

Analysis

Item 2: Oregon Health Authority

Small Drinking Water System and Domestic Well Testing

Analyst: Tom MacDonald

Request: Allocate \$750,000 General Fund from the Emergency Fund to the Oregon Health Authority to test drinking water for contaminants in communities and households impacted by wildfires.

Description: The Oregon Health Authority (OHA) has submitted a request for \$750,000 General Fund to test the quality of drinking water in communities impacted by Oregon's 2020 wildfire season. According to OHA's Public Health Division, as well as information available from the Environmental Protection Agency, U.S. Geological Survey, and other organizations, wildfires can negatively affect drinking water supplies in various ways. For instance, drinking water pipe networks can become contaminated with toxic chemicals known as volatile organic compounds (VOCs), which originate from the burning of vegetation, buildings, and plastic materials. Likewise, VOCs and microorganisms can enter a homeowner's well system due to wildfire damage. Because of the widespread wildfire destruction, OHA requests funding to support testing for both small community water systems and private domestic wells in areas associated with the Beachie Creek, Riverside, Holiday Farm, Echo Mountain, and Alameda fires.

Small Water System Testing (\$150,000): Of the total request, \$150,000 is for water quality testing of water systems with fewer than 1,000 service connections. The Public Health Division's Drinking Water Services (DWS) program carries out OHA's regulatory responsibilities related to community drinking water systems and this request is consistent with the program's existing scope of work. The testing activities will be performed by the Department of Environmental Quality (DEQ), which currently supports OHA's existing testing of community water systems through an interagency agreement. DEQ has indicated it has sufficient laboratory capacity and expenditure limitation to provide this additional one-time support.

OHA's estimated cost of \$150,000 for performing these tests is based on each small water system requiring the testing of an average of 30 samples. This number of samples assumes testing will detect contaminants in each small water system, thereby requiring extensive follow-up testing. While this volume likely reflects the high-end of potential upfront testing needs, OHA indicates that contamination of these water systems could also occur through the remainder of the biennium as a result of runoff from terrain now at higher risk of erosion. OHA's proposal is to use any funds not needed to support the near-term water system testing costs for potential testing needs throughout the biennium.

Domestic Well Testing (\$600,000): With many of the homes impacted by the wildfires relying on well water instead of being connected to public water systems, OHA's request includes \$600,000 to test an estimated 2,000 private domestic wells for contaminants. OHA's assumption that 2,000 wells will need to be tested represents a high-level estimate of the number of households directly impacted by the wildfires. The agency is working with the Water Resources Department to refine this number to ensure the appropriate number of households are considered.

Unlike the DWS program's responsibility for enforcing federal and state safety standards for community water systems, the Public Health Division has historically had minimal statutory purpose to staff a program overseeing private domestic wells. Oregon homeowners with a domestic well are required under state law to test their well water only when selling their property. Because of OHA's lower level of regulatory oversight involving domestic wells, the agency is still developing some of the operational aspects of this part of the request. Commercial laboratories will likely perform these tests, as doing so through DEQ could strain capacity. However, OHA is also seeking testing support from the U.S. Centers for Disease Control and Prevention. The agency is considering a voucher program to enable homeowners to reimburse participating laboratories for testing costs.

OHA is working with the Water Resources Department, Office of Emergency Management, and local public health authorities to determine the appropriate geographic areas and develop an outreach plan to engage communities and households. Eligibility criteria is also still being developed, although the agency intends to prioritize low-income and Black, Indigenous, and People of Color populations served by domestic wells. OHA is able to leverage its Environmental Public Health Tracking Program to help identify these populations.

OHA's pricing of the \$600,000 cost for testing domestic wells does not include staff time; however, the agency's request letter indicates a limited-duration position will be needed for six months to support these activities. Subsequent to the submission of its request, OHA has indicated to the Legislative Fiscal Office that the agency will fund this cost within the requested amount, if approved.

Additionally, some of the costs in the overall request may be eligible for reimbursement through the Federal Emergency Management Agency (FEMA). Given the time and uncertainty with seeking reimbursement, OHA has indicated the request for General Fund reflects the urgent nature of the issue due to homeowners returning to fire-impacted areas and the risk of drinking water being contaminated. To the extent possible, the agency will work to maximize FEMA reimbursement to help minimize the need for General Fund.

Recommendation: The Legislative Fiscal Office recommends that the Emergency Board allocate \$750,000 from the Emergency Fund to the Oregon Health Authority for the testing of small drinking water systems and domestic wells in areas damaged by wildfires.



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October 7, 2020

The Honorable Senator Peter Courtney, Co-Chair
The Honorable Representative Tina Kotek, Co-Chair
State Emergency Board
900 Court Street NE
H-178 State Capitol
Salem, OR 97301-4048

Dear Co-Chairs:

Nature of the Request

Wildfires have ravaged Oregon communities west of the Cascades since early September destroying thousands of structures. Many people have lost their homes, belongings, and livelihoods. To support restoration efforts, the Oregon Health Authority (OHA) requests \$750,000 General Fund dollars for water testing needed in these communities.

Agency Action

To support the immediate recovery of Oregon communities affected by wildfires, OHA is requesting funding for two types of water testing.

Small Water System Testing

OHA is requesting \$150,000 for the analytical costs of testing small water systems for volatile organic compounds (VOCs) and other contaminants. The funding would provide 750 tests at an estimated \$200 per test, targeting 25 small water systems serving less than 3,300 people. The cost estimate assumes 30 samples per system. The estimate does not include any costs for repairing infrastructure, which cannot yet be determined.

Experience from the 2018 Camp Fire that burned Paradise, California, and other locations has shown that VOCs can enter water system piping when pressure is lost, and plastic pipes or other plastic components have melted. Research on this issue is minimal. California guidance recommend that affected systems issue Do Not Drink/Do Not Boil advisories until the system can be flushed and tested. OHA recently issued similar guidance.

To date, 10 water systems have sampled for VOCs at three or more locations in their distribution system, eight using the DEQ lab. Five have not detected contaminants though OHA recommends follow-up sampling since contaminants can adhere to piping and later leach out. The other results are pending.

There are at least six other small community water systems that will likely need testing once infrastructure is repaired and possibly others OHA has not yet identified. If there are detections, investigatory samples would be needed and could be extensive, which is why the cost estimate uses 30 samples per system. Though the primary and immediate concern is with VOCs, there may also be issues with other toxic contaminants associated with run-off impacting some small systems. We are working with DEQ to further identify this risk.

Domestic Well Systems

OHA is also requesting \$600,000 for the testing of private domestic wells not on public water systems. The funding would provide 2,000 tests at an estimated \$300 per test. The estimate of 2,000 homes is a preliminary estimate based on numbers of evacuated households from the wildfires. The \$300 per test estimate is higher than tests required during real estate transactions under the state's Domestic Well Testing Act because testing it is more extensive. Testing fire-damaged properties needs to include multiple contaminants (i.e., bacteria, metals, VOCs, etc.), would be time sensitive (i.e., need to know if water is safe to drink prior to consumption) and come at a time when environmental laboratory capacity is constrained by demand for water testing from wildfire impacts along the West Coast.

OHA needs to work with Water Resources Department to get a better estimate on number of domestic wells in the affected areas and residents potentially eligible for testing. OHA would prioritize low-income and BIPOC populations served by domestic wells. These populations are likely to have less capacity to provide up-front costs of testing and then navigate the FEMA reimbursement process.

This funding would provide relief only for well testing. Additional resources would be required if the state wished to assist property owners for domestic well remediation. This funding also does not include the cost for OHA staff that would be required to develop eligibility criteria, work with the Office of Contracts and Procurement to create a testing voucher program to include participating laboratories or other funding mechanism, deliver outreach messaging to affected communities about the program and to distribute vouchers. OHA will discuss with

The Honorable Senator Peter Courtney
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October 7, 2020
Page 3 of 3

the Legislative Fiscal Office and Department of Administrative Services the need for a limited duration position to support this work.

Action Requested

The Oregon Health Authority requests an increase of \$750,000 in General Fund appropriation for water testing needed for Oregon communities affected by wildfires.

Legislation Affected

Oregon Laws 2019, Chapter 695, Section 1, Subsection (1).

Sincerely,



Patrick M. Allen
Director

EC: Patrick Heath, Department of Administrative Services
George Naughton, Department of Administrative Services
Tom MacDonald, Legislative Fiscal Office
Ken Rocco, Legislative Fiscal Office