

APPROVED
JUN 03 2021

**BOARD OF RECREATION
AND PARK COMMISSIONERS**

BOARD REPORT

NO. 21-102

DATE June 03, 2021

C.D. 2, 4, 13, 14, 15

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: MEASURE W SAFE CLEAN WATER PROGRAM – CONCEPTUAL APPROVAL OF MEASURE W PROJECTS AT GRIFFITH PARK, VALLEY PLAZA PARK, ECHO PARK, KEN MALLOY HARBOR REGIONAL PARK, AND HOLLENBECK PARK

AP Diaz	_____	M. Rudnick	_____
H. Fujita	_____	<i>for</i> C. Santo Domingo	<i>DF</i> _____
J. Kim	_____	N. Williams	_____



General Manager

Approved X

Disapproved _____

Withdrawn _____

RECOMMENDATIONS

1. Conceptually approve the proposed Fern Dell Trail Rehabilitation & Stormwater Capture Project at Griffith Park, as further described in the Summary and Attachment 1 of this Report,
2. Conceptually approve the proposed Alexandria Park Stormwater Capture Project at Valley Plaza Park, as further described in the Summary and Attachment 2 of this Report,
3. Conceptually approve the proposed Whitsett Fields Park North Stormwater Capture Project at Valley Plaza Park, as further described in the Summary and Attachment 2 of this Report,
4. Conceptually approve the proposed Echo Park Lake Operation and Maintenance Project, as further described in the Summary and Attachment 3 of this Report,
5. Conceptually approve the proposed Machado Lake Operation and Maintenance Project at Ken Malloy Harbor Regional Park, as further described in the Summary and Attachment 4 of this Report,
6. Conceptually approve the proposed Hollenbeck Park Stormwater Improvement Project, as further described in the Summary and Attachment 5 of this Report,
7. Direct Department of Recreation and Parks (RAP) staff to return to the Board of Recreation and Park Commissioners (Board) with final plans for consideration for each of the proposed Measure W Projects in this Report; and,

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8. Authorize RAP's General Manager, or designee, and City Attorney to make technical corrections, as needed, to carry out the intent of this Report.

SUMMARY

On November 6, 2018, Los Angeles County voters approved Measure W - The Los Angeles County Safe, Clean Water Program (Measure W), a parcel tax of 2.5 cents per square foot of impermeable surface to support the costs of stormwater-related projects and activities.

Measure W revenues are allocated to three sub-programs: Regional, Municipal, and Administrative. 50% of Measure W revenues are allocated to the Regional Program, for region-wide Infrastructure, Technical Resources, and Scientific Studies projects. These Regional Program funds are awarded on a competitive basis. 40% of Measure W revenues are allocated to the Municipal Program. These Municipal Program funds are allocated to municipalities in the same proportion as the amount of revenues collected within each municipality. The remaining 10% of Measure W revenue is allocated to the Administrative Program. These funds are allocated to the Los Angeles County Flood Control District (LACFCD) for implementation and administration of the Measure W Program.

Eligible uses for Measure W revenues include projects that provide a water supply and/or water quality benefit and a community investment benefit.

MEASURE W SAFE CLEAN WATER PROGRAM

The Measure W Safe Clean Water Program is administered by LACFCD.

Los Angeles County (County) has designated nine local watersheds for the Measure W Program, three of which (Central Santa Monica Bay, South Santa Monica Bay and Upper Los Angeles River) are within the City. LACFCD has formed Watershed Area Steering Committees (WASC) for each watershed in the County, for a total of nine steering committees, along with a Scoring Committee and a Regional Oversight Committee. The nine WASCs are comprised of representatives from cities, agencies and community stakeholders and are responsible for determining eligible projects for developing an annual Stormwater Investment Plan (SIP) to program Regional Program funds for the Infrastructure, Technical Resources, and Scientific Studies projects, reviewing quarterly reports, and selecting watershed coordinators for each watershed.

Each WASC consists of 17 members: seven from municipalities within the watershed, five agency stakeholders, and five community stakeholders. A municipality can occupy up to three municipal seats on each WASC. The number of seats a municipality receives depends on how much impermeable area the municipality comprises within the watershed. The 5 agency stakeholder seats are given to the lead agency in the following 5 areas: district, water agency, groundwater agency, sanitation, and municipal parks/open space. The community stakeholder seats are appointed by the Los Angeles County Board of Supervisors (LA County Board) and are for members who represent environmental justice interests, business interests, and environmental interests.

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The City has municipal seats in the three WASCs that cover the City (Central Santa Monica Bay, South Santa Monica Bay, and Upper Los Angeles River). Additionally, several City Departments serve as lead stakeholder agencies on those WASCs. RAP has agency seats in all three WASCs, the Department of Water and Power (LADWP) has agency seats in all three WASCs, and Los Angeles Sanitation and Environment (LASAN) has agency seats in two of the WASCs.

MEASURE W CITY GOVERNANCE STRUCTURE

In order to ensure proper administration of the City's Measure W efforts, the City has established the Measure W – Safe Clean Water Program Administrative Oversight Committee (AOC) to oversee the program. The AOC consists of representatives from the City Administrative Officer, Chief Legislative Analyst and the Mayor's Office. The duties and responsibilities of the AOC include the development and review of criteria for the selection of projects as proposed by City Departments, the review of project proposals to determine if they meet adopted project criteria, oversight of the program and projects to ensure timely completion within approved schedules and budgets, and to resolve any issues of concern between City Departments to address program and project needs. The actions of the AOC are subject to City Council and Mayoral approval.

Additionally, the City has established a City working group for the various City Departments, Agencies, and Offices involved in City's Measure W efforts. The purpose of this working group is for City staff to meet on a regular basis to discuss, review, advice, and collaborate on Measure W project proposals and plans. LASAN, as the City's lead agency on Measure W, has been tasked with organizing the meetings of the City working group.

MEASURE W REGIONAL PROGRAM CALL FOR PROJECTS

To date, LACFCD has issued three Call for Projects (CFP) for funding under the Regional Program. The first CFP (CFP Round 1), for Fiscal Year 2020-21, closed on December 15, 2019. The second CFP (CFP Round 2), for Fiscal Year 2021-22, closed on October 15, 2020. The third CFP (CFP Round 3) is currently open and accepting applications, and closes on July 31, 2021.

The Board has previously considered, and granted conceptual approval to, a total of 9 projects proposed to be located, in whole or in part, on RAP property (Report No. 20-191). Those 9 projects were submitted for funding under either CFP Round 1 or CFP Round 2. The 9 projects, and the agency that submitted them, are as follows:

- Fernangeles Park Stormwater Capture Project (LADWP)
- MacArthur Park Lake Rehabilitation Project (LASAN)
- Strathern Park North Stormwater Capture Project (LADWP)
- Valley Village Stormwater Capture Project (LADWP)
- David M. Gonzales Stormwater Capture Project (LADWP)
- Lincoln Park Neighborhood Greening/Street Network Project (LASAN)

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- North Hollywood Park Stormwater Capture Project (LADWP)
- Valley Plaza Park Stormwater Capture Project (LADWP)
- Wilmington Neighborhood Greening Center Project (LASAN)

PROPOSED MEASURE W PROJECTS FOR CFP ROUND 3

There are 6 Measure W Projects currently proposed to be located, in whole or in part, on RAP property that have been, or are proposed to be, submitted for funding under CFP Round 3. Those 6 Project are as follows:

- Fern Dell Trail Rehabilitation & Stormwater Capture Project (Friends of Griffith Park)
- Alexandria Park Stormwater Capture Project (LADWP)
- Whittsett Fields Park North Stormwater Capture Project (LADWP)
- Echo Park Lake Operation and Maintenance Project (LASAN)
- Machado Lake Operation and Maintenance Project (LASAN)
- Hollenbeck Park Stormwater Improvement Project (LASAN)

In general, the typical proposed scope of work for these projects includes stormwater diversion and capture structures to divert and infiltrate stormwater to increase groundwater infiltration and replenishment and/or implement improvements designed to help the City achieve compliance with regulatory water quality requirements. The stormwater capture components generally include but are not limited to, catch basins, bioswales, pre-treatment devices, pumps, pump stations, storm drains, underground infiltration galleries, and other stormwater Best Management Practices (BMPs). The scope of work for each project also includes the restoration of any impacted park components, construction of new park improvements, and replacement of trees.

One of the proposed projects is requesting funding under the Technical Resources Program, which provides resources to community groups, municipalities, and individuals who need technical assistance to develop their project concepts.

Two of the proposed projects are requesting funding for operations and maintenance activities to support and sustain existing water quality improvement projects that were previously constructed by the City.

Three of the proposed projects are requesting funding for the design and implementation of new stormwater capture and/or water quality improvement projects.

It is important to note that, at this time, all of these projects are in either the conceptual or preliminary design stage. The project scopes described below will continue to be refined as these projects move forward through the design process, and as additional community input is solicited and received. Project construction schedules will be further refined and, where necessary, will be managed and rolled out sequentially in order to reduce impacts to the community.

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The final designs and specifications for each of these projects, once complete, will be presented for Board consideration.

Detailed description of each proposed project, including their scope, schedule, budget and funding, and current status, follow below.

Fern Dell Trail Rehabilitation & Stormwater Capture Project (Friends of Griffith Park)

Griffith Park is a 4,281.73-acre park located in Council District 4 at 4730 Crystal Springs Drive in the Hollywood community of the City.

The Fern Dell Trail Rehabilitation & Stormwater Capture Project is requesting funding under the Technical Resources Program. This project is proposed to be submitted by Friends of Griffith Park (FOGP), a local non-profit 501(c)(3) corporation.

The Fern Dell Trail Rehabilitation & Stormwater Capture Project proposes to rehabilitate the existing Fern Dell Trail and to capture and treat local stormwater runoff that ultimately discharges to Ballona Creek. The proposed scope of work at the park would include the installation of a stormwater diversion from an existing City storm drain, a hydrodynamic separator, and an underground storage reservoir. Additional features of this project would include various enhancements to the existing detention basin(s); parking lot enhancements including landscaping, permeable pavement, and bioswales; and, rehabilitation of the stream.

It is unknown at this time how many trees would be impacted by the project. However, any impacts to existing trees would be mitigated and replacement trees would be provided in conformance with RAP's standards and guidelines for tree replacements.

FOGP is planning to apply for CFP Round 3 with a funding request of \$300,000.

Attachment 1 to this report is the Fern Dell Trail Rehabilitation & Stormwater Capture Project Conceptual Site Plan.

Alexandria Park Stormwater Capture Project (LADWP)

Valley Plaza Park is a 77.64-acre park located in Council District 2 at 12240 Archwood Street in the North Hollywood community of the City.

The Alexandria Park Stormwater Capture Project is located in the southern portion of Valley Plaza Park, in an area of the park that is generally, and unofficially, referred to as Alexandria Park. The project proposes to collect runoff from a 171-acre drainage area and potentially capture 72 acre-feet of water per year. The proposed scope of work at the park would include the installation of up to three underground infiltration galleries to capture stormwater from LACFCD storm drains and the surrounding neighborhood for infiltration and replenishment of the San Fernando Groundwater Basin. The infiltration galleries would be constructed in the southern portion of the park in an open space area. In addition to the galleries, other underground stormwater components will include the installation of one diversion structure, one

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rubber dam, piping, one pretreatment device, and one pump station. All project components will be within RAP's property except for the diversion structure and rubber dam, which will be within LACFCD's right-of-way.

As a part of this project the park will be improved with new landscaping, irrigation, educational signage and a hydration station. Approximately 26 trees may be removed as a part of the project. To mitigate for these removals at least 70 trees will be planted, and those replacement trees would be provided in conformance with RAP's standards and guidelines for tree replacements.

Community outreach meetings were held on August 20, 2020, October 24, 2020, and May 26, 2021. LADWP, the Bureau of Engineering (BOE), the project design consultant, RAP, and CD 2 were in attendance to answer questions from the community. The next meeting will be scheduled for June 2021. The public outreach effort for this project will continue until the end of construction.

The project design is scheduled to be completed in December 2021. Construction is scheduled to begin January 2025 and estimated to be completed in October 2026. California Environmental Quality Act (CEQA) analysis is underway and the Initial Study/Mitigated Negative Declaration is anticipated to be complete in Summer 2021.

The capital cost for the project is \$14,500,000. LADWP is planning to apply for CFP Round 3 with a funding request of \$7,200,000, which is approximately 50% of the total capital cost. LADWP is committed to funding the remaining 50% of the project cost.

Attachment 2 to this report is the Alexandria Park Stormwater Capture Project and Whitsett Fields Park North Stormwater Capture Project Conceptual Plan

Whitsett Fields Park North Stormwater Capture Project (LADWP)

Valley Plaza Park is a 77.64-acre park located in Council District 2 at 12240 Archwood Street in the North Hollywood area of the City.

The Whitsett Fields Park North Stormwater Capture Project is located in the northwest portion of Valley Plaza Park, just south of Sherman Way and east of Whitsitt Avenue.

The project will collect runoff from a 302-acre drainage area and potentially capture 185 acre-feet of water per year. The proposed scope of work at the park would include the installation of one underground infiltration gallery on the northern portion of the park. The underground infiltration gallery would overlap with two existing baseball fields. In addition to the galleries, other underground stormwater components will include the installation of a diversion structures, piping, two hydrodynamic separators, and flow-measuring devices. All of the project components will be within RAP's property.

As a part of this project the two existing ball fields will be improved with backstops, dugouts, batting cages, and field lighting. Additionally, bleachers, hydration stations, and educational

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signage would be installed in the park. Any impacts to existing trees would be mitigated and replacement trees would be provided in conformance with RAP's standards and guidelines for tree replacements.

Community outreach meetings were held on August 20, 2020, April 24, 2021, and May 26, 2021. LADWP, the Bureau of Engineering (BOE), the design consultant, RAP, and CD 2 were in attendance to answer questions from the community. The public outreach effort for this project will continue until the end of construction.

The project design is expected to be complete in February 2022. Construction is scheduled to begin September 2025 and estimated to be completed in November 2026. CEQA analysis is underway and the Initial Study/Mitigated Negative Declaration is anticipated to be completed in Summer 2021.

The capital cost for the project is \$18,600,000. LADWP is planning to apply for CFP Round 3 with a funding request of \$9,200,000, which is approximately 50% of the total capital cost. LADWP is committed to funding the remaining 50% of the project cost.

Attachment 2 to this report is the Alexandria Park Stormwater Capture Project and Whitsett Fields Park North Stormwater Capture Project Conceptual Plan

Echo Park Lake Operation and Maintenance Project (LASAN)

Echo Park is a 28.14-acre park located in Council District 13 at 751 North Echo Park Boulevard in the Echo Park community of the City.

The Echo Park Lake Operation and Maintenance Project will be requesting funding for operations and maintenance activities to support and sustain the existing water quality improvement project that was previously constructed by the City at Echo Park Lake. Echo Park Lake serves as a stormwater retention basin for water prior to discharge to the LA River, capturing 131 acre-feet per year of urban runoff from nearly 800 acres of watershed. Echo Park Lake is subject to Total Maximum Daily Loads (TMDLs) water quality compliance standards for nutrients, organics, and trash, and the requested funding is critical to sustain regulatory compliance and public health.

Critical daily or weekly tasks that this project will provide for include trash and debris removal and disposal; weed and algae removal and disposal; apple snail reduction; dead animal and fish removal; care and replacement of aquatic plantings; and installation and repair of safety barriers and bird deterrents. Other periodic tasks the project will include are biological treatments for control of algae and cyanobacteria to maintain lake equilibrium, meet TMDL standards, and protect public health; sediment removal from wetlands; sampling and analysis, repair and calibration of in-lake aeration, recirculation, and monitoring systems; lotus bed upkeep to maintain cleanliness and aesthetics; invasive species assessment and control; prevention of conditions causing vector issues; maintenance of structural components such trash separator, wet-wells, pump station, inlet forebay; and, environmental education.

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LASAN is planning to apply for CFP Round 3 with a funding request of \$2,400,000 for 5 years of maintenance.

Attachment 3 to this report is the Echo Park Lake Operation and Maintenance Project Summary Report

Machado Lake Operation and Maintenance Project (LASAN)

Ken Malloy Harbor Regional Park is a 290.87-acre park located in Council District 15 at 25820 Vermont Avenue in the Wilmington community of the City.

The Machado Lake Operation and Maintenance Project will be requesting funding for operations and maintenance activities to support and sustain the existing water quality improvement project that were previously constructed by the City at Machado Lake. Machado Lake is located within the Dominguez Watershed and has a drainage area of approximately 14,000 acres. Machado Lake is subject to TMDLs water quality compliance standards for nutrients and the requested funding is critical to sustain the complex structural, mechanical, and natural systems at the lake.

Critical daily or weekly tasks that this project will provide for include trash and debris removal and disposal; weed and algae removal and disposal; dead animal and fish removal; care and replacement of aquatic plantings; and, installation and repair of safety barriers and bird deterrents. Other periodic tasks the project will include are biological treatments for control of algae and cyanobacteria to maintain lake equilibrium, meet TMDL standards, and protect public health; sediment removal from wetlands; sampling and analysis, repair and calibration of in-lake aeration, recirculation, and monitoring systems; invasive species assessment and control; prevention of conditions causing vector issues; maintenance of structural components such trash separator units, wet wells, pump station, inlet forebay, and oxygenation system; and, environmental education.

LASAN is planning to apply for CFP Round 3 with a funding request of \$5,700,000 for 5 years of maintenance.

Attachment 4 to this report is the Machado Lake Operation and Maintenance Project Summary Report

Hollenbeck Park Stormwater Improvement Project (LASAN)

Hollenbeck Park is an 18.30-acre park located in Council District 14 at 415 South Saint Louis Street in the Boyle Heights community of the City.

The Hollenbeck Park Stormwater Improvement Project would implement a regional multi-benefit project that includes capture and treatment of offsite and onsite stormwater, in-lake improvements, and various community enhancements. It would divert, capture, and treat polluted dry weather flow and a portion of wet weather flow in order to lower the pollutants entering the nearby Los Angeles River.

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The proposed scope of work at the park would include a diversion and storage system for the dry and wet weather flows that, conceptually, will be sited on the north side of the park in order to capture a City and County storm drain line passing through the park. It would also include an underground storage system that would be located inside the park, on the 4th Street side of the park. Most of the project components will be within RAP's property except for some parkway planters, drywells, and street trees located along neighboring streets, which will be within the public right-of-way.

The park improvement and enhancements currently visualized for Hollenbeck Park would include re-grading of the shoreline around the lake perimeter and placement of appropriate foliage, terracing of the embankment at the southern end of the park and placement of foliage and natural pieces for public use. Permeable pavement would be added to replace some of the hardscape currently at the park, including in the main parking lot and portions of the park's walkway. Landscaping in the park, to the extent practical and appropriate, would be replaced with low water demand native vegetation.

It is anticipated that a number of new trees will be included as part of the project, and the final number and specifications on plants and trees will be further developed during the design phase. It is unknown at this time how many trees would be impacted by the project. However, any impacts to existing trees would be mitigated and replacement trees would be provided in conformance with RAP's standards and guidelines for tree replacements.

This project is currently in the conceptual phase. Further refinement of project elements, including the proposed park improvements and enhancements will continue to evolve through the pre-design and design phases based on stakeholder input.

LASAN recently presented the Hollenbeck Park Stormwater Improvement Project to community stakeholders during an Earth Day event, hosted by the local Community Based Organization, Promesa Boyle Heights, on April 22, 2021. During that event, community participants were provided time to give feedback and suggestions on this proposed project. LASAN will continue to solicit stakeholder input as the project concept and scope are finalized. The Office of Council District 14 is in support of this project

The capital cost for the project is \$30,000,000. LASAN is planning to apply for CFP Round 3 with a funding request of \$15,000,000.

Attachment 5 to this report is the Hollenbeck Park Stormwater Improvement Project Conceptual Site Plan.

ENVIRONMENTAL IMPACT

The CEQA analysis will be completed as a part of the design and development for each of the projects. Once completed, the CEQA analysis will be made available for the Board's consideration prior to making a determination on approval of the final plans for each project.

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FISCAL IMPACT

The estimated costs for the design, development, and construction/installation of the proposed park improvements are anticipated to be funded by the above-mentioned funding sources other than RAP's General Fund.

The maintenance cost of the proposed projects is yet to be determined. It is anticipated that RAP and LASAN will enter into maintenance agreements for LASAN to be responsible, at its own expense, for the maintenance of any stormwater capture or water quality improvement components that are proposed to be installed on RAP property as a part of these proposed projects, as LASAN has the staffing and expertise to maintain those components and improvements.

STRATEGIC PLAN INITIATIVES AND GOALS

Approval of this Board Report advances RAP's Strategic Plan by supporting:

- Goal No. 3:** Create & Maintain World Class Parks and Facilities
Outcome No. 2: Newly developed Park Projects and the redesign of the city signature parks.
Result: Development of these stormwater capture and water quality improvement projects will result in improvements to both the parks and the local environment.

This Report was prepared by Darryl Ford, Superintendent, Planning, Maintenance and Construction Branch.

LIST OF ATTACHMENTS

- 1) Fern Dell Trail Rehabilitation & Stormwater Capture Project Conceptual Site Plan
- 2) Alexandria Park Stormwater Capture Project and Whitsett Fields Park North Stormwater Capture Project Conceptual Plan
- 3) Echo Park Lake Operation and Maintenance Project Summary Report
- 4) Machado Lake Operation and Maintenance Project Summary Report
- 5) Hollenbeck Park Stormwater Improvement Project Conceptual Site Plan

FERN DELL TRAIL REHABILITATION AND STORMWATER PROPOSED CONCEPTUAL SITE LAYOUT



Fern Dell Stream Restoration



Pre-Cast Subsurface Infiltration Facility

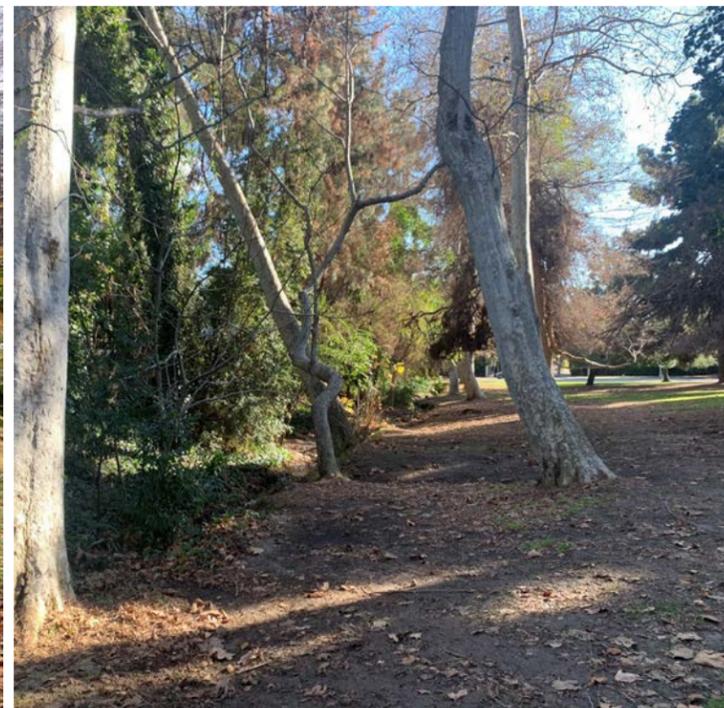
DRAINAGE CHARACTERISTICS

REGIONAL WATER MANAGEMENT PLAN	Ballona Creek Enhanced Watershed Management Program
DRAINAGE AREA	779 acres Los Angeles (100%)
INFILTRATION RATE	0.3 inches per hour (assumed)
APPROX. DEPTH TO GROUNDWATER	121 ft BGS (pending geotechnical)
ESTIMATED AVERAGE ANNUAL RUNOFF VOLUME	75 ac-ft per year

Detention Basin



Fern Dell North of Los Feliz Blvd



BMP CHARACTERISTICS

LOCATION	Fern Dell Trail, Griffith Park 5375 Red Oak Dr, Los Angeles, CA 90068	LAT: 34° 06'31.83"N LONG: 118° 18'26.49"W
Proposed BMP Description:	The Fern Dell Trail is a 20-acre area located in the southwest corner of Griffith Park. Fern Dell was listed as part of the Griffith Park Historic Cultural Monument by the City of Los Angeles in 2009. Runoff from this site ultimately drains to the Ballona Creek watershed. The project seeks to rehabilitate the Fern Dell Trail and improve water quality discharged to Ballona Creek. The project consists of a stormwater diversion from the existing City storm drain and capture runoff from the local neighborhoods. The water captured will be filtered by a hydrodynamic separator, stored in a 2.0 MG/6 AF underground storage reservoir. Additional features include enhancements to the detention basin, parking lot enhancements (landscaping, permeable pavement, and bioswales), and stream rehabilitation. The treatment drainage area for the project at 779 acres captures runoff from the City of Los Angeles jurisdiction.	
Project Benefits:	<ul style="list-style-type: none"> Water Quality Improvement in the Ballona Creek by treating stormwater and urban runoff Sustainability by capturing natural runoff for reuse as irrigation along Fern Dell Trail Nature-Based parking lot and detention basin enhancements with sustainable native landscaping and permeable pavement 	

FRIENDS OF GRIFFITH PARK AND THE CITY OF LOS ANGELES
FERN DELL TRAIL REHABILITATION AND STORMWATER CAPTURE PROJECT



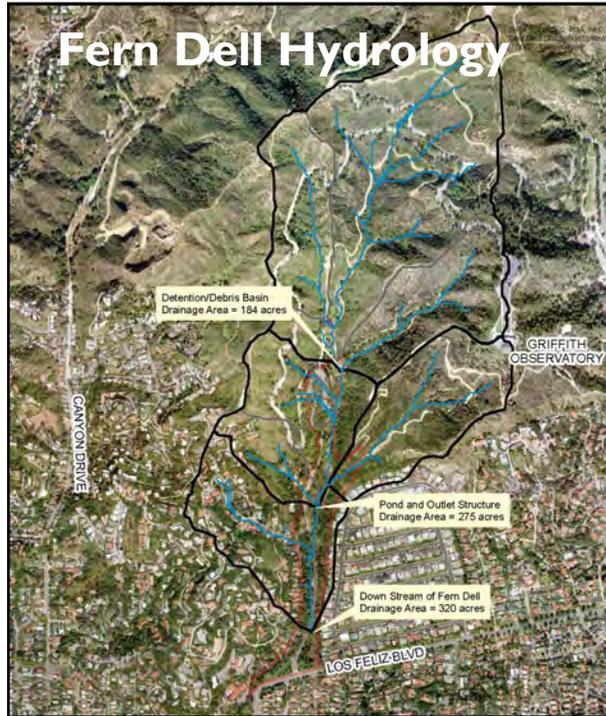


1

Fern Dell Trail Rehabilitation and Stormwater Capture Project
OBJECTIVES

- Rehabilitate the Fern Dell Trail consistent with its historic status
- Enhance the Parking Lot with permeable surfaces
- Enhance Detention Basin with native habitat and improvements
- Construct a Stormwater Capture Facility to treat local runoff and provide sustainable water source for the landscaped areas

2



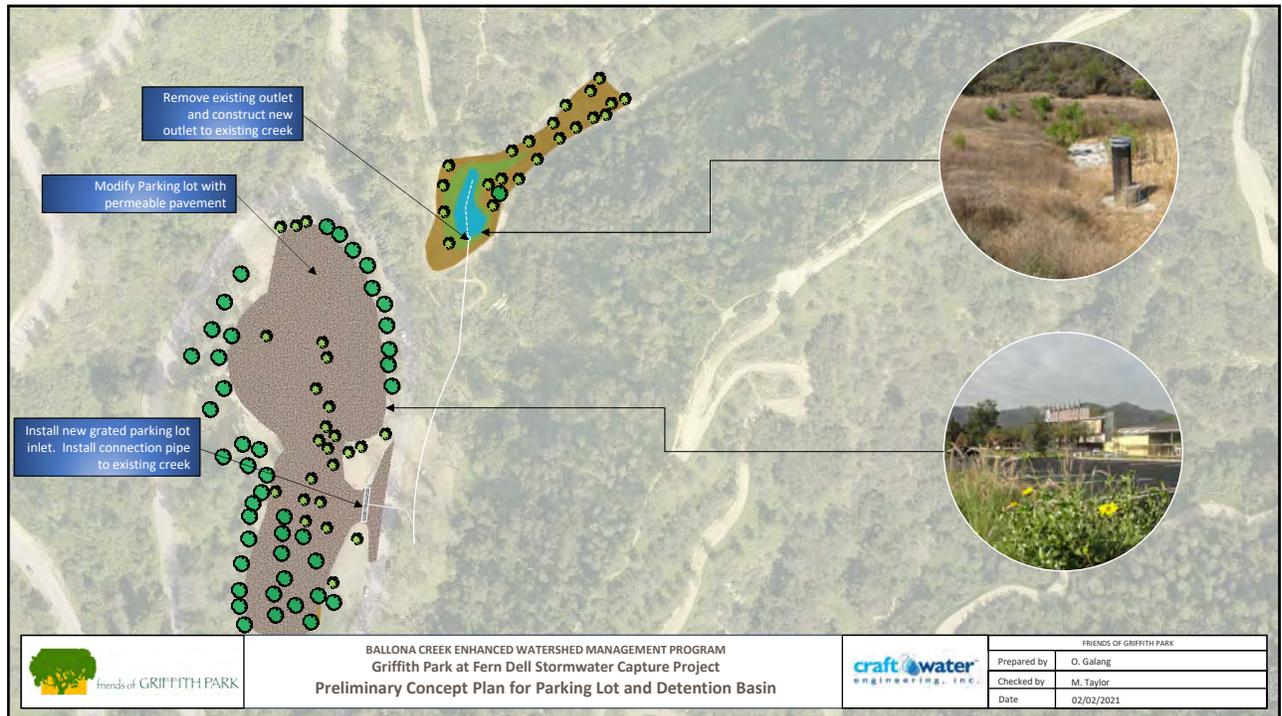
Detention Basin: 184 acres natural watershed

Pond and Outlet structure: 275 acres. Includes Parking Lot

Down stream of Fern Dell Drainage: 320 Acres. Includes residential area

Fern Dell at Los Feliz entrance includes additional residential areas

3

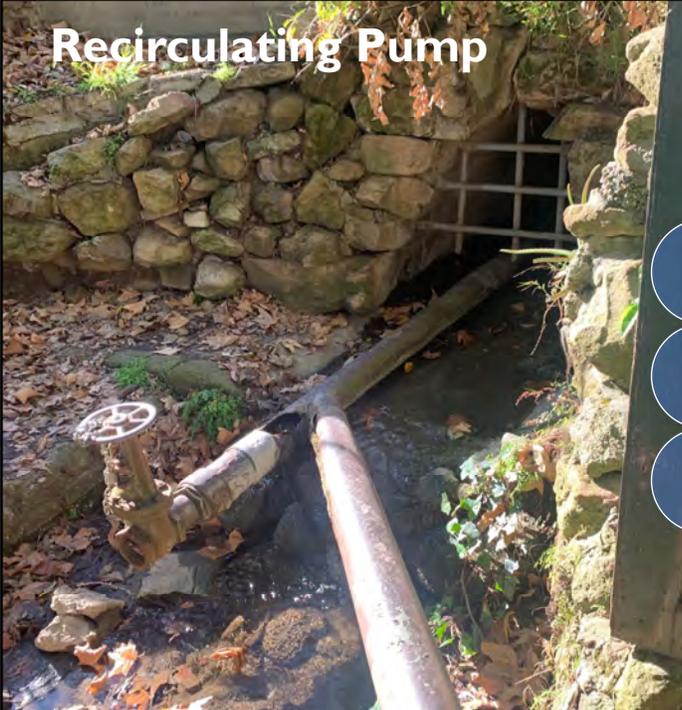


BALLONA CREEK ENHANCED WATERSHED MANAGEMENT PROGRAM
Griffith Park at Fern Dell Stormwater Capture Project
Preliminary Concept Plan for Parking Lot and Detention Basin



FRIENDS OF GRIFFITH PARK	
Prepared by	O. Galang
Checked by	M. Taylor
Date	02/02/2021

4



Recirculating Pump

friends of GRIFFITH PARK **craft water** engineering, inc.

- Restoration to a more natural condition
- Remove street grating inlet
- Remove Pump and pipes from stream

5



Fern Dell at Los Feliz

friends of GRIFFITH PARK **craft water** engineering, inc.

- Capture and treat runoff** from local residential areas (Black Oak and Red Oak Drives) and from the stream
- Divert water from stream** and from catch basins on Fern Dell Drive
- Construct underground reservoir** within available open area north of Los Feliz Blvd
- Pump station to **circulate water** to the upper pond and streams
- Stormwater Harvesting Facility to treat **water to irrigate landscaped areas**

6

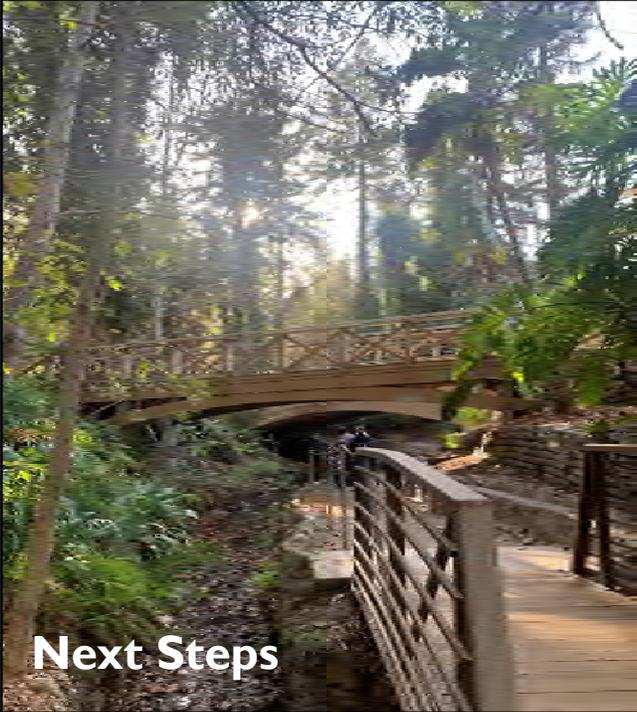


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Eligibility under Safe, Clean Water Program (Measure W)

- Stormwater Capture** from local residential areas supports the Ballona Creek EWMP
- Nature-Based Solutions** with permeable pavement
- Community Support**
- Sustainable Practices** and reduction in water demand

8



Next Steps



Submit an Application for Safe, Clean Water Program in the 2021 Call for Projects in July 2021

SCW Technical Resources Program will request for \$300k towards the development of a Feasibility Study in the Ballona Creek Watershed

9



craftwater™
engineering, inc.

Questions?

Gerry Haas, Friends of Griffith Park

Oliver Galang, PE, ENV SP
Principal Engineer, Craftwater Engineering

10

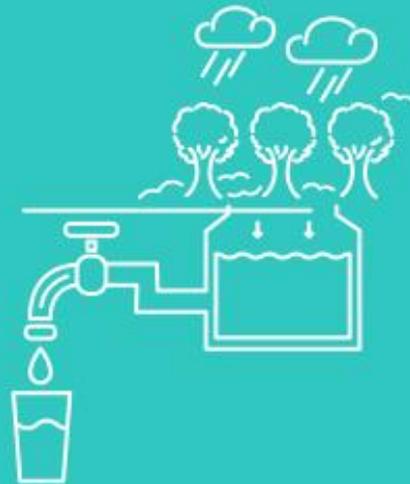
Stormwater Capture Parks Program



Program Objectives



- ✓ Implement multi-benefit stormwater capture projects to improve local WQ and increase local WS
- ✓ Source 70% of LA's water locally
- ✓ Capture 150,000 AFY of stormwater by 2035
- ✓ Deliver Environmental Justice & Social Equity



Source
70%
of all water locally
by 2035

Community Benefits

Expand Park Infrastructure

Improved sports fields and playgrounds

Safe and Clean Communities

Mitigate localized flooding

Environmental Education & Signage

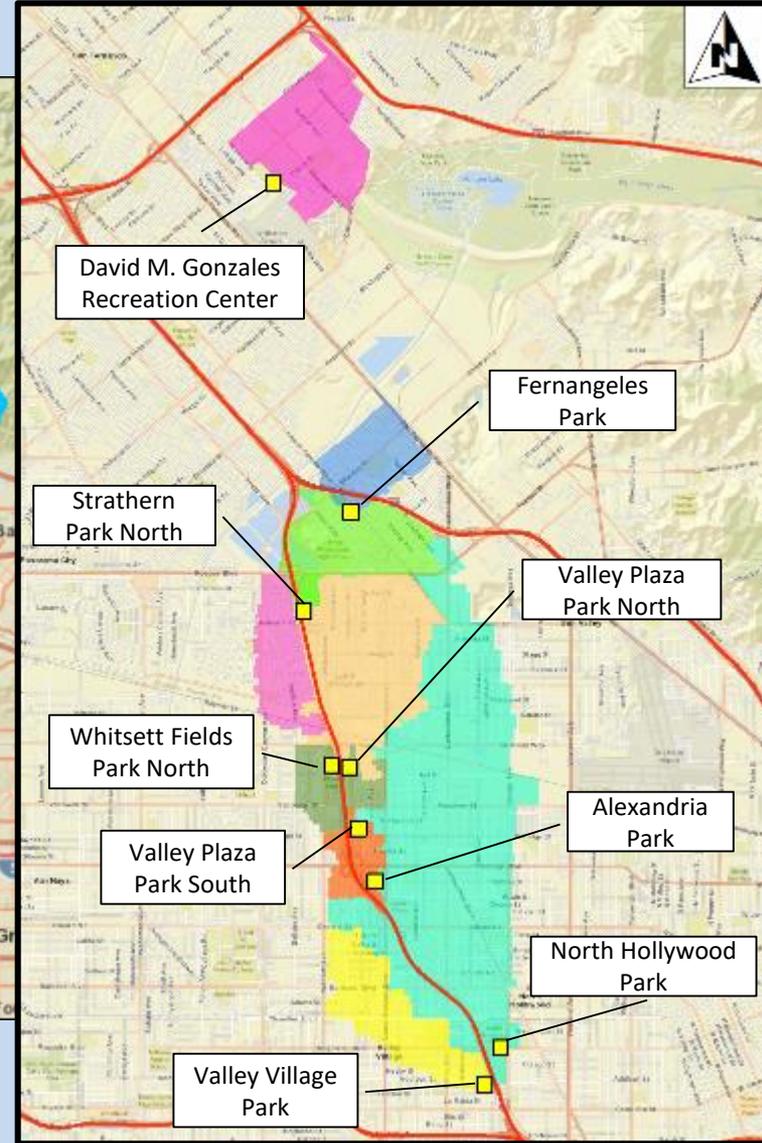
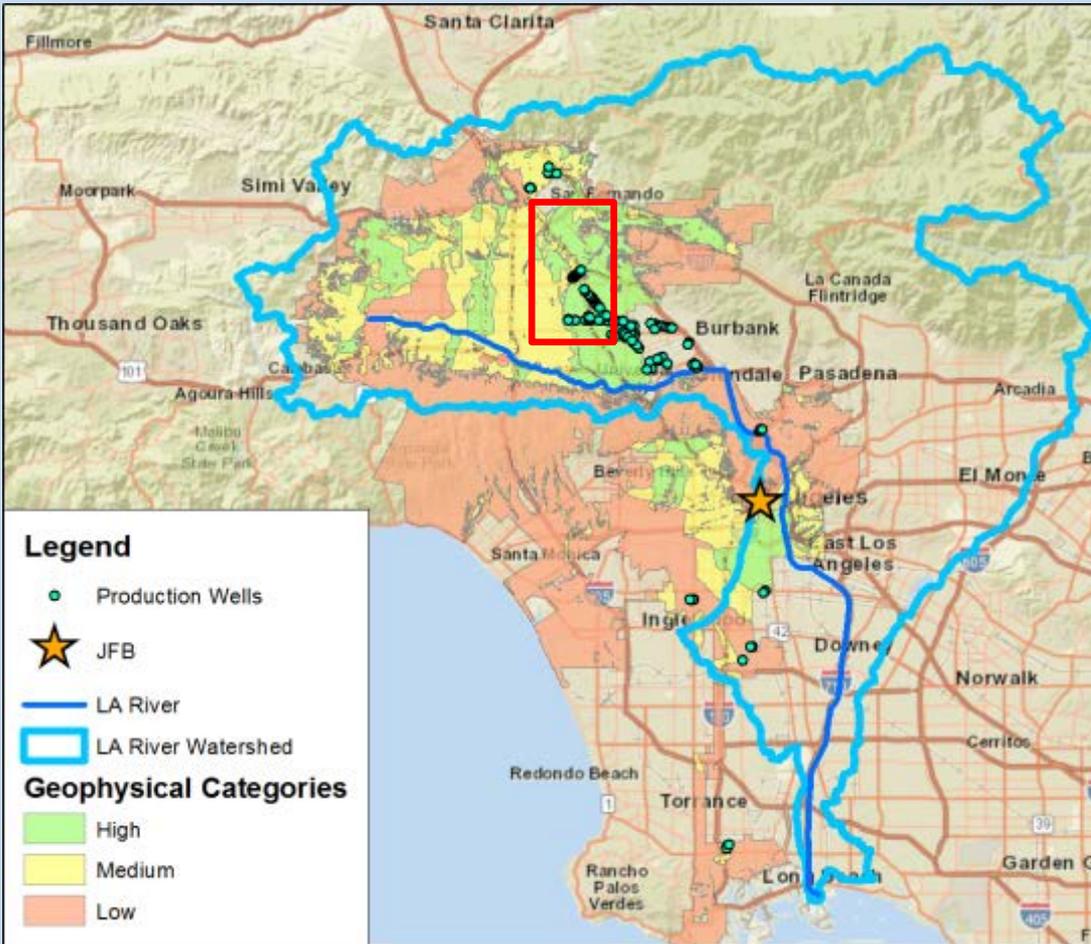
Watershed health and awareness

Job Creation

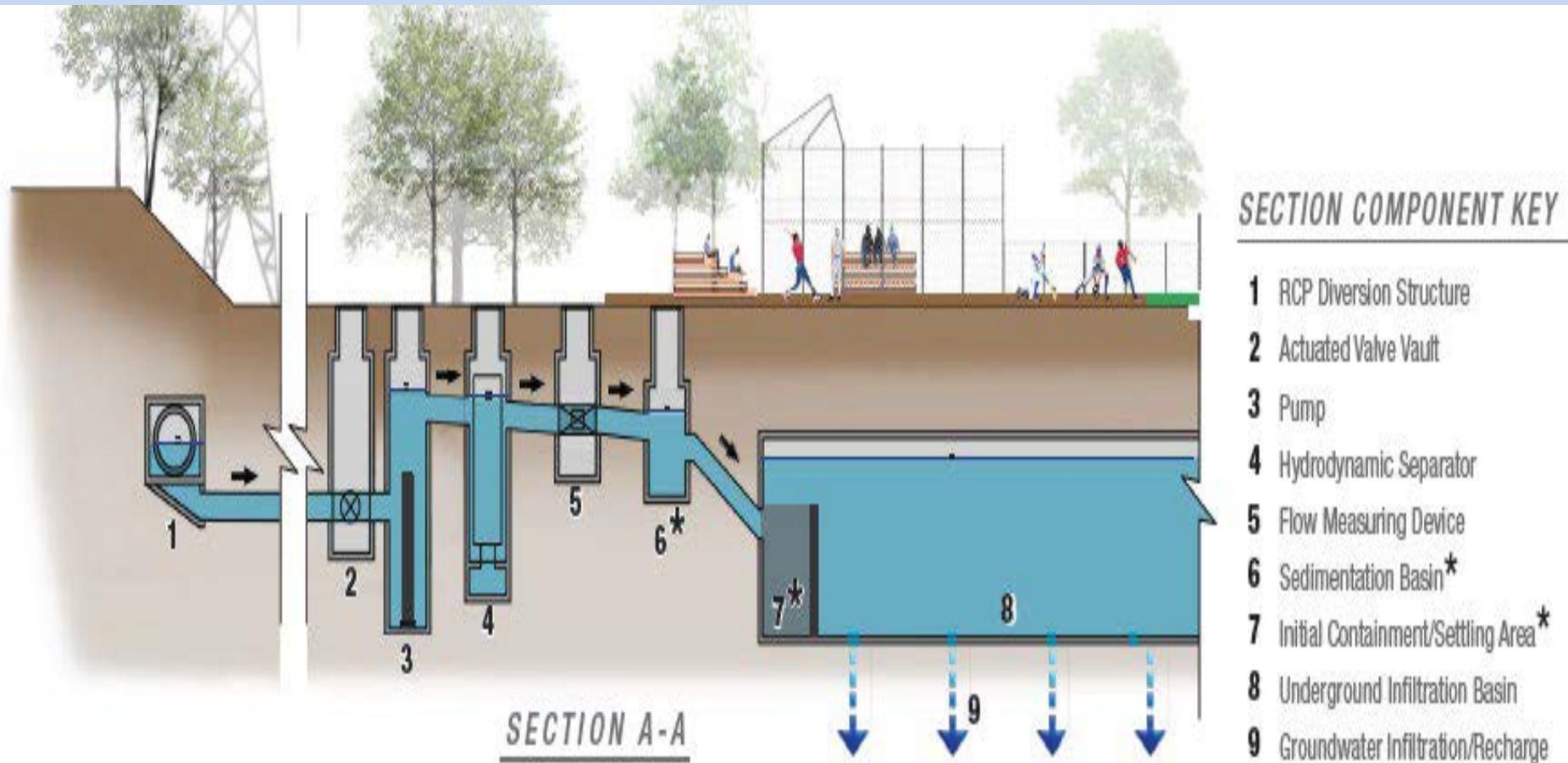
~ 750 jobs



Parks Program Location



Stormwater Capture at the Park





Broadway Neighborhood Greenway

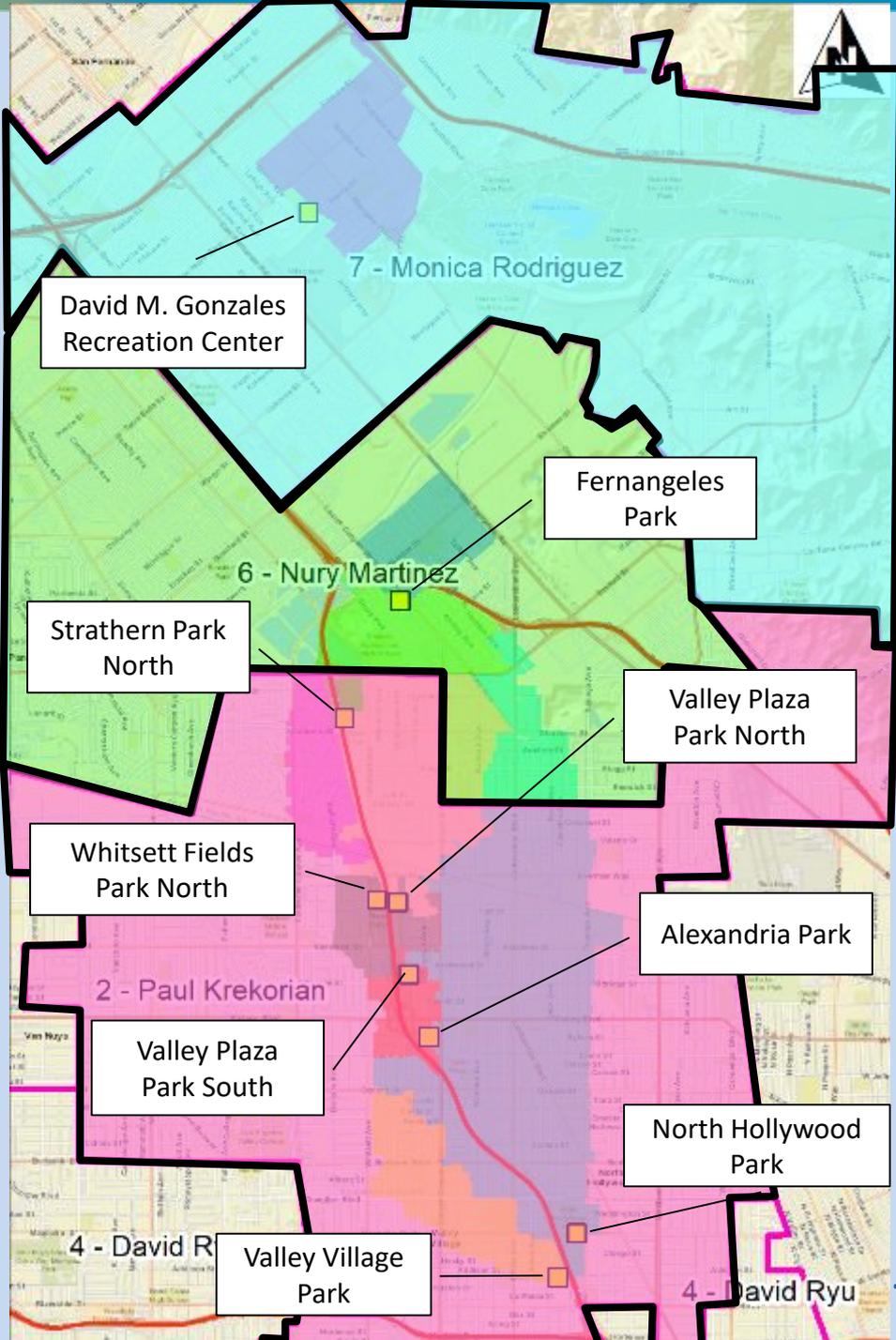
Los Angeles, CA

Albion Riverside Park

Los Angeles, CA



Parks Overview



Water Quality Benefits

EWMP Compliance Targets

EWMP Subwatershed	Required Compliance Load Reduction	Cumulative BMP Capacity for Metal/Bacteria TMDLs Compliance
664949	63%	49.4 AF

Water Quality Benefits

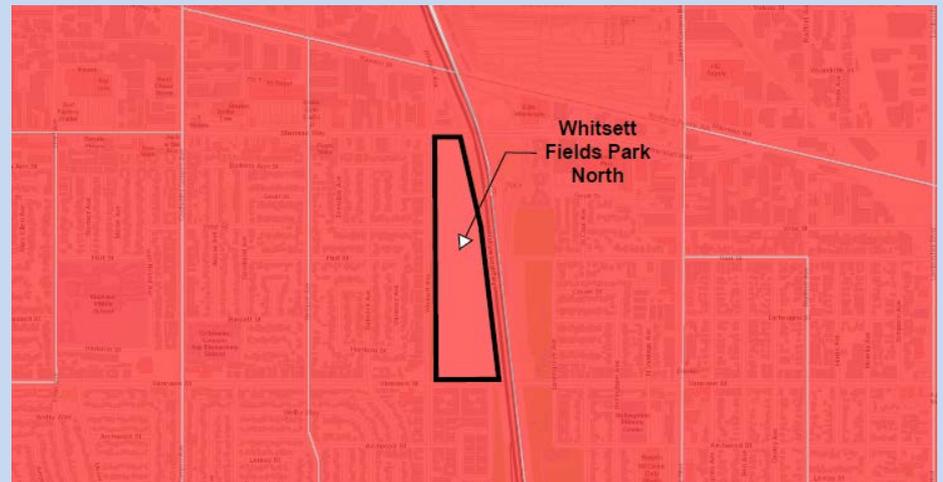
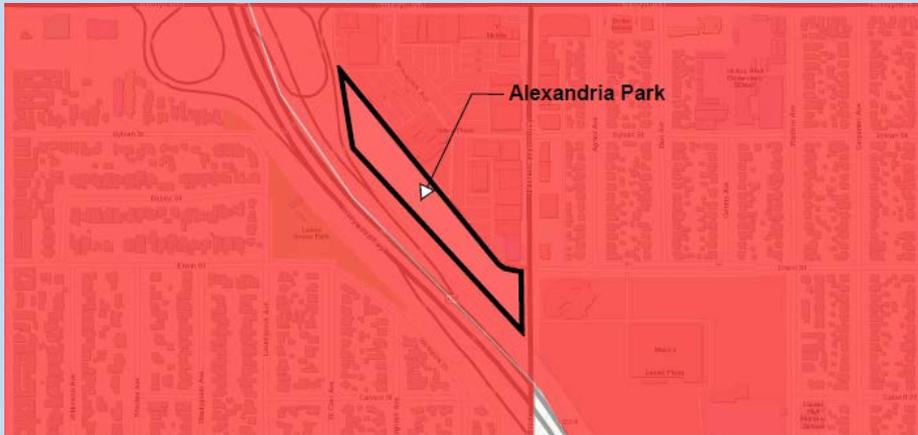
Pollutant Load Reductions

Project	Load Reduction							
	TSS	Total Copper	Total Zinc	Total Lead	Total Phosphorus	Total Nitrogen	E. Coli	Fecal Coliform
AP	10,556 lbs	5 lbs	45 lbs	5 lbs	223 lbs	263 lbs	3.44E+13 MPN	7.88E+12 MPN
WP	32,223lbs	8 lbs	102 lbs				1.94E+13 MPN	4.32E+13 MPN

Disadvantaged Communities

August 17, 2020

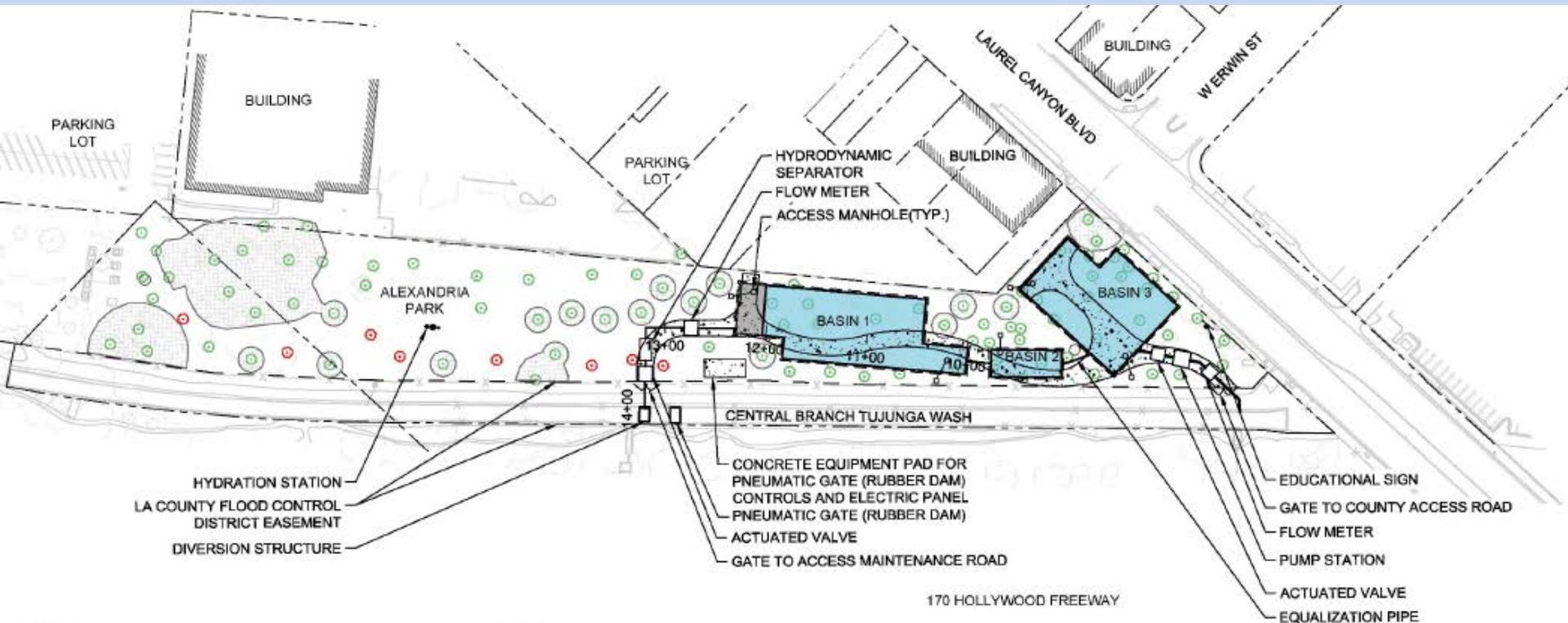
 SB 535 Disadvantaged Communities (June 2018 Update)



Alexandria Park

Approximate Area: 171 Acres

Approximate Yield: 72 AFY

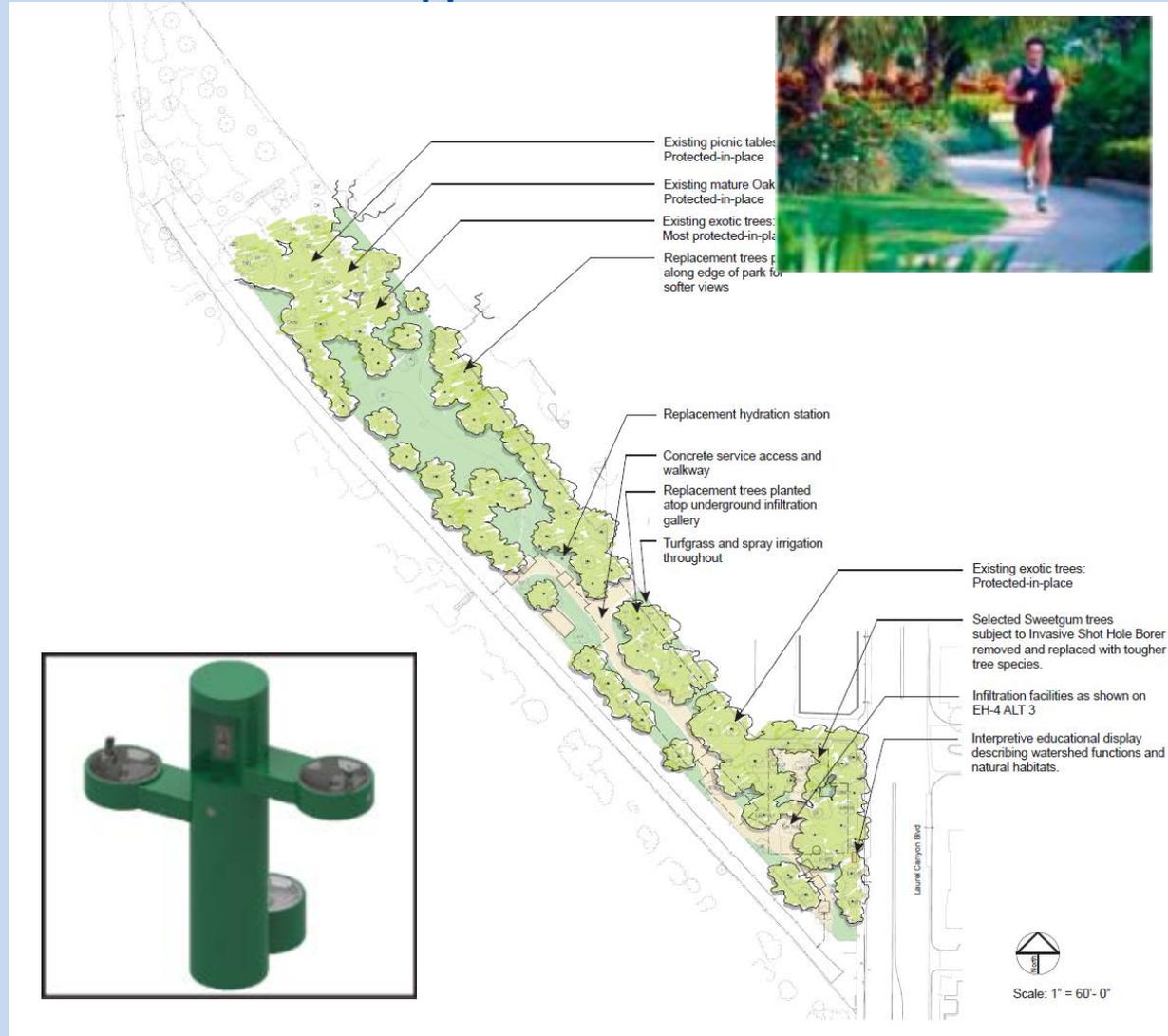


Alexandria Park

Approximate Area: 171 Acres

Approximate Yield: 72 AFY

- Additional trees
- New hydration stations
- Added educational signage
- New irrigation system
- Additional recreational elements to be selected based on community input
- Pedestrian trail with access to waterway



Whitsett Fields Park North

Approximate Area: 302 Acres

Approximate Yield: **185 AFY**

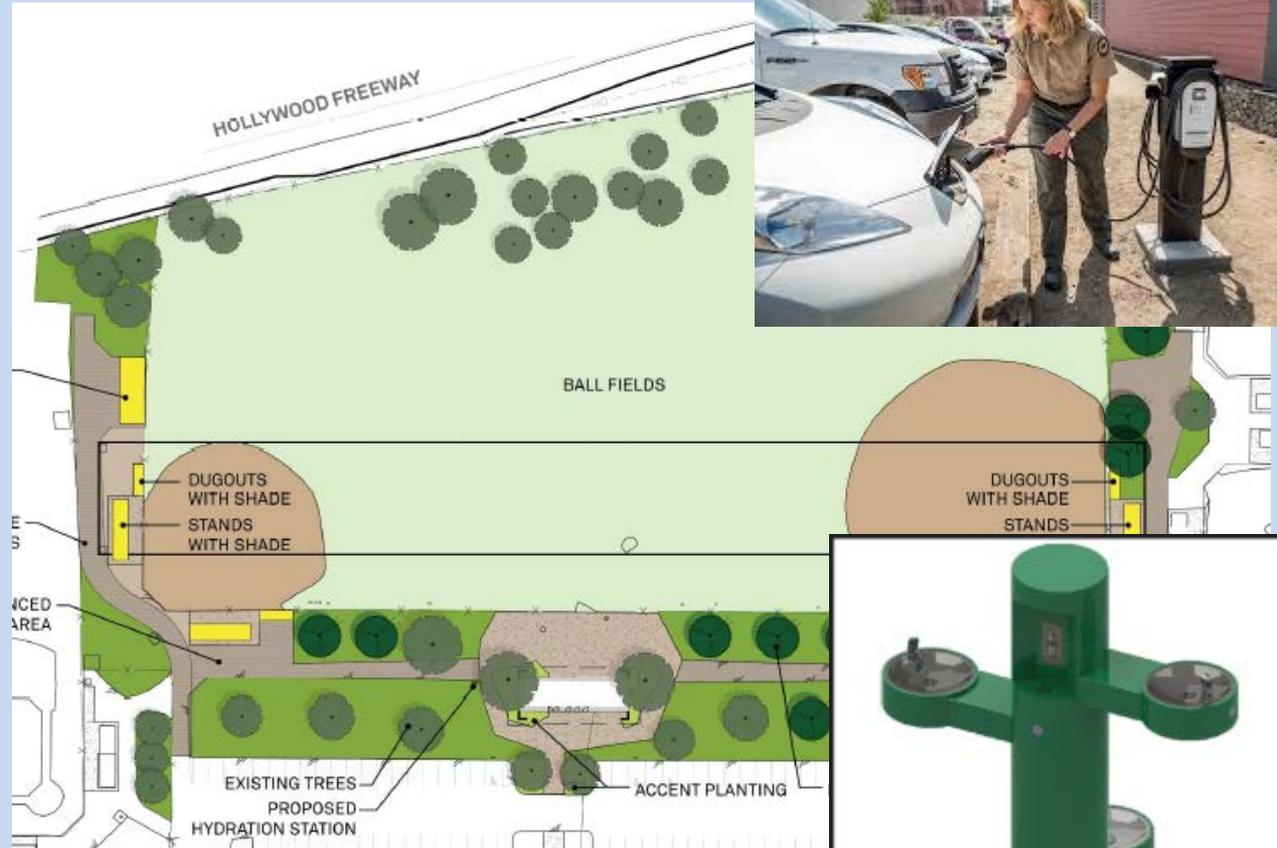


Whitsett Fields Park North

Approximate Area: 302 Acres

Approximate Yield: 185 AFY

- Upgraded baseball fields
- Upgraded bleachers and dugouts
- New batting cages
- New hydration stations and trash receptacles
- New EV Charging Stations
- New LED sports lighting system
- New irrigation system



SCWP Funding Request

Pre-Design Reports August 2020 Update	Measure W Preliminary Score	Total Capital Cost	LADWP Cost Share		Proposed Funding Request
			Amount	%	
Alexandria Park	TBD	\$ 14,500,000	\$ 7,300,000	50.5%	\$ 7,200,000
Whitsett Fields Park North	TBD	\$ 18,600,000	\$ 9,400,000	50.5%	\$ 9,200,000
Total:		\$ 33,100,000	\$ 16,700,000		\$ 16,400,000

*SCWP R1 funding secured



Program Schedule



Preliminary Construction Phasing*

Phase 1: Valley Village, Strathern, Fernangeles, and David M. Gonzales

Phase 2: Valley Plaza North & North Hollywood Part 1

Phase 3: Valley Plaza South, North Hollywood Part 2, **Alexandria**, and **Whitsett**

*Construction schedules will be managed and rolled out sequentially to reduce impacts to the community.

Public Outreach

STORMWATER CAPTURE PROJECT COMING TO VALLEY VILLAGE AND NORTH HOLLYWOOD PARKS

Join us to learn about and provide your input on park improvements and features that will capture rainwater.

Virtual Community Meeting
Saturday, 8/29 @ 10 AM

Registration required in advance:
<https://bit.ly/stormwaterandparks0829>

Spanish translation provided.

PROYECTO DE CAPTURA DE AGUAS PLUVIALES VIENE A VALLEY VILLAGE AND NORTH HOLLYWOOD PARKS

Únase a nosotros para conocer y brindar su opinión sobre las mejoras y características del parque que capturarán el agua de lluvia.

Reunión Comunitaria Virtual
Sábado, 29 de agosto de 2020 @ 10 AM

Se requiere registro con anticipación:
<https://bit.ly/stormwaterandparks0829>

Se proporciona traducción al español.

Stormwater Capture Project Coming to the Park at David M. Gonzales Recreation Center Proyecto de Captura de Aguas Pluviales Viene al Parque en el Centro de Recreación David M. Gonzales



New park features will help capture rain water to increase L.A.'s local water supply, improve water quality in the L.A. River, and reduce local flooding. Each project includes park improvements and may include additional recreational features. Join us for a Virtual Community Meeting!

Saturday, August 22, 2020 @ 10 AM

Registration Required.
<https://tinyurl.com/DavidMGonzalesRecCenter>

Nuevos elementos en el parque ayudarán a capturar agua de lluvia para aumentar el suministro de agua local de L.A., mejorar la calidad del agua en el Río de Los Ángeles y reducir inundaciones locales. Cada proyecto incluye mejoras en el parque y puede incluir elementos recreativos adicionales. ¡Acompáñenos para una Reunión Comunitaria Virtual!

Sábado, 22 de agosto @ 10 AM

Registro Requerido.
<https://tinyurl.com/DavidMGonzalesRecCenter>

ladwp.com/Parks



Strathern Park North
Virtual Community Meeting
Saturday, August 15, 2020 @ 10 AM

Spanish Translation Provided.

Stormwater Capture Parks Program
Funding provided by LADWP and Measure W

Questions:
chris.harris@acbel.net
(213) 393-7022

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. To ensure availability, five or more business days is required. For additional information:
chris.harris@acbel.net, (213) 393-7022.

<https://tinyurl.com/StrathernParkNorth>

ladwp.com/Parks



Local Postal Customer

Strathern Park North
Reunión Comunitaria Virtual
Sábado, 15 de agosto de 2020 @ 10 AM

Se ofrecerá traducción en español durante la reunión.
Programa de Captura de Aguas Pluviales en Parques
Fondos de LADWP y Measure W

Preguntas:
Monalesolga@yahoo.com
(626) 483-2878

Como entidad cubierta bajo el Título II de la Ley de Estadounidenses con Discapacidad, la Ciudad de Los Ángeles no discrimina por discapacidad y, previa solicitud, proporcionará adaptaciones para garantizar el acceso igualitario a sus programas, servicios y actividades. Para asegurar la disponibilidad, cinco días o más es requerido. Para obtener más información:
Monalesolga@yahoo.com, (626) 483-2878



ladwp.com

Public Outreach

Park Director briefing:

- 3/26/2020: Presented Program overview

Council Office briefings:

- 5/6/2020: Presented Program overview to CD2

Community Meetings:

- 8/20/2020: Presented Whitsett Fields Park North and Alexandria Parks SWC Projects
- 10/24/2020: Presented Alexandria park SWC Project
- 4/24/2021: Presented Whitsett Fields Park North SWC Project

Echo Park Lake Operation and Maintenance – SCW Funding application summary 2021

The Echo Park Lake O&M Project sustains the goals of the original City of Los Angeles Clean Water Bond (Prop O) Echo Park Lake Rehabilitation Project completed in 2013. The Echo Park Lake Operation and Maintenance Project (O&M Project) will allow the existing facilities to meet the original project's intended goals of providing open space, recreational amenities, flood mitigation, improved water quality and reduced water supply demand, which are also stated objectives of the Safe Clean Water Program (SCWP) goals.



Echo Park lake and wetland



Trash separator upstream of lake

The O&M Project will sustain the improvements to the existing 13 acres of lake area and 4.4 acres of wetland to meet SCWP goals. The lake serves as a stormwater retention basin for water prior to discharge to the LA River, capturing 131 acre-feet per year of urban runoff from nearly 800 acres of watershed. Pretreatment devices such as trash separators, natural wetlands and physical controls capture pollutants and prevent the discharge of trash and sediment originating from the drainage area from reaching the Los Angeles River. Echo Park Lake is subject to TMDL standards for nutrients, organics and trash, and the O&M Project funding is critical to sustain regulatory compliance and public health.

Project funds will be utilized to keep the lake and wetland ecosystems functioning. Over the past several years LASAN has deferred certain O&M activities due to budget constraints. Critical daily or weekly tasks identified include: trash and debris removal and disposal; weed and algae removal and disposal; apple snail reduction; dead animal and fish removal; care and replacement of aquatic plantings; installation and repair of safety barriers and bird deterrents.

Other periodic tasks identified include: biological treatments for control of algae and cyanobacteria to maintain lake equilibrium, meet TMDL standards, and protect public health; sediment removal from wetlands; sampling and analysis, repair and calibration of in-lake aeration, recirculation, and monitoring systems; lotus bed upkeep to maintain cleanliness and aesthetics; invasive species assessment and control; prevention of conditions causing vector issues; structural components such trash separator, wet-wells, pump station, inlet forebay; and environmental education (for example, DO NOT FEED BIRDS signage) and outreach to the community (website info, public tours), community partnering, and public information to benefit water quality and protect public health. The City is seeking a 5-year funding allocation with an average annual cost estimate of \$480,000 for Echo Park Lake O&M through the Safe Clean Water Program. SCW funding for O&M activities will help to achieve compliance with nutrient and other TMDL targets for the lake, keep the lake and wetland ecosystems functioning and to protect habitat and public health.



Wetland maintenance activities

Machado Lake Operation and Maintenance – SCW Funding application summary 2021

The Machado Lake ecosystem is one of the largest remaining coastal wetland ecosystems in Southern California. It is a 40-acre lake located in 290-acre Ken Malloy Harbor Regional Park (KMHRP) in the Harbor City and Wilmington communities of the City of Los Angeles. The Lake is located within the Dominguez Watershed and has a drainage area of approximately 22 square miles (14,347 acres). In March 2014 efforts to restore the Machado Lake began with the construction of the Machado Lake Ecosystem Rehabilitation Project, the primary goal of which was to improve water quality at the lake, while enhancing the surrounding natural habitat and recreational features of the park.



Machado Lake



Oxygenation and pump station

The City of Los Angeles Sanitation and Environment (LASAN) is responsible for meeting water quality goals (including TMDLs for nutrients and beneficial uses) under the Federal Clean Water Act as well as the maintenance of all Prop O project improvements. Over the past several years LASAN has deferred O&M activities due to budget constraints, with many critical tasks not being done. Critical daily or weekly tasks identified include: trash and debris removal and disposal; weed and algae removal and disposal; dead animal and fish removal; care and replacement of aquatic plantings; installation and repair of safety barriers and bird deterrents.

Other periodic tasks identified include: biological treatments for control of algae and cyanobacteria to maintain lake equilibrium, meet TMDL standards, and protect public health; sediment removal from wetlands; sampling and analysis, repair and calibration of in-lake aeration, recirculation, and monitoring systems; invasive species assessment and control; prevention of conditions causing vector issues; structural components such trash separator units, wet-wells, pump station, inlet forebay, and oxygenation system; and environmental education (for example, DO NOT FEED BIRDS signage) and outreach to the community (website info, public tours), community partnering, and public information to benefit water quality and protect public health.

The continual success of this Project requires an operations and maintenance regime that will continue to achieve the goals and benefits for Machado Lake and the community. In order to do so, the City is seeking a 5-year funding allocation with an average annual cost estimate of \$1,146,000 for Machado Lake Ecosystem Rehabilitation O&M through the Safe Clean Water Program. SCW funding for O&M activities will help to achieve compliance with nutrient and other TMDL targets for the lake, keep the lake and wetland ecosystems functioning and to protect habitat and public health.

The project's budget of \$100 million, mainly funded by the City's Clean Water Bond (Prop O), completed in 2017 and included removal of contaminated sediments, relining of the lake bed, installation of pretreatment devices including trash separation units, a recirculation and oxygenation system and constructed treatment wetlands to help remove pollutants and achieve water quality goals. These improvements require ongoing operations and maintenance (O&M) of complex structural, mechanical, instrumentation and natural systems.



Machado Lake Treatment wetland

Hollenbeck Park Lake Rehabilitation and Stormwater Management Project

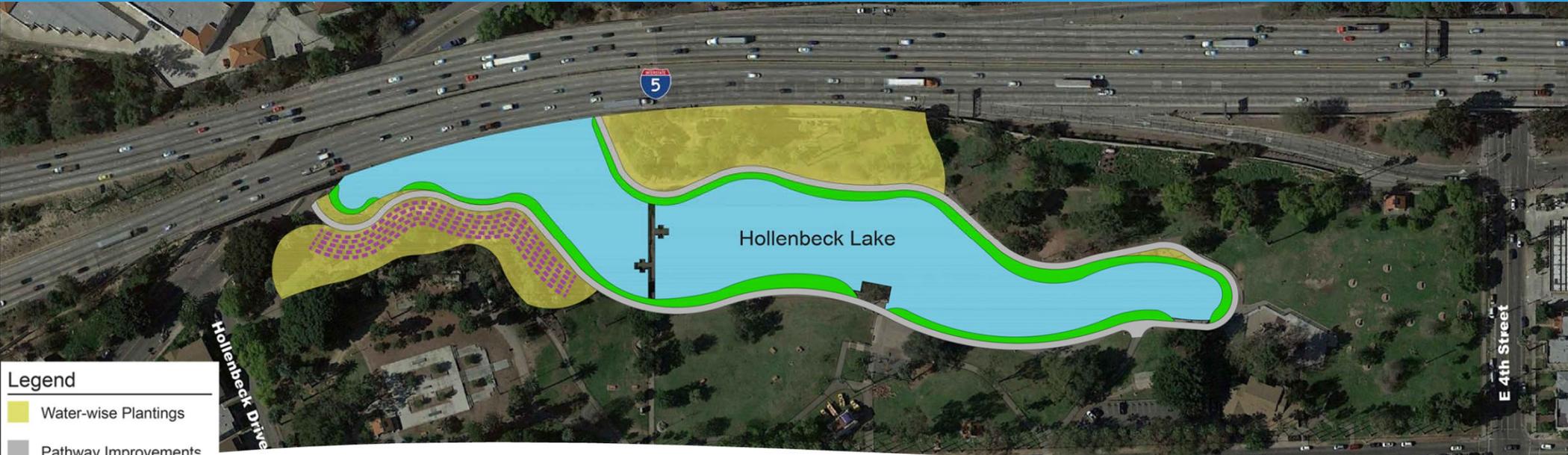


May 2021
City of Los Angeles, Safe Clean Water Program

Enrique C. Zaldivar, P.E.
Director and General Manager
LA Sanitation & Environment



Goals and Objective



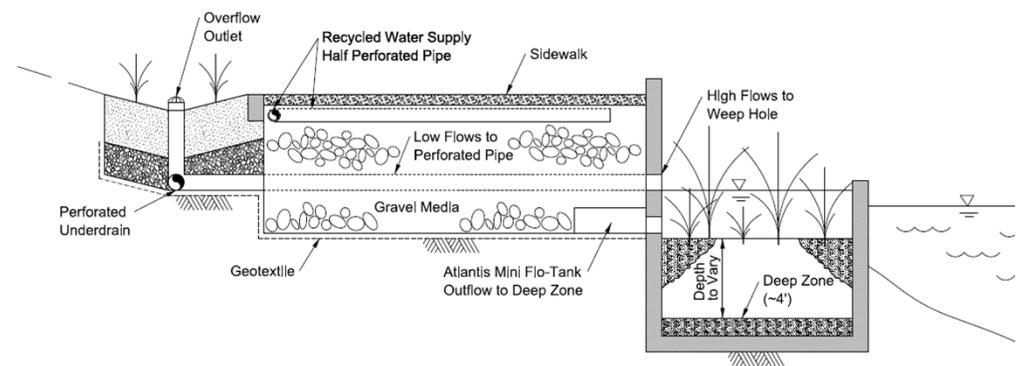
Regional multi-benefit stormwater project that will include:

Water Quality Improvements ❖ Park Improvements ❖ Community Enhancements

Water Quality Improvements

Water improvements: constructed wetlands, pathway swales, lake contouring (being evaluated)

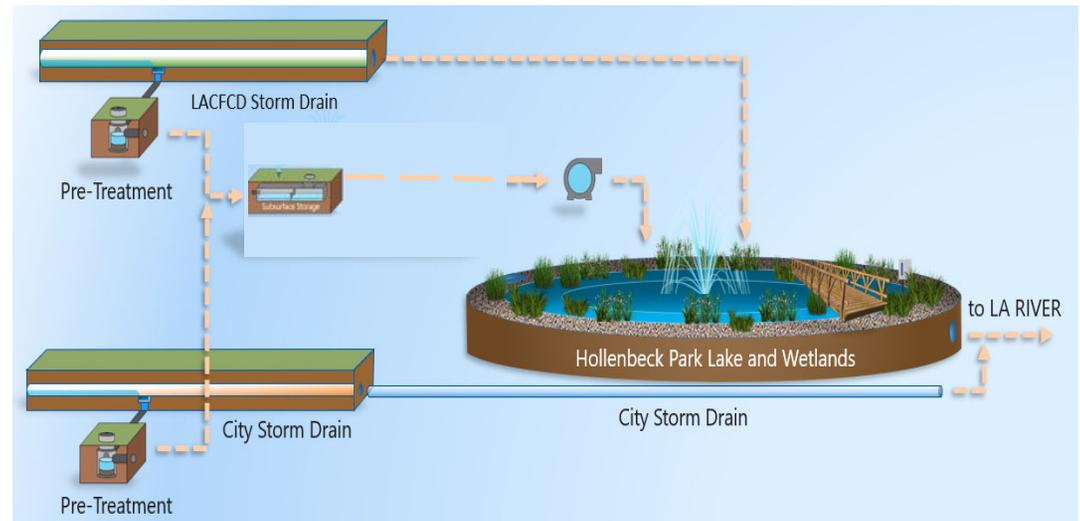
Mechanical improvements: chemical feed system, new aeration system, new recirculation pumps



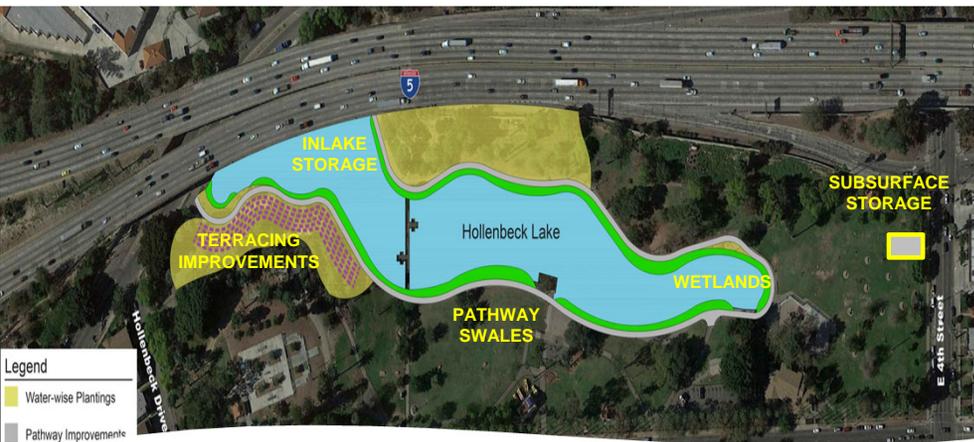
Proposed Alternatives

Alternative 2 – Storage Hybrid: Offsite and Park

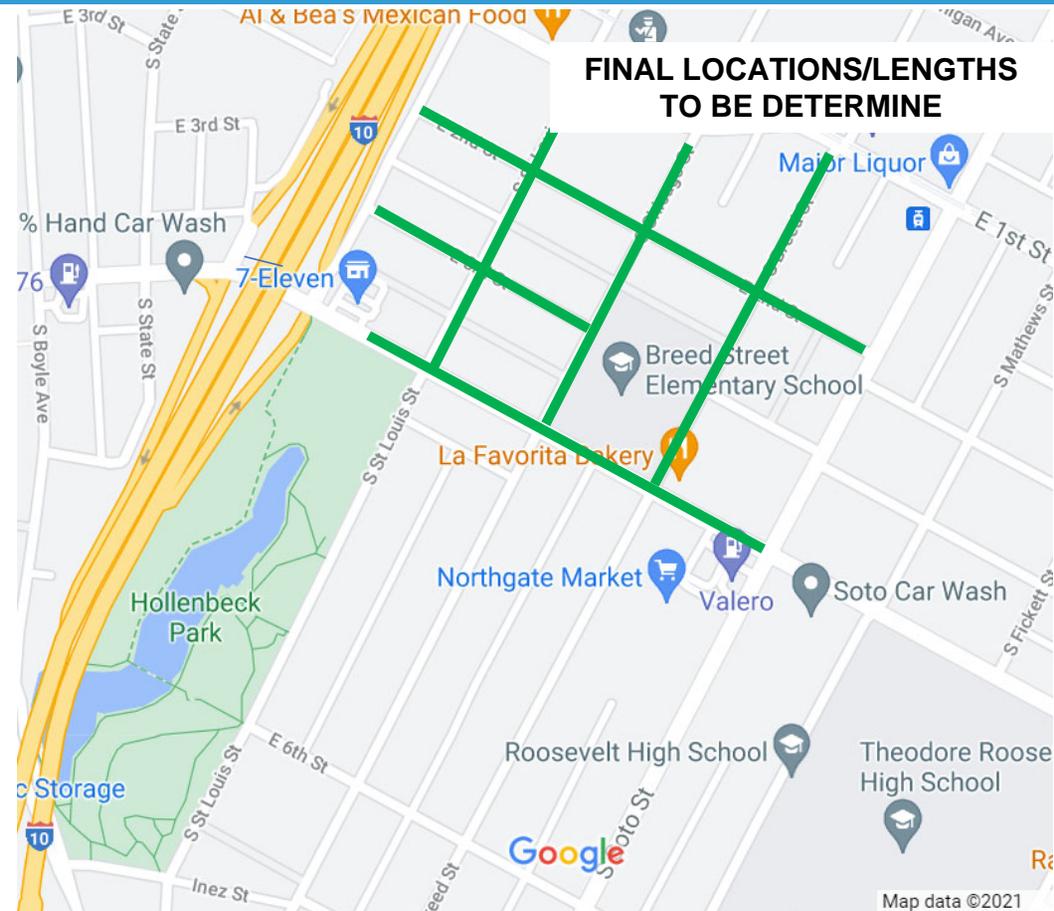
- Minimize storage footprint at Park
- Street Elements: Parkway Planters, Street Trees, Drywells



Proposed Alternatives – No. 2



- Minimize storage footprint at Park
- Street Elements: Parkway Planters , Street Trees, Drywells



IMPROVEMENTS WITHIN PARK + ADJOINING NEIGHBORHOOD