

Safe, Clean Water Program

South Santa Monica Bay

Watershed Area Steering Committee (WASC)



Meeting Minutes:

Wednesday, February 3, 2021
2:00pm - 4:00pm
WebEx Meeting

Attendees

Committee Members Present:

Cung Nguyen (LACFCD)
E.J. Caldwell (West Basin)
Diane Gatza (Water Replenishment District)
Kristen Ruffell (Sanitation Districts)
Darryl Ford* (Los Angeles Rec & Park)
Craig Cadwallader (Surfrider)
Guang Yu Wang (SMB Restoration Commission)
Hany Fangary (Fangary Law Group)

Wendy Butts (LA Conservation Corps)
Julio Gonzalez (Carson)
Susie Santilena (LA)
Thuan Nguyen* (LAC Public Works)
John Dettle (Torrance)
Shawn Igoe* (EWMP: Beach Cities)
Heecheol Kwon (EWMP: Dominguez)
Ken Rukavina (EWMP: Peninsula)

Committee Members Not Present:

*Committee Member Alternate

See attached sign-in sheet for the full list of attendees.

1. Welcome and Introductions

Kristen Ruffell, Chair of the South Santa Monica Bay WASC, welcomed Committee Members and called the meeting to order.

The District facilitated the roll call of Committee Members. All committee members made self-introductions and a quorum was established.

Kristen Ruffell discussed housekeeping items and further expanded on the WebEx features and public comment participation.

2. Approval of Meeting Minutes from January 28, 2021

The District provided a copy of the meeting minutes from the previous meeting. Kristen Ruffell asked the committee members for comments or revisions.

Craig Cadwallader made a motion to approve the meeting minutes. Hany Fangary seconded the motion. The Committee voted to approve the meeting minutes. (15 Approved and 1 Abstained, see Vote Tracker).

3. Committee Member and District Updates

Kirk Allen (District) provided a summary of the General Income-based Tax Relief Program and other credit programs and provided additional updates on the status of the Watershed Coordinators, SIP Programming tool, and Transfer Agreements.

Kristen Ruffell asked if there was guidance from the District regarding partially funding projects. The District indicated that guidance relating to partial funding of projects is yet to be released.

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4. Public Comment Period

No public comments received.

5. Discussion Items:

a) Ex Parte Communication Disclosures

Thuan Nguyen noted his participation as part of the LA County team on the Carson Stormwater and Runoff Capture Project. Kristen Ruffell noted her participation as well.

Susie Santilena noted to have been working with UCLA Ecology students in ranking and comparing Regional Program projects from various Watersheds including SSMB.

b) Presentations for Infrastructure Program

- (i) Carson Stormwater and Runoff Capture Project at Carriage Crest Park- City of Carson
Project overview presented by Julio Gonzalez: Dry weather and 27 AF of wet-weather runoff capacity from multiple jurisdictions will be captured, sent to the sewer, and treated for potential future reuse. Joint project with the City of Carson and Los Angeles County. Requested \$1,037,500.00 from Caltrans to fund the project.

John Dettle asked for clarification as to the operations contract and how the budget was prepared for the project. He proceeded to inquire if the project maintenance will be managed by LA County Flood Control District or will it be outsourced. Julio Gonzalez indicated that the operation costs are derived from the preliminary engineering design report. He also indicated that the City of Carson has two options for operation and maintenance: 1 – contract the work out; 2 – work with LA County for a couple years and then contract the work out, these details have not been finalized yet..

Guang Yu Wang asked if the project was requesting to be funded over the next five years and if a project could be funded by the Committee over that period. Julio Gonzalez confirmed that the request for funding is over a 5 yr. span. The District added that the Committee programs 1 year of budget in the SIP program, therefore, if a project applicant proposes requesting funding for multiple years, the Committee will evaluate and allocate funds accordingly on a yearly basis.

- (ii) Portuguese Bend Landslide Complex Mitigation Project – City of Rancho Palos Verdes
Project overview presented by Charles Eder & John Hunter: Seeks design funding to reduce landslides at Portuguese Bend and to improve coastal water quality through drainage improvements like bioswales and detention basins. Restore native California habitat. Total funding requested: \$1,875,000.00

Susie Santilena requested clarification on the storm water quality and drainage in open space and diverting into the sewer which may lead to ocean discharge vs. a treatment plant. John Hunter indicated that the project would benefit stormwater, water quality run-off, roads, and sewer lines. He also stated that the project has options for consideration; divert to a natural creek, canyon, or treatment plant.

Guang Yu Wang asked for clarification on how the project would address the TMDLs, especially bacteria, DDT, and PCBs. He is unclear on how a reduction in pollutants would be measured. John Hunter answered that they have no empirical data besides knowledge that 3.5 million cubic yards of sediment has been

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washed out into the ocean since 1956. He stated the project would reduce the potential for landslides which would presumably contain the mentioned pollutants.

John Dettle commented that the project has a landslide repair focus and wanted to know what percentage of the project budget would be applied towards BMP's, and restoring infrastructure and slopes. John Hunter noted that if the project were to be funded those questions would be answered.

Heecheol Kwon asked on the percentage of diverted rainfall water that the project can capture. John Hunter indicated not to have data available.

Susie Santilena asked if the project was included in the Beach Cities EWMP or other water quality plan. John Hunter indicated that it is included in the Palos Verdes Peninsula Plan.

- (iii) South Santa Monica Bay Water Quality Enhancement: 28th Street Storm Drain Infiltration Project – City of Manhattan Beach. Project overview presented by: Mamerto Estepa Jr, PE & Katie Harrel. The multi-benefit infiltration project will enhance water quality in South Santa Monica Bay by reducing storm drain discharges. Total Funding Requested: \$17,620,0300.

Heecheol Kwon asked for clarification if seawater would enter the dry wells and into the infiltration system during the construction process. Katie Harrel indicated that the parking facility is 40 feet higher in elevation than seawater, which prevents impact.

John Dettle requested information on the first year of funding for the design and permitting. Katie Harrel indicated the first-year design cost is \$1,497,100.

Kristen Ruffell asked about the potential impacts to the building downhill from the parking lot. Katie Harrel indicated that there would not be significant impact. Kristen Ruffell followed up with additional questions; the type of building and outreach efforts and the diversion rate capturing the whole 85th percentile within a 24/HR peak. Katie Harrel indicated that the building is a Lifeguard Training Center and stated to have reached out to the organization as part of their community outreach efforts and confirmed the captured volume to be at 85th percentile 24/HR peak.

Thuan Nguyen asked for the total acre feet that will be captured and the depth of the dry wells for Phase I. Katie Harrel indicated 53 acre-ft. and dry wells will be from 30-35 ft. deep.

- (iv) Beach Cities Green Streets Project – City of Torrance (no presentation – withdrawn by application)

Kristen Ruffell noted that Beach Cities Green Street Project will not be presenting due to the City of Torrance's withdrawal of their application.

6. Public Comment Period

No public comments received.

7. Voting Items

None

8. Items for Next Agenda

- a) Presentations for Instructure Program

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- (i) Stormwater Basin Expansion Project – City of Torrance
- (ii) Torrance Airport Storm Water Basin Project, Phase 2 Construction – City of Torrance
- (iii) Wilmington Neighborhood Greening Project – City of Los Angeles

John Dettle noted that the Beach Cities Green Street Project was withdrawn in order to complete preliminary design efforts and would be back next year.

9. Adjournment

Kristen Ruffell thanked WASC members and the public for their attendance and participation and adjourned the meeting.

SOUTH SANTA MONICA BAY WASC MEETING - February 3, 2021

		Quorum Present				Voting Items
Member Type	Organization	Member	Voting?	Alternate	Voting?	Meeting Minutes 01/20/21
Agency	LACFCD	Cung Nguyen	x	Carolina Hernandez		Y
Agency	West Basin MWD	E.J. Caldwell	x	Alex Heide		Y
Agency	Water Replenishment District	Diane Gatzka	x	Lyndsey Bloxom		Y
Agency	LAC Sanitation District	Kristen Ruffell	x	Mike Sullivan		Y
Agency	LA Recreation & Parks	Cathie Santo Domingo		Darryl Ford	x	Y
Community Stakeholder	Surfrider Foundation South Bay Chapter	Craig Cadwallader	x	Mary Simun		Y
Community Stakeholder	Santa Monica Bay Restoration Commission	Guang Yu Wang	x			Y
Community Stakeholder	Fangary Law Group	Hany Fangary	x	Justin Massey		Y
Community Stakeholder	Los Angeles Conservation Corps	Wendy Butts	x	Bo Savage		Y
Community Stakeholder	VACANT					
Municipal Members	Carson	Julio Gonzalez	x	Maria E. Williams-Slaughter		Y
Municipal Members	Los Angeles	Susie Santilena	x	Ilene Ramirez		Y
Municipal Members	LAC Public Works	TJ Moon		Thuan Nguyen	x	A
Municipal Members	Torrance	John Dettle	x	Wilson Mendoza		Y
Municipal Members	EWMP: Beach Cities			Shawn Igoe	x	Y
Municipal Members	EWMP: Dominguez	Heecheol Kwon	x	Mitchell Wagner		Y
Municipal Members	EWMP: Peninsula	Ken Rukavina	x	David Wahba		Y
Total Non-Vacant Seats		15			Yay (Y)	15
Total Voting Members Present		16			Nay (N)	0
Agency		5			Abstain (A)	1
Community Stakeholder		4			Total	16
Municipal Members		7				Approved

Other Attendees	
Alysha Chan	Nate Schreiner
Charles Eder	Taraneh Nik-Khah
Danielle Chupa	
Ilene Ramirez	
Jacqueline Mak	
John Hunter	
Kathleen McGowan	
Katie Harrel	
Mamerto (Mo) Estepa	
Marita DRA Inc	
Mercedes Passanisi	
Michelle Staffield	
Nancy Shrodes	
Prem	
Seth Carr	
Tammy Takigawa	
Wilson Mendoza	



Carson Stormwater Runoff and Capture Project at Carriage Crest Park

Infrastructure Funding Program

City of Carson

Julio Gonzalez



Project Overview

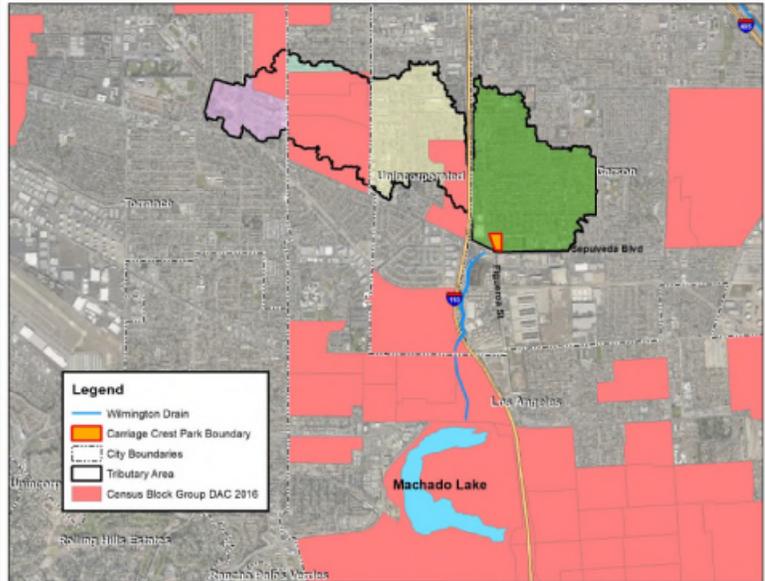
Dry-weather and 27 AF of wet-weather runoff capacity from multiple jurisdictions will be captured, sent to the sewer, and treated for potential future reuse.

- Primary Objectives: Improve water quality and increase water supply by up to 455 AFY
- Secondary Objectives: Provide community enhancements
- Project Status – Construction
- Requesting \$207,500/year for 5 years of O&M

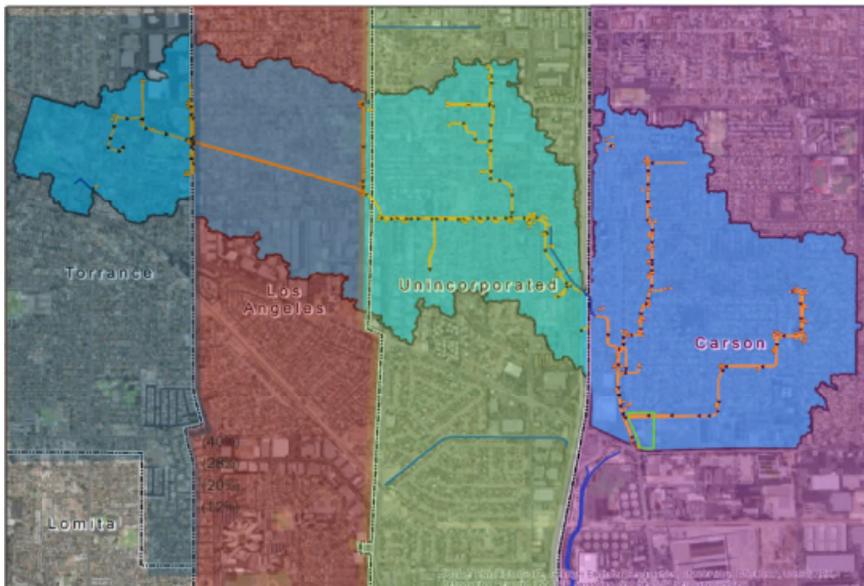




Project Location



Project Location



Jurisdiction	Total Tributary Area (ac)
Carson	455
Unincorporated	319
Los Angeles	234
Torrance	138
Total	1,146



Project Background

- Adjacent to LACFCD Storm Drain
- “Last line of defense” before Wilmington Drain
- Infiltration is infeasible
- Adjacent to Sewer Trunk Line



Project Background





Project Details



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Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Completion of project design report and 10% Plans	\$240,000	07/2016
Design	Design documents, CEQA, specifications preparation, approval, and permitting	\$900,000	07/2017
Construction	Purchase of concrete storage, excavation, cover, connection to storm drain and sewer, park restoration and tree Planting	\$16,500,000	03/2021
Construction	Construction Administration & Management	\$1,080,000	03/2021
TOTAL		\$18,720,000	



Cost & Schedule

Annual Cost Breakdown	
Annual Maintenance Cost	\$83,000
Annual Operation Cost	\$290,500
Annual Monitoring Cost	\$41,500
Annual Total Cost	\$415,000
Project Life Span	50 years
Module-generated Life-Cycle Cost for Project	\$28,677,469

- Operation costs include LACSD fees

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Funding Request

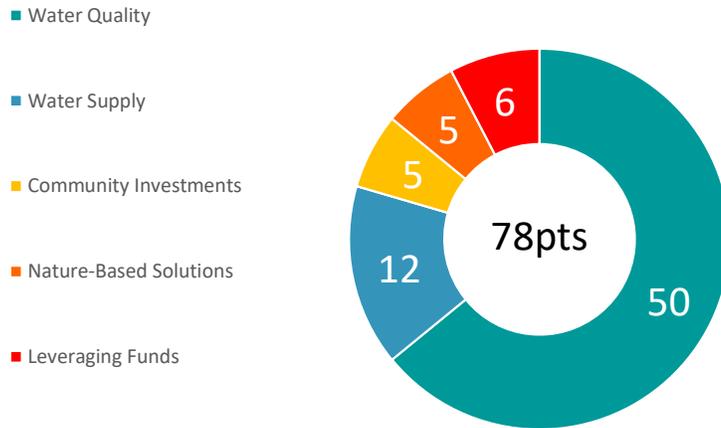
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$207,500	O&M	Operations and maintenance of project including LACSD fees.
2	\$207,500	O&M	Operations and maintenance of project including LACSD fees.
3	\$207,500	O&M	Operations and maintenance of project including LACSD fees.
4	\$207,500	O&M	Operations and maintenance of project including LACSD fees.
5	\$207,500	O&M	Operations and maintenance of project including LACSD fees.
TOTAL	\$1,037,500		

- \$1,037,500 from City of Carson and Los Angeles County (50% cost match)
- Planning, Design, and Construction fully funded through Caltrans Cooperative Implementation Agreement (CIA) and MOU with LA County

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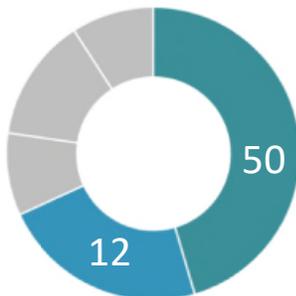
Preliminary Score



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Water Quality & Water Supply Benefits



Water Quality and Water Supply – 50 pts

- Wet Weather Project
- 785-acre wet weather watershed (1,146-acre dry)
- 27 AF Capacity
- >80% removal of Nitrogen and Bacteria

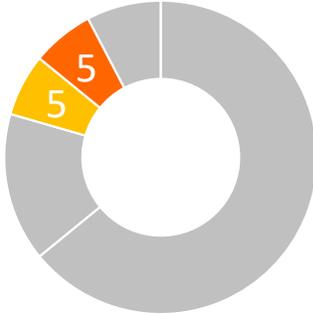
Water Supply – 12 pts

- 333 AFY (wet) 454 AFY (dry)
- Water Supply from Water Recycling

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Community Investment Benefits and Nature Based Solutions



Community Investment Benefits – 5 pts

- Improves flood management, flood risk mitigation
- Park restoration
- Recreational enhancements
- Reduce heat island effect

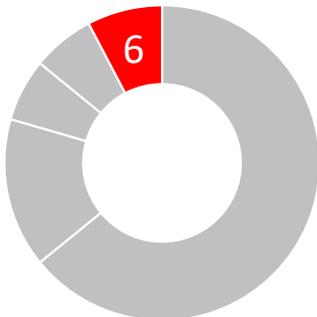
Nature Based Solutions – 5 pts

- Trees replaced at a 2:1 ratio

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Leveraging Funds and Community Support



Leveraging Funds – 6pts

- \$18.72M for Planning, Design, and Construction fully funded through Caltrans Cooperative Implementation Agreement (CIA) and MOU with LA County
- 50% of requested O&M funding to be matched by Carson and LA County

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Questions?

Portuguese Bend Landslide Complex Mitigation Project

Infrastructure Program

City of Rancho Palos Verdes

Presented by Charles Eder and John Hunter



Project Overview

Project seeks design funding to reduce landslide movement at Portuguese Bend and protect coastal water quality through drainage improvements like bioswales and detention basins

- **Primary and Secondary Objectives:**
 - Improve and protect coastal water quality and ecological restoration projects
 - Significantly reduce the Portuguese Bend Landslide Complex (PBLC) movement
 - Restore native California habitat
 - Enhance public access to the Portuguese Bend Reserve trails
- **Project Status:** Design
- **Total Funding Requested:** \$1,875,000





Project Location and Site Conditions

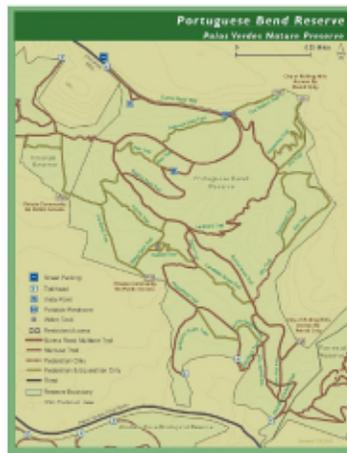
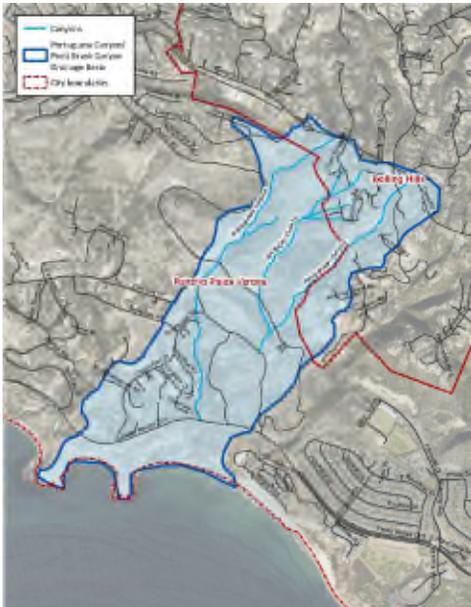


- The project is located in the PBLC within City of Rancho Palos Verdes
- City of Rancho Palos Verdes is part of the Palos Verdes Peninsula (PVP) Watershed Group
- Santa Monica Bay Subwatershed

- The PBLC was reactivated in 1956, and the main cause of continuous land movement is runoff and stormwater percolation into groundwater
- PBLC slope failure continues today at rates ranging 3 ft to 11 ft per year and more than **3,589,000 cubic yards of earth** have been pushed into the Santa Monica Bay since reactivation



Project Drainage Area



Land Use Type	Percent Impervious	Acre
Agriculture	0.37%	0.09
Institutional	2.08%	0.51
Secondary Roads and Alleys	4.53%	1.11
Single Family Residential	40.82%	10.00
Open Space	52.2%	12.79

- 52% of the land use is open space, mainly the Portuguese Bend Reserve, with extensive trails and an active native plant restoration

- The PBLC Mitigation Project has a total drainage area of 600 acres including the City of Rancho Palos Verdes (76%) and City of Rolling Hills (24%)



- Potential public access improvement with a parking lot near Palos Verdes Drive



Project Background

- The PBLC was considered as a potential site for targeted control measures in the PVP EWMP
 - The PBLC Mitigation Project was uploaded to the Opti Database for inclusion in the GLAC IRWMP
- The City of Rancho Palos Verdes funded a Feasibility Study (2018), Geotechnical Study (2019), and Initial Study (2020)
- Mitigation of PBLC sediment erosion will also protect the **Palos Verdes Reef Restoration Project**, which recently completed reef construction off the shoreline adjacent to Portuguese Bend in late September 2020
 - The project would also support the **Kelp Restoration Project** and **Abalone Restoration Program** based around the Palos Verdes Peninsula
- The proposed mitigation measures of this project will prevent further infrastructure damage to homes, utilities, and roadways in and adjacent to the PBLC. The City of Rancho Palos Verdes spent more than \$50 million on continuous maintenance of infrastructure in and near the PBLC through 2018.
- The project will likely include improved recreational access to the Portuguese Bend Reserve hiking trails from the south-east corner of the project site



Maintenance of Palos Verdes Drive S.



Palos Verdes Reef Restoration Project



Project Details

- The mitigation measures proposed are to design 3 phases:
 - Phase 1: Infill existing surface fractures to reduce erosion and concentration of stormwater infiltration
 - Phase 2: Construct surface drainage improvements to improve surface water quality and mitigate ponding concerns (including drainage infrastructure, vegetated bioswales, and vegetated detention basin - planted with a native plant palette approved by or sourced from the Palos Verdes Land Conservancy)
 - Phase 3: Install hydrauger arrays to lower underground artesian water pressure (to be implemented after examination of Phase 1 and Phase 2 to determine if further groundwater dewatering is warranted to reduce land movement)
- After examination of the effects of the three mitigation phases, further phases being considered are: installation of 2 miles of new subsurface sewer lines, private lateral connection installations, and septic system removal in Altamira Canyon and Portuguese Canyon



Project Details

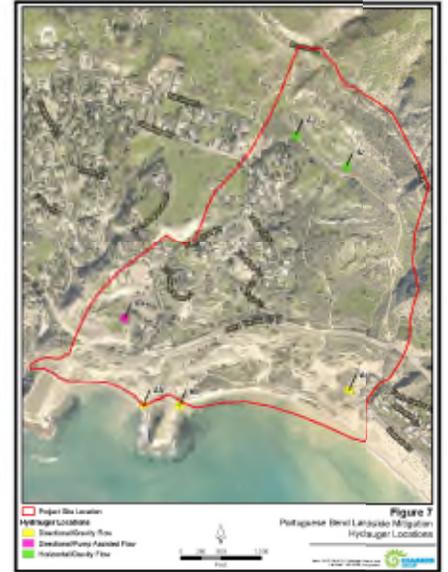
Phase 1: Infill fractures



Phase 2: Construct surface drainage improvements



Phase 3: Install hydraugers



Cost & Schedule

Phase	Description	Cost	Completion Date
Design	Design, data gap investigation, pilot testing	\$1,825,000.00	06/2023
Design	Public Outreach Campaign	\$50,000.00	06/2023
Construction	Full-scale field construction (upper, mid, lower canyons, 10 drains, 30 wells, 18,480 ft. of residential lines), reporting, and project management	\$29,495,000.00	06/2025
Total		\$31,370,000.00	

Annual Cost Breakdown	
Annual Maintenance Cost:	\$ 237,500.00
Annual Operation Cost:	\$ 237,500.00
Annual Monitoring Cost:	\$ 150,000.00
Project Life Span:	30 years



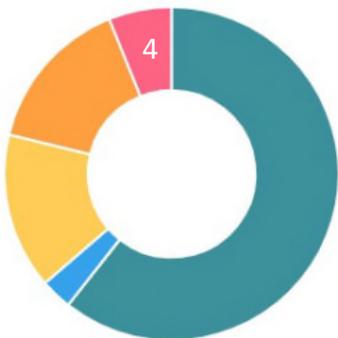
Funding Request

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
Year 1	\$ 1,120,000.00	Design	Design, data gap investigation, environmental planning and permitting documents, public outreach campaign
Total Year 1	\$ 1,120,000.00		
Year 2	\$ 755,000.00	Design	Design, data gap investigation, environmental planning and permitting documents, pilot testing, and public outreach campaign
Total Year 2	\$ 755,000.00		
Total	\$ 1,875,000.00		

- Upon completion of final design, future SCWP funding requests may be submitted for project construction, operations and maintenance, and monitoring



Leveraging Funds and Community-Based Outreach



- Municipal funds were used to complete:
 - Feasibility Study (August 2018)
 - Geotechnical Evaluation Report (December 2019)
 - Initial Study (November 2020)
- City of Rancho Palos Verdes also hosted a series of public meetings to garner and include community input in the development of the PBLC Mitigation Project:
 - June 01, 2017
 - June 20, 2017
 - June 29, 2017
 - July 6, 2017
 - June 28, 2018
 - August 07, 2018
 - August 28, 2019
 - December 17, 2019

- The City plans to host more public meetings with the community to incorporate public input where feasible
- Budgetary allowance for continued community input has been included in this funding request



Community-Based Support



May 11, 2020

Elias Sassoon
Director of Public Works
City of Rancho Palos Verdes
30840 Hawthorne Boulevard
Rancho Palos Verdes, CA 90275

Dear Elias Sassoon,

Portuguese Bend Community is a local residential PUD located in the City of Rancho Palos Verdes & is dedicated to serving the residents of the community and surrounding areas. We have enjoyed a professional and healthy working relationship with the City of Rancho Palos Verdes through the years and look forward to many more years of success and improvements towards mutual benefits to the surrounding areas of Portuguese Bend.

We recently learned of the City's efforts to seek funding to remediate the ongoing land movement in the City's Portuguese Bend Landslide Complex. We understand that upon completion, the proposed project will provide an array of local and regional benefits, improving water quality and public well-being.

We are appreciative of the City's commitment to improving the public's quality of life and to protecting the environment. On behalf of the Portuguese Bend Community we would thus like to formally give our support to the Portuguese Bend Landslide Complex project brought forth through acquired grant funding. We wish the City a successful project and look forward to its completion.

Sincerely,

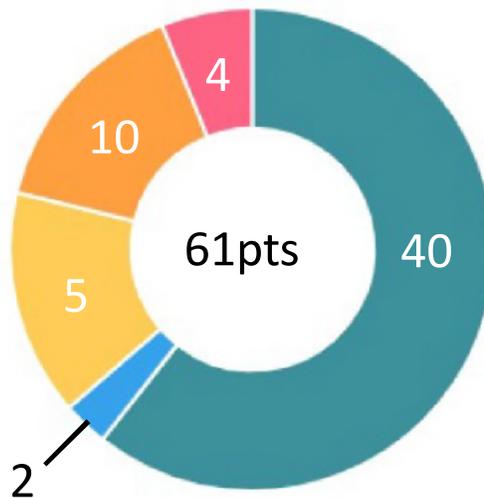
Corinne Gerrard, President, PBCA
corinne.pbca@gmail.com
310-403-7777

- The Portuguese Bend Community Association (PBCA) is a local residential Planned Urban Development dedicated to serving the residents of the community and surrounding areas
- The PBCA supports the City of Rancho Palos Verdes' commitment to improving the public's quality of life and to protecting the environment through the PBLC Mitigation Project



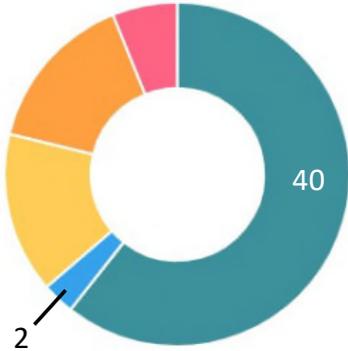
Scoring Committee Score

- Water Quality
- Water Supply
- Community Investment Benefits
- Nature Based Solutions
- Leveraged Funds and Community Supp





Water Quality and Water Supply Benefits

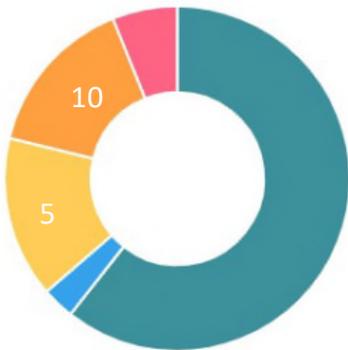


- The PBLC Mitigation Project:
 - Is located in the Santa Monica Bay Subwatershed
 - Will improve water quality through reduction of land movement and biofiltration
 - **Minimizes sedimentation, a potential source of bacteria, DDTs, and PCBs, and debris, pollutants with TMDLS in the PVP Santa Monica Bay**
 - Will protect and support the recently completed Palos Verdes Reef Restoration and ongoing Kelp Forest Restoration Program, and Abalone Restoration Program
 - Has a drainage area of 600 acres (including City of Rancho Palos Verdes and City of Rolling Hills)
- Proposed bioswales and detention basin area will provide pollutant removal prior to discharge of runoff and stormwater to Santa Monica Bay
- **Project has potential to direct 50-100 ac-ft per year of treated flow to the sanitary sewer at off-peak hours**

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Community Investment Benefits and Nature-Based Solutions



- Flood Management:
 - The project will significantly slow the landslide and convey stormwater and runoff to the Santa Monica Bay by replacing ineffective drainage infrastructure, protecting residential communities and public areas and utilities
- Enhanced Habitat and Trail Access:
 - Native vegetation approved by or sourced from the Palos Verdes Land Conservancy will be planted at the detention basin and bioswales, contributing towards the area's habitat restoration efforts for sensitive species like the California Gnatcatcher and Cactus Wren
 - Marine habitat will also be improved by ensuring the success of the SMB restoration projects (rocky reef, kelp forest, and abalone)
 - Project may include improved public access to hiking trails from the south-east corner of the project site
- New Recreational Opportunities:
 - The detention basin and bioswale sites may provide new opportunities for passive recreation and a watershed education opportunity
- Reduced Heat Island Effect:
 - Native trees, shrubs, and other vegetation will be planted in and along the biofiltration swales and the detention basin



Cactus Wren

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Questions?



South Santa Monica Bay Water Quality Enhancement: 28th Street Storm Drain Infiltration Project

Infrastructure Program (IP)
City of Manhattan Beach
Mamerto Estepa, Jr., PE (City of Manhattan Beach)
Katie Harrel (CWE)



Project Overview

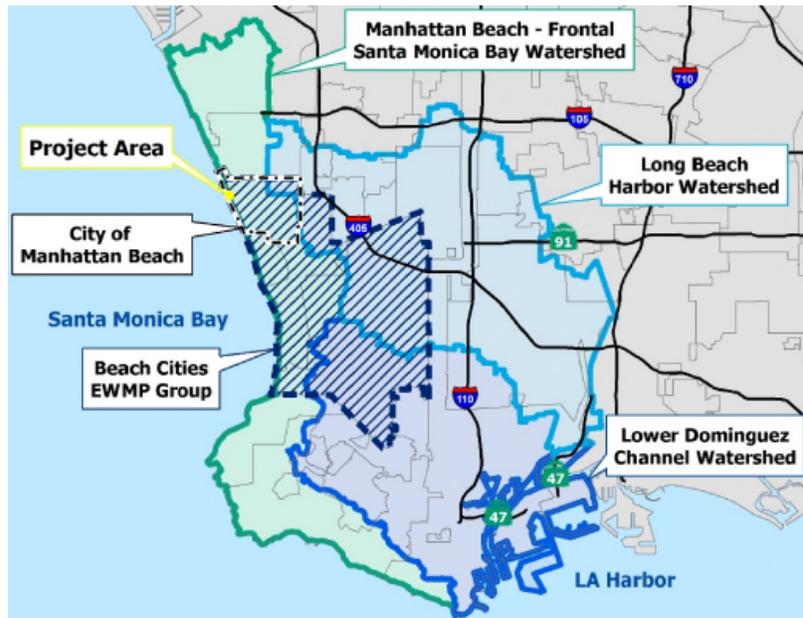
The multi-benefit infiltration Project will enhance water quality in South Santa Monica Bay by reducing storm drain discharges.

- **Description of Primary and Secondary Objectives.** Capture and infiltrate runoff from an area approximately 1,520 acres (60% of Manhattan Beach's area). The objectives for this project are to
 - Improve water quality locally, on the beach, and in the Santa Monica Bay;
 - Enhance beach conditions;
 - Reduce beach closures;
 - Create opportunities for education and local outreach;
 - Enhance the environment for marine life; and
 - Improve the 26th Street Parking Facility.
- **Project Status.** Funding is requested for the following phases: design, construction and monitoring.
- **Total Funding Requested.** \$17,620,030

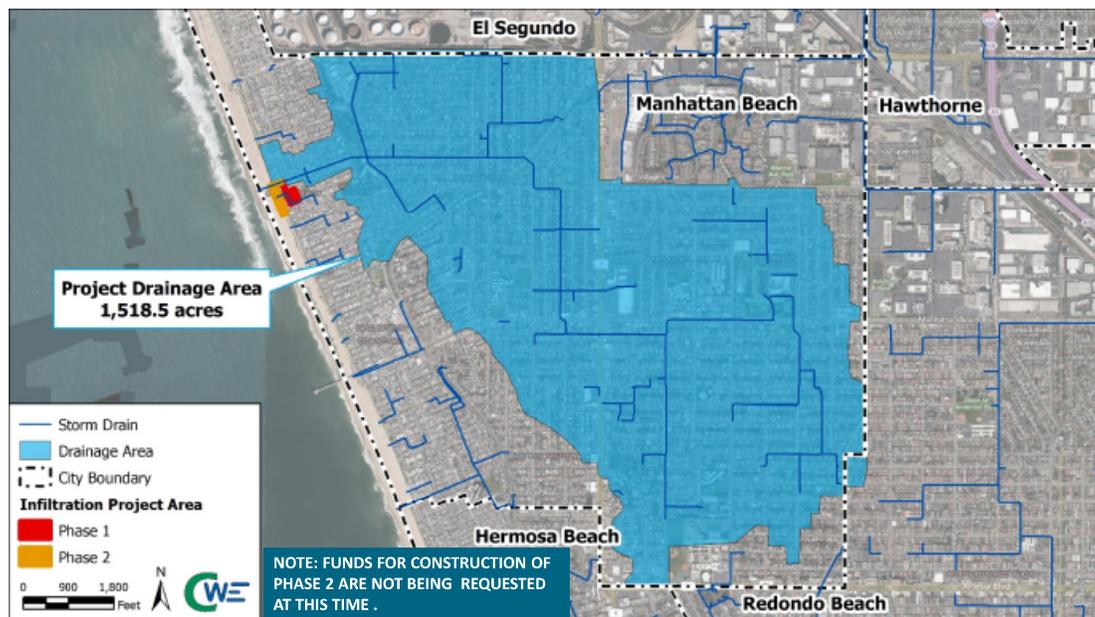




Project Location – Map of Watershed and Watershed Group



Project Location – Project Drainage Area





Project Background

- The Beach Cities EWMP identified the Project as the highest priority capital project for the City of Manhattan Beach.
- The Project goal is to reduce bacterial, trash and debris discharges into South Santa Monica Bay from the storm drain system.
- The location minimizes the project footprint, particularly in front of beachfront homes and for mitigating the effects of sea level rise.
- Benefits of the Project include
 - Improving water quality on the beach and in South Santa Monica Bay;
 - Reducing the discharge of bacteria, trash and debris from the drainage system;
 - Minimizing the potential for beach closures;
 - Enhancing the environment for marine life;
 - Creating opportunities for education and outreach; and
 - Improving the 26th Street Parking Facility.

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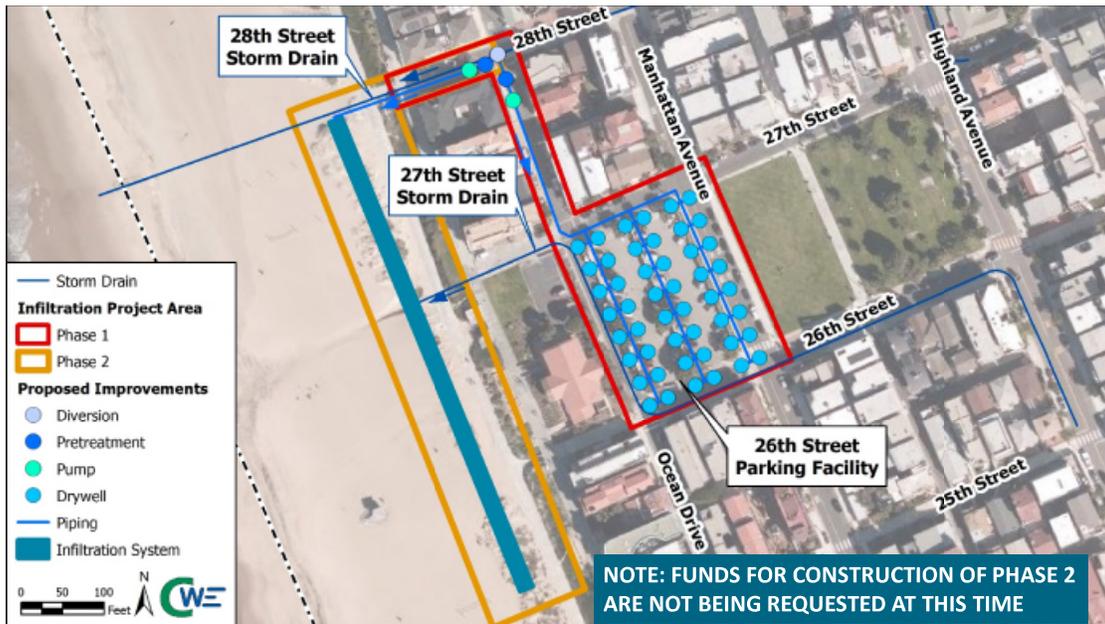


Project Details





Project Details



Project Details – Site Conditions



- Site Conditions
 - Sandy soil with an infiltration rate greater than 200 in/hr
 - Groundwater is 47 ft. below the upper level of 26th Street Parking Facility



Cost & Schedule

Phase	Description	Cost	Completion Date
Planning	Project development and Feasibility Study.	\$198,286.00	11/2020
Design	Design, permitting, and environmental documentation.	\$1,497,080.00	07/2022
Construction	Implementation of Phase 1 (drywells in the 26 th St Parking Facility), including construction management. (Phase 2 construction/construction management costs are not included at this time and will be incorporated into a future amendment).	\$16,022,930.00	06/2024
TOTAL		\$17,718,296.00	

- Annual Costs including annual maintenance, operating and monitoring is \$201,000.00.
- Project Lifespan is 50 years.
- The module-generated Annualized Cost for the Project is \$939,450.00.

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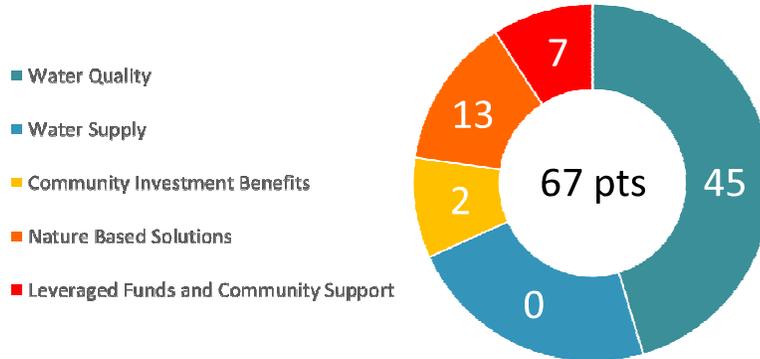


Funding Request

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$1,497,100.00	Design	Project design to be completed during Year 1.
	\$1,048,230.00	Construction	The Phase 1 construction management total is being requested in Year 1.
2	\$5,989,880.00	Construction	40% of the anticipated construction cost for Phase 1 implementation is being requested, as construction is expected to start during Year 2.
3	\$5,989,880.00	Construction	40% of the anticipated construction cost for Phase 1 implementation is being requested, as construction will continue into Year 3.
4	\$2,994,940.00	Construction	20% of the anticipated construction cost for Phase 1 implementation is being requested, as construction will be completed early in Year 4.
	\$50,000.00	Monitoring	Monitoring and analysis of Phase 1 performance will start once construction is completed. Monitoring costs are projected at this phase and may be refined in the future.
5	\$50,000.00	Monitoring	Monitoring and analysis of Phase 1 performance will continue. Monitoring costs are projected at this phase and may be refined in the future.
TOTAL	\$17,620,030.00		



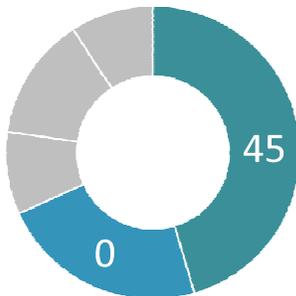
Preliminary Score



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Water Quality & Water Supply Benefits

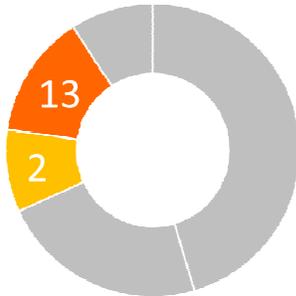


- **Primary Mechanism.** Diversion and infiltration is the primary mechanism for addressing bacterial loading to the Santa Monica Bay.
- **Project Weather Type:** Wet
- **Project Drainage Area:** 1,518.5 acres (approximately 60% of Manhattan Beach's Area)
- **Calculated 24 –Hour Capacity:** 129.72 ac-ft
- **Pollutant Reduction (Calculated 10-year Reduction):**
 - Bacteria: 76.7%
 - Total Nitrogen: 84.3%
- **Annual Water Benefit:** Not being claimed

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Community Investment Benefits and Nature Based Solutions

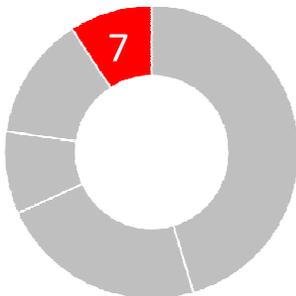


- **Community Investment Benefits (2 pts).** The Project
 - Reduces heat local island effect & increases shade;
 - Increases the number of trees/other vegetation at site the location;
 - Creates opportunities for education and outreach; and
 - Improves accessibility of the parking facility.
- **Nature Based Solutions (13 pts).** The Project
 - Utilizes infiltration, a natural process, to treat runoff;
 - Infiltrates a drainage area of 1,520 acres in an area 0.60 acre (26th Street Parking Facility), using the natural conditions at the existing site location; and
 - Converts 32% of the Project Area from impervious to pervious by resurfacing with pervious pavement.

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Leveraging Funds and Community Support



- **Leveraging Funds (3 pts)**
 - > 25% funding matched
- **Community Support (4 pts)**
 - The Project demonstrates strong local, community-based support, including Letters of Support from
 - Heal the Bay,
 - Manhattan Beach Botanical Garden, and
 - 7th Generation Advisors.
 - City conducted community outreach to the following groups:
 - Surfrider Foundation,
 - The Bay Foundation,
 - Heal the Bay,
 - Local Residents, and
 - Supervisor Hahn's Office.

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Questions?