

AMENDMENT NO. 1 TO
ECOLOGY GRANT NO. G0800289
BETWEEN THE
STATE OF WASHINGTON DEPARTMENT OF ECOLOGY
AND OKANOGAN PUBLIC UTILTIY DISTRICT NO. 1

It is mutually agreed that:

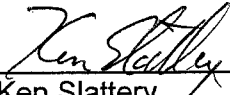
1. The completion date of the contract remains December 31, 2008
2. The Scope of Work is amended per Attachment #1 to this Amendment. All elements of this attached scope is included by reference to the original agreement G0800289

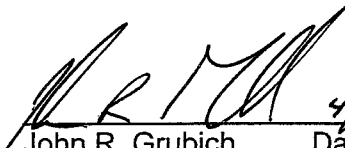
All other terms and conditions of the original contract and prior amendment s remain in effect.

The parties sign this amendment:

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

OKANOGAN PUBLIC UTILTIY
DISTRICT NO 1

 4/9/08
Ken Slattery Date

 4/1/2008
John R. Grubich Date

Water Resources Program Manager
Department of Ecology

General Manager
OKANOGAN PUD NO 1

Approved as to form only.
Assistant Attorney General

ATTACHMENT #1
SCOPE OF WORK (AMENDMENT 1)

Project Title: Similkameen River/ Shankers Bend Appraisal Study

Task 11.0 – Cultural Resources Assessment

The purpose of this task is to assess and summarize the potential cultural effects of a storage project through a review of existing literature, studies and project alternatives. A summary will be prepared that provides an overview of cultural resources. Tribes and First Nations on both sides of the United States and Canadian border will actively participate in preparation, review, and approval of the summary report of Cultural Resources.

Task 12.0 – Assessment of Environmental Effects

The purpose of this task is to assess the current condition of the Similkameen river basin flora and fauna and potential effects from a new water storage reservoir project. This work will be based on a review of existing literature, studies and reservoir project alternatives. The following sub-tasks will be performed:

12.1 Aquatics/Fisheries

- a) Utilizing existing data sources, estimate the effects from reservoir inundation upon existing aquatic life. If data sources exist and are readily available the following items should be briefly described (goals):
 - Effects on Kokanee including spawning areas,
 - Effects on Whitefish including spawning areas,
 - Effects on Freshwater mussels.
 - Effects on Warm water fish species.
 - Effects to other identified fish populations including those in Canada and those below the project.

- b) Utilizing existing data sources, estimate the impact upon the recreational and non recreational fishery.

12.2 Wildlife

- a) Utilizing existing data sources, estimate the effects from reservoir inundation upon existing wildlife. If data sources exist and are readily available the following items should be briefly described (goals):

- Effects on big game populations including habitat, migration/habitat corridors.
 - Effects on Avian species.
 - Effects on other wildlife species.
- a) Estimate the impacts of wildlife-based recreational opportunities with an emphasis on big game and waterfowl hunting, birding and other watch-able wildlife opportunities

12.3 Water Quality – Utilizing existing data sources, compare Similkameen River water quality to the Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC). Compile a list of existing deviations from State Standards and estimate the possible or likely effects of the presented reservoir options evaluated.

12.4 Wetlands and Shorelines – Utilizing existing data sources, estimate the effects from reservoir inundation upon existing and created wetlands and shorelines. Quantify the amount of wetlands and shorelines lost or gained do to reservoir inundation. These areas need to be identified and the effects of seasonal inundation need to be evaluated.

12.6 Recreation – Estimate the type and amount of gained or lost recreational opportunities caused by construction of all reservoir options.

12.7 Land Use – Quantify the amount of land lost to reservoir inundation. Breakdown the inundated lands by percentage of agricultural, forest, pastoral, or wildlife and recreation use.

12.8 Flooding of Infrastructure/Private property – Estimate the amount of public and privately owned infrastructure that would be inundated by any reservoir storage options. Provide cost estimates for mitigating the effects of this loss of infrastructure. Estimate the amount of private and publicly owned land that would be inundated by the reservoir.

Task 13.0 - Appraisal Level Engineering

The purpose of this task is to produce rough costs that allow project sponsors and stakeholders to consider the cost of electricity generated at or water stored by a new multipurpose storage reservoir in the Shanker's Bend area. These costs, coupled with an understanding of the cultural and environmental impacts, provide the project with comparability with other potential sources of water storage and electricity.

13.1 Identification of Potential Sites- Utilizing the results from the "Similkameen River Basin Water Supply and Demand Study" (Supply and Demand Study) and other available

data, evaluate possible water storage sites. Potential dam sites shall include Shankers Bend (with the three possible reservoir configurations discussed in the Supply and Demand Study), the Lenton Flat location, and the Corps of Engineers sites that were evaluated in the mid-1980's. The sites in combination with potential saddle dams shall also be evaluated. The sites will each undergo a "fatal flaw" review by the consultant. This review will utilize existing geologic maps, seismic data, and potential failure mode analysis features to assess the site from a safety and constructability standpoint.

13.2 Conceptual Facility Design - From the possible dam construction sites described in 13.1 above, develop conceptual facility designs that include all appurtenant features for storage of water, production of electricity, and any necessary features designed to be protective of instream resources. If a particular dam construction site has the capacity for more than one of the reservoir storage proposals, then a design shall be provided for each storage option at that site.

13.3 Development of Construction and Operation Costs - For each storage option developed in 13.2 above, order-of-magnitude cost estimates shall be prepared. In addition, annual operation and maintenance expenses based upon project configuration will be included.

13.4 Development of new water storage sites on the Similkameen River in Canada has been considered in the past. A new Canadian investigation for a Similkameen River dam is currently underway. Coordinated operation of any of the above Washington sites, in conjunction with a Canadian water storage facility under consideration, shall be evaluated.

Task 14.0 – Report, Production and Distribution

The purpose of this task is to produce and distribute the "Similkameen River/ Shankers Bend Appraisal Study" report. This task will be comprised of the following sub-tasks:

14.1 Report - A report will be prepared that incorporates and summarizes task 11.0 through 13.0 of this amendment and the Army Corps of Engineers report identified in tasks 1.0 through 6.0 (Corps report). Additionally, the report will incorporate a regulatory processes and timing section and conclude with a Summary and Recommendation section.

14.2 Production and Distribution – The report identified in task 14.1 above will be produced in the following format and quantities: Twenty-five (25) hard copies and fifty (50) electronic (CD) copies. These copies will be distributed and made available to interested agencies, tribes and the public.

14.3 Public Informational Meetings – After the report is finalized, PUD and Ecology staff will host two public informational meetings/presentations in proximity to the study area.

Task 15.0 Post Report and Next Steps

This task is intended to link this grant phase with potential future funding phases. Upon completion of the report and presentations, the PUD and Ecology will develop a next steps assessment of necessary tasks and funding amounts.

AMMENDED BUDGET

TASK	ORIGINAL BUDGET	NEW TASK BUDGET	TOTAL BUDGET
Contract with United States Army Corps of Engineers (USACOE)	\$45,000		\$45,000
Administration (Task 10.0)	\$7,500	\$15,000	\$22,500
Management Services, Project Coordination and Critical Path Identification	\$22,500		\$22,500
Public Outreach and Consultation	\$25,000		\$25,000
Cultural Res. Assessment (Task 11.0)		\$50,000	\$50,000
Assess. of Environmental Effects (Task 12.0)		\$50,000	\$50,000
Appraisal Level Engineering (Task 13.0)		\$50,000	\$50,000
Report, Production and Dist. (Task 14.0)		\$25,000	\$25,000
Post Report and Next Steps (Task 15.0)		\$10,000	\$10,000
Total	\$100,000	\$200,000	\$300,000