# The Columbia River Basin (Washington, Oregon and Idaho)

**Our Goal:** To protect public health and the environment in the Columbia River Basin by improving water quality and aiding in the recovery of Pacific salmon.

### Background

Multiple public and private interests derive economic, social and spiritual value from the Columbia River and its tributaries throughout six Western states -Washington, Oregon, Idaho, Montana, Nevada, Wyoming - and British Columbia, including fisheries, hydro-electric power generation, irrigation, water supply, transport and recreation. Sixty-nine out of 200 historical salmon stocks on the Columbia River have become extinct, and another 75 are at risk. Additionally, water quality is listed as impaired (not meeting Clean Water Act standards for water quality) for temperature, total dissolved gas, dissolved oxygen, and other toxic substances, which pose risks to fish and human health.

# The Focus of Our Efforts

EPA shares responsibility with numerous federal, state and tribal agencies for managing the Columbia River and protecting water quality. We are using a watershed approach – working with numerous stakeholders across multiple jurisdictions in a manner which focuses attention on natural landscape and ecological processes – to address multiple impacts in the Basin. We are placing a major emphasis on developing the scientific tools necessary to make informed decisions about how best to manage the resources of the Columbia Basin to restore salmon and water quality while protecting the economic and social values of the region. We will soon issue TMDLs (Total Maximum Daily Load) that will set targets for temperature and total dissolved gas in order to achieve water quality standards. We are also completing fish and sediment contamination surveys to help define potential health risks and to focus future efforts on reducing those risks.

## Scope of the Columbia/Snake River TMDL



### Average Annual Temperature Regime at Bonneville Dam



#### **Environmental Outcomes by 2007**

- ✓ State, tribal, federal and local agencies are working to achieve water quality standards for temperature and total dissolved gas (in accordance with State and Tribal TMDL Implementation Plans).
- ✓ Agreement has been reached on specific structural and operational measures to reduce water temperature and total dissolved gas.
- ✓ Contaminated sediments along the Upper Columbia River to the Canadian border are being cleaned up.

#### Environmental Indicators for Measuring Success

- Water temperature in the Columbia and Snake Rivers
- Total dissolved gas levels in the Columbia and Snake Rivers
- Contaminant levels in fish tissue
- Contaminant levels in sediment

#### Key Actions: Next 1-2 Years

- Establish TMDL (EPA) for temperature for the Columbia and Lower Snake Rivers
  - quantify temperature problems, identify main causes, and determine targets to achieve water quality standards
- Establish TMDLs (States/EPA/Tribes) for total dissolved gas for the Columbia and Lower Snake Rivers
  - quantify total dissolved gas levels and establish allowable loads that will achieve water quality standards
- Complete Upper Columbia River Sediment Contamination Study
- quantify extent of sediment contamination, estimate public health risk, and determine whether further investigation is necessary
- Complete Upper Columbia Basin Fish Contaminant Study



### **Columbia River Basin - United States and Canada**