

# Monterey Peninsula, Carmel Bay, and South Monterey Bay IRWM Region Proposed Projects

Presentation derived from Prop 1 Implementation Grant Pre-Application Meeting September 24, 2019

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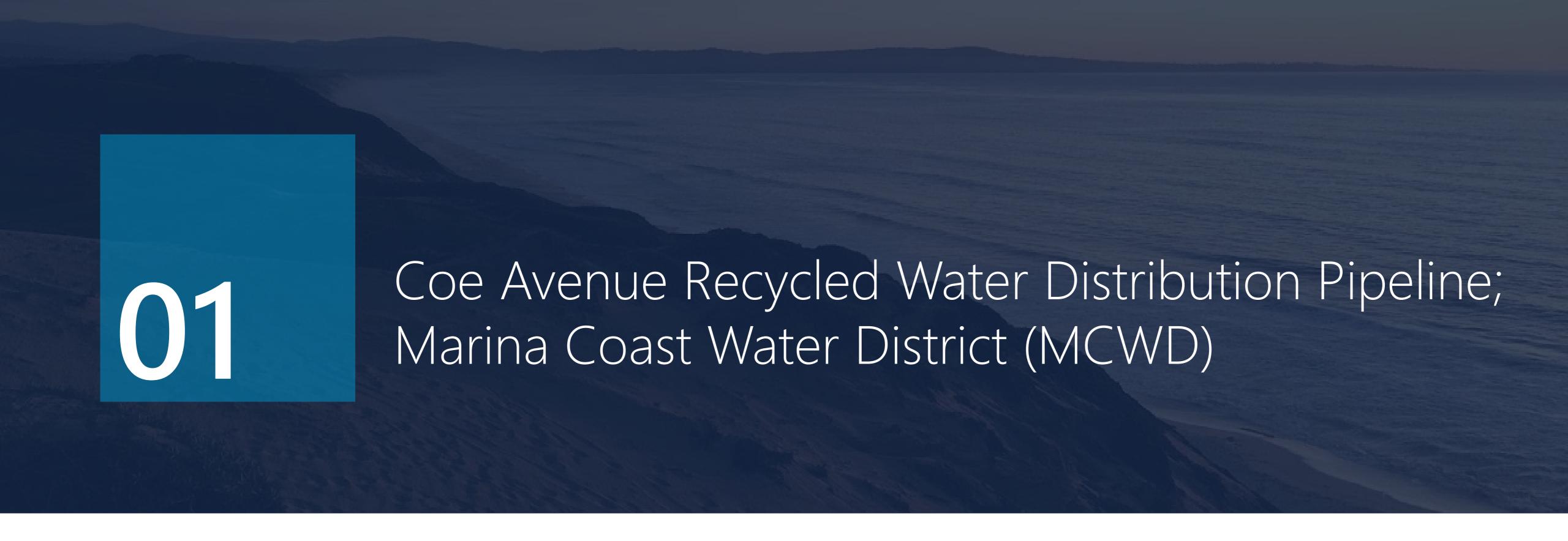
# Grant Status

# 7/7/2020 Award Notification Letter 12/11/2020 Final Acceptance Letter

One project was unable to accept the award due to COVID-19 related staffing limitations

# 2/12/2020 Grant Agreement Review by DWR

In progress



Cooperating across regions to provide clean, reliable, and sustainable water for our green spaces

# gend Advanced Water Treatment Facility Advanced Water Treatment Product Water Conveyance Pipeline Facilities Product Water Conveyance Pipeline Facilities 1.7 Miles A Salle Ave. Sayy abto Ave Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO New Injection Well Facilities FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, E

# Project Background

- MCWD provides water and sewer service to a population of approximately 35,000 in Marina and on former Fort Ord lands
- In 2018-2019, as part of RUWAP, MCWD participated in the construction of a recycled water *trunk main* extending from the regional WWTP southward to the Monterey Peninsula.
- In order to deliver recycled water to end users, *distribution mains* branching off from the trunk main must be designed and constructed.
- The **Coe Avenue** distribution main fills a gap in MCWD's existing system of recycled water lines, allowing for the delivery of recycled water to a relatively large cluster of existing water customers.

# IRWM Plan Goals & Objectives

#### Project Addresses the following IRWM Goals:

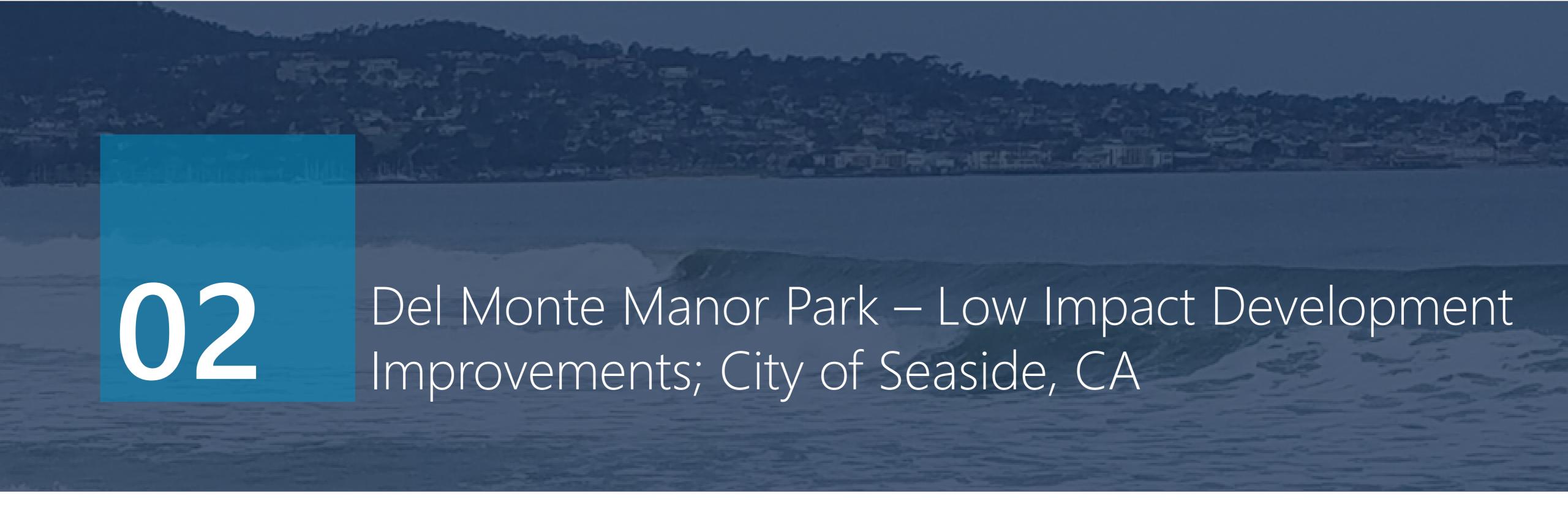
- Water Supply: The project maximizes the use of recycled water by providing advanced-treated wastewater to irrigation customers in Seaside who currently irrigate with potable supplies (WS-2). As a result, the project helps to meet existing supply needs of the Seaside Basin (WS-1) by providing some additional recharge and freeing up potable water supplies. Water supplies in the Salinas Valley Basin benefit from reduced groundwater pumping.
- Water Quality: Any additional net recharge that results from increased outdoor water use will help protect and improve water quality in the Seaside Groundwater Basin, which is at risk of further seawater intrusion (WQ-3). There is also an indirect effect of improving ocean water quality (WQ-2), as one source of the advanced-treated wastewater is agricultural and urban stormwater runoff that would otherwise enter Monterey Bay via the Salinas River and Elkhorn Slough. Treating and beneficially reusing this polluted source water on land helps to minimize pollutants in stormwater discharges.
- Climate Change: Recycled water is a reliable water source that will not be impacted by more frequent/intense droughts that are expected to result from a changing climate (CC-1). Producing advanced-treated recycled water from freshwater sources (municipal wastewater and/or stormwater) is less energy-intensive than the water supply alternative of desalinating seawater or brackish groundwater, thus helping to conserve energy and decrease reliance on fossil fuels (CC-3).

# IRWM Plan Goals & Objectives

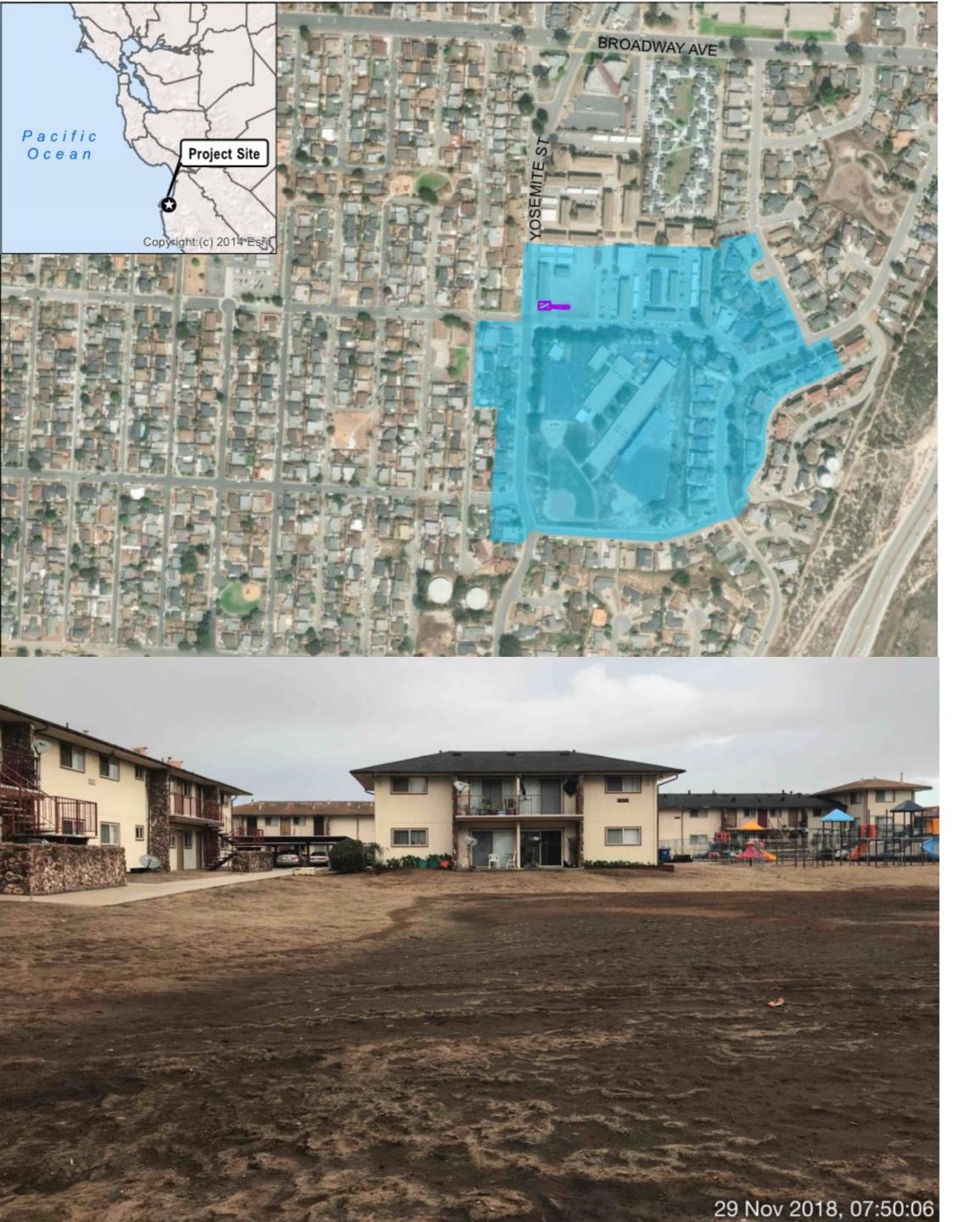
#### Project Addresses the following IRWM Goals:



Regional Communication and Cooperation: The delivery of recycled water to irrigation customers is one component of the Regional Urban Water Augmentation Project (RUWAP), a regional infrastructure project involving multiple local governments and agencies (RC-1). By linking the region's water resources and coordinating use to maximize benefit, the project will help participants to move beyond a history of litigation and foster increased future collaboration among stakeholders (RC-2). The project will also help to build a relationship for sustainable groundwater management between the Seaside and Salinas Valley Basin agencies (RC-4).



Park improvements in a Severely Disadvantaged Community (SDAC) that incorporate LID features to address flooding, improve water quality and promote sustainable water management



# Project Description

The project is the result of both City and community engagement to identify means to alleviate frequent flooding that occurs to a low income housing complex open space. The project is a retrofit of an existing open space that will integrate LID features to provide flood control, improve water quality and meet community objectives to provide an aesthetically pleasing recreation space for a severely disadvantaged community. The design includes:

- ( Bio-retention facilities
- ( A series of horizontal infiltration chambers
- New storm drain routing
- Educational signage



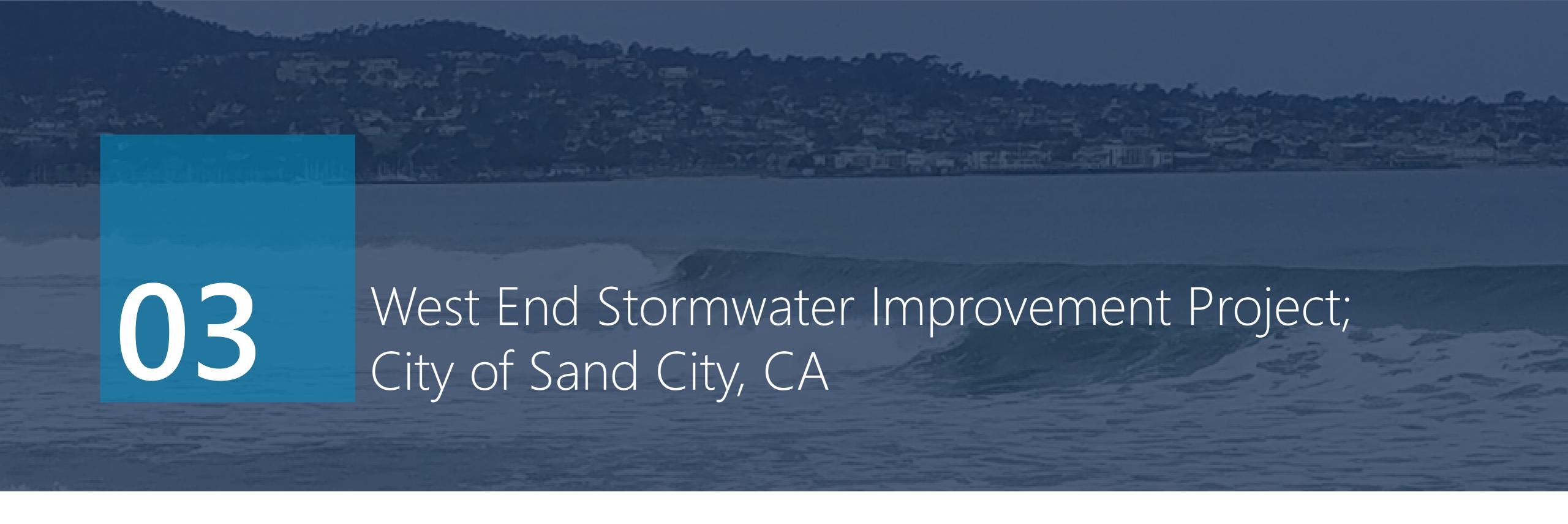
## Project Benefits

- FLOOD PROTECTION: The use of LID strategies and drainage improvements will reduce the flooding to existing playground and open space.
- WATER QUALITY: The LID features will capture and treat urban pollutants including trash that would otherwise be discharged to the Monterey Bay National Marine Sanctuary (MBNMS).
- HABITAT/ECOSYSTEMS: By intercepting runoff the project will reduce the amount of urban pollutants entering the MBNMS and thereby help to improve habitat.
- CLIMATE CHANGE: Promoting groundwater recharge will improve the aquifer's resilience against saltwater intrusion, a vulnerability assessed in the IRWM plan.
- EDUCATION & OUTREACH: The project has involved stakeholder outreach, education, and community involvement through presentations held at the Del Monte Manor and City Council Meetings. In addition, the project includes permanent educational signs to educate residents and public about the various LID features incorporated into the project.



### Benefits to the SDAC

- The project location is entirely within a severely disadvantaged community (SDAC) Block Group.
- The SDAC designation was defined using the 2012-2016 census data that shows the Del Monte Manor median household income (MHI) is \$21,936, which is below 60% of the statewide MHI (\$51,026).
- The City also has an unemployment rate of 7.8 percent. Combined with the City's low MHI, these factors qualify the City as an Economically Distressed Area (EDA).
- The design provides lowest cost alternative for addressing flooding versus upsizing storm drains in public streets.



Retrofit of an existing urban collector street to integrate LID features, address flooding and promote sustainable water management to benefit a Disadvantaged Community (DAC)





### Project Needs

- Catalina Street experiences localized flooding during moderate and heavy storms. Flooding has resulted in property damage to homes and businesses within the West End District.
- The area is composed primarily of lager, impervious surface areas and adjacent to residential, commercial, and industrial uses. Pollutants from these uses are present in urban runoff.
- Lack of storm drain infrastructure and inconsistent conveyance contributes to the flooding issues.
- The street and surrounding neighborhood lack green spaces.
- The City would like to enhance the walkability of the street as one of the main corridors through this area of the West End District.



### Project Description

Retrofit of Catalina Street, an existing minor collector street, to integrate LID strategies to address flooding, urban runoff and water quality, and meet various community objectives for the West End district. LID strategies to be implemented are:

- Bioretention facilities and curb extensions at intersections to capture runoff
- Horizontal infiltration chambers
- Permeable pavement in parking and sidewalk areas
- New storm drain infrastructure and routing
- ( Abandonment of existing storm drain lines
- In addition to the LID components of the project, curb extensions at intersections will provide improved pedestrian and ADA access throughout the street corridor.
- The project was selected as the result of a deliberate process to engage the community to identify important goals and objectives for the West End District.



### Project Benefits

- WATER QUALITY: The LID features will capture and treat urban runoff that would otherwise be discharged to the Monterey Bay National Marine Sanctuary (MBNMS).
- HABITAT/ECOSYSTEMS: By intercepting runoff the project will reduce the amount of urban pollutants entering the MBNMS and thereby help to improve habitat.
- CLIMATE CHANGE: Promoting groundwater recharge will improve the aquifer's resilience against saltwater intrusion, a vulnerability assessed in the IRWM plan.
- FLOOD PROTECTION: The use of LID strategies will reduce the volume of runoff and help to reduce flooding in the West End neighborhood.
- EDUCATION & OUTREACH: The project has involved significant stakeholder outreach, education, and community involvement through presentations at publicly held city council meetings and via community input at the City's annual West End Celebration. As the project moves forward, the City plans to post informational articles on it's webpage, run articles in its newsletter, and organize tours and educational presentations of the project once it is constructed.



WEST END STORMWATER IMPROVEMENT PROJECT
SAND CITY, CA
PRIMARY & SECONDARY RENEFIT MAP

#### Benefits to the DAC

- The project location is entirely within a disadvantaged community (DAC) Block Group and the DAC community will receive 100% of the benefits.
- The DAC designation was defined using the 2012-2016 census data that shows the City's median household income (MHI) is \$45,000, which is below 80% of the statewide MHI (\$51,026).
- The City also has an unemployment rate of 15.3%. Combined with the City's low MHI, these factors qualify the City as an Economically Distressed Area (EDA).
- The entire community relies on the groundwater basin for water and are affected by the flooding in the West End. The improvements of this project will promote groundwater supply resiliency, reduce flooding, and provide urban greening to support community livability and health.