



- Board of Directors  
*Water Planning and Stewardship Committee*

9/10/2019 Board Meeting

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**8-5**

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## **Subject**

Authorize \$5.0 million for a Stormwater for Direct Use Pilot Program for developing and monitoring of stormwater capture for direct-use projects; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

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## **Executive Summary**

Metropolitan seeks to better understand the water supply benefits and assess project performance of stormwater projects by conducting additional research and collecting data on actual stormwater projects. The proposed Stormwater for Direct Use Pilot Program (Pilot Program) encourages development and monitoring of new and existing direct-use stormwater projects by providing financial incentives for construction or retrofit of projects and supplemental monitoring and reporting costs. The primary purpose of the Pilot Program is to collect data from several region-wide stormwater projects. The data collected will provide a better understanding of actual stormwater runoff capture volumes, costs, and project performance. The Pilot Program will help evaluate the potential water supply benefits delivered by stormwater capture projects and provide a basis for potential future funding approaches.

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## **Details**

### **Background**

Metropolitan's 2015 Integrated Water Resources Plan (IRP) Update calls for the development of a diverse resource portfolio through local supply projects – including recycled water, groundwater recovery, seawater desalination, and stormwater capture. Metropolitan has played an active role in the development of those local supplies through different approaches and programs developed over the years. Since 1982, Metropolitan has provided incentives to its member agencies to develop local projects through the Local Resources Program (LRP). Currently, the LRP does not fund local stormwater capture projects, due in part to the need for a better understanding of the connection between captured stormwater and water supply yield.

In 2018, the Southern California Water Coalition published a whitepaper that detailed benefits and challenges associated with stormwater development. Although stormwater projects deliver multiple benefits such as supply yield, flood mitigation, habitat creation, and water quality improvements, there are also some challenges with developing these types of projects. The main challenges are costs, metering, and data collection. Stormwater capture projects are typically expensive to construct, operate, and maintain. In addition, it is difficult to secure available funding to help offset the capital investment. Furthermore, the relationship between stormwater capture and water supply yield has not been extensively analyzed. With respect to metering, very few projects are monitored, either due to expensive flow monitoring devices and/or insufficient staff resources. This limits the ability to fully characterize stormwater capture project costs or to quantify the water supply benefit.

Over the last several months, staff has received feedback from the Conservation and Local Resources Committee, Water Planning and Stewardship Committee, and member agency managers. The feedback received can be summarized into four main considerations: (1) program outreach, (2) project type, (3) monitoring period, and (4) criteria. Staff has refined concepts for the proposed Pilot Program based on the feedback received.

## Stormwater for Direct Use Pilot Program

Direct-use projects capture and store rainfall and stormwater runoff on-site and use it to meet non-potable demands (not for recharge). Some examples of direct-use projects include stormwater capture through cisterns or permeable pavement with an underground collection system, which then use the captured water for on-site irrigation.

In an effort to gain a better understanding of the actual costs and potential benefits associated with capture, and reuse of stormwater, staff proposes a Pilot Program to encourage the development and monitoring of new and existing stormwater projects. The Pilot Program will provide funding for project construction or retrofit and reporting of stormwater capture and reuse. For the purpose of collecting data to understand project performance and examine the potential benefits, Metropolitan may fund projects under the Pilot Program at a cost higher than if funded solely for their actual water supply yield.

### *Criteria*

During the development process, staff looked at various programs Metropolitan currently offers and selected the best elements from these programs to develop the framework for the Pilot Program (**Attachment 1**).

Staff proposes a \$5.0 million Pilot Program to provide funding for constructing/retrofitting and three-year monitoring of direct-use stormwater capture projects. The purpose of the Pilot Program is to capture a diverse set of data from existing, active projects, and from new, potentially larger-scale projects. The Pilot Program would provide funding for: (1) existing stormwater projects (that do not currently meter) to retrofit their sites to include flow monitoring, and (2) construction of new direct-use stormwater capture projects. Additionally, Metropolitan would also provide funding for a three-year monitoring and reporting period following construction/retrofit completion. Once approved, a project has up to one year for retrofit or two years for new construction.

The Pilot Program would be open to public and private (non-residential) sites, and each project would require coordination with its member agency. Eligible sites include schools, parks, golf courses, industrial/commercial sites, and cemeteries. For each approved project, Metropolitan would enter into an agreement with the member agency and the project owner.

During the monitoring period, participants will be required to submit annual reports capturing the monitoring data and costs incurred in that year. Reports would be due at the end of each fiscal year, for a minimum of three years. Upon mutual agreement, Metropolitan may fund additional years of reporting, if needed.

To be eligible to participate in the Pilot Program, projects must:

- Include meter(s) for measurement of capture and reuse;
- Offset potable water use;
- Be within Metropolitan's service area;
- Have an estimated minimum capture and reuse of one acre-foot per year;
- Have completed CEQA documents (if needed); and
- Submit original project construction costs at the time of application (retrofit projects only).

In an effort to gather data from several region-wide stormwater projects, staff proposes to select projects within three different climate zones: coastal, mid, and inland. Selections would be on a first-come, first-served basis per climate zone and project type and conforming to program criteria detailed in **Attachment 1**. Once a zone is fully committed, applications received within that zone will be placed on a waitlist per project type. At the end of the first year of the application period, additional projects from the waitlist may be selected based on available funding.

### *Funding Structure*

Metropolitan will fund retrofit projects in two components: construction and monitoring/reporting. The first component would offset the upfront costs associated with retrofitting a project to include flow monitoring. Under this component, a project would be eligible to receive reimbursement of up to \$100,000 of eligible project costs (i.e., design, materials, and construction/installation). The second component is to help with the required monitoring and reporting for this pilot. Based on average reporting costs identified in project proposals submitted for other Metropolitan programs, Metropolitan would pay \$20,000 per report to cover the additional time and

effort required to produce the data needed for this Pilot Program. A retrofit project would be eligible to receive a maximum funding amount of the sum of the construction and monitoring/reporting components, capped at \$160,000.

Similarly, Metropolitan will fund construction of new stormwater capture and reuse projects in two components: construction and monitoring/reporting. For the first component, a project would be eligible to receive reimbursement of up to 50 percent of eligible project costs (design, materials, and construction). For the monitoring and reporting component, Metropolitan would pay \$20,000 per report. In total, a new construction project would be eligible to receive a maximum funding amount of the sum of the construction and monitoring/reporting components, capped at \$500,000.

The table below summarizes potential program structure:

	<b>Retrofit Projects</b>	<b>New Construction Projects</b>
<b>Maximum Funding Amount</b>	\$160,000	\$500,000
<b>Construction Period</b>	Up to one year	Up to two years

*Outreach*

In anticipation of the application period, Metropolitan staff will meet with member agencies to coordinate outreach and develop targeted marketing materials for the program for distribution within their service area. The Pilot Program would begin accepting retrofit and new construction project applications starting January 1, 2020, for a two-year period, or until funding is fully committed, whichever is sooner.

**Summary**

The Pilot Program will provide information to help evaluate the water supply benefits of stormwater capture projects. Providing funding to offset construction and monitoring costs reduces a key constraint in project development and the ability to quantify stormwater volumes. Furthermore, the monitoring and reporting component will provide necessary data to evaluate the potential water supply benefits delivered by stormwater capture projects.

**Next Steps**

If approved, staff will begin coordinating with member agency staff for program outreach and begin accepting applications in January 2020. Projects with eligible costs greater than the General Manager’s authority will be brought to the Board for authorization prior to entering into agreement.

**Policy**

By Minute Item 50358, dated January 12, 2016, the Board adopted the 2015 Integrated Water Resources Plan Update.

By Minute Item 50883 and as set forth in Board Letter 8-2, dated July 11, 2017, the Board adopted revised Policy Principles guiding Metropolitan’s role in regional implementation of Integrated Water Resources Plan targets for local resources and conservation.

**California Environmental Quality Act (CEQA)**

**CEQA determination for Option #1:**

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed action will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines)

**CEQA determination for Option #2:**

None required

**Board Options**

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**Option #1**

Authorize \$5.0 million for the Stormwater for Direct Use Pilot Program for developing and monitoring of stormwater capture for direct-use projects consistent with the program criteria in **Attachment 1**.

**Fiscal Impact:** \$5,000,000 for the Stormwater for Direct Use Pilot Program funded from the water stewardship fund for developing and monitoring of stormwater capture for direct-use projects

**Business Analysis:** The proposed Pilot Program would help achieve the IRP targets for local resources and conservation.

**Option #2**

Do not authorize \$5.0 million for the Stormwater for Direct Use Pilot Program.

**Fiscal Impact:** None

**Business Analysis:** Metropolitan would forgo an opportunity to increase local resources in order to help meet IRP targets.

**Staff Recommendation**

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## Option #1

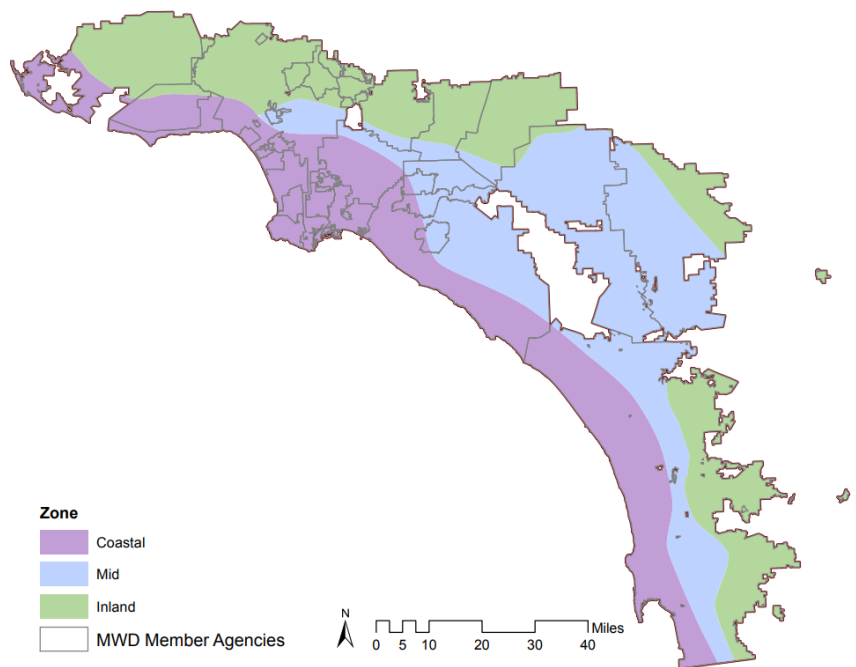
 Brad Coffey Manager, Water Resource Management	8/27/2019 Date
 Jeffrey Nightlinger General Manager	8/29/2019 Date

**Attachment 1 – Program Criteria**

Ref# wrm12662632

### Proposed Stormwater for Direct Use Pilot Program Program Criteria

- Budget: \$5.0 million
- Program Start: January 1, 2020
- Participation: Public/private sites (non-residential)
- Project must:
  - Be only for direct use through on-site capture or storm drain diversion
  - Include meter(s) for measurement of capture and reuse
  - Offset existing potable water use
  - Be located within Metropolitan’s service area
  - Capture and reuse at least one acre-foot per year
  - Have completed CEQA documents (if needed)
  - Submit original project construction costs at time of application (retrofit projects only)
- Projects must submit a minimum of three annual monitoring reports; upon mutual agreement, Metropolitan may fund additional years of reporting, if needed
- Application period: January 1, 2020, – December 31, 2021, or until funds fully committed
  - Projects will be sought in three separate climate zones in Metropolitan’s service area.
  - Applications selected on a first-come, first-served basis per zone and project type
  - Once zone is fully committed, applications received within that zone will be placed on a waitlist
- Provide funding for:
  - Retrofit – installation of monitoring equipment and reporting of stormwater capture and reuse of existing direct-use stormwater capture projects
  - New Construction – construction and monitoring/reporting of new direct-use stormwater capture projects



Project Type	Funding Components	
	Construction/Installation	Monitoring & Reporting
<b>Retrofit</b>	Up to \$100,000 for eligible costs (design, material, installation)	\$20,000/report
<b>Capped at \$160,000</b>		
<b>New Construction</b>	Up to 50% reimbursement of eligible costs (design, material, construction)	\$20,000/report
<b>Capped at \$500,000</b>		