

Stormwater Department Final Stormwater Audit Response February 2022

**In Response to Recommendation #6 of the Performance Audit
of the City of San Diego's Stormwater Division**



THINK BLUE
City of San Diego
Stormwater Department

February 2022

City of San Diego Stormwater Department
9370 Chesapeake Drive, Suite 100
San Diego, CA 92123

Contents

1.0 INTRODUCTION..... 1

2.0 PUBLIC OPINION RESEARCH STRATEGY 4

3.0 PUBLIC OPINION RESEARCH FINDINGS..... 6

 3.1 There is a strong perceived need for stormwater funding6

 3.2 San Diegans value the potential outcomes that could be achieved through stormwater funding.....7

 3.3 Impermeable area as the basis for a stormwater charge8

 3.4 There is majority support for a stormwater funding measure.....9

4.0 THE SWD WILL CONTINUE TO AGGRESSIVELY PURSUE OTHER STORMWATER FUNDING OPTIONS .. 12

Figures

Figure 1: Opinions on the Need for Additional Funding (December 2020 Survey).....6

Figure 2. Survey Responses to Funding Measure Question with Variable Impervious Area Amounts Tested as an Initial Vote, Vote After Educational Statements, and Vote After Critical Statements with the Margin of Error Indicated..... 11

Tables

Table 1. Audit Recommendation #6 Requirements and City Action/Response 1

Table 2. Funding Strategy Public Opinion Research Summary.....4

Table 3. Priorities for Outcomes Associated with a Potential Stormwater Funding Measure (August 2022 Survey) 7

Table 4. Funding Mechanism Scenario Ranges for an Impermeable Area Special Parcel Tax (March 2021 and August 2021 Surveys).....9

Appendices

APPENDIX A: FUNDING STRATEGY IMPLEMENTATION UPDATE

APPENDIX B: PUBLIC OPINION RESEARCH FINDINGS APPENDIX FROM JULY 2021 FUNDING STRATEGY IMPLEMENTATION UPDATE

APPENDIX C: PUBLIC OPINION RESEARCH FINDINGS APPENDIX FROM NOVEMBER 2021 FUNDING STRATEGY IMPLEMENTATION UPDATE

Acronyms/Abbreviations

Acronym/Abbreviation	Definition
Audit	Performance Audit of the Storm Water Division: 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; (City of San Diego. 2018.)
Funding Strategy	Stormwater Funding Strategy
FY	Fiscal Year
M	million
MFR	Multifamily Residential
OCA	Office of the City Auditor
SF	square foot
SFR	Single-Family Residential
SWD	Stormwater Department

1.0 Introduction

This document, the Stormwater Department (SWD) “Final Stormwater Audit Response”, provides the funding measure public opinion research summary and was developed in response to Recommendation #6 detailed in the June 2018 Office of the City Auditor (OCA) report entitled “Performance Audit of the Storm Water Division: 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”¹ (hereafter referred to as “Audit”). In February 2021, the SWD presented the *Stormwater Funding Strategy* (the “Funding Strategy”)² to City Council as a thorough response to the Audit’s finding that stormwater funding is insufficient to meet current and future needs and presented a long-term strategy to secure additional funding. The Funding Strategy included the recommendation for further evaluation of the viability of a stormwater funding mechanism that may require voter approval, in alignment with Audit Recommendation #6. Table 1 summarizes the specific Audit Recommendation #6 requirements and SWD responses and actions. The subsections below summarize the overall findings.

Table 1. Audit Recommendation #6 Requirements and City Action/Response

Audit Recommendation #6 Requirement		City Action/Response
Hire consultant to conduct unbiased, statistically reliable survey of potential voters to estimate voter support for a variety of funding options deemed viable by long-term funding strategy		In FY2021 and FY2022, the SWD hired a consultant (Fairbank, Maslin, Maullin, Metz, & Associates or FM3 Research) to conduct three surveys and four focus groups.
When conducting survey, educate stakeholders on stormwater issues including:	Flood prevention	Surveys and focus groups involved a battery of educational and informational statements that included each recommended education component, among others (Section 2.0 Public Opinion Research Strategy). The SWD continued broad education and engagement efforts on these issues, including them as part of Environment Committee and City Council presentations related to stormwater issues and the relaunch of Think Blue San Diego.
	Deferred capital backlog	
	Ongoing operational costs	
	Water regulations	
	Stormwater funding gap	

¹ City of San Diego. 2018. *Performance Audit of the Storm Water Division: 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*. Office of the City Auditor. https://www.sandiego.gov/sites/default/files/18-023_storm_water_division_0.pdf.

² City of San Diego. 2021. *Stormwater Division Funding Strategy January 2021*. Stormwater Division. [Stormwater Funding Strategy Report.pdf \(sandiego.gov\)](#)

Audit Recommendation #6 Requirement		City Action/Response
Solicit voter opinions and analysis on:	Importance of water quality and flood reduction to residents and businesses	Surveys and focus groups solicited voter feedback on many stormwater issues, perceived need for stormwater funding, and willingness to pay.
	Whether, and how much residents or property owners are willing to pay for water quality measures, stormwater infrastructure, and other SWD activities	
	Funding mechanism structure options	Surveys and focus groups assessed the viability of different funding mechanism structure options, including: <ul style="list-style-type: none"> • Parcel type rate basis • Impermeable area³ rate basis • Variable rate amounts for both parcel type and impermeable area rate basis
	Identify objections and strategies to overcome them	Surveys and focus groups assessed responses to both educational and critical statements related to stormwater issues.
	Whether the funding mechanism can be obtained by a simple majority or a two-thirds supermajority	Surveys and focus groups tested viability of different funding mechanism structure options to assess voter response thresholds.
Based on results, modify plan to pursue selected funding mechanism(s) and execute the plan		The City revised the Funding Strategy Implementation Actions Update document, which reflects updates to the plans to pursue (Appendix A).

In accordance with Audit Recommendation #6, overall findings from public opinion research are:

- 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 toward the proposed SWD funding program goals.

³ For the purposes of the Funding Strategy, impermeable area is characterized as any solid surface where water cannot penetrate, causing it to run off (e.g., roofs, driveways, sidewalks, and walkways)

- Public opinion research shows **initial support for a stormwater funding measure**, exceeding a 50% + 1 threshold and within the margin of error for a two-thirds voter threshold, for a stormwater charge based on impermeable area.
- **Support for funding stormwater exists**, and there appears to be a strong sense of need for additional funding for stormwater, with high levels of importance placed on benefits provided by such a measure. The SWD will continue to aggressively pursue a variety of stormwater funding means.

Additional findings are summarized in the public opinion research finding appendices that were presented as part of two interim updates to City Council on implementation of the Funding Strategy:

- July 2021 Interim Funding Strategy Implementation Update was provided to Environment Committee⁴ (public opinion research findings are attached as Appendix B to this document)
- November 2021 Interim Funding Strategy Implementation Update was provided to Environment Committee⁵ (public opinion research findings are attached as Appendix C to this document).

⁴ City of San Diego. 2021. *Stormwater Department Interim Funding Strategy Implementation Update*. Stormwater Department. [Stormwater Funding Strategy Report - July 2021.pdf \(sandiego.gov\)](#)

⁵ City of San Diego. 2021. *Stormwater Funding Strategy Implementation Update*. Stormwater Department. [Stormwater Funding Strategy Report – November 2021.pdf \(sandiego.gov\)](#)

2.0 Public Opinion Research Strategy

The SWD conducted three surveys and four focus groups as part of the Funding Strategy development and implementation processes (Table 2). Each of the surveys and focus groups were framed to assess different components related to the viability of funding stormwater and how to communicate broadly about stormwater issues.

Table 2. Funding Strategy Public Opinion Research Summary

Public Opinion Research Activity	Audit-Related Outcomes	Primary Elements Tested
December 2020 Survey	Recommendation #5 (Funding Strategy)	<ul style="list-style-type: none"> • Understanding and values of stormwater issues across broader community and City interests • Perceived funding need • Educational and critical statements • Priorities related to stormwater
March 2021 Survey	Recommendation #6 (Funding Measure)	<ul style="list-style-type: none"> • Willingness to pay based on different funding measure charge basis (parcel type and impermeable area) • Educational and critical statements • Priorities related to stormwater
May 2021 Focus Groups	Recommendation #6 (Funding Measure)	<ul style="list-style-type: none"> • Core values for living in San Diego • Outcomes of stormwater programs • Awareness and understanding of stormwater issues • Understanding of potential funding measure label • Willingness to pay
August 2021 Survey	Recommendation #6 (Funding Measure)	<ul style="list-style-type: none"> • Willingness to pay at different rate amounts on an impermeable area charge basis (4.5 and 5 cents per square foot of impermeable area per year) • Educational and critical statements • Priorities related to stormwater

Each of the three surveys were dual mode (telephone and online), conducted in both English and Spanish, and conducted to facilitate proportional representation throughout the City as it relates to certain demographics (e.g., age, gender, race/ethnicity, geographic location, including Council District, etc.). Each of the surveys also included a set of questions that were asked of each respondent and a subset of questions that were part of a split sample where only half of the respondents were asked certain questions. The sample size of the surveys varied based on desired margin of error for both the full and split samples, indicated in the findings below where applicable.

The four focus groups were conducted virtually with eight participants each (32 total) and grouped geographically:

- Coastal Region (Council Districts 1 and 2);
- Northeast Region (Council Districts 5, 6, and 7);
- Southeast Region (Council Districts 3, 4, and 9) and
- South Region (Council District 8).

The focus group participants were recruited to generally reflect the demographics of each region (e.g., gender, race/ethnicity, age, homeownership, etc.); however, due to the sample size, the opinions cannot be generalized or extrapolated to the broader population of residents with any statistical precision.

3.0 Public Opinion Research Findings

The key findings for the three surveys conducted among voters in the City of San Diego are as follows and presented in further detail in the sections below:

- A strong majority of San Diegan’s perceive there is a need for additional stormwater funding.
- Ongoing education and engagement for stormwater issues is essential, with very large percentages of San Diegans placing value on the potential outcomes that could be achieved through stormwater funding.
- Impermeable area as the basis for a stormwater charge tested more strongly than property type.
- There is at least majority support for a stormwater funding measure.

3.1 There is a strong perceived need for stormwater funding

A strong majority of voters agree the City needs more funding to maintain its storm drain system. Three-quarters of respondents also recognize the need for funding to clean and protect local water quality (Figure 1). In the December 2020 survey, in response to a question of whether the City needs additional funds to maintain its storm drain system, 61% of respondents said the City has either a “great need” or “some need” (Figure 1). An additional 11% said the City has “a little need” for additional funding, while less than 10% said the City has “no real need.” Notably, 18% of respondents said they do not know about the City’s need for additional funding to maintain its storm drain system, indicating an opportunity for public outreach and communication.

Voters even more clearly recognize the need for funding to clean and protect local water quality. Seventy-five percent of voters said the City has a “great need” or “some need” for funding to clean and protect local water quality, with nearly 40% describing the need as “great” (Figure 1). Just 14% said the City has “a little need” or “no real need,” with 11% who were unsure.

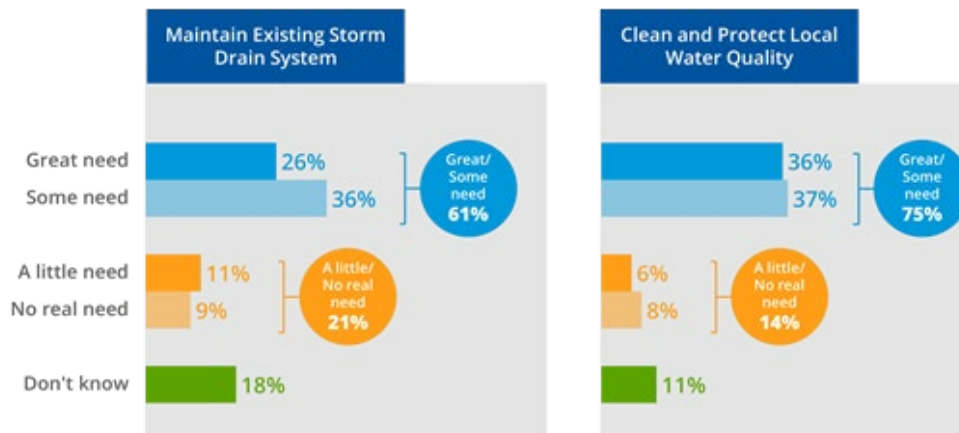


Figure 1: Opinions on the Need for Additional Funding (December 2020 Survey)

3.2 San Diegans value the potential outcomes that could be achieved through stormwater funding

Each of the surveys tested understanding, priorities and value associated with different components of stormwater management priorities. Overall, understanding of how the stormwater system works is moderately low. For example, only around 40% of respondents correctly responded that stormwater reaches creeks, rivers, and oceans without treatment. However, across the surveys, there was consistently a high level of interest in funding priorities such as: clean drinking water, protecting natural waterways, infrastructure repair and improvements and improving water quality associated with a potential stormwater funding measure. Table 3 presents the priorities tested in the August 2022 survey where respondents valued the priority as “Very Important” or “Important.”

Table 3. Priorities for Outcomes Associated with a Potential Stormwater Funding Measure (August 2022 Survey)

Priorities	Percent “Very Important” or “Important”
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%
Reducing pollution, trash, toxins/plastics entering local waterways, bays, oceans (and) beaches impacting public health and marine life	80%
Protecting marine life	78%
Protecting public health	75%
Preparing for future droughts	74%
Increasing safe drinking water supplies	74%
Capturing rain and stormwater for drought preparedness	69%
Preventing damage to roads from failed water pipes	67%
Maintaining pipes and channels that carry stormwater	66%
Preventing potholes, sinkholes, and flooding due to failed stormwater infrastructure	66%
Preventing flooding of streets, homes and businesses	66%

Ongoing education and engagement around stormwater remains a priority. The SWD has recently relaunched Think Blue San Diego and has increased efforts to reach residents and community members, including:

- Outreach and education through a coordinated media campaign – print radio, TV, outdoor and digital advertising -- to inform the general public of the importance of improving stormwater quality to ensure clean water and clean beaches for all of San Diego. Scheduled to begin in mid-February with goal of 24 million impressions (the number of digital views or engagements for a piece of content) by the end of FY2022.
- Launching a revamped ThinkBlue.org website with more engaging content, such as educational videos, animations, interactive maps and data dashboards.
- Outreach and education related to water conservation efforts like rebates that will include a bilingual hotline, community workshops, outreach materials at events and cleanups and a social media campaign.

3.3 Impermeable area as the basis for a stormwater charge

The March 2021 and August 2021 surveys tested funding mechanism scenarios. Survey results 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 (Table 4):⁶

- **Impermeable area method:** 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)
- **Property type-based method:** 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.

⁶ City of San Diego. 2021. Stormwater Funding Strategy. www.thinkblue.org/fundingstrategy

Table 4. Funding Mechanism Scenario Ranges for an Impermeable Area Special Parcel Tax (March 2021 and August 2021 Surveys)

Rate Basis Tested in Surveys	Typical Single-Family Residential (SFR) Bill		Commercial/ Industrial Bill	Estimated Annual Revenue Generated (\$M)
	Median Annual	Median Monthly		
Property Type: \$68 SFR, \$48 MFR, \$250 all others*	\$68.00	\$5.67	Non-residential ratepayer impacts vary widely based on parcel-specific impermeable area***	~\$30 M
Property Type: \$89 SFR, \$69 MFR, \$500 all others*	\$89.00	\$7.42		~\$44 M
Impermeable Area: \$0.04 per SF*	\$128.00	\$10.67		~\$74 M
Impermeable Area: \$0.045 per SF**	\$144.00	\$12.00		~\$83 M
Impermeable Area: \$0.05 per SF **	\$160.00	\$13.33		~\$93 M

M = million

*March 2021 survey

**August 2021 survey

***Example parcel with 5,000 sq-ft impermeable area at rate of 4 cents per sq-ft impermeable area, 5,000 * \$0.04 per sq-ft = \$200 per year

Results from the March 2021 survey and May 2021 focus groups indicated an impermeable area basis performed better with voters and was perceived as a more equitable, fair basis for levying a stormwater charge. In addition, impermeable cover is the most common basis used for stormwater-related charges, with 87% of respondents of the 2021 Stormwater Utility Survey indicating impermeable area is the basis for stormwater charges across the nation.⁷ This approach is often used because it charges ratepayers based on the relative contribution of stormwater runoff. In some cases, runoff volume may be used as a proxy for potential stormwater pollution generated from a parcel based on land use and other factors.

3.4 There is majority support for a stormwater funding measure

The March 2021 and August 2021 surveys tested variable amounts for impermeable area to gauge voter thresholds for a potential stormwater funding measure. For each scenario tested, the survey respondents

⁷ Black & Veatch Management Consulting. 2021. 2021 Stormwater Utility Survey Report. <https://www.bv.com/resources/2021-stormwater-survey-report>.

were presented a sample ballot question to obtain an initial response, provided with an equal number of educational and critical statements and asked for a response after each set of statements. For reference, the full sample ballot question tested in August 2021 is as follows:

*“Shall an ordinance improving/protecting water quality; reducing pollution, trash, toxins, plastics entering local waterways/bays/ocean/beaches impacting public health and marine life; capturing rain/stormwater for drought preparedness; preventing road damage from failed water pipes; establishing an annual **4.5¢/5¢** per square foot of impermeable area clean water parcel tax, raising approximately **\$83,000,000/\$93,000,000** annually until ended by voters, requiring audits, public disclosure of spending, local control, be adopted?”*

The poll reflects a ballot question representative of the elements of a potential funding measure for consideration (*noting that the ultimate ballot question and funding measure elements are subject to revision and final drafting by the City Attorney*):

- **Proposition 218 voter requirements shall be followed** to minimize the risk of a legal challenge, as reported in the July 2021 Funding Strategy Implementation Update and the City Attorney review of Senate Bill (SB) 231 and Assembly Bill (AB) 2403.⁷
- **The funding mechanism could be a special parcel tax**, which would levy a tax on each applicable parcel and would be limited for use as stated in the potential ballot measure.
- **An impermeable area basis could be applied**, which uses a rate per square foot of impermeable area on a parcel or a subdivision of a parcel where there are stacked units (e.g., apartments and condominiums)
- **Frame the Potential Funding Measure Around Program Goals**, which have been drafted in coordination with other City entities, community groups, and stakeholders 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.
- **Tax rate structure**, which is the specific rate (e.g., cents per square foot) that the tax could be levied.
- **Exemptions** to the special parcel tax that identifies ratepayers that may not receive a tax bill. Exemptions being considered include public parcels, ad valorem exempt parcels, and low-income senior property owners.
- **Reductions or discounts** for ratepayers that could reduce the tax bill and account for variability in the ratepayer base, affordability, or equity (e.g., low-income areas).
- **Adjustments, incentives, credits, or rebates** could be included for ratepayers who participate in eligible stormwater-related programs (e.g., stormwater best management practices, rain barrels, etc.).
- **Eligible and ineligible expenditures** that could define what activities, programs, and project revenues from a funding measure can and cannot be spent on, respectively. Expenditures could also include administration and collection of the funding measure, debt financing, workforce job training, and educational and outreach efforts, among others.
- **Debt and issuance of bonds** in order to issue new debt (bonds, loans) and/or pay existing debt service (such as the federal (WIFIA) and state (SRF) loans currently in various stages of approval) supporting the

stormwater capital program and payable from and secured by the revenues associated with any future stormwater funding measure, voter approval of debt authorization for these activities may be required.

- **Program governance (decision-making, oversight, and accountability)** with elements like advisory and/or oversight committees, implementation plans, independent audits, annual budgets, and annual reporting.
- **Appeals processes** could be designed to allow for correction of errors in the administration or levy of the tax.

Figure 2 shows the results, which indicate there is at least majority support for a funding measure.

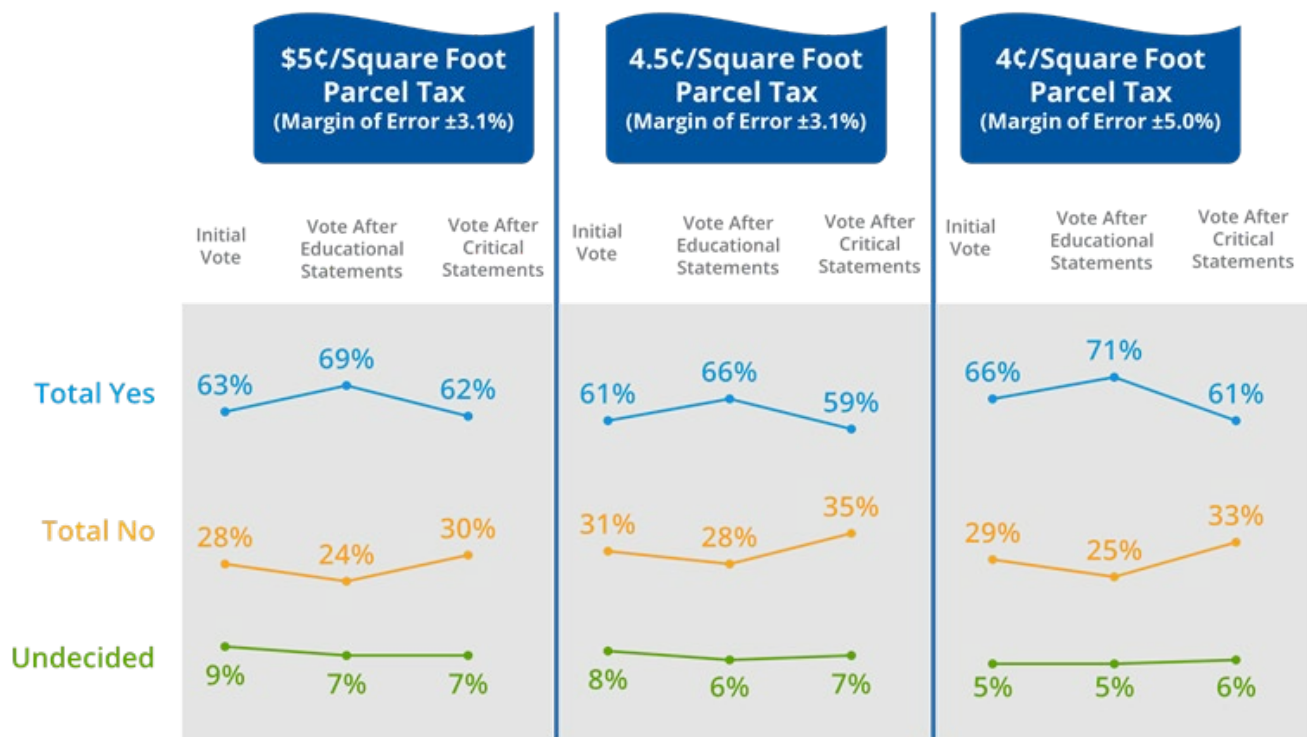


Figure 2. Survey Responses to Funding Measure Question with Variable Impervious Area Amounts Tested as an Initial Vote, Vote After Educational Statements, and Vote After Critical Statements with the Margin of Error Indicated

4.0 The SWD will continue to aggressively pursue other stormwater funding options

The public opinion research findings indicate San Diegans acknowledge the SWD needs additional funding and the outcomes associated with a funded stormwater program are valued highly. As such, the SWD will continue to pursue other funding opportunities like grants, loans and cost recovery funding options (e.g., expand the street sweeping parking citation program, develop a stormwater inspection and reinspection fee program, and modify the current stormwater violation/fines matrix), as well as continue to incorporate innovation and efficiencies into day-to-day operations to maximize available funding. Appendix A is a summary of Funding Strategy Implementation Actions.

Appendix A: Funding Strategy Implementation Update

Appendix A: Funding Strategy Implementation Actions Update

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 FY2022 progress presented below.

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.

Implementation progress and FY2022 and FY2023 milestones include the following:

- **Pipe repairs:** An additional in-house pipe-repair team was prioritized to be funded for FY2022 to accelerate the pace of more efficient and timely repairs for failing pipes. The dedicated pipe repair crew of 25 full time employees were hired and onboarded in Q2 FY2022.
- **Optimizing street sweeping routes:** The analysis of street sweeping routes and sweeping frequencies that was initiated in FY2021 in alignment with the Street Sweeping Audit is complete. The SWD reported on the Street Sweeping Audit Response in December 2021, providing the FY2019 – FY2021 data analysis and Standard Operating Procedure (SOP) to assess street sweeping route priorities. Two new parking enforcement officers were onboarded in Q2 FY2022.

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.

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 Q3 FY2022, the SWD completed development of a comprehensive online dashboard (<https://www.sandiego.gov/think-blue/data-maps>).
- **Alternative Compliance Program (ACP):** Ongoing stakeholder engagement, including meetings of the ACP Technical Advisory Committee, continued in Q3 FY2022. The draft Programmatic Environmental Impact Report for the ACP will be completed in early FY2023, with anticipated public review and approvals Q1 – Q3 FY2023 and program implementation targeted for Q4 FY2023.
- **Integrated planning:** The SWD will explore options for reengaging the Regional Board Staff and conducting stakeholder outreach in Q3 – Q4 FY2022. The framework will be further examined developed in FY2023, with necessary approvals from Regional Board and City Council.
- **Stormwater harvesting and reuse:** 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. 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., Green Infrastructure [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). In Q2 FY2022 the Carroll Canyon dry weather diversion project is being advanced

to Capital Improvements Program (CIP). This project would be the first full-scale example of strategic runoff harvesting coordinated with Pure Water and will enable the City to further explore the City-wide viability of this technology. The project will capture local runoff and help to restore sensitive habitat in the downstream Los Peñasquitos Lagoon. Other stormwater harvesting efforts that are underway and will be completed by the end of FY2022 include (1) developing proofs of concept for eight prioritized dry- and wet-weather diversion to Pure Water project opportunities, (2) strategically monitoring and analyzing urban runoff quality as a potential source water for the Pure Water program, (3) directly engaging with regulators and environmental groups to overcome the specific regulatory constraints identified in FY2021, (4) continuing coordination between SWD and PUD to ensure urban runoff harvesting is considered by Pure Water Phase II planning and design, and (5) conducting feasibility studies on two priority groundwater basins for potential groundwater recharge and recovery. The industrial framework will be developed for diversion of wet weather project opportunities.

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 \$115 million in funding for the SWD, inclusive of \$57 million from one time capital funding sources like commercial paper, development impact fees, and a grant. 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 at the state and federal level, 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.¹ 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

¹ 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.

State Water Resources Control Board (SWRCB) regarding adjustments to CWSRF scoring of stormwater projects to allow for greater parity.²

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.

Implementation progress and FY2022 and FY2023 milestones include the following:

- **Stormwater enforcement and fines:** In FY2021, the SWD reassessed the 2004 monetary penalties to achieve target cost recovery and has proposed reclassifying rates for internal City review. The SWD is planning to update the proposed monetary penalties matrix in Q3 FY2022 to route for review by the COO and stakeholder engagement in Q3 FY2022. The SWD plans to notify City Council of the update in Q4 FY2022, with the proposed monetary penalties anticipated for FY2023, if approved.
- **Street sweeping parking enforcement fines:** The SWD completed evaluation of the potential to increase fine amounts in FY2021. Two options for full cost recovery were identified through increased fine amounts and/or addition of posted routes. Development of the approach is ongoing in FY2022, with stakeholder outreach initiation planned in Q3 FY2022. Next steps on the implementation timeline will depend on the approach developed.
- **Stormwater Inspection and Reinspection Program:** In FY2021, potential approaches for the Stormwater Business and Structural Best Management Practices Inspection Programs to target full-cost recovery were developed. The need for a municipal code (MC) change was identified by the City Attorney's office. Stormwater Department is working on the needed MC change in FY2022. The inspection fee package, including the new MC, is planned to be presented to City Council for adoption in FY2023. If approved by City Council, the program will be implemented in FY2024.
- **Grants:** So far in FY2022, the SWD identified and will apply for 6 grants for four projects totaling \$7.3 million in requested funding. The SWD was recently awarded a grant that was applied for in FY2020 by the U.S. Department of Commerce's EDA for \$6.0 million for the Maple Canyon Restoration Project. In FY2022, the SWD is currently assessing two additional grants totaling \$2.65 million to consider for application. The SWD will continue to work with Government Affairs to identify and assess upcoming grant and loan opportunities that are emerging from recent State and Federal legislative actions, often with a focus on climate resiliency and drought preparedness.
- **State Budget Allocation:** The Southcrest Green Infrastructure Project has been identified in the Statewide Budget to receive an appropriation of \$3.1 million by the California

² City of San Diego. 2021. Letter to the State Water Resources Control Board. *City of San Diego Stormwater Projects 8610-110 and 8504-110.*

Department of Natural Resources to treat stormwater runoff entering Chollas Creek. SWD has identified additional candidate projects for future State Budget Allocations.

- **Water Infrastructure Finance and Innovation Act (WIFIA):** The SWD submitted a Letter of Interest for a Water Infrastructure Finance and Innovation Act (WIFIA) loan for high-risk pipe replacements, GI, revitalization and restoration of natural waterways, pump station upgrades, and rehabilitation of stormwater features. The subsequent loan application was submitted at the end of FY2021. The City has been engaged in negotiations with the U.S. Environmental Protection Agency regarding loan specifics with loan execution potentially taking up to a year. The City anticipates that WIFIA funding will be available to the SWD in late FY2022 or early FY2023.
- **Clean Water State Revolving Fund (CWSRF):** The SWD has also applied for CWSRF loans for South Mission Beach Storm Drain Improvements and Green Infrastructure project and Los Peñasquitos Lagoon Restoration Project in FY2020 and FY2019 respectively. Both projects were placed on the CWSRF Intended Use Plan. The South Mission Beach Storm Drain Improvements and Green Infrastructure project received City Council approval in an amount of \$27 million in FY2021. The SWD is planning to enter into a CWSRF loan pending City Council approval and successful negotiation of a loan agreement with the SWRCB for the Los Peñasquitos Lagoon Restoration project. In Q2 FY22, the SWD also submitted an updated CWSRF application for the Los Peñasquitos Lagoon Restoration Project, to update the project timeline and request an increase in the total amount of \$27 million to \$58 million, and a new \$9 million CWSRF application for green infrastructure projects in the Chollas Creek watershed.

Implementation Action IV: Pursue Development of a Long-Term Dedicated Funding Mechanism

In alignment with both Audit Recommendation #6 and Council Resolution R-2021-306, the SWD has continued assessment and refinement of a potential stormwater funding measure in close coordination with the Office of the City Attorney, Department of Finance, City Treasurer, Debt Management, Department of Information Technology, Department of Engineering & Capital Projects, Public Utilities Department, Mayor's Office, County Assessor's Office, and other stakeholder groups. The SWD presented draft funding measure recommendations and refined funding mechanism scenarios as part of the November 2021 Funding Strategy Implementation Update³.

In addition, the SWD has conducted three surveys (December 2020, March 2021, and August 2021) and four focus groups (May 2021) to test sample ballot language for a stormwater funding measure, willingness to pay for stormwater, and the importance of various stormwater-related priorities,

³ City of San Diego. 2021. *Stormwater Funding Strategy Implementation Update*. Stormwater Department. [Stormwater Funding Strategy Report – November 2021.pdf \(sandiego.gov\)](#)

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. Key findings and suggested near term implementation actions include:

- **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 toward the proposed SWD funding program goals. The SWD will continue education and engagement about stormwater issues through Think Blue San Diego.
- Public opinion research shows **initial support for a stormwater funding measure**, exceeding a 50% + 1 threshold and within the margin of error for a two-thirds voter threshold, for an impermeable area-based stormwater charge. There appears to be a strong sense of need for additional funding for stormwater, with high levels of importance placed on benefits provided by such a measure. The SWD will continue to pursue funding for stormwater, including each of the implementation actions identified herein.
- **Support for funding stormwater exists**; therefore, the City will continue to evaluate the viability of a stormwater funding measure.

Appendix B: Public Opinion Research Findings Appendix from July 2021 Funding Strategy Implementation Update

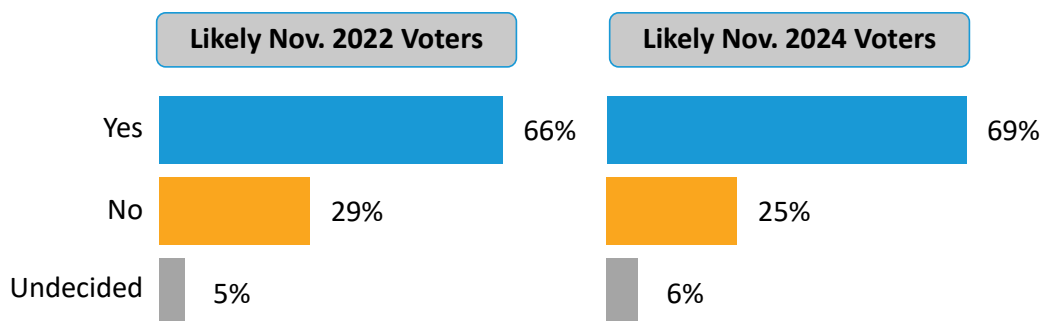


TO Bethany Bezak, City of San Diego
FROM FM3 Research
RE: Key Findings from Voter Surveys Assessing a Potential Stormwater Funding Measure
DATE May 14, 2021

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.**¹ 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.

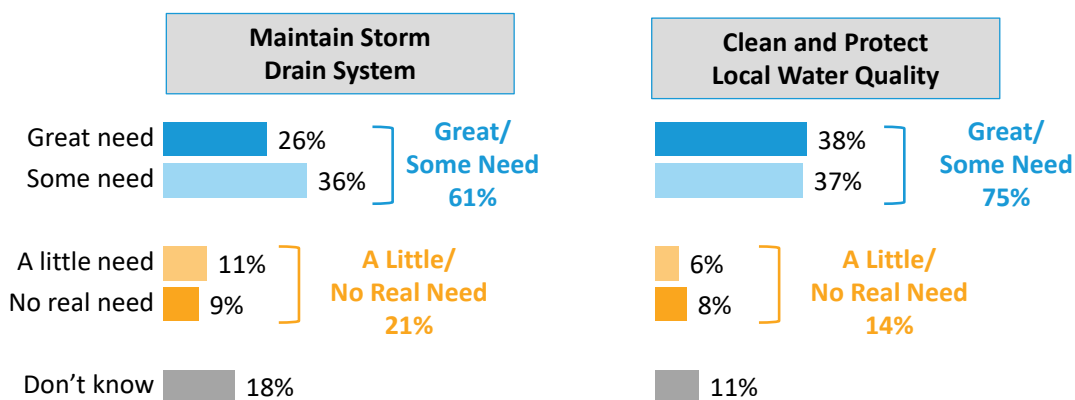
Figure 1: Opinions on Ballot Measure to Fund Stormwater Infrastructure with Parcel Tax of 4¢/SF of Impermeable Area
4¢/Sq-ft of Impermeable Area



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%).

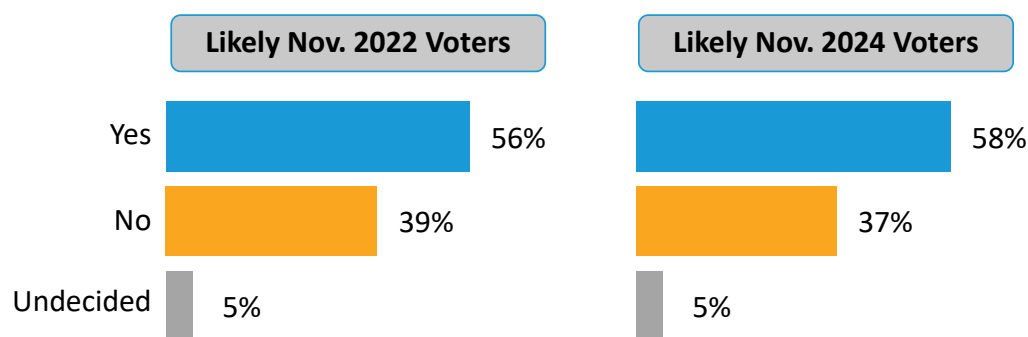
Other highly rated priorities included “Protecting marine life” (78%), “Protecting public health” (75%), “Preparing for future droughts” (74%), and “Increasing safe drinking water supplies” (74%). Taken together, they show the high level of interest in funding the varied goals and purposes of this potential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

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 ±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 ±3.5% at the 95% confidence level. 725 interviews with Likely November 2022 voters; margin of sampling error of ±4.1% at the 95% confidence level. Higher margins of error for subgroups.

Appendix C: Public Opinion Research Findings Appendix from November 2021 Funding Strategy Implementation Update

TO Bethany Bezak, City of San Diego

FROM FM3 Research

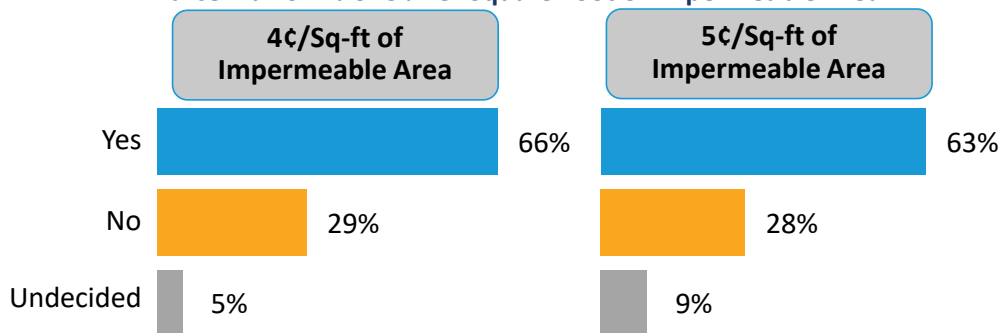
RE: Key Findings from Voter Surveys Assessing a Potential Stormwater Funding Measure

DATE September 24, 2021

In December 2020, March 2021, and August 2021, Fairbank, Maslin, Maullin, Metz & Associates (FM3) conducted three surveys among voters in the City of San Diego regarding **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.**¹ 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 with a rate of either 4¢ or 5¢ 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 potential measure with a 4¢ rate, 29% opposed it, and 5% were undecided. In the August 2021 survey of likely November 2022 voters, 63% supported the potential measure with a 5¢ rate, compared to 28% who opposed and 9% who were undecided. These results show 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.

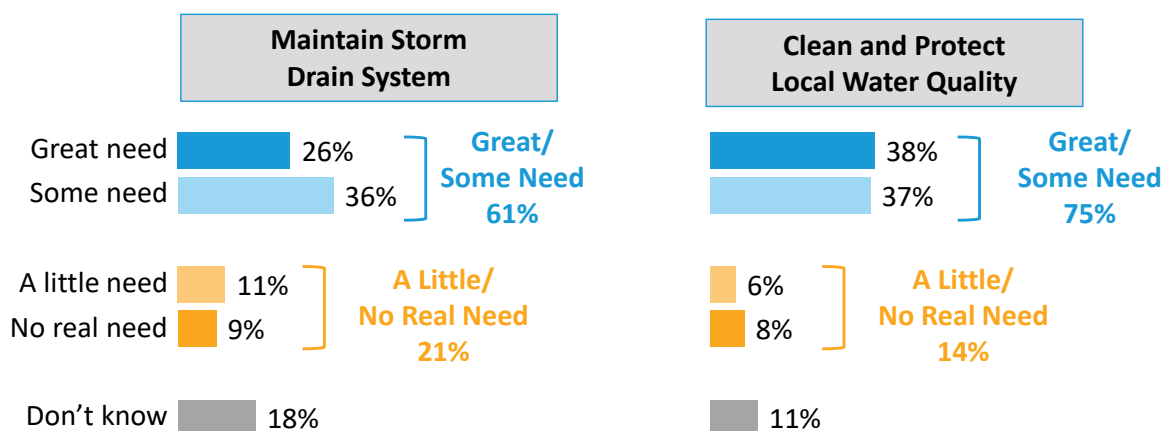
Figure 1: Opinions on Potential Ballot Measure to Fund Stormwater Infrastructure with Parcel Tax of 4¢ or 5¢ Per Square Foot of Impermeable Area



Notably, in both surveys, responses in support of 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.

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 (Figure 2). In the December 2020 survey, 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. Seventy-five percent 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



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%).

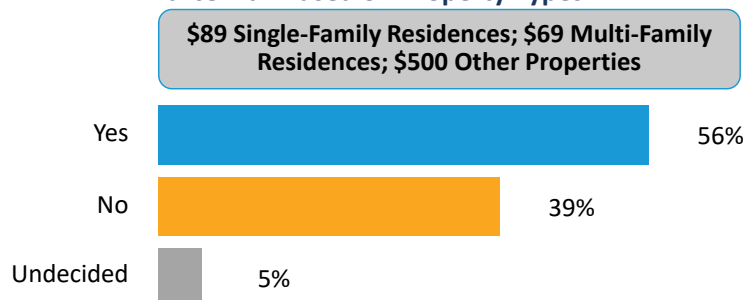
Other highly rated priorities included “Protecting marine life” (78%), “Protecting public health” (75%), “Preparing for future droughts” (74%), and “Increasing safe drinking water supplies” (74%). Taken together, they show the high level of interest in funding the varied goals and purposes of a potential 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 potential 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 potential measure received majority support, it did not reach the two-thirds supermajority necessary for passage (see Figure 4). Fifty-six percent of likely November 2022 voters said they would support this potential measure. 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



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 either 4¢ or 5¢/SF of impermeable area. This support is broad and crosses demographic and geographic subgroups throughout the City. The surveys also indicate that education on stormwater issues is important so that residents can be more fully informed when making their decision as to whether to support a potential measure in the future.

Survey Methodology: This memo includes the results of three surveys of City of San Diego registered voters. Two surveys – those conducted in December 2020 and March 2021 – included respondents 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 of these surveys are presented of respondents likely to vote in November 2024 except where indicated. The survey conducted in August 2021 only included respondents with a voting history that makes them likely to vote in the November 2022 election. All three 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 ±3.3% at the 95% confidence level.
- 2) March 18–25, 2021: Results on the potential ballot measure questions are based on 362 interviews with likely November 2022 voters; margin of sampling error of ±5.2% at the 95% confidence level. Higher margins of error for subgroups.
- 3) August 15–25, 2021: Results on the potential ballot measure questions are based on 1,102 interviews with likely November 2022 voters; margin of sampling error of ±3.1% at the 95% confidence level. Higher margins of error for subgroups.