



## BUSINESS OF THE CITY COUNCIL CITY OF SNOQUALMIE

**AB23-110**  
**October 9, 2023**

Choose an item.

### AGENDA BILL INFORMATION

<b>TITLE:</b>	AB23-110: Eagle Lake Water Reclamation Basin Improvements Amendment to RH2 Services Agreement	<input type="checkbox"/> Discussion Only
<b>PROPOSED COUNCIL ACTION:</b>	Approve an amendment to the agreement with RH2 Engineering for design services	<input checked="" type="checkbox"/> Action Needed: <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution

<b>REVIEW:</b>	Department Director/Peer	Jeff Hamlin	9/27/2023
	Finance	Janna Walker	9/27/2023
	Legal	David Linehan	9/28/2023
	City Administrator	Mike Chambless	Click or tap to enter a date.

<b>DEPARTMENT:</b>	Parks & Public Works		
<b>STAFF:</b>	Andrew Vining		
<b>COMMITTEE:</b>	Parks & Public Works	<b>COMMITTEE DATE:</b> October 3, 2023	
<b>MEMBERS:</b>	Bryan Holloway	Ethan Benson	Jo Johnson
<b>EXHIBITS:</b>	1. Amendment to Rh2 Services Agreement 2. Map - Class A Reclaimed Water Distribution System 3. Reclaimed Water Distribution System Engineering Report- Preliminary 4. CIP Excerpt – Eagle Lake Water Reclamation Basin Improvements Project		

<b>AMOUNT OF EXPENDITURE</b>	\$ 658,722
<b>AMOUNT BUDGETED</b>	\$ 321,000
<b>APPROPRIATION REQUESTED</b>	\$ \$444,192

### SUMMARY

#### INTRODUCTION

This agenda bill seeks to amend the existing services agreement with RH2 Engineering to design and permit a new reclaimed water reservoir and update the reclaimed water system plan. The City produces and distributes Class A reclaimed water during dry season months for reuse as irrigation supply. This reclaimed water improvement project will upgrade the dated reclaimed water distribution system and bring it in to compliance with the Department of Ecology mandated Reclaimed Water Rule.

#### BACKGROUND

In January 2018 the Washington Department of Ecology (Ecology) adopted Reclaimed Water Rule WAC 173-219 which establishes the framework for the distribution of reclaimed water for beneficial uses. Among other requirements, this rule requires facilities delivering reclaimed water to properly treat and disinfect the water

prior to delivery in order to protect public health. The City utilizes sand filtration enhanced treatment followed by ultraviolet disinfection to treat reclaimed water to Class A standards in compliance with the Reclaimed Water Rules and City National Pollutants Discharge Elimination System (NPDES) Permit. Following treatment Class A water is then pumped to Eagle Lake Reservoir for temporary storage prior to distribution as irrigation water to various locations on the ridge including Snoqualmie Ridge Golf Course, City parks and right-of-way, and the Snoqualmie Ridge Business Park. While Ecology originally determined that the distribution system complied with the interim reclaimed water standards established in 1997, it does not comply with the current Reclaimed Water Rule. Specifically, the City distribution system requires additional cross-connection control improvements necessary to protect Class A water used in public spaces from contamination by lower-quality water sources- such as urban stormwater runoff.

In May of 2021 the City of Snoqualmie Water Reclamation Facility (WRF) received from Ecology a renewed NPDES discharge permit which authorizes continued production, distribution, and use of Class A water, provided that the City meets requirements to implement added these cross-control improvements with the following compliance schedule milestones:

- July 1, 2023 - Draft Engineering Report (Complete)
- December 31, 2023 – Final Engineering Report (Underway)
- December 31, 2024 – Final Plans and Specifications
- June 30, 2026 –Construction Completion

This year RH2 Engineering prepared a Reclaimed Water Distribution System Engineering Report (Exhibit 4) which evaluates alternatives that will bring the reclaimed water distribution system into compliance with current standards and preliminary design of a new reservoir. Preliminary cost estimates for this project range between 6.3 and 7 million and exceed those costs assumed in the 2023-2028 CIP due to the following reasons:

- Larger reservoir size is necessary to provide reliable service.
- Complex retrofitting needed to connect to the existing irrigation pump station (IPS).
- Site improvements necessary to provide security and integration with existing utilities.
- Increased inflation and construction cost escalation.

These updated project costs will be incorporated into the next utility rate study and capital improvement planning.

Included with this contract amendment, RH2 will update the 2015 reclaimed water system plan to align with the 2018 Reclaimed Water Rule and identify a schedule of capital improvements for the next 20-year planning period. Appendices of the reclaimed water system plan must be updated to comply with the reclaimed water rules and NPDES Permit requirements. The updated plan will address these requirements and guide future operations budgets, utility rates, and capital improvements to support the reclaimed water system.

## **ANALYSIS**

The City of Snoqualmie has for two decades demonstrated successful production, distribution, and reuse of Class A reclaimed water resulting in water quality and water supply benefits. On average the City distributes 18 million gallons of reclaimed water annually. To comply with state permit requirements and continue distribution of Class A water the City must begin design of a new reclaimed water reservoir. Based on the engineering report evaluation the construction of a new reclaimed water reservoir is the lowest cost solution that will bring the existing distribution system into compliance with current regulations. Six different reservoir sites were evaluated and the City is pursuing the lowest cost available site. Permitting efforts have begun with outside agencies to assist with finalizing the reservoir site. City and state permitting, and design will begin in 2023 to maintain schedule and meet project milestones. the reclaimed water system plan update will

identify, and schedule reclaimed water system improvements that correct existing deficiencies and ensure a safe and reliable reclaimed water system for customers.

#### BUDGET IMPACTS

Administration recommends approving an amendment to the contract with RH2, Inc. in the amount of \$658,722 to complete the design of Eagle Lake Water Reclamation Basin Improvements. This project is incorporated in the 2023-2028 Capital Improvement Plan (CIP) (See Exhibit #4) with a life-of-project budget of \$3,332,000. The 2023-24 Amended Budget appropriates \$321,000 for this project. In the current biennium, \$49,722 has been spent and \$56,748 has been encumbered for contracts within the Eagle Lake Improvements Project. With the addition of the RH2 contract, the project is \$444,192 over budget for the current biennium, as shown in the table below.

#### Eagle Lake Water Reclamation Basin Improvements

	Life-of-Project Budget (Multiple Bienniums)	2023-2024 Biennial Budget
Beginning Budget	\$ 3,332,000	\$ 321,000
Expenditures	\$ (49,722)	\$ (49,722)
Outstanding Contract Value (Previously Approved)	\$ (56,748)	\$ (56,748)
Current Available Budget	\$ 3,225,530	\$ 214,530
Value of this Contract (AB23-110)	\$ (658,722)	\$ (658,722)
Available Budget / (Shortfall) after AB23-110	\$ 2,566,808	\$ (444,192)

Of the contract amendment, \$74,186 relates to a reclaimed water system plan update, which will be paid from the operations budgets of the Water Utility (#401) and the Sewer Utility (#402). In addition, the Administration intends to delay the Pressure Reducing Valve Stations Project, a project from the 2023-2028 CIP within the Utility Capital Fund (#417) and appropriated within the 2023-24 Biennial Budget, to support the project's overall budget shortfall. Delaying the Pressure Reducing Valve project will result in a reallocation of \$321,000 in budget appropriation to the Eagle Lake Project. As a result, the City will need an additional \$49,006 appropriation to fund this phase of the project and anticipates introducing the amendment as part of the mid-biennium review process.

#### Eagle Lake Water Reclamation Basin Improvements

	Life-of-Project Budget (Multiple Bienniums)	2023-2024 Biennial Budget
Available Budget / (Shortfall) after AB23-110	\$ 2,566,808	\$ (444,192)
Water Utility (#401)	\$ 37,093	\$ 37,093
Sewer Utility (#402)	\$ 37,093	\$ 37,093
Pressure Reducting Valve	\$ 321,000	\$ 321,000
Acceleration of Project Budget into Current Biennium	\$ 49,006	\$ 49,006
Available Budget after AB23-088	\$ 3,011,000	\$ -

#### NEXT STEPS

The new reservoir site will be finalized following feedback from outside permitting agencies, including Bonneville Power Administration. Permitting with City and state agencies will continue as the project seeks SEPA approval and approval of the Reclaimed Water Distribution System Engineering Report. City staff will submit a Clean Water State Revolving Fund (CWSRF) application to Ecology to requesting state funding for design and construction costs.

## **PROPOSED ACTION**

Move to approve an amendment to the Eagle Lake Water Reclamation Basin Improvements services agreement with RH2 Engineering.