



## Staff Report

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**File #:** 21-481

**Version:** 1

**Date:** 11/8/2021

**Item #:** 3.3a.

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**TO:** Mayor and City Council

**THROUGH:** Steve Powers, City Manager

**FROM:** Peter Fernandez, PE, Public Works Director

### **SUBJECT:**

Increase in scope and funding for U.S. Geological Survey to maintain a water-quality monitoring program in the North Santiam River Basin

Ward(s): All Wards

Councilor(s): All Councilors

Neighborhood(s): All Neighborhoods

Result Area(s): Natural Environment Stewardship; Welcoming and Livable Community

### **SUMMARY:**

Amending an Intergovernmental Agreement with the U.S. Geological Survey to increase scope and funding of the water-quality monitoring program in the North Santiam River Basin. Three new water-quality monitoring stations will be added for a total of five continuous water-quality monitors.

### **ISSUE:**

Shall Council authorize the City Manager to execute the amendment to the Intergovernmental Agreement (IGA) with the U.S. Geological Survey (USGS) to increase source water monitoring in the North Santiam Basin to five continuous water-quality monitors?

### **RECOMMENDATION:**

Authorize the City Manager to execute the amendment to the IGA with the USGS to increase source water monitoring in the North Santiam Basin to five continuous water-quality monitors.

### **FACTS AND FINDINGS:**

On July 22, 2019, Salem City Council approved an Intergovernmental Agreement (IGA) with the U.S. Geological Survey (USGS) for monitoring water quality in the North Santiam River Basin. The initial

agreement included the reactivation of a water quality monitoring station at Niagara on the North Santiam River, and operation and maintenance of the water quality monitor on the profiler at the Log Boom on Detroit Reservoir.

The amendment (Attachment #1) to the IGA includes three additional water quality monitoring stations located on the North Santiam River. One is below Stout Creek, another is located at the Little North Fork of the North Santiam River near Mehama, and the third is at the Little North Fork of the North Santiam River above Evans Creek. The areas along the Little North Fork river were severely burned in the fall of 2020 during the Beachie Creek and Lionshead wildfires. Areas impacted by wildfire have an increased frequency of events that can adversely impact water quality and flows. The addition of source water monitoring stations in the Little North Fork and below all convergence points on the North Santiam River will provide the City with additional critical data regarding changing water quality conditions that may impact water treatment operations at Geren Island Water Treatment Facility.

Under the amendment, the City will contribute an additional \$139,635 to the project. The USGS will contribute an additional \$108,657 to the project. All other terms of the original IGA will remain the same.

The City Manager may execute amendments to an IGA if the following requirements are met: (1) The amendments do not substantially expand the City's obligations; (2) The amendments do not broaden the scope of the agreement to other subjects; (3) The amendments do not increase the City's financial obligations; and, (4) The amendments may extend the term or renew the IGA so long as any other changes to the IGA do not substantially expand the City's obligations.

## **BACKGROUND:**

The North Santiam River is the primary drinking water source for the City of Salem. Water is treated at the Geren Island Water Treatment Facility, located just east of Stayton, before it is conveyed into the City of Salem's water distribution system serving nearly 200,000 customers. The City of Salem water treatment processes include ozonation, slow sand filtration (biological filtration), chlorination, fluoridation, and corrosion control.

Monitoring water quality in the North Santiam River Basin is imperative to treatment operations and provides essential information used by the Geren Island Water Treatment Facility operators to modify water treatment processes as water quality changes in the North Santiam River. Operators can access data remotely from the water quality monitoring stations to observe any changes in data that may indicate deteriorating water quality conditions.

The 2019 Intergovernmental Agreement (IGA) added two water quality monitoring stations in the North Santiam River Basin following the City of Salem's issuance of two separate Do Not Drink Advisories for Vulnerable Persons. The advisories were issued after a harmful algal bloom produced levels of cyanotoxins, specifically total microcystins and cylindrospermopsin, that were detected in Salem's drinking water.

Mark Becketl, AICP  
Operations Division Manager

Attachments:

1. Amendment To IGA With USGS
2. USGS Proposal 9-23-2021