The estimated average annual cost is about $2 million
  - This estimate has been integrated into the bureau's financial planning work;
  - In the past, the Council has authorized funding for increased operation of groundwater, so that Bull Run flows can be released, and for planning for the ESA/CWA compliance program;
  - With these existing and anticipated resources, the bureau projects that no additional incremental rate increases would be required to fund the current proposal

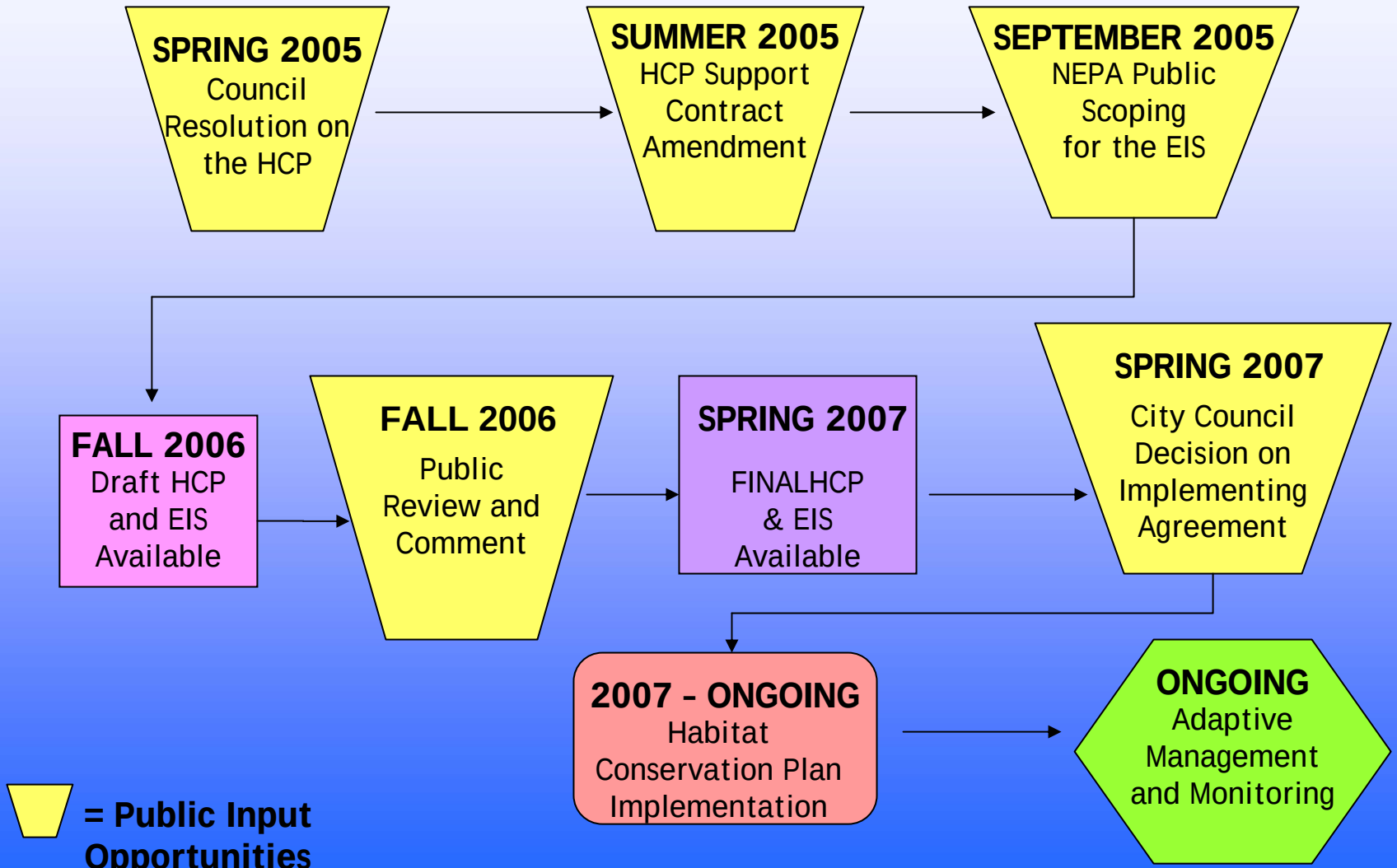



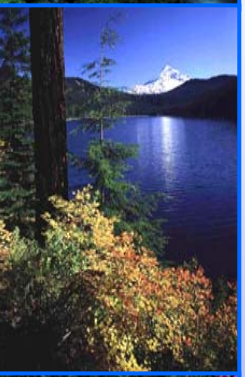


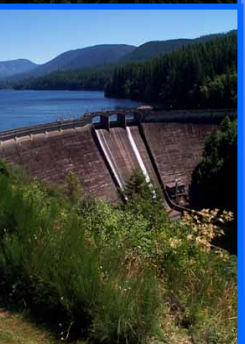
What are the next steps?

- Proposed measures will be more fully developed in a Draft Habitat Conservation Plan document and evaluated, along with suitable alternatives, in an Environmental Impact Statement

Habitat Conservation Plan and Environmental Impact Statement Next Steps







Questions