



# Westlake Village MS4 Compliance Project

Technical Resources Program  
Fiscal Year 2023-2024  
North Santa Monica Bay  
City of Westlake Village  
Roxanne Hughes, City Engineer  
Previously Awarded TRP –No



# Project Overview

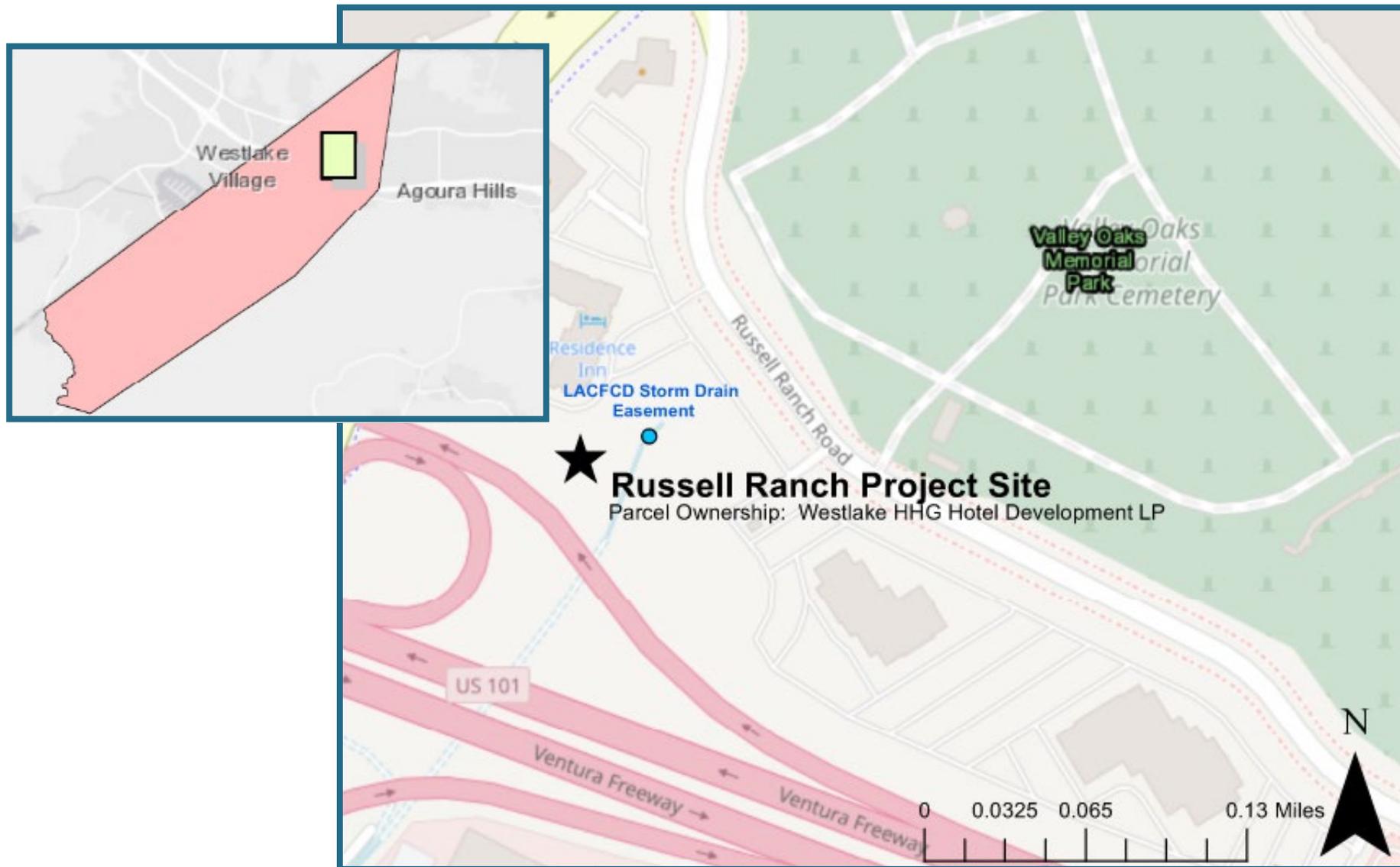
The Westlake Village MS4 Project combines two areas to meet 42% of the MS4 Permit, as per the MCW EWMP, and adds 2.5 AF to the water supply.

- Primary Objective: Improve Water Quality and Supply
- Secondary Objectives: Create a Water Supply for Community and Ecosystem
- Project Status: Planning and Design
- Total Funding Requested: \$300K



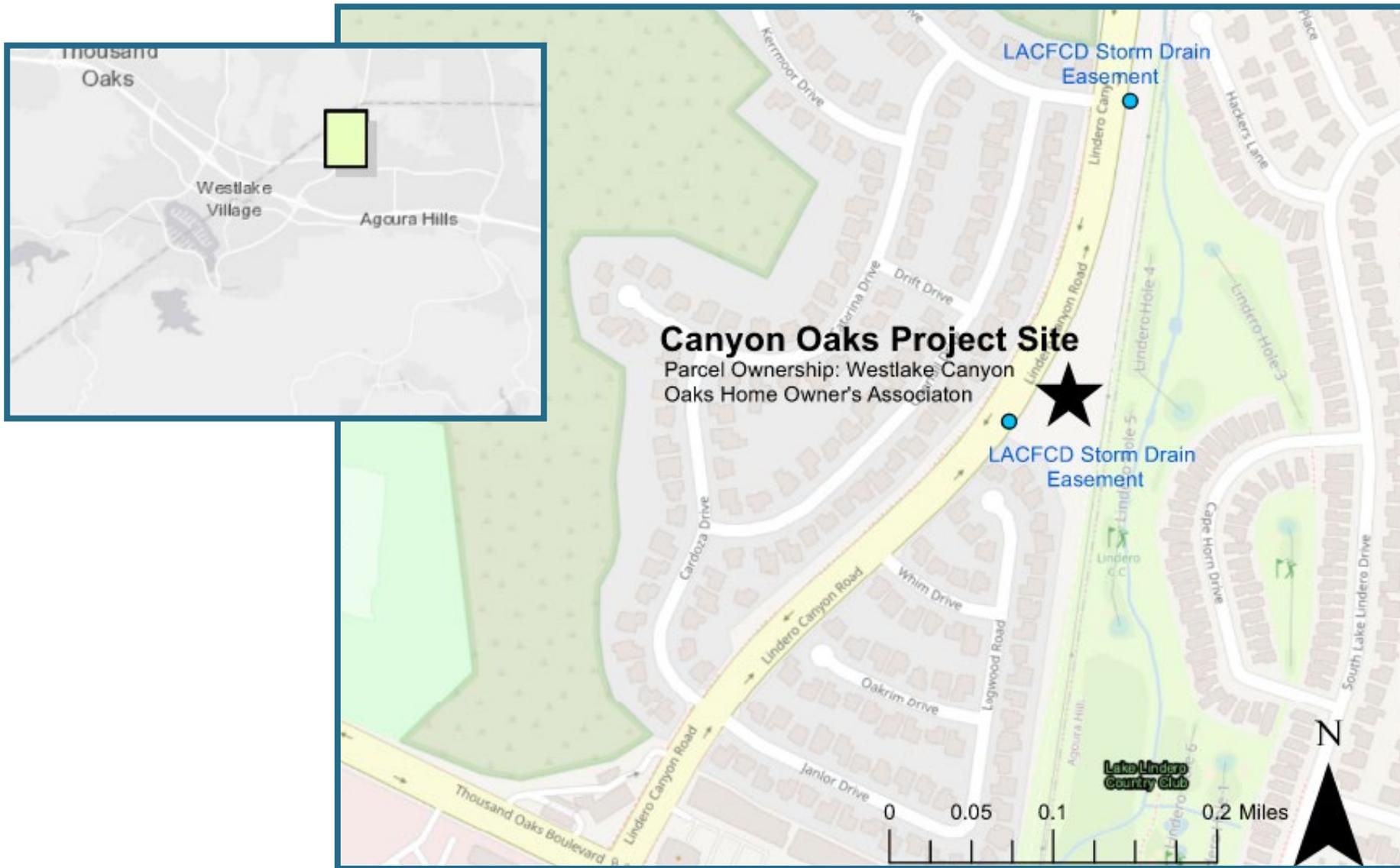


# Project Location – Russell Ranch





# Project Location – Canyon Oaks





# Project Background

- Why was the Project Location selected?

The **Russell Ranch site** will clean urban flow from commercial and industrial land uses prior to reaching Triunfo Creek.

- The treated water will be funneled to the sanitary sewer for treatment and reuse by LVMWD.
- LVMWD is in the process of building the Pure Water Project for drinking water.

The **Canyon Oaks site** addresses significant residential runoff prior to reaching Lindero Creek.

- ✓ IMPROVE WATER QUALITY
- ✓ INCREASE LOCAL WATER SUPPLY



**.55 SQ MI DRAINAGE**

+ majority of City's Commercial and Industrial Areas, Residential Community





## • How was the Project developed?

The Project is the result of a decade's worth of research and planning to improve water quality and water supply and the result of a lengthy community outreach process derived from the 2016 MCW EWMP.

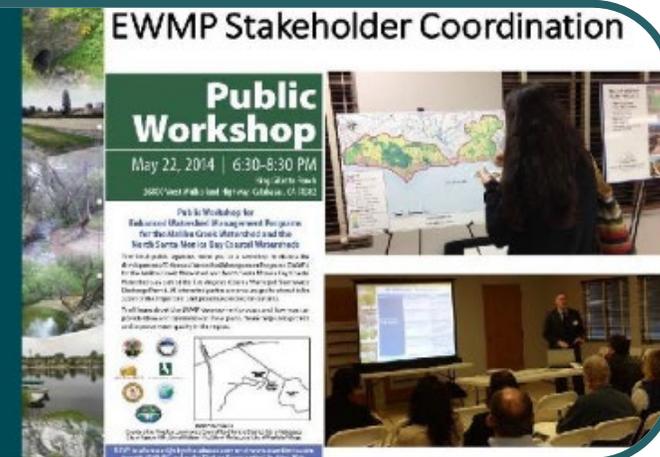
## • Which regional water management plan includes the proposed project?

The MCW EWMP, updated in the June 2021 MCW WMP submittal to the Regional Board, incorporated this vital City stormwater and water supply benefit project as result of a reasonable assurance analysis (RAA).

### Benefits

- ✓ Clean drinking water
- ✓ New water supply
- ✓ Supports ecological beneficial uses
- ✓ Supports recreational beneficial uses

Stakeholder Outreach from original MCW EWMP





# Partners

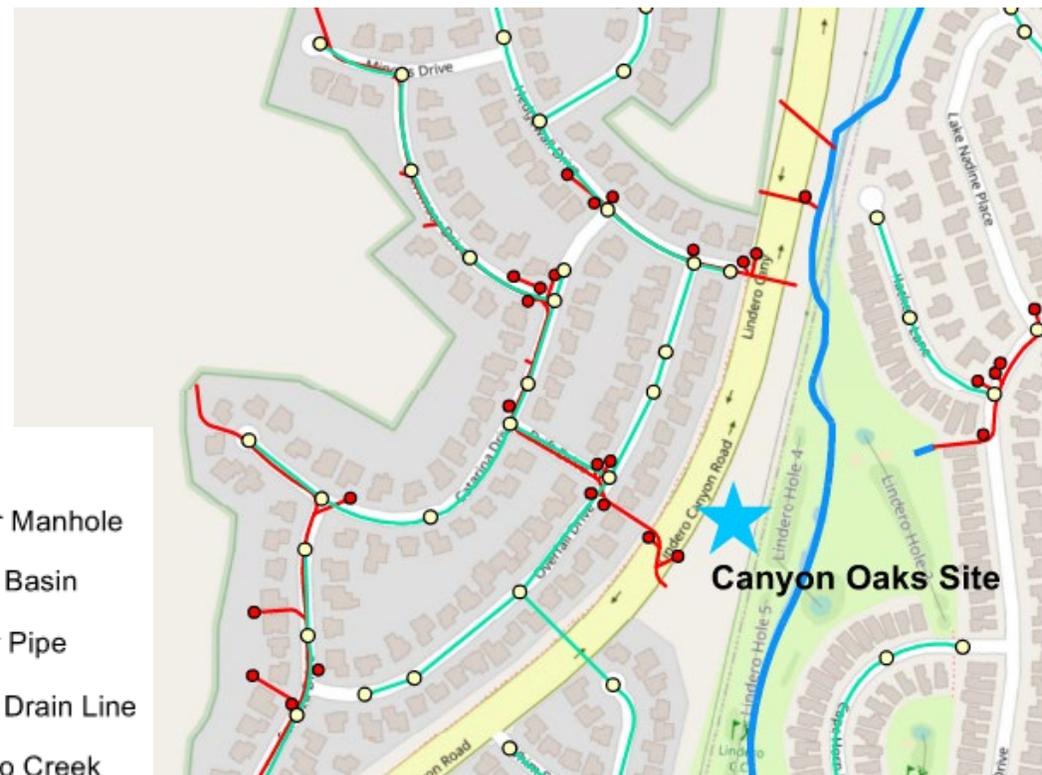
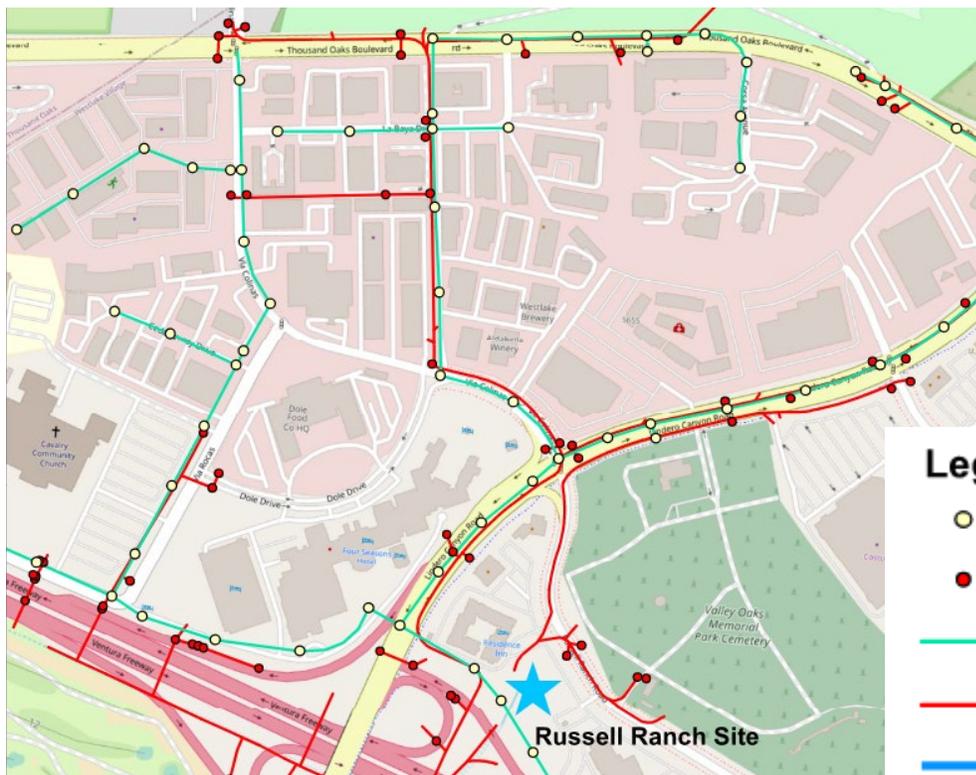
- Who are the Project collaborators already identified?
  - The City of Westlake Village
  - Las Virgenes Municipal Water District (LVMWD)
  - Westlake Canyon Oaks HOA
  - Russell Ranch Road Property Owners
  - Los Angeles County Flood Control District (LACFCD)
- What communities or groups have expressed support for the project?

To date the Project has garnered the support of:

  - The City of Westlake Village
    - Received a letter of non-objection
  - LVMWD
    - Received a letter of support



# Project Details



## Legend

- Sewer Manhole
- Catch Basin
- Sewer Pipe
- Storm Drain Line
- Lindero Creek

## Russell Ranch

- Includes intercepting two storm drain lines
- Install treatment and release via Nature Based Solutions
  - Partial diversion into LVMWD sewer main.

## Canyon Oaks

- Intercept at least two storm drain lines
- Use land-based treatment to remove pollutants
- Release clean water into Lindero Creek
  - Supports of ecological and recreational uses



# Project Details

*(Continued)*

Capture Area Summary	
Capture Area:	352 ac
Impervious Area	147.83 ac
Pervious Area:	204.17 ac

Breakdown of Impervious Acreage in Capture Area		
Land Use Type	Percent Impervious	Acres
Single Family Residential	6%	8.87
Commercial	83%	122.7
Open Space	11%	16.26

## Site Conditions

- Based on the findings of the MCW WMP:
  - The Russell Ranch Site is expected to treat a drainage area that covers 300 acres
  - The Canyon Oaks Site will treat 52 acres
  - This will cover over 10 percent of the total area of the City of Westlake Village
- No alternative locations exist to achieve the desired benefits

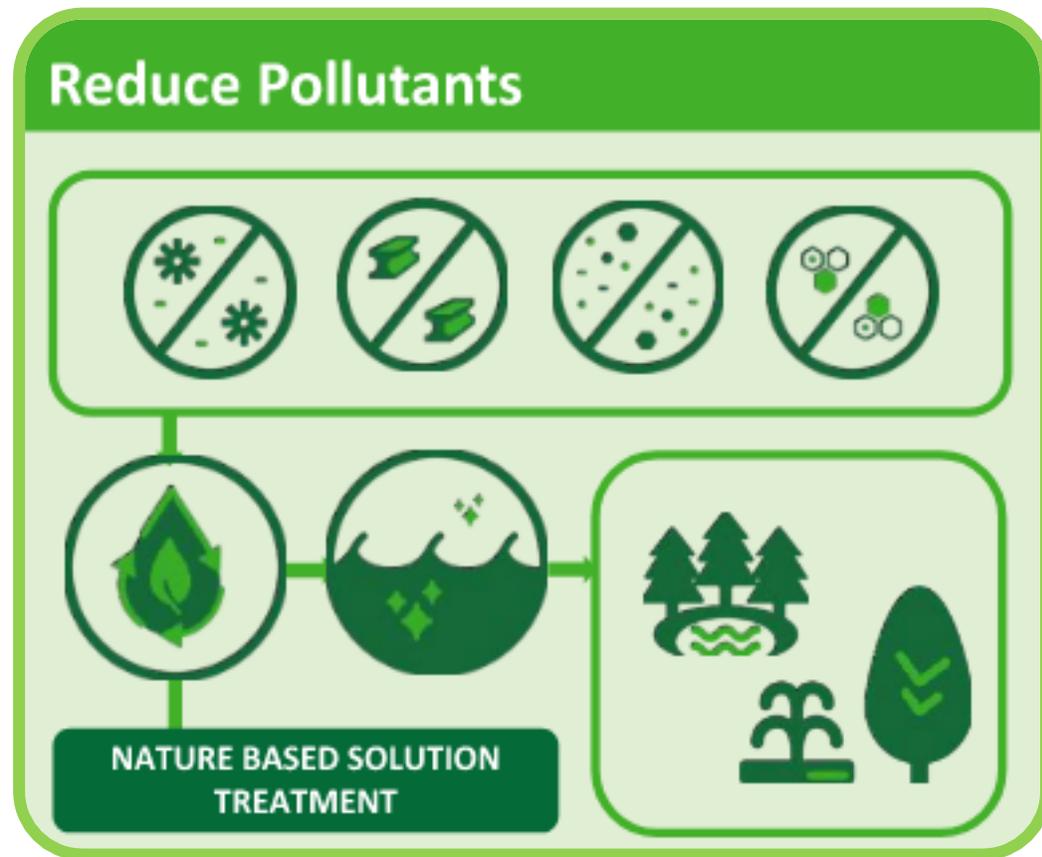


# Project Details

*(Continued)*

The City of Westlake Village prioritizes nature-based solutions as drivers of design

- The community is excited because it will address long running water quality concerns and create additional water supply.
- The project will include thoughtfully curated landscaping, using native plants sourced from the immediate local ecosystems



**2.5 ACRE FEET** BMP CAPACITY  
RUSSEL RANCH SITE

**2.6 ACRE FEET** BMP CAPACITY  
CANYON OAKS SITE



## **Russell Ranch site**

- Pretreatment process will be integrated into a standing grove of protected oaks
  - Maintain our historic tree communities is part of the treatment plan

## **Canyon Oaks site**

- Treat water via creation of a passive park
  - Utilizing both pretreatment and biofiltration
- Returning treated water to Lindero Creek and Lake Lindero
- Passive park will create a place for exercise and enjoying green space.



# Project Details

(Continued)

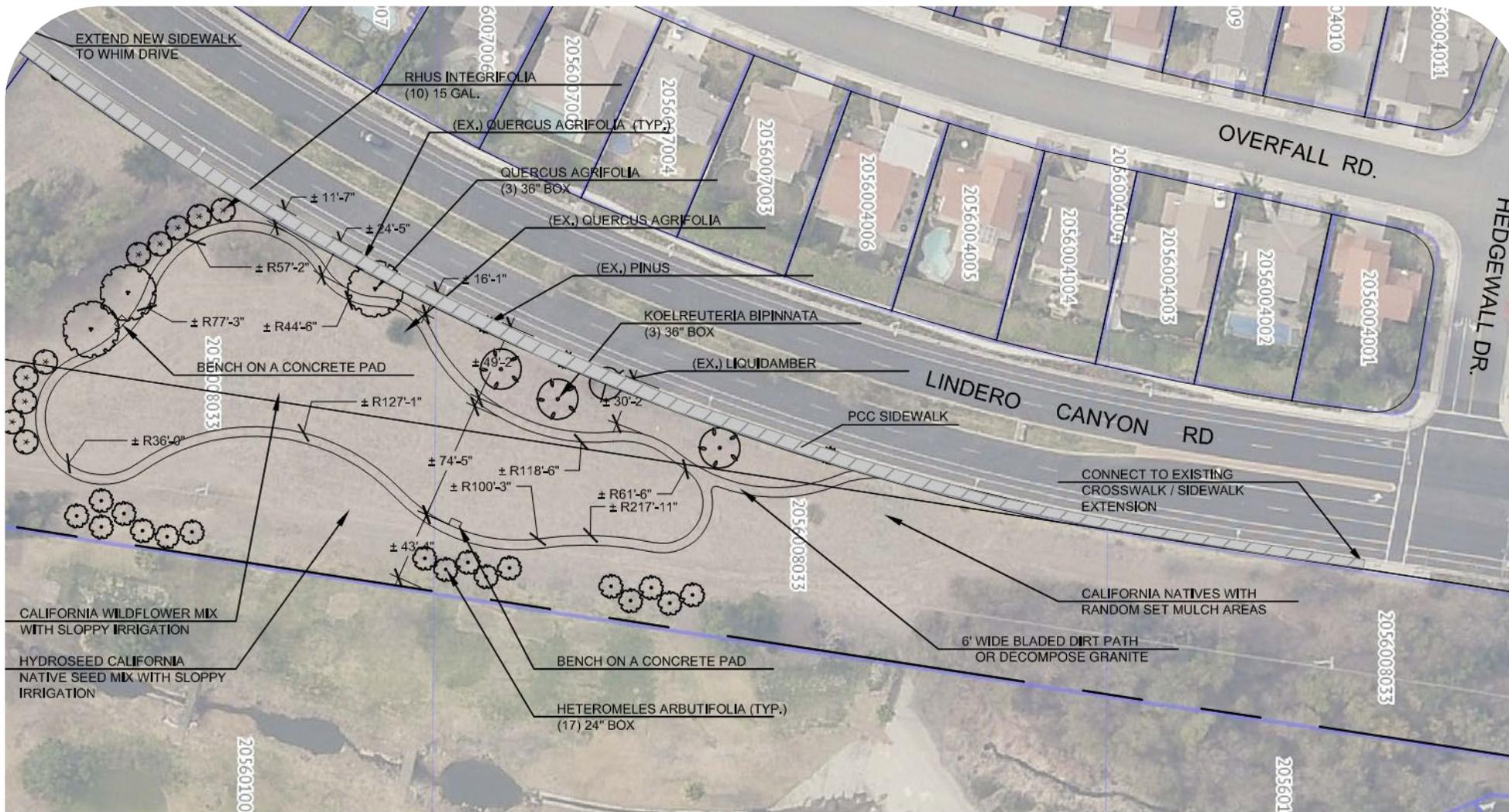


EXHIBIT A  
*Lot 80 - Passive Park*  
 Conceptual Plan

Draft Print

10/27/2021 10:52:50 AM



City of Westlake Village  
 31200 Oak Crest Drive  
 Westlake Village, Ca 91361



# Cost & Schedule

Phase	Description	Cost
Construction	Award contract and construction implementation	\$1,750,000.00
Planning and Design	Early concept design, pre-project monitoring, feasibility study, site investigations, project design, project audits, and environmental impact studies and permitting	\$300,000.00
<b>TOTAL</b>		<b>\$2,050,000.00</b>

Annual Cost Breakdown	
Annual Maintenance	\$20,000.00
Annual Operation	\$10,000.00
Annual Monitoring	\$10,000.00
<b>TOTAL</b>	<b>\$50,000.00</b>

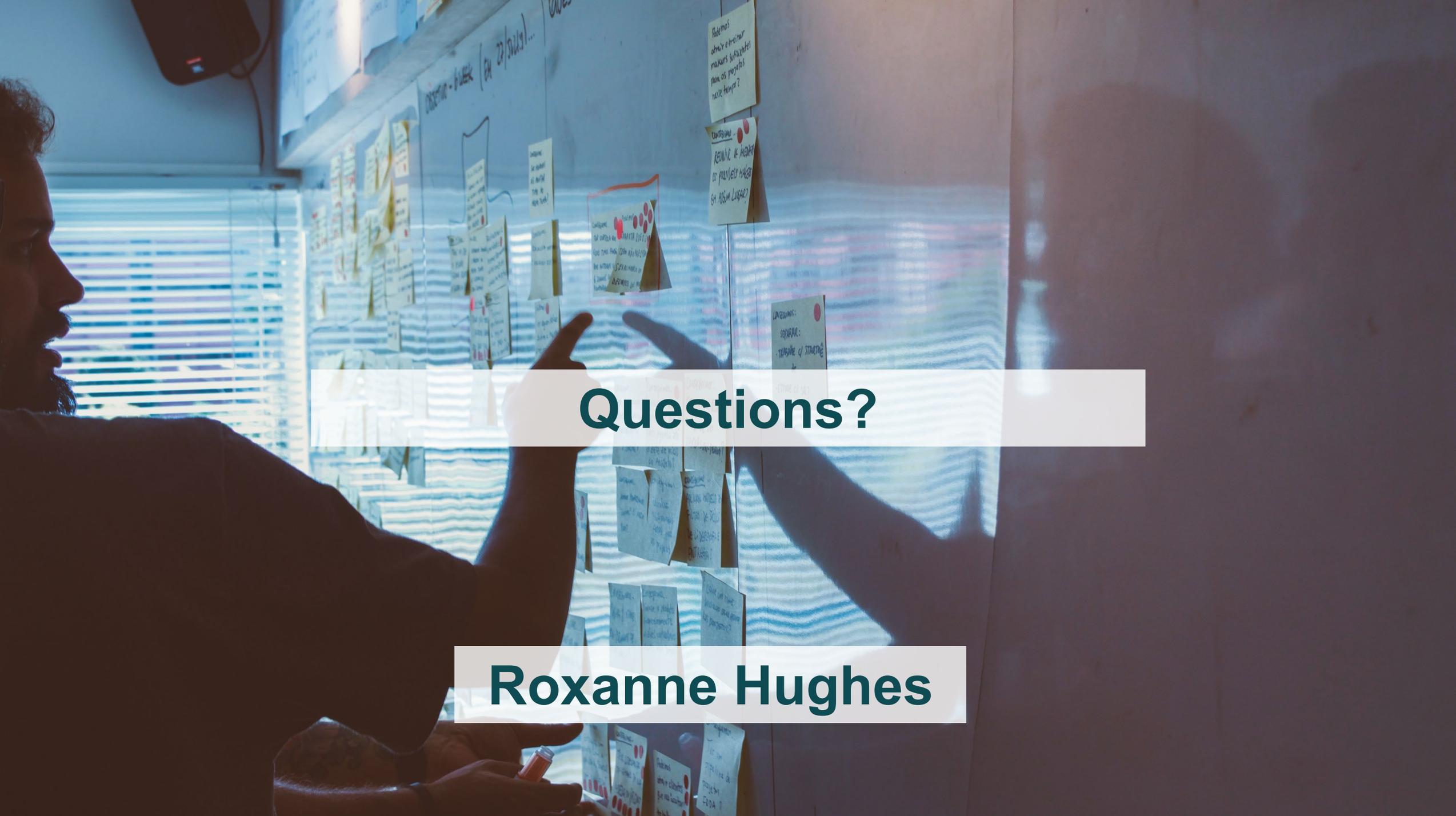
- Project Lifespan: 50 Years
- Lifecycle Cost: \$ 4,550,000



# Funding Request

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$300,000.00	Planning and Design	
<b>TOTAL</b>			

- Description of future potential SCW funding requests, if applicable



**Questions?**

**Roxanne Hughes**