



Annual Stormwater Update

Environment Committee | Nov 9 2023

5-Year Strategic Plan - Key Priority Areas



Ensure flood-safe communities



Protect clean water



Provide clean & green streets



Enhance our communities & protect our habitat



Capture stormwater for use



Prioritize education, outreach, & engagement

Stormwater challenges and needs continue to increase

- Aging and failing infrastructure
- Clean Water Act requirements
- Continued urbanization
- Insufficient funding
- Changing climate





Ensure flood-safe communities

In Action: Storm preparation and emergency projects

Unpredictable rainfall requires year-round preparation

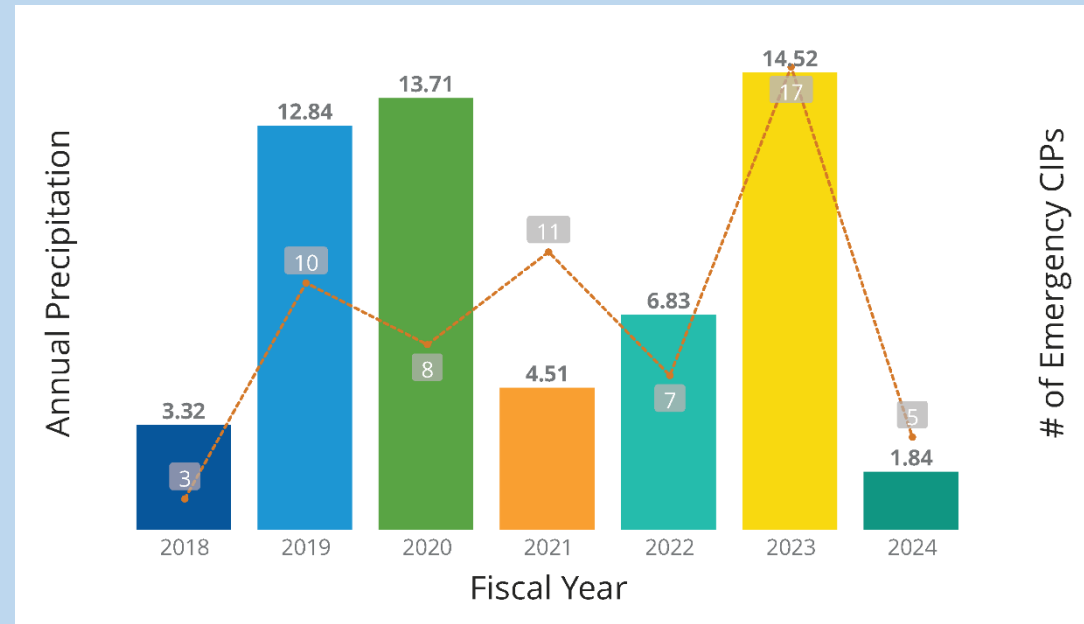
FY23 Summary

59 days with rainfall

>19k Get It Done notifications responded to within 24 hours

17 new emergency CIP repairs

\$46.5M Total emergency CIP cost





Ensure flood-safe communities

In Action: Pipe replacements

Annual In-House KPIs

- Replace **1** mile of pipe
- Design and permit **1** mile of pipe replacement

26.4

Miles of Corrugated Metal Pipe in the Department's inventory



7.2

Miles replaced or in an active CIP project

19.2

Miles remaining



Ensure flood-safe communities

In Action: Clean and maintain channels



Pomerado 2 (Before)

60 Channel segments identified for major maintenance

4 Channels to be cleaned & repaired in FY24

- Alpha 1 (CD9)
- Pomerado 1 (CD5)
- Rolando 1 (CD4)
- Titus 1 (CD3)

4 Priority Channels in FY25

- Cottonwood 2 (CD8)
- Euclid 2 (CD4)
- Baja 1 (CD9)
- Smythe 1 (CD8)

>27 acres of mitigation area needed for known maintenance impacts



Pomerado 2 (After)



Ensure flood-safe communities

In Action: Floodplain management & Levee maintenance (Unfunded)



FY23 Accomplishments

- Obtained **15%** discount for National Flood Insurance Policy holders
- Completed minimum inspection and reporting requirements
- Completed **4** deficiency repairs

FY24 Look Ahead

- Continue minimum inspection and reporting requirements on 100% overtime
- Complete additional deficiency repairs

\$27.7M

Unfunded Levee Repairs identified by USACE

Additional repairs not feasible beyond FY24 without dedicated resources and staffing



Ensure flood-safe communities

In Action: Pump station repairs

4 Pump stations undergoing emergency repairs

2 Pump station replacement projects in design including the City's largest

FY23 Accomplishments

Ensured critical pump stations operational during heavy rainy season under limited resources and with limited access due to emergency status

1,000s

Homes and businesses impacted if critical pump stations fail





Protect clean water

In Action: Eliminate pollution sources

FY23 Accomplishments

- >3,500** illicit discharges investigated
- >2,800** business and TCBMP inspections
- 11** long-term, persistent pollution cases addressed

FY24 Look Ahead

- Investigate all illicit discharge cases within 30 days
- Work on additional complex pollution cases



Protect clean water

In Action: Equitable investments in Green Infrastructure

FY23 Accomplishments

3 Integrated Drainage Plans advanced for Mission Bay, San Diego Bay, San Diego River

Allocated WIFIA funding to green infrastructure projects

FY24-FY27 Look Ahead

- Construct **5-10** green infrastructure projects

Prioritizing Green Infrastructure

Estimated \$2.4 billion to address water quality needs, includes planning, design, construction and 20 years of O&M

Projects in design or construction:



South Mission Beach
Council District 2
Final Design



Streamview Drive
Council District 4
60% Design



Alamo Salvation
Council District 9
Construction



Southcrest
Council District 8,4
Bid/Award

zero

staff dedicated to operate and
maintain green infrastructure



Provide clean & green streets

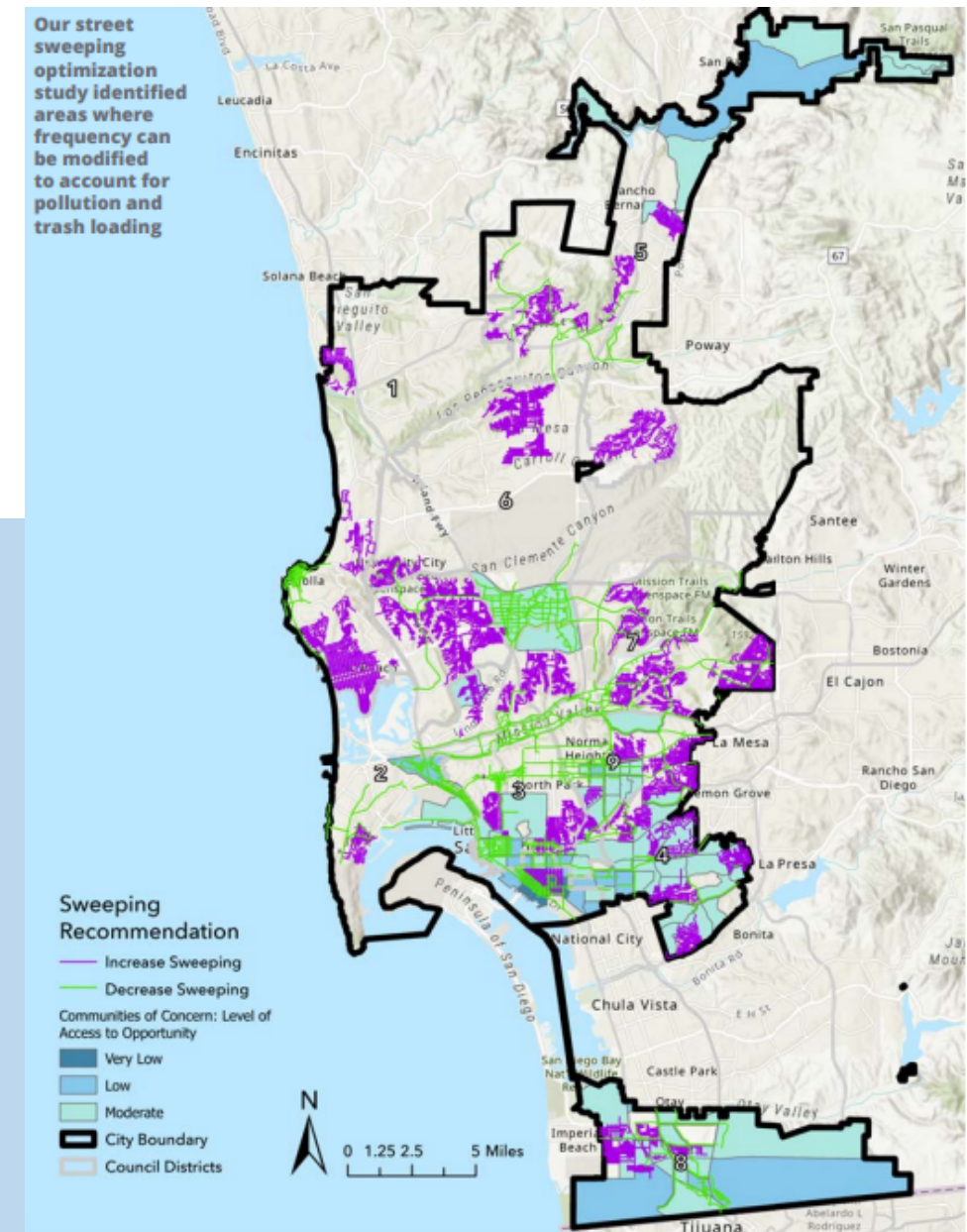
In Action: Optimize street sweeping

FY23 Accomplishments

- Swept **85,000** miles, plus routine bike path sweeps
- Launched street sweeping optimization – updated frequencies for **9** routes, and posted **4** new routes
- Removed **>5,700** tons of pollution and trash
- Performed **> 360** special sweeps to support emergencies, storm preparation and other service notifications

FY24 Look Ahead

- Sweep **85,000** core miles
- Continue data-driven street sweeping optimization





Provide clean & green streets

In Action: Inspect and clean storm drains

FY23 Accomplishments

- Inspected & cleaned **~20,600** storm drain inlets & cleanouts
- Removed **>430** tons of trash and debris
- Responded to **5,906** service notifications

FY24 Look Ahead

- Inspect & clean **~25,000** storm drain inlets & cleanouts
- Complete **100%** of required enhanced cleanings in Los Peñasquitos, Tijuana River and Chollas Creek Watersheds





Enhance our Communities & Protect our Habitats

In Action: Restore habitats and streams

FY23 Accomplishments

- **7** stream restoration projects identified and initiated
- **11** habitat restoration projects initiated

FY24 Look Ahead

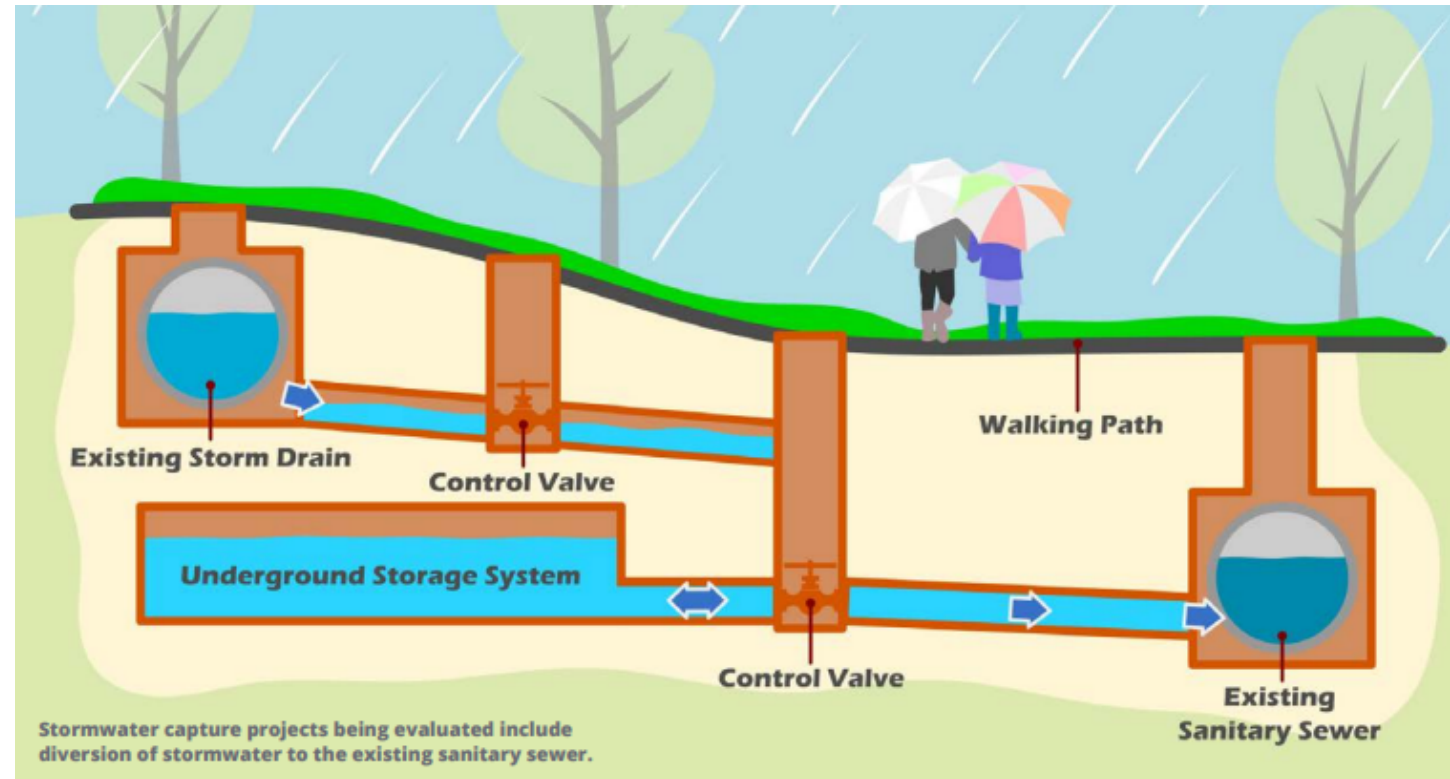
- Initiate Design for **4** Projects
- Implement **2** Mitigation Projects
 - Smythe-Bandola (CD8)
 - South Chollas/Paradise Canyon (CD4)



Capture stormwater for use

In Action: Capture projects

- Shift from stormwater as a nuisance to a resource
- Aligns with City Strategic Plan and Climate Action Plan goals
- Ongoing coordination with PUD
- Projects on hold pending clarification from regulators



3.0 million gallons per day (dry weather) and 4.8 MGD (wet weather)
possible across opportunity types



Capture Stormwater for Use

In Action: Stormwater Capture Rebate programs

- Awarded **\$500,000** in grant funding (FY23 – FY28)
- Expand program participation by **15%** over the next five years
- Increase focused outreach and education, advancing City equity goals as part of expanded rebate program



Downspout Disconnections



Rain Barrels



Rain Gutter Replacements



Prioritize Education, Outreach, and Engagement

In Action: Street sweeping outreach

Street sweeping optimization outreach:

- Website pop-ups
- Interactive web map updates
- Fact sheets (English & Spanish)
- Direct mailers to impacted properties
- Social media
- E-blasts

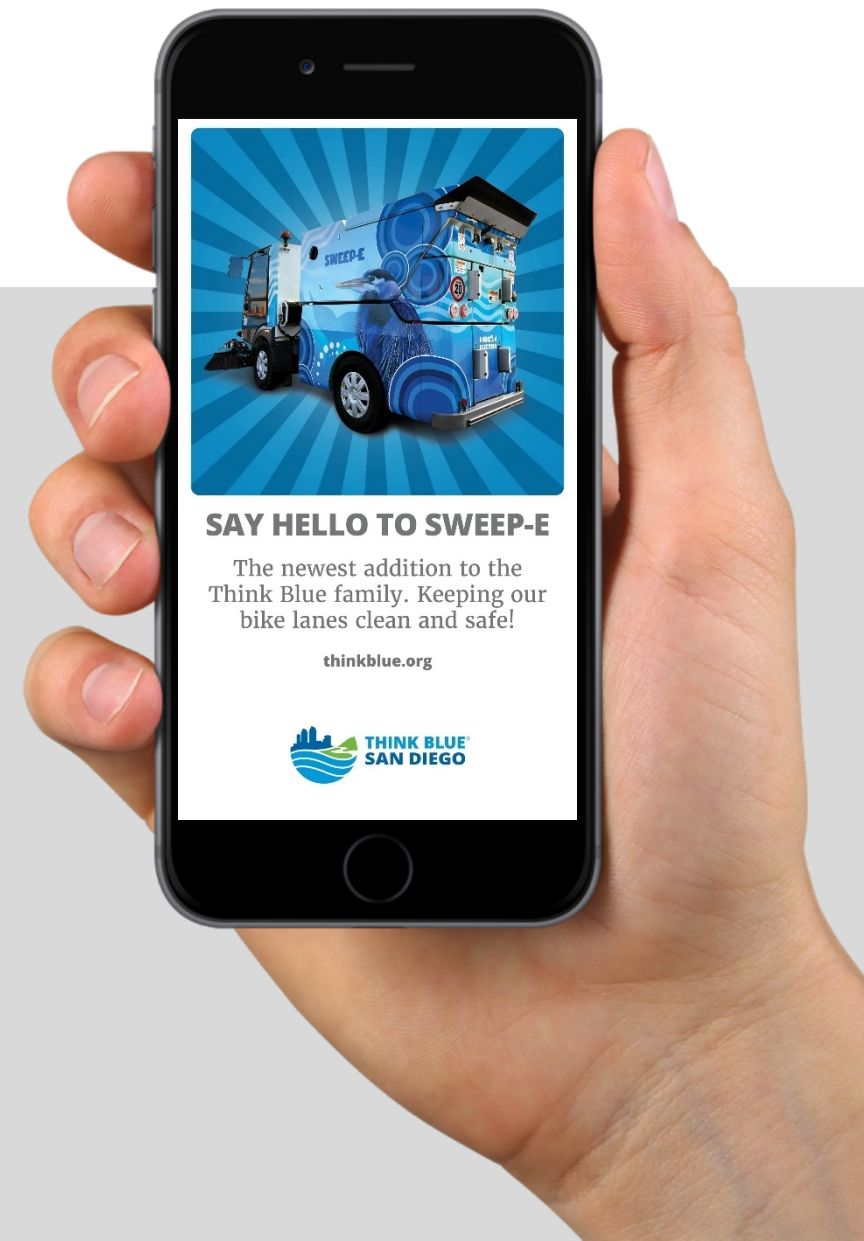
SWEEP-E! 100% electric mini sweeper naming contest in November 2022

1,000+ votes

120K earned TV audience

700K+ impressions

\$55K free ad value





Prioritize Education, Outreach, and Engagement

In Action: Partner/sponsor cleanups

FY23 Accomplishments

- Nearly **53 Million** impressions
- Partnered with San Diego Wave Futbol Club
- Sponsored **45** Cleanups, removing **> 35,000** pounds of trash and debris from the environment

FY24 Look Ahead

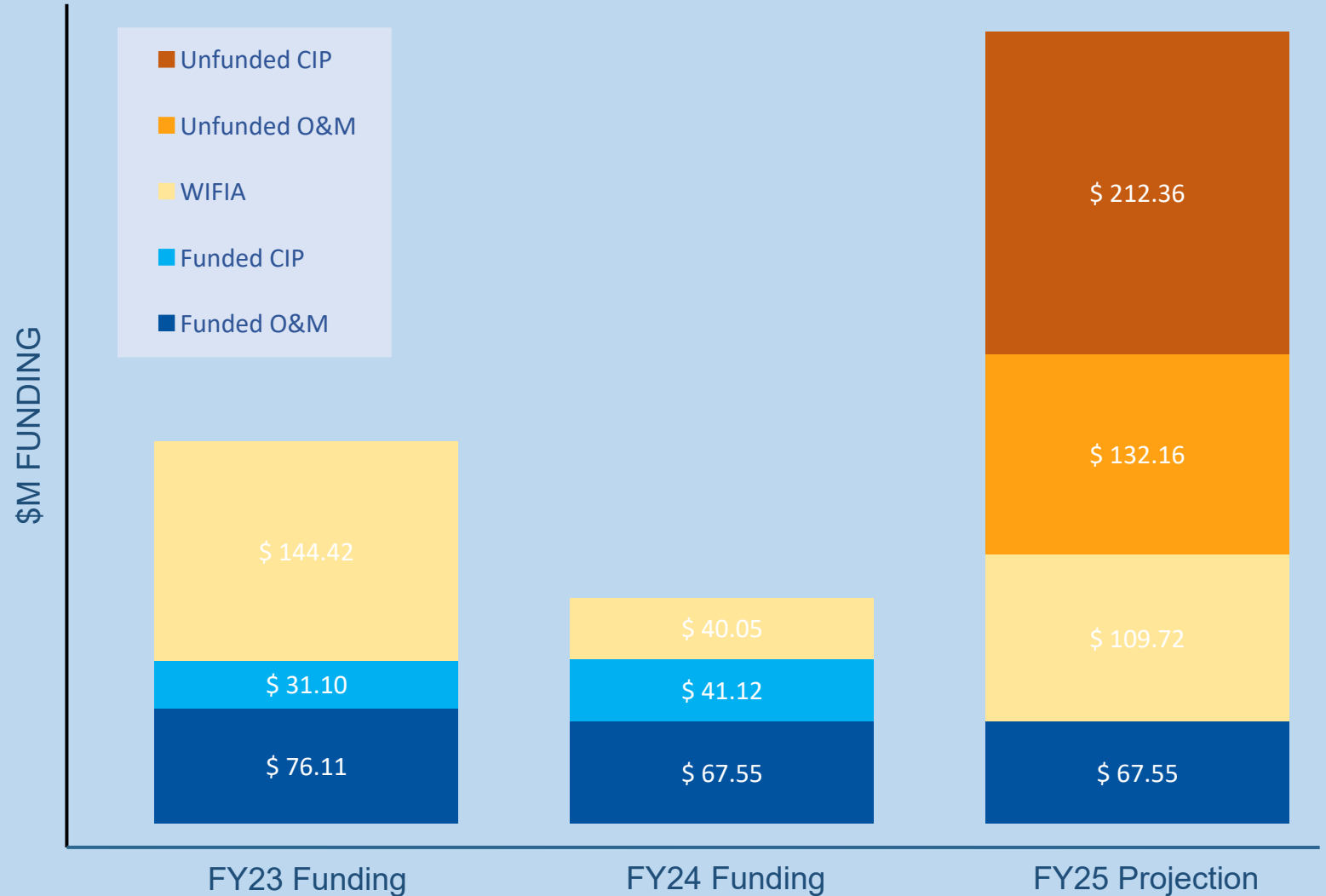
- Reach **10,000** more people
- Remove **>35,000** pounds of trash and debris



“The amount of plastic in the ocean is expected to double in the next 15 years, and by 2050 there could be more plastic than fish in the sea (by weight)”
– World Wildlife Fund

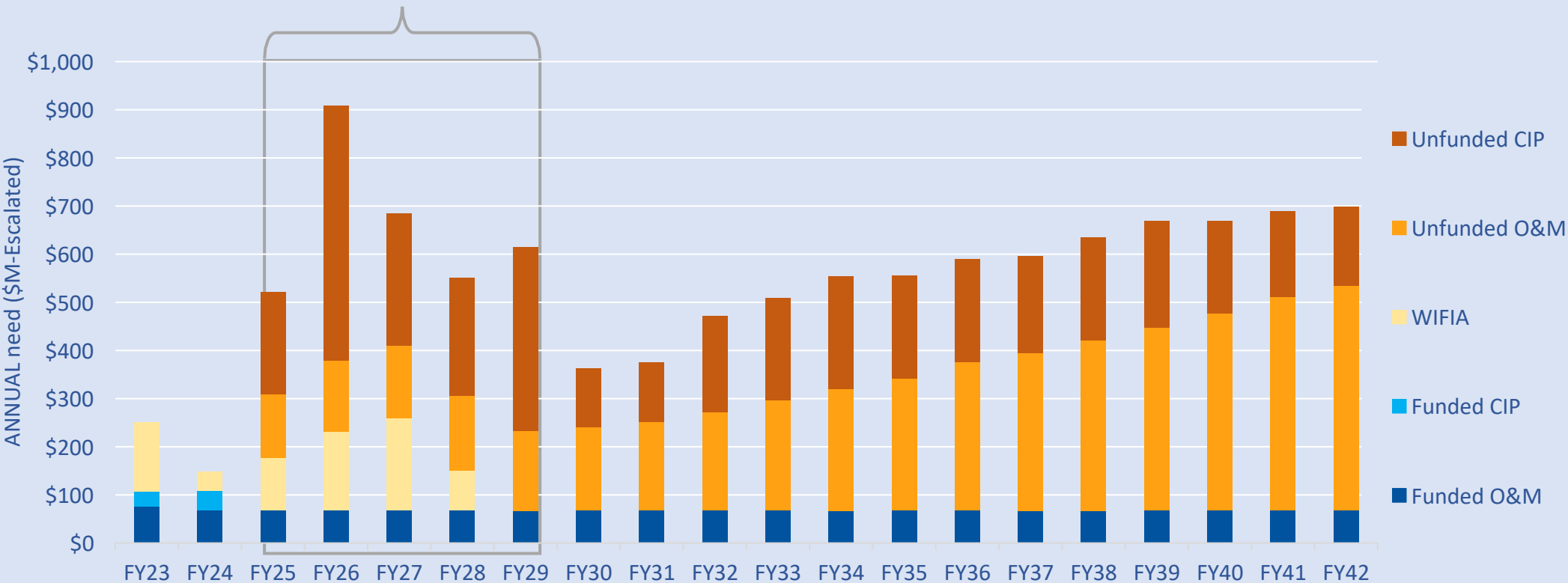
Funding remains largest challenge to achieving vision

- Funding Sources
 - General Fund
 - Storm Drain Fee
 - Parking Fee



Reminder: WIFIA will not fund other underfunded essential projects and services

FY25 – FY29 WIFIA loan will only cover a portion CIP and 0% O&M funding needs



Water Infrastructure Finance & Innovation Act Update

Planning/Design

42 storm drain
18 stream restoration and GI
3 pump stations

Program Management Plan

13 Chapters
11 Workshops



Program Management Office

Onboarded Program management
Established organizational structure
Optimized delivery process/tools



Construction

7 Storm Drain and
1 Green Infrastructure
Maple Canyon Phases I and II



Guidelines

Climate Change Guidelines
Pump Station Guidelines
Key Performance Indicators



Key Takeaways

- Responsibilities continue to expand
- SWD addressing critical needs, innovating, and improving service delivery
- Funding needs persist (even with WIFIA)
- FY24 Priorities:
 - Storm Preparation & Response
 - WIFIA Project Delivery
 - Negotiations with Regional Water Board
 - Maximize use of Limited Resources

