



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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September 21, 2012

Mr. Pete Tjemsland, Utilities Manager
City of Sequim
152 West Cedar Street
Sequim, WA 98382

**Re: Reclaimed Water Grants Program
Amendment No. 1 to Ecology Grant Agreement No. G0800564**

Dear Pete:

Enclosed is one signed original of amendment No. 1 to grant agreement G0800564 between the Department of Ecology and the City of Sequim for the City of Sequim Water Reclamation Facility and Distribution Expansion project. This amendment extends the project and modifies the scope of work.

If you have any questions, please call me at (360) 407-7489.

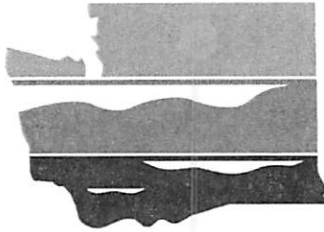
Sincerely,

Melanie Tyler
Grant Financial Manager
Water Quality Program

Enclosures

cc: Greg Zentner, Ecology, SWRO/WQ





DEPARTMENT OF
ECOLOGY
State of Washington

**AMENDMENT NO. 1
TO GRANT AGREEMENT NO. G0800564
BETWEEN THE
STATE OF WASHINGTON DEPARTMENT OF ECOLOGY
AND
THE CITY OF SEQUIM**

PURPOSE: To amend the above-referenced grant agreement between the Department of Ecology [DEPARTMENT] and the City of Sequim [RECIPIENT] for the City of Sequim Water Reclamation Facility and Distribution Expansion Project. This amendment is needed to extend the expiration date of the agreement and to modify the Scope of Work to incorporate the remaining tasks.

IT IS MUTUALLY AGREED that the grant agreement is amended as follows:

1. The project agreement shall be modified as follows:

a. The following shall be deleted:

Part II (Goals); Part III (Project Description); Part IV (Project Budget); and Part V (Scope of Work)

b. The following shall be added:

Attachment A: Part II (Goals); Part III (Project Description); Part IV (Project Budget); and Part V (Scope of Work)

2. The grant expiration date is extended from June 30, 2011, to June 30, 2013.

FURTHER, this amendment shall be effective upon the effective date of the original agreement, September 8, 2008.

Except as expressly provided by this amendment, all other terms and conditions of the original grant agreement and all amendments thereto remain in full force and effect.

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IN WITNESS WHEREOF: the parties have signed this amendment.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

CITY OF SEQUIM

for Donald J. Sush 09/19/2012
KELLY SUSEWIND, P.E., P.G. DATE
WATER QUALITY PROGRAM MANAGER

Paul Haines 9-10-12
PAUL HAINES, P.E. DATE
PUBLIC WORKS DIRECTOR

APPROVED AS TO FORM ONLY
ASSISTANT ATTORNEY GENERAL

approved as to form
Cara O. Rite Sequim City Atty
9/10/2012

ATTACHMENT A
TO
AMENDMENT NO. 1
TO GRANT AGREEMENT NO. G0800564
BETWEEN THE
STATE OF WASHINGTON DEPARTMENT OF ECOLOGY
AND
THE CITY OF SEQUIM

PART II: PROJECT GOALS, OUTCOMES, POST PROJECT ASSESSMENT, MISCELLANEOUS REQUIREMENTS

A. Water Quality Goals:

1. Provide water for existing water supplies in water short areas (application, page 8)
2. Augment stream flows in water short area (application, page 8). The city has also indicated its desire to use reclaimed water as mitigation for future water rights. Ecology has indicated that the city may divert reclaimed water to other uses in the future to meet Goal 1 (letter of June 8, 2009).

B. Water Quality Project Outcomes:

1. Complete hydrogeologic studies, including pilot testing for infiltration of reclaimed water.
2. Develop a *Reclaimed Water Engineering Plan for Aquifer Recharge & Distribution System Expansion*.
3. Complete design and implementation tasks identified in the city's Phase III Scope of Work:
 - A. Design Rapid Infiltration Basin (RIB)s
 - B. Design, implement, and monitor a Leaky Pipe Pilot Project
 - C. Design and construct relocation of the existing reclaimed water pump station to the end of the "flow-through channel at the treatment plant to provide 500,000 gallons of storage.

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- C. Post Project Assessment. The RECIPIENT agrees to submit a brief survey regarding the key project results or water quality project outcomes and status of eventual environmental results or goals from the application.

The DEPARTMENT's Performance Measures Lead will make an effort to e-mail the RECIPIENT the Post Project Assessment Survey approximately 60 days prior to the Post Project Assessment Date. This date will generally be three to five years after the agreement expires. This survey is to be completed by the RECIPIENT and sent as an e-mail attachment to the DEPARTMENT's Project Manager and the DEPARTMENT's Water Quality Program Performance Measures Lead.

The DEPARTMENT may conduct additional on-site interviews and inspections to gather information for this assessment. The DEPARTMENT will provide the performance measures data the Legislature, Environmental Protection Agency, and other natural resource agencies.

Post Project Assessment Date: June 30, 2014.

PART III: PROJECT DESCRIPTION

The city of Sequim currently uses reclaimed water for dust control, street washing, and irrigation of some portions of the Reuse Demonstration Site next to Carrie Blake Park. The city also provides a small amount of flow to Bell Creek. Primarily the city discharges reclaimed water to an existing outfall in the Strait of Juan de Fuca near Sequim Bay, because Sequim has not developed a distribution system, users, or the ability to recharge groundwater.

The portion of the project funded by this grant includes:

1. Hydrogeologic studies and pilot testing for an infiltration basin. Reclaimed water that the city infiltrates to ground may ultimately augment stream flows. At a future date, the city may divert this water to other uses, or seek to use this water as mitigation for future water rights.
2. Development of a Reclaimed Water Engineering Report. The Report will provide a basis for design of reclaimed water improvements, utilizing information developed during hydrogeologic studies.
3. Design and implementation of various improvements described in Part V, including implementation of a leaky pipe pilot project, design of infiltration basins, and reconfiguration of an existing basin for reclaimed water storage ("flow-through channel") at the treatment plant.

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PART IV: PROJECT BUDGET

City of Sequim Reclaimed Water Engineering Report and Project Development		
ELEMENTS (Tasks)	TOTAL ELIGIBLE PROJECT COST	TOTAL ELIGIBLE COST (TEC)
Task 1 – Project Administration/Management	\$3,270	\$3,270
Task 2 – Permitting, Plans and Specifications	\$0	\$0
Task 3 – Design of Reuse Site Improvements and Distribution System Extension		
Task 3A – Public Involvement	\$13,100	\$13,100
Task 3B – Hydrogeologic Studies, Engineering Report	\$555,200	\$555,200
Task 3C – Flow-Through Channel Design	\$51,300	\$51,300
Task 3D –Design of Rapid Infiltration Basin (RIB)	\$89,300	\$89,300
Task 3E – Leaky Pipe Pilot Project	\$15,900	\$15,900
Task 3F – Project Administration and Coordination Assistance	\$42,400	\$42,400
Task 3G – Flow-through Channel (FTC) Reconfiguration	\$383,800	\$332,800
Total	\$1,154,270	\$1,103,270
The DEPARTMENT's Fiscal Office will track to the Total Eligible Cost.		
MATCHING REQUIREMENTS		
DEPARTMENT Share: 75% of TEC		\$827,453
RECIPIENT Share: 25% of TEC		\$275,817

PART V: SCOPE OF WORK

Task 1 - Project Administration/Management

- A. The RECIPIENT will administer the project. Responsibilities will include, but not be limited to: maintenance of project records; submittal of payment vouchers, fiscal forms, and progress reports; compliance with applicable procurement, contracting, and interlocal agreement requirements; attainment of all required permits, licenses, easements, or property rights necessary for the project; and submittal of required performance items.
- B. The RECIPIENT will manage the project. Efforts will include conducting, coordinating, and scheduling project activities and assuring quality control. Every effort will be made to maintain effective communication with the RECIPIENT's designees, the DEPARTMENT, all affected local, state, or federal jurisdictions, and any interested individuals or groups. The RECIPIENT will carry out this project in accordance with any completion dates outlined in this agreement.
- C. The RECIPIENT will submit to the DEPARTMENT the following documents in the quantities identified:
- Design reports and 90 percent plans and specifications – one copy
 - Final plans and specifications - two copies

The RECIPIENT will submit two copies of any document(s) which require DEPARTMENT approval. Once approval is given, one copy will be returned to the RECIPIENT. If the RECIPIENT needs more than one approved copy, the number of submittals should be adjusted accordingly.

- D. Required Performance:
1. Effective administration and management of this grant project
 4. Maintenance of all project records
 5. Submittal of all required performance items, progress reports, financial vouchers, and maintenance of all project records

Task 2 – Permitting, Plans and Specifications

A. Groundwater Monitoring Program

A monitoring program will be established for the infiltration sites in accordance with Section 3 Article 5 Section 9 of the Water Reclamation and Reuse Standards.

Groundwater monitoring wells need to be installed and a sampling program is required.

B. Public Outreach Program

The RECIPIENT will continue to collaborate with Clallam County to provide public education and public outreach on the importance of reclaimed water in the water-short area. The RECIPIENT realizes that public support is directly related to the success of the project.

C. Plans and specifications must be reviewed and approved by the Department of Health and the DEPARTMENT's Water Quality Program and be consistent with:

1. Requirements stated in Chapter 173-240 WAC, Submission of Plans and Reports for Construction of Wastewater Facilities related to plans and specifications.
2. Requirements stated in Chapter 246-271 WAC, Public Sewage.
3. Water Reclamation and Reuse Standards, September 1997 (DEPARTMENT Publication #97-23).
4. Good engineering practices and generally recognized engineering standards, including, but not limited to, the Criteria for Sewage Works Design, December 1998 (DEPARTMENT Publication No. 98-37 WQ).
5. The approved engineering report or facilities plan.
6. Other reports approved by the DEPARTMENT which pertain to the facilities design.

D. Plans, specifications, construction contract documents, and addenda must be approved by the RECIPIENT prior to submittal for DEPARTMENT review.

E. An engineer's projected construction schedule will be prepared and submitted to the DEPARTMENT at 90 percent completion of plans and specifications.

F. A current, updated construction cost estimate will be submitted along with each plans/specifications submittal.

G. All construction plans submitted to the DEPARTMENT for review and approval will be reduced to no larger than 11" x 17" in size. They may, at the RECIPIENT's option, be bound with the specifications or related construction contract documents or bound as a separate document. All reduced drawings must be completely legible.

H. DEPARTMENT approval of the plans, specifications, and construction documents authorizes the RECIPIENT to solicit bids and award the construction contract (or reject bids) without further DEPARTMENT authorization or approval. However, any

additional costs resulting from successful bid protests or other claims due to improper bid solicitation and award procedures will not be considered eligible for grant participation.

Task 3 – Design of Reuse Site Improvements and Distribution System Extension

A. Public Involvement

The RECIPIENT will conduct public outreach efforts aimed at the general community, public interest groups, and involved stakeholders.

B. Hydrogeologic Studies and Engineering Report

The RECIPIENT will evaluate several sites for suitability for reclaimed water infiltration. Those sites include properties identified by the regional Technical Advisory Group and RECIPIENT owned properties. The RECIPIENT will conduct a detailed hydrogeologic evaluation on the most promising sites or site and identify a preferred site for reclaimed water infiltration.

The RECIPIENT will also develop a reclaimed water engineering report to form the basis of design for future reclaimed water infrastructure, including distribution and infiltration. The engineering report will comply with requirements for engineering reports (WAC 173-240-060).

If the report will be the basis for financial assistance applications for design or construction, the RECIPIENT will comply with SERP requirements prior to application for additional funds.

C. Design of Reconfigured Flow-through Channel (FTC) Storage and Pump Station Relocation

The RECIPIENT will design for the relocation of pumps from the existing reclaimed water pump station to the outlet of a 500,000 gallon basin at the Water Reclamation Facility. The completed work will provide a Flow-Through Channel/Reclaimed Water Storage, with a roof structure to keep the product clean.

Work elements will include:

- Survey,
- Geotechnical,
- Piping modifications
- Minor structural modifications
- Electrical and SCADA modifications
- Design of a roof covering the FTC storage structure
- Preparation of technical specifications

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- Preparation of detailed estimate of probable cost to construct
- Submittal of plans and specifications to the DEPARTMENT and DOH for review and approval.
- Preparation of bid documents

D. Design of Rapid Infiltration Basin (RIB)

The RECIPIENT will prepare the plans, specifications, estimate, and bid documents for the construction of the rapid infiltration basins (RIB) as described in the Engineering Report. The RECIPIENT will design the RIBs to infiltrate up to 650,000 gallons per day of reclaimed water. The RECIPIENT proposes to locate the RIBs at the Reuse Demonstration Site.

Work elements will include:

- Survey
- Grading and drainage
- Piping modifications,
- Pump and valve controls
- SCADA and electrical controls
- Landscape and irrigation (reclaimed water application) design
- Informational signing design
- Preparation of technical specifications
- Preparation of detailed estimate of probable cost to construct
- The Consultant will submit plans and specifications to the DEPARTMENT and DOH for review and approval.
- Preparation of bid documents

E. Leaky Pipe Pilot Project

The RECIPIENT will construct a pilot project to evaluate the viability of using “Leaky Pipe” as identified in the Engineering Report. (The Engineering Report identifies Leaky Pipe as an option to consider for future reclaimed water infiltration utilizing the existing right of way.) The RECIPIENT will construct the pilot project at the Reuse Demonstration site where monitoring wells were installed during the initial Engineering Report phase of the project.

Work elements will include:

- Coordinate testing protocols with the DEPARTMENT
- Design pilot project layout
- Obtain and install data loggers, if used
- Monitor data collection

F. Project Administration and Coordination Assistance

The RECIPIENT's consultant will assist the city in project management and administrative services including meeting coordination, project status updates, quality assurance and control, billing reviews, and progress reports.

Work elements will include:

- Project management, administration and coordination
- Preparation and maintenance of Work Plan and Project Schedule
- Preparation and maintenance of Project Management Plan (PMP)
- Monthly invoices, progress reports and earned value reports
- Miscellaneous periodic reports

G. Flow-through Channel (FTC) Reconfiguration

The RECIPIENT will use a portion of the grant funding to complete construction activities associated with reconfiguration of an existing basin at the Water Reclamation Facility. The RECIPIENT will modify the existing basin to provide 500,000 gallons of storage and relocate pumps from an existing pump station to the basin ("flow-through channel"). The RECIPIENT will construct the design features described in Task 3C above.

H. Required Performance:

1. Engineering Report and SEPA Determination.
2. Complete set of plan drawings, specifications, cost estimate and bid documents for the relocation of the pump station and covering of the existing flow-through channel at the treatment plant.
3. Complete set of plan drawings, specifications, cost estimate, and bid documents for the construction of the new RIBs.
4. Design and final reports for the Leaky Pipe pilot project. Data collection and report on status of both aquifer reaction and groundwater quality.
5. Pre-construction documentation, weekly construction meeting documentation, IDRs, and As-built drawings for Flow-through Channel Reconfiguration.