

**Additional Documents**

February 22, 2022 NREC Meeting

**ITEM 2**

City Stormwater Projects:

Potential Park Projects Map

Arroyo Seco Projects – Concept Design Presentation

★ SCWP Approved Project

**Potential Project**

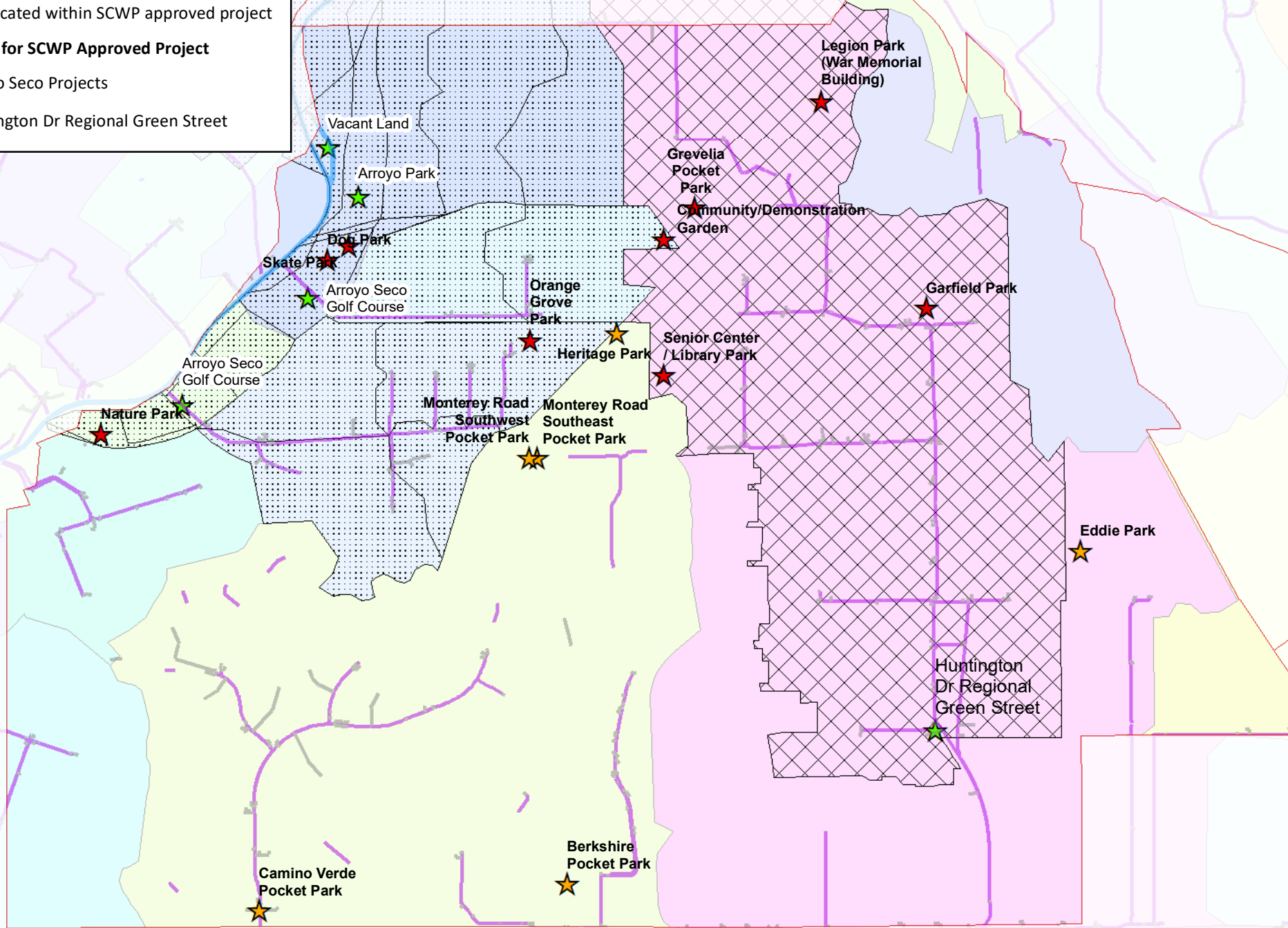
★ Located within SCWP approved project

★ Not located within SCWP approved project

**Drainage Area for SCWP Approved Project**

Arroyo Seco Projects

Huntington Dr Regional Green Street





# Arroyo Seco Projects – Concept Design

Improving water quality for the Arroyo Seco and increasing water supply for the surrounding park and golf course

Public Meeting  
December 2021



# Welcome and Virtual Meeting Tips

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## For a Good Virtual Meeting Experience

### Do:

- Mute your microphones if you are not speaking
- Ask questions that are on topic and as concise as possible
- Provide feedback and insights
- Follow the displays in the virtual presentation or refer to the email copy
- Share in mutual respect and courtesy to all participants

**Thank you for participating!**

# Project Team

**Mayra Cabrera**  
Project Manager  
LACPW

**Ted Gerber**  
Acting Director of Public Works  
City of South Pasadena

**Jonathan Abelson**  
Project Manager  
Stantec Consulting Inc

**C.J. Caluag**  
Civil Engineer  
LACPW

**Anteneh Tesfaye**  
Water Operations Manager  
City of South Pasadena

**Christopher Mote**  
Project Technical Lead  
Stantec Consulting Inc

# Agenda

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Welcome & Virtual  
Public Meeting  
Tips



Project Overview:  
Urban Runoff,  
Water Quality  
Compliance,  
Background, and  
Goals



Site Specifics:  
Design  
Components and  
Benefits



Next Steps



Discussion:  
Questions,  
Concerns, and  
Suggestions

# Project Overview



# Big Picture Project Intents – Why?



- New Plan for LA's Water System to Capture Stormwater
- Protect Coastal Waters from Trash/Stormwater Pollutants
- Modernize 100-yr old water infrastructure
- Protect Public Health with Green/Livable Spaces
- Prepare Region for Effects of Climate Change
- Strict Community Oversight for Local Money Funding

# Examples of Urban Runoff

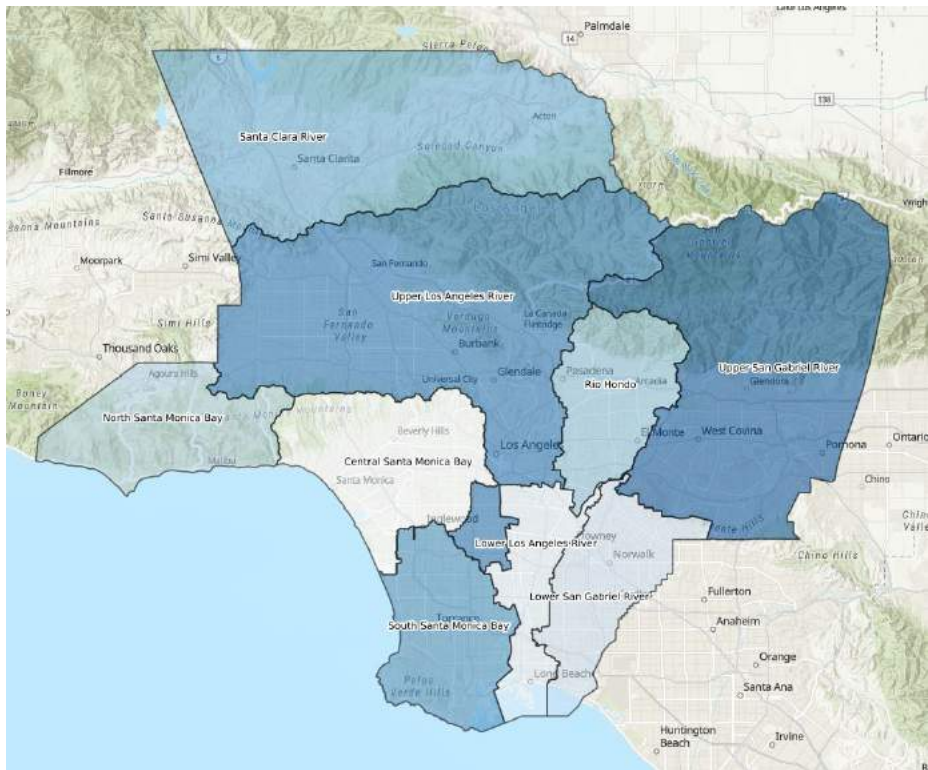
Urban runoff picks up:

- Pet Waste
- Leaves
- Fertilizers
- Motor Oil
- Detergents
- Trash



Urban runoff carries pollutants into our waterways

# What is the Safe, Clean Water Program?



Water Quality Compliance



Water Supply and Resilience



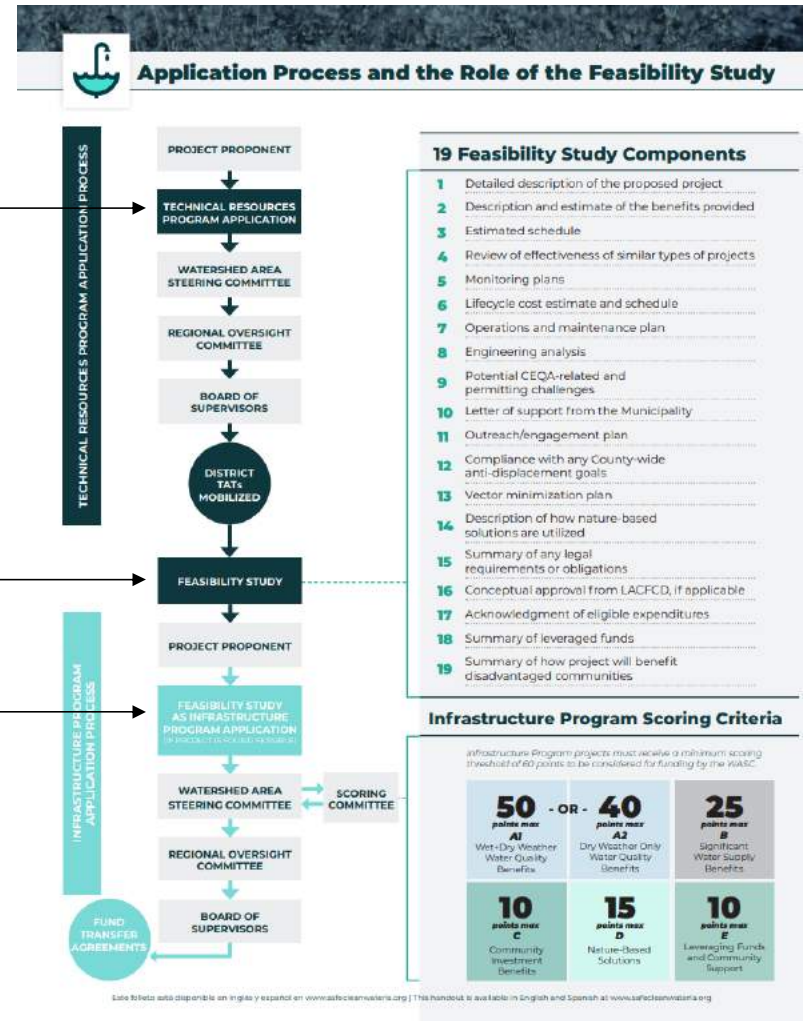
Enhanced Community Investments

# Project Background

- City of South Pasadena Public Works originally proposed *four* Arroyo Seco Projects for the Technical Resources Program
  - Three Wetlands and an Infiltration Gallery, 2017-2018
  - Goal: Treat high bacterial and metal counts in polluted urban runoff and the first storm after a dry period (first flush) to the Arroyo Seco Channel

- Received \$400,000 funding from Safe Clean Water Program, Technical Resources Program
  - A feasibility study is currently being developed.

- The Feasibility Study will be submitted as an infrastructure program application
  - If accepted into the infrastructure program, the project will proceed to design and construction.



# Project Goals

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Treat first-flush runoff from four discrete stormwater outfalls using the wetlands and infiltration



Increase native habitat and urban green space for native vegetation and local community

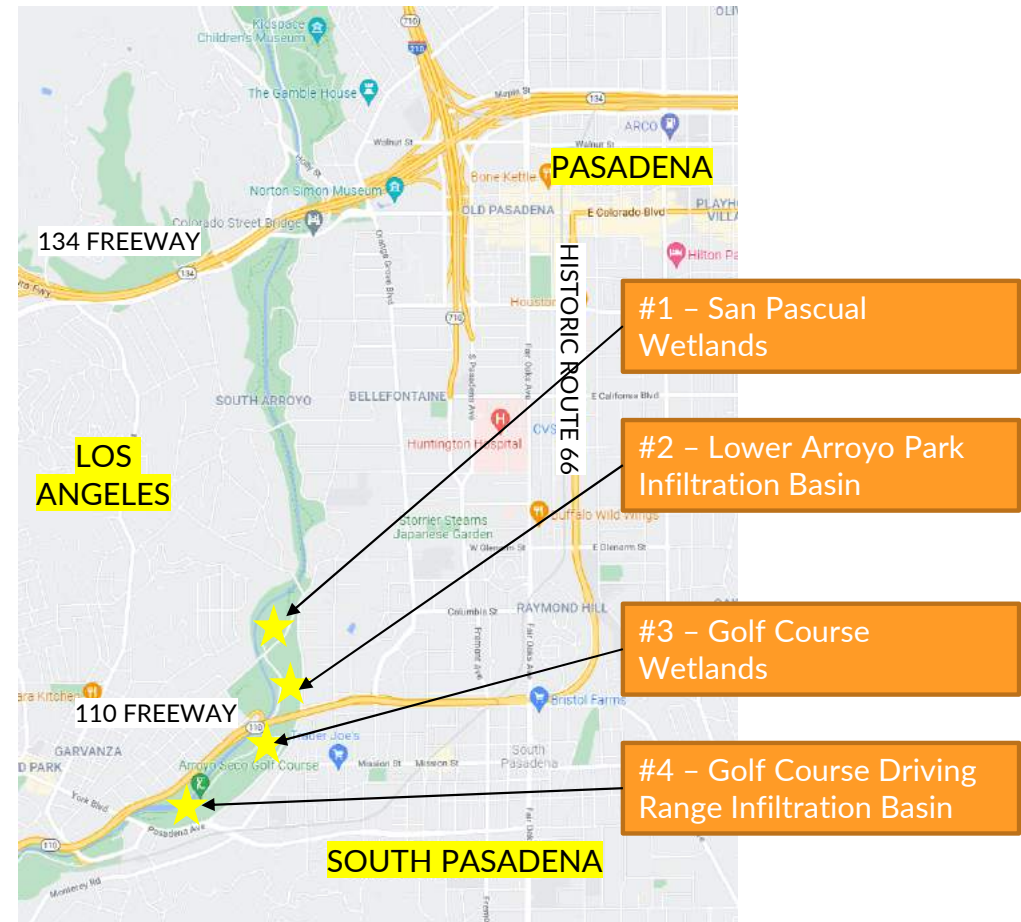
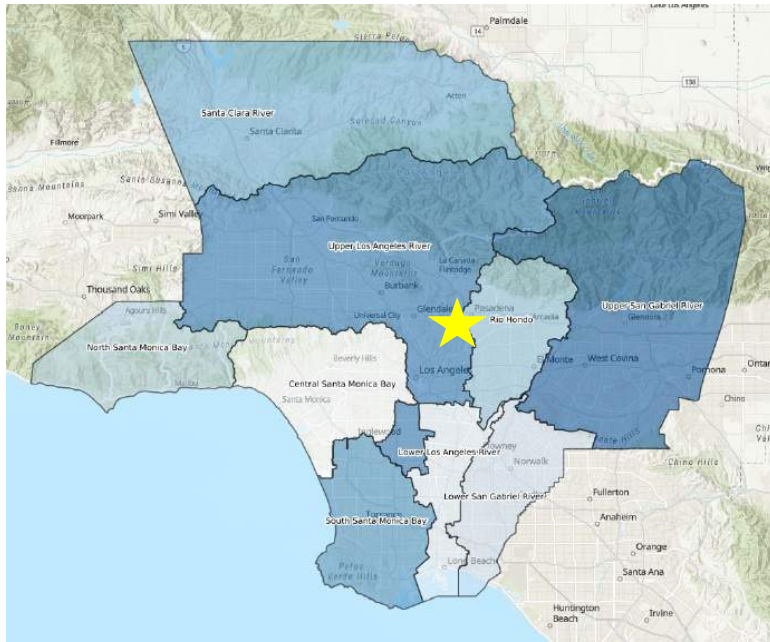


Provide water for irrigation supply

# Site Specifics

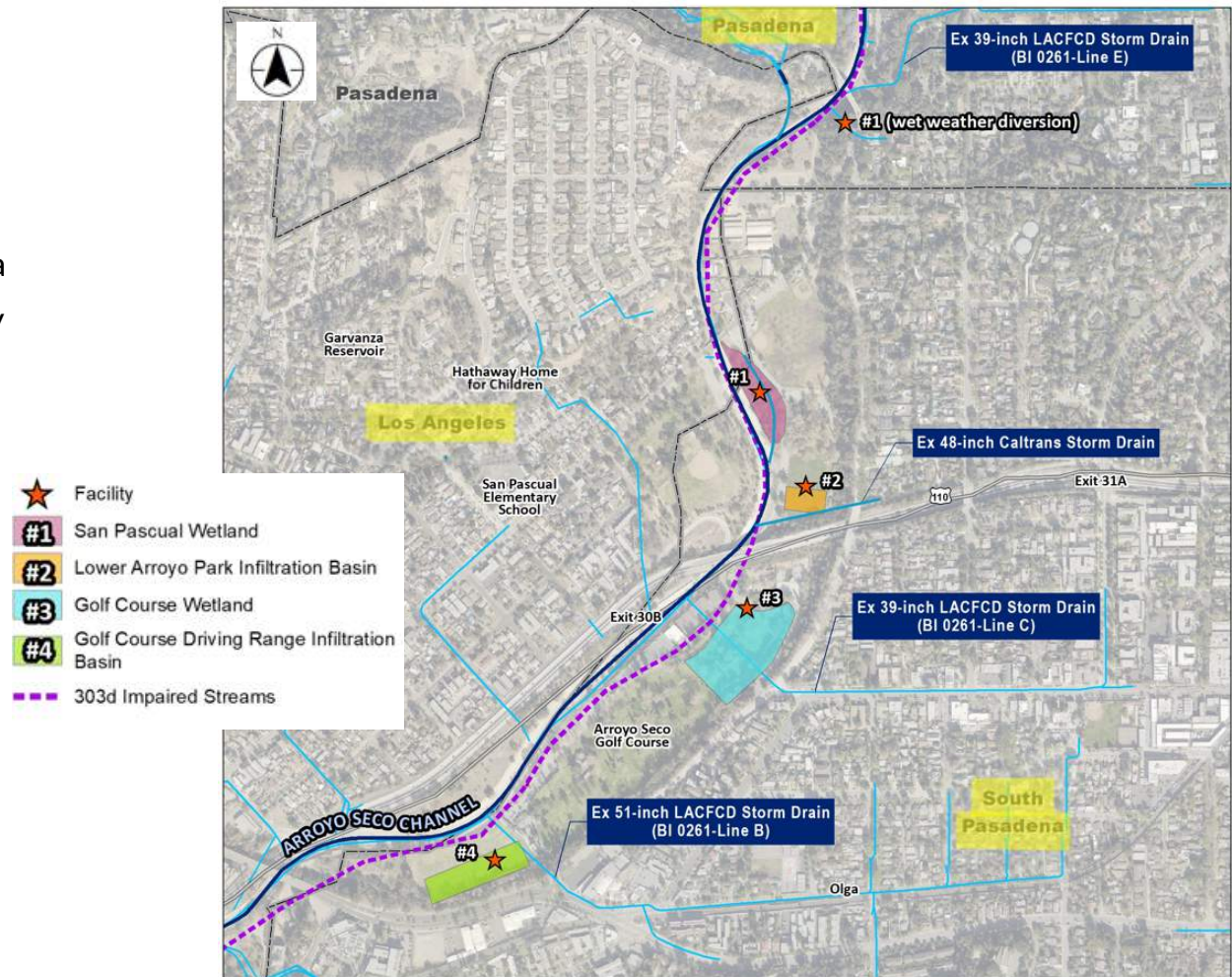
# Project Location

All Facilities Within SCW ULAR Watershed



# Project Locations

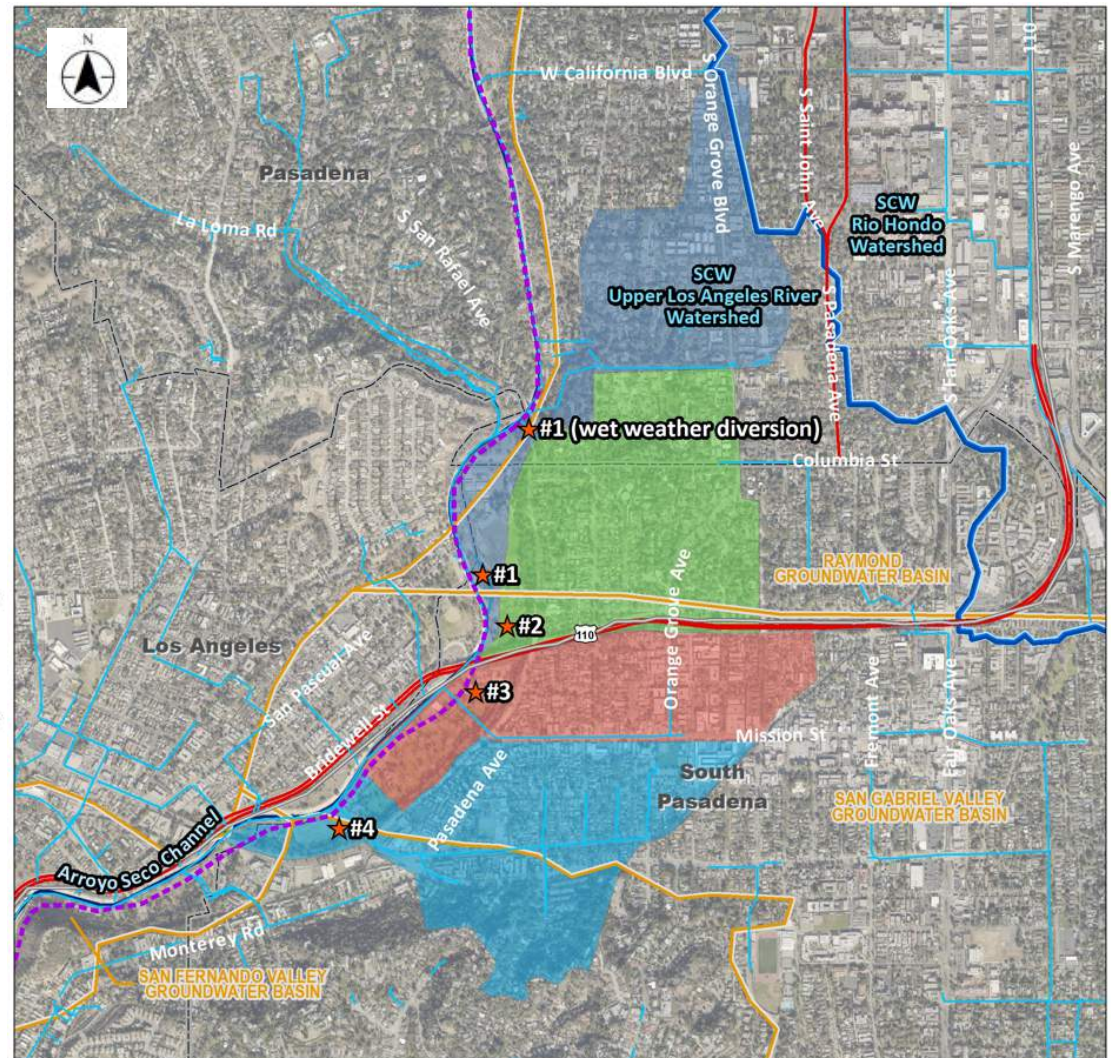
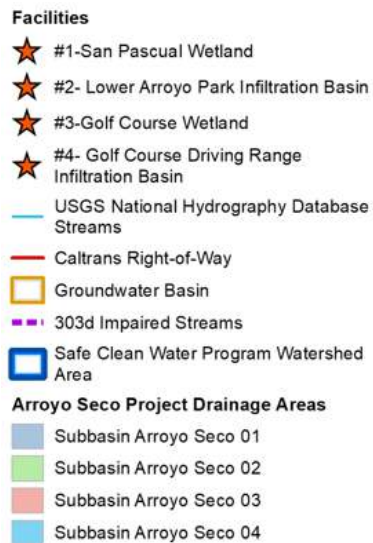
- Facility 1 located in both Pasadena and South Pasadena
- All other facilities located only in South Pasadena



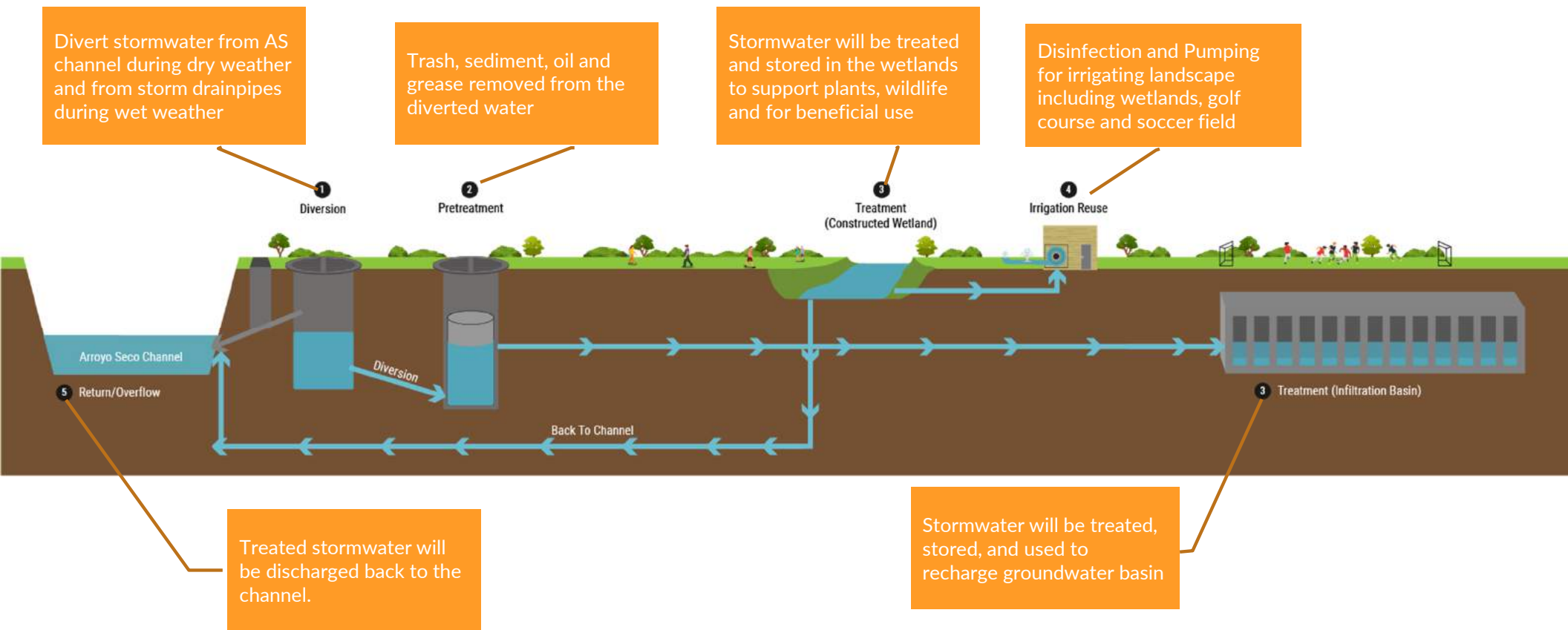


# Project Jurisdictional Boundaries

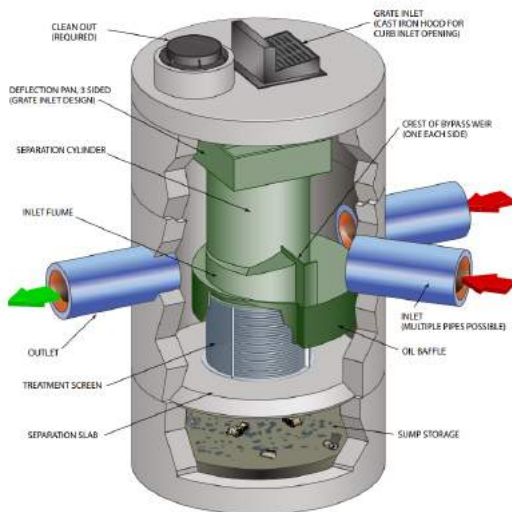
- The projects receive runoff from four sub-basins within South Pasadena.
- **Subbasin 2** Accounts for Caltrans Watershed Area



# Design Configuration



# Other Project Elements



Source: Contech Engineered Solution

## Hydrodynamic Separator:

- Pretreatment device, precast manhole
- Removes trash, sediment, oil and grease



Source: NDS®

## Infiltration Gallery:

- Treatment BMP, underground corrugated chamber
- Stormwater capture and recharge ground water basin

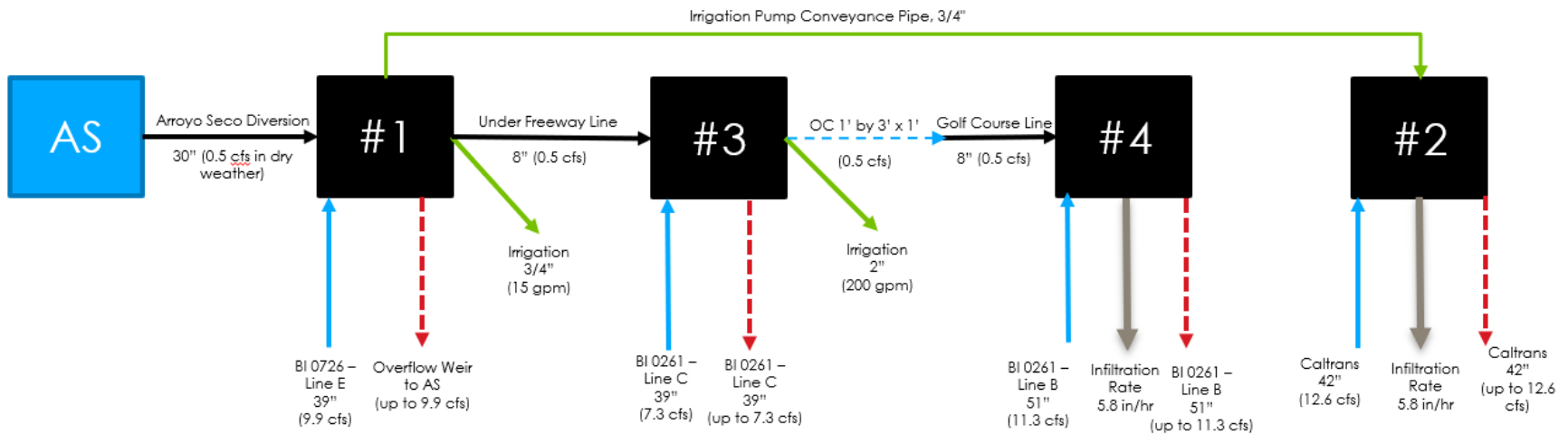


Source: Rain-Flo

## UV Disinfection:

- Post treatment prior to irrigation
- Removal of all classes of pathogens with no chemical requirements.

# Facilities Overview – Process Flow



**AS = Arroyo Seco Channel**  
**#1 = San Pascual Wetland**  
**#2 = Lower Arroyo Park Infiltration Basin**  
**#3 = Golf Course Wetland**  
**#4 = Golf Course Driving Range Infiltration Basin**

# Facility 1 - San Pascual Wetlands

- Along Stoney Dr
- Diverting from existing Storm Drain along San Rafael Ave (39-inch LACFCD RCP Storm Drain, BI 0726 - Line E)
- San Pascual Stables between diversion and site location



# Facility 1 – Design Components

Facility Name	Clear Peak Flow Rate (cubic feet per second)	24-Hr Clear Runoff Volume (acre-feet)
San Pascual Wetlands – Facility 1	9.88	6.77
Stoney Drive Infiltration Basin – Facility 2	12.6	6.17
Golf Course Wetlands – Facility 3	7.29	4.60
Golf Course Driving Range Infiltration Basin – Facility 4	11.3	7.16

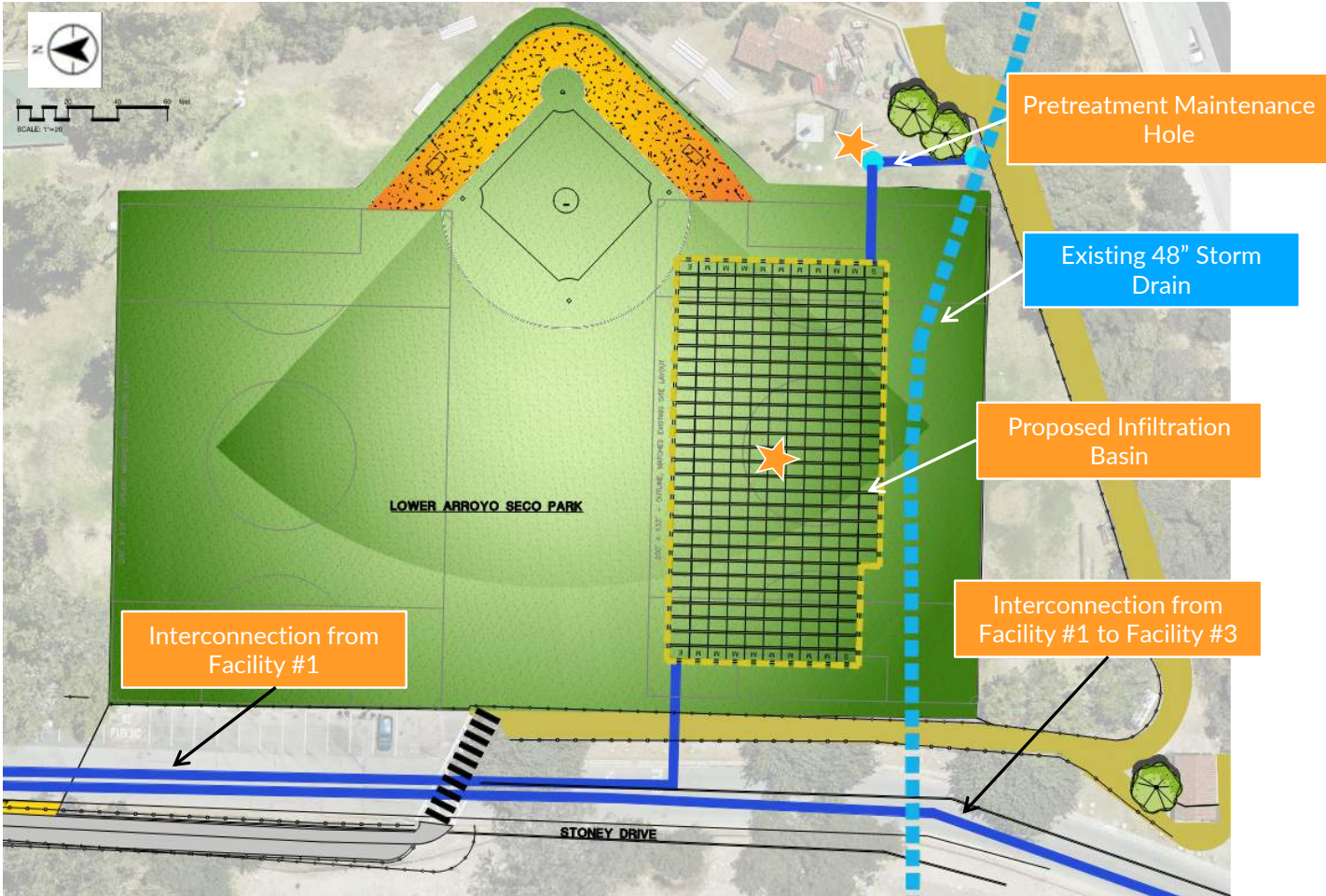


# Facility 2 – Lower Arroyo Park Infiltration Basin

- Diverts from overflow from San Pascual Wetlands and an existing Caltrans storm drain along Rt 110 (48-inch Caltrans Storm Drain drawing no. 70001160)
- Underneath soccer fields that will be renovated after installation of infiltration gallery



# Facility 2 – Design Components



Facility Name	Clear Peak Flow Rate (cubic feet per second)	24-Hr Clear Runoff Volume (acre-feet)
San Pascual Wetlands – Facility 1	9.88	6.77
<b>Stoney Drive Infiltration Basin – Facility 2</b>	<b>12.6</b>	<b>6.17</b>
Golf Course Wetlands – Facility 3	7.29	4.60
Golf Course Driving Range Infiltration Basin – Facility 4	11.3	7.16



## Facility 3 – Golf Course Wetlands

- Diverting flow from existing storm drain along Mission St (39-inch LACFCD RCP Storm Drain, BI 0261 - Line C)
- Built in the northmost part of golf course across from Dog Park and along tennis courts
- The wetland will receive runoff from three subbasins, providing improved water quality to the Arroyo Seco



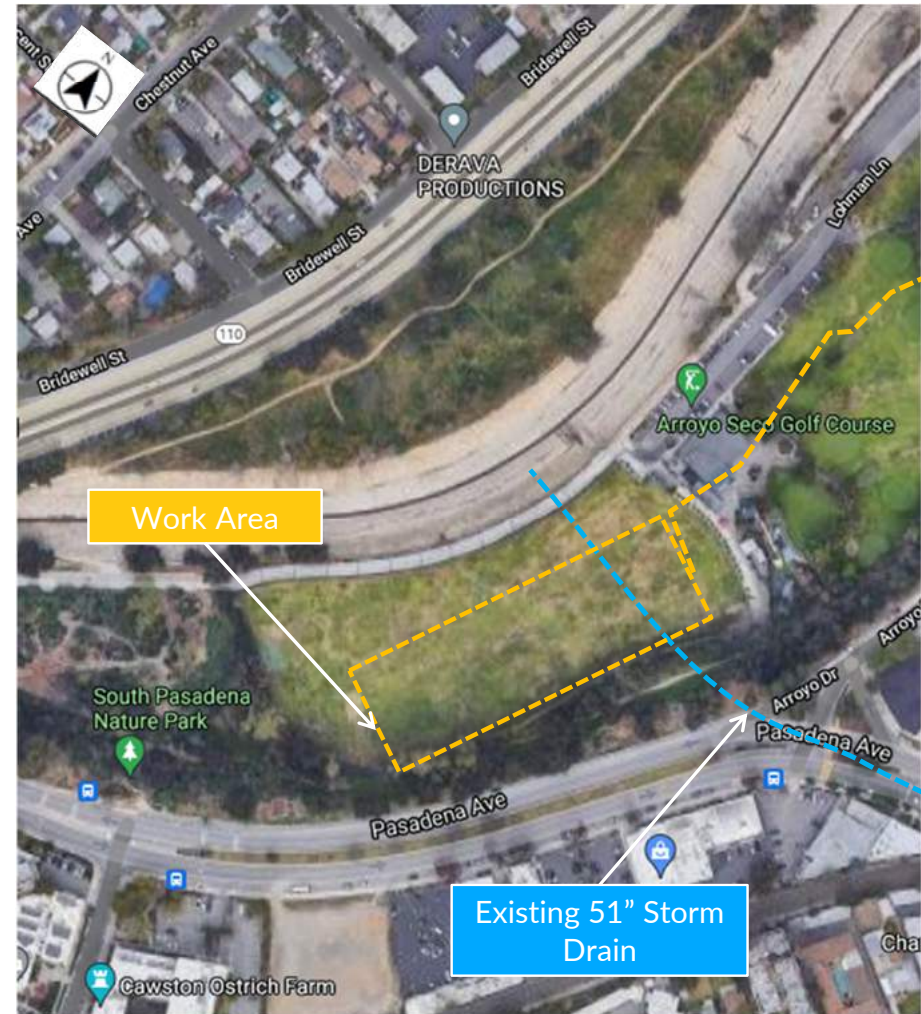
# Facility 3 – Design Components



Facility Name	Clear Peak Flow Rate (cubic feet per second)	24-Hr Clear Runoff Volume (acre-feet)
San Pascual Wetlands – Facility 1	9.88	6.77
Stoney Drive Infiltration Basin – Facility 2	12.6	6.17
Golf Course Wetlands – Facility 3	7.29	4.60
Golf Course Driving Range Infiltration Basin – Facility 4	11.3	7.16

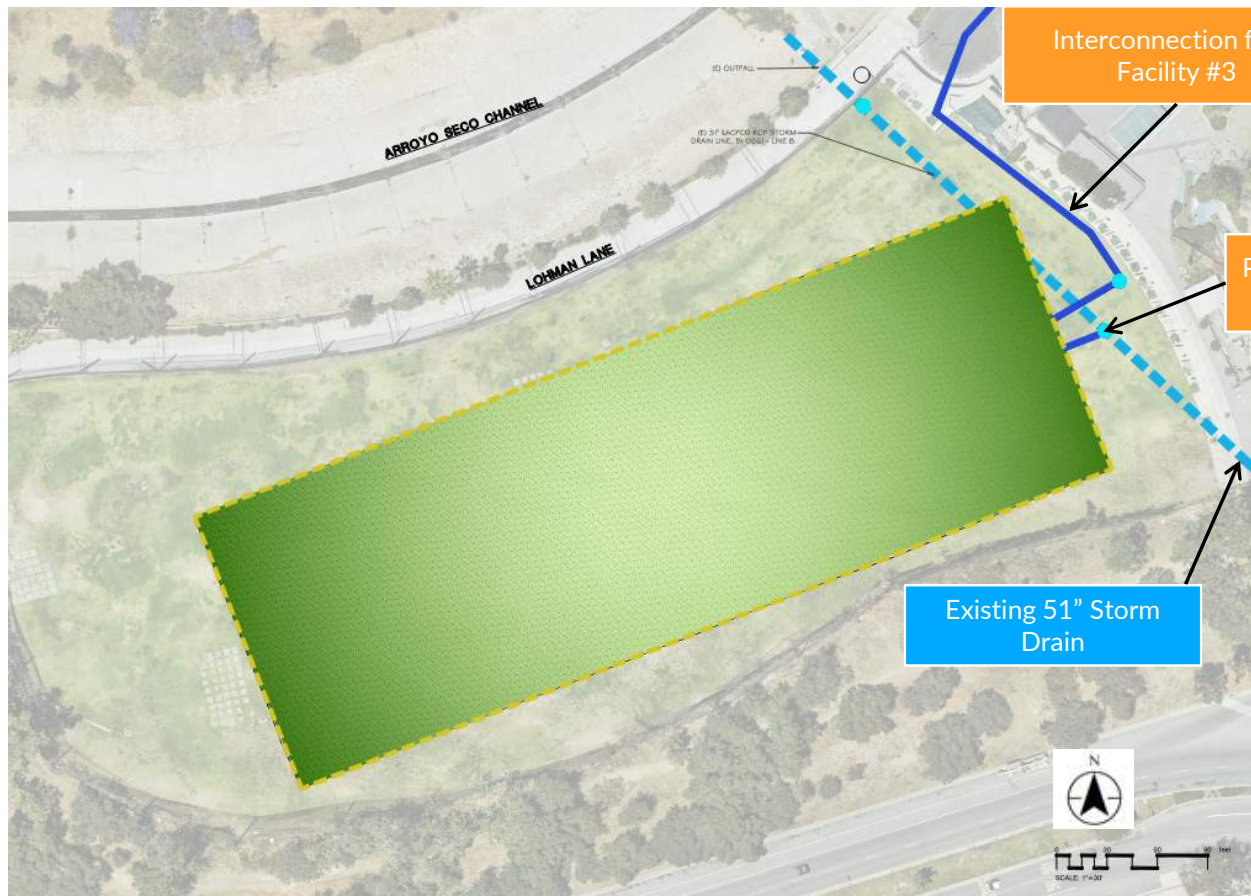
## Facility 4 - Golf Course Driving Range Infiltration Basin

- Diverts flow from existing storm drain along Pasadena Ave (51-inch LACFCD RCP Storm Drain, BI 0261 - Line B)
- Situated along side driving range along Pasadena Ave



# Facility 4 – Design Components

Facility Name	Clear Peak Flow Rate (cubic feet per second)	24-Hr Clear Runoff Volume (acre-feet)
San Pascual Wetlands – Facility 1	9.88	6.77
Stoney Drive Infiltration Basin – Facility 2	12.6	6.17
Golf Course Wetlands – Facility 3	7.29	4.60
Golf Course Driving Range Infiltration Basin– Facility 4	11.3	7.16



# Project Benefits

# Benefits

- **Improve water quality** of flows entering the Arroyo Seco Channel and the local groundwater basin
  - First flush runoff (first rain after the summer season)
  - Natural treatment processes – wetlands, infiltration gallery
- **Replenish local water sources**
  - Infiltrate stormwater into groundwater basin
  - Reduce water use by using treated stormwater for irrigation in surrounding parks and golf courses
- **Increase habitat space for local flora and fauna**
- **Increase urban green space for communities**
- **Enhance community spaces** with park trails, picnic areas, outdoor classrooms, golf course grounds and soccer fields



# Nature Based Solutions

- **Native vegetation** provide green space to the local community.
- **Subsurface infiltration systems** provide treatment by capturing and infiltrating stormwater, naturally removing pollutants in the process.
- **Wetlands** use natural processes to slow, detain, and capture stormwater while also providing and enhancing habitat, green space, and usable open space.



# Green Project Elements

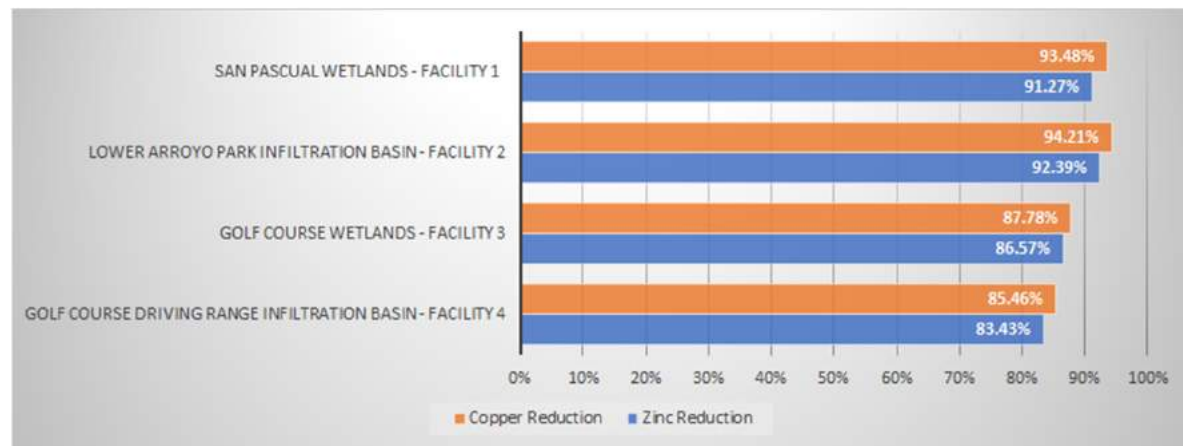
- **Constructed Wetlands** – Excavated areas that store water and provide habitat for plants.
- **Improved Public Spaces** – Outdoor classrooms and picnic areas will be available for use by residents.
- **Wildlife Habitats** – The existing direct connection to the Arroyo Seco will provide a habitat for native species to live year-round.
- **Decreased/Delayed Runoff to the Arroyo Seco** – By capturing, treating, and delaying the initial rush of polluted stormwater runoff, the water quality of the Arroyo Seco will be protected.





# Pollutants Reductions via Treatment BMPs

	Zinc Reduction (lbs)	Copper Reduction (lbs)
San Pascual Wetlands – Facility 1	12.5	2.85
Stoney Drive Infiltration Basin – Facility 2	32.01	6.61
Golf Course Wetlands – Facility 3	31.58	7.63
Driving Range Infiltration Basin– Facility 4	57.97	13.99



- Zinc and copper are the primary and secondary pollutants, respectively.
- Zinc was determined to be the limiting pollutant for the Upper LA River (ULAR) Enhanced Water Management Plan (EWMP) and copper was prioritized as a category 1A pollutant in the ULAR EWMP.
- In the Safe Clean Water Program, maximum wet and dry weather water quality points can be achieved through greater than 80 percent reduction for both primary and secondary pollutants.

# Project Schedule

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- SCW Infrastructure Program Application Submission – Summer 2022 (Tentative)
- Design – To be Determined
- Bid/Construction - To be Determined

# Next Steps

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- Letter of Support from Stakeholders
- SCW application
- If approved for the SCW Infrastructure Program:
  - Detailed design
  - Outreach and engagement
  - Advertise for public bidding
  - Regular informational meetings during construction

# Questions and Discussion

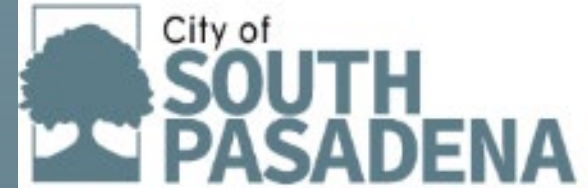
Thank you All for Participating!

**ITEM 5**

NREC 2021 Work Plan Progress Report  
NREC Work Plan March 2022 – June 2022

# Natural Resources & Environmental Commission

## 2021 Work Plan



Status	Tasks and Activities	Lead Person(s)	Timeline	Desired Outcome
Completed	<b>Action:</b> Approve 2021 NREC Work Plan	Staff Liaison	January 26	Final 2021 NREC Work Plan
Completed (presentation by staff), without EPP	<b>Discussion:</b> Review Mandatory Organics Recycling Ordinance including City Environmental Preferable Purchasing Policy (Move III; AB1826; SB1383)	Staff Liaison; Finance Department		Review Template Ordinance including City Environmental Preferable Purchasing Policy and Provide Feedback
Completed	<b>Action:</b> Election of Chair and Vice Chair	Staff Liaison		Commission will appoint Chair and Vice Chair for calendar year 2021
Completed	<b>Discussion/Action:</b> Virtual Earth Day	Staff Liaison		Create Virtual Earth Day Subcommittee and Discuss Ideas
Completed (presentation by CalRecycle), without EPP	<b>Discussion:</b> Second Mandatory Organics Recycling Ordinance including City Environmental Preferable Purchasing Policy (Move III; AB1826; SB1383)	Staff Liaison; Finance Department	February 23	Review Updated Ordinance including City Environmental Preferable Purchasing Policy and Provide Feedback
Completed	<b>Discussion:</b> Virtual Earth Day	Staff Liaison		Discuss Earth Day Ideas
Incomplete	<b>Action:</b> Provide input on the proposed FY 21/22 Water Conservation Program (Goal II) (Goes to Council in April)	Staff Liaison	March 23	Input on Proposed Water Conservation Program
Not needed	<b>Discussion:</b> Third Review of Mandatory Organics Recycling Ordinance including City Environmental Preferable Purchasing Policy (Move III; AB1826; SB1383)	Staff Liaison; Finance Department		Review Updated Ordinance and Provide Feedback
Completed	<b>Discussion:</b> Virtual Earth Day	Staff Liaison		Finalize Virtual Earth Day Event

Status	Tasks and Activities	Lead Person(s)	Timeline	Desired Outcome
Completed without EPP, different meeting date	<b>Action:</b> Recommend to adopt Mandatory Organics Recycling Ordinance including City Environmental Preferable Purchasing Policy (Move III; AB1826; SB1383)	Staff Liaison; Finance Department	April 27	Provide Recommendation to Council on Mandatory Organics Recycling Ordinance
Completed	<b>Update:</b> Green Plan Progress Report	Staff Liaison		Update NREC on the progress of the FY20/21 Q3 moves
Incomplete	<b>Discussion:</b> Review Current Parking Lot Codes and Provide Recommendations (Move IV.1.1)	Staff Liaison; Building/Planning Department	May 25	Determine if Parking Lot Codes Need to be Updated and How
Incomplete	<b>Discussion:</b> Second Review of Current Parking Lot Codes and Provide Recommendations (Move IV.1.1)	Staff Liaison; Building/Planning Department	June 22	Review Updated Code and Provide Feedback
Incomplete	<b>Update:</b> Climate Action Plan Progress Report	Staff Liaison		Update NREC on the progress of the CAP plays/moves
Incomplete	<b>Discussion:</b> Recommend to adopt Updated Parking Lot Codes (Move IV.1.1)	Staff Liaison; Building/Planning Department	July 27	Provide Recommendation to Council on Updated Parking Lot Codes
Incomplete	<b>Update:</b> Green Plan Progress Report	Staff Liaison		Update NREC on the progress of the FY20/21 Q4 moves
Completed	<b>Discussion:</b> Review Current Cool Roof Codes and Provide Recommendations (Move IV.2.1)	Staff Liaison; Building/Planning Department	August 24	Determine if Cool Roof Codes Need to be Updated and How
Not needed, no changes recommended	<b>Discussion:</b> Second Review of Current Cool Roof Codes and Provide Recommendations (Move IV.2.1)	Staff Liaison; Building/Planning Department	September 28	Review Updated Code and Provide Feedback
Incomplete	<b>Update:</b> Green Plan Progress Report	Staff Liaison	October 26	Update NREC on the progress of the FY20/21 Q1 moves
Not needed, no changes recommended	<b>Discussion:</b> Recommend to adopt Updated Cool Roof Codes (Move IV.1.1)	Staff Liaison; Building/Planning Department		Provide Recommendation to Council on Updated Cool Roof Codes
Incomplete	<b>Update:</b> Climate Action Plan Progress Report	Staff Liaison	November 23	Update NREC on the progress of the CAP plays/moves
Incomplete	<b>Discussion:</b> Develop a plastic-free/zero-waste guide for City events			Create Zero-Waste Guide
4 Completed	<b>Tree Removal Hearings</b>	Staff Liaison	As-Needed	Approve/Deny tree removal requests



# Natural Resources & Environmental Commission

## 2022 Work Plan – March 2022 - June 2022



Tasks and Activities	Lead Person(s)	Timeline	Desired Outcome
<b>Discussion:</b> Earth Day	Staff Liaison	March 22	Discuss Earth Day ideas
<b>Presentation:</b> Green Action Plan Progress Report	Staff Liaison		Update NREC on the progress of the Green Action Plan plays/moves
<b>Discussion/Presentation:</b> Commission Analysis	Staff Liaison		Provide the commission with the results of the commission analysis and how it may affect NREC
<b>Action:</b> Selection of Officers	Staff Liaison		Commission will appoint Chair and Vice Chair for calendar year 2022
<b>Action:</b> Provide input on the proposed FY 20/21 Water Conservation Program (Goal II)	Staff Liaison	April 26	Input on proposed water conservation program
<b>Presentation:</b> Climate Action Plan Progress Report	Staff Liaison	May 24	Update NREC on the progress of the CAP plays/moves
<b>Discussion:</b> Review Work Plan FY 22-23	Staff Liaison		Review updated NREC FY22-23 Work Plan and provide comments
<b>Discussion:</b> Review Current Parking Lot Codes and Provide Recommendations (Move IV.1.1)	Staff Liaison; Building/Planning Department	June 28	Determine if Parking Lot Codes need to be updated and how
<b>Action:</b> Adopt NREC Work Plan for FY 22-23	Staff Liaison		Adopted NREC FY22-23 Work Plan
<b>Tree Removal Hearings</b>	Staff Liaison	As-Needed	Approve/Deny tree removal requests