



# STORMWATER DEPARTMENT INTERIM FUNDING STRATEGY IMPLEMENTATION UPDATE

CITY OF SAN DIEGO STORMWATER DEPARTMENT



June 2021

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# INTRODUCTION

The *July 2021 Interim Stormwater Department Audit Recommendation #5 Funding Strategy Implementation Update (the “Interim Funding Strategy Implementation Update”)* provides an update on the implementation actions identified in the *Stormwater Funding Strategy (the “Funding Strategy”)*. The Stormwater Department (SWD) presented the Funding Strategy to City Council in February 2021 in response to Recommendation #5 of the June 2018 performance audit of the SWD by the Office of the City Auditor titled *The Storm Water Division Can Further Improve the Efficiency of Its Infrastructure Maintenance and Code Enforcement Efforts, but the City Ultimately Needs to Address Significant Storm Water Funding Shortages*<sup>1</sup> (the “Audit”).

This Interim Funding Strategy Implementation Update focuses on four key areas:

- Analysis of potential funding mechanisms and methodologies (Appendix A)
- Public opinion research findings, notably that ongoing education is critical to improving residents’ understanding of the stormwater system and SWD services and that a two-thirds vote on a ballot funding measure is achievable (Appendix B)
- Education, outreach, and stakeholder engagement (Appendix C)
- SWD progress toward implementing funding and financing options identified in the Funding Strategy (Appendix D)

As reported in January 2021, the primary findings of the Funding Strategy were that the SWD faces a significant and growing funding gap (estimated at \$225.1 million per year) that cannot be closed by current revenue sources, cost savings, and increased efficiencies alone and that a long-term, dedicated funding source is needed.<sup>2</sup> Many stormwater funding mechanisms, such as a special parcel tax or a property-related fee, require a public vote under the provisions of California Proposition 218. To address that issue, City Council approved a resolution to enable the SWD to continue evaluating the viability of a stormwater-related ballot measure or similar dedicated stormwater funding mechanism (Resolution R-2021-316).<sup>3</sup> Assessing and refining a stormwater funding measure involves rate analyses, surveys of potential voter support, and education and engagement with stakeholders per Recommendation #6.

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1 City of San Diego. 2018. Performance Audit of the Storm Water Division. Office of the City Auditor. [https://www.sandiego.gov/sites/default/files/18-023\\_storm\\_water\\_division\\_0.pdf](https://www.sandiego.gov/sites/default/files/18-023_storm_water_division_0.pdf).

2 The average annual funding gap is expressed in 2020 dollars and does not include the potential effects of future inflation or changes in economic conditions.

3 City of San Diego. 2021. A Resolution of the Council of the City of San Diego Requesting that the Stormwater Division Evaluate the Viability of a Stormwater-Related Ballot Measure or Similar Dedicated Stormwater Funding Mechanism. <https://onbase.sandiego.gov/OnBaseAgendaOnline/Documents/ViewDocument/Resolution%20R-2021-316.pdf?meetingId=4248&documentType=Agenda&itemId=195665&publishId=451391&isSection=false>.

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This document serves both as a refresher and an implementation update on Audit Recommendation #5 (Funding Strategy) as well as an interim progress update on for Audit Recommendation #6 development. Upcoming milestones include the following:

- November 2021 Interim Funding Strategy Implementation Update to City Council, including updates on funding mechanism scenarios, funding measure program design, public opinion research, and stakeholder engagement;
- January 2022 Recommendation #6 Response to Audit Committee;
- March 2022 Draft Ballot Measure and Expenditure Plan to Rules Committee, including updates on public opinion research and stakeholder engagement; and
- June/July 2022 Final Ballot Measure and Expenditure Plan to City Council, including updates on public opinion research and stakeholder engagement.



This Funding Strategy Implementation update is for informational purposes only and includes no recommendations for specific funding measure program content, a specific funding mechanism, potential revenue, or ratepayer amount nor is it a recommendation to place a stormwater funding measure on a ballot.



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# CONTEXT: STORMWATER SYSTEM AND SERVICES

The SWD is responsible for protecting local streams, rivers, bays, and beaches from pollution and for building, operating, and maintaining the City's vast, integrated stormwater system that includes pipes, drains, channels, green infrastructure (GI), and pumps. This system is comprised of many interconnected components that must function together seamlessly to provide critical services to San Diego residents and businesses. The SWD's core goals as illustrated in Figure 1 are to:

- Protect safe, clean water.
- Use stormwater as a resource.
- Safeguard our communities from floods.
- Provide community benefits.
- Restore the environment.
- Encourage public partnership.



**Figure 1. SWD mission and goals.**

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The City's stormwater infrastructure and services are essential to San Diego's quality of life, health, and safety. In addition to clean water and flood management services, they provide community benefits such as green streets, improved mobility, walking and biking paths, green spaces, and stream and wetland revitalization. SWD investments achieve more than stormwater goals; they also contribute to the City's fundamental values and priorities like equity, sustainability, and resilience.

## **The SWD faces mounting funding challenges driven by several compounding factors**

These factors include a changing climate, increasingly strict water quality requirements, aging and failing infrastructure, and urbanization. Adapting to new circumstances brought on by these factors is a complex, dynamic, and ongoing challenge. For example, the number of pipe failure sites is growing throughout the City. As of the close of FY2021, more than 1,800 known sites had resulted in 11 emergency repairs, posing public health and safety hazards (Figure 2). These emergency repairs—none of which were originally in the adopted FY2021 budget—will cost more than \$9.3 million. Only \$3.9 million of these repairs was funded in FY2021, resulting in an additional \$5.4 million to be carried over to FY2022, adding pressure on future resources and extremely limited funding.<sup>4</sup>

Another example of the escalating risk associated with stormwater funding challenges is the passing of the final dry weather milestone for a major water quality requirement—the Bacterial total maximum daily load [TMDL]—and locations in the City not currently in compliance with that standard. Any exceedances of the TMDL after this deadline could likely result in violations and the corresponding enforcement actions or monetary fines by the San Diego Regional Water Quality Control Board and/or third parties as soon as they are reported. Previously, the SWD has been able to fund few of the implementation actions necessary to address any exceedances. These examples demonstrate that, the longer a dedicated stormwater funding source is deferred, the greater the risk to public health and safety and environmental water quality and the higher the likelihood that compliance issues will continue to develop.

## **Spotlight on innovation, partnerships, and progress**

Even with limited funding, the SWD has continued to make significant progress on pressing issues:

**Water Quality Response Team:** The SWD has organized a multidisciplinary tactical team that, in partnership with staff from the Public Utilities Department (PUD), uses cutting edge technology to identify and track sources of harmful bacteria that pose human health and water quality risks throughout the City. In FY2021, the Water Quality Response Team successfully reduced or eliminated 125 bacteria source locations. The team will be expanding in FY2022 with additional

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<sup>4</sup> Funding for FY2021 emergency repairs was transferred from transportation projects. Funding for FY2022 emergency repairs and potential future emergencies will be requested as part of the next issuance of commercial paper in late FY2021/early FY2022.

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City staff, and an adaptive management dashboard is being developed to help them visualize and assess trends in monitoring data and locations of concern and deploy to the highest priority areas to maximize attenuation of harmful bacteria.

**Construction Site Patrol Program:** In FY2019, the SWD initiated a proactive construction site patrol program to ensure that construction sites were not discharging pollutants into sensitive coastal habitats and lagoons. In FY2021, a total of 67 separate inspections were conducted at 28 construction sites before and after rain to ensure that they were protecting local water quality using industry-approved best practices.

**Modernizing Stormwater Management:** The SWD has successfully migrated to more efficient, digital platforms for operations and maintenance (O&M) activities that include street sweeping and catch basin cleaning as well as for activities that interface with the public like the stormwater quality monitoring, stormwater best management practice, and business inspections programs. By going online, the SWD is transitioning to a more sustainable approach by eliminating paper inspection forms and streamlining the process for both the businesses and SWD inspection teams.

**Los Peñasquitos Lagoon Restoration Project:** The City is actively pursuing funding for the Phase I Los Peñasquitos Lagoon Restoration Project, which is currently estimated to cost \$35.2 million, with the City being responsible for 78% of these costs. The City has been added to the Intended Use Plan for the Clean Water State Revolving Fund (CWSRF) for this project (estimated cost of \$27 million) and has submitted a Water Infrastructure Finance and Innovation (WIFIA) loan application for the entire Capital Improvement Program (CIP), which includes the lagoon restoration. The City has been actively coordinating with the Los Peñasquitos Lagoon Foundation, the Coastal Conservancy, California State Parks, and the US Fish and Wildlife Service to identify additional grants for this landmark project.

**Partnerships:** In FY2021, the SWD successfully supported Groundwork San Diego Chollas Creek, a local not-for-profit organization, in securing a \$6.5-million grant for revitalizing a portion of Chollas Creek in a historically underserved neighborhood.<sup>5</sup> The revitalization project will improve water quality, reduce flooding, create health benefits associated with recreational facilities, capture carbon, and improve wildlife habitat, making it a prime example of the benefits that can result through community-based collaboration.

**Strategic and Efficient Infrastructure Repair:** At the beginning of FY2021, 17 sites of pipe failure or undersized pipes required that SWD operate temporary bypass pumps during rainstorms to reduce flooding. By strategically prioritizing pipe repairs and replacements at those locations, the SWD was able to reduce that number to six bypass locations by the end of FY2021 and save approximately \$1.3 million in estimated annual ongoing operating costs.

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<sup>5</sup> Public and Nonprofit Agency Collaboration to Restore an Urban Creek and Trail. 2021. <https://the-atlas.com/projects/public-and-nonprofit-agency-collaboration-to-restore-an-urban-creek-and-trail---planning-phase-1698>.

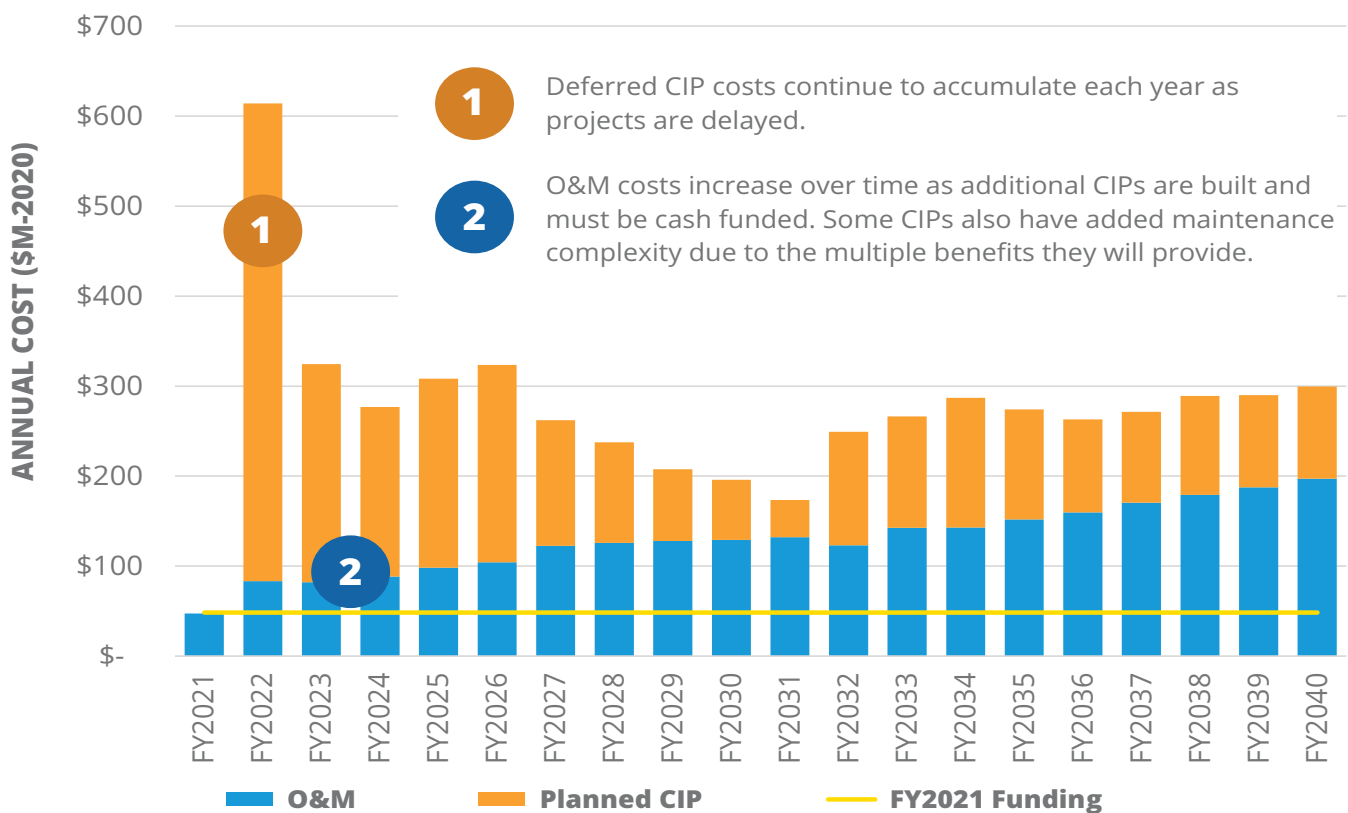


## Funding Needs and Funding Gap

The SWD's funding needs and the funding gap reported in this update reflect figures assessed at the beginning of FY2021 and FY2021 budget levels. They are reported in 2020 dollars:<sup>6,7</sup>

- The average annual funding need over the 20-year planning horizon (FY2021-FY2040) is \$273.7 million per year.
- The FY2021 adopted budget for stormwater was \$48.5 million, which was barely one-tenth of FY2021 funding needs.
- The average annual funding gap over the 20-year planning horizon (FY2021-FY2040) is \$225.1 million per year.

Figure 2 presents the projected funded and unfunded needs for stormwater based on Funding Strategy projects and demonstrates the compounding effect of deferred investments that continue to accumulate as unfunded needs are rolled over from one year to the next.



**Figure 2. 20-year funding need, accounting for deferment of FY2021 unfunded needs.**

<sup>6</sup> An update of the total funding need and funding gap, including deferment of unfunded FY2021 needs and FY2022 budget levels, will be completed for the November 2021 City Council update following adoption of the FY2022 budget and reconciliation of FY2021 expenditures.

<sup>7</sup> The average annual funding gap values reported are expressed in 2020 dollars and do not include the potential effects of future inflation or changes in economic conditions.

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The SWD has been actively coordinating with the Engineering and Capital Projects Department (E&CP) and the Department of Finance to develop a CIP ramp-up strategy that accounts for Citywide staffing and resource considerations for capital project delivery should additional funds become available. Multiple project delivery methods are being considered to implement the complex mix of stormwater CIPs needed, including traditional design-bid-build, multiple award construction contracting, job order contracting, and design-build for specific project types. The City estimates a need for approximately 120 additional full-time positions at E&CP to execute the anticipated stormwater CIPs. Additional staff from other City departments will be needed to support this projected growth, such as environmental planners, financial analysts, plan reviewers and contract specialists. The City's E&CP would also need to augment its in-house engineering staff by hiring consultants for design services to accommodate the potential increase in stormwater CIPs. Additional consultant services will be needed for the more complex, nonstandard green infrastructure and waterways restoration projects.

The stormwater CIP strategy is being integrated into funding and financing scenarios that include loans from CWSRF and WIFIA for stormwater projects and prioritizes clean water projects like GI for funding.

The following sections discuss additional efforts to maximize available funding.



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# FUNDING STRATEGY IMPLEMENTATION (EFFICIENCIES, INNOVATION, EXISTING FUNDING SOURCES, GRANTS, LOANS)

Through the extensive research, analysis, and benchmarking conducted in the Funding Strategy, the SWD identified four implementation action categories:

- I. Maximize and accelerate implementation of efficiencies;
- II. Increase investment in SWD program innovation;
- III. Maximize existing funding sources, grants, and loans; and
- IV. Pursue development of a long-term dedicated funding mechanism.

Many of these actions are underway, with FY2021 progress presented in this appendix. Appendix D provides further details and milestones in FY2022 and FY2023.

## Implementation Action I: Maximize and Accelerate Implementation of Efficiencies

A foundational element of both near-term and ongoing Funding Strategy implementation is reducing the SWD funding need through maximizing and accelerating implementation of efficiencies, including reducing or eliminating sources of pollution, using adaptive management practices, and optimizing O&M efforts. The SWD has committed to identifying and implementing efficiencies at all levels to ensure that funding is optimized for providing essential stormwater services. While two examples of efficiencies were highlighted in the Funding Strategy and are provided below, identifying and implementing efficiencies are included in daily O&M and planning.

### **FY2021 implementation progress and FY2022 and FY2023 milestones include the following:**

- **Pipe repairs:** An additional in-house pipe-repair team will be added for FY2022 and will accelerate the pace of more efficient and timely repairs for failing pipes.
- **Optimizing street sweeping routes:** Analysis of street sweeping routes and frequencies initiated in FY2021 in alignment with the Street Sweeping Audit is underway, with the Street Sweeping Audit Response in December 2021 and implementation planned for FY2023.

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## Implementation Action II: Increase Investment in SWD Program Innovation

The SWD is committed to investing in program innovation and strategically evaluating opportunities to advance its goals through innovative partnerships and other efforts. By implementing the Watershed Asset Management Plan (WAMP) 2.0, the SWD has been able to prioritize strategic, data-driven efforts and optimize day-to-day activities. In addition, the SWD has advanced programmatic efforts like the Alternative Compliance Program (ACP), stormwater harvesting and reuse, and integrated planning, with a focus on equity and resiliency.

### **FY2021 implementation progress and FY2022 and FY2023 milestones include the following:**

- **Developing and implementing analytical tools:** The SWD developed a pilot data dashboard to track performance metrics and optimize real-time decision-making for the street sweeping and stormwater inlet/pipe cleaning programs in FY2021. In FY2022 and FY2023, the SWD plans to develop and deploy a comprehensive online dashboard.
- **Alternative Compliance Program (ACP):** Ongoing stakeholder engagement, including meetings of the ACP Technical Advisory Committee, is planned in FY2022. The Environmental Impact Report for the ACP will be completed in FY2022, with anticipated approvals and program implementation targeted for FY2023.
- **Integrated planning:** FY2021 updates include incorporating WAMP financial information, initiating stakeholder engagement, tracking related legislation, and developing a recommended timeline for pursuit of an Integrated Planning Framework as part of the Funding Strategy and Citywide Compliance Strategy. The framework will be further developed in FY2022 and FY2023.
- **Stormwater harvesting and reuse:** In partnership with PUD, the SWD is investigating opportunities to integrate stormwater capture activities to achieve both water quality and water supply goals by developing a comprehensive stormwater harvesting strategy. In FY2021, the SWD and PUD continued assessing feasibility of dry weather flow diversion and diversion of stormwater for indirect potable use and/or recycling to determine technical, regulatory, and high-level cost implications. Results suggested that urban runoff harvesting might be viable and cost competitive with other runoff management strategies in the City's Water Quality Improvement Plans (i.e., GI). Specifically, the results suggest a continuation of investment and planning for strategies that serve multiple benefits and in which the City is already investing (e.g., wetland restoration, small-scale on-site harvesting like rain barrels, GI, and dry weather diversion). the SWD and PUD will continue their assessment to confirm viability of opportunities like groundwater recharge by the end of FY2024, and dry- and wet-weather diversion to Pure Water by the end of FY2022. No further action is recommended at this time for water recycling, as it presents limited opportunities for stormwater capture and there is no additional capacity for recycled water, and on-site irrigation due to comparatively high costs and misalignment with the seasonality of supply and demand. Next steps in FY2022 include (1) developing proofs of concept for two to four prioritized dry- and wet-weather diversion to Pure Water project opportunities, (2) advancing the Sorrento Valley

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dry-weather diversion project to CIP, (3) strategically monitoring and analyzing urban runoff quality as a potential source water for the Pure Water program, and (4) directly engaging with regulators and environmental groups to overcome the specific regulatory constraints identified in FY2021. Proofs of concept will be developed for one to three industrial wet weather project opportunities in coordination with industry by the end of FY2023. In addition, confirmation of viability for groundwater recharge will be completed by the end of FY2023.

## Implementation Action III: Maximize Existing Funding Sources, Grants, and Loans

Several funding options that already support or exist as potential revenue sources for the SWD include funding sources subject to SWD or City discretion for allocation as part of the annual budget process and financing for CIPs, grants, and loans. The FY2022 approved budget includes \$57.1 million in funding for the SWD, representing an 18% increase from FY2021, which experienced a decrease over previous years as a result of the COVID-19 pandemic. Funding Strategy implementation updates are provided for options that could achieve cost recovery for the SWD, including revenue-generating activities, grants, and loans.

Additional efforts are ongoing, including tracking stormwater and infrastructure-related legislation such as the two-part Federal Infrastructure Plan (American Jobs Plan and American Families Plan) and advocacy for stormwater as parts of funding and financing programs like WIFIA and CWSRF. For example, protecting natural water resources is a central priority of the Clean Water Act and the CWSRF; however, as noted in the April 18, 2021, CWSRF Intended Use Plan, California's CWSRF has executed more than \$11.9 billion in financial assistance agreements, of which approximately 97% have been awarded to publicly owned wastewater infrastructure.<sup>8</sup> As such, the City should work with the State to pursue modifications to CWSRF to increase access to funding for stormwater programs as documented in the May 24, 2021, letter from the City to the State Water Resources Control Board (SWRCB) regarding adjustments to CWSRF scoring of stormwater projects to allow for greater parity.<sup>9</sup>

In addition, monitoring of policy and regulatory updates (e.g., source control provisions) and state and local ballot measures, are being closely coordinated and/or monitored as part of Funding Strategy implementation.

### **FY2021 implementation progress and FY2022 and FY2023 milestones include the following:**

- **Stormwater enforcement and fines:** In FY2021, the SWD reassessed the 2014 monetary

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8 State Water Resources Control Board. 2021. Clean Water State Revolving Fund and The Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Prop 1) and The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Prop 68) Intended Use Plan for State Fiscal Year 2021-2022. [https://www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/docs/2021-22\\_cwsrf\\_iup\\_final\\_draft.pdf](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/docs/2021-22_cwsrf_iup_final_draft.pdf).

9 City of San Diego. 2021. Letter to the State Water Resources Control Board. City of San Diego Stormwater Projects 8610-110 and 8504-110.



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penalties to achieve target cost recovery and has proposed reclassifying rates for internal City review. Stakeholder engagement is planned for FY2022 with implementation of the proposed monetary penalties anticipated for FY2023.

- **Street sweeping parking enforcement fines:** The SWD continued evaluating potential options for street sweeping parking enforcement fines, including addition of posted routes, extension of enforcement zones, increase in frequency of sweeping, and/or increase in fine amounts in FY2021. Proposal development will continue, and stakeholder outreach will occur in FY2022, with implementation estimated in FY2023, if approved by City Council.
- **Stormwater Inspection and Reinspection Program:** In FY2021, potential approaches for the Stormwater Inspection and Reinspection Program to target full-cost recovery were developed and stakeholder engagement was initiated. Additional stakeholder engagement is planned in FY2022 and, if approved by City Council, the program will be implemented in FY2023.
- **Grants:** In FY2021, a significant number of grant opportunities with synergy between their requirements and eligible SWD projects were identified. The SWD applied for nine grants totaling \$25.6 million in requested funding. Of those, seven were denied and two are in process. Additionally, the SWD was awarded a grant by the U.S. Department of Commerce's Economic Development Administration for \$5.9 million for the Maple Canyon Restoration Project. In future years, the SWD anticipates submitting at least four grant applications each year and potentially more as opportunities arise and additional grant programs become available.
- **Loans:** The SWD submitted a Letter of Interest for a WIFIA loan to finance high-risk pipe replacements, GI, revitalization and restoration of natural waterways, pump station upgrades, and rehabilitation of stormwater features. The City would be submitting a loan application for (\$359 million), with the City matching 51% (or \$374 million). Reviews of the WIFIA application by the U.S. Environmental Protection Agency may take up to a year. The earliest that WIFIA funding is anticipated to be available to the SWD is late FY2022 or early FY2023. The SWD is also applying for CWSRF loans for stormwater projects. The South Mission Beach Storm Drain Improvements and Green Infrastructure Project (\$27 million) and Los Peñasquitos Lagoon Restoration Project (\$27 million) were placed on the CWSRF Intended Use Plan, and the SWD can enter into a CWSRF loan pending City Council approval and successful negotiation of a loan agreement with the SWRCB. The SWD is also continuing to explore additional CWSRF loan applications for large projects that protect natural waterways.

# PURSUE DEVELOPMENT OF A LONG-TERM DEDICATED FUNDING MECHANISM (IMPLEMENTATION ACTION IV)

In alignment with both Recommendation #6 and Council Resolution R-2021-306, the SWD is evaluating the viability of a stormwater-related ballot measure or similar dedicated stormwater funding mechanism. The SWD has made progress on each of the five integrated elements necessary for a successful stormwater funding measure, which were identified through extensive benchmarking of stormwater ballot measures in the Funding Strategy (Figure 3).<sup>10</sup>



Figure 3. Integrated elements for stormwater funding measure development.

10 City of San Diego. 2021. Stormwater Funding Strategy. <http://www.thinkblue.org/fundingstrategy>.

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This section summarizes progress to date in FY2021 on each of these elements. They are further described in subsequent sections of this Interim Funding Strategy Implementation Update and associated Appendices:

- **Strategic program design**, including draft funding measure program Expenditure Plan goals and development of initial funding mechanism scenarios in FY2021.
- Research-driven decision making informed by two public opinion surveys (December 2020 and March 2021) and focus groups in May 2021.
- **Resource commitments** of staffing and funding in FY2021 and budgeted for FY2022 to develop a technically robust program, educate the public, and engage with stakeholders.
- **Engagement with stakeholders** in FY2021 on the Funding Strategy findings and funding measure development process.
- **Compelling communications** to support an informed and educated San Diego on topics related to stormwater, including the relaunch of Think Blue San Diego and SWD rebranding.

## Proposition 218 Process and Requirements

A major difficulty in raising revenues for stormwater management in California has been California Proposition 218, a constitutional amendment passed by a vote of the people in 1996 that restricts the ability of local governments and special districts to raise revenues. Proposition 218 requires local governments and special districts to secure voter approval before raising taxes and established thresholds of voter approval based on whether the tax was a general tax or specific tax. Special taxes require a two-thirds majority approval for adoption.

Additionally, Proposition 218 introduced constraints for property-related fees by requiring clear identification of the need for revenue and establishment of a clear nexus of the fee being levied and the service it ultimately funds. Proposition 218 requires a two-step public approval process for any property-related fee or fee increase that includes an affected property-owner protest vote and, if the local agency does not receive a majority objection, a property-owner election requiring a majority approval of all impacted voting property owners or two-thirds approval from the electorate. **Establishing a property-related fee requires a cost-of-service analysis to demonstrate that the fee charged does not exceed the cost of serving ratepayers. Similarly, the fee charged to a parcel or person may not exceed the proportional cost of service attributable to the parcel. This precludes the ability to exempt specific properties (e.g., government, institutional, or vacant land) and provides limited flexibility in allocation of funds if there is not a clear nexus.**

Senate Bill (SB) 231 and Assembly Bill (AB) 2403 were introduced following passage of Proposition 218 and modify definitions related to Proposition 218 in terms of what is considered “sewer” and “water,” respectively. The modifications were intended to allow flexibility for stormwater rates to be increased or established through either a City Council vote or a majority protest vote. Currently, no communities have sought to establish a new stormwater fee using these means and, according to the California Stormwater Quality Association, the Howard Jarvis Taxpayers

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Association, a California lobbying and policy organization, has indicated they intend to challenge any community that attempts to institute a stormwater fee using the SB231 approach.<sup>11</sup> The City Attorney has reviewed both of the bills and related case law and recommends that **Proposition 218 voter requirements are followed to minimize the risk of a legal challenge.**<sup>12</sup>

## Funding Measure Program Expenditure Plan

To support the development of a potential stormwater funding mechanism, the program to be funded will need to be clearly and succinctly described. An Expenditure Plan can be designed to provide an overview of the goals and outcomes of the funding program, specifics on what types of projects could be included, eligible and ineligible recipients, eligible expenditures, program governance, and oversight/accountability. Developing the Expenditure Plan would be an iterative and adaptive process to incorporate stakeholder feedback and preferences. Initial funding measure program goals have been drafted and discussed with stakeholders and are presented in Appendix E. The SWD is still assessing other Expenditure Plan components and considerations, some of which will be brought to stakeholders in FY2022.

## Initial Funding Mechanism Scenarios

“Funding mechanism scenarios” refer to assessing different methods and considerations related to potential ratepayer impacts and revenue levels. Some funding mechanism methodologies include flat parcel rates, flat parcel rates that vary by property type, rates based on impermeable area or gross area of a parcel, rates based on development intensity, or a combination of methodologies. Similarly, considerations that could be assessed include exemptions, discounts/reductions, credits, rebates, a sunset clause, escalations over time, and level of complexity. Initial funding mechanism scenarios were developed to estimate ranges of potential revenue collected and potential ratepayer impacts through a Proposition 218 stormwater funding measure.

The initial scenarios presented here reflect two commonly used methods for calculating stormwater rates, as well as stakeholder input that an equitable and non-regressive basis for rates be considered:<sup>13</sup>

- **Impermeable area method**, which uses a rate per square foot (SF) of impermeable area on a parcel or a subdivision of a parcel where there are stacked units (e.g., apartments and condominiums).<sup>14</sup>

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11 California Stormwater Quality Association. June 2017. Funding Resources Overview and Background. <https://www.casqa.org/resources/funding-resources/overview-and-background>.

12 City of San Diego, Office of the City Attorney. 2021. Legal Update to 2012 Memorandum of Law Titled “Proposition 218 Impacts to Storm Drain Fees”.

13 City of San Diego. 2021. Stormwater Funding Strategy. <http://www.thinkblue.org/fundingstrategy>.

14 Impermeable area is characterized as any solid surface where water cannot penetrate, causing it to run off (e.g., roofs, driveways, sidewalks, walkways, etc.).

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- **Property type-based method**, which uses a flat rate for each single-family residential (SFR) parcel and each multifamily residential dwelling unit but uses a per-SF impermeable area basis for all other parcels due to the extreme variability within other property types.

Impermeable cover is the most common basis used for stormwater-related charges, with 87% of respondents of the 2021 Stormwater Utility Survey indicating that impermeable area is the basis for stormwater charges across the nation.<sup>15</sup> In addition, both these methods were tested in a public opinion research survey in March 2021 with the impermeable area basis resulting in a higher degree of respondents who might vote “yes” on a future funding measure. For each of these methods, a range of ratepayer impact scenarios and associated annual revenue were estimated for illustrative purposes (Table 1).



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15 Black & Veatch Management Consulting. 2021. 2021 Stormwater Utility Survey Report. <https://www.bv.com/resources/2021-stormwater-survey-report>.



**Table 1. High and low funding mechanism ranges by methodology (property type and impermeable area) based on an equitable basis for stormwater.**

<b>RATE BASIS</b>	<b>MEDIAN ANNUAL SINGLE-FAMILY RESIDENTIAL BILL</b>	<b>MEDIAN MONTHLY SINGLE-FAMILY RESIDENTIAL BILL</b>	<b>ESTIMATED ANNUAL REVENUE GENERATED (\$M)</b>
Property type (lower)	<b>\$69.00</b>	<b>\$5.75</b>	<b>~\$32 M</b>
Property type (higher)	<b>\$100.00</b>	<b>\$8.33</b>	<b>~\$46 M</b>
Impermeable area (lower): \$0.02 per SF	<b>\$64.00</b>	<b>\$5.33</b>	<b>~\$33 M</b>
Impermeable area (higher): \$0.05 per SF	<b>\$160.00</b>	<b>\$13.33</b>	<b>~\$83 M</b>

*Notes: Appendix A provides additional detail on the funding mechanism scenario methods, input data, assumptions, and considerations.*

The initial scenarios reflect stakeholder input and public opinion research related to the range and magnitude of ratepayer impacts and viability for meeting voter or property owner tolerance thresholds under Proposition 218. As such, a single funding measure is unlikely to fully meet SWD needs to close the funding gap, which includes both O&M and CIP funding needs, and additional funding sources will be needed.<sup>16</sup>

The SWD will continue to refine funding mechanism scenarios in FY2022 as technical analyses and stakeholder engagement continues. The SWD will also be conducting an assessment to ensure that the proposed scenarios reflect potential economic and socioeconomic impacts on a variety of ratepayer classes and Communities of Concern as identified in the City's Climate Equity Index.<sup>17</sup>

Appendix A provides additional detail on methodologies and considerations for the initial funding mechanism scenarios.

<sup>16</sup> Funding for CIP needs can be financed from loans and bonds, or cash funded, while O&M can only be cash funded, which restricts the funding or financing sources that can be considered for addressing the remaining SWD funding gap.

<sup>17</sup> City of San Diego, 2019 revised 2021. Climate Equity Index Report. [https://www.sandiego.gov/sites/default/files/2019\\_climate\\_equity\\_index\\_report.pdf](https://www.sandiego.gov/sites/default/files/2019_climate_equity_index_report.pdf).

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# PUBLIC OPINION RESEARCH

## Survey and Focus Groups

Public opinion research, which included surveys and focus groups in FY2021, was completed to capture perceptions and understanding of stormwater as well as to inform funding measure development. Two surveys were conducted, one in December 2020 and the other in March 2021, that tested knowledge and perceptions about stormwater. The March 2021 survey also tested sample ballot language to gauge initial responses to a potential stormwater funding measure and the importance of various stormwater-related priorities, including the capture of stormwater for local water supply, protection of water quality, preparation for future drought, maintenance of current infrastructure, and prevention of flooding, among others. Following the surveys, four focus groups were conducted in May 2021 to dive deeper into perceptions of stormwater and reactions to a potential stormwater funding measure. Key findings from FY2021 public opinion research include the following:

- **Ongoing general education and community engagement for stormwater is essential.** Stormwater issues and services are not well understood, but residents highly value the outcomes of SWD activities, especially clean water. Residents want additional information on the specific strategies and projects that could be funded and would contribute towards the proposed SWD funding program goals.
- Public opinion research shows **initial support for a stormwater funding measure**, with meeting a two-thirds voter threshold possible.
- There is greater support for **basing the funding measure rate on impermeable area** than on property type.
- **Continued assessment and refinement** of a potential stormwater measure with additional public opinion research is needed.

Appendix B provides additional outcomes from the survey and focus groups.

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# EDUCATION, OUTREACH, AND STAKEHOLDER ENGAGEMENT

Education, outreach, and stakeholder engagement are critical both for successful Funding Strategy implementation and for funding measure development.

As indicated by both the Audit and subsequent surveys, an important component of stormwater funding measure development and overall best practices is compelling communication and outreach. The SWD has prioritized the launch of a refreshed and revitalized Think Blue website (<https://www.thinkblue.org>), refreshed the Think Blue logo and brand, expanded and updated educational materials, and increased multimedia communication efforts to more effectively reach a broader audience. (Figure 4).

To date, stakeholder engagement has been focused on expanding understanding of the essential services the SWD provides, presenting the findings and recommendations included in the Funding Strategy, and obtaining input and feedback related to the potential stormwater funding measure program goals. Engagement and outreach have been conducted with a wide diversity interest groups and the general public throughout the City, including with local environmental and business organizations, labor, industry, regulators, and community groups. Priorities and common themes that have emerged from engagement include the following:

- Stormwater harvesting and reuse to augment local water supplies;
- Adapting to climate change, resiliency, and drought preparedness;
- Equity;
- Economic growth, job creation, and workforce development.

Education, outreach, and stakeholder engagement will continue to be a priority for ongoing Funding Strategy implementation and funding measure assessment and development into FY2022.



**Figure 4. New Think Blue San Diego logo.**

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# CONTINUED IMPLEMENTATION

The SWD will continue to further each of the core elements central to a successful stormwater program and funding measure development, including strategic program design, committed resources, research-driven decision-making, compelling communication, and stakeholder engagement. Key milestones in FY2022 and FY2023 include the following:

- Education, outreach, and stakeholder engagement—Ongoing
- Focus groups (with education, outreach, and communication focus)—Q1 FY2022
- Survey (general viability of a ballot measure)—Q2 FY2022
- City Council November 2021 Funding Strategy Implementation Update, including updates on funding mechanism scenarios, funding measure program design, public opinion research, and stakeholder engagement—Q2 FY2022
- Survey (refinement of a ballot measure)—Q3 FY2022
- Recommendation #6 response to Audit Committee—Q3 FY2022
- Submit report on survey (refinement of a ballot measure), draft ballot measure and Expenditure Plan submitted to the Rules Committee of City Council—Q3 FY2022
- Focus groups (ballot label and language)—Q4 FY2022
- Survey (specific viability of a ballot measure)—Q4 FY2022
- Report out on survey (specific viability of a ballot measure) and final ballot measure and Expenditure Plan to City Council—Q4 FY2022



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# APPENDIX A: FUNDING MECHANISM OPTIONS AND ANALYSIS SUMMARY



# Appendix A: Draft Funding Mechanism Options and Analysis Summary

## Introduction

The City of San Diego (City) Stormwater Department (SWD) recently completed *Stormwater Funding Strategy* (the Funding Strategy) in response to Recommendation #5 of the June 2018 performance audit of the SWD by the Office of the City Auditor (OCA) titled “The Storm Water Division Can Further Improve the Efficiency of Its Infrastructure Maintenance and Code Enforcement Efforts, but the City Ultimately Needs to Address Significant Storm Water Funding Shortages<sup>1</sup>,” (hereafter referred to as “the Audit”).

The primary findings of the Funding Strategy were that the SWD faces a significant and growing funding gap (estimated at \$225.1 million per year) that cannot be closed by current revenue sources, cost savings, and increased efficiencies alone and that a long-term, dedicated funding mechanism is needed. Many stormwater funding mechanisms, such as a special parcel tax or a property-related fee, require a public vote under the provisions of Proposition 218. As such, City Council approved a resolution to enable the SWD to continue evaluating the viability of a stormwater-related ballot measure or similar dedicated stormwater funding mechanism (Resolution R-2021-316).<sup>2</sup>

This appendix discusses the initial scenarios the SWD evaluated as potential stormwater funding mechanisms, including the basis for selecting the scenarios; methods and data used to develop the scenarios; and additional considerations to be evaluated. The discussion highlights the differences, some of them nuanced, between the funding mechanism approach and structure; its potential revenue; the program to be funded; and its impact on ratepayers.

The discussion provided in this Appendix is intended to inform the funding mechanism development process and does not indicate final recommendations by the City. The approaches and structures will continue to be refined as part of the process to develop and assess the viability of each funding mechanism in fiscal year (FY) 2022.

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<sup>1</sup> City of San Diego. 2018. *Performance Audit of the Storm Water Division*. Office of the City Auditor. [https://www.sandiego.gov/sites/default/files/18-023\\_storm\\_water\\_division\\_0.pdf](https://www.sandiego.gov/sites/default/files/18-023_storm_water_division_0.pdf).

<sup>2</sup> City of San Diego. 2021. *A Resolution of the Council of the City of San Diego Requesting that the Stormwater Division Evaluate the Viability of a Stormwater-related Ballot Measure or Similar Dedicated Stormwater Funding Mechanism*. <https://onbase.sandiego.gov/OnBaseAgendaOnline/Documents/ViewDocument/Resolution%20R-2021-316.pdf?meetingId=4248&documentType=Agenda&itemId=195665&publishId=451391&isSection=false>.

## Initial Scenario Results

The initial scenarios evaluated by SWD reflect two commonly used methods for calculating stormwater rates—impermeable area and property type—as well as stakeholder input that an equitable and non-regressive basis for rates be considered:<sup>3</sup>

- **Impermeable area method**, which uses a rate per square foot (SF) of impermeable area on a parcel or a subdivision of a parcel where there are stacked units (e.g., apartments and condominiums)<sup>4</sup>
- **Property type-based method**, which uses a flat rate for each single-family residential (SFR) parcel and each multifamily residential (MFR) dwelling unit but uses a per-SF impermeable area basis for all other parcels because of the wide variation across other property types.

These methods both use impermeable cover, or a proxy for impermeable cover through land use, as a correlation for the stormwater runoff and pollutant runoff “potential” of a parcel. Impermeable cover is the most common basis used for stormwater-related charges, with 87% of the utility leaders responding to Black & Veatch’s 2021 Stormwater Utility Survey indicating that impermeable area is the basis for stormwater charges across the nation.<sup>5</sup> Both methods were tested in a voter survey in March 2021, with the impermeable area basis resulting in a higher degree of respondents who might vote “yes” on a future ballot funding measure. For each of the methods, a range of ratepayer impact scenarios and associated annual revenue were evaluated. The initial scenarios also quantify the magnitude of potential revenue associated with the rates. Table 1 shows the high and low funding mechanism ranges by methodology, including the estimated annual and monthly median bills for SFR ratepayers and estimated annual revenue that could be generated.

**Table 1. High and Low Funding Mechanism Ranges by Methodology (impermeable area and property type)**

Rate Basis	Median Annual Single-Family Residential (SFR) Bill	Median Monthly Single-Family Residential (SFR) Bill	Estimated Annual Revenue Generated (\$M)
Property type (lower): \$69 per SFR, \$20 per MFR dwelling unit, \$390 per acre of parcel area for all others	\$69.00	\$5.75	~\$32 M
Property type (higher): \$100 per SFR, \$30 per MFR dwelling unit, \$560 per acre of parcel area for all others	\$100.00	\$8.33	~\$46 M
Impermeable area (lower): \$0.02 per SF	\$64.00	\$5.33	~\$33 M
Impermeable area (higher): \$0.05 per SF	\$160.00	\$13.33	~\$83 M

<sup>3</sup> City of San Diego. 2021. Stormwater Funding Strategy. [www.thinkblue.org/fundingstrategy](http://www.thinkblue.org/fundingstrategy)

<sup>4</sup> Impermeable area is characterized as any solid surface where water cannot penetrate, causing it to run off (e.g., roofs, driveways, sidewalks, and walkways).

<sup>5</sup> Black & Veatch Management Consulting. 2021. 2021 Stormwater Utility Survey Report.

<https://www.bv.com/resources/2021-stormwater-survey-report>.

The initial scenarios reflect stakeholder input and public opinion research related to the range and magnitude of ratepayer impacts and viability for meeting voter or property owner thresholds under Proposition 218 requirements. A single funding measure is unlikely to fully meet SWD needs to close the funding gap, which includes both operation and maintenance and Capital Improvement Program funding needs, and additional funding sources will be needed.<sup>6</sup> Generally, capital program funding can be financed through long term bonds and loans by leveraging a recurring annual revenue source, however, operations and maintenance costs will need to be funded on pay go basis.

Funding mechanism scenarios will continue to be refined in FY2022 as technical analyses and stakeholder engagement continues.

### Funding Mechanism Types (Property-Related Fee and Special Parcel Tax)

A number of dedicated stormwater funding mechanism types were assessed as part of the Funding Strategy and are presented in that document in detail.<sup>7</sup> This appendix and associated analyses, however, are focused on two primary funding mechanism types:

- **A new property-related stormwater fee; and**
- **A new stormwater-related special parcel tax**

Of the 22 California stormwater-related funding mechanisms included in the Funding Strategy benchmarking (including San Diego), 20 of them were either a property-related fee or a special parcel tax (Table 2).<sup>8, 9</sup> Both of these funding mechanism types are subject to requirements under California Proposition 218, a constitutional amendment passed by voters in 1996 that restricts the ability of local governments and special districts to raise revenues.

**Table 2. Benchmarked Communities in California with Successful Stormwater Funding Mechanisms**

Jurisdiction	Funding Mechanism	Pre-Prop 218	Latest Approval	Typical SFR Bill (Monthly)
San Francisco <sup>a</sup>	Sewer utility		2018	\$21.31
City of Palo Alto	Property-related fee	✓ <sup>b</sup>	2017	\$13.65
City of Del Mar	Property-related fee		2019	\$13.11
City of Sacramento	Property-related fee	✓ <sup>b</sup>	2016	\$11.31

<sup>6</sup> Funding for Capital Improvement Program needs can be borrowed from loans and bonds, or cash funded, while operation and maintenance can only be cash funded, which restricts funding or financing sources that can be considered to address the remaining SWD funding gap.

<sup>7</sup> City of San Diego. 2021. Stormwater Funding Strategy. [www.thinkblue.org/fundingstrategy](http://www.thinkblue.org/fundingstrategy)

<sup>8</sup> The two municipalities that did not use a property-related fee or special parcel tax are the City of San Francisco, which has a combined sewer system and a sewer utility fee, and the City of Long Beach, which increased the general sales tax to fund stormwater projects.

<sup>9</sup> City of San Diego. 2021. Stormwater Funding Strategy. [www.thinkblue.org/fundingstrategy](http://www.thinkblue.org/fundingstrategy)

Jurisdiction	Funding Mechanism	Pre-Prop 218	Latest Approval	Typical SFR Bill (Monthly)
City of Santa Monica <sup>c</sup>	-- Special parcel tax Property-related fee	✓	-- 2006 1995	Total: \$10.00 \$7.00 (max) \$3.00
City of Santa Cruz <sup>c</sup>	-- Property-related fee Property-related fee	✓	-- 1994 1994	Total: \$9.09 \$7.32 \$1.77
Culver City	Special parcel tax		2016	\$8.25
City of Berkeley <sup>c</sup>	-- Property-related fee Property-related fee	✓	-- 1991 2018	Total: \$8.00 \$4.42 \$3.58
City of San Jose	Property-related fee	✓ <sup>b</sup>	2011	\$7.87
LA County Flood Control District	Special parcel tax		2018	\$6.92
City of San Clemente	Property-related fee		2013	\$6.23
Santa Clara Valley Water District	Special parcel tax		2012	\$4.65
City of Santa Clarita	Property-related fee	✓ <sup>b</sup>	2009	\$2.08
Vallejo Flood and Wastewater District	Property-related fee	✓ <sup>b</sup>	2017	\$1.97
City of Los Angeles	Property-related fee	✓	1994	\$1.92
City of Oceanside	Property-related Drainage impact fee		2007	\$1.50
<b>City of San Diego</b>	<b>Property-related fee</b>	✓	<b>1996</b>	<b>\$0.95</b>
City of Chula Vista	Property-related fee	✓	1991	\$0.70
City of Long Beach	General sales tax		2016	Median SFR N/A 1% for first 6 years; 0.5% for next 4 years

Notes: N/A = not applicable.

<sup>a</sup> San Francisco Public Utilities Commission (SFPUC) is a combined storm sewer system and charges a monthly service fee for customers not already charged separately for water and sewer services through SFPUC, primarily unmetered properties like vacant parcels and parking lots.

<sup>b</sup> Initial funding mechanism instated prior to approval of Proposition 218; more recent rate increases passed with voter or property owner approval.

<sup>c</sup> Some municipalities have two separate funding mechanisms that might fund separate stormwater needs, were passed at different times, or are different types of mechanisms.

Proposition 218 requires local governments and special districts to secure voter approval before raising taxes and created different thresholds of voter approval based on whether the tax was a general tax or specific tax. Special taxes require a two-thirds majority approval for adoption.

Additionally, Proposition 218 introduced constraints on property-related fees by requiring clear identification of the need for revenue and establishment of a clear nexus of the fee being levied and the service it ultimately funds. Proposition 218 requires a two-step public approval process for any property-related fee or fee increase that includes an affected property owner protest vote and, if the local agency does not receive a majority objection, a property-owner election requiring a majority approval of all impacted voting property owners or two-thirds approval from the electorate.

**Establishing a property-related fee requires a cost-of-service analysis to demonstrate that the fee does not exceed the cost of serving ratepayers. Similarly, the fee charged to a parcel or person may not exceed the proportional cost of service attributable to the parcel. This precludes the ability to exempt specific properties (e.g., government, institutional, or vacant land) and provides limited flexibility in allocation of funds if there is not a clear nexus.**

It should be noted that Senate Bill (SB) 231 and Assembly Bill (AB) 2403 were introduced following Proposition 218 and modify definitions related to Proposition 218 in terms of what is considered a “sewer” and “water,” respectively. The modifications were intended to provide some flexibility for stormwater agencies to increase or establish rates through either a City Council vote or majority protest vote. Currently, no communities have sought to establish a new stormwater fee using these means and, according to the California Stormwater Quality Association, the Howard Jarvis Taxpayers Association, a California lobbying and policy organization, has indicated they intend to challenge any community that attempts to institute a stormwater fee using the SB 231 approach<sup>10</sup>. The San Diego City Attorney has also reviewed both legislative items and related case law and has recommended that **Proposition 218 voter requirements are followed to minimize the risk of a legal challenge.**<sup>11</sup>

## Funding Mechanism Considerations

For each of the funding mechanism types, a number of methodologies and other factors need to be considered to estimate ratepayer impacts and revenue generation potential. Following is a comprehensive list of funding mechanism considerations, including whether they are explicitly represented in the initial scenarios:

- **Ratepayer impacts:** Ratepayer impacts will be informed by the interaction of a variety of factors, including equity and affordability, political will, internal and external stakeholder preferences, and voter willingness to pay. Ratepayers are often grouped into “customer classes” like SFR, MFR, and nonresidential. *The initial funding mechanism scenarios provide either median annual bills or distributions of potential ratepayer impacts for broad customer classes.*
- **Methodology:** A number of methods exist by which a tax or fee would be assessed and applied to a ratepayer (e.g., flat parcel, land-use based, intensity of development, or

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<sup>10</sup> California Stormwater Quality Association. Funding Resources Overview and Background.

<https://www.casqa.org/resources/funding-resources/overview-and-background>.

<sup>11</sup> City of San Diego, Office of the City Attorney. April 22, 2021. *Legal Update to 2012 Memorandum of Law Titled “Proposition 218 Impacts to Storm Drain Fees.”*

impermeable area). *Commonly used stormwater methodologies and recommended methods (property type and impermeable area) are described in the Funding Mechanism Methodologies section later in this appendix.*

- **Tiers:** Tiers can be included within each larger methodology to further refine how rates are applied. *Inclusion of tiers for SFR parcels is discussed in more detail in the Funding Mechanism Methodologies section later in this appendix.*
- **Exemptions:** Exemptions can be included for specific ratepayers, land uses (e.g., government parcels, institutional facilities, and public schools), and tax status (e.g., ad valorem exempt); however, they are applicable only to taxes (fees cannot have exemptions because of the nexus requirements). *Exemptions can be quantified using the land use and data described in this appendix.*
- **Base rate and additional components:** A base rate could be applied to a specific component of the SWD program (e.g., connection to the storm drain system) and additional components depending on services provided to the ratepayer. *This consideration might be incorporated into the analyses in the future but was not included in the initial funding mechanism scenarios.*
- **Reductions or discounts:** Reductions and/or discounts for ratepayers can be included to account for variability in the ratepayer base, affordability, or equity (e.g., low-income areas, vacant land, etc.). *Potential methods for inclusion of reductions and/or discounts are presented in the sections below.*
- **Incentives, credits, or rebates:** Incentives, credits, or rebates may be offered to ratepayers who participate in eligible stormwater-related programs (e.g., stormwater best management practices, residential rain barrels, downspout disconnections, etc.). *This consideration may be incorporated in the future but was not included in the initial funding mechanism scenarios.*
- **Fee or tax escalations:** A schedule of future fee or tax escalation may be included in a rate schedule but must be clearly defined. *This consideration may be incorporated in the future but was not included in the initial funding mechanism scenarios.*
- **Sunset clause:** A sunset clause can be included so a funding measure will cease to be in effect after a specific date, unless further legislative action or a vote is taken to extend it. *This consideration may be incorporated in the future but was not included in the initial funding mechanism scenarios.*

The initial scenarios further described below include some of these considerations, while others will be assessed iteratively in coordination with stakeholder engagement and surveys as part of the continued viability assessment for a stormwater ballot funding measure.



## Funding Mechanism Methodologies

A number of funding mechanism methodologies exist for assessing stormwater rates varying in complexity from a flat rate for all ratepayers to multitiered approaches for different ratepayer classes. Many of the methods use land use or impermeable area as a proxy for a parcel's potential to generate stormwater and/or stormwater pollutants. Each of the methods can be used by itself or in combination with others for specific ratepayer classes. Additionally, each of these methodologies can be calculated and billed based on one or a combination of the following billing units and cost allocation factors:

- **Parcel:** This unit uniformly allocates costs and recovers revenues from parcels, either uniformly for all or distinct to a property type or land use category.
- **Gross area:** This unit allocates costs and recovers revenues based on the total area of parcels. This billing unit could be applied to each parcel's unique area or used to estimate a typical value or tiers of values for each property type.
- **Impermeable area:** This unit functions similarly to gross area but allocates costs and recovers revenues based solely on the impermeable portion of a parcel area, which is characterized as any solid surface where water cannot penetrate, causing it to run off (e.g., roofs, driveways, sidewalks, and walkways) (Figure 1). Again, this billing unit could be applied to each parcel's unique area or used to estimate a typical value or tiers of values for each land use class.

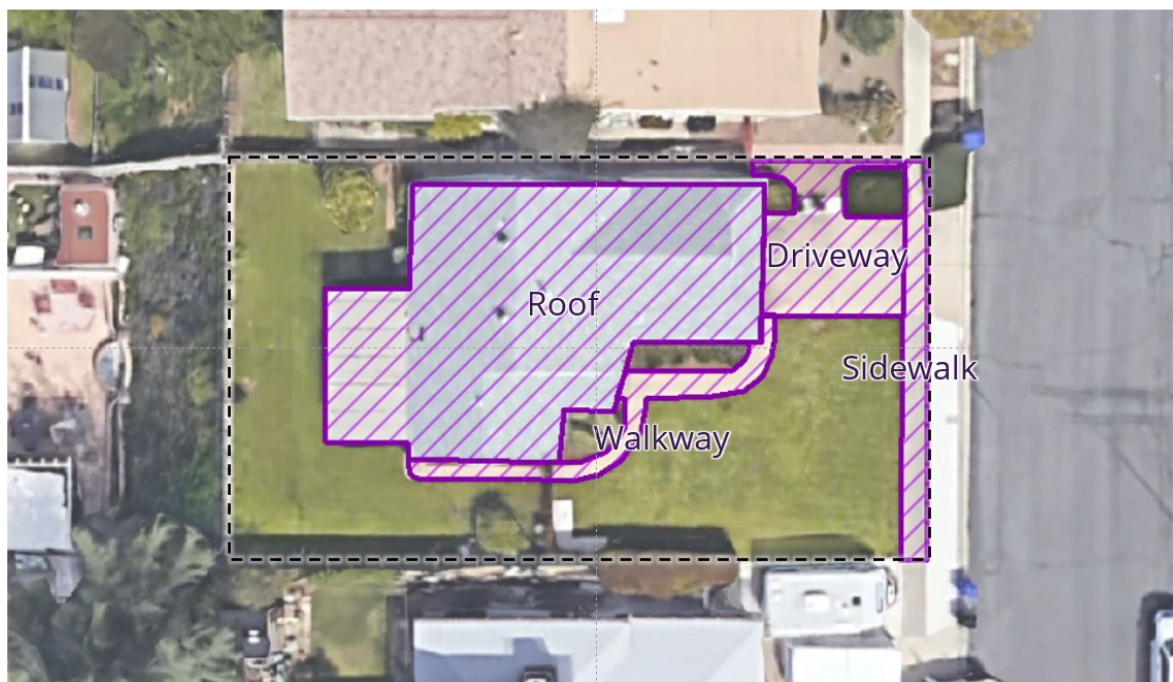


Figure 1. Example of impermeable area on a residential parcel.

Each of these units is applied under the alternative methodologies described next.

### **Flat Rate**

A flat rate methodology would apply a single rate to all ratepayers, regardless of property type or impermeable area. The billing unit for the flat rate is, therefore, a uniform rate per parcel across all land uses and parcel sizes. This rate structure would be considered highly regressive and would also not satisfy the Proposition 218 nexus requirements for a property-related fee, which require the rate charged to individual parcels to be proportional to the parcel's contribution to the overall cost of service.

### **Property type-Based Rates**

Property type-based rates are distinct rates for different property type or land use categories, including SFR, MFR, commercial, industrial, and government. Unique rates could be determined for each type based on the typical impermeable area, gross area, or a combination of the two. The rates for each property type can be flat rates or tiered to account for variability in characteristics within a property type (e.g., small, medium, and large residential parcels).

### **Impermeable Area Rates**

Stormwater rate structures based on impermeable area have been widely used because of the direct correlation between impermeable cover and the peak of stormwater runoff and pollutant loadings.<sup>12</sup> Impermeable cover is the most common basis for stormwater-related charges, with 87% of national utility leaders who responded to the 2021 Stormwater Utility Survey indicating that impermeable area is the basis for their stormwater charges.<sup>13</sup> This section describes alternative approaches to billing.

#### **Direct Impermeable Area**

This method uses the direct impermeable area for each parcel as the basis for a rate and can be considered the most equitable as it directly correlates each individual parcel's impermeable area to the amount being charged. Few municipalities use the exact amount of impermeable area on each parcel, however, because their data availability and resolution does not support such a precise calculation.<sup>14</sup>

#### **Equivalent Residential Unit (ERU)**

This method is typically applied only to the subset of SFR parcels, where the customers are billed a flat rate based on a representative sampling of typical impermeable area. This method typically involves determining the basis for one ERU, often the average or median impermeable area for SFR parcels. In many cases, several tiers of flat rates are established using ratios of ERUs up to a defined

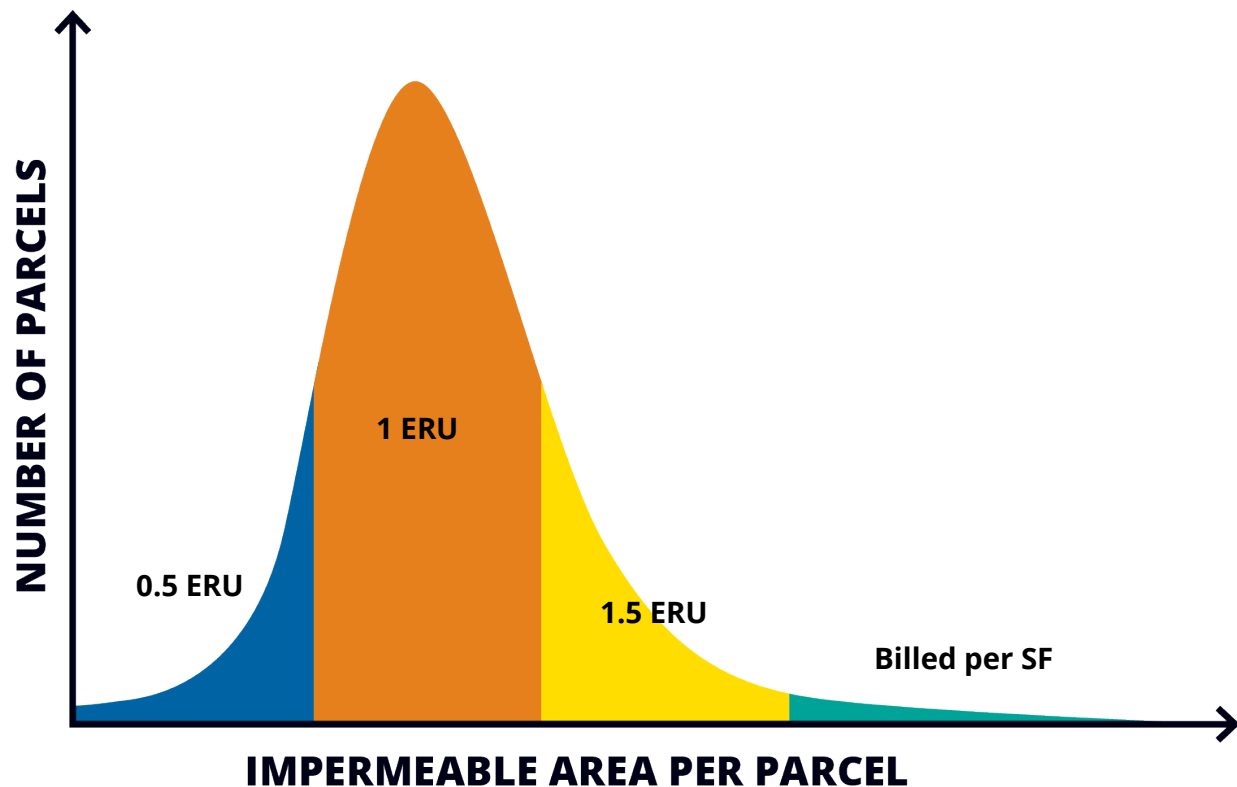
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<sup>12</sup> National Association of Flood and Stormwater Management Agencies. 2006. *Guidance for Municipal Stormwater Funding*. <https://www.epa.gov/sites/production/files/2015-10/documents/guidance-manual-version-2x-2.pdf>.

<sup>13</sup> See note 6.

<sup>14</sup> See note 13.

maximum impermeable area, above which parcels are charged on their direct impermeable area (see Figure 2).



**Figure 2. Conceptual illustration of tiered rates (ERU) for SFR parcels.**

Using a tiered basis for SFR parcels is less administratively burdensome than using the direct impermeable method, improves equity over simple flat rate and land use methods, and is also easily communicated to ratepayers. One U.S. Environmental Protection Agency fact sheet reported that more than 80% of all stormwater utilities in 2008 used ERUs as a basis for stormwater rates.<sup>15</sup>

It is worth noting that the MFR and nonresidential land use classes have much greater variability in total area and impermeable area than the SFR class. As a result, these two land uses are typically still billed based on direct impermeable area when ERUs are used for the SFR class.

### Equivalent Hydraulic Area (EHA)

This method is based on both the impermeable area and pervious area (calculated as gross area less impermeable area) and applies a runoff coefficient to each portion of the parcel area to create a new billing unit commonly called the “equivalent hydraulic area” (EHA) to quantify the total area and the degree to which that area has been improved or developed (i.e., development intensity). This approach quantifies the total area and the degree to which that area has been improved or developed, thereby, reducing the impermeable area and increasing the runoff from the parcel. It

<sup>15</sup> U.S. Environmental Protection Agency. 2008. *Funding Stormwater Programs*.  
[https://www.epa.gov/sites/production/files/2015-10/documents/region3\\_factsheet\\_funding\\_0.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/region3_factsheet_funding_0.pdf).

recognizes that a small amount of runoff occurs from pervious areas, but the majority comes from the impermeable portion. For example, this analysis assigned the impermeable area a runoff coefficient of 0.9 and the permeable area a factor of 0.1, meaning approximately 90% of the runoff and runoff pollutant loading comes from the impermeable area and 10% of the loading comes from the permeable area. This approach was analyzed using a single per-parcel rate for SFR parcels and converting it to an equivalent per-dwelling unit rate for MFR and a per-gross area acre for nonresidential parcels, all based on their respective shares of impermeable and permeable area. Similar to the ERU methodology, nonresidential parcels are often billed on a per-acre basis to address the wide range of parcel sizes included in that class.

Data requirements for this approach are often less than some other methodologies as gross area can be sourced from available land use and parcel data and development intensity can be based on actual impermeable area, developed or improved area, building footprint, or other representative data to estimate the developed portion of each parcel.

## Data Sources and Data Summaries

Each of the funding mechanism methodologies and many of the considerations (e.g., exemptions, discounts, and rebates) rely on Citywide geospatial or index data. The primary data sources used for the scenario analyses were accessed through the San Diego Geographic Information Source, or SanGIS, Regional Data Warehouse, including parcel, land cover, and building outline datasets (Table 3). The SWD incorporated supplemental datasets, including economic data, CalEnviroScreen data, and the City's Climate Equity Index (CEI), into the analysis to inform potential economic and socioeconomic considerations. This section describes each of the datasets following the table.

**Table 3. Data Sources**

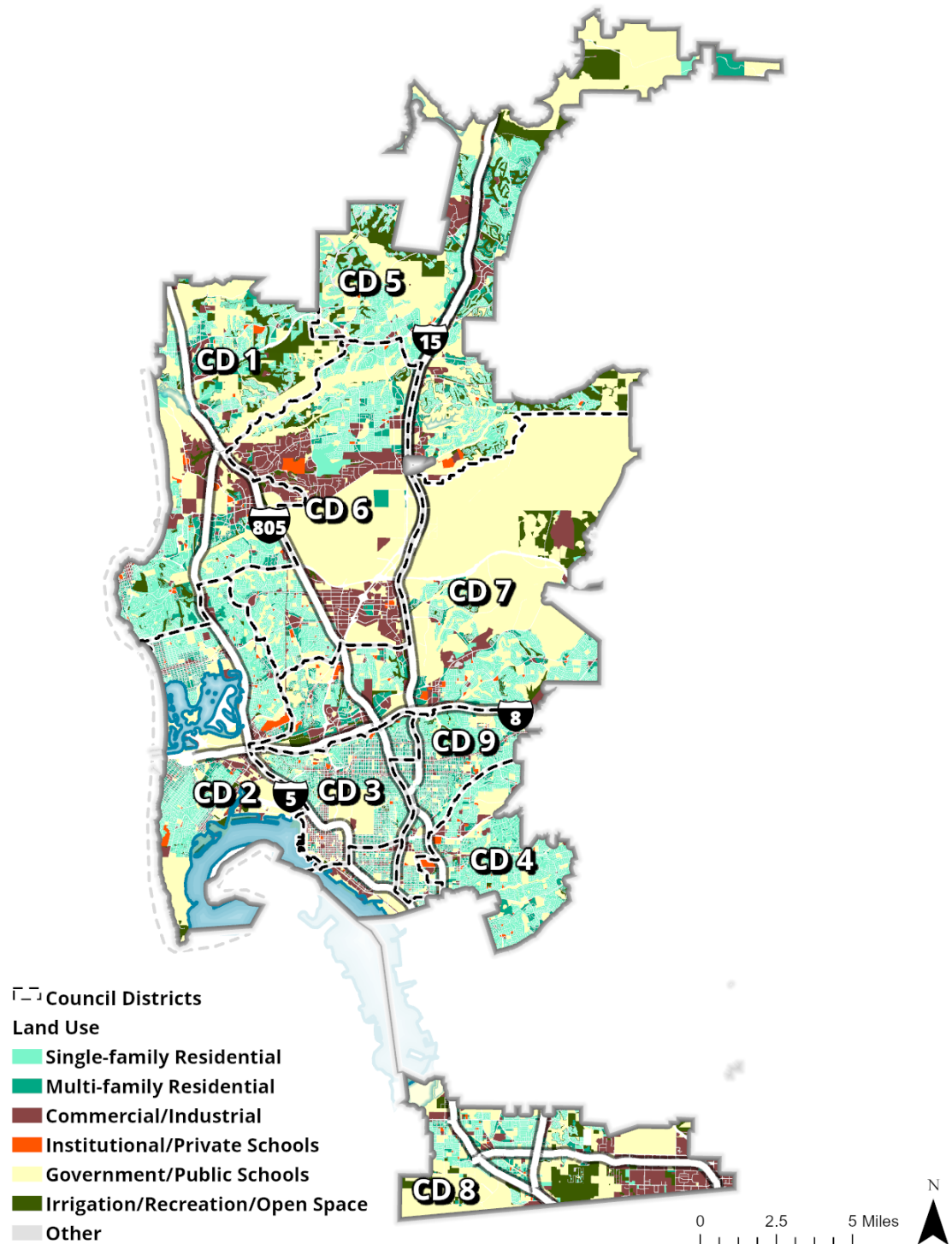
Dataset name	Date acquired	Date updated	Online link
Parcels	3/19/2021	3/1/2021 (updated weekly)	<a href="https://rdw.sandag.org/">https://rdw.sandag.org/</a> (Parcels Category)
Land Cover (LANDCOVER_SD)	3/19/2021	2/23/2017	<a href="https://rdw.sandag.org/">https://rdw.sandag.org/</a> (Ecology Category)
Buildings (BUILDING_OUTLINES)	3/19/2021	8/1/2018	<a href="https://rdw.sandag.org/">https://rdw.sandag.org/</a> (Miscellaneous Category)
Climate Equity Index	3/05/2021	3/05/2021	<a href="https://www.sandiego.gov/sustainability/social-equity-and-job-creation">https://www.sandiego.gov/sustainability/social-equity-and-job-creation</a>
CalEnviroScreen 4.0	3/22/2021	3/3/2021	<a href="https://oehha.ca.gov/calenviroscreen/report/draft-calenviroscreen-40">https://oehha.ca.gov/calenviroscreen/report/draft-calenviroscreen-40</a>

## Parcels Dataset

The parcels data layer formed the basis for funding mechanism analysis as it is the means by which bills would be attributed to potential ratepayers, whether for a property-related fee or a special parcel tax. There are over 388,000 individual records for parcels within the City, each of which is maintained by the County of San Diego Assessors Office.<sup>16</sup> Each of the parcel records contains associated land use, ownership, and gross area information relevant to this analysis. The dataset includes 197 unique land use types, which were analyzed and aggregated into more generalized categories for this effort (Figure 3). For parcels with multiple vertical units (e.g., MFR or mixed-use residential and commercial buildings), the number of units was quantified to ensure that, when the parcels are merged with the land cover and impermeable area data, the amount of impermeable coverage would not be included more than once.

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<sup>16</sup> Individual parcel records might be stacked for multilevel buildings (e.g., condominiums, and commercial and industrial buildings) and have overlapping boundaries for purposes of assessing impermeable area “on the ground.” The summation of parcels in Table 4 does not reflect the multiple parcel records that might occupy the same geographical area to prevent duplicating and overestimating the amount of impermeable cover.

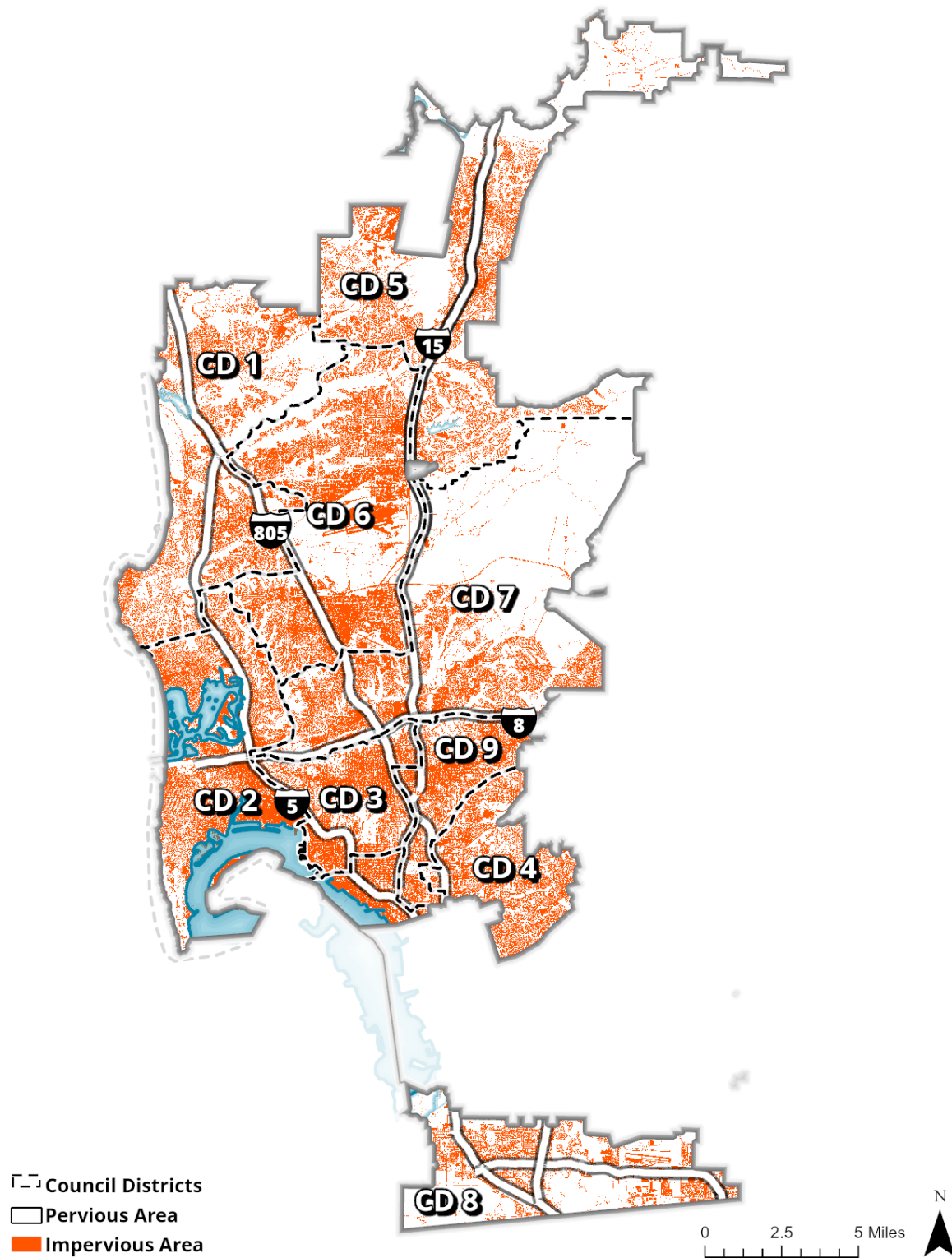


**Figure 3. Generalized land cover classifications by council district.**



### **Impermeable Cover Data—Landcover and Buildings**

The primary dataset used to estimate impermeable cover was the County land cover dataset developed in 2017 from a combination of light detection and ranging (LiDAR) elevation data and National Agricultural Imagery Program data. Both sets of data were collected in 2014. Land cover (LANDCOVER\_SD dataset) was not developed specifically for detecting impermeable surfaces but has been confirmed by the County to have the highest resolution and most accurate land cover layer available for the current analyses. That layer contains more than 13 million polygons classified into (1) tree canopy, (2) grass/shrub, (3) bare earth, (4) water, (5) buildings, (6) roads, and (7) other paved surfaces. The layer was developed to estimate tree canopy coverage rather than impermeable area and used a top-down classification approach, meaning that the first feature detected was retained. In other words, trees overlapping buildings were classified as trees. As such, the County buildings layer was used to “burn in” building footprints to improve the accuracy of the impermeable area representation Citywide (Figure 4).



**Figure 4. Impermeable area by council district.**

## Impermeable Cover Data Limitations

The LANDCOVER\_SD data being used was developed in 2017 from a combination of LiDAR elevation data collected at a resolution of 2.5 feet and National Agricultural Imagery Program data collected at 1-meter resolution. Both datasets were collected in 2014, making them 7 years old. The layer was developed to estimate tree canopy coverage rather than impermeable area and used a top-down classification approach, meaning that the first feature detected was retained. In other words, trees overlapping buildings were classified as trees. In addition, because the focus was on tree canopy coverage, significant quality assurance and quality control was not performed for smaller impermeable areas, such as driveways and sidewalks. Figure 5 illustrates locations where features such as driveways are absent from the land cover layer when an automated process for classification is used (bottom panels in the figure). In other areas, pixels were simply misclassified, such as tennis courts in the top panels being categorized as "grass/shrubs" and the automated building extents (purple) extending beyond the actual footprint into the parking lot. These errors affect smaller parcels more than larger ones and would require a time-intensive manual process to provide quality assurance and quality control. The accuracy of the LANDCOVER\_SD data should be considered in determining whether a funding mechanism would be assessed at the individual parcel level or there would be tiers or classes of ratepayers grouped together to which to assign bill categories. Note that a tiered approach is generally recommended only for SFR land use classifications; therefore, all other ratepayer classes would still require refined parcel information.



**Figure 5. Land cover classification accuracy issues.**

## Processed Parcels and Impermeable Cover Data

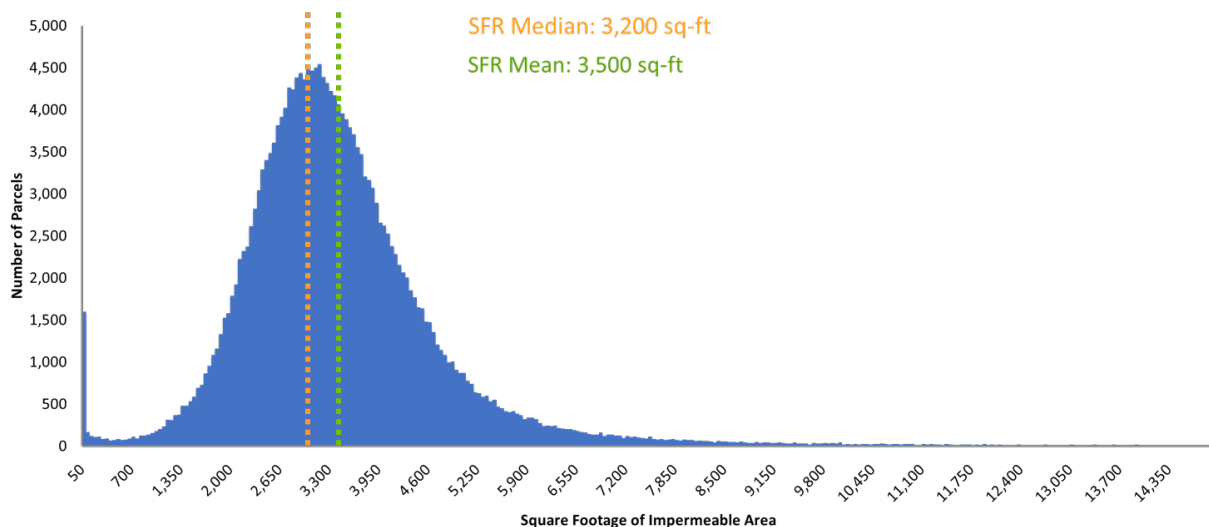
Table 4 summarizes the processed parcels data with representation of impermeable cover (using the land cover and buildings layers) by generalized land use type Citywide.

**Table 4. Summary of Parcels by Generalized Land Use Category**

Land use category	Number of parcels	Total area (sq-mi)	Total Impermeable area (sq-mi)
Single-Family Residential	214,011	65.2	26.9
Multifamily Residential	31,638	21.0	11.5
Commercial / Industrial	14,237	32.7	18.5
Private Schools / Institutions	903	3.5	1.5
Public Schools	630	9.1	4.1
Government	8,344	135.2	12.5
Other	2,253	9.2	0.9
<b>Total</b>	<b>269,763</b>	<b>266.7</b>	<b>75.0</b>

Note: sq mi = square miles.

In addition, Figure 6 presents a histogram of SFR parcels by impermeable cover with mean and median impermeable areas indicated.



**Figure 6. Histogram of SFR parcels and impermeable area.**

Similar histograms and information at the parcel scale are available for each category of land use that can be used to quantify impacts on ratepayers and estimated revenue for different funding mechanism scenarios.

## Economic Indicators—Household Income

California municipalities use a number of economic indicators to assess disadvantaged, or low-income, communities. The California Water Code defines a “disadvantaged community” as one with a median household income (MHI) or median family income at or below 80% of the state MHI. The MHI for FY2021 from the U.S. Department of Housing and Urban Development is \$90,100 for all of California, \$90,600 for metropolitan areas, and \$69,700 for nonmetropolitan areas.<sup>17</sup>

The California Department of Housing and Community Development refines the state income levels by county, variable income limits, and number of people within each household. Table 5 reproduces the income levels for San Diego County for 2021<sup>18</sup>.

**Table 5. 2021 Income Levels for San Diego County**

Number of Persons in Household		1	2	3	4	5	6	7	8
San Diego County Area Median Income: \$95,100	Extremely Low Income	\$25,450	\$29,100	\$32,750	\$36,350	\$39,300	\$42,200	\$45,100	\$48,000
	Very Low Income	\$42,450	\$48,500	\$54,550	\$60,600	\$65,450	\$70,300	\$75,150	\$80,000
	Low Income	\$67,900	\$77,600	\$87,300	\$97,000	\$104,800	\$112,550	\$120,300	\$128,050
	Median Income	\$66,550	\$76,100	\$85,600	\$95,100	\$102,700	\$110,300	\$117,900	\$125,550
	Moderate Income	\$79,850	\$91,300	\$102,700	\$114,100	\$123,250	\$132,350	\$141,500	\$150,600

Measure W, or the Safe Clean Water Program in Los Angeles County, which was a special parcel tax passed in 2018, provided a variable tax reduction/discount for property owners who qualified as either an “extremely low-income household” or a “very low-income household” based on Los Angeles County income levels.<sup>19</sup>

## CalEnviroScreen

CalEnviroScreen, which is managed by the California Office of Environmental Health Hazard Assessment on behalf of the California Environmental Protection Agency (CalEPA), is a tool used to assess potential exposure to pollutants, adverse environmental conditions, socioeconomic factors, and specific health condition indicators to rank census tracts throughout California (Figure 7). CalEnviroScreen has been used by CalEPA to define disadvantaged communities pursuant to SB 535 (the Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act) to aid in administering related grants, promoting compliance with environmental laws, and identifying opportunities for sustainable economic development. CalEnviroScreen could be used as an indicator for disadvantaged communities and will be evaluated as SWD’s funding measure development progresses. Based on census tract-level data, nearly 115,000 residents could be considered disadvantaged using this metric.

<sup>17</sup> U.S. Department of Housing and Urban Development. 2021. *Estimated Median Family Incomes for Fiscal Year (FY) 2021*. <https://www.huduser.gov/portal/datasets/il/il21/Medians2021.pdf>.

<sup>18</sup> California Department of Housing and Community Development. 2021. *State Income Limits for 2021*. <https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/income%20limits%202021.pdf>.

<sup>19</sup> Los Angeles County Flood Control District. 2020. *Safe, Clean Water Program General Income-Based Tax Reduction Procedures and Guidelines*. <https://safecleanwaterla.org/wp-content/uploads/2020/02/General-Income-Based-Tax-Reduction-PG-20200206-FINAL.pdf>.

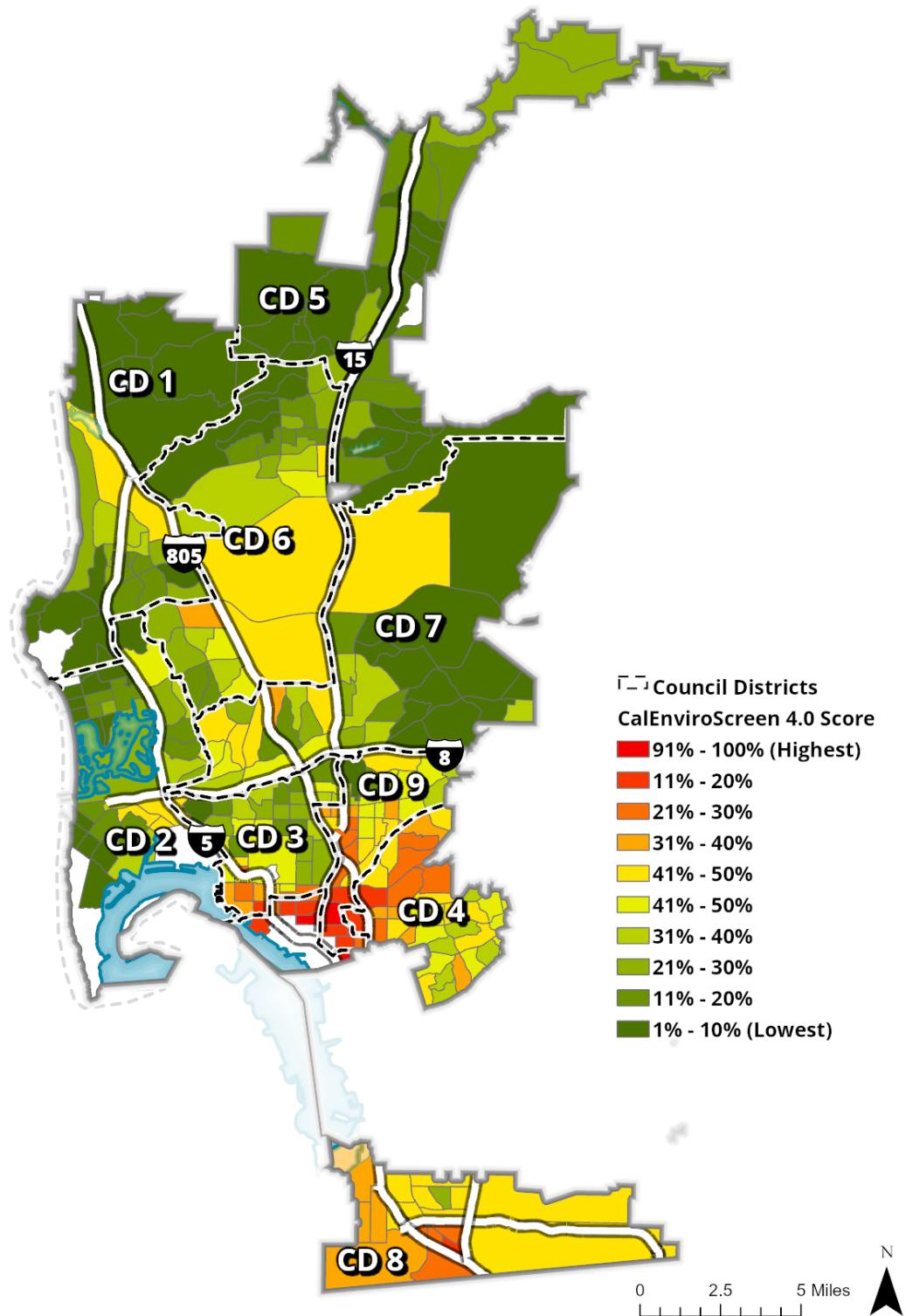


Figure 7. CalEnviroScreen 4.0 scores (currently in draft form).



## San Diego's Climate Equity Index

The City developed the CEI in 2019 through a community-driven process to address environmental justice and social equity across the City.<sup>20</sup> The CEI, which was revised in 2021, designates scores using 41 indicators (updated from 37 in 2019) across each of the 297 census tracts that intersect the City to characterize Communities of Concern. "Communities of Concern" are census tracts designated as having "very low," "low," or "moderate" levels of access to opportunity (Figure 8). The indicators used as a basis for the CEI fall into five categories: environmental, socioeconomic, housing, mobility, and health. The CEI directly incorporates information from CalEnviroScreen and also looks at economic indicators like median income and poverty rate.

One of the recommendations made in the CEI Report is to refresh the data within the CEI every 5 years, which suggests that the data would be kept relatively up to date if included in a stormwater funding measure through a discount or rebate program. Figure 8 presents the CEI scores by council district.

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<sup>20</sup> City of San Diego. 2021. *Climate Equity Index Scores*. <https://www.sandiego.gov/sustainability/social-equity-and-job-creation>.

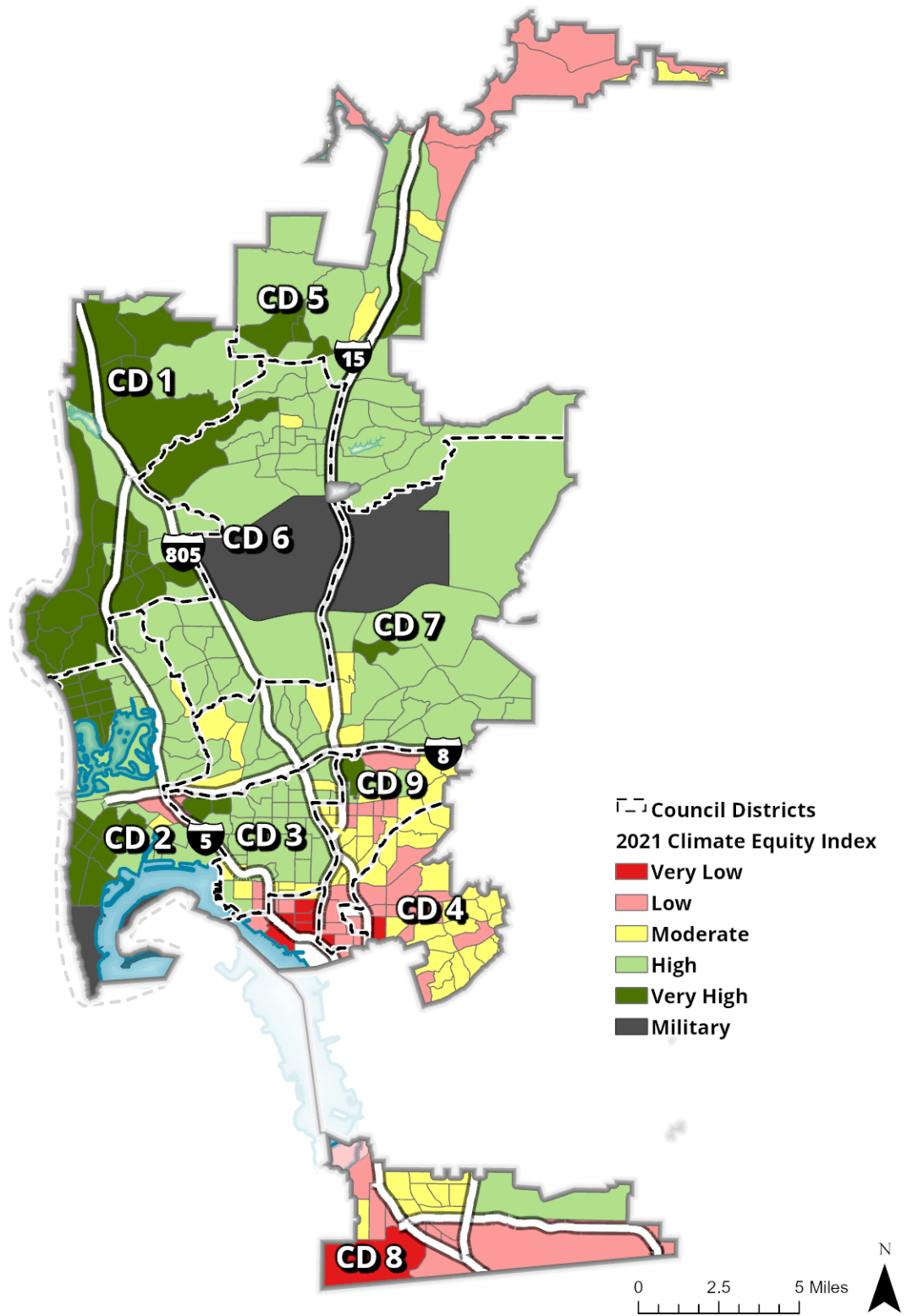


Figure 8. 2021 CEI scores by council district.

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# APPENDIX B: KEY FINDINGS FROM FY2021 VOTER SURVEYS



OPINION  
RESEARCH  
& STRATEGY

**TO** Bethany Bezak, City of San Diego

**FROM** FM3 Research

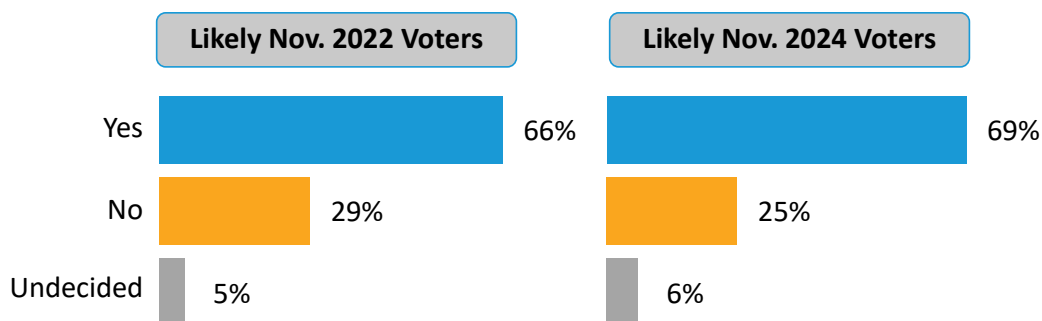
**RE:** Key Findings from Voter Surveys Assessing a Potential Stormwater Funding Measure

**DATE** May 14, 2021

In December 2020 and March 2021, Fairbank, Maslin, Maullin, Metz & Associates (FM3) conducted two surveys among voters in the City of San Diego that show **support for a measure to provide funding for stormwater infrastructure**, based on the strong sense of **need for additional funding for this purpose and high levels of importance of the funding priorities and outcomes of such a measure.**<sup>1</sup> This memo summarizes key findings from the surveys.

**Nearly two-thirds of San Diego voters likely to vote in the November 2022 election would support a possible ballot measure to fund stormwater infrastructure improvements through a parcel tax of 4¢ per square foot (SF) of impermeable area (Figure 1).** In the March 2021 survey, 66% of frequent voters likely to vote in November 2022 supported the measure, 29% opposed it, and 5% were undecided. This result shows that the potential proposal—which would require a two-thirds supermajority for passage under Proposition 218—is potentially viable, with further planning, as a ballot measure in an upcoming election. With support for the measure just under the two-thirds threshold, **it will be important for the City to educate residents further on the importance of repairing, replacing, and maintaining the stormwater system before placing the measure on the ballot.** Support is somewhat stronger among voters who are likely to participate in the November 2024 general election (which include those who participate only in Presidential general elections): 69% support the measure compared to only 25% who oppose it and 6% who are undecided.

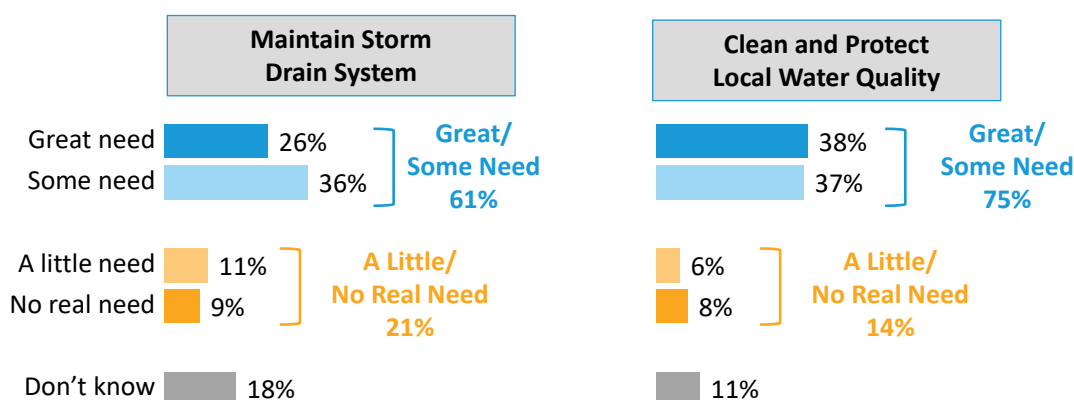
**Figure 1: Opinions on Ballot Measure to Fund Stormwater Infrastructure with Parcel Tax of 4¢/SF of Impermeable Area**  
*4¢/Sq-ft of Impermeable Area*



Notably, support for the measure is broad across demographic groups, including both homeowners and renters; among different age groups, racial/ethnic groups, and genders; and in the various geographic areas of the City.

One reason support for the stormwater funding measure is so high is that a strong majority of voters agree that the City of San Diego needs more funding to maintain its storm drain system. Three-quarters of respondents also recognized the need for funding to clean and protect local water quality - one of the most significant outcomes of stormwater system management (Figure 2). In the December 2020 survey, more than six in 10, or 61% of, respondents said the City has either a “great need” or “some need” for additional funds to maintain its storm drain system. An additional 11% said the City has “a little need” for additional funding, while less than 10% said the City had “no real need.” Notably, 18% of respondents said they did not know about the City’s need for additional funding to maintain its storm drain system, indicating an opportunity for public outreach and communication. Further, voters even more clearly recognize the need for funding to clean and protect local water quality, which would be one of the outcomes of maintaining the storm drain system. A full three-quarters, or 75%, of voters said the City had a “great need” or “some need” for funding to clean and protect local water quality, with nearly 40% describing the need as “great.” Just 14% said the City had “a little need” or “no read need,” with 11% who were unsure.

**Figure 2: Opinions on the Need for Additional Funding**



Another reason for the measure’s popularity is that very large percentages of San Diego voters consider important many of the funding priorities and outcomes that could be achieved through this measure (see Figure 3). The five highest rated priorities, with more than 80% of respondents rating them as “very important” or “important” (a 6 or 7 on a scale of 1 to 7), included:

- “Protecting the local supply of clean drinking water” (87%)
- “Keeping trash, liquid toxins, and pharmaceuticals out of our creeks, bays, lagoons and coastal waters, and off of our beaches” (82%)
- “Maintaining the highest possible standards of water quality” (82%)
- “Improving and protecting water quality” (80%), and
- “Reducing pollution, trash, toxins/plastics entering local waterways, bays, oceans (and) beaches impacting public health and marine life” (80%).

Other highly rated priorities included “Protecting marine life” (78%), “Protecting public health” (75%), “Preparing for future droughts” (74%), and “Increasing safe drinking water supplies” (74%). Taken together, they show the high level of interest in funding the varied goals and purposes of this potential ballot measure.

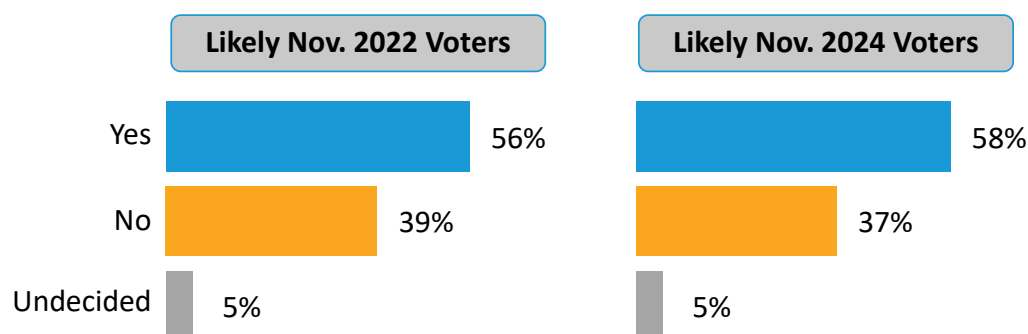
**Figure 3: Priorities for San Diego Stormwater Ballot Measure**

Priorities	% “Very Important” or “Important”
<i>Protecting the local supply of clean drinking water</i>	87%
<i>Keeping trash, liquid toxins, and pharmaceuticals out of our creeks, bays, lagoons, and coastal waters and off of our beaches</i>	82%
<i>Maintaining the highest possible standards of water quality</i>	82%
<i>Improving and protecting water quality</i>	80%
<i>Reducing pollution, trash, toxins/plastics entering local waterways, bays, oceans (and) beaches impacting public health and marine life</i>	80%
<i>Protecting marine life</i>	78%
<i>Protecting public health</i>	75%
<i>Preparing for future droughts</i>	74%
<i>Increasing safe drinking water supplies</i>	74%
<i>Capturing rain and stormwater for drought preparedness</i>	69%
<i>Preventing damage to roads from failed water pipes</i>	67%
<i>Maintaining pipes and channels that carry stormwater</i>	66%
<i>Preventing potholes, sinkholes, and flooding due to failed stormwater infrastructure</i>	66%
<i>Preventing flooding of streets, homes and businesses</i>	66%



The March 2021 survey also tested the same ballot measure funded instead by a parcel tax with different rates based on property type—\$89 per single-family residence, \$69 per multifamily residence, and \$500 for other property types. While the measure received majority support, it did not reach the two-thirds supermajority necessary for passage (Figure 4). Fifty-six percent of likely November 2022 voters said they would support this measure, as did 58% of likely November 2024 voters. With the requirement of a two-thirds vote for passage, however, a measure with a funding mechanism of this type is likely not viable in the near-term.

**Figure 4: Opinions on Ballot Measure to Fund Stormwater Infrastructure Funded with Parcel Tax Based on Property Types**  
*\$89 Single-Family Residences, \$69 Multi-Family Residences, \$500 Other Properties*



### Conclusions

A strong majority of City of San Diego voters support a potential ballot measure to provide funding to improve stormwater infrastructure and other aspects of stormwater management through a parcel tax of 4¢/SF of impermeable area. This support is broad and crosses demographic and geographic subgroups throughout the City. Since the measure requires a two-thirds vote to be successful and voters strongly prioritize many of the outcomes of this potential ballot measure, the City should consider continuing and expanding educational outreach efforts about the importance of improving the storm drain system and other aspects of stormwater management, so that that residents can be more fully informed when making their decision as to whether to support a potential measure.

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**Survey Methodology:** This memo includes the results of two surveys of City of San Diego registered voters with a voting history that makes them likely to vote in the November 2024 election, a subset of whom have a voting history that also makes them likely to vote in the November 2022 election. Results are presented of respondents likely to vote in November 2024 except where indicated. Both surveys used a combination of online and telephone interviewing.

- 1) December 2–9, 2020: 1,034 interviews with Likely November 2024 voters; margin of sampling error of  $\pm 3.3\%$  at the 95% confidence level.
- 2) March 18–25, 2021: 1,006 interviews with Likely November 2024 voters; margin of sampling error of  $\pm 3.5\%$  at the 95% confidence level. 725 interviews with Likely November 2022 voters; margin of sampling error of  $\pm 4.1\%$  at the 95% confidence level. Higher margins of error for subgroups.

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# APPENDIX C: STAKEHOLDER ENGAGEMENT AND OUTREACH SUMMARY

# Appendix C: Stakeholder Engagement and Outreach Summary

## Introduction

The City of San Diego Stormwater Department (SWD) has developed and implemented communication and public outreach activities to engage stakeholders and community members in understanding the importance of stormwater and the need to create a dedicated funding strategy to improve the City's stormwater management efforts, creating a more resilient and sustainable San Diego and protecting and improving quality of life. In June 2018, the Office of the City Auditor (OCA) completed a performance audit of the City of San Diego's (SWD) titled *Performance Audit of the Storm Water Division*. The Audit identified opportunities for improving the Department's Division's operations and maintenance of stormwater infrastructure and management programs; enhancing the efficiency of management, monitoring, and reporting activities; and significantly increasing stormwater revenues.

The Audit identified stakeholder engagement as an integral element of developing an effective funding strategy, including both stakeholders internal to the City as well as external stakeholders like organizations, associations, other public agencies, and residents. The Audit further suggested that stakeholder and public input should be incorporated into the development of the Funding Strategy (Recommendation #5) through mechanisms like focus groups, interviews, meetings, and surveys. Also included in the Audit is a finding that awareness and understanding of what the SWD does, and its existing funding are insufficient; the Audit recommends developing a strategic communications plan (Recommendation #4).

Recommendation #5 of the Audit was to develop a long-term funding strategy), and that as part of that funding strategy, a recommendation be made about whether to further explore one or more long-term funding mechanisms, taking into account benchmarking of other communities that had passed successful stormwater funding measures (Recommendation #6).

The City of San Diego recognizes that stakeholder and community engagement is a critical element in establishing a funding strategy that works for all neighborhoods. The City is committed to open, inclusive, and ongoing communication with stakeholders and communities throughout the development of an expenditure plan and funding mechanism that will support funding for the SWD to ensure our stormwater system is operating safely, efficiently, and effectively and upgrades and maintenance occur regularly.

This appendix summarizes public outreach activities conducted to date, which, for purposes of this document, are considered to have started in January 2019 when the OCA completed the Audit, with a ramp up in early 2021 in conjunction with SWD's briefings to the City Environment Committee on January 28, 2021, and City Council on February 9, 2021. It also summarizes planned activities going

forward. An at-a-glance view of the types of communication and outreach activities conducted, stakeholders reached, and stakeholder and community feedback are included as well.

## **Engagement and Outreach Objectives and Key Audiences**

The purpose of stakeholder and community engagement and outreach is to provide the public with opportunities to help shape the expenditure plan and funding mechanism. In communication and engagement activities for the project, the City team is using a multipronged approach to disseminating information and collecting stakeholder and community input about the SWD, including conveying and raising awareness and understanding of the importance of its services; its increased role and responsibilities, including regulatory requirements; the associated funding gap and needs; and the purpose of and need for a funding strategy and the associated expenditure plan and funding mechanism. Engagement activities have been focused on providing early, comprehensible, and accessible information to the public and obtaining a broad representation of interests.

The following objectives for stakeholder communication and engagement were identified to guide the City team in developing informational materials and engagement opportunities:

- Raise awareness and clearly communicate the need for a funding strategy to support future stormwater management efforts.
- Communicate stakeholders' role in developing the Funding Strategy and how their input will be used to develop an expenditure plan and funding mechanism.
- Conduct an open and transparent planning process that provides a variety of opportunities for participation.
- Solicit input, ideas, and feedback to develop the expenditure plan and funding mechanism.
- Establish and maintain open communication channels to share information and proactively identify and respond to concerns.
- Report to the public and decision-makers on decisions made throughout the funding strategy development process.

There are myriad audiences who have varying awareness of stormwater issues and consume information in different ways and through different mediums. Customized approaches for communicating with each of these audiences was developed to frame the conversation on topics of most interest to specific stakeholders. Key audiences include the following:

- City of San Diego residents and property owners
- City of San Diego business owners
- City of San Diego elected officials and staff
- Other City of San Diego departments and divisions
- Community groups

- Communities of concern
- Regulatory agencies
- Environmental organizations
- Economic development organizations
- Industry
- Landowners with pollution prevention best management practices (BMPs) on their property
- Media

At this initial phase of funding strategy implementation, stakeholder engagement has focused on introducing the Funding Strategy to key stakeholders, identifying high-level areas of concern and interest, identifying ways to continue engaging with groups, and obtaining initial high-level feedback on the goals and objectives of an expenditure plan and funding mechanism.

Sentiment could be categorized as generally positive and supportive of the notion for adequate funding of the SWD and development of the Funding Strategy. Stakeholders expressed positive sentiment for SWD's efforts to engage stakeholders early in the process.

### **Communications and Outreach Activities at a Glance**

The City team leveraged the Think Blue program to reach a broader community on the importance of stormwater pollution prevention, BMPs, operations, and maintenance for improved quality of life. To guide communication activities, a fiscal year FY2021 strategic communications plan was developed and implemented create a cohesive and comprehensive program. Furthermore, new Think Blue branding, a style guide and templates were developed that connect the program with the SWD to guide creation of materials for a refreshed Think Blue brand.

In summary, major initiatives of the communications and outreach program included the following:

- Development of a ThinkBlue.org website to reinvigorate the Think Blue brand, host multimedia and informational materials as well as information on events, communicate the importance of stormwater and how San Diegans can help prevent pollution, and promote various stormwater pollution prevention and quality-of-life campaigns.
- Update of the SWD/Think Blue web page on the City's website (sandiego.gov) to post information about the Funding Strategy and as a repository of related informational materials.
- Social media postings—Leveraging the City's social media accounts (Facebook, Twitter, Instagram, NextDoor) and the Think Blue Facebook page to regularly share relevant information, accomplishments, and pollution prevention BMPs.

- Developing and updating fact sheets—Developing a fact sheet on the Funding Strategy and updating a large portfolio of stormwater BMPs fact sheets for stakeholders, residents, and business owners on how they can help reduce stormwater pollution. The fact sheets have been posted to the website and distributed to stakeholders and community members.
- Developing frequently asked questions (FAQs)—Developing a set of FAQs on various stormwater topics to answer questions stakeholders and community members have on implementing pollution prevention BMPs and impacts on them.
- Developing a slide presentation and talking points—Preparing a presentation slide deck to provide an overview of the funding strategy initiative to assist with engagement briefings.
- Producing videos—Launching campaigns in partnership with nongovernmental organizations (e.g., Coastkeeper), such as producing videos on trash cleanup and overwatering as it relates to pollution prevention and sharing videos on multiple social media platforms.
- Compiling a mailing list—Compiling a stakeholder and community email list to reach interested parties through e-blasts. A concerted effort was made to expand the list to reach a diverse and comprehensive breadth of potentially interested parties.
- Conducting surveys—In addition to formal research surveys (see Appendix B), the SWD conducted its annual stormwater channel maintenance prioritization survey. As a map-based survey, it provided interested parties with an opportunity to voice their selection of stormwater channels to be prioritized for maintenance in the upcoming fiscal years. The survey was advertised through social media, a news release to media, and eblasts.
- Sponsoring and participating in events—In partnership with other City departments and nongovernmental organizations, the SWD sponsored or participated in various events, such as the following:
  - Coastkeeper
    - Beach Cleanups (15 in 2019)
    - Creek to Bay Cleanup Day (April 20, 2019)
    - Project SWELL Classroom Presentations (31 in 2019, 10 in 2020, and 17 so far in 2021)
  - I Love A Clean San Diego
    - Auburn Creek Cleanup (February 8, 2020, and January 21, 2021)
    - Coastal Cleanup Day (September 21, 2019 and September 26, 2020)
    - Creek to Bay Cleanup (April 27, 2019; June 20, 2020 [virtual]; and April 24, 2021)



- Cupid's Cleanup at Los Peñasquitos Watershed (February 9, 2019, and February 15, 2020)
- Hollywood Canyon Cleanup (March 11, 2021)
- October Fest Cleanup (October 26, 2019)
- Other Canyon Cleanup Events (eight in 2020 and two so far in 2021)
- Pet Outreach Events (eight in 2019 and three in 2020)
- Storm Drain Stenciling Day (March 30, 2019; November 23, 2019; and May 22, 2021)
- Swan Canyon Cleanup (February 4, 2021)
- Trash or Treat: Halloween Community Cleanup (October 31, 2020)
- Watershed Classroom Presentations (six in 2019, 12 in 2020, and 22 so far in 2021)
- Project Clean Water
  - Launched Weekly Pledge Campaign "52 Ways to Love Your Water"
  - World Water Day—New Website Launch and Media Event (March 22, 2021)
- WILDCOAST
  - Floating/Shoreline Labs (three in 2019 and two in 2020)
  - Outdoor Voices Fishing Program (April 1, 2021)
  - Price Philanthropies Fellows Virtual Event (February 20, 2021)
- Think Blue (events where a Think Blue table/booth is set up)
  - Asian Film Festival (July 16, 2019)
  - Auto Show (January 1–4, 2020)
  - December Nights (December 6–7, 2019, and December 4–6, 2020)
  - San Diego County Fair (June 1, 2019)
  - Science Fest (March 7, 2020)
- San Diego River Park Foundation
  - Estuary Kayak Cleanup (January 11, 2020)
  - San Diego River Days (May 26–30, 2020, and May 8–16, 2021)
- Outreach for Municipal Separate Storm Sewer System (MS4) permit compliance—While many of the other activities assist with complying with the MS4 permit, the permit also

specifies that outreach activities targeting certain audiences must be conducted to aid in pollution prevention. For example, the City conducted outreach to trash haulers and property managers about power washing, outreach about street sweeping, outreach and trainings for homeowners' association managers and maintenance district managers, outreach to homeowners with agricultural properties, trainings for mobile water-using businesses, and outreach about pet waste cleanup and car washing.

- Translation of materials—Key information, such as fact sheets, FAQs, and presentations, were translated into Spanish and made available online.

### **Stakeholder Activities at a Glance**

Engaging stakeholders, including community members, industry, and subject matter experts, is a critical component of the City's Funding Strategy initiative. The SWD conducted introductory calls and emails, provided updates and presentations, and answered questions.

A stakeholder engagement strategy was developed to guide the process in a phased approach, so that feedback received would effectively inform development of the expenditure plan and funding mechanism.

The phased approach is structured as follows:

- Phase 1: Informal introduction to the Funding Strategy via stakeholder point of contact (February–April 2021)
- Phase 2: Formal presentations to groups—Speaker's bureau (April–May 2021)
- Phase 3: Additional engagement with stakeholder groups and community-wide engagement (May–June 2021)
- Phase 4: Updating stakeholder and community groups and continuing relationship-building (June 2021–2022)

Stakeholders engaged to date include the following:

- Biocom
- BOMA—Government Affairs Committee
- Building Industry Association—City/County Legislative Committee
- Canyonlands
- Chollas Creek Coalition
- Climate Action Campaign
- Equity Working Group

- Friends of Rose Creek
- Industrial Environmental Association—Water Committee
- NAIOP Legislative Committee
- Port of San Diego
- San Diego Coastkeeper
- San Diego County Taxpayers Association
- San Diego Green New Deal Alliance
- San Diego Regional Chamber of Commerce—Sustainability and Infrastructure Committee
- San Diego River Park Foundation
- Southeastern San Diego Community Planning Group
- Water Reliability Coalition

Although the following organizations might be associated with committees and coalitions listed above, they may also receive separate briefings for further engagement as the engagement program progresses in FY2022.

- AGC San Diego
- American Institute of Architects
- Asian Business Association
- Central San Diego Black Chamber of Commerce
- Chicano Federation
- Community Planners Committee
- Downtown San Diego Partnership
- Indigenous Peoples/Native American groups
- NAACP
- Port Tenants Association
- San Diego Foundation
- San Diego Regional Economic Development Corporation
- School districts
- South County Economic Development Council
- Stakeholders for MS4 permit compliance
- Urban Land Institute San Diego/Tijuana

Stakeholders contacted by the SWD were asked to provide feedback on the goals and objectives of the expenditure plan and funding mechanism presented and to encourage dialogue for future input opportunities related to other components of funding strategy implementation. Stakeholder engagement focused on providing an overview of the SWD and Funding Strategy, and introduction to the expenditure plan, specifically the program goals and objectives and expenditure plan components. The participant feedback sought focused on program goals and objectives and an initial overview of the expenditure plan components.

### **Stakeholder and Community Feedback**

Through the stakeholder engagement and activities described above, the primary interest areas and concerns identified include the following:

- Interest in being involved in developing the expenditure plan and funding measure
- Interest in short- and long-term plans and how stakeholders can help
- Fiscal spending and exploring legitimacy and justification of costs
- Interest in exhausting funding sources before levying new taxes/fees that require voter action
- Timing of levying a tax or fee in consideration of economic impacts resulting from the COVID-19 pandemic
- Reducing costs to taxpayers/ratepayers as low as possible
- Ensuring the right combination of funding mechanisms
- Equity
- Multi-benefit projects
- Green infrastructure
- Environmental impact and increased costs of deferred maintenance resulting in emergency work
- City and department coordination for efficiencies and consistency in City messaging and information to constituents
- Efficiencies of overlapping/consolidating projects to help save money
- Specific flooding issues, channel maintenance, projects, and areas to be addressed
- Flood issues and water quality as it relates to quality of life
- Maximizing grant/funding opportunities and partnering with nonprofits

- Maximizing state and federal funding and financing
- Workforce development
- Stormwater harvesting and application to industrial use and how to make this happen within City structures
- Finding efficiencies in cost, innovation, and integration of systems
- Finding win-win solutions for environment, water quality, and industry needs, including benefits to industry and ratepayers
- The City developing a program for large industry and commercial users to discharge stormwater into the sanitary sewage system, or an alternative compliance program akin to mitigation credits, ensuring our ability to maximize stormwater as a water resource
- Interest in what will be identified to be funded/allocation of funding from taxes/fee
- Improvement on how SWD spends funds on capital improvements
- Innovation in pollution prevention, street sweeping, and trash capture devices
- Increased cost of complying with the state's regulatory requirements/MS4 permit compliance
- Climate change considerations
- Investing based on science and best technology/practices from other utilities (e.g., real-time controls)

The SWD intends to continually engage stakeholders and the community throughout the Think Blue communications program and to continually make information available to interested parties so they can be up to date and informed on the Funding Strategy program. It may be advisable to consider forming a diverse Working Group to help ensure various stakeholders can collectively discuss key aspects of the Funding Strategy and make tangible recommendations for the City to consider and include in their planning efforts that might be key to the success of any future funding initiative.

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# APPENDIX D: FUNDING STRATEGY IMPLEMENTATION ACTION PLANS



# Appendix D: Funding Strategy Implementation Action Plans

## Introduction

The City of San Diego (City) Stormwater Department (SWD) recently completed the *Stormwater Funding Strategy* (the “Funding Strategy”) in response to Recommendation #5 of the June 2018 performance audit of the SWD by the Office of the City Auditor titled *The Storm Water Division Can Further Improve the Efficiency of Its Infrastructure Maintenance and Code Enforcement Efforts, but the City Ultimately Needs to Address Significant Storm Water Funding Shortages*<sup>1</sup> (“the Audit”). The Funding Strategy included the following implementation actions:

- Implementation Action I: Maximize and accelerate implementation of efficiencies
- Implementation Action II: Increase investment in SWD program innovation
- Implementation Action III: Maximize existing funding sources, grants, and loans
- Implementation Action IV: Pursue development of a long-term dedicated stormwater funding mechanism

The Funding Strategy identified an associated plan for efforts to be pursued for each of these implementation actions to guide near- and long-term efforts. This appendix presents each of the identified implementation actions, the efforts being pursued under the associated plan for each action, and progress updates through the end of FY2021.

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<sup>1</sup> City of San Diego. 2018. *Performance Audit of the Storm Water Division*. Office of the City Auditor.  
[https://www.sandiego.gov/sites/default/files/18-023\\_storm\\_water\\_division\\_0.pdf](https://www.sandiego.gov/sites/default/files/18-023_storm_water_division_0.pdf).

## Implementation Action I: Maximize and Accelerate Implementation of Efficiencies

Implementation Action Detail	Pipe Repair Team	Optimize Street Sweeping Routes
Implementation Action Effort:	The SWD has determined that many pipe repairs and replacements can be performed by its staff rather than going through the full Capital Improvement Program (CIP) process for eligible projects, which will allow for more cost-effective and timely repairs. The SWD also determined that doubling the size of the in-house pipe repair team would support incremental increases in capability to enable the team to complete the current backlog of repairs that are past their useful life by FY2025 and that the team would be able to address CMP segment repairs reaching expiration in real time by FY2027.	In alignment with the <i>Performance Audit of the Transportation and Stormwater Department's Street Sweeping Section</i> (the "Street Sweeping Audit"), the SWD will use data to effectively monitor and make timely adjustments to route priorities and sweeping frequencies to improve efficiency of operations.
Implementation Action Plan included in Funding Strategy:	Continue to prioritize an additional in-house pipe repair crew as part of all General Fund requests in FY2022.	Analyze street sweeping frequency in alignment with the Street Sweeping Audit by December 2021 and modify routes or frequencies in FY2023 as appropriate.
FY2021 Implementation Action Progress:	An additional pipe repair team requested by the SWD was included in the Mayor's FY2021 Proposed Budget.	The SWD analyzed the percent of miles swept and total debris collected annually to develop key performance indicators (KPIs) per the Street Sweeping Audit. The KPIs will be implemented in June 2021.
FY2022/FY2023 Implementation Plan Critical Path Items:	FY2022: <ul style="list-style-type: none"> <li>Addition of a new in-house pipe repair team.</li> </ul>	FY2022: <ul style="list-style-type: none"> <li>Analyze street sweeping data from FY2019 through FY2021 and conduct comprehensive assessments of routes, pollution generation potential and priority watershed areas.</li> <li>Assess addition of posted routes and/or other programmatic considerations following assessment.</li> </ul>
FY2022 Budget and/or Resource Requests and Approval/Denied Status:	FY2022 Approved Budget: Full-Time Equivalent (FTE) Staff: 25.00 Expenditures: \$2,435,998 Revenue: \$1,700,000	Current SWD resources will be used.

Implementation Action II: Increase Investment in SWD Program Innovation

Implementation Action Detail:	Data Dashboard	Alternative Compliance Program (ACP)	Integrated Planning (IP) Framework	Stormwater Harvesting
Implementation Action Effort:	The data dashboard work plan was completed in FY2021. It is anticipated that the dashboard will provide an internal interface and access to the centralized data “hub” currently being developed for the SWD. The data dashboard will provide information for development of stormwater regulatory compliance annual reporting and possibly include external facing annual reporting and compliance information for access by the public and regulators.	The ACP is an optional compliance pathway included in the municipal separate storm sewer system (MS4) permit that allows for priority development projects to achieve compliance off-site if the projects meet specific criteria. The SWD has developed a specific off-site ACP that will maintain stormwater requirements but will also provide opportunities for more centralized projects and potential for accelerated project delivery through partnerships with private industry and developers.	The U.S. Environmental Protection Agency’s (EPA’s) IP Framework provides an integrated approach to planning and implementation that can be used to meet multiple Clean Water Act (CWA) requirements (e.g., stormwater, wastewater, etc.). The IP Framework enables the City to evaluate requirements and obligations across regulations to best prioritize and sequence investments to comprehensively meet human health and water quality objectives for different pollutants, while considering the City’s and its citizens’ ability to fund the obligations. An IP approach prioritizes more efficient, sustainable, and comprehensive solutions to implement such as green infrastructure and larger scale stormwater capture projects that improve water quality, manage flood risk, and potentially augment local water demand. A key component of the IP Framework is a commitment to implement it, as demonstrated through attainment of tangible milestones, in order to maintain compliance under the Framework.	The City is evaluating potential cost-effective ways to diversify its water portfolio by harvesting urban runoff as a water source. The alternatives being assessed include groundwater recharge for potable use, green infrastructure, on-site irrigation, small-scale storage and use, flow-through treatment, dry weather diversions, and dry- and wet-weather diversions to the Pure Water program.
Implementation Action Plan included in Funding Strategy:	The SWD will develop analytical tools and data dashboard(s) to track performance metrics and allow for optimized, real-time decision-making in FY2022. Dashboard information also will be used for annual reporting required by the MS4 permit.	The Environmental Impact Report (EIR) for the ACP will be presented to City Council for approval by the end of FY2022, with program implementation targeted for FY2023.	Continued development of the IP Framework and coordination with the Regional Water Quality Control Board (RWQCB) and other stakeholders is anticipated to continue as part of the RWQCB’s MS4 permit reissuance process. Based on the permit reissuance schedule, the SWD will develop an IP outline, gather key stakeholder input, and formulate key recommendations to discuss with the RWQCB.	In partnership with the Public Utilities Department (PUD), the SWD is investigating opportunities to integrate stormwater capture activities to achieve both water quality and water supply goals by developing a comprehensive stormwater harvesting strategy.
FY2021 Implementation Action Progress:	<ul style="list-style-type: none"> <li>Completion of scope and work plan for data dashboard development.</li> </ul>	<ul style="list-style-type: none"> <li>Presentation of recommendations to the Mayor’s Office.</li> <li>Engagement with key public stakeholders, including meeting of the ACP Technical Advisory Committee.</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate initial stakeholder outreach with Funding Strategy team.</li> <li>Update financial information based on updated Watershed Asset Management Plan.</li> <li>Formulate a recommendation on the timeline to pursue the IP Framework as part of the Funding Strategy and Citywide Compliance Strategy.</li> </ul>	<ul style="list-style-type: none"> <li>In FY2021, the SWD and PUD continued assessing the feasibility of dry-weather flow diversion and diversion of stormwater for indirect potable use and/or recycling to determine technical, regulatory, and high-level cost implications.</li> <li>Results suggested that urban runoff harvesting might be viable and cost competitive with other runoff</li> </ul>

Implementation Action Detail:	Data Dashboard	Alternative Compliance Program (ACP)	Integrated Planning (IP) Framework	Stormwater Harvesting
			<ul style="list-style-type: none"> <li>Track and evaluate legislation related to IP and Financial Capability Assessments (e.g., Senate Bill 426).</li> </ul>	management strategies in the City's Water Quality Improvement Plans (i.e., green infrastructure).
FY2022/FY2023 Implementation Plan Critical Path Items:	Q2 FY2022: <ul style="list-style-type: none"> <li>Develop online dashboard and process for migrating asset data to SAP.</li> </ul> Q1 FY2023: <ul style="list-style-type: none"> <li>Implement online dashboard.</li> </ul>	Q1 FY2022: <ul style="list-style-type: none"> <li>Initiate the EIR process, including conducting a public scoping meeting, initiation of a Citywide review effort, and conducting stakeholder engagement.</li> </ul> Q2 FY2022: <ul style="list-style-type: none"> <li>Finalize Citywide review of the ACP document (Part 3 of the Stormwater Standards Manual).</li> </ul> Q4 FY2022: <ul style="list-style-type: none"> <li>Conduct final EIR review.</li> </ul> FY2023: <ul style="list-style-type: none"> <li>Presentation to Planning Commission.</li> <li>Presentation to Environment Committee.</li> <li>Presentation to City Council for approval.</li> <li>Submit approved program to San Diego Water Board Executive Officer for approval.</li> <li>Presentation to Coastal Commission for approval.</li> <li>Implement the ACP.</li> </ul>	Q1 FY2022: <ul style="list-style-type: none"> <li>Reengage with RWQCB staff in coordination with Funding Strategy outreach.</li> <li>Initial stakeholder outreach in coordination with Funding Strategy.</li> </ul> Q2 FY2022: <ul style="list-style-type: none"> <li>Continue engagement with RWQCB staff.</li> <li>Stakeholder outreach, as appropriate.</li> </ul> Q3 FY2022: <ul style="list-style-type: none"> <li>Continue engagement with RWQCB staff.</li> <li>Stakeholder outreach, as appropriate.</li> </ul> Q4 FY2022: <ul style="list-style-type: none"> <li>Continue engagement with RWQCB staff.</li> <li>Stakeholder outreach, as appropriate.</li> </ul> FY2023: <ul style="list-style-type: none"> <li>Development of IP.</li> </ul>	FY2022: <ul style="list-style-type: none"> <li>Develop proof of concepts for two to four prioritized dry- and wet-weather diversion project opportunities.</li> <li>Advance the Sorrento Valley dry-weather diversion project to CIP.</li> <li>Strategically monitor and analyze urban runoff quality as a potential source water to the Pure Water program.</li> <li>Directly engage with regulators and environmental groups to overcome the specific regulatory constraints identified in FY2021.</li> </ul> FY2023: <ul style="list-style-type: none"> <li>Develop proof of concepts for one to three industrial wet-weather project opportunities in coordination with industry by the end of FY2023.</li> <li>Conduct a focused feasibility study on two priority groundwater basins for potential groundwater recharge and recovery.</li> </ul>
FY2022 Budget and/or Resource Requests and Approval/Denied Status:	Current City resources (SWD and Department of IT) will be used.	FY2022 Approved Budget: Expenditures: \$300,000	FY2022 Approved Budget: Expenditures: \$250,000	To be determined.

Implementation Action III: Maximize Existing Funding Sources, Grants, and Loans (Cost Recovery)

Implementation Action Detail	Stormwater Enforcement and Fines	Street Sweeping Parking Enforcement Fines	Stormwater Inspection and Reinspection Program
Implementation Action Effort:	<p>Stormwater enforcement and fines refer to stormwater code enforcement fines for violations of the City's Municipal Code because of an adverse impact on safely managing stormwater, protecting water quality and public health, and potential impacts on the City's ability to meet regulatory requirements.</p> <p>Citation amounts are prescribed in San Diego Municipal Code §12.0908(c) to be implemented by all departments consistently across the City to conform with the March 4, 2011, Memorandum of Law and California due process requirements.</p>	<p>Street sweeping is an essential component of stormwater management because of its dual water quality and flood management benefits associated with removal of trash, debris, sediment, and other pollutants. Parking citations associated with street sweeping operations serve to deter disruptions to SWD street sweeping operations. Several options are being explored, including:</p> <ul style="list-style-type: none"> <li>Option 1: Full program cost recovery/ revise street sweeping parking enforcement fines;</li> <li>Option 2: Full program cost recovery/ extend street sweeping parking restrictions to other zones; and</li> <li>Option 3: Full program cost recovery/ increase the frequency of sweeping and add more enforcement officers.</li> </ul>	<p>Stormwater management on private properties, including commercial and industrial properties, is an important and substantial component in Citywide protection of clean water and management of flood risk. Many of these properties have nonstructural stormwater best management practices (BMPs) like eliminating illicit discharges, spill prevention and response, waste management, and structural BMPs like filtration devices or GI. The SWD regularly inspects industrial and commercial facilities and structural BMPs to ensure that the measures being implemented or maintained meet requisite City standards for protecting water quality and ultimately downstream environmental health. The SWD incurs costs associated with both initial and routine inspections as well as reinspection for violations and follow-up actions.</p> <p>As identified in the Audit (Recommendation #9), implementation of new inspection or reinspection fees and development of a more robust policy for inspection in accordance with San Diego's Municipal Code is a means for both reducing pollution and achieving cost recovery. Options are being evaluated for full and partial cost recovery.</p>
Implementation Action Plan included in Funding Strategy:	Update Monetary Penalty Matrix pollutant type categories by one or two citation increments to reflect current regulatory requirements within the prescribed citation amounts outlined in San Diego Municipal Code §12.0908(c) and the March 4, 2011, Memorandum of Law.	The SWD plans to further evaluate and pursue cost recovery for the street sweeping program, in coordination with other City departments that use the "violation of signs" fine category.	The SWD plans to develop an inspection and reinspection fee program for industrial and commercial facilities and stormwater structural treatment control BMPs.
FY2021 Implementation Action Progress:	Proposed reclassification of pollutant categories to achieve full cost recovery by modifying the Matrix pollutant classification by one or two citation increments to reflect the current pollutant impact on the environment.	Develop potential approaches in alignment with other street sweeping program assessments in alignment with the Street Sweeping Audit.	Develop potential approaches and initiate stakeholder outreach.
FY2022/FY2023 Implementation Plan Critical Path Items:	<p>Q1 FY2022:</p> <ul style="list-style-type: none"> <li>Complete proposed Monetary Penalty Matrix update.</li> <li>Initiate stakeholder engagement.</li> </ul> <p>Q3 FY2022:</p> <ul style="list-style-type: none"> <li>Notification City Council of Monetary Penalty Matrix update.</li> <li>Continue stakeholder engagement.</li> </ul> <p>FY2023:</p> <ul style="list-style-type: none"> <li>Implement updated Monetary Penalty Matrix.</li> </ul>	<p>Q1 FY2022</p> <ul style="list-style-type: none"> <li>Implementation approach developed.</li> <li>Stakeholder outreach approach developed.</li> </ul> <p>Q2 FY2022:</p> <ul style="list-style-type: none"> <li>Conduct stakeholder engagement.</li> </ul> <p>Additional timeline details are dependent on approach developed in Q1 FY2022.</p>	<p>Q1 FY2022:</p> <ul style="list-style-type: none"> <li>Conduct stakeholder outreach.</li> </ul> <p>Q2 FY2022:</p> <ul style="list-style-type: none"> <li>Present recommended program to City Council.</li> </ul> <p>Q1 FY2023:</p> <ul style="list-style-type: none"> <li>Implement recommended approach.</li> </ul>
FY2022 Budget and/or Resource Requests and Approval/Denied Status:	<p>FY022 Approved Budget:</p> <p>FTE: 1.00 code compliance officer</p> <p>Expenditures: \$60,502</p> <p>Revenue: \$20,000</p>	<p>FY2022 Approved Budget:</p> <p>FTEs: 2.00 parking enforcement officers</p> <p>Expenditures: \$330,163</p> <p>Revenues: \$400,000</p>	Current City resources (SWD and Department of Finance) will be used.

Implementation Action Detail:	Grants	Water Infrastructure and Financing Innovation Act (WIFIA)	Clean Water State Revolving Fund (CWSRF)—South Mission Beach	CWSRF—Los Peñasquitos	CWSRF—SWD Programmatic Application
Implementation Action Effort:	Grants are near-term, temporary sources of revenue that can meet either CIP or O&M spending needs. They are typically competitive and have specific objectives and requirements that applicants must align with to be considered for funding, including potential funding match and reporting requirements. Importantly, regularity, amount, and duration of distinct grant opportunities are variable and will need to be considered individually for suitability.	<p>Established by the WIFIA, this program is a loan program administered by EPA. WIFIA loans are intended to fund eligible water and wastewater projects that fall under the CWA and Safe Drinking Water Act. WIFIA loans could likely have lower interest rates than general obligation or revenue bonds.</p> <p>WIFIA funds 49% of the project cost with the loan agency to raise the remaining 51% through other funding sources. On the other hand, the WIFIA funds are eligible to be used for initial planning, design, and preconstruction work—that is, no critical expectation for project readiness exists to receive loans.</p> <p>The SWD submitted a Letter of Interest for a WIFIA loan for high-risk pipe replacements, GI, revitalization and restoration of natural waterways, pump station upgrades, and rehabilitation of stormwater features. The City would be submitting a loan application for (\$359 million), with the City matching 51% (or \$374 million). This amount might be updated pending EPA feedback.</p>	<p>CWSRF loans are issued by a federal-state partnership that provides financial assistance for a wide range of water quality infrastructure projects. While CWSRF loans are typically issued for utilities, eligible projects can include green infrastructure projects and stormwater reduction and treatment projects. The CWSRF loans are highly competitive and do not have sufficient financing resources to meet all applicant needs. Current CWSRF criteria and project readiness requirements have historically put stormwater projects at a disadvantage.</p> <p>The City has submitted an application for the South Mission Beach Storm Drain Improvements and Green Infrastructure Project (\$27 million), and the project is on the State Water Resources Control Board’s (SWRCB) Intended Use Plan. This indicates that the project has been selected for funding pending submittal of the full application.</p>	<p>See the CWSRF loan description in the Clean Water State Revolving Fund (CWSRF)—South Mission Beach column.</p> <p>The City has submitted an application for the Los Peñasquitos Lagoon Restoration Design (\$27 million), and the project is on the SWRCB’s Intended Use Plan. This indicates that the project has been selected for funding pending submittal of the full application.</p>	<p>See the CWSRF loan description in the Clean Water State Revolving Fund (CWSRF)—South Mission Beach column.</p> <p>The City has submitted a programmatic CIP application for the SWD that included a request for a loan to finance \$516 million of the CIP needs. The application was not placed on the SWRCB Intended Use Plan and will be reassessed by the City to meet current scoring criteria.</p>
Implementation Action Plan included in Funding Strategy:	Grant opportunities will continue to be researched, tracked, and pursued where appropriate to augment other revenue streams. Pursuit of grants can include application submittals and development of partnerships.	The Funding Strategy included the commitment that the SWD would continue to identify and pursue loan opportunities, as appropriate.	The Funding Strategy included the commitment that the SWD would continue to identify and pursue loan opportunities, as appropriate.	The Funding Strategy included the commitment that the SWD would continue to identify and pursue loan opportunities, as appropriate.	The Funding Strategy included the commitment that the SWD would continue to identify and pursue loan opportunities, as appropriate.



Implementation Action Detail:	Grants	Water Infrastructure and Financing Innovation Act (WIFIA)	Clean Water State Revolving Fund (CWSRF)—South Mission Beach	CWSRF—Los Peñasquitos	CWSRF—SWD Programmatic Application
FY2021 Implementation Action Progress:	In FY2021, there were a significant number of grant opportunities with synergy to eligible SWD projects. The SWD applied for nine grants in FY2021 totaling \$25.67 million in requested funding. Of those, seven were denied and two are in process.	Application submitted.	City Council approved Ordinance O-21302 to direct staff to enter into a financing agreement with the SWRCB.	The Los Peñasquitos Lagoon Restoration Design project (\$27 million) was placed on the CWSRF Intended Use Plan.	The Programmatic CIP application was submitted for consideration and not placed on the CWSRF Intended Use Plan.
FY2022/FY2023 Implementation Plan Critical Path Items:	Annual goal is to apply for four grants per year and potentially more, as opportunities arise, and additional grant programs become available.	<p>The SWD will update City Council on the application and status in Q4 FY2022.</p> <p>Following application submittal, state and federal review could take one year to complete. The assumption is that funding could be available in FY2023 at the earliest.</p>	Enter into a CWSRF loan pending successful negotiations of a loan agreement with the SWRCB.	Staff to present to City Council to request approval of an ordinance to direct staff to enter into a financing agreement with the SWRCB. Enter into a CWSRF loan pending successful negotiations of a loan agreement with the SWRCB.	Staff to reassess application and identify specific CIPs or CIP bundles that meet project readiness requirements and current scoring criteria.
FY2022 Budget and/or Resource Requests and Approval/Denied Status:	Current City resources (SWD and Department of Finance) will be used.	Current City resources (SWD and Department of Finance) will be used.	Current City resources (SWD and Department of Finance) will be used.	Current City resources (SWD and Department of Finance) will be used.	Current City resources (SWD and Department of Finance) will be used.

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# APPENDIX E: FUNDING MEASURE PROGRAM EXPENDITURE PLAN GOALS

# Appendix E: Funding Measure Program Expenditure Plan Goals

## Introduction

Stormwater services are essential to protecting and maintaining the safety, livability and sustainability of San Diego's diverse communities and our environment. The City of San Diego (City) Stormwater Department (SWD) is committed to and has demonstrated the expertise in and the ability to provide these services; however, as described in the Stormwater Funding Strategy, the SWD's ability to provide critical City services, maintain the existing system, meet regulatory requirements, and innovate and modernize for the future is unsustainably and severely impacted by inadequate funding. To address this situation, the SWD is evaluating the viability of a potential stormwater funding measure (e.g., property-related stormwater fee or special parcel tax).

## Funding Measure Program Expenditure Plan Goals

An essential component of developing a forward-looking and effective funding program is strategic program design, including fully articulated program goals. The SWD has collaborated with other City entities, community groups and stakeholders to develop funding measure program goals to reflect the vision for a stormwater system for all San Diegans' benefit in which (1) innovation and efficiency are the backbone of the approach to clean water and flood control; (2) infrastructure adapts to meet the needs of a growing population and changing climate to ensure people, homes, and businesses are safe from flooding; (3) stormwater is managed as a resource to promote equity, sustainability, and resilience; (4) water quality is a point of pride; and (5) the SWD protects, restores, and enhances waterways for local communities and wildlife for future generations. The SWD has proposed the following goals for the funding measure program:

- a. Transition from reactive to proactive stormwater management.
- b. Improve public health by addressing pollutants in stormwater, increasing access to open space and increasing or enhancing recreational opportunities associated with or near the stormwater system and waterways.
- c. Improve and protect environmental water quality in San Diego streams, rivers, lakes, bays, and the ocean and meet regulatory requirements.
- d. Prioritize green infrastructure and nature-based solutions.
- e. Capture/harvest stormwater for local water supplies.
- f. Improve the sustainability, resilience, and livability of San Diego through adaptation and mitigation for climate change and urbanization.
- g. Restore the environment and revitalize waterways.

- h. Incorporate green spaces.
- i. Safeguard communities from flooding.
- j. Reduce stormwater system failures and emergencies.
- k. Maintain and upgrade existing stormwater infrastructure.
- l. Invest in infrastructure that provides multiple benefits, including reducing flood risk, improving water quality, capturing stormwater for use, and/or recreational and community amenities (e.g., bike paths, trails, and so forth).
- m. Promote innovation, scientific research, and utilization of new technologies and best practices.;
- n. Encourage public partnerships and educate and engage residents, businesses and communities about stormwater.
- o. Generate green jobs and workforce development.
- p. Promote equity across the City and align with the Climate Action Plan 2.0.
- q. Leverage other funding and financing sources to maximize program benefits.
- r. Adopt an adaptive management process that accounts for iterative planning, monitoring, and performance evaluations.

The SWD may continue to refine and revise these goals as development of a potential funding measure progresses.