



DATE: November 18, 2024

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

FROM: Pamela Tuft - Special Projects Consultant, Public Works & Utilities (PW&U)
Oriana Hart - Water Resources & Conservation Manager, PW&U
Gina Benedetti-Petnic, PE - Interim Director, PW&U

SUBJECT: Resolution Authorizing Staff to Submit Grant Applications to the California Department of Water Resources' California Stream Gage Improvement Program (CalSIP) for the Petaluma River, Adobe Creek, Washington Creek, and Willowbrook Locations, Confirming Availability of Matching Support, Accepting any Potential Grant Awards, and Authorizing the City Manager to Execute all Documents Necessary to Complete the Grant

RECOMMENDATION

It is recommended that the City Council adopt the attached Resolution authorizing staff to submit grant applications, accept any potential grant awards, and authorizing the City Manager to execute all documents necessary to complete the grant from the California Department of Water Resources' California Stream Gage Improvement Program (CalSIP) for the Petaluma River, Adobe Creek, Washington Creek, and Willowbrook locations and confirm availability of matching support, accepting any potential grant awards, and authorizing the City Manager to execute all documents necessary to complete the grant.

BACKGROUND

The City of Petaluma is committed to advancing sustainable water management, environmental conservation, and community resilience, as outlined in our climate action and long-term planning goals. An opportunity to support these efforts has emerged through the California Stream Gage Improvement Program (CalSIP), a grant program administered by the Department of Water Resources (DWR). CalSIP provides funding for projects that address key water data gaps across the state by installing and upgrading stream gages, essential for effective water management and the conservation of local freshwater ecosystems. To align with these goals, staff seeks Council authorization to apply for CalSIP funding to improve stream monitoring in Petaluma and accept any potential award resulting from that application and execute all necessary agreements.

Senate Bill (SB) 19, enacted in 2019, directed DWR and the State Water Resources Control Board to establish a statewide network of stream gages to address critical data gaps in water management and freshwater species conservation, prioritizing areas where improved data could reduce water usage conflicts and enhance multiple benefits like water supply, flood management, and ecosystem health.

In response, DWR, the State Water Board, and related agencies developed the California Stream Gaging Prioritization Plan 2022 (SB 19 Plan), which recommends upgrades to existing stream gages, new installations, reactivations of historical gages, and the addition of water temperature sensors. The California Stream Gage Improvement Program (CalSIP) builds on SB 19 Plan recommendations, distributing funds to public agencies and federally recognized Tribes to expand California's surface water monitoring network.

DISCUSSION

The City of Petaluma is committed to advancing sustainable water management, environmental conservation, and community resilience, as outlined in our climate action and long-term planning goals. An opportunity to support these efforts has emerged through the California Stream Gage Improvement Program (CalSIP), a grant program administered by the Department of Water Resources (DWR). CalSIP provides funding for projects that address key water data gaps across the state by installing and upgrading stream gages, essential for effective water management and the conservation of local freshwater ecosystems. To align with these goals, staff seeks Council authorization to apply for CalSIP funding to improve stream monitoring in Petaluma and accept any potential award resulting from that application and execute all necessary agreements.

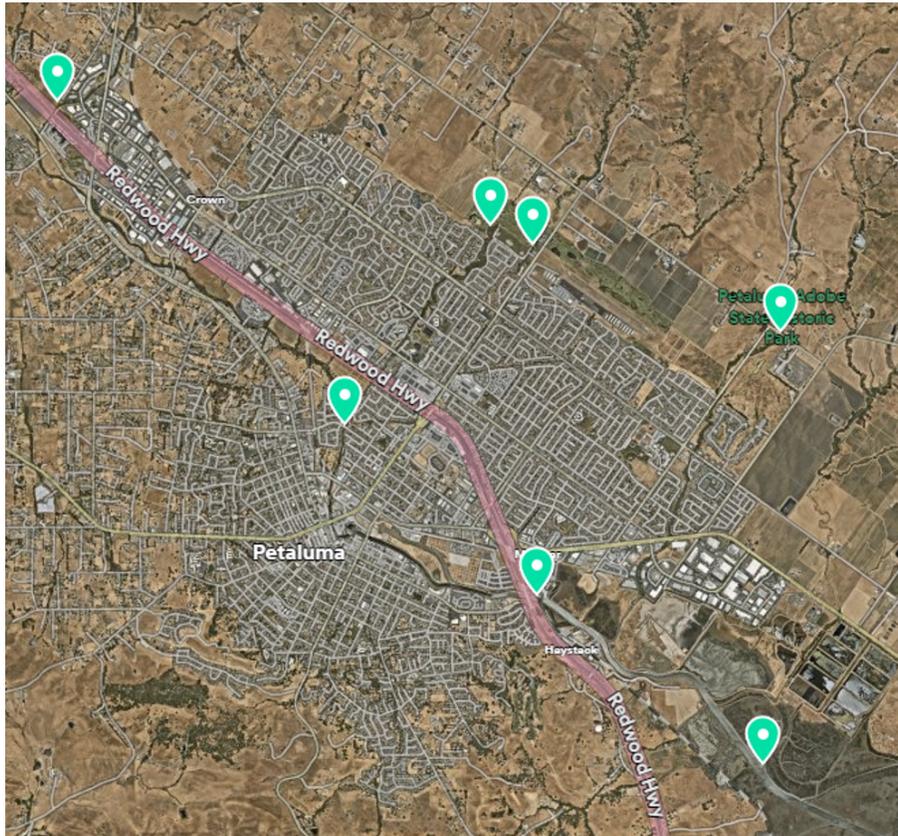
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DISCUSSION

With Council direction, Staff are prepared to apply for CalSIP funding to install stream gauges at critical locations, including the Petaluma River at the Highway 101 undercrossing near the SMART Trestle, the Ellis Creek Water Recycling Facility, and at the Payran Street Bridge. Additional proposed sites include Adobe Creek (downstream of Old Adobe Road), Lynch Creek at Prince Park, Washington Creek at Prince Park, and Willowbrook (downstream of the Redwood Business Park retention ponds).

Map of Proposed Locations



The proposed project sites align well with CalSIP’s core objectives, as they support:

- Planning, forecasting, and warning about floods and droughts
- Monitoring environmental conditions to protect aquatic habitats
- Planning for safe and enjoyable recreational activities
- Analysis of groundwater recharge and streamflow depletion

Funding from CalSIP would allow Petaluma to enhance sustainable water management practices, strengthen environmental conservation efforts, and improve community resilience. This project would help to close critical data gaps, support local freshwater ecosystems, and reduce potential conflicts in water resource management. Enhanced stream monitoring will further Petaluma’s commitment to climate action goals, supporting initiatives in flood mitigation, water quality improvement, and ecosystem health. Timely data collection and resource allocation would enable the City of Petaluma to make better informed decisions for water management, ultimately serving the community’s long-term environmental and public health objectives.

If approved and awarded, the City’s contribution to this project will be in the form of in-kind labor hours for installation, ongoing monitoring, and data-sharing activities required through at least June 30, 2027, as stipulated by CalSIP. The estimated in-kind labor match per approved stream

gauge site is \$16,225. This estimate is based on 40 hours of labor by a Utility Worker for the initial installation, monthly maintenance requiring 8 hours each month over two years (for a total of 192 hours), and 80 hours of work by an Analyst dedicated to setup, data management, and reporting. The City has submitted preliminary applications for seven (7) locations. Depending on the number of sites for which CalSIPs requests full applications, the match contribution would range from \$16,225-\$113,575. Although matching efforts are not required, they will positively influence the grant application review process, with further details on the matching support request outlined in the *Guidelines for Funding Public Agencies under the California Stream Gage Improvement Program* (Attachment 2).

Approval of the attached Resolution will authorize staff to submit grant applications and confirm the availability of this in-kind labor matching support.

PUBLIC OUTREACH

This item was noticed in compliance with the Brown Act.

COUNCIL GOAL ALIGNMENT

This project aligns closely with the City Council's goals of fostering sustainable environmental stewardship, enhancing community resilience, and ensuring public safety. Specifically, the installation of stream gages will provide critical data that supports:

- **A Safe Community That Thrives:** Improved monitoring of water levels and quality will enhance the City's ability to respond proactively to flood risks, protect water resources, and ensure public safety, especially during extreme weather events.
- **An Environmental Legacy We Can Be Proud Of:** By supporting effective water management, ecosystem health, and species conservation, the project contributes to preserving local natural resources and enhancing habitat for wildlife, in line with Petaluma's broader climate action goals.
- **Spaces and Places That Inspire:** Stream gages offer an opportunity to collect data that informs water quality and watershed health, ensuring that public recreational spaces near creeks and rivers are safe and accessible for residents and visitors.

This project supports Petaluma's commitment to sustainable practices, environmental health, and long-term resilience, aligning well with the Council's priorities and the City's Climate Action goals.

CLIMATE ACTION/SUSTAINABILITY EFFORTS

These projects would significantly enhance Petaluma's climate action and sustainability efforts by providing precise, real-time data on stream flows, water levels, and temperatures, which are essential for effective water resource management amid changing conditions. Accurate data from these stream gages would help manage water resources for multiple benefits, including flood control, ecosystem health, and public safety. With improved water monitoring, the City could make more informed decisions around climate resilience, reduce vulnerability to extreme weather

events, and support sustainable landscaping and conservation practices, advancing Petaluma's long-term environmental goals and aligning with its commitment to carbon neutrality.

ENVIRONMENTAL REVIEW

This action is exempt from the California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Section 15378(b)(5), as submitting a grant application 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. The proposed project will be subject to environmental review and approvals prior to any construction activities taking place. The environmental document(s) will be determined when the City receives funding for and initiates the planning, environmental review, and design phase.

FINANCIAL IMPACTS

Receiving CalSIP grant funding would provide a valuable financial benefit to Petaluma by offsetting the substantial costs associated with expanding the City's stream monitoring capabilities. If awarded, the grant would primarily fund the permitting, equipment purchases, installation, development of rating curves, and operation and maintenance required for new stream gages on natural waterways. This support would greatly reduce the City's initial and ongoing financial commitment to the project, making the installation of these gages feasible at this time.

The City's matching contribution would be provided primarily in the form of in-kind labor hours for installation, ongoing monitoring, and data-sharing requirements through at least June 30, 2027, as outlined in the grant terms. The estimated in-kind labor match per approved stream gauge site is \$16,225. This estimate is based on 40 hours of labor by a Utility Worker for the initial installation, monthly maintenance requiring 8 hours each month over two years (for a total of 192 hours), and 80 hours of work by an Analyst dedicated to setup, data management, and reporting. The City has submitted preliminary applications for seven (7) locations. Depending on the number of sites for which CalSIPs requests full applications, the match contribution would range from \$16,225-\$113,575. Although matching efforts are not required, they will positively influence the grant application review process, with further details on the matching support request outlined in the *Guidelines for Funding Public Agencies under the California Stream Gage Improvement Program* (Attachment 2).

Leveraging the City's existing resources in this way minimizes direct financial outlays, allowing Petaluma to pursue this enhanced monitoring without adding significant new expenses to its budget.

Additionally, access to real-time data on stream flows, water levels, and temperatures over time will support the City in making well-informed decisions for infrastructure planning, conservation, and climate resilience, potentially reducing costs associated with flood management, water shortages, and ecosystem maintenance.

ALTERNATIVES

If the Council chooses not to authorize the application for CalSIP funding, the City may need to delay the implementation of the proposed stream gage improvements or seek additional funding sources. Without the support of CalSIP, the financial responsibility for purchasing, installing, and maintaining the stream gages would fall entirely to the City. This could result in a postponement of the project due to budget constraints or require that the City allocate funds from other programs or secure alternative grants to proceed with the stream monitoring enhancements. Delaying or reallocating resources could impact the City's water management capabilities and slow progress toward achieving sustainable water monitoring and climate resilience goals.

ATTACHMENTS

1. Resolution
2. CalSIP Guidelines