



San Diego County Flood Control District

GOVERNING BODY

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First District

JOEL ANDERSON
Second District

TERRA LAWSON-REMER
Third District

MONICA MONTGOMERY STEPPE
Fourth District

JIM DESMOND
Fifth District

AGENDA ITEM

DATE: April 23, 2025

FL01

TO: Flood Control District Board of Directors

SUBJECT

ADOPT RESOLUTION TO ACCEPT CALIFORNIA STREAM GAGE IMPROVEMENT PROGRAM (CAL SIP) GRANT FROM CALIFORNIA DEPARTMENT OF WATER RESOURCES, AUTHORIZE ADDITIONAL ACTION TO COMPLETE GRANT PROCESS, AND CEQA EXEMPTION FINDING (DISTRICTS: 2 & 5)

OVERVIEW

The San Diego County Flood Control District (District) was formed to provide for the control of flood and storm waters in the unincorporated county; to preserve such waters for beneficial uses such as water supply, groundwater percolation, recreation, and environment; to protect land, properties, facilities, and people from damage caused by storm and flood waters; and to protect, preserve, and restore the watersheds within the unincorporated county.

The District operates the Automatic Local Evaluation in Real-Time (ALERT) Flood Warning System, which provides real-time data for flood forecasting and emergency response. The ALERT system consists of 120 monitoring stations that track water levels in rivers and streams, rainfall amounts, and lake levels in real-time. The need for an expanded and modernized flood monitoring system was underscored by the major flooding in the region during the January 2024 storms. These extreme weather events demonstrated the importance of real-time data collection in protecting residents, preparing emergency responders, and informing decision-making. Multiple agencies and departments use this data to enhance flood preparedness and response.

The District applied for funding through the California Stream Gage Improvement Program (CalSIP) in September 2024 and has since received notice of an award for \$642,000 from the California Department of Water Resources (DWR). This funding will fund the installation of four new stream gages on Pine Valley Creek, Pala Creek, Lower San Vicente Creek, and Santa Maria Creek, as well as the reactivation of two gages on the San Luis Rey River and San Felipe Creek. A stream gage is a monitoring device installed in a river, creek, or stream to measure water levels and flow rates in real time, providing critical data for flood monitoring, water resource management, and environmental conservation. To determine the most suitable locations for the new stream gages, County staff conducted a comprehensive evaluation of unincorporated areas using multiple criteria, including jurisdiction type, proximity to existing ALERT stations, whether

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the area serves or has a stream that drains into an underserved community, and alignment with the state's priority ungaged watersheds as identified in the California Stream Gaging Prioritization Plan (Senate Bill 19, Statutes of 2019, Ch. 361, Dodd). These priority watersheds were determined by the state based on their significance for flood management, water quality monitoring, and ecosystem conservation, with a focus on areas where limited data currently hinders effective resource management. As part of this evaluation, staff also reviewed the location of existing stream gages to avoid redundancy while ensuring adequate coverage in high-need areas. Additionally, site selection was influenced by property ownership considerations, ensuring that the gages could be placed on publicly accessible lands. Staff's selected sites reflect the highest-need areas within the County's jurisdiction in the unincorporated area. By addressing these gaps, the program enhances the County's capacity to mitigate flood risks and protect vulnerable populations.

Today's request is for the Board of Directors to adopt a resolution to accept the CalSIP grant from California DWR and authorize additional action to complete the grant process. Approval of this resolution will enable the County to meet grant requirements, accept grant funding, and proceed with the necessary actions to implement the program and improve its flood monitoring and response capabilities.

RECOMMENDATION(S)

CHIEF ADMINISTRATIVE OFFICER

Acting as the Flood Control District Board of Directors:

1. Find that adoption of the proposed resolutions is exempt from review under the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the CEQA Guidelines because there is no possibility for the activity to cause a significant effect on the environment.
2. Adopt a resolution entitled: RESOLUTION TO ACCEPT CALIFORNIA STREAM GAGE IMPROVEMENT PROGRAM (CALSIP) GRANT FROM CALIFORNIA DEPARTMENT OF WATER RESOURCES & AUTHORIZE ADDITIONAL ACTION TO COMPLETE GRANT PROCESS.
3. Establish appropriations of \$642,000 in the Department of Public Works, Flood Control District, Services & Supplies, for the California Stream Gage Improvement Program (CalSIP) based on grant revenue from the California Department of Water Resources.
(4 VOTES)

EQUITY IMPACT STATEMENT

Adopting the proposed resolution supports equitable access to vital flood monitoring and water resource management, improving public safety by enhancing early warning systems and supporting timely emergency response in historically underserved and vulnerable communities. The San Diego County Flood Control District prioritizes flood preparedness and the protection of life and property through innovative programs and infrastructure improvements. The California Stream Gage Improvement Program (CalSIP) will strengthen the District's Automatic Local

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Evaluation in Real-time (ALERT) Flood Warning System by expanding its stream gage network. These enhancements will provide critical real-time data for early warning systems, flood forecasting, and emergency response, particularly benefiting underserved communities. Five of the proposed gages—Pala Creek, Lower San Vicente Creek, Santa Maria Creek, San Luis Rey River, and San Felipe Creek—are located either within underserved areas, or in watersheds that drain into underserved areas, based on criteria such as:

- Healthy Places Index (HPI) rankings in the 3rd and 4th quartiles.
- CalEnviroScreen (2.0) percentile scores above 25%.
- Inclusion in “San Diego LiveWell Communities,” which are Central San Diego, Southeastern San Diego, Lemon Grove, National City, and Spring Valley.
- Identification as Environmental Justice Communities in the County’s General Plan Environmental Justice Element.

Additionally, the Pine Valley Creek gage will serve a Census-designated disadvantaged community, further extending the program’s equity benefits.

SUSTAINABILITY IMPACT STATEMENT

This initiative aligns with the County’s sustainability goals by improving flood preparedness, enhancing emergency response, resiliency, and monitoring environmental conditions. Some gages may include sensors to measure water quality parameters like turbidity, conductivity, and temperature, providing valuable data for long-term water quality management. The enhanced stream gage network will provide additional critical data for the Automatic Local Evaluation in Real-time (ALERT) flood warning system, helping mitigate the impacts of extreme weather events and supporting the well-being of residents in vulnerable communities. These improvements also contribute to long-term economic sustainability by informing better floodplain management practices, reducing possible flood damages by improving land development decision making, and potentially lowering flood insurance costs for residents and businesses. With improved hydrological data, better understanding of flow patterns is possible, which is essential for planning sustainable water use and implementing effective flood resilience strategies. This prioritization targets basins critical for water resource management, freshwater species conservation, and flood resilience, particularly in areas facing significant climate-related challenges. Furthermore, this program potentially supports environmental sustainability by improving water quality monitoring.

FISCAL IMPACT

Funds for this request are not included in the Fiscal Year 2024-25 Operational Plan for the Flood Control District. If approved, this request will result in costs and revenue in the amount of \$642,000 for the installation and reactivation of stream gages and, up to five years of operations and maintenance costs for these gages. No matching funds or cost-sharing are required. The funding source is grant revenue from California Department of Water Resources. Operations and maintenance cost, after the five years, will be funded by San Diego County Flood Control District annual property tax revenues. There will be no change in net General Fund cost and no additional staff years.

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BUSINESS IMPACT STATEMENT

The California Stream Gage Improvement Program (CalSIP) grant will enhance San Diego County's Automatic Local Evaluation in Real-time (ALERT) Flood Warning System by improving the monitoring of streamflow conditions, thereby benefiting local businesses indirectly through enhanced flood preparedness and risk mitigation. The additional streamflow data helps mitigate the secondary impacts of flooding by enabling quicker and more informed decisions to protect critical infrastructure and transportation networks, such as road closures or evacuation routes. Additionally, the project promotes regional economic activity through the procurement and installation of advanced stream gaging equipment and services, which may involve local contractors and suppliers.

ADVISORY BOARD STATEMENT

This item was presented and discussed at the February 6, 2025 Flood Control District Advisory Commission meeting. During the meeting, staff provided an overview of the California Stream Gage Improvement Program (CalSIP), including its objectives, funding allocation, and the planned installation and reactivation of stream gages within the County. The presentation highlighted the program's alignment with the County's flood preparedness and water resource management goals, as well as its focus on underserved and disadvantaged communities. Feedback from the Commission was received and will be considered in the implementation of this program.

BACKGROUND

Flooding poses a significant and recurring threat to the San Diego region, particularly in areas prone to flooding. The January 2024 storms resulted in severe flooding that damaged infrastructure, homes, and businesses, highlighting the ongoing need for enhanced flood monitoring and preparedness. These events have historically caused extensive damage, reinforcing the importance of real-time data for emergency response and risk reduction. The San Diego County Flood Control District (District) was formed to provide for the control of the flood and storm waters in the unincorporated county; to preserve such waters for beneficial uses such as water supply, groundwater percolation, recreation, and environment; to protect land, properties, facilities, and people from damage caused by storm and flood waters; and to protect, preserve, and restore the watersheds within the unincorporated county.

The District operates the Automatic Local Evaluation in Real-time (ALERT) Flood Warning System, which provides real-time data for flood forecasting and emergency response. The ALERT system is comprised of 120 stations monitoring various hydrologic and meteorological parameters, including streamflow, rainfall, lake-level data, etc. Multiple agencies and departments use this system to enhance flood preparedness and response. Some examples include:

- DPW Road Crews use ALERT data to monitor impending flood hazards and receive advance notice to prepare for potential road closures.
- The Office of Emergency Services (OES) relies on the system for situational awareness during significant rainfall events, ensuring a coordinated emergency response.

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- The National Weather Service (NWS), a branch of the National Oceanic and Atmospheric Administration (NOAA), integrates ALERT data into its decision-making process for issuing flood watches and warnings and for overall situational awareness during severe weather events.

However, gaps in the monitoring network limit its effectiveness in certain areas. To address this issue, the District applied for and has been tentatively awarded \$642,000 in funding through the California Stream Gage Improvement Program (CalSIP) administered by the California Department of Water Resources (DWR).

Purpose of CalSIP

CalSIP was established under the State’s Budget Act of 2023 to expand and improve California’s stream gage network in alignment with the Senate Bill 19 California Stream Gaging Prioritization Plan. The program prioritizes ungauged watersheds critical for water resource management, flood hazard assessment, and ecosystem conservation. These watersheds have limited or no data collection, impeding effective planning and response efforts. By addressing these gaps, CalSIP supports more informed decision-making for water management and disaster mitigation. The District’s CalSIP funding will support the installation of four new gages and the reactivation of two historical gages. These gages will be strategically located in high-priority watersheds: Pine Valley Creek, Pala Creek, Lower San Vicente Creek, Santa Maria Creek, San Luis Rey River, and San Felipe Creek. Each of these sites serve watersheds that are within or drain into areas designated as underserved or disadvantaged communities.

Collaboration with Tribal Partners

The District’s CalSIP implementation included collaboration with the Pala Band of Mission Indians in the San Luis Rey River watershed. Two of the gages will be installed at Pala Creek and the San Luis Rey River, respectively, which are of particular importance to the Pala Band. These gages will provide real-time hydrological data critical for flood preparedness, water resource management, and ecological conservation in tribal lands and surrounding areas. This collaboration enhances tribal partnerships, supporting shared goals of protecting life and property and ensuring sustainable water management practices in the region. The program will enhance flood preparedness by providing critical real-time data for early warnings and flood management decisions. Additionally, it may be possible to install gages that measure water quality parameters such as turbidity, conductivity, temperature, pH, and dissolved oxygen, as well as to proactively monitor for harmful algal blooms. If so, this data will provide information to assess long term trends in water quality management actions, environmental conservation, and public health protection. Adopting the proposed resolution will authorize District officials to finalize agreements with DWR, ensuring timely implementation of this critical initiative.

ENVIRONMENTAL STATEMENT

Section 15061(b)(3) of the CEQA Guidelines exempts from CEQA review those projects where “...it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment...” The proposed activity is the adoption of resolutions to authorize District staff to apply for and accept grant funding for flood control and flood-related

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disaster response. The approval of the resolutions does not commit the District to a particular project or guarantee that any funding for such a project will be sought or obtained. The proposed activity will not, accordingly, have any significant effect on the environment and is exempt from CEQA review by Section 15061(b)(3) of the CEQA Guidelines.

LINKAGE TO THE COUNTY OF SAN DIEGO STRATEGIC PLAN

The proposed action supports the County of San Diego's 2025-2030 Strategic Plan by advancing sustainability and resilience in the face of extreme weather; equity and environmental justice by providing better data for underserved and disadvantaged communities; empowerment through better-informed decision-making; and community safety through enhanced disaster preparation and response.

Respectfully submitted,



DAHVIA LYNCH

Deputy Chief Administrative Officer

ATTACHMENT(S)

Attachment A - RESOLUTION TO ACCEPT CALIFORNIA STREAM GAGE IMPROVEMENT PROGRAM (CALSIP) GRANT FROM CALIFORNIA DEPARTMENT OF WATER RESOURCES & AUTHORIZE ADDITIONAL ACTION TO COMPLETE GRANT PROCESS