



● **Board of Directors**
Water Planning and Stewardship Committee

6/8/2021 Board Meeting

7-8

Subject

Review and consider Inland Empire Utilities Agency's approved Final PEIR and Addendum and take related CEQA actions, and authorize the General Manager to enter into a Stormwater for Recharge Pilot Agreement with Inland Empire Utilities Agency for the Montclair Basins Improvement Project

Executive Summary

This letter requests authorization for Metropolitan to enter into a Stormwater for Recharge Pilot Program (Pilot Program) agreement with the Inland Empire Utilities Agency (IEUA) with a maximum amount of up to \$987,485 for the construction and monitoring of the Montclair Basins Improvement Project (Project). The proposed Project, if approved, would construct upgrades to the existing Montclair Basin, perform groundwater modeling, and perform a minimum of three years of stormwater recharge monitoring and reporting. The proposed Project would quantify stormwater capture and its relationship to water supply yield, which will contribute towards Metropolitan's evaluation and understanding of the potential water supply benefits delivered by stormwater capture projects throughout the service area.

Details

Background

Metropolitan's 2015 Integrated Water Resources Plan Update calls for the development of a diverse regional 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). Local stormwater capture projects currently are not funded through the LRP in part due to the need to have a better understanding of the connection between captured stormwater and yield. To clarify this connection, Metropolitan developed the Pilot Program. Participants of the Pilot Program will measure the quantity of stormwater runoff capture and how the captured stormwater provides for new usable groundwater. The Board approved the Pilot Program on November 5, 2019 (Board Letter 8-3). The Pilot Program application process launched on March 27, 2020. Agencies may submit applications to install monitoring equipment on existing projects or construct new projects. To date, the Pilot Program has received six applications, two for monitoring equipment installation and four for new construction projects. IEUA applied for the proposed Project on October 20, 2020. Staff reviewed the application for completeness and confirmed that Project criteria approved by the Board were met.

Proposed Project

The proposed Project is an infrastructure improvement project for the construction of upgrades to the existing Montclair Basin located in the city of Montclair. The Montclair Basin facility, which includes Basins 1 through 4, currently diverts stormwater from the San Antonio Creek flood control channel. Stormwater is captured in Basin 1 and percolates via the other basins into the Chino groundwater basin. Without the Montclair Basins, the San Antonio Creek flood control channel would be unable to handle the peak flows experienced during larger storm events. The San Antonio Creek flood control channel also carries dry weather runoff that can be diverted into Basin 1.

The proposed improvement consists of constructing two new diversion structures in the San Antonio Creek flood control channel to divert flow into the Montclair Basins 2 and 3. This Project would also repair and improve the spillway between Basins 1 and 2. The spillway between Basins 1 and 2 was initially damaged in 2011, with substantially more damage occurring in 2017. After 2017, Chino Basin Water Conservation District declared the spillway non-operational to avoid further structural damage. The spillway structural issues reduce the amount that can be recharged. Also, the proposed spillway will prolong the useful life of the facility. The Project will increase the facility's opportunity to capture and recharge an additional 152 acre-feet per year of stormwater.

Project Description

The proposed Project, if approved, would construct upgrades to the existing Montclair Basin, perform groundwater modeling, and perform a minimum of three years of stormwater recharge monitoring and reporting in the Chino Basin. The proposed Project would include:

- Constructing two new diversion structures from the San Antonio Creek flood control channel.
- Repairing the existing spillway.
- Monitoring stormwater capture and groundwater levels.
- Reporting on modeling results.
- Evaluating increases in storage and groundwater production.
- Preparing three annual monitoring reports to summarize data collection and analysis.

Key terms of the proposed Recharge Pilot Agreement are stated in **Attachment 1**. A more detailed Project description can be found in **Attachment 2**.

Funding Structure

The funding includes two components: construction and ongoing monitoring and reporting. This Project has requested funding for construction, monitoring, and reporting for a total of \$987,485.

Component	Metropolitan	IEUA	Total Project
Construction	\$837,435	\$837,435	\$1,674,870
Monitoring and reporting	\$150,000	\$0	\$150,000
Total	\$987,435	\$837,435	\$1,824,870

Staff recommends approval of the funding agreement as this Project is consistent with the objectives of the board-approved Pilot Program.

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.

By Minute Item 51793, dated November 5, 2019, the Board authorized \$7.5 million for the Stormwater for Recharge Pilot Program.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the Inland Empire Utilities Agency (IEUA) acting as the CEQA Lead Agency, prepared and processed a Final Program Environmental Impact Report and Addendum for the proposed project in the IEUA service area. The Final PEIR was adopted and the project approved by the Lead Agency on March 15, 2017. The Lead Agency also approved the respective Mitigation

Monitoring and Reporting Program (MMRP) and Statement of Overriding Consideration. Subsequent to that time, the IEUA prepared an Addendum to the Final PEIR, dated January 5, 2021, that identifies Metropolitan as a Responsible Agency under CEQA. As a Responsible agency, Metropolitan is required to certify that it has reviewed and considered the information in the Final PEIR and Addendum for this project and adopt the Lead Agency's findings and MMRP prior to approval of the formal terms and conditions for the proposed agreement. The environmental documentation is included as **Attachment 3**

CEQA determination for Options #2:

None required

Board Options

Option #1

Review and consider the Lead Agency's approved Final EIR and Addendum and take related CEQA actions, and authorize the General Manager to enter into a Stormwater for Recharge Pilot Program Agreement with Inland Empire Utilities Agency for the construction and monitoring of the Montclair Basins Improvement Project.

Fiscal Impact: Metropolitan's maximum financial obligation would total \$987,485 for eligible Project expenses and a three-year monitoring and reporting period. These payments will be taken from the approved \$7.5 million Recharge Pilot Program budget (Minute Item 51793, dated November 5, 2019; Water Stewardship Fund).

Business Analysis: The Project would help Metropolitan achieve the Recharge Pilot Program goal of understanding the relationship between stormwater capture and the water supply benefit of stormwater.

Option #2

Do not authorize execution of an agreement for the Project.

Fiscal Impact: None

Business Analysis: Metropolitan would pursue other projects, and it may take longer to meet the goals of the Recharge Pilot Program.

Staff Recommendation

Option #1


 Brad Coffey
 Manager, Water Resource Management

5/18/2021

Date


 Jeffrey Nighlirger
 General Manager

5/21/2021

Date

Attachment 1 – Term Sheet for the Inland Empire Utilities Agency Construction and Monitoring and Reporting for the Montclair Basin Improvements Project

Attachment 2 – Project Description for the Montclair Basin Improvement Project

Attachment 3 – Environmental Documentation

Ref# wrm12680883

**Term Sheet for the Inland Empire Utilities Agency Construction and Monitoring and Reporting for
the Montclair Basin Improvements Project
Stormwater for Recharge Pilot Program**

Project Overview

- Member Agency: Inland Empire Utilities Agency
- Regional Board Area: Santa Ana
- Groundwater Basin: Santa Ana
- Project Type: New Construction
- Estimated Stormwater Capture: 152 acre-feet per year
- **Agreement Term**
 - Agreement Term: 6 years
 - Construction complete: 3 years
 - Monitoring Period: 3 years

Project Costs

- Estimated member agency cost: \$1,824,870
- Maximum Metropolitan contribution: \$987,435
- Construction: \$837,435
- Monitoring and Reporting: \$150,000 (\$50,000 per report, total of three reports)
- Metropolitan will reimburse for eligible costs upon completion of deliverables, along with verification and approval of invoices.
 - Metropolitan will make the monitoring and reporting payments upon approval of submitted monitoring report and database collection.
 - Metropolitan will make all payments directly to Inland Empire Utilities Agency.

Project Description for the Montclair Basin Improvement Project

Background

The Montclair Basin Improvements Project (Project) is an infrastructure improvement project for the construction and monitoring of upgrades to the existing Montclair Basin (Basin) located in the city of Montclair, in San Bernardino County, California. The Basin is part of a multiple-use agreement with Chino Basin Water Conservation District (CBWCD), Inland Empire Utilities Agency (IEUA), Chino Basin Watermaster (Watermaster), and San Bernardino County Flood Control District (SBCFCD) for stormwater retention and groundwater recharge. The Project is designed to increase the diversion and volume for groundwater recharge of stormwater, dry weather runoff and imported water into the Chino Groundwater Basin (CGB). Two of the four retention basins that make up the facility will be modified to directly receive additional channel flow of stormwater, runoff, and imported water and increase storage in Basin 1 through the improvement of an existing Basin 2 spillway system. The Project goal is to provide additional stormwater, dry weather run off and imported water capture via Basin 2 and Basin 3 inlet structures from the San Antonio Channel and increase the basin storage capacity via the spillway improvements in order to increase drought resiliency through groundwater recharge.

The Montclair Basins currently divert stormwater from the San Antonio Creek flood control channel during storm events to Basin 1 only to minimize the volume of water flowing through the flood control channels. Without the Montclair Basins, the San Antonio Creek flood control channel would be unable to handle the peak flows experienced during larger storm events. Stormwater is captured in Basin 1 and percolates via the four basins into CGB. The San Antonio Creek flood control channel also carries dry weather runoff which can be diverted into Basin 1.

Proposed Project

The proposed improvement consists of providing two new diversion structures in the San Antonio Creek flood control channel to divert flow into the Montclair Basins 2 and 3. A diversion structure is already in place that diverts flow into Basin 1. Providing additional diversions into both Montclair Basin 2 and Basin 3 would increase the yield to 96 acre-feet per year (AFY). This Project would also repair and improve the spillway between Basins 1 and 2. The spillway between Basins 1 and 2 was initially damaged in 2011, with more damage occurring in 2017. The Basin 2 spillway damage included a hole in the spillway discharge channel concrete lining, cracking with vertical displacements of substantial portions of the concrete channel and some subgrade flow were observed. In 2017, CBWCD declared the spillway non-operational to avoid further structural damage. The spillway structural issues reduce the maximum water detention level in Basin 1 by over eight feet, which translates to approximately 56 AFY of recharge loss. The proposed spillway will prolong the use life the facility and return 56 AFY for recharge. The beneficial use for this Project will allow for more water capture at 96 AFY for the two new diversions and 56 AFY for the improved future drought resiliency in the Chino Basin region. The improvement will increase the facility's opportunity to capture and recharge nearly 152 AFY of stormwater.

The proposed Project also includes three years of stormwater recharge monitoring and reporting for the Project. The monitoring and reporting tasks include:

- Monitor stormwater flow amount captured with flow meter upstream and downstream of the spreading basins
- Monitor changes in water level from existing wells

- Report on modeling results to estimate the flow path for water that is recharged and estimate the percent of the stormwater captured that reaches primary pumping aquifer
- Evaluate increases in storage and groundwater production as a result of project
- Prepare three annual monitoring reports to summarize data collection and analysis

The additional monitoring will allow IEUA to increase groundwater levels in the Basin while avoiding negative effects such as increased liquefaction potential, excessive groundwater mounding, and shallow groundwater.



*THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA*
700 N. Alameda Street, Los Angeles, California 90012

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[Attachment 3 –Environmental Documentation](#)

These attachments are not included.

You may review these documents on our website at:

<http://mwdh2o.com/WhoWeAre/Board/Board-Meeting>

OR

By contacting Metropolitan's Board Executive Secretary at: (213) 217-6291 or

via email at DL-BoardSupportTeam@mwdh2o.com