



GENERAL SERVICES DEPARTMENT

# Drinking Water Treatment System & Secondary Water Source Rountree Facility

April 3, 2024

# **Rountree Water System Grant Project**

# Rountree Water System

The Rountree water system (CA 4400762) is in coastal southern Santa Cruz County.

The water system serves the correctional facility, the adjacent County-owned Buena Vista landfill and nearby facilities. Annual production at the Facility varies, in 2022 approximately 3.6 million gallons was produced. The population served includes up to approximately 160 residents and 75 non-transient individuals (on-site staff).



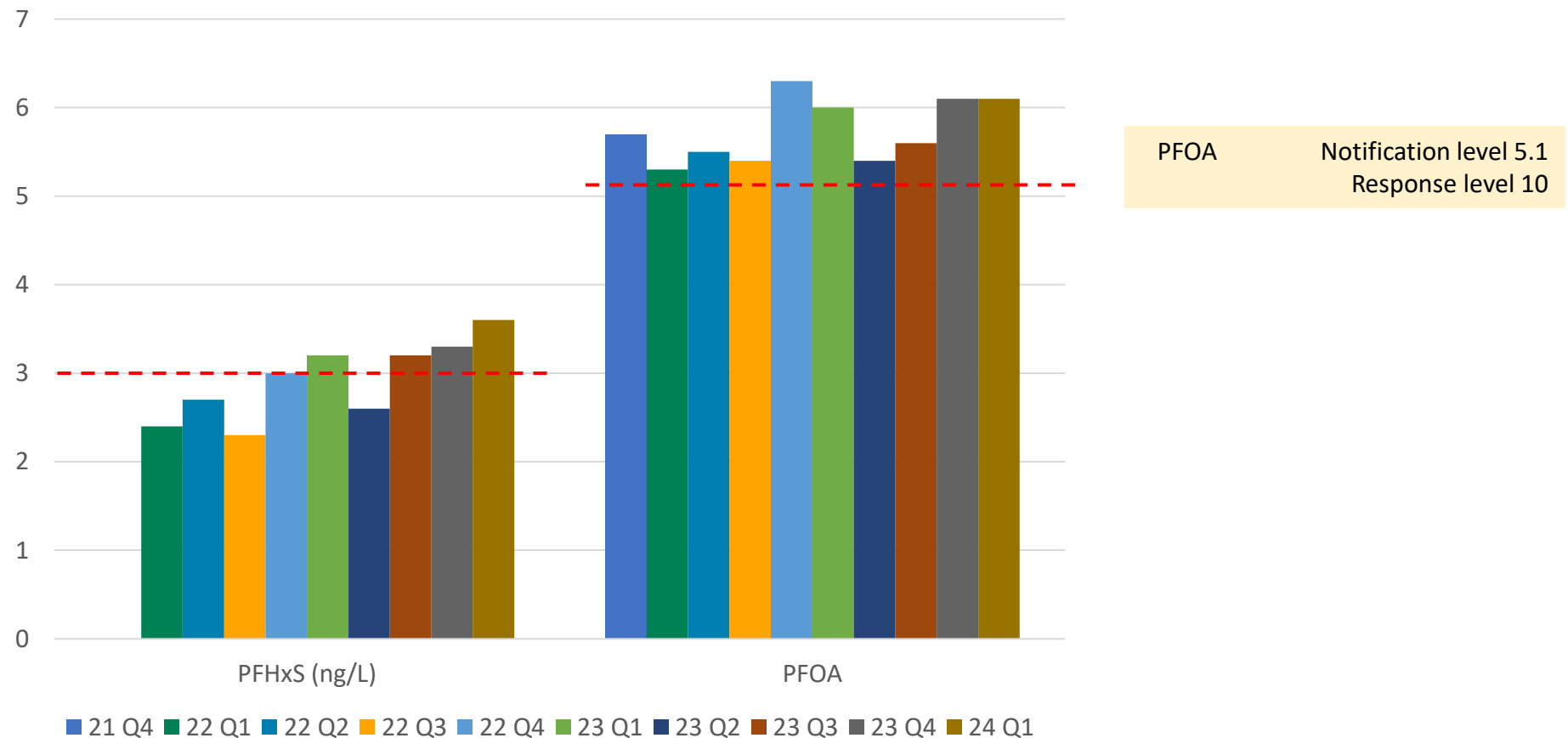
# Water testing

Water testing shows the presence of hexavalent chromium (Cr(VI)) and per- and polyfluoroalkyl substances (PFAS), specifically perfluorooctanoic acid (PFOA), perfluorobutane sulfonic acid (PFBS), perfluorohexane sulfonate (PFHxS).

The Rountree Facility is providing water that is compliant with federal and state regulations. However, PFOA and PFHxS have been detected above the California State Water Resources Control Board Division of Drinking Water (DDW) notification level of 3.0 and 5.1 ng/L, respectively.



# Quarterly Water Testing (ng/L) PFxS & PFOA



# What is a Notification Level?

Notification levels are health-based advisory levels established by the DDW for chemicals in drinking water that lack maximum contaminant levels. When chemicals are found at concentrations greater than their notification levels, certain reporting requirements and recommendations apply.

Notification Levels (NL) are non-regulatory. Notification levels are established as precautionary measures for contaminants that may be considered candidates for establishment of maximum contaminant levels but have not yet undergone or completed the regulatory standard setting process prescribed for the development of maximum contaminant levels and are not drinking water standards.



# What is a Response Level?

A Response Level (RL) is set higher than a notification level and represents a recommended chemical concentration level at which water systems consider taking a water source out of service or provide treatment if that option is available to them.

Starting in January 2020, water systems that receive an order and detect levels of PFAS substances that exceed their response level, shall take a water source out of use, treat the water delivered, or provide public notification.

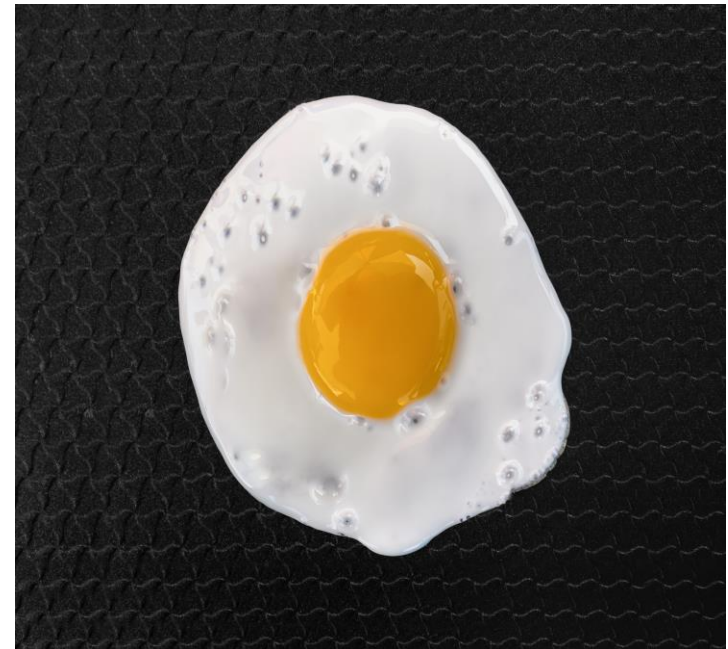


# What are these contaminants?

PFOA (and PFOS) has been extensively produced and studied in the United States. These manmade substances have been synthesized for water and lipid resistance. They have been used extensively in consumer products such as carpets, clothing, fabrics for furniture, paper packaging for food, and other materials (e.g., cookware) designed to be waterproof, stain-resistant or non-stick.

In addition, they have been used in fire-retarding foam and various industrial processes. Based on the current evaluation of recent human and animal toxicity data, exposure to PFOA and PFOS in tap water over certain levels may result in adverse health effects including hepatotoxicity, immunotoxicity, thyroid toxicity, reproductive toxicity, and cancer (pancreatic and liver).

PFHxS is a member of a large class of chemicals known as PFAS (per-and polyfluoroalkyl substances) with similar uses as above. It is resistant to degradation and as result, this compound persists in the environment and in biological organisms. PFHxS adversely affects the growth and development in fetuses, infants, and young children.





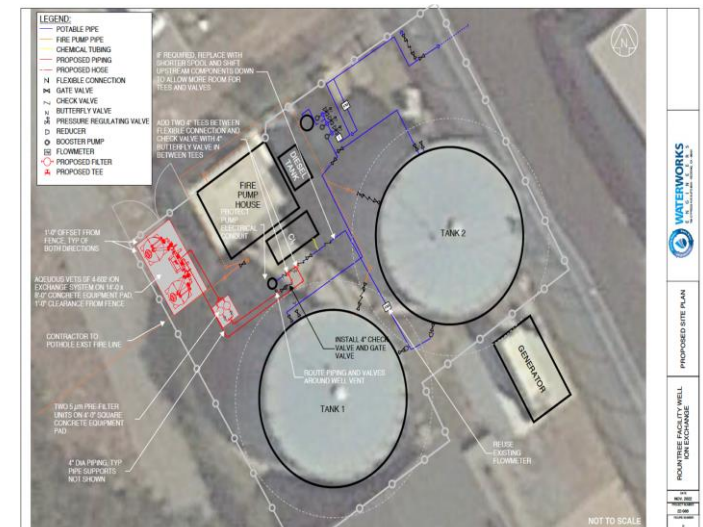
# Regional Water Management Foundation Grant

The proposed grant includes

- 1) implementing an **ion exchange water treatment system** to reduce hexavalent chromium and per- and polyfluoroalkyl substances (PFAS), and
- 2) conducting a **feasibility study** of the water system to consider the most appropriate approaches to add reliability and redundancy.

The **feasibility study** will consider potential options, such as:

- 1) the use of a new water source (e.g., new well);
- or
- 2) an intertie to a well at the Buena Vista landfill; or
- 3) an intertie to a well located at the nearby Buena Vista Migrant Center.



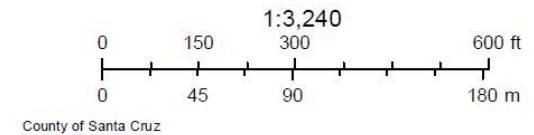
# Rountree Facility Project Map



January 6, 2023

Parcel APN labels

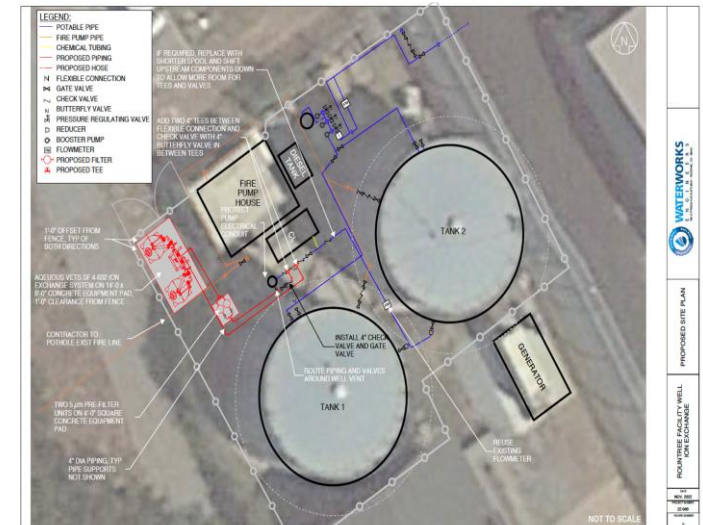
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# IRWM Grant

Grant award:

\$800,000



# Questions?

Thank You

