



BUSINESS OF THE CITY COUNCIL CITY OF SNOQUALMIE

AB22-146
November 28, 2022
Choose an item.

AGENDA BILL INFORMATION

TITLE:	AB22-146: Consultant Services Agreement with RH2 Engineering for Planning and Design of the Eagle Lake Water Reclamation Basin Improvements	<input type="checkbox"/> Discussion Only <input checked="" type="checkbox"/> Action Needed:
PROPOSED COUNCIL ACTION:	Approve an Agreement for Consultant Services with RH2 for the Eagle Water Reclamation Basin Design Improvements.	<input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution

REVIEW:	Department Director/Peer	Mike Chambless	Click or tap to enter a date.
	Finance	Drew Bouta	11/17/2022
	Legal	Bob Sterbank	11/4/2022
	City Administrator	Mike Sauerwein	11/18/2022

DEPARTMENT:	Parks & Public Works		
STAFF:	Jeff Hamlin & Andrew Vining		
COMMITTEE:	Parks & Public Works	COMMITTEE DATE: November 22, 2022	
MEMBERS:	Bryan Holloway	Ethan Benson	Jo Johnson
EXHIBITS:	1. Agreement for Consultant Services: Eagle Lake Water Reclamation Basin 2. CIP Excerpt – Eagle Lake Water Reclamation Basin Improvements Project 3. Map - Class A Reclaimed Water Distribution System		

AMOUNT OF EXPENDITURE	\$ 106,470
AMOUNT BUDGETED	\$ 321,000 (2023-2024 Biennium)
APPROPRIATION REQUESTED	\$ 0

SUMMARY

INTRODUCTION

This agenda bill seeks approval of an agreement with RH2 Engineering for design services related to the Eagle Lake Water Reclamation Basin Improvement Project. The City produces and distributes Class A reclaimed water during dry season months for reuse as irrigation supply. The Eagle Lake Water Reclamation Basin Improvement Project will upgrade the dated reclaimed water distribution system and bring it in to compliance with Ecology's Reclaimed Water Rule and the requirements of the City's recently-renewed National Pollutant Discharge Elimination System ("NPDES") Permit for wastewater plant.

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 Snoqualmie Water Reclamation Facility ("SWRF" aka wastewater plant) utilizes sand filtration enhanced treatment followed by ultraviolet disinfection to treat and

disinfect reclaimed water to Class A standards in compliance with the Reclaimed Water Rule and the 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. When the SWRF was designed and constructed in 1996-1998, Ecology initially determined that the reclaimed water distribution system complied with the interim reclaimed water standards, but the distribution system no longer complies with the current Reclaimed Water Rule, which was updated in 2018. 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, which currently flows into Eagle Lake.

The City's NPDES Permit has a 5-year term, and the City must seek renewal of the Permit prior to expiration. In 2019, when the City was seeking the most-recent Permit renewal, Ecology indicated that the City would need to address the updated Reclaimed Water Rule. RH2 Engineering prepared two technical memorandums evaluating the Class A water system supply and feasibility of several options to bring the distribution system into compliance with the current standards. Following this evaluation and Ecology review of City comments on the draft NPDES Permit renewal, Ecology issued the renewal Permit in May, 2021 authorizing continued production, distribution, and use of Class A water. The Permit also included requirements to implement added cross-control improvements to the City operated Class A reclaimed water distribution system, along with a "compliance schedule" to allow the City time to design and build the required improvements. The compliance schedule provides the following milestone dates for submittals to Ecology:

- July 1, 2023 - Draft Engineering Report
- December 31, 2023 – Final Engineering Report
- December 31, 2024 – Final Plans and Specifications
- June 30, 2026 – Declaration of Construction

In fall 2022, City staff reviewed qualifications for three engineering firms included in the City's list of on-call consultants, and selected RH2 for continued services on this project. The enclosed consultant services agreement includes scope for RH2 to complete the engineering report. The project scope and budget will continue to be refined during this planning effort, and following engineering report approval, staff will seek Council approval of contract amendments prior to authorizing RH2 preparation of plans and specifications.

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. To comply with the updated Reclaimed Water Rule and the NPDES Permit, and to continue distribution of Class A water for City and private business irrigation use, the City must plan, design and construct improvements to the Class A water distribution system at Eagle Lake. Reasonable improvements may include a reclaimed water reservoir for Class A water use in public spaces. RH2 Engineering has assisted City staff with the NPDES Permit renewal and previous evaluations related to this project, and has demonstrated experience with planning and design of water reservoirs and treatment facilities. The engineering report will be coordinated with Ecology to determine a reasonable solution and will include a siting study to determine the best location for the selected improvements. This planning effort needs to begin in January 2023 to provide sufficient time to maintain NPDES Permit compliance and meet project milestones.

BUDGET IMPACTS

Administration recommends approving a contract with RH2 in the amount of \$106,470 for design services related to the Eagle Lake Reclamation Basin Improvement Project. The Eagle Lake Reclamation Basin Improvement Project was incorporated into the 2023-2028 Capital Improvement Plan (CIP) for \$3,332,000

with a budget of \$321,000 during the 2023-2024 biennium. \$0 has been incurred or encumbered against the project budget to-date. If Council approves the 2023-2024 Biennial Budget with the Eagle Lake Water Reclamation Basin Improvement Project included, at the dollar amount specified, then sufficient appropriation will exist within the 2023-2024 Biennial Budget (Utilities Capital Fund #417) to fund the contract.

NEXT STEPS

The Eagle Lake Water Reclamation Basin Improvements draft Engineering Report will include an alternatives evaluation and a siting study. Following Ecology approval of the selected improvements outlined in the Engineering Report this contract will be amended to include final design and permitting tasks needed for implementing the improvements.

PROPOSED ACTION

Recommend that the City Council approve and authorize the Mayor to sign the Agreement for Consultant Services with RH2 for the Eagle Water Reclamation Basin Design Improvements.