



Vincent Lugo Park Stormwater Capture Project

Funding Program: Infrastructure Program (IP)

Project Lead: City of San Gabriel

Presenter: Greg de Vinck, P.E., Public Works Director/City Engineer



Project Overview

The project area includes an area within Vincent Lugo Park in the City of San Gabriel. This park is located next to McKinley Elementary School in a residential area of the city. Vincent Lugo Park is home to La Laguna de San Gabriel, also known as Monster Park. This popular playground features larger than life play equipment and is listed on the California Register of Historic Places and as a local historic landmark for the city of San Gabriel.

The project concept was initiated as an idea from a City Councilmember, who suggested building a stormwater capture basin at Vincent Lugo Park. It was determined that not enough street surface stormwater could be captured to make a significant impact, so staff looked at other opportunities near the park that could make a broader impact. After evaluating the priorities of the EWMP, staff identified the Alhambra Wash, which runs adjacent to Vincent Lugo Park, as a viable source of significant stormwater runoff to divert into an existing infiltration creek bed, a new bioswale, a mechanical treatment system, storage cisterns, and subsurface infiltration galleries to be built in Vincent Lugo Park.

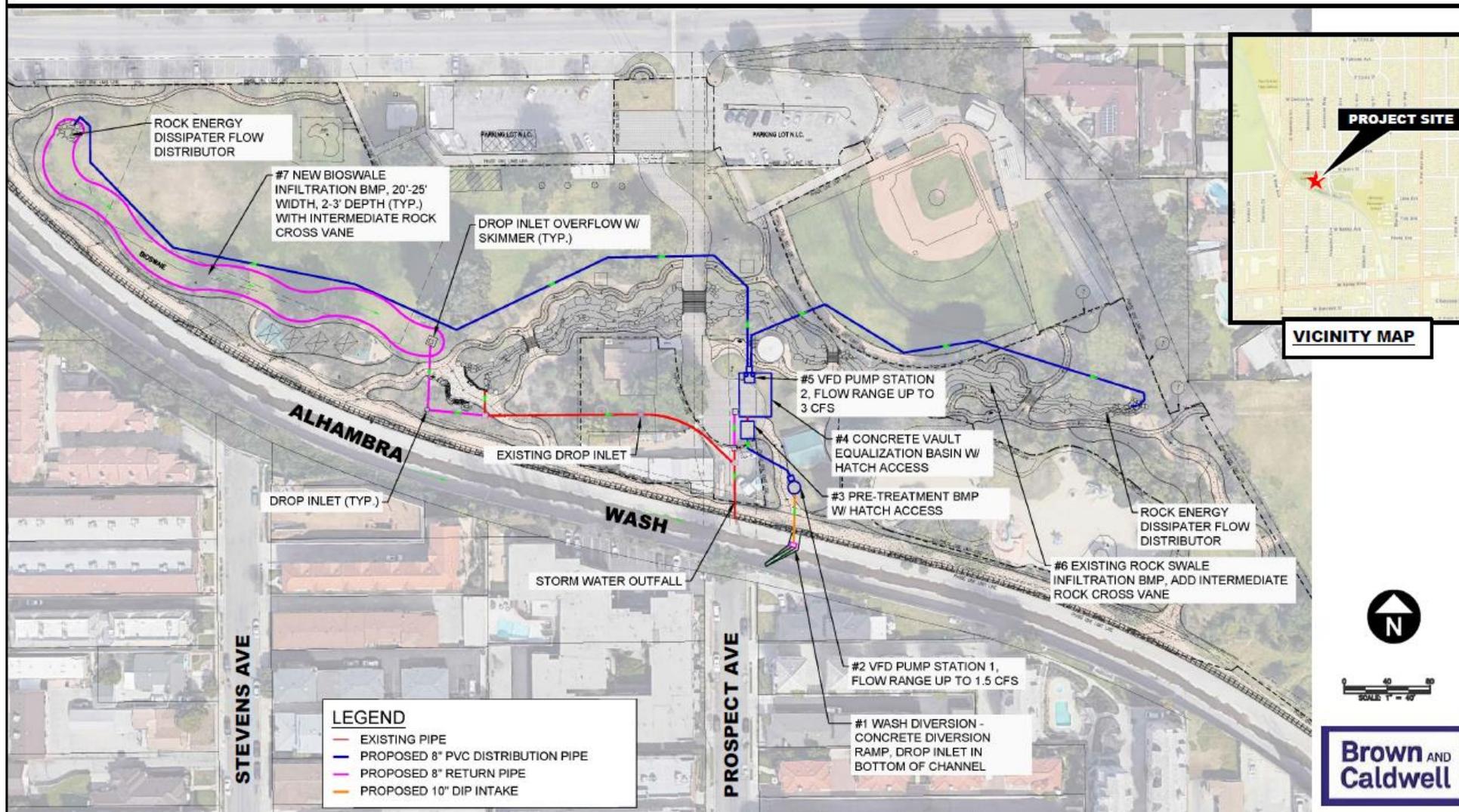
- Project will divert water from the Alhambra Wash to Vincent Lugo Park for pre-treatment and infiltration via an existing dry creek bed and a new bioswale BMP.
- Provide new recreational opportunities, public education and community access to waterways.
- Project Status: Requesting funding for Design and Construction
- Total Funding Requested: \$4,078,000





Project Location

VINCENT LUGO PARK STORMWATER CAPTURE PROJECT CONCEPTUAL PLAN





Project Background

- The project site was selected to capture the largest amount of stormwater runoff in proximity to the park.
- The City is part of the Upper LA River EWMP group and the project is progressing towards being listed in the IRWMP/OPTI Database.
- Assists with achievement of Water Quality Objectives for MS4 Permit.
- This project can support community education about water management and the environmental benefits of a project that removes pollution from stormwater runoff, reduces downstream flooding, and enhances groundwater supplies.



Project Details



- The infiltration rate of soils beneath the project site are expected to have long term infiltration rates, ranging from 2 to 4 inches per hour, which would provide approximately 1 cfs to 2 cfs of project infiltration. Hydrology in the Alhambra Wash near Vincent Lugo Park was evaluated using historic flow datasets and is discussed in the Hydrology report. The annual volume of water calculated to pass through the wash is approximately 3,500 acre-feet with consistent dry weather flow. The right-of-way and/or LACFCD letter demonstrates conceptual approval for the proposed project. No utility relocation work is expected.



Cost & Schedule

Phase	Description	Cost	Completion Date
Design	Design, Survey, and Geotechnical	\$730,000	12/2022
Design	Permitting	\$70,000	07/2023
Design	Public Outreach/Engagement	\$20,000	07/2023
Construction	Construction	\$3,258,000	07/2024
TOTAL		\$4,078,000	

- Annual O&M Costs are estimated to be \$95,000.



Funding Request

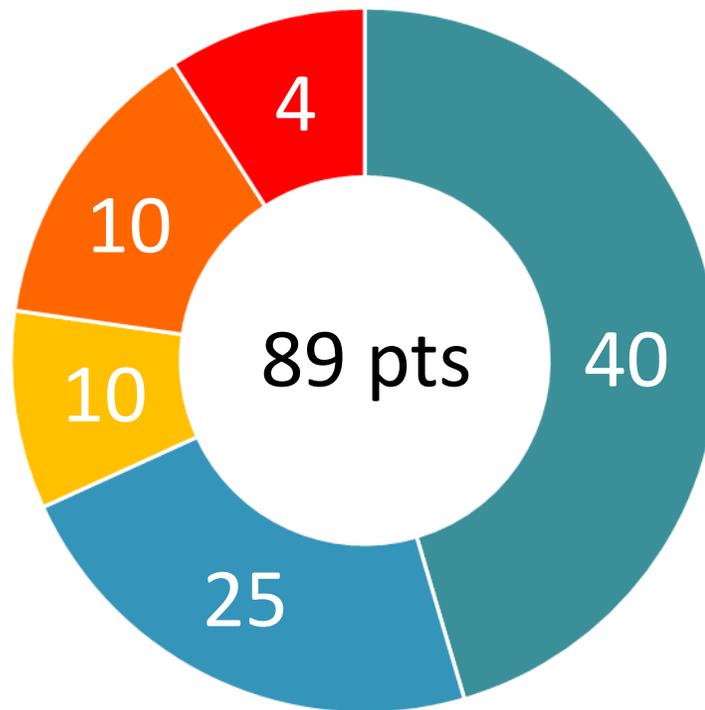
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$682,000	Design	Includes 80% of design, permitting and outreach efforts; and 100% of survey and geotech efforts
2	\$138,000	Design	Includes remaining 20% of design, permitting and outreach efforts
2	\$664,000	Construction	Includes 100% of bidding efforts and 20% of construction efforts
3	\$2,594,000	Construction	Includes remaining 80% construction efforts and 100% start-up efforts
TOTAL	\$4,078,000		

- Future requests for O&M expenses may be submitted.



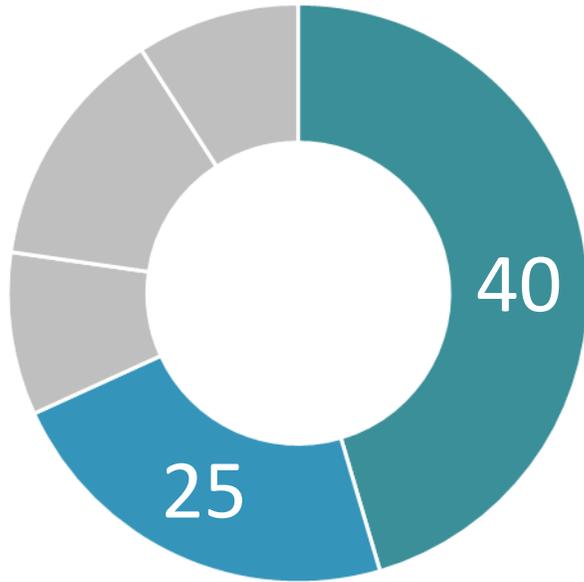
Preliminary Score

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





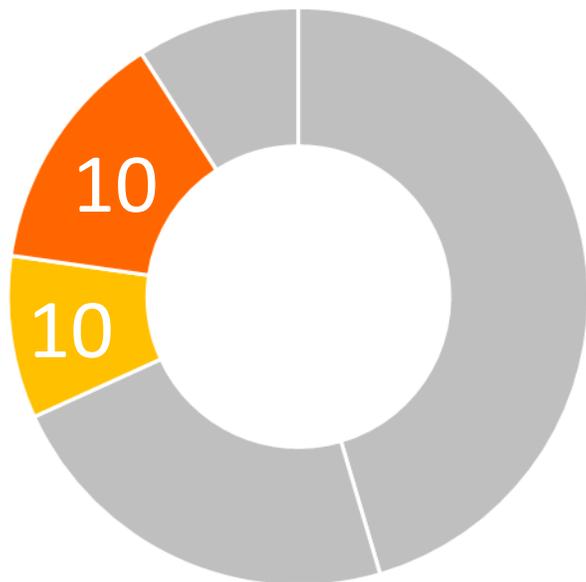
Water Quality & Water Supply Benefits



- Primary mechanisms to achieve Water Quality and Water Supply Benefits:
 - Divert stormwater runoff and dry-weather flow for treatment and infiltration to achieve the primary benefits of groundwater aquifer recharge, trash removal, and pollutant load reduction.
- Project captures both Wet/Dry flows.
- Tributary Area for this project is 5,800 acres.
- Dry Weather Pollutant Reduction: estimated to be 100%.
- This project is anticipated to capture and infiltrate 430 to 628 acre-feet per year, based on expected infiltration rates and observed dry weather channel flows.
- This project provides a cost effective way to assist with water supply and water quality improvement.



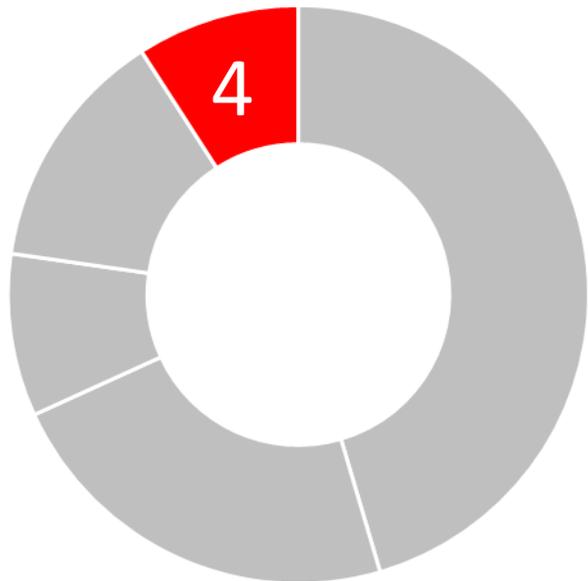
Community Investment Benefits and Nature Based Solutions



- Community Investment Benefits
 - Creation of riparian habitat.
 - Creek bed restoration and a new bioswale.
 - Create a year-round water supply.
 - Public access to waterways.
 - Reduce urban heat island affect.
 - Public educational walking tour within the park.
- Nature Based Solutions
 - Creek bed and bioswale constructed of natural materials.
 - Maximize infiltration and minimize the “gray” infrastructure.
 - Native vegetation to be selected.



Leveraging Funds and Community Support



- Leveraging Funds
 - The City of San Gabriel has been operating with a negative general fund balance over the past three years. The City will end this fiscal year with a positive fund balance, however our next obligation is to develop a healthy reserve fund. None of the City's Capital Improvement Program is funded with general fund dollars. As such, the City is not in a position to provide leveraged funding for this proposed project.
- Community Support
 - Letters of support have been provided by the following community organizations: San Gabriel Unified School District, SGVCOG, Friends of La Laguna.



Questions?