# City of Redmond

15670 NE 85th Street Redmond, WA

# Memorandum

Date: 12/7/2021 Meeting of: City Council		<b>File No.</b> AM N <b>Type:</b> Consen	
TO: Members of the City Cour FROM: Mayor Angela Birney DEPARTMENT DIRECTOR COI			
Public Works	Malisa Files (Interim)	425-556-2166	
DEPARTMENT STAFF:			
Public Works	Jessica Atlakson	Environmental Geologist	٦
Public Works	Amanda Balzer	Science and Data Analytics Supervisor	
OVERVIEW STATEMENT: Execute the following contract		ents  nond Paired Watershed Study (RPWS) the Washington State Department	
Phase V Agreement	48 to fund the contracts with King owith King County in the amount of the ment No. 3 with Herrera Environment	•	741,710.
☑ Additional Backgroun	d Information/Description of Propo	sal Attached	
REQUESTED ACTION:			
☐ Receive Information	☐ Provide Direction	☑ Approve	
REQUEST RATIONALE:			

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The Redmond Paired Watershed Study (RPWS) and partnership between King County, Herrera Environmental Consulting (Herrera), and Redmond started in 2014 to measure the health of streams in Redmond and unincorporated King County. The goal of the RPWS is to measure the effectiveness of actions taken by Redmond's Stormwater Utility and King County to restore urban streams on a watershed scale. The City is focusing restoration efforts in priority watersheds identified in the 2013 Watershed Management Plan.

Many studies have occurred nationally that measure the declining health of streams after urbanization of a watershed. This Study does the opposite by measuring the health of streams in already urbanized watersheds and the impact local governments can have in trying to restore the urban streams to good health.

The effectiveness monitoring to date has established baseline conditions in seven streams. The Study is 'paired' because it measures the health of streams that either:

- 1. Redmond and King County are working to improve (application watersheds),
- 2. Are not targeted for improvement (control watersheds), or
- 3. Are relatively pristine and located in Redmond's Watershed Preserve Park (reference watersheds).

By 'pairing' watersheds, it will be easier to identify if actions taken by Redmond and King County specifically made an improvement in stream health.

# **Program Modifications**

The application watershed of Evans Creek Tributary 108 has been removed from this scope of work. Evans Creek Tributary 108 is in unincorporated King County. King County has no further plans for stormwater retrofits within this watershed during the timeline of this project. The trend analysis report for water years 2016 through 2019, which was presented to Council at the June 1, 2021 Staff Report, did not identify any improvement within the watershed based on the two vaults installed by King County in water year 2017. Based on this finding and no further retrofits planned during the project timeline, the watershed is being removed to reduce project costs.

# Sustainability

The RPWS supports Strategies N1 and N3 in the Environmental Sustainability Action Plan. The information collected by this Study is used to calculate City of Redmond dashboard measures and budget performance measures. The benthic index of biotic integrity (BIBI) data collected for the RPWS is a target indicator for the Natural Systems focus area within the Environmental Sustainability Action Plan.

#### **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.

# **Description of Agreements**

#### Interagency Agreement with the Washington State Department of Ecology

This study is 100 percent funded by the Stormwater Action Monitoring (SAM) program, except for staff time to manage the project. The SAM program is administered through the Washington Department of Ecology.

## Agreement with King County

King County's agreement includes collecting continuous rain, stream gauge, and temperature data for six streams from January 1, 2022 through September 30, 2024, as well as an annual quality control review.

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#### Supplemental Agreement with Herrera

Herrera's contract amendment would authorize them to continue to collect water quality data, BIBI data, sediment quality data, and physical habitat data in six streams from January 1, 2022 through September 30, 2024. Herrera's contract also includes data quality control review, annual reporting, and a data analysis report that will demonstrate trends in the entire dataset collected to date. Data quality review and reporting will be completed by September 2025.

The supplemental agreement also includes monitoring to evaluate the effectiveness of upgrades to two existing stormwater detention ponds in the Monticello Watershed. The detention ponds were retrofitted with a continuous monitoring and adaptive control system to improve their performance for managing peak flows during storm events.

#### COMMUNITY/STAKEHOLDER OUTREACH AND INVOLVEMENT:

•	Timeline (previous or planned):
	N/A

Outreach Methods and Results:

N/A

 Feedback Summary: N/A

BUDGET IMPACT	В	JD	GE	T IN	ИΡ	A(	ĴΤ
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<b>Total Cost:</b> Total project cost since 2014: \$3,583,294.33			
Project cost included in this current amendme	ent: \$936,444.	48	
Approved in current biennial budget:	⊠ Yes	□ No	□ N/A
<b>Budget Offer Number:</b> 000214			
<b>Budget Priority</b> : Healthy and Sustainable			
Other budget impacts or additional costs: <i>If yes, explain</i> : N/A	□ Yes	⊠ No	□ N/A

#### Funding source(s):

100% grant funded through the Stormwater Action Monitoring (SAM) Program

The RPWS is planned to continue through 2025 with 100% funding from the SAM program, which is a collaborative stormwater monitoring program in Western Washington funded by Phase I and II municipal stormwater permittees and administered by the Washington Department of Ecology. Redmond pays into the SAM program as part of the fee requirements for the City's stormwater permit.

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This is included in the 2021-2022 Adopted Budget.

# **Budget/Funding Constraints:**

N/A

#### □ Additional budget details attached

## **COUNCIL REVIEW:**

#### Previous Contact(s)

Date Meeting		Requested Action	
5/11/2021	Committee of the Whole - Planning and Public Works	Provide Direction	
6/1/2021	Business Meeting	Receive Information	
11/9/2021	Committee of the Whole - Planning and Public Works	Approve	

#### Proposed Upcoming Contact(s)

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

#### **Time Constraints:**

The current contract has monitoring scheduled through December 31, 2021. Having amendments in place by December will avoid a lapse in the data collection for the study.

# **ANTICIPATED RESULT IF NOT APPROVED:**

This would end the Study before the effectiveness of actions taken by the City to restore urban streams has been measured. The project would have spent \$2,646,849.85 of pooled resources from Phase I and II municipal stormwater permittees without completing the goals of the Study.

#### **ATTACHMENTS:**

Attachment A: Washington State Department of Ecology Interagency Agreement Amendment 5

Attachment B: Herrera Environmental Consulting Supplemental Agreement

Attachment C: King County Agreement Attachment D: RPWS Budget information