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Which Includes:

- Dam Safety Office
- Columbia River Water Mgmt Grants
- Ag. Water Supply Grants (Ref 38)
- Well Drilling
- Water Conservation
- Zozel Dam Operation

Osoyoos Lake Water Science Forum Shanker's Bend  
Similkameen River

## Current Flow Augmentation at Lake Osoyoos

Informal  
Agreement During  
Drought Years

- Ecology asks BC Ministry of Environment to Release Water from Lake Okanogan
- Water Reaches Lake Osoyoos
- Ecology Opens Gates on Zozel Dam to Flush Sockeye Smolt into Okanogan River

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In February 2006, the Legislature enacted HB 2860

Which created the

## Columbia River Basin Water Mgmt Program

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Pursue Development of Water Supplies **For** Instream and Out-of-Stream Uses

## Through Storage, Conservation, and Water Mgmt Agreements (VRAs)

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**Columbia River Grant Program, First Year**

Initially, as a grant program was being developed, Ecology distributed the money on a case by case basis, funding projects:

- Odessa Subarea Surface Water Appraisal
- Kennewick Aquifer Storage Proposal
- Potholes Supplemental Feed Route
- Similkameen River/Shanker's Bend Proposal
- Columbia Basin Project Conservation Alternatives
- Columbia River Mainstem Off-Channel Storage

In addition to:

- Eastern WA Aquifer Storage/Recovery Study
- Walla Walla River Pump Exchange

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In October 2007, Ecology will begin accepting pre-applications for Columbia River Basin Water Management Grants. Successful applicants will be awarded grants funded by the Account.

The grants will fund a variety of conservation and storage projects, including:

- Conservation infrastructure ("pumps and pipes")
- Surface Storage
- Aquifer Storage
- Pump Exchange Projects
- Feasibility Studies
- Operations and Maintenance (annually funded)

All projects, large and small, will be given consideration

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Water supplies secured through the development of new storage facilities made possible with funding from the Columbia River Basin water supply development account is required to be allocated as follows:

- Two-thirds of active storage is required to be available for appropriation for out-of-stream uses, and
- One-third of active storage is required to be available to augment instream flows to maximize benefits to salmon and steelhead populations.

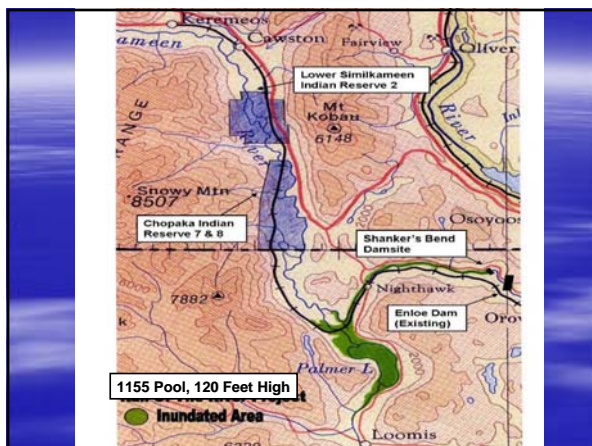
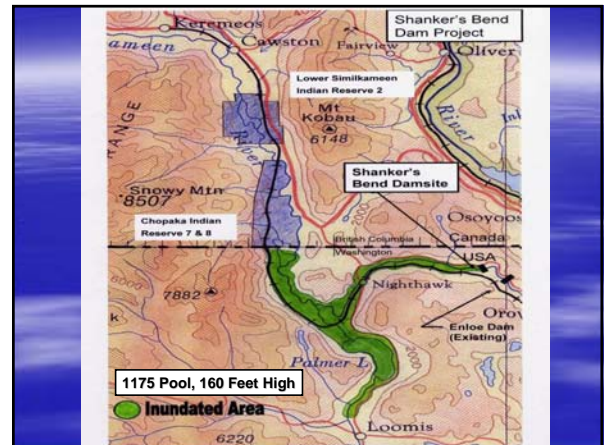
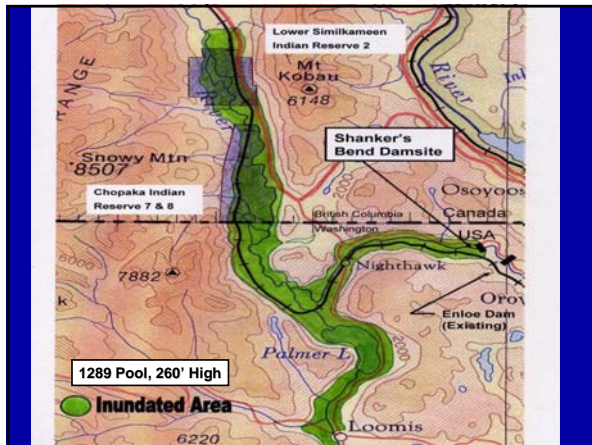
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### Similkameen River Storage Project (Shanker's Bend)

The US Army Corps of Engineers (Corps) surveyed the Columbia River and its tributaries in the 1920s. This work resulted in the "308 Reports," which included plans for comprehensive development of the Columbia River system. Shanker's Bend was one of the recommended projects.

In 1948, the 308 Report included a preliminary design of a 260 foot high dam on the Similkameen River. This design backed water 15 miles up into Canada. A report by the International Columbia River Engineering Board in 1955 for the International Joint Commission of the United States and Canada included a 160 foot high design, but recommended the High Dam with a number of smaller projects on the Similkameen River in Canada. A Preliminary Application for a FERC Hydropower permit for the project included a run-of-the-river option that was only 120 feet high.

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### Shanker's Bend Statistics

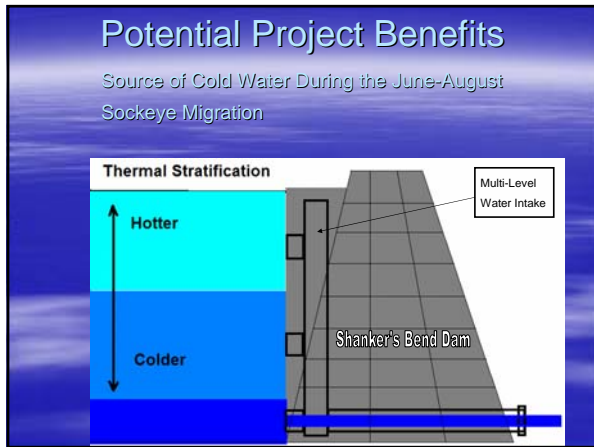
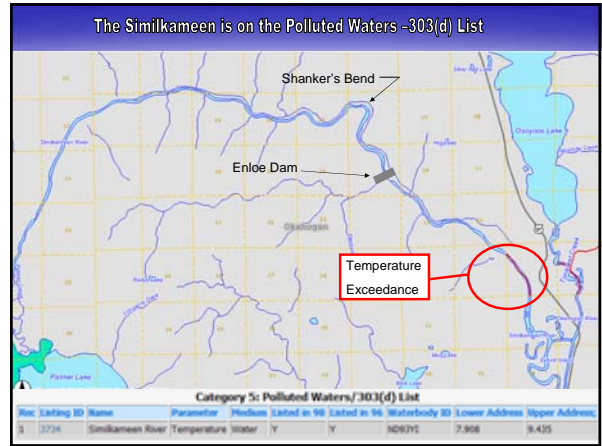
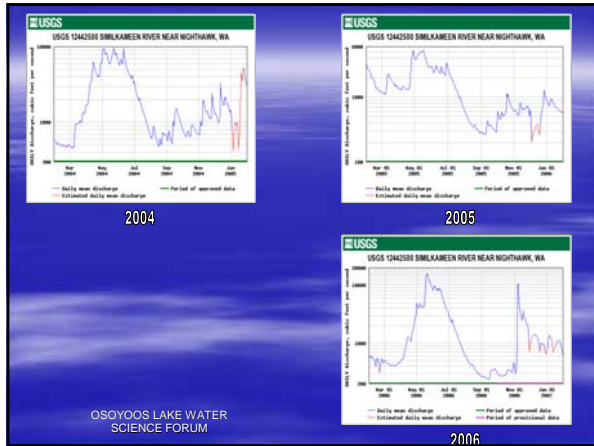
Project Config.	Dam Height	Reservoir Volume	Cost Est.
Elev. 1289	260 feet	1.7M Acre Feet	\$260M
1175	160 feet	168K Acre Feet	\$115M
1155	120 feet	50K AF (Temp.)	\$50M

### Why Do We Like the Project?

Plenty of Cheap, Cold, Water, for an Area with Temperature Problems

Dam Ht.	Estimated Cost
260 feet	\$153/Acre Foot
160 feet	\$683/Acre Foot
120 feet	\$1000/Acre Foot

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**Shanker's Bend Project Status:**

Okanogan PUD has applied for a Preliminary FERC Hydropower permit for the Shanker's bend damsite.

Discussions are currently underway with project sponsor, Okanogan PUD, for Columbia River Grant agreement.

The project work is part of an investigation taking place on both sides of border. The Interim Steering Committee overseeing investigation has contributors on both sides of Canada/US Border.

The work required to bring this project to a comparable level of knowledge as the joint USBR/Ecology Columbia River Mainstem Storage investigation will include conceptual level cost estimating, estimates of mitigation required, as well as cultural studies for any impacts to Colville and Lower Similkameen properties.

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