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Columbia River Treaty Review

**Water Resources Commission Meeting
November 15, 2012
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Presentation

- **Columbia River Basin – A Few Facts and Figures.**
- **Columbia River Treaty Provisions/Operations.**
- **Purpose of 2014-2024 Columbia River Treaty Review.**
- **Treaty Review Process and Oregon's Participation**
- **A Look Ahead**



The Columbia River Basin

- **North America's fourth largest river by volume (annual discharge of roughly 198 Maf) rises in the Rocky Mountains of British Columbia and drains a basin roughly the size of France.**
- **The basin is home to fifteen U.S. Indian Tribes and eleven First Nations in Canada.**
- **Jurisdictionally Complex.**
- **Human engineering has dramatically altered the Columbia River.**



An Altered Columbia River Basin

From an estimated 16 million salmon and steelhead prior to 1850 to around 660,000 per year today.

Alterations

- **Seasonal hydrograph “flattened” .**
- **Water velocities decreased.**
- **Size and orientation of the Columbia River plume changed.**
- **Water temperatures in the mainstream steadily increased during last century and continues to increase.**



Establishment of the Columbia River Treaty

- **1909 Boundary Waters Treaty establishes principals and procedures affecting U.S./Canada boundary waters—creates International Joint Commission (IJC).**
- **1948 Flood focuses IJC efforts to study future flood control measures on the Columbia.**
- **Formal negotiations begin in 1959 and culminate in ratification of the Treaty by the U.S. in 1961 and by the federal Crown of Canada in 1964.**



Columbia River Treaty Provisions/Operations

In General

Create upstream storage in Canada and then share the power and flood control benefits that are derived downstream in the U.S.

More Specifically

- **Construction and operation of three large dams in British Columbia--U.S. option to build a fourth dam in Montana.**
- **The dams would create 15.5 million acre-feet (Maf) of reservoir storage for hydroelectric power generation and flood control benefits in Canada and in the U.S.**



Columbia River Treaty Provisions/Operations

Hydroelectric Power Benefits

- U.S. agreed to: 1) make most effective use of 15.5 Maf of Canadian storage, and 2) reimburse one-half of the estimated increase in downstream power benefits to Canada – “Canadian Entitlement”.
- Current annual value of the “Canadian Entitlement” is estimated at between \$250 - \$350 million.

Flood Control Benefits

The U.S. agreed to pay Canada \$64.4 million for 60 years of ‘assured use’ annually of 8.45 Maf of Canadian project storage space for U.S. flood control.

Treaty Dams and Reservoirs [Mica, Keenleyside, Duncan, Libby]





REASONS FOR THE 2014/2024 TREATY REVIEW

- **Option to Terminate the Treaty begins in 2014.**
- **Assured Flood Control Storage in Canada ends in 2024.**
- **Changed circumstances/priorities in both countries has broadened interests beyond power and flood control to include:**

**Fish and Wildlife
Resources**

Recreation

Cultural

**Water Supply
Change**

Navigation

Climate

U.S. Tribes/Canadian First Nations



Purpose of Treaty 2014/2024 **Review**

To enable the U.S. Entity and regional sovereigns (including Oregon) to make an informed recommendation to the U.S. Department of State by September 2013.

Recommendation will indicate whether or not it is in the best interest of the U.S to:

- Continue the Treaty**
- Terminate the Treaty, or**
- Seek to negotiate with Canada on modification of the Treaty**



Treaty Review Process and Oregon's Participation

U.S. Entities establish a Sovereign Review Team and a Sovereign Technical Team and undertake a comprehensive iterative process.

Sovereign Review Team (SRT)

- **Northwest regional states of Oregon, Washington, Idaho and Montana**
- **15 Northwest Tribes, and**
- **11 Federal Agencies**

Oregon's SRT representatives: Bill Bradbury and Henry Lorenzen, co-chair and member of the Northwest Power and Conservation Council, respectively.

Cont.



Treaty Review Process and Oregon's Participation

Sovereign Technical Team (STT) – responsible for the development of methodologies and tools to evaluate alternative future Treaty scenarios. STT is comprised of staff designated by their respective sovereigns.

Oregon's STT representatives: Ruben Ochoa, Oregon Water Resources Department; Rick Kruger, Oregon Department of Fish and Wildlife.

Washington's STT representatives: Derek Sandison, Director of Ecology's Office of Columbia River; Bill Tweit, Washington Department of Fish and Wildlife.



Treaty Review Process and Oregon's Participation

Technical Studies – Iterative Process

- **Based on three primary operational drivers: 1) hydropower, 2) flood risk management, and 3) ecosystem-based functions.**
- **Impact assessments for water supply, recreation, navigation, cultural resources, estuary, and climate change are being conducted.**

Water Supply – Special Study

Oregon and Washington lead efforts to ensure evaluation of a future scenario that involves accessing “additional water supply” from Canadian reservoirs for instream (flow augmentation) and out-of-stream (primarily irrigation) purposes in Oregon and Washington



Oregon Integrated Water Resources Strategy

(Adopted August 2012)

- **Provides a blueprint to help the state better understand and meet its instream and out-of-stream needs, taking into account water quantity, water quality, and ecosystem needs.**
- **Under Goal 2 of the Strategy, it is recommended that Oregon take actions to partner with federal agencies, tribes, and neighboring states in long-term water resources management.**
- **Oregon's active participation in the Columbia River Treaty 2014/2024 Review Process represents a clear and direct manifestation of this recommended action.**



Oregon Perspective – Treaty Review

- **Protecting and improving environmental conditions for fish and wildlife within the Columbia River Basin is a priority Oregon interest.**
- **Hydroelectric power generated by the Federal Columbia River Power System is a vital component of Oregon long-term energy plan.**
- **Flood Risk Management is vital to protecting cities and industry in Oregon vulnerable to Columbia River flooding.**
- **Water supply to meet Oregon's current and future instream and out-of-stream needs is a priority interest for Treaty Review.**



Columbia River Treaty 2014 – 2024 Review

A Bridge to the Future