

Staff Report

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# Honorable Mayor and Members of the Hermosa Beach City Council Regular Meeting of March 26, 2019

## **GREENBELT INFILTRATION PROJECT NEXT STEPS**

(Environmental Analyst Kristy Morris)

### Recommended Action:

Staff recommends that the City Council:

- 1. Proceed with a project at the existing Greenbelt location; or
- 2. Proceed with a project at an alternative location within the City's jurisdiction that would capture and treat the equivalent volume of stormwater; or
- 3. Initiate a dissolution or an amendment of the Memorandum of Understanding (MOU) to negotiate a suitable substitute or revised MOU and project with the City's partners, relinquish the Grant and forfeit the grant funding.

### Executive Summary:

The Hermosa Greenbelt Infiltration Project (Project) is the highest priority project in the Beach Cities Enhanced Watershed Management Program (EWMP) that would achieve the greatest reduction in bacterial levels, at the Herondo Drain Outfall in Hermosa Beach. The awarded Proposition 1 Stormwater Implementation Grant of \$3,099,400 represents approximately one half of the estimated total project cost. In response to community concerns regarding the proximity of the Project to residential dwelling units and the potential construction and operational impacts, progress was delayed on the Project as City Council reviewed alternative project sites and initiated negotiations with Redondo Beach to site the project in Redondo Beach. This delay resulted in the State Water Resources Control Board (State Board) issuing a breach of agreement notice to the City. The City is required to notify the State Board by April 1, 2019 as to whether it will implement a project at a location within the City's jurisdiction or forfeit the grant funding and initiate a dissolution of the Memorandum of Understanding (MOU) for cost-sharing with the Beach Cities Watershed Management Group (Beach Cities WMG).

### Background:

The cities of Hermosa Beach, Torrance, Redondo Beach, Manhattan Beach and the Los Angeles County Flood Control District formed the Beach Cities WMG in 2013 to develop an EWMP to comply with the Los Angeles Regional Water Quality Control Board (Regional Board) 2012 Municipal Separate Storm Sewer System Permit (MS4 Permit), which the Regional Board issued under the Clean Water Act, and comply with Santa Monica Bay Beaches Bacteria (SMBBB) Total Maximum

Daily Load (TMDL) and Santa Monica Bay Toxics TMDL, which are requirements of the MS4 Permit. The EWMP identifies strategies and best management practices that, when implemented individually by jurisdictions, or collectively at a watershed scale, would satisfy the requirements of the MS4 Permit. Although the EWMP is a long-term plan, it is a document that the Regional Board can enforce should permittees covered under the EWMP fail to meet the project milestones contained therein.

The City is subject to coming into compliance over time with numeric limits established by TMDLs discussed above. The most notable TMDL for the City is the Santa Monica Bay Beaches Bacteria TMDL that contains dry weather limits that became effective in 2006 and 2009, and wet weather numeric limits that must be complied with by July 15, 2021. Exceedances of numeric limits without an "alternative compliance option" can, in some cases, expose a city to Regional Board enforcement actions or third party citizen suits, and the liability therefrom. For example, the City of Malibu settled a lawsuit with the Natural Resources Defense Council (NRDC) and LA Waterkeeper, agreeing before trial to a complex agreement that included payment of \$750,000 in attorney's fees, upgrades to storm water facilities, regular compliance reporting and other cumbersome obligations.

On November 26, 2013, City Council approved the initial MOU with the Beach Cities WMG for Phase I of the EWMP and the Regional Board received the final EWMP on February 9, 2016. The Executive Officer of the Regional Board approved the EWMP via a letter dated April 18, 2016 and directed the Beach Cities WMG to commence implementing the EWMP immediately. The members of the Beach Cities WMG are deemed to be in compliance with the MS4 so long as it diligently implements all EWMP requirements, both in its jurisdiction and in conjunction with other cities with which it has mutual projects.

Following the Regional Board's approval of the EWMP in 2016, the City, in partnership with the Beach Cities WMG, submitted a successful application to the State Board for funding the design and construction of the Greenbelt Infiltration Project that is the highest priority project in the EWMP because it would achieve the greatest reduction in bacterial levels, at the Herondo Drain Outfall. Figure 1 shows priority catchments for placement of regional projects in the Herondo Storm Drain tributary area (as shown in red). The City of Torrance completed the Torrance Basins Enhancement regional projects including the Henrietta, Amie, and Entradero Basins to treat a tributary area of 1407 acres south of 190th Street.



Figure 1. Land use and Priority Project areas in the Herondo Drain Watershed.

The purpose of the Greenbelt Infiltration Project is to divert the first 15 minutes of storm water in wet weather conditions, and treat that storm water through multiple stages of treatment culminating in infiltration, removing 100% of the pollutant load of the diverted stormwater and eliminating the discharge of those pollutants to Santa Monica Bay. The Proposition 1 Stormwater Implementation Grant (Prop 1 Grant) amount of \$3,099,400 represents approximately one half of the estimated Project cost. The balance of the Project cost must be provided as local matching funds by the members of the Beach Cities WMG.

The City executed an agreement with the State Board (Attachment 1) to accept the Prop 1 Grant

and serve as the lead agency for the design and construction of the Project (the Funding Agreement). Through an approved MOU dated September 26, 2017(**Attachment 2**), the other members of the Beach Cities WMG contribute a proportionate share of the local matching funds. The total Project budget is \$7,336,180 and the cost sharing formula is based on each jurisdiction's contributing tributary area to the project after subtracting the treatment capacity of the City of Torrance Basin Enhancement Project.

The City's share of design costs is \$115,550.50 (13.6%) and the current estimate for the City of Hermosa Beach share of construction costs is \$460,651.59, for a total project budget of \$576,202.09. Redondo Beach, Torrance, and Manhattan Beach would contribute 50.8%, 33.1% and 2.5% of the remaining design and construction costs, respectively.

At their September 12, 2017 meeting, City Council awarded a professional services agreement to Tetra Tech, Inc. for the design of the Project. A competitive process that included representatives from each of the Beach Cities WMG selected Tetra Tech as the most qualified team based on qualifications and references, experience with similar projects, including projects within Regional Board's jurisdiction, and the cost proposal.

## Community Engagement

In accordance with the scope of work and schedule, Tetra Tech commenced site surveys at the Hermosa Beach Greenbelt and developed preliminary designs that were presented at community workshops held on March 29, 2018 and May 10, 2018. City Council convened a special study session on June 19, 2018 to discuss the project background, site selection process and California Environmental Quality Act requirements for the proposed project. Since this was a study session, City Council took no formal actions at this meeting and received public comment following the presentations. Presentations are available on the project page:

<a href="http://www.hermosabch.org/index.aspx?page=938">(Attachment 3).</a>

Based on community concerns regarding the proximity of the Project to residences and the potential construction and operational impacts, staff provided an analysis of alternative project sites located in Hermosa Beach. Approximately 720 residential units are within 500ft of the existing project site, primarily in the large apartment complexes Playa Pacifica and The Gallery, and the Moorings and Beachside condominiums. Approximately 17 dwelling units in the Moorings Condominiums directly overlook the project site. Moreover, in a letter dated July 12, the Moorings Homeowners Association group presented additional sites located in Redondo Beach for consideration.

At the October 9, 2018 City Council meeting, City Council considered alternative locations for the Project within the City's jurisdiction to meet the water quality requirements at the Herondo Drain Outfall. The alternative locations discussed at the June 19, 2018 Special Study Session (**Attachment 4**) and summarized below include:

- 1. Greenbelt North of 2nd Street (Attachment 5)
- 2. Turf Field at South Park, 425 Valley Drive (**Attachment 6**)
- 3. Herondo Street at Valley Drive (**Attachment 7**)

Potential benefits of selecting an alternative location in Hermosa Beach include: 1) the ability to retain the Prop 1 Grant funding; 2) greater likelihood to be approved by the Regional Board as a timely amendment to the EWMP; and 3) ability to comply with the 2021 operative project completion schedule in the EWMP.

The Herondo Street at Valley Drive location presented at the October 9, 2018 Council Meeting (**Attachment 8**), was determined to be predominantly located in Redondo Beach. Other potential Redondo Beach sites were presented in the staff report, however, they were not included in the site analysis since these sites are not within the City's jurisdiction and cannot be evaluated without the permission of Redondo Beach. On October 16, 2018 staff met with Redondo Beach staff to discuss the feasibility of these sites and other parcels within Redondo Beach and in proximity to the Herondo storm drain. Staff summarized the outcomes of this discussion in a Memorandum dated October 24, 2018 (**Attachment 9**). The responses from SCE and AES denying the City's request to explore their properties as potential sites are included as attachments to the October 9, 2018 staff report. Following the October 16 meeting, Redondo Beach staff followed up with SCE with an additional request for permission to use the site which was also declined (**Attachment 10**).

### Greenbelt North of 2nd Street

The site is located underneath the Greenbelt, directly north of 2nd Street and extending for approximately 1,200 feet through to 6th Street (**Attachment 5**). There are approximately 175 residential dwelling units within 500 feet of the project site that could be impacted by construction, and future operation and maintenance activities. A number of condominiums on 2nd Street directly overlook the project site. The location has sufficient capacity to capture the required volume of stormwater and would be confined to the width of the wood-chip walking path on the Greenbelt to limit tree removal. The resulting design is narrow and irregularly shaped and would likely require shoring (i.e. pile-driving) that would increase the construction costs and schedule compared to the existing location.

Construction would be enclosed behind construction fencing for the duration of construction and potential impacts could include restricted access to this portion of the Greenbelt and the removal of trees and shrubs that would be replanted upon completion of construction activities. Construction cost estimates are approximately \$3.8M higher compared to the existing Greenbelt location.

### South Park Turf Field, 425 Valley Drive

South Park is located 1000 feet north of the existing site at 425 Valley Drive. Park amenities include restroom facilities, a turf field and playground, picnic tables, and classrooms. Renovations to the northern perimeter of the park were completed in 2016 and include the installation of a universally

accessible playground and a community garden. There are approximately 200 residential dwelling units within 500 feet of the project site that could be potentially impacted by construction activities.



Figure 2. Rendering for proposed South Park project area.

The alternative project is located beneath a portion of the turf field within the existing pathway (Figure 2). The area is sufficient in size to design a system to meet the required water quality priorities for the Permit and Grant Agreement. Infiltration projects are common beneath turf fields and public parks because they are large, regularly shaped, undeveloped publicly-owned parcels. These factors reduce the design and construction cost and timeline, and provide an opportunity to enhance park amenities such as picnic shelters, irrigation and landscaping. Following construction, the park could be enhanced to include many unfinished elements of the South Park Master Plan.

In addition to the examples of similar projects presented in the October 9, 2018 staff report, Beach Cities WMG partners Manhattan Beach and Redondo Beach are also currently partnering with Los Angeles County on the Alondra Park Multi-Benefit Stormwater Capture Project located in Lawndale. This project would divert 70 Acre-Feet urban and stormwater runoff from surrounding areas including unincorporated communities and the cities of El Segundo, Hawthorne, Lawndale, Manhattan Beach, and Redondo Beach into an underground storage and water treatment system beneath the turf fields at Alondra Park (Attachment 11).

Construction at South Park is estimated to take 12 months and the uniformly shaped system is

relatively simple to excavate compared to the other site alternatives. Excavation at this site would not require shoring (i.e. pile-driving), thereby reducing the noise and vibrations during construction. Construction would be enclosed behind construction fencing and the field would be closed for the duration of the construction. All other park amenities, including the playground and community garden, would operate at full capacity during construction. Depending on the staging location and other construction activities, potential impacts could include restricted access to a portion of the sidewalk and parking lot, and the relocation of furniture, lighting and vegetation. Following construction, the park could be enhanced to include many unfinished elements of the South Park Master Plan.

The diversion pipeline from Herondo Drain would be through a conveyance pipe under the Greenbelt. The construction of the diversion pipeline would most likely consist of conventional trenching with temporary hydraulic shoring devices. Pile-driving is not expected for pipeline installation. The actuated valve, pretreatment device and possibly the pump station would be located below the Greenbelt. This is the lowest-cost alternative to the current location (+/- ~\$865,000) based on construction cost estimates using Caltrans historical cost data, recent bid results, and RSMeans cost data.

At the October 9, 2018 City Council meeting, residents expressed similar concerns to the existing Greenbelt location regarding the construction schedule, noise, odor, toxic buildup, liquefaction, vector control, and adjacent structure vulnerability. Staff and consultants discussed many of these concerns at the June 19, 2018 and October 9, 2018 meetings and they are summarized here:

- <u>Construction Schedule</u>: Construction at South Park is estimated to take 12 months due to the uniformly shaped system and limited vegetation removal and site preparation compared to the other site alternatives. Park amenities, including the playground and community garden, would operate at full capacity during construction. Potential impacts could include noise during construction hours, and restricted access to a portion of the sidewalk and parking lot, and the relocation of furniture, lighting and vegetation.
- *Noise:* Excavation at this site would not require shoring (i.e. pile-driving), thereby reducing the noise and vibrations during construction. Construction would be enclosed behind construction fencing and the field would be closed for the duration of the construction. The actuated valve, pretreatment device and possibly the pump station would be located below the Greenbelt and would unlikely at ground surface during operation.
- <u>Odor</u>: Odors occur when standing water is retained in the system for extended periods of time. The system is designed to retain standing water for 48 to 72 hours and is dry for the remainder of the time. The pretreatment device and forebay would extend the life of the system by reducing solids and sediment entering the infiltration gallery, which reduce infiltration rates. The Project Operation and Maintenance Manual would specify the frequency and types of maintenance activities to ensure the system does not become clogged with fine sediment, organic matter (leaf litter), or other materials that prevent percolation. Odors have not caused

concern for the Pier Avenue Improvement project in operation for nearly ten years that includes an infiltration system to retain storm water runoff. Maintenance activities for this project include annual inspections of catch basins and the manual removal of sediments via a vacuum truck.

- <u>Toxic Buildup</u>: The MS4 permit identifies several pollutants of concern in stormwater, including bacteria, zinc, copper, DDT and others. The majority of these pollutants adhere to solids and sediments that are removed in the pretreatment device and forebay, and maintenance activities are focused in a concentrated area. The Project Operation and Maintenance Manual and the frequency of storms would determine the frequency of cleaning. The Project would infiltrate a similar quality of stormwater as the Pier Avenue Improvement project, and toxic buildup has not been a cause for concern.
- <u>Liquefaction</u>: Additional testing is recommended for the completion of the geotechnical investigation at South Park to determine susceptibility to liquefaction. At the June 19 study session, consultants discussed the liquefaction potential of soils at the existing Greenbelt location. Materials above the groundwater table are not considered susceptible to liquefaction, however, soils found below 10 feet are susceptible to liquefaction and measures were incorporated into the design plans to attenuate potential impacts.
- <u>Vector Control</u>: The Greater Los Angeles County Vector Control District would review design documents and the Project Operation and Maintenance Manual, and recommend Best Management Practices, if necessary, to reduce the potential mosquito breeding. The system is designed to retain standing water for short periods of time-usually 48 to 72 hours-which is much shorter than the time needed for mosquitoes to develop from larvae to adults. When designed to this standard and properly maintained, water is infiltrated into the ground quickly enough to limit the occurrence of mosquitos.
- <u>Adjacent Structure Vulnerability</u>: Excavation at this site would not require shoring (i.e. piledriving), reducing the vibrations during construction and potential structural impacts to surrounding structures during construction. Compared to the other site alternatives, this site is the farthest distance from the nearby residences.

Following presentations from staff and consultants, public testimony, and deliberation by the City Council, unanimous direction was provided to staff and the Redondo Beach Development Council Subcommittee, consisting of Mayor Armato and Councilmember Fangary (Hermosa Subcommittee), to jointly engage the City of Redondo Beach and/or City of Torrance to discuss 1) relocating the infiltration project, at its current volume, outside of Hermosa Beach, or 2) dividing the Project into multiple smaller projects totaling a similar stormwater capture volume, with an understanding that the division of projects may include one or more smaller scale projects in Hermosa Beach and/or the expansion of the Hermosa Beach Infiltration Trench Project currently in the EWMP.

## Discussion:

On November 6, 2018, the Redondo Beach City Council elected a subcommittee comprised of Councilmember Christian Horvath and Councilmember Todd Loewenstein (Redondo Subcommittee)

to meet with the Hermosa Subcommittee. The Hermosa Subcommittee and Redondo Subcommittee, along with Redondo Beach Mayor Bill Brand, met on December 5, 2018 to discuss the scope of work and current project expenditures, as well as the additional costs associated with further site assessments and developing an Environmental Impact Report (EIR) that would satisfy the EWMP.

Members of both subcommittees discussed public and private parcels in Redondo Beach as potential alternative project sites. Despite these discussions, there was no consensus on further pursuing a site in Redondo Beach, and the Redondo Subcommittee declined invitations for further meetings.

On December 20, 2018, after delays on the Project resulted in a violation of the terms and conditions of the Funding Agreement, the State Board issued a Breach of Agreement notice to the City. The notice required the City to provide all delinquent submittals and to submit invoices, Project deviation and time extension request forms, a new budget and schedule and applicable updates by February 28, 2019. On February 21, 2019, the City submitted the following requested information, including a Deviation Request Form that noted the City's search for an alternative site:

- Project Director Certification (Necessary update to our project director and designee contact information due to staff turnover in our Public Works Department)
- Project Deviation Request Form (Outlining a proposed deviation from the original scope of work as staff and the City Council Subcommittee have been engaging the City's project partners on potential alternative site locations within the vicinity of the Herondo storm drain)
- Request for Time Extension (Necessary revisions to the original project schedule to account for delays and additional time anticipated for the environmental impact report process)

The State Board notified the City on March 15, 2019 that despite receiving all of the requested materials outlined in the Breach of Agreement, the City remains in breach of the Funding Agreement until a complete proposal identifying a new site is received.

The State Board Division of Financial Assistance will immediately recommend that the Prop 1 Grant be withdrawn if the City is not prepared to move forward with the Project under the terms of the Funding Agreement. City staff asked State Board staff to delay this recommendation until after the March 26, 2019 City Council meeting. The City has until April 1, 2019 to notify the State Board on whether it will proceed with the Project.

The City's grant recipient and lead agency obligations include administering the Funding Agreement and carrying out the design, approval and construction of the Project. The Beach Cities WMG was notified of the State Board's Breach of Agreement notice. On February 4, 2019, City staff met with staff from Redondo Beach, Manhattan Beach, and Torrance to discuss how to proceed with a project under the current MOU to retain the Prop 1 Grant. At this meeting, Manhattan Beach, Torrance, and Redondo Beach staff expressed that if the original MOU cannot be executed, they would like the Hermosa Beach City Council to send a letter to their respective City Councils asking their counterparts to dissolve the MOU and forfeit the Prop 1 Grant.

The City has been provided the opportunity by the State Board to correct the violations or submit alternative project plans and other forms to allow the State Board to consider substitution of the Project. An alternative project, however, would need to meet the Prop 1 Grant requirements, demonstrate similar water quality benefits to the Project, and be approved by both the State Board and Regional Board through an EWMP amendment.

Alternatively, City Council may choose to abandon the Project by initiating an amendment or dissolution of the MOU and relinquish the Prop 1 Grant. Regarding the City's EWMP compliance, the City would need to provide notice to the Regional Board that it is terminating the MOU. Prior to this occurring, staff will need to meet with the Regional Board to determine how they would view such termination and what alternative requirements it would accept to stay in compliance with the EWMP.

Staff recommends that City Council consider and provide direction on the following three options to address the requirements of the Grant Agreement and cost-sharing MOU for the Project:

- 1. Proceed with a project at the existing Greenbelt location; or
- 2. Proceed with a project at an alternative location within the City's jurisdiction to capture and treat the equivalent volume of stormwater; or
- 3. Initiate a dissolution or an amendment of the MOU and negotiate a suitable substitute or revised MOU and project with the City's partners, relinquish the Grant and forfeit the grant funding.

City staff will notify the State Board of the City Council's decision and determine next steps on how to proceed with complying with the MS4 Permit.

## <u>General Plan Consistency:</u>

PLAN Hermosa, the City's General Plan, was adopted by the City Council in August 2017. The construction of an infiltration system to capture and infiltrate stormwater supports several PLAN Hermosa goals and policies that are listed below.

1.8 Reduce stormwater runoff. Reduce stormwater runoff consistent with local stormwater permits.

4.3 Collaboration with adjacent jurisdictions. Maintain strong collaborative relationships with adjacent jurisdictions and work together on projects of mutual interest and concern.

4.8 Holistic systems planning. Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater

systems, and increased conservation awareness.

5.7 Stormwater permits. Strictly implement, enforce, and monitor MS4 National Pollutant Discharge Elimination Systems (NPDES) Permit requirements through stormwater ordinances.

#### Fiscal Impact:

This project budget total is \$7,336,180 and the costs are distributed among the Beach Cities agencies based on a cost-sharing formula outlined in the MOU for project design. The cost-sharing formula is based on capture responsibility for the tributary area to the project after subtracting the treatment capacity of the City of Torrance Stormwater Basin Enhancement Project. The City of Hermosa Beach's share for design costs is \$115,550.50 (13.6%) and the current estimate for the City of Hermosa Beach share of construction costs is \$460,651.59, for a total project budget of \$576,202.09. The current project expenditures are shown in Table 1 for each City based on the cost-sharing formula outlined in the MOU.

City	Cosŧshare (%)	Total Expenditures
Redondo Beach	50.8	\$118,833.37
Torrance	33.1	\$77,428.83
Hermosa Beach	13.6	\$31,813.66
Manhattan Beach	2.5	\$5,848.09
Total		\$233,923.9

Should Council decide to proceed with a project at the existing Greenbelt location there would be an additional cost of \$130,000 for preparing the project environmental impact report. Relocating the site to another site within the City would require an amendment to Tetra Tech's scope of work and budget, and is estimated to cost an additional \$50,000 for additional design services. The location of the site would determine the extent and cost of additional environmental analysis. These cost increases would need to be approved by each of the Beach Cities agencies through an amendment to the MOU for the cost sharing for project design. Abandonment of the Project may entail costs that are unknown at this time. Should City Council decide to initiate a dissolution or an amendment of the MOU and negotiate a suitable substitute or revised MOU and project with the City's partners, relinquish the Grant and forfeit the grant funding costs would include forfeiting current design expenditure and the cost to design and construct a project at alternative location (s) with or without partnerships with Beach Cities WMG agencies.

### Attachments:

- 1. Grant Agreement
- 2. MOU for cost sharing
- 3. Link to project page and presentations
- 4. Tetra Tech Presentation (June 19, 2018)
- 5. Greenbelt North of 2nd Street
- 6. South Park
- 7. Herondo Street at Valley Drive
- 8. October 9, 2018 Alternative Site Presentations
- 9. Memorandum of discussions with Redondo Beach staff
- 10. SCE Response to Redondo Beach Enquiry
- 11. Alondra Park Project

Respectfully Submitted by: Kristy Morris, Environmental Analyst Noted for Fiscal Impact: Viki Copeland, Finance Director Legal Review: Mike Jenkins, City Attorney Approved: Suja Lowenthal, City Manager