



Memorandum

Date: 10/17/2023
Meeting of: City Council

File No. AM No. 23-145
Type: Consent Item

TO: Members of the City Council
FROM: Mayor Angela Birney
DEPARTMENT DIRECTOR CONTACT(S):

Public Works	Aaron L. Bert	425-556-2786
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DEPARTMENT STAFF:

Public Works	Jessica Atlakson	Senior Environmental Scientist
Public Works	Amanda Balzer	Science and Data Analytics Manager

TITLE:

Approve Redmond Paired Watershed Study Contract Amendments, in the amount of \$70,050 with Washington State Department of Ecology and \$84,050 with Herrera Environmental Consulting

OVERVIEW STATEMENT:

Execute the following contract amendments to continue 6PPD-quinone (6PPD-q) sampling for the Tosh Creek Watershed Street Sweeping project through the Redmond Paired Watershed Study (RPWS):

- Amendment No. 7 to the Interagency Agreement with the Washington State Department of Ecology in the amount of \$70,050 to fund the contract with Herrera.
- Supplemental Agreement No. 5 with Herrera Environmental Consulting in the amount of \$84,050.

☒ **Additional Background Information/Description of Proposal Attached**

REQUESTED ACTION:

☐ **Receive Information** ☐ **Provide Direction** ☒ **Approve**

REQUEST RATIONALE:

- **Relevant Plans/Policies:**
Comprehensive Plan, Environmental Sustainability Action Plan, Redmond Watershed Management Plan
- **Required:**
NA
- **Council Request:**
NA
- **Other Key Facts:**
Background

Redmond received a King County WaterWorks grant to fund increased street sweeping in the Tosh Creek Watershed for two years. Tosh Creek Watershed is identified as a priority watershed within the Redmond Watershed Management Plan. Council accepted the grant on July 19, 2022, and the project began implementation in October 2022 and will continue through September 2024.

Water quality sampling from the Redmond Paired Watershed Study (RPWS) has been leveraged to determine if increased street sweeping within the Tosh Creek Watershed will improve water quality. Additional funding from the Washington Department of Ecology was granted to the City to add 6PPD-quinone (6PPD-q) to the water quality sampling through Water Year 2023 (year 1 of the Tosh Creek Watershed Street Sweeping project). 6PPD-q is released as car tires wear and has recently been discovered to be acutely toxic to Coho Salmon adults in freshwater urban streams.

Washington Department of Ecology has recently received more 6PPD-q funding and has agreed to extend the agreement with Redmond to cover the costs of 6PPD-q water quality analysis through year 2 of the Tosh Creek Watershed Street Sweeping project.

The RPWS is designed measure the effectiveness of actions taken by Redmond's Stormwater Utility and King County to restore urban streams on a watershed scale. This is done by analysis of monitoring data collected in six watersheds within Redmond, including the Tosh Creek Watershed. Council was provided with an update on RPWS findings during the June 1, 2021, staff report. RPWS data collected from Tosh Creek will be used to determine the effectiveness of street sweeping to improve water quality.

Sustainability

This project supports Strategy N1 and N3 in the Environmental Sustainability Action Plan.

Additional Benefits

While not called out as a specific NPDES permit requirement, street sweeping helps Redmond meet permit obligations to prevent degradation of receiving waters (in this case, Tosh Creek) by keeping pollutants out of the storm drain, which discharges without any treatment to Tosh Creek.

This study in Tosh Creek will benefit the Puget Sound region by quantifying the benefits of street sweeping on in-stream water quality. Street sweeping is a cost-effective, readily available stormwater management tool that can be equitably served throughout a jurisdiction.

OUTCOMES:

These agreements will allow the RPWS to continue as planned as a long term (10 year) study to determine the effectiveness of actions taken to restore urban streams on a watershed scale. The study will help guide regional actions to refine stormwater management programs. Additionally, the RPWS will help state agencies assess whether current regulations and program requirements are effectively improving stream conditions in urban areas.

Funding from the Washington Department of Ecology will be utilized to continue the analysis of 6PPD-q in Tosh Creek to determine the effectiveness of street sweeping at reducing the amount of 6PPD-q entering urban streams. This agreement will allow 6PPD-q analysis through year 2 of the street sweeping project, where street sweeping will be increased from monthly to twice a month. 6PPD-q is released as car tires wear and has been found to be acutely toxic to Coho Salmon adults in freshwater urban streams. Little is known about this emerging contaminant and there will be great regional interest in the results of this study.

Results from initial 6PPD-q analysis show that concentrations are higher during storm events compared to baseflow samples (when the creek is not receiving stormwater through outfalls). A trend analysis will be conducted with the data collected and results are anticipated in 2024.

COMMUNITY/STAKEHOLDER OUTREACH AND INVOLVEMENT:

- **Timeline (previous or planned):**
Postcards were sent to residents within the Tosh Creek Watershed in June 2023.
- **Outreach Methods and Results:**
Postcards sent to residents in the Tosh Creek Watershed provided information on the project and requested residents to support the project by moving cars off the streets on sweeping dates. There has been a slight decrease in the number of parked cars on the street during events.
- **Feedback Summary:**
No comments were received.

BUDGET IMPACT:

Total Cost:

Total project cost since 2014: \$3,619,784.33 (this cost has been funded through Ecology's Stormwater Action Monitoring program).

Project cost included in this current amendment: \$84,050

Funding for current amendment costs:

- Stormwater Action Monitoring Program: \$70,050
- King County WaterWorks Grant: \$14,000
- Total: \$84,050

Approved in current biennial budget: ☐ Yes ☒ No ☐ N/A

Budget Offer Number:

000214

Budget Priority:

Healthy and Sustainable

Other budget impacts or additional costs: ☐ Yes ☒ No ☐ N/A

If yes, explain:

N/A

Funding source(s):

\$70,050 will be funded through the Stormwater Action Monitoring program, administered through Washington Department of Ecology.

\$14,000 will be funded through the King County WaterWorks grant, awarded, and accepted by the City on July 19, 2022.

Budget/Funding Constraints:

NA

☐ Additional budget details attached

COUNCIL REVIEW:

Previous Contact(s)

Date	Meeting	Requested Action
7/19/2022	Business Meeting	Approve
10/3/2023	Committee of the Whole - Planning and Public Works	Approve

Proposed Upcoming Contact(s)

Date	Meeting	Requested Action
	None proposed at this time	N/A

Time Constraints:

Current funding from Washington Department of Ecology for 6PPD-q analysis is through year 1 of the street sweeping project. If there are delays in approving the amendments, there could be impacts to sample collection.

ANTICIPATED RESULT IF NOT APPROVED:

The RPWS uses the pooled resources from Phase I and II municipal stormwater permittees. There is great interest from the permittees to determine the effectiveness of a widely available and relatively inexpensive operational practice (street sweeping) to address water quality and 6PPD-q pollution. Information from this study can be used by Western Washington jurisdictions to prioritize stormwater management practices and enhance salmon restoration activities. By not approving the amendments, Redmond will miss an opportunity to leverage the RPWS and assist the region with critical data for salmon recovery.

ATTACHMENTS:

Attachment A: Washington State Department of Ecology Interagency Agreement Amendment 7
Attachment B: Herrera Environmental Consulting Supplemental Agreement
Attachment C: Redmond Watersheds Map