

ORDINANCE NO. _____

AMENDMENT NO. 3 TO ORDINANCE NO. 2014-081 ESTABLISHING THE AGATE HEIGHTS/ESTATE BAY LANE STORM WATER IMPROVEMENTS FUND AND ESTABLISHING A PROJECT BASED BUDGET FOR AGATE HEIGHTS ESTATE/BAY LANE STORM WATER IMPROVEMENTS

WHEREAS, Agate Heights Estate/Bay Lane Storm Water improvements is listed as item number 1 on the 2019-2024 Six-Year Water Resources Improvement Program,

WHEREAS, the project will treat runoff from approximately 90 acres and includes system upgrades to improve water quality through construction of cartridge treatment vaults and channel stabilization to reduce ditch erosion, and

WHEREAS, this amendment will supplement the original proposal and two previous amendments by adding funding to construct Phase 2 of the project, and

WHEREAS, these additional expenses will be funded by a recently approved Washington State Department of Ecology grant (WQC-2017-WhCoPW-00030) identified by Whatcom County Contract Number 201902012,

NOW, THEREFORE, BE IT ORDAINED by the Whatcom County Council that Ordinance No. 2014-081 is hereby amended to add \$360,000 of expenditure authority, as described in Exhibit A, to the current project budget of \$1,308,219, for a total amended project budget of \$1,668,219.

ADOPTED this ____ day of July, 2019.

ATTEST:

WHATCOM COUNTY COUNCIL
WHATCOM COUNTY, WASHINGTON

Dana Brown-Davis, Clerk of the Council

Rud Browne, Council Chair

APPROVED AS TO FORM:

WHATCOM COUNTY COUNCIL
WHATCOM COUNTY, WASHINGTON



Civil Deputy Prosecutor

Jack Louws, County Executive

() Approved () Denied

Date Signed: _____

Agate Heights Estate/Bay Lane Stormwater Improvements

Account	Descriptions	Current Project Budget	Amendment #3 to Ord. 2014- 080	Total Amended Project Budget
Expenditures				
	6110 Wages	\$127,700		\$127,700
	6292 Applied Benefits	\$94,240		\$94,240
	6630 Professional Services	\$405,144		\$405,144
	6699 Other Services Interfund	\$66,500		\$66,500
	7199 Other Misc. Interfund	\$4,635		\$4,635
	7380 Other Improvements	\$610,000	\$360,000	\$970,000
		<u>\$1,308,219</u>	<u>\$360,000</u>	<u>\$1,668,219</u>
Revenues				
	4334.031 DOE Water Quality Grant	\$0	\$360,000	\$360,000
	8301.324 WDOE Grant Reimbursement	\$1,308,219	\$0	\$1,308,219
		<u>\$1,308,219</u>	<u>\$360,000</u>	<u>\$1,668,219</u>



Jon Hutchings
DIRECTOR

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MEMORANDUM

TO: The Honorable Jack Louws, County Executive and
Honorable Members of the Whatcom County Council

THROUGH: Jon Hutchings, Public Works Director

FROM: Kraig Olason, Stormwater Program Manager

DATE: June 24, 2019

RE: Supplemental Budget request #3 - Agate Heights Estate/Bay Lane
Stormwater Improvements

Please find attached for approval a supplemental budget request from Public Works Stormwater for the Agate Heights Estate/Bay Lane Stormwater Improvement project Phase 2.

▪ **Background and Purpose**

This project will improve water quality in the Lake Whatcom watershed by substantially reducing the discharge of phosphorus and other pollutants to Agate Bay. Runoff along North Shore Drive, south of the Y Road intersection will be addressed by the installation of three water quality treatment vaults to remove phosphorus and suspended solids. This is a priority capital project in the Lake Whatcom Comprehensive Stormwater Management Plan and is listed as Item No. 1 on the 2019-2024 Six-Year Water Resources Improvement Program.

Supplemental amendment request #2 did not include costs for construction of Phase 2 of this project since the potential for receiving Washington State Department of Ecology (WDOE) grant funding would require redesign of the project and final costs were not certain. The WDOE grant was approved by Council last Fall and final design has been completed. The requested funds are for a portion of the construction costs since current available balance in the Project Based Budget is sufficient to cover the remainder.

▪ **Funding Amount and Source**

This request, in the additional amount of \$360,000, will be funded by WDOE. The grant will reimburse up to the seventy-five percent of eligible county expenses on this phase for a maximum reimbursement of \$550,000.

Please contact Kraig Olason at extension 6301 if you have any questions or concerns regarding the terms of this agreement,

Encl.

Supplemental Budget Request

Status: Pending

Public Works

Stormwater

Suppl ID # 2741

Fund 365

Cost Center 365100

Originator: Kraig Olason

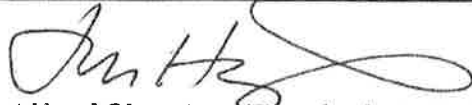
Year 1 2019

Add'l FTE

Priority 1

Name of Request: Agate Heights Estate/Bay Lane Stormwater Improv.

X



6/24/19

Department Head Signature (Required on Hard Copy Submission)

Date

Costs:	Object	Object Description	Amount Requested
	4334.0311	CZM-FCCAP Grant	(\$360,000)
	7380	Other Improvements	\$360,000
	Request Total		\$0

1a. Description of request:

This project will improve water quality in Lake Whatcom through the installation of three water quality treatment vaults in the Agate Bay sub-watershed in Whatcom County. This project will provide treatment for total suspended solids (TSS) and phosphorus.

1b. Primary customers:

Lake Whatcom supplies drinking water to approximately 100,000 residents in the Bellingham area all of whom are affected by this water quality impact.

2. Problem to be solved:

Elevated levels of phosphorus, bacteria, and dissolved oxygen have caused Lake Whatcom to be placed on Washington State's 303(d) list as an impaired water body. The Lake Whatcom Watershed Total Phosphorus and Bacteria Total Maximum Daily Loads (TMDL) mandates that stormwater phosphorus loading to the lake be reduced substantially. The TMDL indicates that phosphorus loading from developed areas is the primary driver of oxygen depletion in Lake Whatcom. Research by Western Washington University has shown that oxygen depletion in Lake Whatcom is getting worse and periods of excessive algae growth have increased in frequency. In the summer of 2009, a significant algae bloom clogged drinking water intake structures, forcing the City of Bellingham to implement an emergency ban on all outdoor water use. The TMDL estimates that phosphorus laden runoff from 87 percent of currently developed areas must be reduced so that Lake Whatcom can meet state water quality standards.

3a. Options / Advantages:

Initially, media filter drains were proposed for this area. This type of water quality treatment relies on a depth of free draining material above the winter high-water table. Unfortunately, site analysis showed that the area has a high water table through the winter months. While the media filter drains would have been less expensive, they would have provided questionable treatment. In addition, a Washington State Department of Ecology Grant, applied for several years ago for this project has become available due to the county regaining compliance with the Growth Management Act in the fall of 2018. Media filter drains as contemplated for this area wouldn't meet Best Management Practice Standards necessary to comply with Washington State Department of Ecology (WDOE) guidelines and would therefore not be eligible for 75% cost reimbursement up to \$552,500.

3b. Cost savings:

Water quality protection of the lake is comprised of many discrete activities. The overall collective effort is intended to limit impacts to the lake, not all of which are easily quantified in financial terms. The treatment vaults proposed provide reasonable treatment within the county's existing ROW thus saving land acquisition costs. Because the maintenance consists of vactoring and replacing the cartridges annually or semi-annually, the costs are much more predictable than for more elaborate and complex treatment

Monday, June 24, 2019

Rpt: Rpt Suppl Regular

Supplemental Budget Request

Status: Pending

Public Works

Stormwater

Suppl ID # 2741

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Cost Center 365100

Originator: Kraig Olason

facilities.

4a. Outcomes:

The areas treated by the three cartridge vaults will have total suspended solids and phosphorus quantities reduced by over 50% from what is now entering the lake from these sites. The life cycle for these vaults is at least 50 years. Construction is scheduled for the Summer/early Fall of 2019.

4b. Measures:

The outcome of reducing the phosphorus in the water treated by these systems by 50% is based on the presumed quantity of runoff generated from the land draining to these treatment systems. The assumed 50% treatment is based on testing done by WDOE to certify this treatment option. Treatment percentages are most likely higher than listed due to the conservative approach applied by WDOE.

5a. Other Departments/Agencies:

The treatment vaults will be added to the Public Works Maintenance and Operations Division work load and expenses. They will also require annual inspection and filter media replacement which is coordinated through the NPDES program under the Stormwater Division of Public Works.

5b. Name the person in charge of implementation and what they are responsible for:

Vernon Brown, crew leader of the NPDES program works cooperatively with NPDES program staff to provide needed maintenance and repair to all of the stormwater infrastructure under the NPDES Permit. Vernon will manage the crew and schedule their work for cartridge media replacement, vault vactoring (cleaning) and any other necessary maintenance requirements of the treatment system.

6. Funding Source:

Washington State Department of Ecology "Water Quality Combined Financial Assistance" grant is providing the funds included in this supplemental request. The entire design and construction costs are eligible for 75% reimbursement. The total reimbursement available through the grant exceeds the supplemental request.