



City of Hermosa Beach

Civic Center, 1315 Valley Drive, Hermosa Beach, CA 90254-3885

Information Item

DATE: June 5, 2024
TO: Honorable Mayor and Members of the City Council
FROM: Environmental Programs Manager, Doug Krauss
SUBJECT: Watershed Management Plan and Post-Infiltration Project Update

Executive Summary

The current National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System Permit (MS4 Permit) required permittees to submit an updated Watershed Management Plan (WMP) with an amended Reasonable Assurance Analysis. In June of 2021, Council approved the draft WMP and it was subsequently submitted to the Regional Water Quality Control Board (Water Board) and approved in April 2023. The WMP includes identification of regional projects to help meet pollution reduction requirements. The prior WMP proposed the Greenbelt Infiltration project to meet these goals, but that project has since been replaced with smaller, more localized project alternatives. Two projects have been identified for Hermosa Beach to accomplish the City's pollution reduction goals: the Hermosa Avenue Green Streets project (CIP164) and a dry well project in the vicinity of Pacific Coast Highway (CIP 438).

Background

In 2013, the cities of Hermosa Beach, Torrance, Redondo Beach, Manhattan Beach, and the Los Angeles County Flood Control District formed the Beach Cities Group (BCG) to develop a Watershed Management Plan to comply with the Los Angeles Regional Water Quality Control Board's (Regional Board) 2012 MS4 Permit. At that time, the BCG agencies entered into a Memorandum of Understanding (MOU) to cost share the development of the WMP and a Coordinated Integrated Monitoring Plan. On April 18, 2016, the BCG was directed by the Executive Officer of the Regional Board to begin implementation of the WMP immediately, including construction of identified capital projects.

Following the Regional Board's approval, the City, in partnership with the BCG, successfully secured funding for the design and construction of the Greenbelt Infiltration Project. The Greenbelt Infiltration Project was the highest priority project in the WMP due to its potential significant contribution toward achievement of the pollutant reduction goals. However, due to project complications, City Council approved the dissolution or revision of the project MOU at the March 26, 2019, meeting.

On July 28, 2020, staff returned to City Council with a request to dissolve the MOU related to design of joint regional projects and to appropriate \$160,000 to fund a feasibility study to explore alternate projects to achieve stormwater diversion and pollution reductions equivalent to what would have been achieved by the cancelled Greenbelt Infiltration Project. The search for alternative projects involved reanalyzing existing concepts and researching new projects throughout the region with the strategy of combining multiple smaller projects to achieve compliance goals. Additionally, the BCG submitted a Time Schedule Order (TSO) to the Regional Board in May of 2024 requesting an extension of compliance deadlines through 2031. Response to this request is expected sometime in late 2024.

Analysis

The new project strategies identified in the revised WMP were a result of many improvements to the BCG's understanding of regional hydrology and its role in pollution reduction. Since the BCG's initial WMP, then known as an Enhanced Watershed Management Plan or EWMP, was approved in 2016, significant advancements have been made in the state of the practice of stormwater project planning and Reasonable Assurance Analysis (RAA) modeling. Additionally, the group has gained invaluable experience and insight with respect to implementation of the WMP, understanding more about both the opportunities and challenges to successful implementation of effective stormwater projects.

In particular, the updated BCG WMP was revised in the following critical ways:

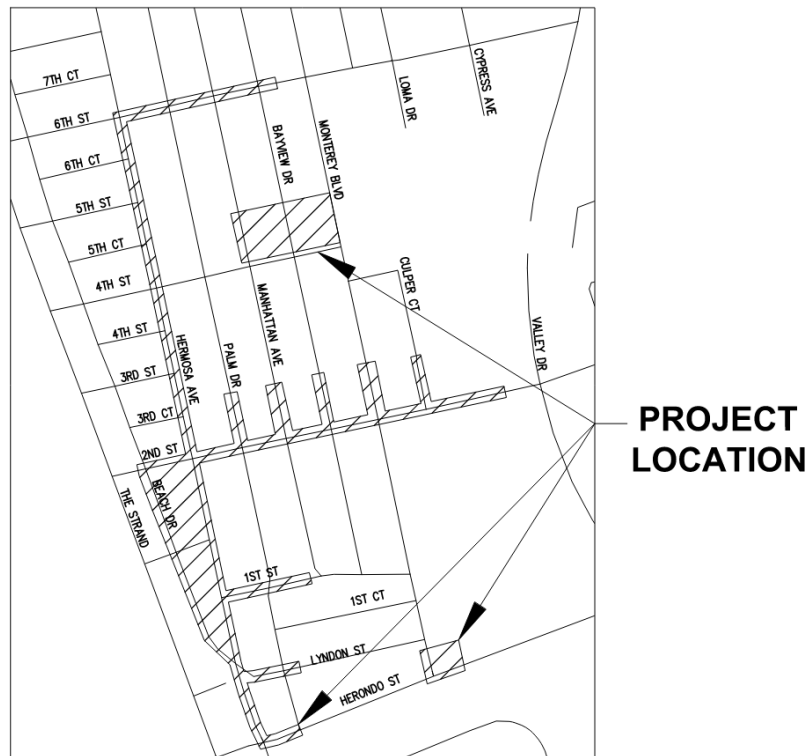
- **Incorporation of newly available, WMP-specific data.** The BCG has been successfully implementing its Coordinated Integrated Monitoring Plan (CIMP) since 2015, resulting in five years of outfall and receiving water monitoring data from the WMP area. Coupled with other regional studies and data, this has allowed a more-definitive determination of whether MS4 outfalls are causing or contributing to receiving water exceedances.
- **Utilization of the updated, Countywide RAA modeling tool.** The revised RAA uses the newly released Watershed Management Modeling System 2 modeling platform. This model was further calibrated and validated using BCG CIMP monitoring data collected through June 30, 2020, to best reflect the baseline hydrology and water quality conditions within the WMP Area.
- **A focus on multi-benefit regional projects.** Although distributed projects are necessary, regional projects are generally preferable as they provide multiple benefits, are more cost-effective, and have a higher likelihood of receiving outside funding.

Incorporating these changes, the revised WMP more accurately reflects the actual water quality and flow conditions, provides updated, measurable milestones that can be tracked over time, and identifies implementable, cost-effective solutions to achieve compliance.

Proposed Projects

The updated WMP identifies two projects that, in combination, will meet the necessary pollutant reduction requirements originally envisioned for the cancelled Greenbelt Infiltration project. The Hermosa Avenue Green Streets project is part of a series of green street projects located throughout the BCG cities. Acting as lead agency, the City of Torrance has successfully applied for a grant from the Safe, Clean Water program and a Santa Monica Bay Restoration grant. Together, these grants total more than \$7 million to be used for construction of these projects. The project plans are finalized and the BCG agencies are currently working to finalize an MOU for construction implementation.

In Hermosa Beach, the project will center on installation of permeable concrete gutters in the vicinity of Hermosa Avenue, between Herondo and 6th Street. As designed, the project will capture the necessary stormwater volume from this area of Hermosa Beach that currently discharges stormwater run-off directly to the ocean. With the City of Torrance as lead, the project is estimated to go out to bid soon and be completed in 2025.



For the other proposed project, the WMP proposed installation of dry wells in the vicinity of Pacific Coast Highway. A dry well is a bored, drilled, or driven shaft whose depth is greater than its width. These dry wells would most likely be prefabricated storage chambers or pipe segments. Dry wells are similar to a tube in the ground, no bigger than a few feet in diameter and marked at the surface by a maintenance access hole and inlet. Dry wells serve to temporarily store, and subsequently infiltrate, stormwater runoff.

Dry wells are more cost effective and logistically manageable than a large regional infiltration project and allow much greater flexibility for siting. As shown in the schematic below, dry wells installed in the vicinity of Pacific Coast Highway and the neighborhood to the east could potentially provide the stormwater capture necessary (in conjunction with projects in our partner cities) to satisfy the requirements of the WMP. The final quantity and locations will be determined via further investigation and community engagement. Currently, the City is working with the City of Redondo to assess the possibility of combining with their own dry wells project to seek funding for project design and construction. Should the BCG's TSO request be approved, the City will have until 2031 to complete this project. In combination with other programmatic measures (regular street sweeping, education and outreach, business inspections, etc.), completion of both the Green Streets and Dry Well projects will ensure the City's full compliance with the current MS4 permit and any applicable pollutant reduction targets.

