

Stormwater Management Oversight Committee

Thursday, August 11, 2022 1 pm to 3 pm Special Meeting

Community Meeting Room at City Hall

****BY IN PERSON and VIRTUAL TELECONFERENCE ***
https://zoom.us/join Meeting ID: 990 9847 5635 Phone: 1(669)9006833

Pursuant to the provisions of California Governor's Executive Order N-29-20, issued on March 17, 2020, to prevent the spread of Covid-19, this meeting will be held by virtual teleconference and in person.

Agenda posted in accordance Government Code Section 54954.2(a) or 54956.

PUBLIC COMMENT

Members of the public who wish to participate by computer or phone can find the instructions at the end of this agenda. To ensure participation in a particular item, we suggest calling in or connecting online 15 minutes before the item you wish to speak on.

Call to Order (5 min)

Oral Communications (5 min)

Members of the public may speak to any item NOT on the agenda. A reasonable time restriction may be imposed at the discretion of the Committee Chair.

Old Business (5 min)

1. Approval of Action Minutes from the April 7, 2022 Stormwater Management Oversight Committee Meeting (5 min)

New Business (95 min)

- 2. Adoption of a Resolution Authorizing Use of Teleconferencing for Stormwater Management Oversight Committee Meetings During Covid-19 State of Emergency (5 min)
- 3. Staff Presentation of FY 2023 Approved Budget (10 min)
- 4. Staff Update Stormwater Management Fund Capital Program (20 min)

5. Update on the new stormwater permit, Green Streets Stewards, and Rebate Program (60 minutes)

Committee Member Comments and Announcements (15 min)

Tentative Agenda Items for Future Meetings and Review Action Items (5 min)

<u>Adjournment</u>

AMERICANS WITH DISABILITY ACT (ADA)

Persons with disabilities who require auxiliary aids or services in using City facilities, services or programs or who would like information on the City's compliance with the Americans with Disabilities Act (ADA) of 1990, may contact (650) 329-2550 (Voice) 24 hours in advance.

Public Comment Instructions

Members of the Public may provide public comments to teleconference meetings via email, teleconference, or by phone.

- 1. Written public comments may be submitted by email to the staff liaison, Karin North at karin.north@cityofpaloalto.org.
- 2. Spoken public comments using a computer will be accepted through the teleconference meeting. To address the Council, click on the link below to access a Zoom-based meeting. Please read the following instructions carefully.
 - A. You may download the Zoom client or connect to the meeting in browser. If using your browser, make sure you are using a current, up-to-date browser: Chrome 30+, Firefox 27+, Microsoft Edge 12+, Safari 7+. Certain functionality may be disabled in older browsers including Internet Explorer.
 - B. You may be asked to enter an email address and name. We request that you identify yourself by name as this will be visible online and will be used to notify you that it is your turn to speak.
 - C. When you wish to speak on an Agenda Item, click on "raise hand." The Clerk will activate and unmute speakers in turn. Speakers will be notified shortly before they are called to speak. When called, please limit your remarks to the time limit allotted.
 - D. A timer will be shown on the computer to help keep track of your comments.
- 3. Spoken public comments using a smart phone will be accepted through the teleconference meeting. To address the Council, download the Zoom application onto your phone from the Apple App Store or Google Play Store and enter the Meeting ID below. Please follow the instructions B-E above.
- 4. Spoken public comments using a phone use the telephone number

listed below. When you wish to speak on an agenda item hit *9 on your phone so we know that you wish to speak. You will be asked to provide your first and last name before addressing the Council. You will be advised how long you have to speak. When called please limit your remarks to the agenda item and time limit allotted.

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STORMWATER MANAGEMENT OVERSIGHT COMMITTEE MINUTES

Special Meeting April 7, 2022

The Stormwater Management Oversight Committee of the City of Palo Alto met in hybrid teleconference at 1:05 P.M.

Present: Bower, Keller, Mickelson (Chair), Mossar, Owes, Perman, Wenzlau

Absent:

Oral Communications

Old Business

1. Approval of Minutes from the February 3, 2022 Stormwater Management Oversight Committee Meeting.

MOTION: Committee Chair Hal Michelson moved, seconded by Committee Member Dena Mossar to approve the minutes as presented.

MOTION PASSED: 7-0

New Business

2. Adoption of a Resolution Authorizing Use of Teleconferencing for Stormwater Management Oversight Committee Meetings During Covid-19 State of Emergency.

MOTION: Committee Chair Hal Michelson moved, seconded by Committee Member Dena Mossar to adopt the resolution.

MOTION PASSED: 7-0

SWMOC MINUTES

- 3. Staff Presentation of FY 2023 Proposed Budget for Committee Approval.
 - A. Motion to approve the draft communication to the Finance Committee to be dated April 7 as presented to the Committee.
 - a. Mossar: Motions to approve.
 - i. Wenzlau seconds.
 - ii. No objections. Approved at 1:26 PM.
- 4. Staff Update Stormwater Management Fund Capital Program.

NO ACTION TAKEN

- 5. Discussion of Boards, Commissions, and Committee (BCC) Workplan Update in Preparation for Next Meeting.
 - A. The Chair will communicate with the City Clerk on the format of the workplan.
- 6. Discussion of GSI Operations and Maintenance Costs.

NO ACTION TAKEN

Committee Member Comments and Announcements

Tentative Agenda Items for Future Meetings and Review Action Items

Adjournment: The meeting was adjourned at 2:44 P.M.

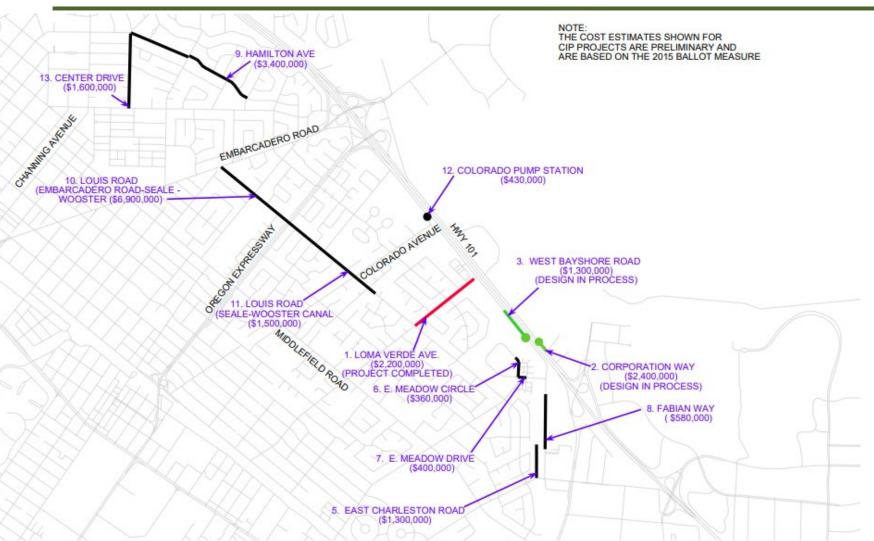




AUGUST 11, 2022

www.cityofpaloalto.org

2017 BALLOT MEASURE CIP PROJECTS



OBJECTIVE: Implement projects that will reduce flooding risk

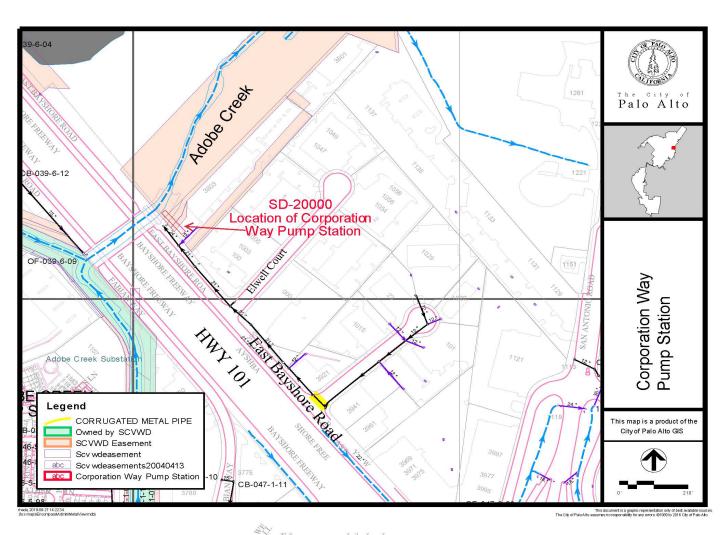
- 13 PROJECTS / 15 YEARS (2032)
- 9 PIPE UPGRADES
- TWO NEW PUMP STATIONS
- REMOVAL OF ONE EXISTING STATION







CORPORATION WAY PUMP STATION AND SYSTEM UPGRADES



PROJECT PURPOSE & STATUS UPDATE

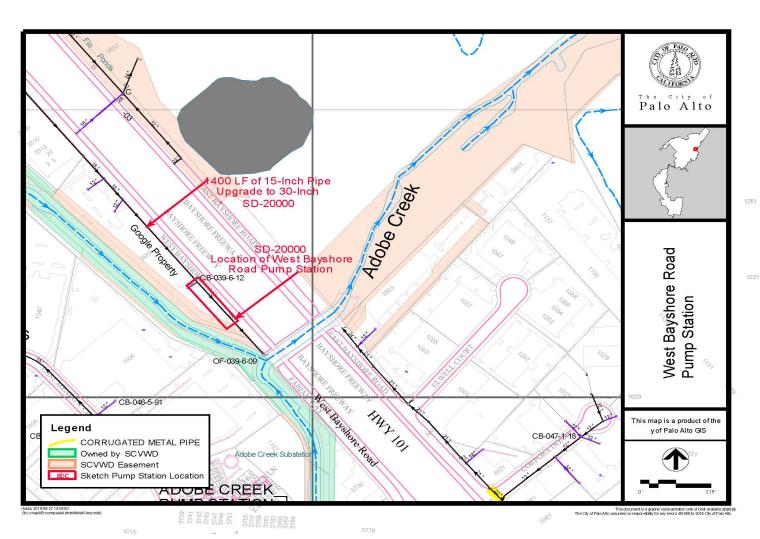
- Install a Pressurized System to Allow Flows to Drain into Adobe Creek and Prevent Flooding on E. Bayshore and Corporation Way.
- Process to Acquire Easement from Google Ongoing. Draft Agreement Submitted.

PROJECT OBJECTIVES

 Upgrade 700 LF of Pipe from 21-inches to 30-inches and Install ne 25 cfs Pump Station.



WEST BAYSHORE ROAD PUMP STATION AND SYSTEM UPGRADES



PROJECT OBJECTIVES & STATUS UPDATE

- Increase 400 LF of Pipe from 15-inches to 30-inches and Install 15 cfs Pump Station.
- Easement Agreement Finalized with Google. Agreement has been Submitted for Signatures.

PROJECT SCHEDULES

- Design Complete 2022/2023
- Construction of Corp Way 2022/2023
- Construction of West Bayshore Road 2023/2024







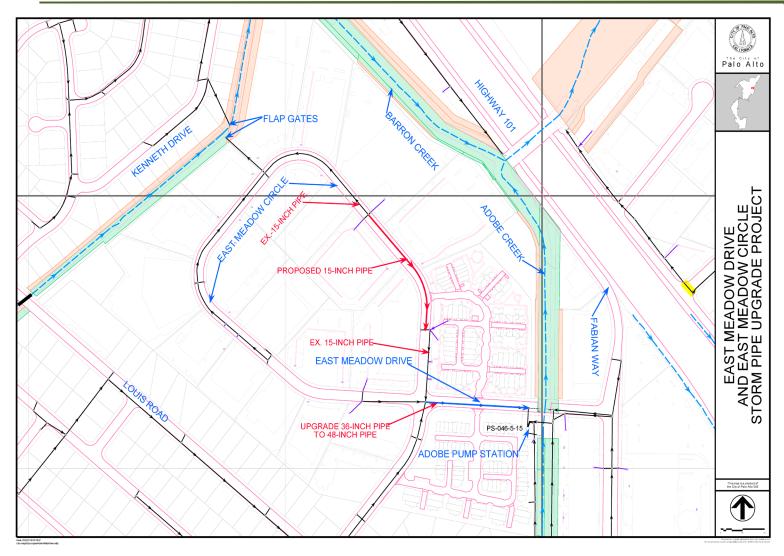
East Meadow Drive Capacity Upgrades & East Meadow Circle Connect to Adobe Pump Station

East Meadow Circle and East Meadow Drive

PROJECT PURPOSE

- Prevent Flooding on East Meadow Circle Due to Back Up Flow from the System that Flows to Barron Creek When Water Surface in the Creek is Very High
- Upgrade and Install New Storm System at East Meadow Drive and East Meadow Circle to Accommodate the 10-Year Flow in the Pipe System.

East Meadow Circle and East Meadow Drive



PROJECT OBJECTIVES

- 15-inch Pipe Gravity Outfall to Barron Creek Does Not Have Capacity to Discharge Runoff into the Creek When Creek Water Surface is Very High.
- Install New 15-inch Pipe on East Meadow Circle to Allow Overflow to Adobe Pump Station on East Meadow Drive.
- Upsize 36-inch Pipe on East Meadow Drive to 48-inch Pipe to Increase Capacity to Accommodate Overflow from East Meadow Circle and to Accommodate 10-year low.



East Meadow Circle and East Meadow Drive

PROJECT SCHEDULES

- Potholing for Utility Conflicts
 Complete September 2022
- Design Complete December
 2022
- Installation of pipe March 2023





STORM DRAIN SYSTEM REPLACEMENT AND REHABILITATION PROJECT

Construction Update

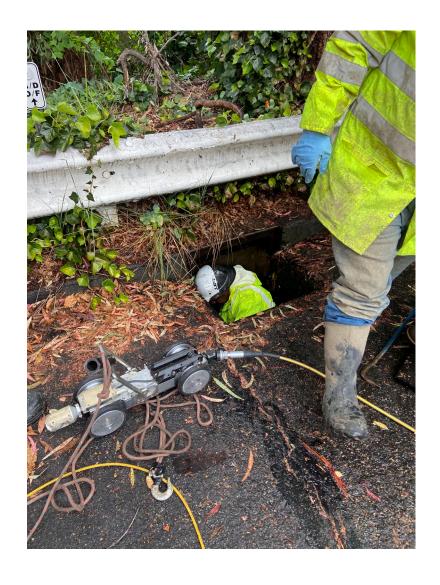
- Completed all open trench pipe replacement
- Added work on Middlefield / Bryson since the pipe could not be lined. Corrugated metal pipe deteriorated away.
- Remaining work includes:
 - Striping
 - Storm drain grate replacements
 - CIPP lining
 - CCTV of newly installed storm drain pipes



Construction Update

- CIPP Lining
 - Pipe assessment, cleaning and video of pipes completed April 2022
 - Liners ordered by Contractor
 - Delay in procurement of liner material due to supply chain issues











MUNICIPAL REGIONAL STORMWATER PERMIT (MRP 3.0)

Overview of Expanded and New Requirements

Pam Boyle Rodriguez
August 11, 2022



Presentation Outline



- Background on MRP
- Significant Changes & New Requirements
 - Modified Provisions
 - New Provisions/Sub-Provisions

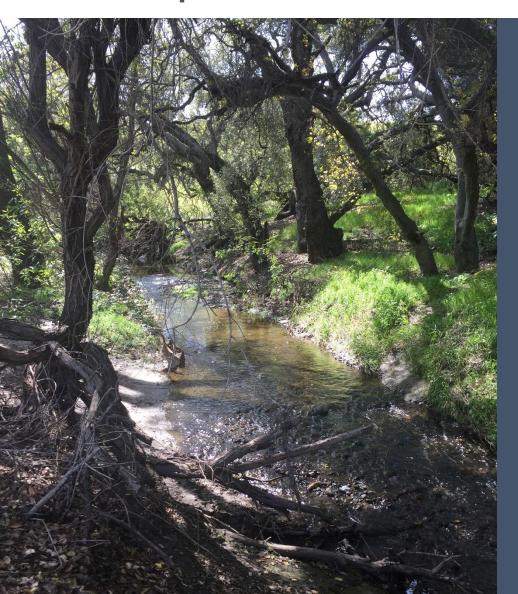
California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit

> Order No. R2-2022-0018 NPDES Permit No. CAS612008 May 11, 2022



Regulatory Background Municipal Stormwater Permits





- Addresses only water discharged from storm drain systems to creeks and SF Bay
- Federal Clean Water Act (1987) began regulating through National Pollutant Discharge Elimination System (NPDES) permits
- NPDES permits issued by States/EPA require public agencies to implement measures to control stormwater pollution
- Santa Clara Valley agencies issued nation's first NPDES municipal stormwater permit in 1990 by the SF Bay Regional Water Quality Control Board

Bay Area MRP Background



- MRP issued to 79 agencies in the Bay Area, including the City of Palo Alto
- Third iteration ("MRP 3.0") became effective on July 1, 2022
- > MRP is effective for five years
- SCVURPPP assists County, Valley Water and 13 cities/towns in Santa Clara Valley with countywide programs and compliance



MRP Provisions Applicable To Palo Alto

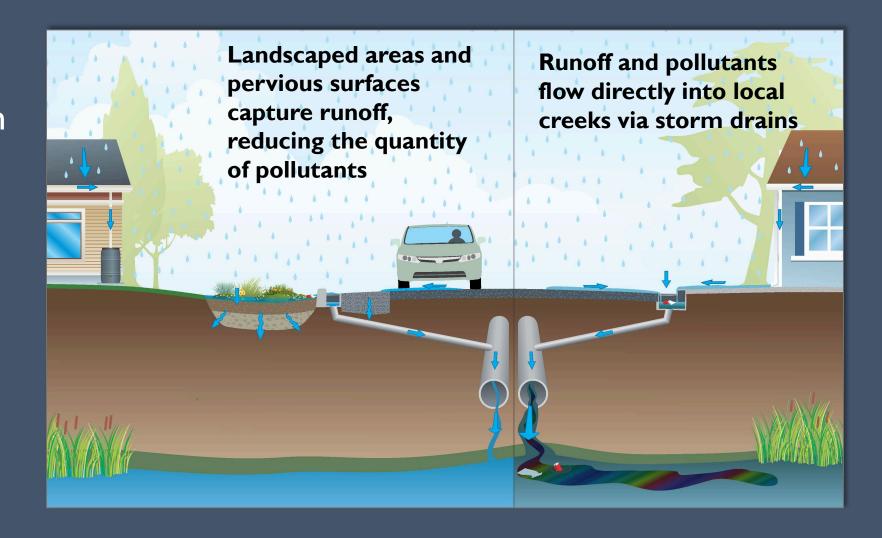


Topic Specific		Pollutant Specific		Monitoring/Reporting	
C.2 Municipal Operations	C.6 Construction Site Controls	C.9 Pesticides Toxicity Control	C.13 Copper Controls	C.8 Water Quality Monitoring	C.21 Asset Management
C.3 New Development and Redevelopment	C.7 Public Information and Outreach	C.10 Trash Load Reduction		C.20 Cost Reporting	
C.4 Industrial/ Commercial Site Controls	C.15 Exempted and Conditionally Exempted Discharges	C.11/12 PCB and Mercury Controls		Min	or changes
C.5 Illicit Discharge Controls	C.17 Unsheltered Homeless Populations				ificant changes w provision

Provision C.3 - New and RedevelopmentBackground



Development projects must implement Green Stormwater Infrastructure or GSI (based on project size)



Provision C.3 - New and Redevelopment Background



- Development project size = how much impervious surface is created or replaced on a development site
- > Projects above certain thresholds trigger requirements to treat stormwater runoff using GIS
- > Municipalities also required to retrofit existing public streets and parking lots



Pervious Surfaces



Bioretention Areas (rain gardens)



Rainwater Harvesting

Provision C.3 - New and Redevelopment Significant Changes



- Project size threshold lowered to 5,000 ft² for most project types:
 - Private/public new development and redevelopment projects
 - New roads or lane additions
 - Some road repair or improvement activities
- Road reconstruction and pavement widening projects now regulated at threshold of I acre of contiguous impervious area
- Single-family homes now regulated at threshold of 10,000 ft² of impervious area





Provision C.3 - New and Redevelopment Municipal GSI Requirements (retrofit projects)



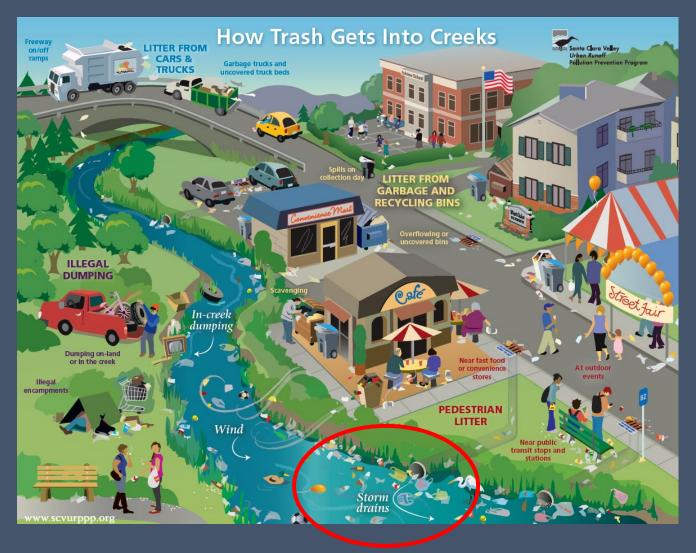
- > Continue to implement actions in 2019 GSI Plans
 - Identify opportunities to integrate GSI into planned public projects where feasible
- Construct GSI projects to meet target of 3 acres treated per 50,000 population up to 5 acres
- > (Palo Alto @ 65,364 population = 3.92 ac)
- > Targets can be met at the countywide level
 - If countywide approach chosen, treat minimum of 0.2 acres





Provision C.10 - Trash Controls Significant Changes





- Reduce trash entering storm drain systems
- ➤ New Benchmarks:
 - New 90% trash reductionby June 30, 2023
 - Extended 100% trash reduction (no adverse impact to waters)
 by June 30, 2025

Provision C.10 - Trash Controls Significant Changes









Credits/offsets for source control ordinances eliminated after June 2025



Require private properties with trash issues to implement trash controls

Provisions C.II/C.I2 - Mercury/PCB Controls Background



Legacy pollutants still detected in Bay Area soils and waters

- ➤ Polychlorinated Biphenyls (PCBs) Sources (manufacturing banned in 1979)
 - Electrical equipment (transformers and capacitors)
 - Hydraulic fluids, dust control, flame retardants, lubricants, paints, sealants, wood preservatives, inks/dyes and plasticizers
 - Construction materials (caulking, insulation, roofing and siding materials)
- Mercury Sources
 - Mining
 - Fossil fuel combustion
 - Concrete production
 - Consumer goods (fluorescent light bulbs, batteries)





Provisions C.11/C.12 - Mercury/PCB Controls Significant Changes





Continuing Programs

- Identify/manage properties that may be sources of PCBs/mercury
- Manage PCBs-containing materials and wastes during building demolition
- Control PCBs from oil-filled equipment at municipally-owned electrical utilities

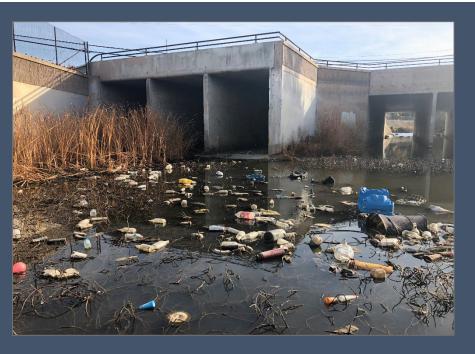


New Programs

- Implement runoff treatment measures from Old Industrial
 Areas (664 acres in Santa Clara County)
- Control PCBs from materials in bridges and overpasses (when repaired or replaced)

Provision C.8 – Water Quality Monitoring Significant Changes





- Increased requirements for trash monitoring
 - Levels of trash discharged from storm drains during storm events
 - In-stream trash monitoring during storm events
 - Assess trash levels on shorelines and/or streambanks

- Monitor effectiveness of GSI
- Monitor certain pollutants entering receiving waters



New Provisions



C.17 Discharges Associated with Unsheltered Homeless Populations

 Identify/implement practices to manage discharges associated with unsheltered homeless populations

C.20 Cost Reporting

- Develop and submit a regional cost reporting framework
- Submit annual analysis of stormwater program costs starting FY 24-25

C.21 Asset Management

Develop/implement
 Asset Management Plan
 for stormwater quality
 assets (e.g., GSI & trash
 devices)

New (Sub)Provisions



C.5 Mapping Storm Drain Systems

- Identify missing data from MS4 maps and develop a plan to gather data
- Gather asset management data (pipe size, material, condition, etc.)

C.15 Firefighting Discharges

- Convene a regionwide Firefighting Discharges Working Group
- Submit a Firefighting Discharges Report describing BMPs/SOPs
- Evaluate adequacy of industrial properties to contain firefighting discharges

Fiscal Impacts of MRP 3.0



- >Expanded public resources will be needed to comply
 - Internal funding needs assessment planned
 - Five-year projected budget from SCVURPPP under development

- > Potential funding sources & opportunities to increase efficiencies
 - Funding Analysis recommendations
 - Regional/Program-wide collaboration on tasks/projects
 - State/Federal grant opportunities

QUESTIONS







Rebate Program and Outreach Updates

Olivia Trevino August 11, 2022



Rain Barrel Survey and Results

Goal:

- Learn how satisfied people were with the Rain Barrel Pilot Program and rebate process
- Gain valuable feedback for future program improvements
- Total of 77 submitted responses
- Opportunity to improve rebate process
- Majority of individuals heard about the rebate through utility bill inserts and e-newsletter

Rebate Program Yard Signs

▶ 18" height x 24" width full-color yard sign printed with weather-resistant UV ink on corrugated plastic

WATER YOU WAITING FOR?

Learn more about rainwater capture rebates.





Funded by the City of Palo Alto Stormwater Management Fee



cityofpaloalto.org/stormwater



Rebate Signage Distribution

- ▶14 signs distributed to Palo Alto Residents
- ▶23 signs distributed to city facilities









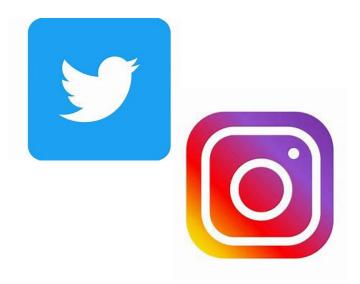


Trash Boom Project Webpage and Signage

- Webpage provides information on two Palo Alto trash booms
- New signage for trash booms
- New signage for 3 major creeks

Social Media Outreach

 Posting on Instagram and Twitter on "Sustainable Saturday" to promote Stormwater Rebate Program





Did you know that you can save money and help the environment with four different stormwater-related **rebate incentives** provided by the City? Available to both Palo Alto residents and business, they include: Rain Cisterns **Barrels** Learn more at **Pervious** Rain cityofpaloalto.org Gardens **Pavement** /stormwater

Future Outreach: Newsletter, Blog, and More!

- Promote our future workshop with SummerWinds Nursery
- Promote and educate the community about stormwater rebates
- Business/Resident factsheets to address new MRP 3.0 requirements and educate about BMPs



Stormwater eNEWS

How Palo Alto Rebates Can Help Small Projects Make A Big Impact

The City of Palo Alto and Valley Water rebates help you save money on outdoor home projects while focusing on sustainability, pollution prevention, and water conservation. Rebates can total up to \$3,000 per single-family home and \$55,000 for a commercial property. Learn more >

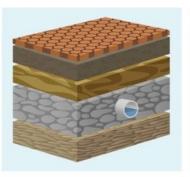
Click on the rebate options below for rebate incentives, detailed instructions on how to apply, and answers to your most frequently asked questions.



Capture rainwater from your downspout and receive \$70 per rain barrel with a barrel size of 40 - 199 gallons.









Rain Barrels Cisterns Pervious Pavement Rain Gardens

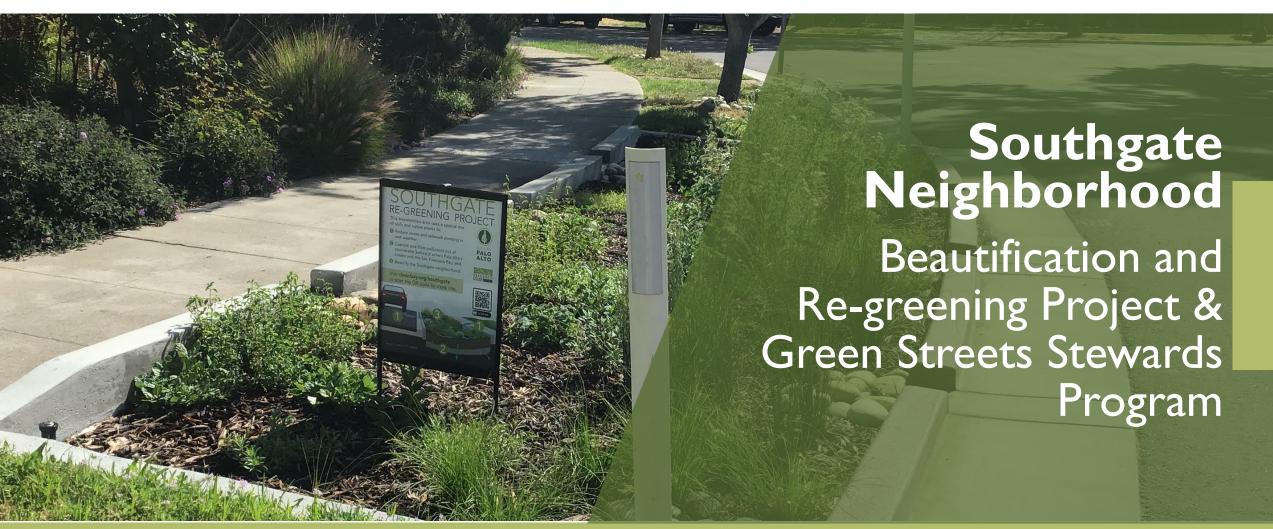


Future Outreach Event

- SummerWinds Event Goal: Educate City residents on stormwater capture, pollution prevention, and benefits of rain barrels
 - November/October (date TBD)
 - Work with SummerWinds staff to promote event and install rain barrel
 - Follow up with registrants with installation and rebate information and send out survey to gather feedback







August 11, 2022

www.cityofpaloalto.org/southgat



Southgate Project Background

- Lack of traditional storm drain system
- Neighborhood-wide drainage problems
- 2014 green stormwater infrastructure (GSI) project
- Funded by Storm Drain Fee

Bioretention Area Benefits

- Captures and filters pollutants
- Reduces ponding in streets and sidewalks
- Supports wildlife habitat
- Beautifies the neighborhood
- Improves air quality
- Aids with climate change resilience and mitigation







Maintenance Challenges









Southgate Replanting Partnership



Bioretention Restoration Story





Southgate Green Streets Stewards Program

- Pilot a volunteer maintenance program for bioretention areas
- Southgate Neighborhood ideal location
- Grassroots Ecology provides training and oversight
- City provides structure and support



Southgate Green Streets Stewards Program

Expectations:

- I. Training with Grassroots Ecology and City staff
- 2. Monthly maintenance of bioretention (minimum)
- 3. Online reporting of maintenance activities
- 4. Participate in Grassroots Ecology workdays

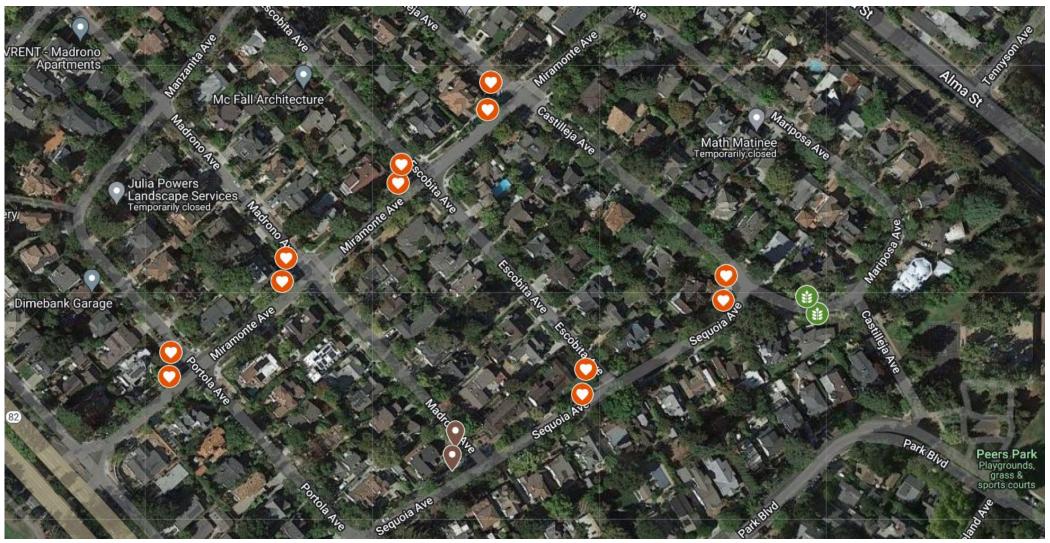


Southgate Green Streets Stewards Program

After receiving training, Stewards will:

- I. Receive a "maintenance kit"
- 2. Keep inlets and outlets clear of debris
- 3. Beautify area by removing trash, debris and weeds
- 4. Photodocument progress and challenges (e.g., drainage)
- 5. Report issues such as damage from vehicles or irrigation malfunction

Map of Southgate Bioretention Areas

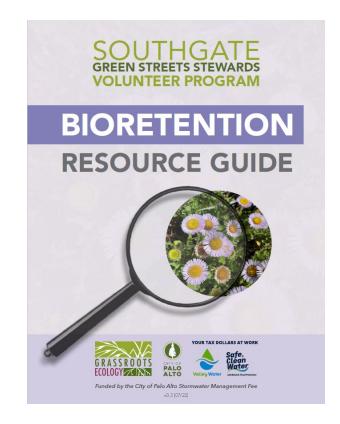




OUTREACH AND EDUCATIONAL MATERIALS











Project Updates

- Neighborhood Meeting March 3, 2022
- Grassroots Ecology workdays
 - Neighborhood May 15, 2022
 - Renovation of 4 remaining bioretention areas with Corps
 - July 20 Rock removal, replacement of electrical box by Utilities Department (Sequoia and Escobita)
 - August 3 Removal of non-native plants and rock (Sequoia and Madrono)
 - Fall w/ neighborhood
 - Update irrigation
 - Amend soil with compost
 - Replant remaining 4 bioretention areas

Next Steps



- Development of workplan
- Grassroots ecology volunteer management
 - Volunteer training days
 - Community/volunteer workdays
- Bioretention monitoring and maintenance
- Revaluation and adjustment of plant palette
 - Improve aesthetics of areas
 - Increase community acceptability





Challenges and Lessons Learned

- Response to community feedback/concerns
 - Signage
 - Aesthetics
 - Maintenance issues/concerns
- Continuing communication
 - Ongoing community outreach and engagement
- Bioretention area management
 - Meeting various goals plant choice, spacing and placement
 - Plant size and establishment period
 - Monitoring and maintenance considerations

