



*Building Collaboration: Multi-agency +  
Community Partnerships to Restore &  
Enhance the Arroyo Las Positas Riparian  
Corridor in North Livermore*

*Alameda Creek Watershed Forum*

*May 8, 2024*

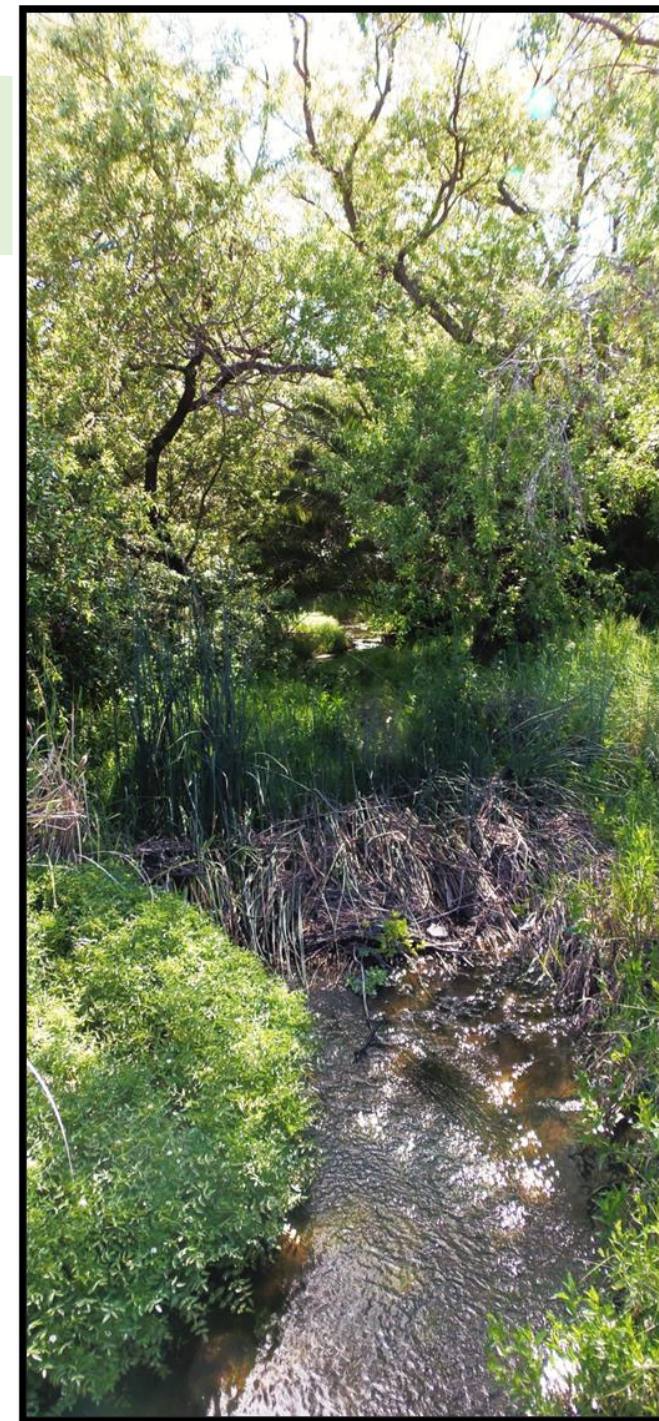
# INTRODUCTION

## **Leslie Koenig, Wildlife Biologist, Swaim Biological, Inc.**

- Springtown natural history
- Stream maintenance, restoration, and flood management effort
- Former golf course land use to open space
- Next Steps

## **Patti Cole, Community Activist, Retired Park Ranger/Naturalist**

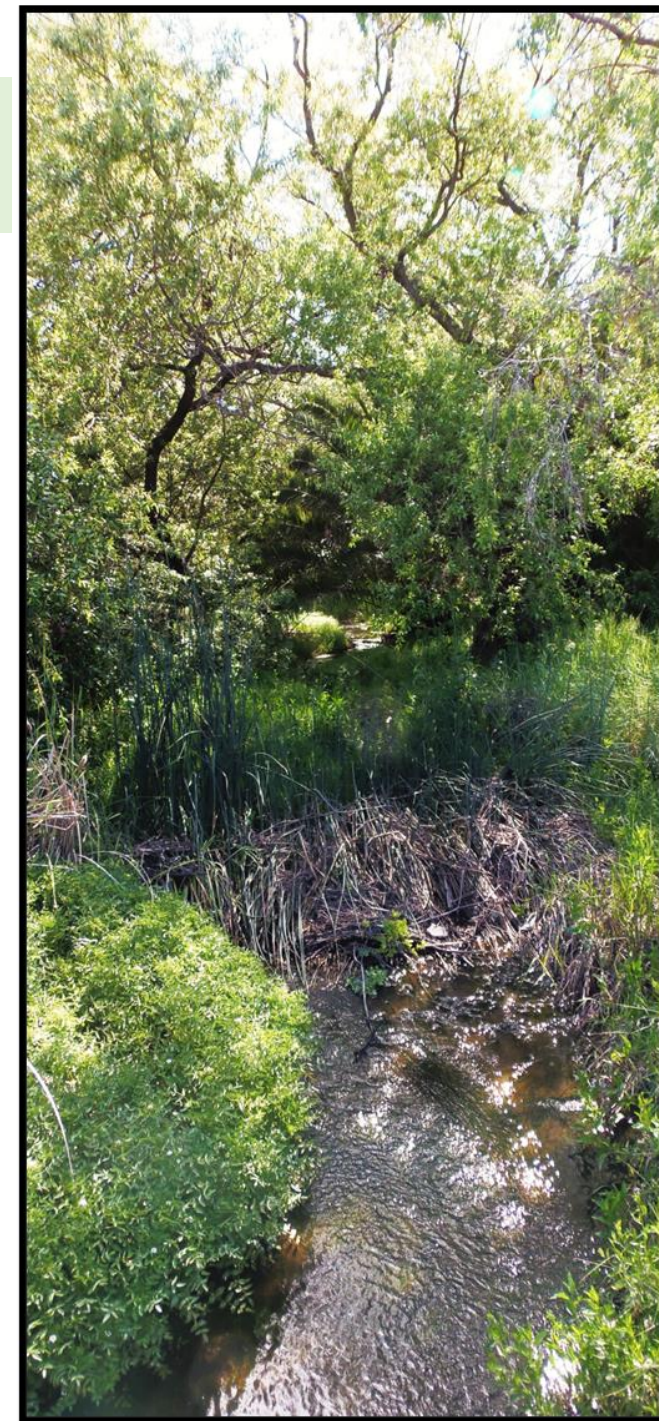
- Community Involvement
- Adopt A Creek Spot & Living Arroyos Programs
- Tree Planting Projects
- Education & Documentation



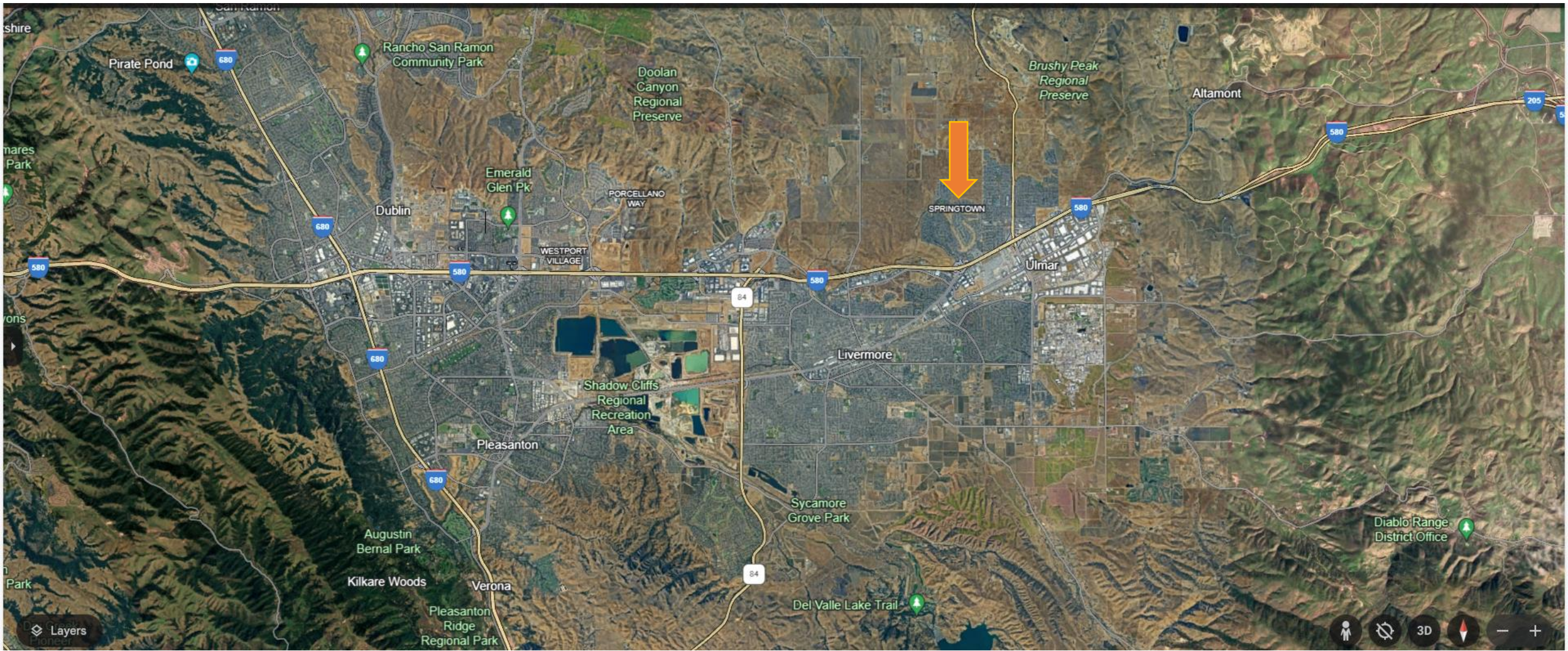
# SITE LOCATION

## Maps

- Greater geographic area
- Springtown area
- Project site



# SITE LOCATION



Greater Geographic Area

# SITE LOCATION



Springtown Area

# SITE LOCATION

Located in the Springtown area of Livermore, north of I-580.  
Project area indicated in yellow.



Project Area

# SPRINGTOWN NATURAL HISTORY

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The efficiency of flooding, with the establishment of underground tile drainage, in the reclamation of alkali lands has been demonstrated, but the dense, impervious nature of the subsoil and the lack of an adequate water supply makes the reclamation of alkali soils in this area a **difficult** problem.

—WESTOVER AND VAN DUYNE  
1910:62



## "Bad" habitat...

The limestone formation is probably quite extensive in this region, as the water and the soil in the northeasterly section of the valley are quite alkali, the water from some wells being **unfit** for domestic use, for stock, or for irrigation.

—WILLIAMS 1912:47

Bad alkali sink, nearly devoid of vegetation; margin characterized by *Frankenia*, *Hordeum* & *Bromus mollis* [*B. hordeaceus*] patches of *Frankenia* and *Bromus* & patches of *Frankenia* and *Hordeum*; the *Hordeum* & *Bromus* not growing together.

Towards the center, *Frankenia suadea* [*salina*] & *Allenrolfea* occur; the latter not luxuriant.

Salt grass & *Centromadia* local, on slopes. They also occur on the flat, but not on the lowest wettest places.

*Allenrolfea* [iodine bush] follows the line of the stream bed. (Burt Davy 1898)





1940



# Formation of the Alkali Sink

- Alkali salts originated in marine sedimentary rocks with relatively high salt concentrations to the north and east of Livermore
- These marine sediments eroded and flowed downstream through Altamont Creek and other small drainages.
- As these creeks overflowed and spread during high flows, they spread minerals across the land of the basin.
- Over time, high evaporation rates and low rainfall resulted in highly concentrated salts



3/2024

Altamont  
Creek

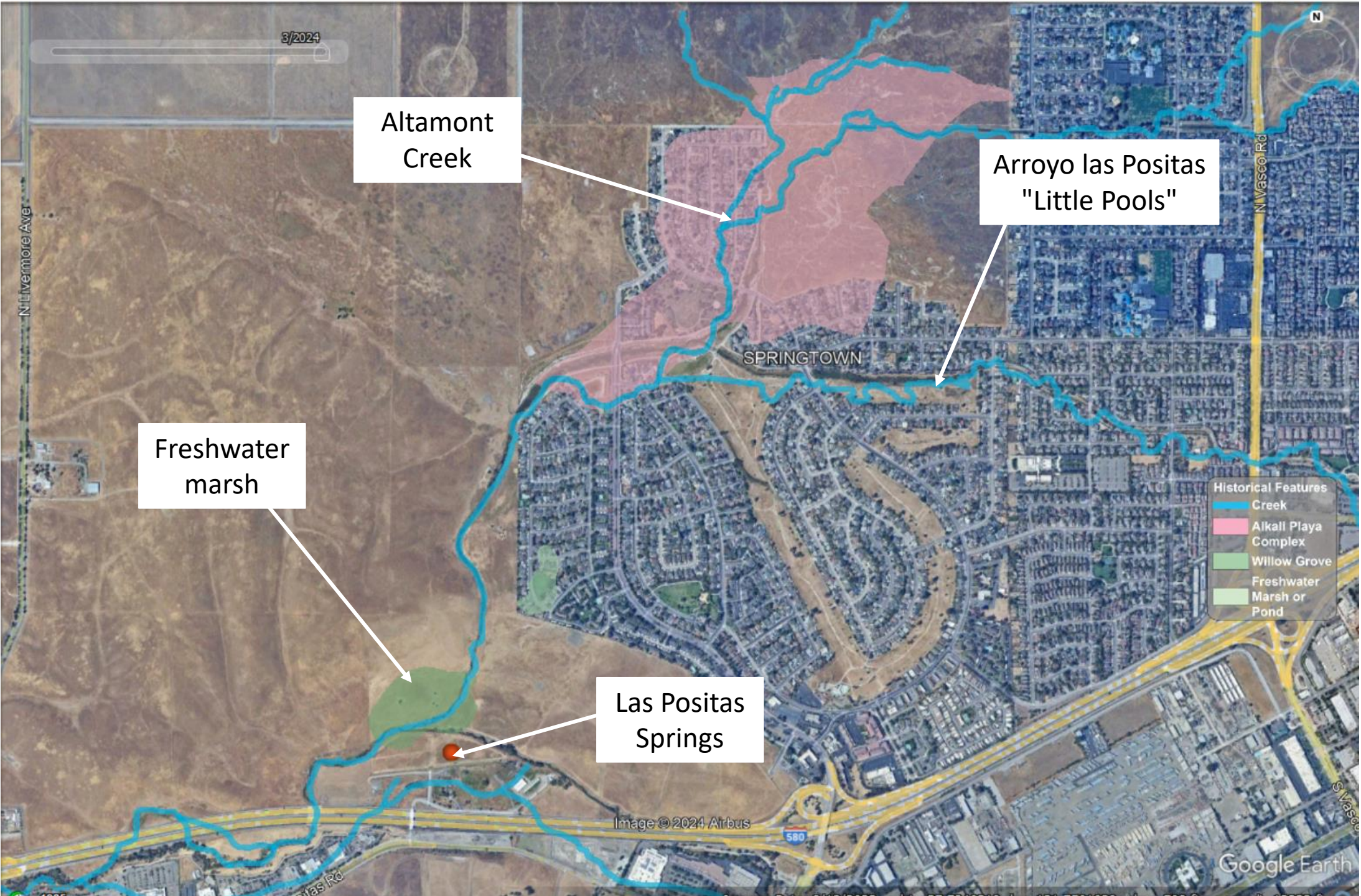
Arroyo las Positas  
"Little Pools"

Freshwater  
marsh

Las Positas  
Springs

Historical Features

- Creek
- Alkali Playa Complex
- Willow Grove
- Freshwater Marsh or Pond



3/2024

N Livermore Ave

N Vasco Rd

SPRINGTOWN

**Las Positas Springs**

"Las Positas," meaning "little pools," was an area of natural springs and willow groves. Here, between two bedrock knolls, water that had soaked into the ground in the flat, wide valley to the east, rose to the surface to begin the channel of west-flowing Arroyo Las Positas. These springs were an important source of water in the dry Livermore Valley. Early travelers and Gold Rush 49ers would drink here before heading east across Altamont Pass to the San Joaquin River.

For more information, see pages 126-128 of San Francisco Estuary Institute's study, available at [Alameda Creek Watershed Historical Ecology Study](#)

**Historical Features**

- Creek
- Alkali Playa Complex
- Willow Grove
- Freshwater
- Marsh or Pond

Image © 2024 Atribus

580

Google Earth

1985

Imagery Date: 9/12/2023

lat 37.724543° lon -121.749576° elev 510 ft

eye alt 13232 ft

Positas Rd

N Vasco

3/2024

Altamont  
Creek

Arroyo las Positas  
"Little Pools"

Freshwater  
marsh

SPRINGTOWN

Present Features

- Creek
- Engineered Channel
- Underground Culvert or Storm Drain
- Artificial Body of Water
- Natural Lake

Image © 2024 Airbus

580

Google Earth

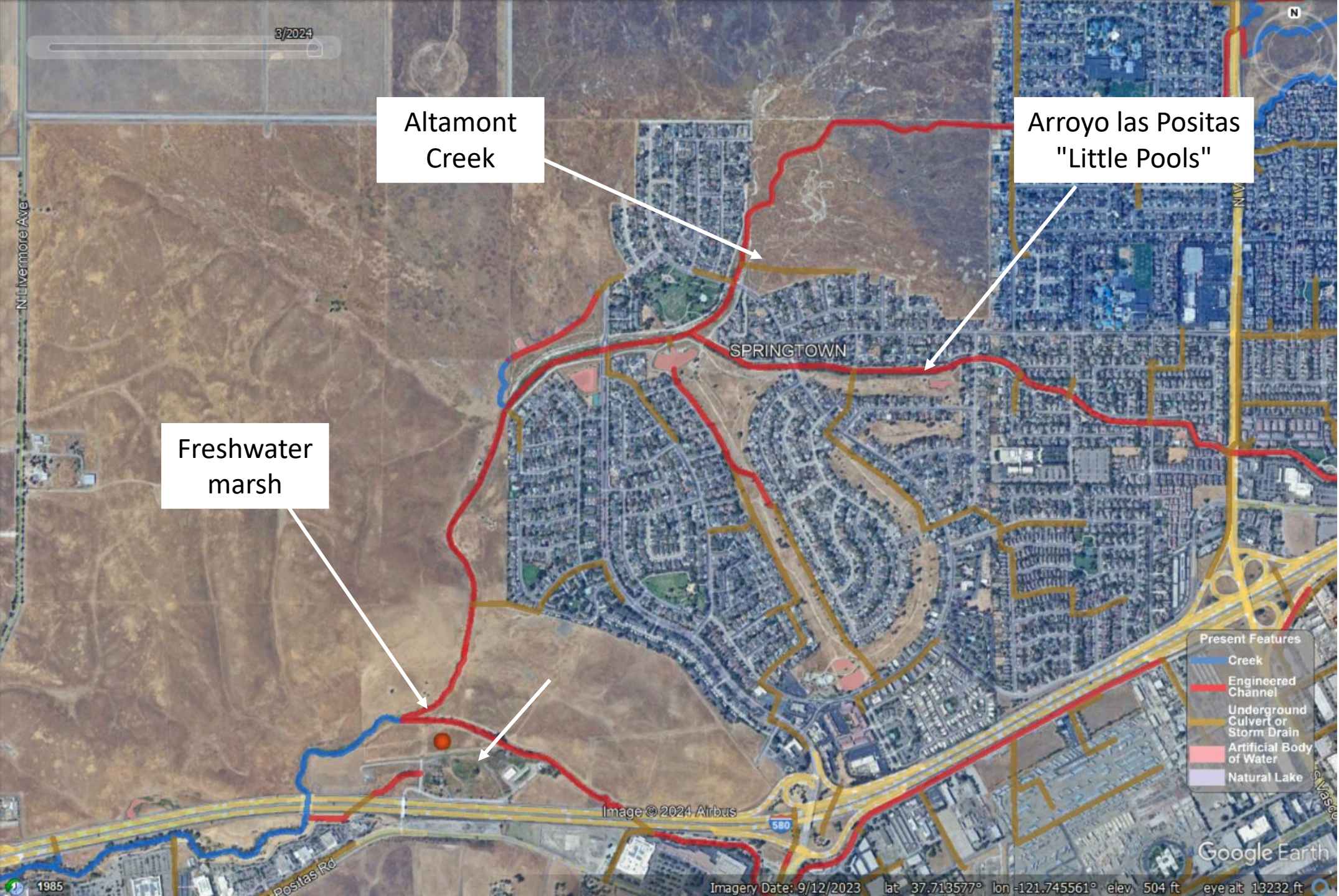
1985

Positas Rd

Imagery Date: 9/12/2023

lat 37.713577° lon -121.745561° elev 504 ft

eye alt 13232 ft



# Challenges

- Highly managed system
- Flooding
- Special Status Species
- Invasive Species
- Human disturbance
- Alkali soils, high boron





# Stream Maintenance Program

- Programmatic Initial Study/Mitigated Negative Declaration
- Regional Water Quality Control Board Regional Order for Stream Maintenance Programs
- California Department of Fish and Wildlife Routine Maintenance Agreement
- US Army Corps of Engineers Regional General Permit
- East Alameda County Conservation Strategy Programmatic Biological Opinion
  - Habitat Conservation Plan in development









Non native species



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Native species



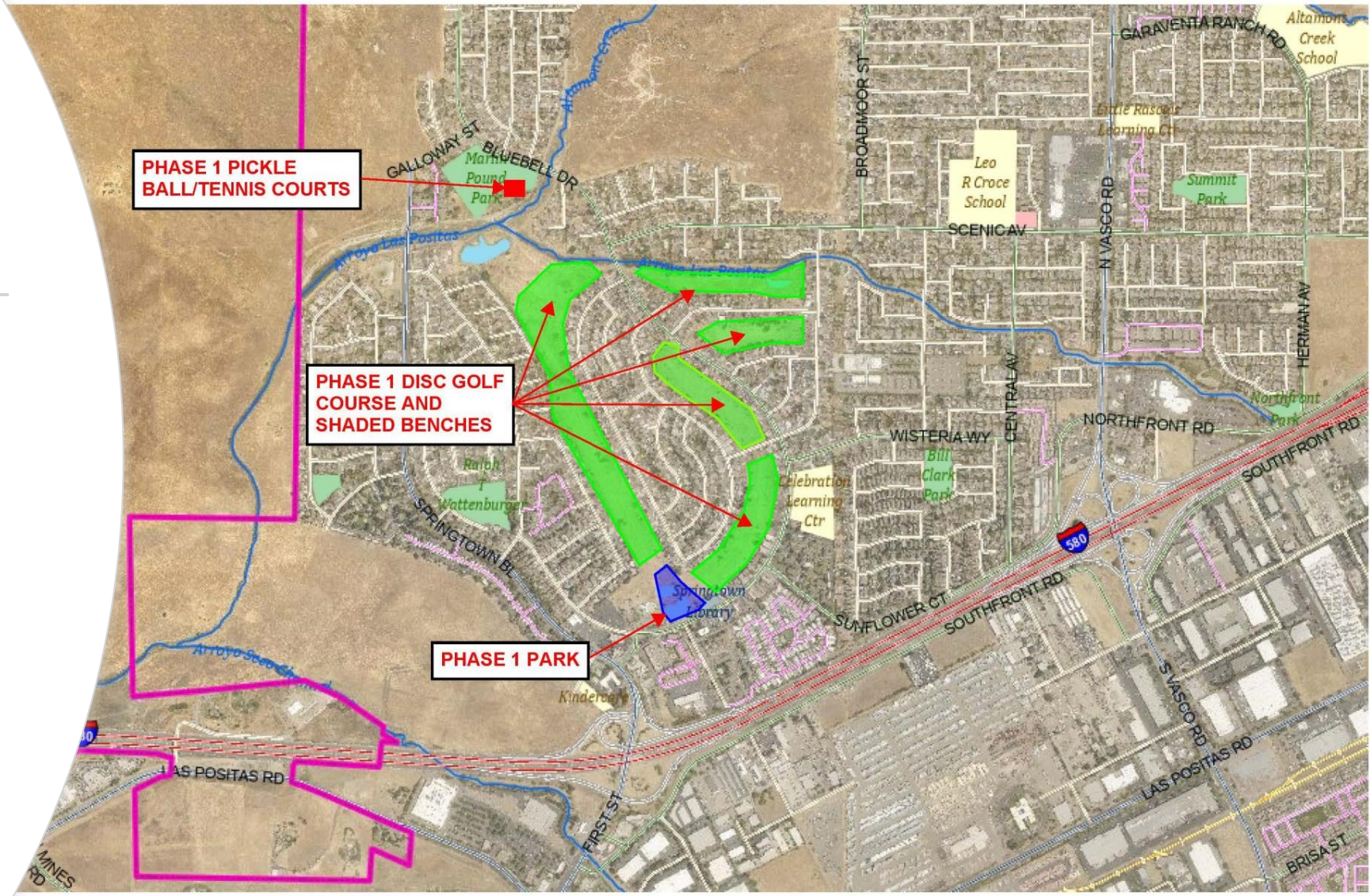
# Mitigation







- 85 acres of former golf course
- Potential for seasonal wetland creation
- Additional riparian restoration
- Education and outreach
- Citizen engagement



0 1,333.33 2,666.7 Feet  
 IAD\_1983\_2011\_StatePlane\_California\_III\_FIPS\_0403\_Ft\_US  
 Livermore IT, GIS Services 1: 16,000

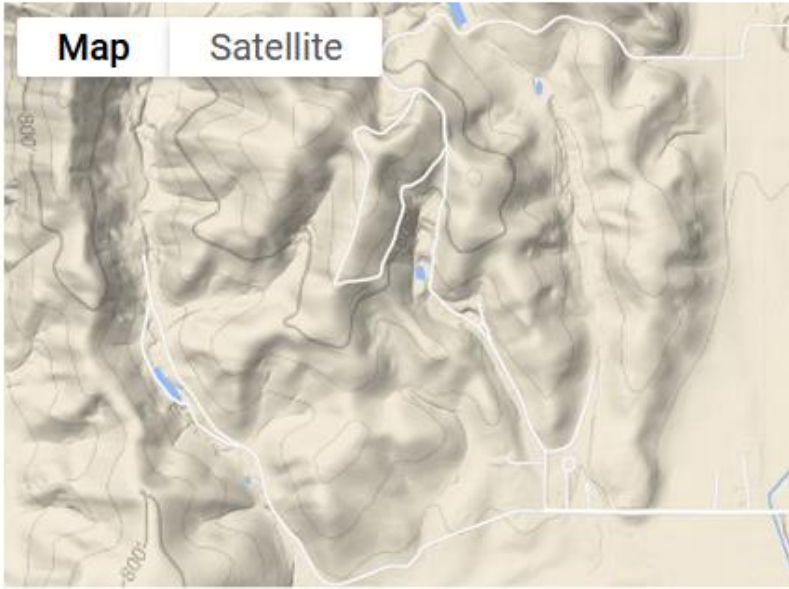
This map is based on City of Livermore GIS Information and reflects the most current information at the time of this printing. The map is intended for reference purposes only and the City and its staff is not responsible for errors or omissions.  
 Notes



Places > Livermore CA >

Map

Satellite



City of Livermore Springtown Pre

Species

Observations

Projects

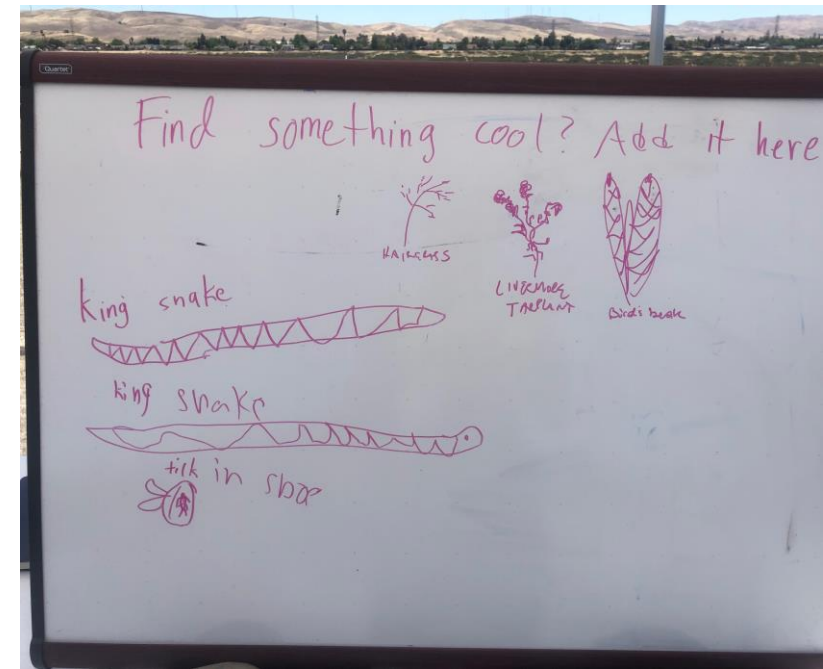
People

### Projects from City of Livermore Springtown Pr



#### Livermore Springtown Preserve Bioblitz

Bring your smartphone and curiosity to help catalog rare species at Livermore's Springtown Preserve!

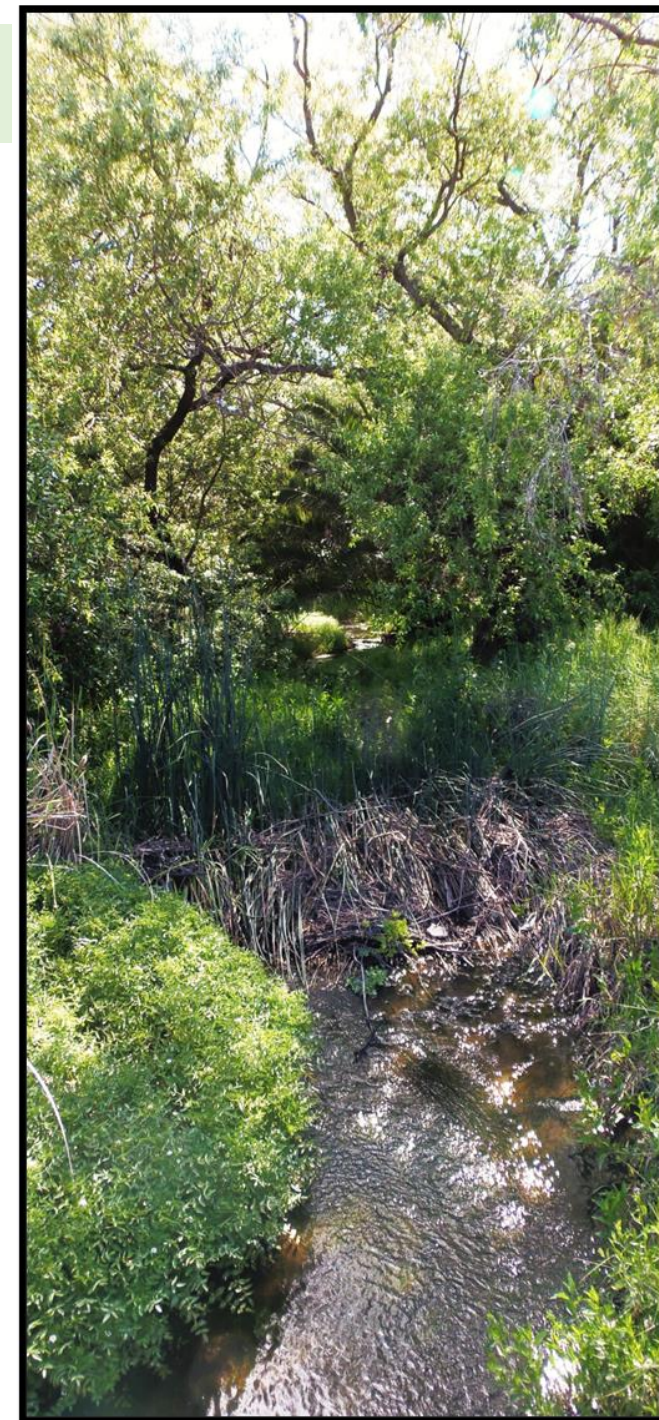


# BUILDING COLLABORATION

## *Agency & Business Partners*



ALAMEDA  
COUNTY  
RESOURCE  
CONSERVATION  
DISTRICT

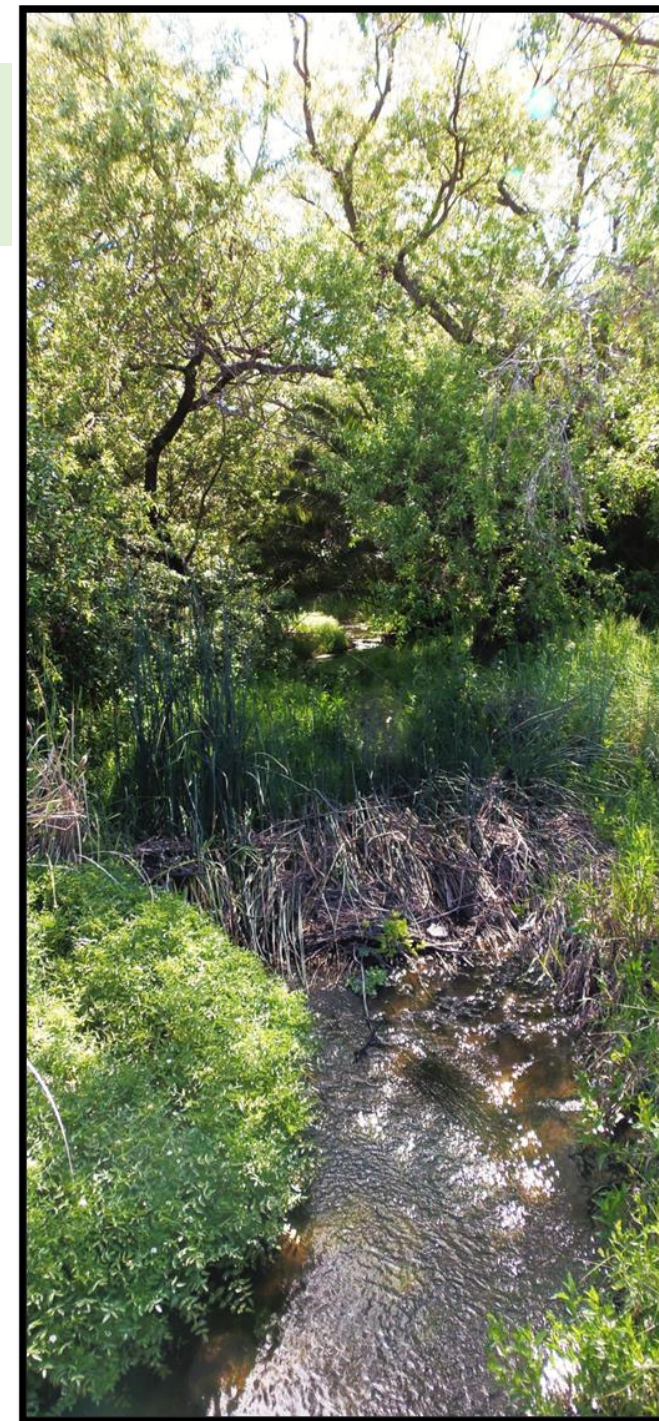




# BUILDING COLLABORATION

## *Community Partners*

- Individuals
- Community groups (church, school, social organizations, scouts, etc.)
- Volunteer members of agency committees



# BUILDING COLLABORATION

## *Adopt A Creek Spot & LIVING ARROYOS*



Created as multi-agency (ACRCD, COL, Zone 7, LARPD) program to hold on-going creek clean-ups & provide basic educational information on stream ecology & water quality



# BUILDING COLLABORATION

## *Adopt A Creek Spot & LIVING ARROYOS*



Multi-agency (ACRCD, Tri-Valley cities, Zone 7, LARPD) program providing assistance in riparian/stream vegetation management

- Eventually AACS & Living Arroyos merged, under Living Arroyos, administered by ACRCD



# BUILDING COLLABORATION

## TREE PLANTINGS

### *Arbor Day Tree Planting*

- Started in 2021
- Suggested by COL Beautification Committee
- Valley Oak Trees
- Sign posted at each (year)
- Connection with 2<sup>nd</sup> graders in Livermore



# BUILDING COLLABORATION

## TREE PLANTINGS

### *Tree Planting Event*

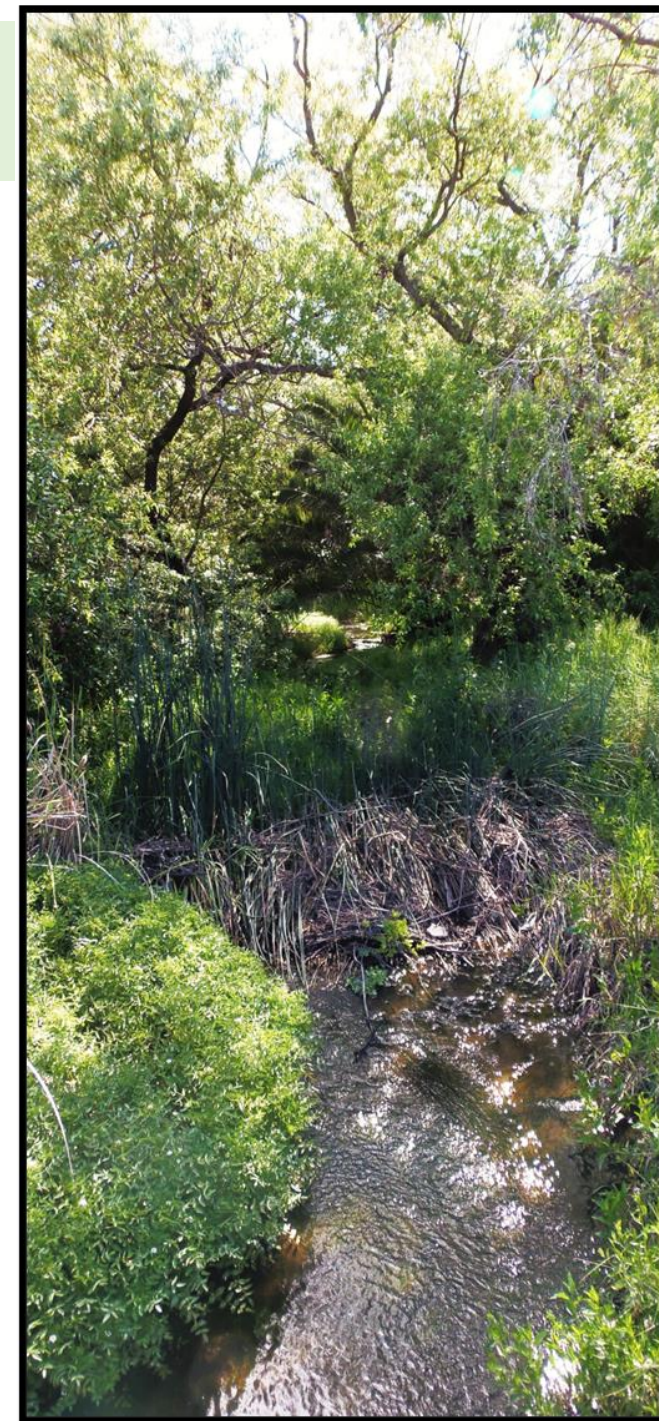
- 2021
- 65 trees
- Volunteers planted in one morning
- Community organizations coordinated event with City of Livermore



# BUILDING COLLABORATION

## EDUCATION & DOCUMENTATION

- Community members
  - Bird list & booklet field guide
  - Audubon Christmas bird count
  - Nature walks
  - Amateur wildlife photographers
  - Regular birders, botany enthusiasts, etc. record sightings (eBird, iNaturalist, Otter Spotter)
- Assist City of Livermore in Springtown Open Space
  - Native Garden
  - Information/interpretative board



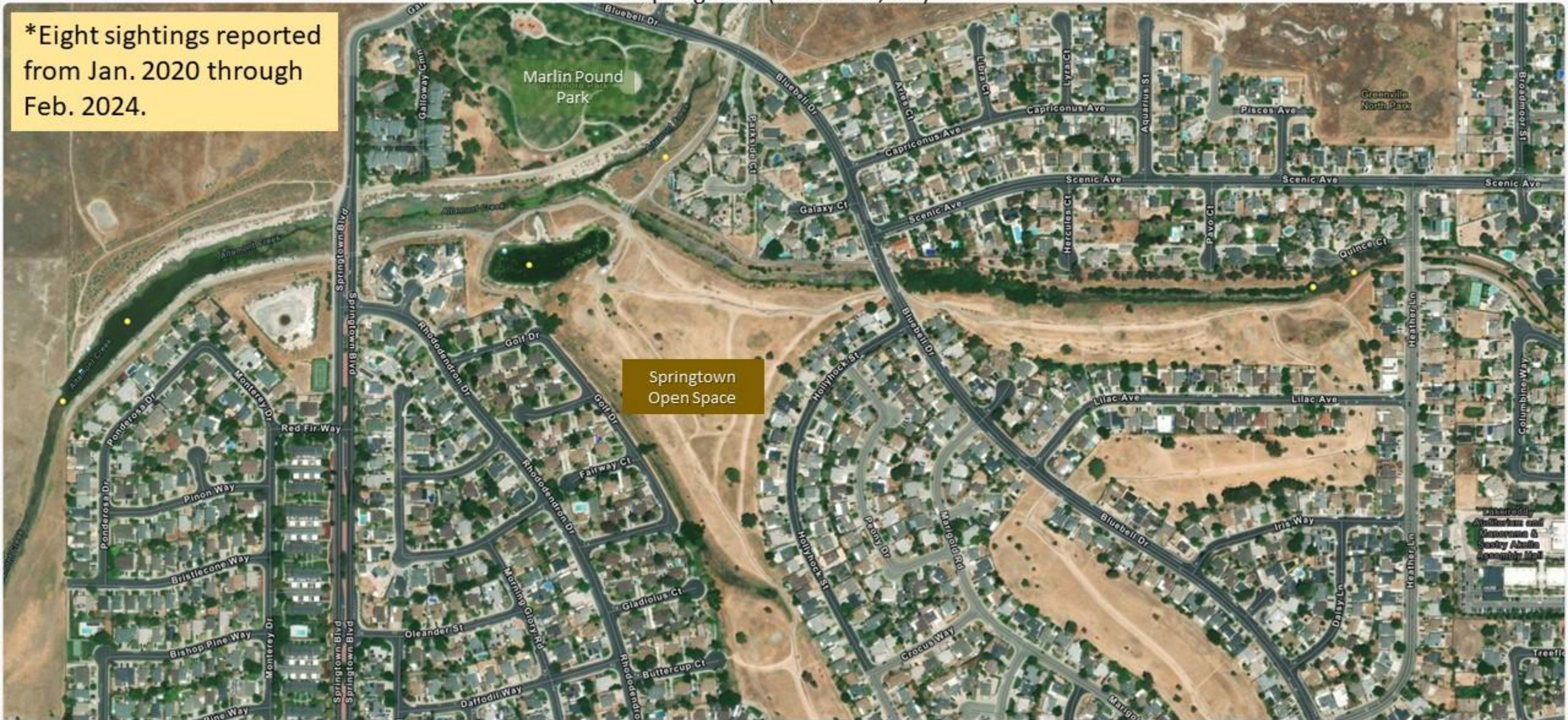


*© Lisa Davidson Farte*

# River Otter Reported Sightings\* on 'Otter Spotter'

Springtown (Livermore, CA)

\*Eight sightings reported from Jan. 2020 through Feb. 2024.





# Springtown River Otters



Questions?

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