



DATE: March 17, 2025

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Dan Herrera, PE – Deputy Director of Operations, Water Resources & Utilities Department (WR&U)
Chelsea Thompson – Director, WR&U

SUBJECT: Resolution Authorizing the Purchase of a Portable Jetter Machine for the Water Resources & Utilities Department through Sourcewell Cooperative Purchasing Program and Authorizing the City Manager to Execute all Documents Necessary to Complete the Purchase

RECOMMENDATION

It is recommended that the City Council adopt the attached Resolution authorizing the purchase of a Portable Jetter Machine for the Water Resources & Utilities Department through Sourcewell Cooperative Purchasing Program and authorizing the City Manager to execute all documents necessary to complete the purchase.

BACKGROUND

The Utility Operations Division of the Water Resources and Utilities (WR&U) Department is responsible for operating and maintaining over 200 miles of sewer main pipelines within the city. Proper maintenance of these pipelines is essential to ensuring the effective conveyance of wastewater, preventing sanitary sewer overflows (SSOs), and protecting water quality in local waterways.

The WR&U Department also must adhere to regulatory requirements of the City's Sewer System Management Plan (SSMP) and the Petaluma River Bacteria Total Maximum Daily Load (TMDL). The SSMP, developed in accordance with the State Water Resources Control Board's Waste Discharge Requirements, mandates that all sewer mains be cleaned at least once every six years, with high-use and problem-prone areas requiring more frequent maintenance to prevent blockages and SSOs. To meet these requirements, the City employs high-pressure jetters and vacuum trucks to remove debris, grease, and other obstructions that could compromise system performance. However, the City's sewer collection system includes pipelines in difficult-to-access areas such as residential backyards, open spaces accessed by dirt or gravel roads, alleyways, and pedestrian pathways, making maintenance in these locations more challenging and often delayed.

In addition to SSMP requirements, the City must also comply with the Petaluma River Bacteria TMDL, established by the San Francisco Bay Regional Water Quality Control Board, which sets limits on bacteria levels in the river to protect public health and aquatic ecosystems. Compliance with this regulation requires proactive sewer maintenance to prevent SSOs and ensure wastewater is properly conveyed through the system.

The high-pressure jetter is a key piece of equipment in meeting these regulatory obligations, ensuring the sewer system operates efficiently, maintains adequate capacity, and minimizes the risk of environmental and public health impacts. However, to fully meet SSMP and TMDL requirements, the City must continue to evaluate and address accessibility challenges in maintaining all parts of the collection system to prevent sewer overflows and support long-term regulatory compliance.

DISCUSSION

The City's primary sewer main cleaning equipment is the jetter and vacuum assembly attached to the VacCon Vacuum Truck. While effective, this vehicle is large, has a wide turning radius, and cannot access confined areas, such as backyard sewer manholes and narrow spaces.

As a result, maintenance activities in these locations are often delayed or left incomplete, increasing the risk of blockages and SSOs. Additionally, the existing VacCon Vacuum Truck is a multi-use vehicle essential for various operational tasks, including potholing, earthwork removal, and infrastructure cleaning. Because it serves multiple teams and applications, relying solely on this equipment for sewer main cleaning limits its availability for other critical operations. To address these challenges, the City requires a smaller, more maneuverable jetter machine to improve access to difficult-to-reach areas and ensure timely sewer maintenance.

To assess the department's needs for sewer main cleaning, staff conducted comprehensive research on potential equipment options, focusing on the following key criteria:

- **Maneuverability** – The equipment must access hard-to-reach areas, including backyard sewer manholes and pedestrian pathways.
- **Performance Capabilities** – It must meet specific operational requirements, including adequate pressure and reach.
- **Alternative Fuel Sources** – Preference was given to equipment that operates on gasoline alternatives, such as electricity or renewable diesel.

After evaluating various options, staff identified a renewable diesel-powered, trailer-mounted portable jetter machine as the most suitable choice. Research has determined that electric alternatives currently available on the market do not meet the necessary performance requirements, specifically providing 2,000 PSI at 40 gallons per minute in the City's sewer mains. The ability to power the unit with renewable diesel ensures both operational efficiency and alignment with sustainability goals while addressing the department's specific needs.

The City of Petaluma is a member of the Sourcewell Cooperative Purchasing Program (formerly National Joint Powers Alliance), which provides access to competitively awarded, nationally leveraged cooperative purchasing contracts. This program allows the City to procure specialized equipment at better prices than would be available locally, as local vendors do not typically sell this type of equipment.

Participating in this statewide competitively bid and awarding purchasing program, the City complies with the Petaluma Municipal Code, Section 4.04.100 (Cooperative Purchasing Programs), which authorizes the purchase of supplies and equipment made under a cooperative purchasing program with the State, County, or other public agencies that have already been competitively bid and awarded.

The portable jetter machine will be purchased for \$98,721.47 under the Sourcewell Cooperative Purchasing Program. This price is based on a competitive bidding process conducted by Sourcewell, with the contract awarded to Vactor Manufacturing (Sourcewell Contract #101221-VTR). The equipment will be procured through Owen Equipment, an approved vendor under this contract.

Vactor Manufacturing is a highly regarded manufacturer of jetter and vacuum equipment. Acquiring this portable jetter machine will allow the City to effectively service and maintain sewer main pipelines, ensuring the health and safety of residents while enhancing operational efficiency.

PUBLIC OUTREACH

This agenda item appeared on the City's tentative agenda document on March 3, 2025, which was a publicly-noticed meeting.

COUNCIL GOAL ALIGNMENT

This proposed action supports the FY 20/21 through FY 22/23 City Council Goals and Priorities and the following Workplan items:

- #42 "Find ways for City Operations to reduce greenhouse gas emissions, conserve water, decrease waste, and minimize the use of fossil fuels and investigate and pursue options for carbon sequestration."
- #203 "Impose a moratorium on City purchases of fossil fuel-powered vehicles, power equipment, and appliances, with limited exceptions for emergency vehicles and equipment when no low climate pollution causing alternatives are reasonably available."

CLIMATE ACTION/SUSTAINABILITY EFFORTS

The renewable diesel-powered jetter machine supports the City of Petaluma's climate action goals by reducing reliance on gasoline-powered equipment and lowering greenhouse gas emissions. Renewable diesel significantly cuts lifecycle carbon emissions compared to conventional fuels, aligning with the City's carbon neutrality efforts.

This purchase also helps meet Petaluma River Bacteria Total Maximum Daily Load (TMDL) requirements, established by the Regional Water Quality Control Board in 2018, by ensuring reliable sewer maintenance to prevent SSOs that can introduce harmful bacteria into the Petaluma River and its tributaries.

Electric jetter alternatives were evaluated but found to be underpowered and unable to meet operational needs. Choosing a renewable diesel alternative ensures immediate emissions reductions while maintaining performance.

ENVIRONMENTAL REVIEW

The proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Section 15378(b)(5), in that purchasing a jetter machine does not meet CEQA's definition of a "project," because the action does not have the potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, and because the action constitutes organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment. Relatedly, if the proposed action did constitute a project under CEQA, the action is exempt under the common-sense exemption, CEQA Guidelines Section 15061(b)(3) as the use of a renewable diesel-powered jetter machine will reduce emissions from an equivalent internal combustion vehicle. And CEQA Guidelines Section 15301 (Existing Facilities) as this equipment will be used to operate existing facilities.

FINANCIAL IMPACTS

The purchase of the jetter machine is included in the approved FY 24/25 budget for wastewater operations using wastewater capital. The approved budget is \$115,000, which is sufficient for the purchase price of the portable jetter machine.

The costs of the Vactor Manufacturing portable jetter machine quoted by Owen Equipment are below (including taxes and fees):

Trailer-Mounted High-Pressure Jetting Unit	
Sell Price w/ Sourcewell Discount:	\$ 86,047.00
Freight:	\$ 4,500.00
Taxes:	\$ 8,174.47
Total Advertised Price:	\$ 98,721.47

ALTERNATIVES

Alternatives considered but not recommended:

1. Maintain the status quo—by continuing to only use the VacCon Vacuum truck for sewer main cleaning. This approach is not recommended because it will continue to leave portions of the City's sewer main uncleaned and unmaintained, increasing the risk of SSOs.

2. Acquire an electric jetter machine—while an electric jetter machine aligns with the City’s sustainability goals, this option presents significant operational risks. Current electric jetter machine models do not meet essential performance requirements and lack necessary cleaning capabilities, which include minimum pressure and flow requirements. These limitations could result in inadequate sewer maintenance and insufficient operational capacity, ultimately compromising the City’s sewer function and ability to meet regulatory compliance.

ATTACHMENTS

1. Resolution
2. Quote from Owen Equipment
3. Portable Jetter Information