



# Valley Water

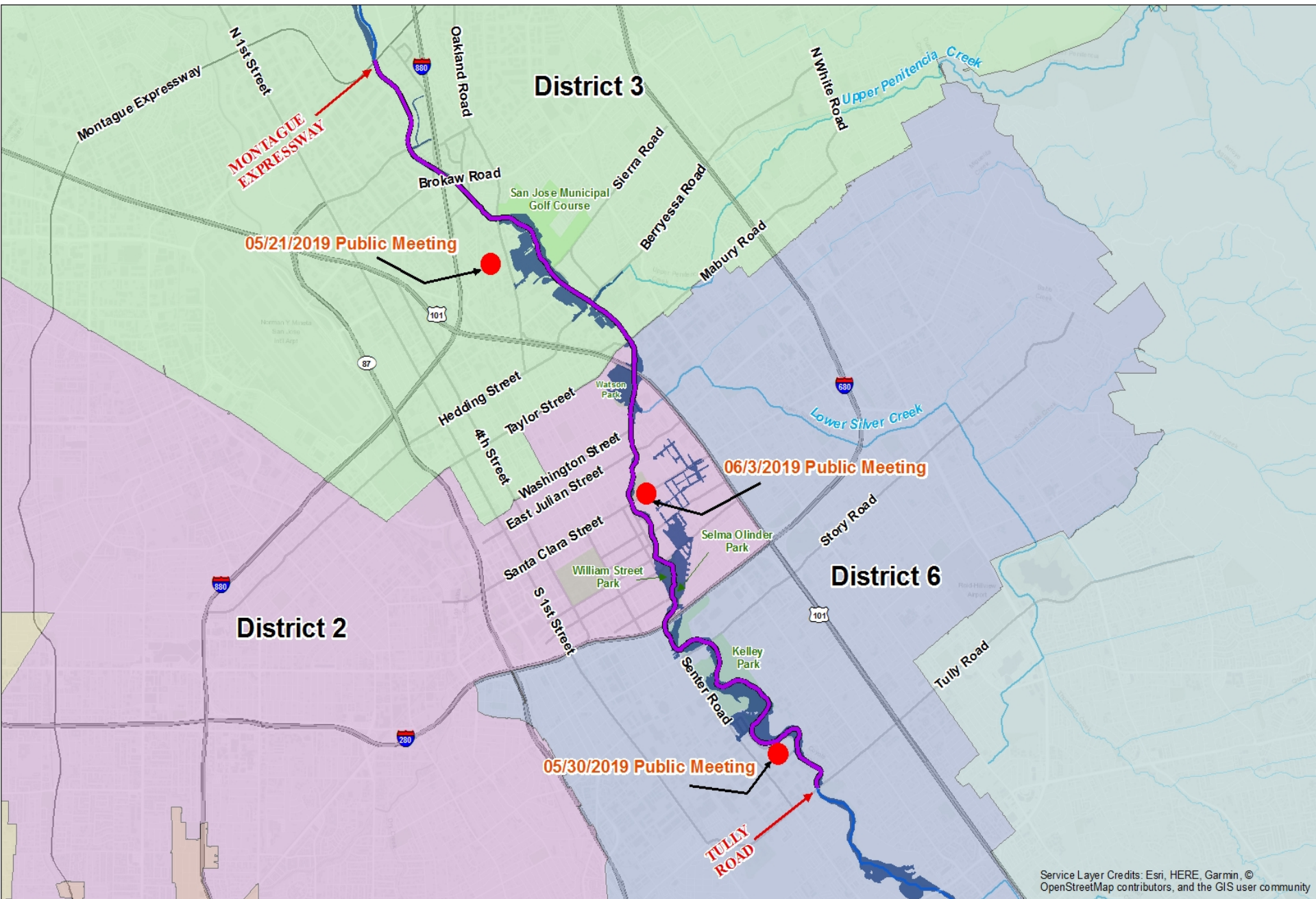
Clean Water • Healthy Environment • Flood Protection



# Coyote Creek Flood Protection Project

## Problem Definition and Refined Project Objectives

June 3rd, 2019 Public Meeting  
Roosevelt Community Center  
901 E. Santa Clara Street  
6:00 – 8:00 pm



# Flood Risk Reduction Work Since 2017



Floodwall and berm installation



Invasive vegetation Management and blockage removal



Installation of visible stream gauges



Levee Repair

# Agenda

5

**1. Project Setting**

**2. Project History and  
Description**

**3. Project Status and Timeline**

**4. Conceptual Solutions**

**5. Next Steps**



**MONTAGUE EXPRESSWAY**

**TULLY ROAD**

City of Santa Clara

City of San Jose

**Project Location**

SANTA CLARA COUNTY BOUNDARY



Milpitas

Lower Penitencia  
Creek

Upper Penitencia  
Creek

Lower Silver  
Creek

Upper Silver  
Creek

San  
Jose

DIABLO MOUNTAIN  
RANGE

COYOTE CREEK  
WATERSHED

Coyote  
Creek

Henry W. Goe  
State Park

Fisher  
Creek

Anderson  
Reservoir

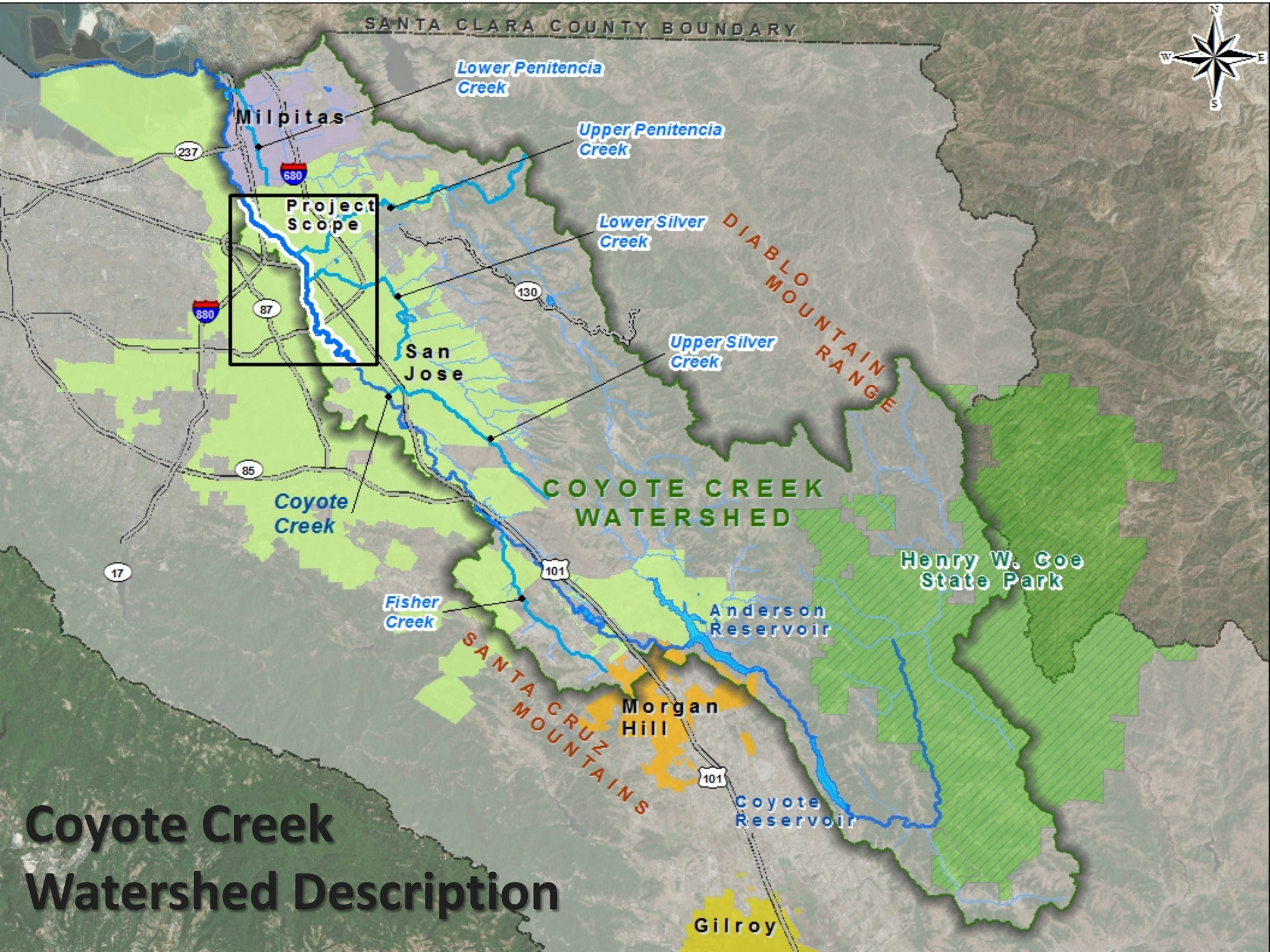
Morgan  
Hill

Coyote  
Reservoir

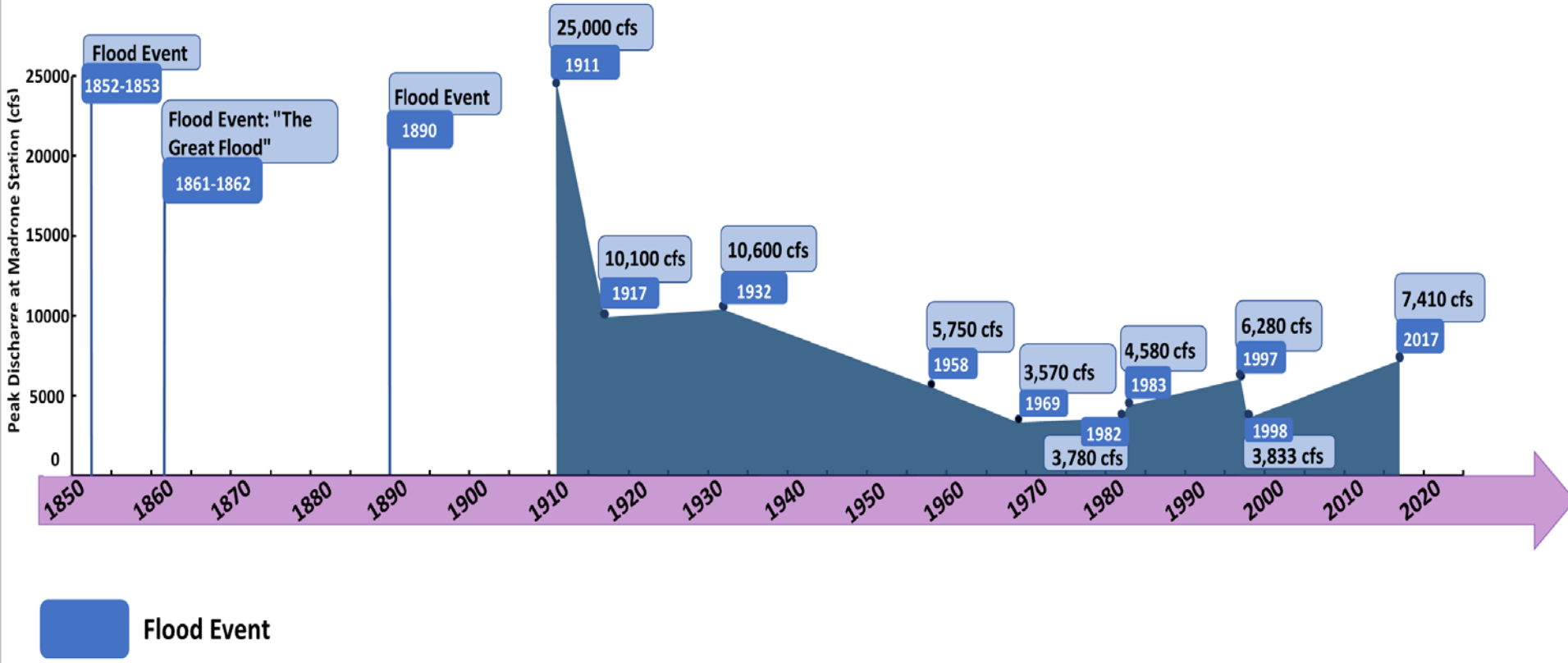
SANTA CRUZ  
MOUNTAINS

Gilroy

# Coyote Creek Watershed Description

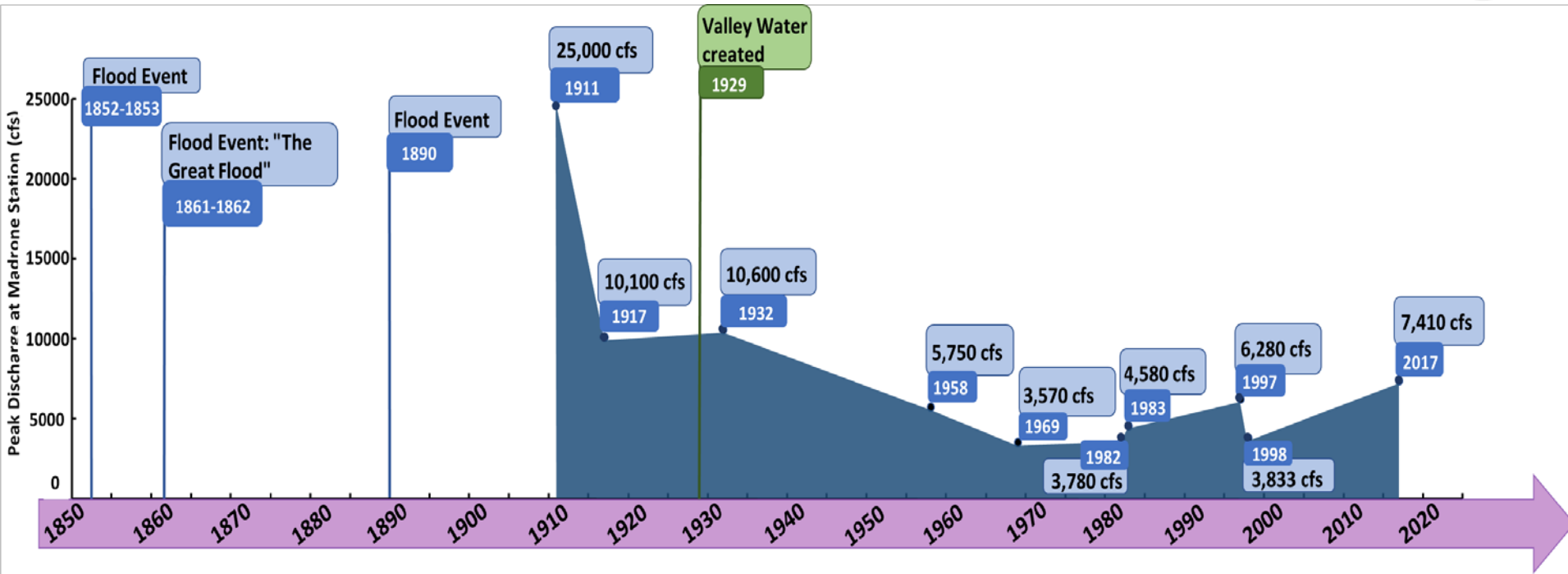


# History of Coyote Creek Floods



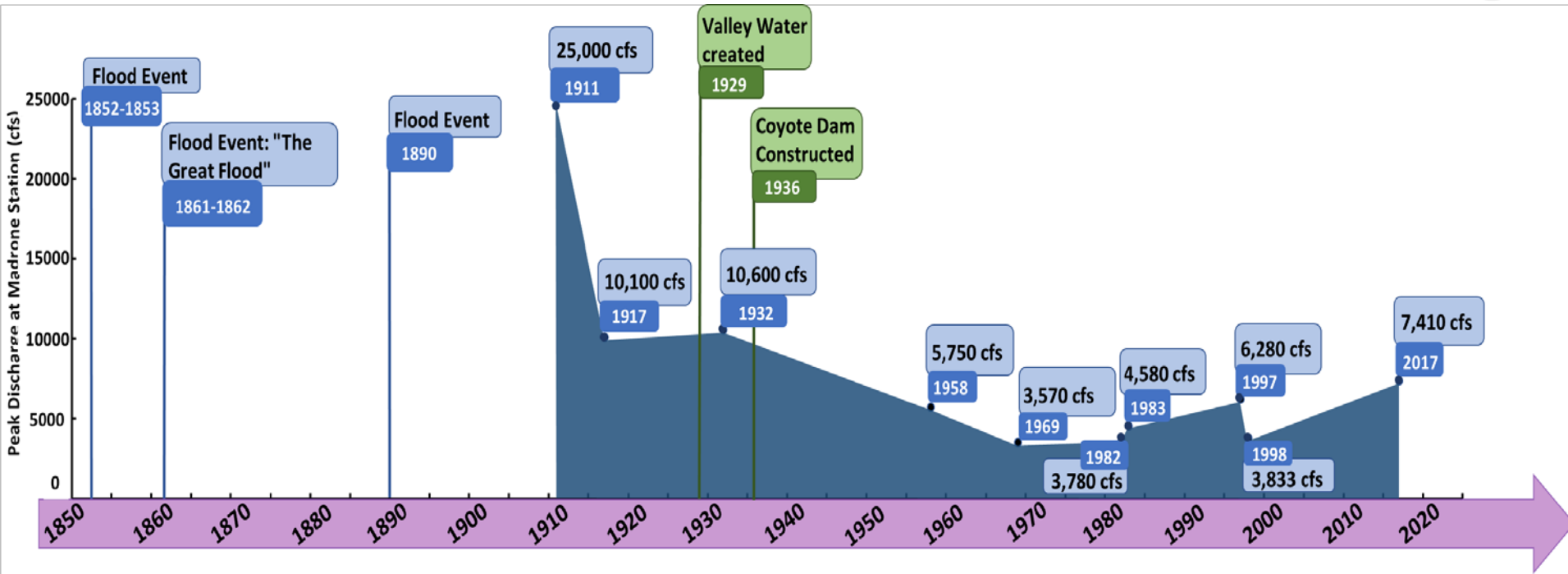


# History of Coyote Creek Floods



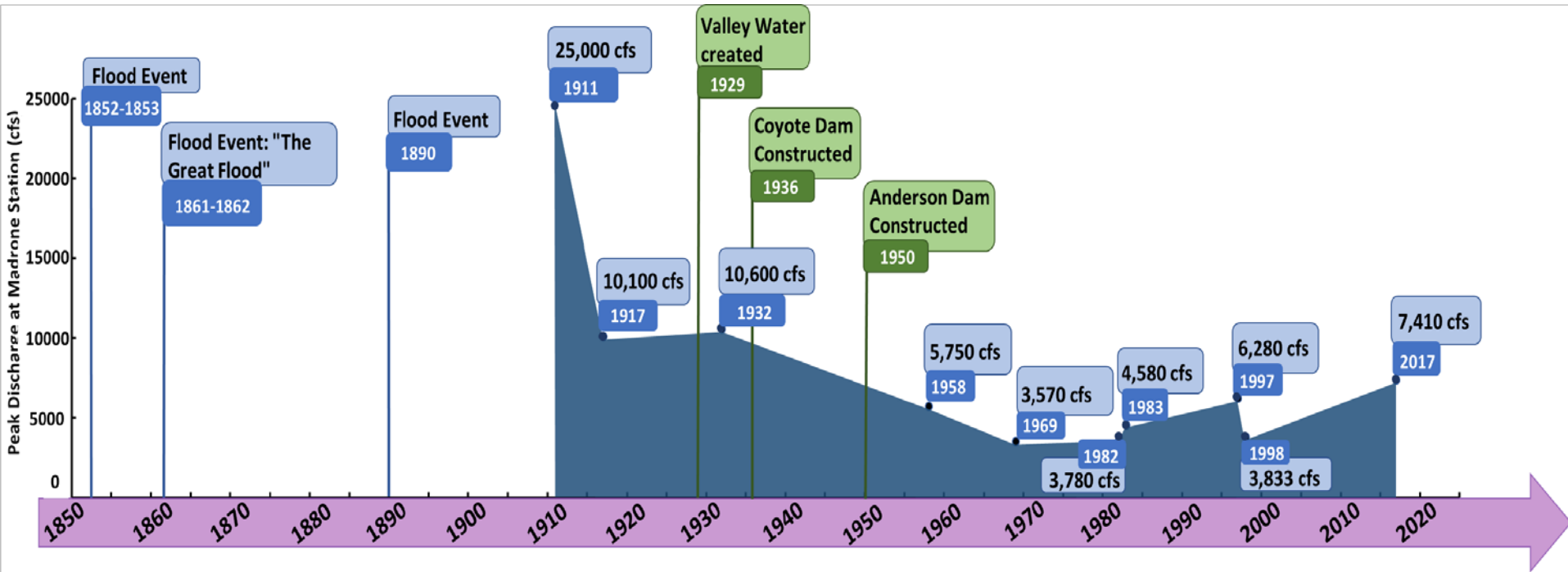
- Flood Event
- Valley Water Milestone Event


# History of Coyote Creek Floods



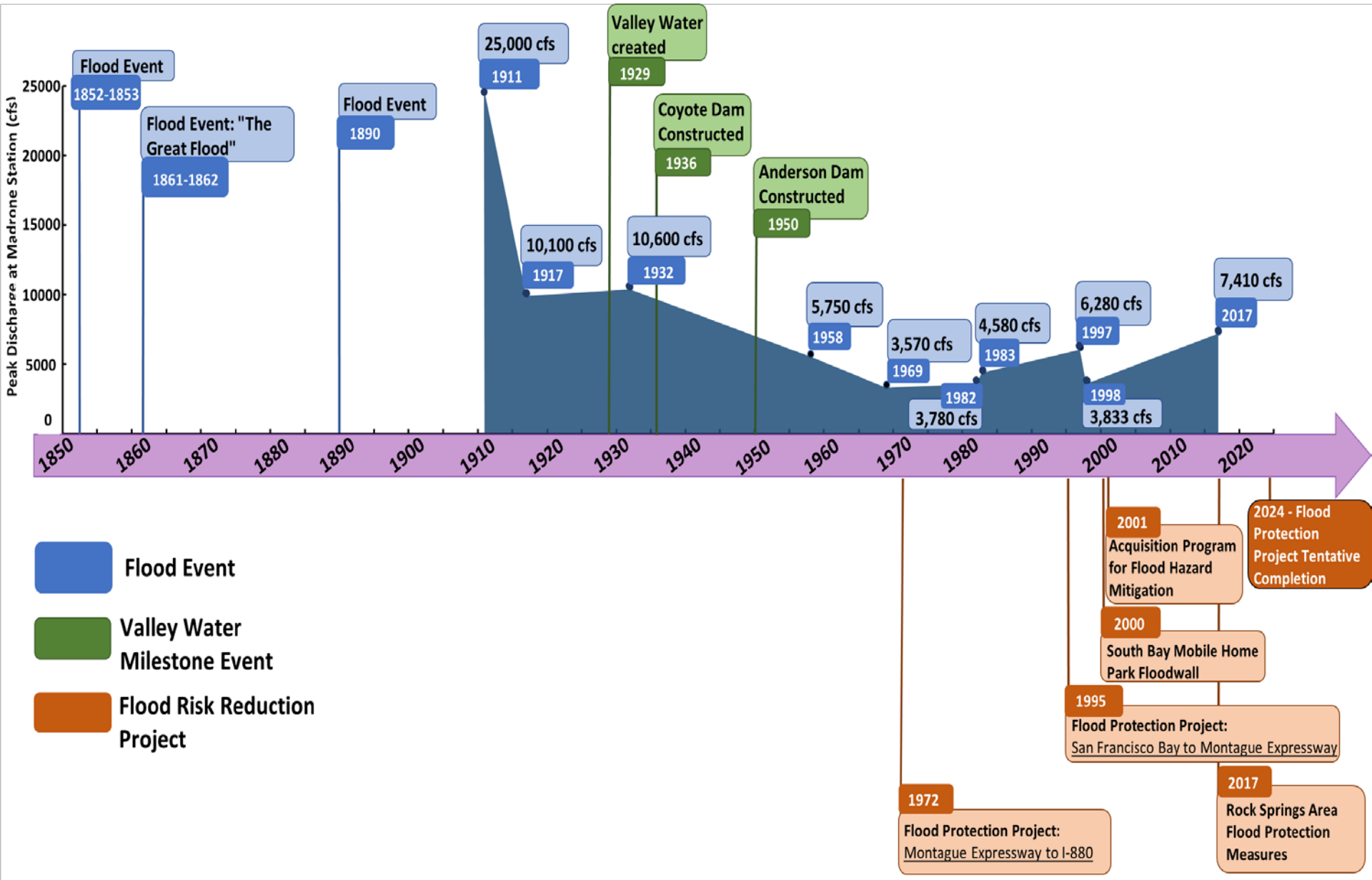
- Flood Event
- Valley Water Milestone Event

# History of Coyote Creek Floods



-  Flood Event
-  Valley Water Milestone Event

# History of Coyote Creek Floods



# Flooding History: Santa Clara Street, January 1890

13



Source: Loomis, P., *Signposts*, [Limited 1st ed.].  
San Jose Historical Museum Association. San Jose, Calif. 74 p.

Boating down W. Santa Clara Street, January, 1890

# Flooding History: Monterey Road, March 7-9, 1911



MONTEREY ROAD.  
MARCH 7-1911



# Flooding History: Nordale Avenue, January 27, 1997

15



# Flooding History: Golden Wheel Mobile Home Park, February 8, 1998

16

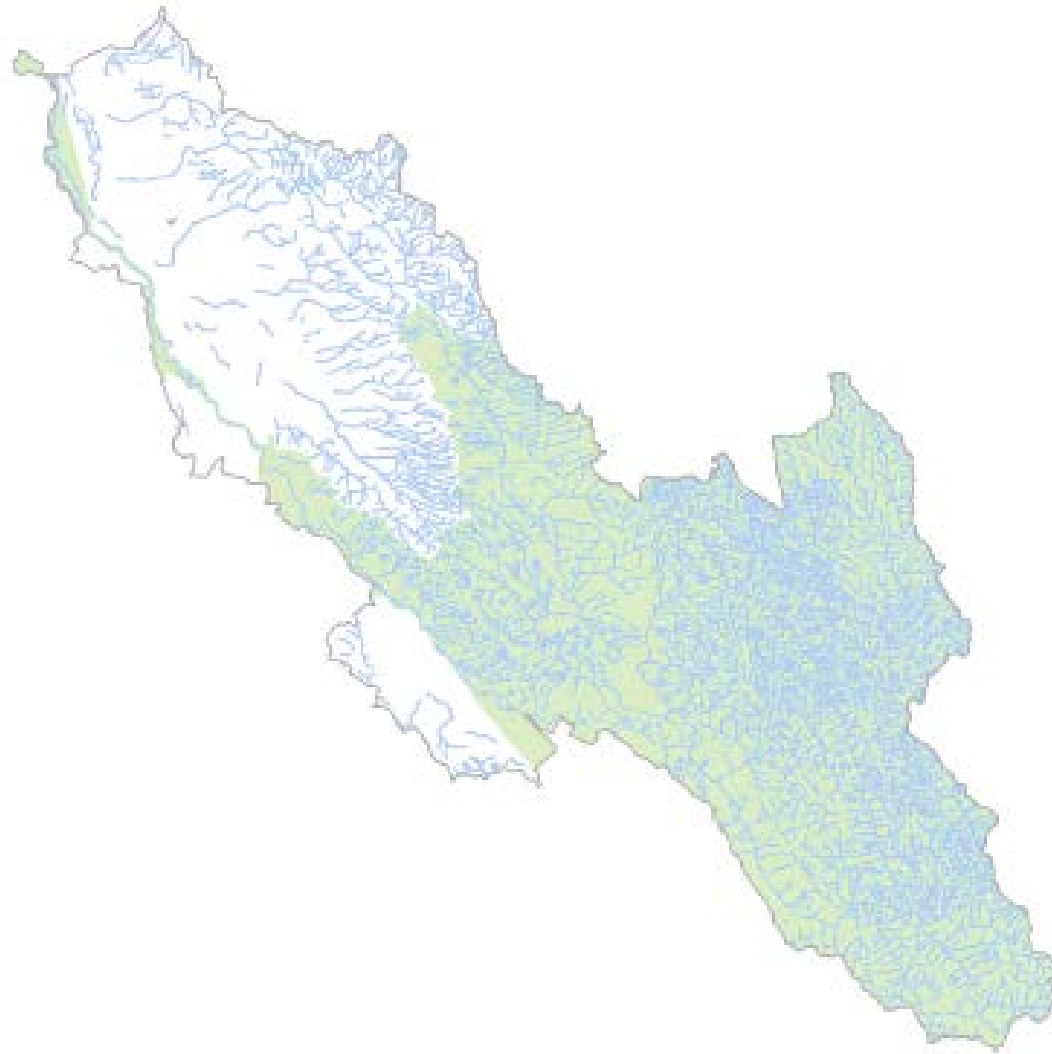


*Photographer Richard Wisdom, San Jose Mercury News*



# Watershed Modifications - 1800s

17



*Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.*

# Watershed Modifications - 1852

18



*Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.*

# Watershed Modifications - 1895

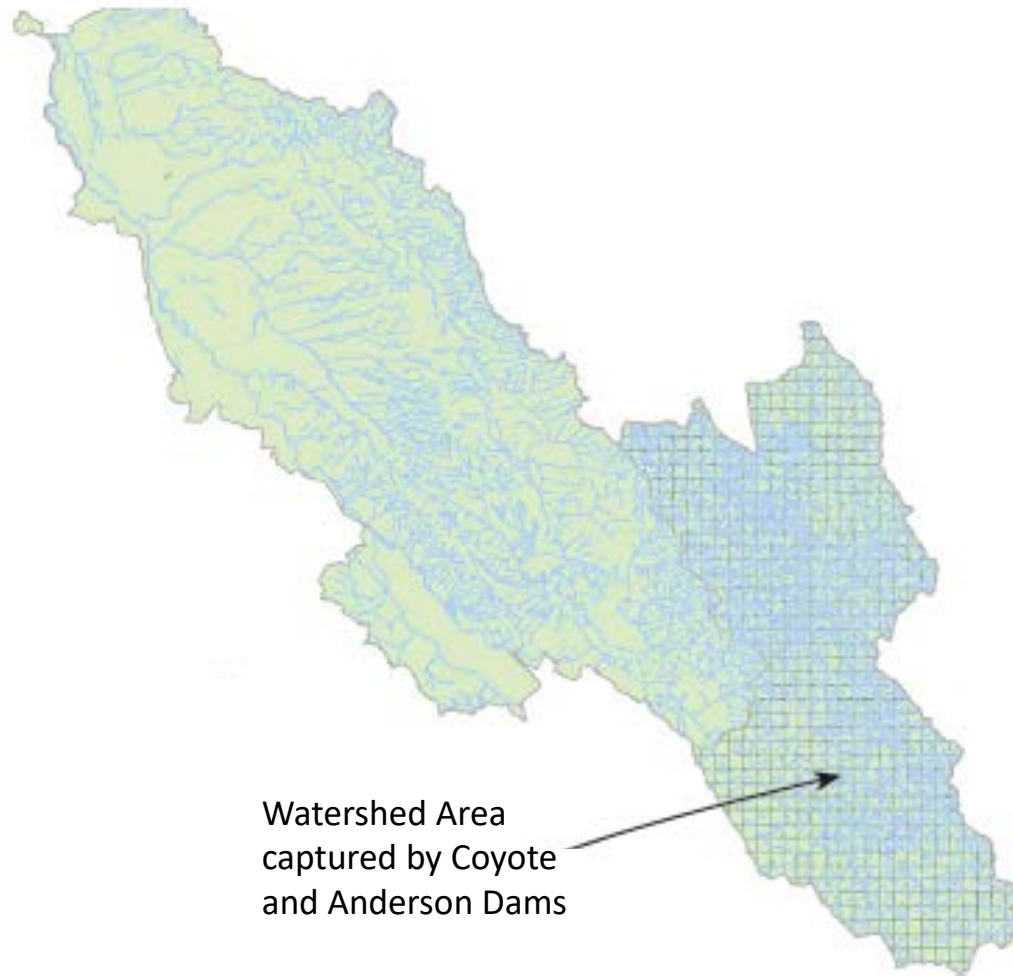
19



*Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.*

# Watershed Modifications - 1950

20

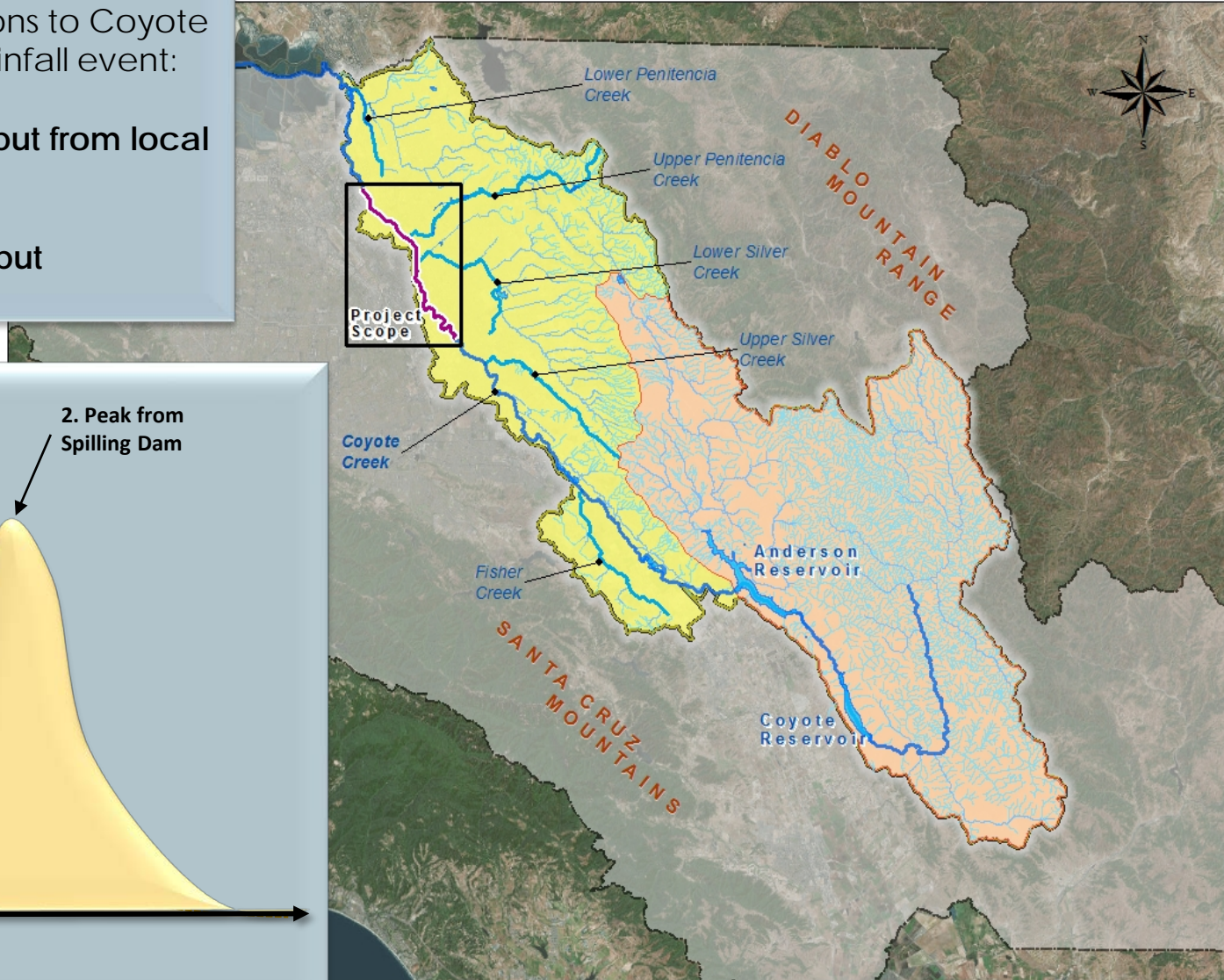
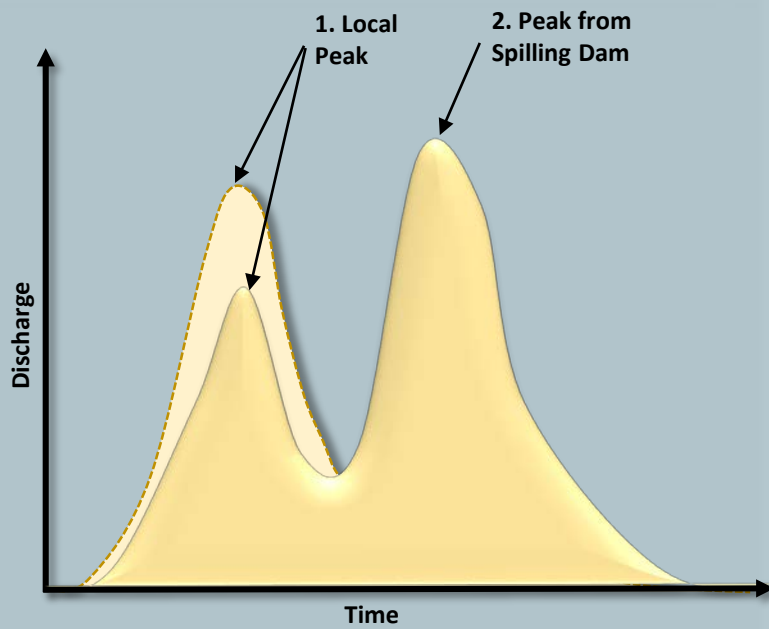


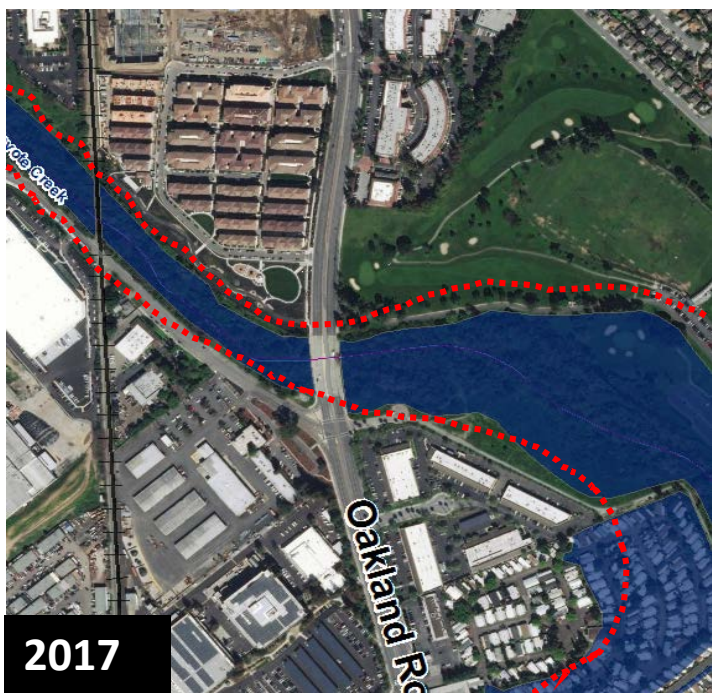
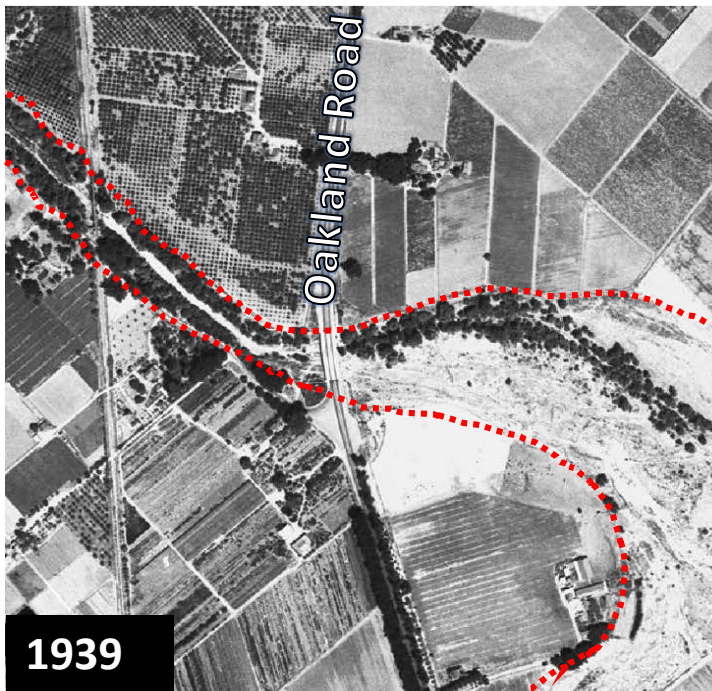
Source: Grossinger, Robin, et al., 2006. *Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.*

# Local Peak versus Upper Watershed Peak

Two main flow contributions to Coyote Creek in response to a rainfall event:

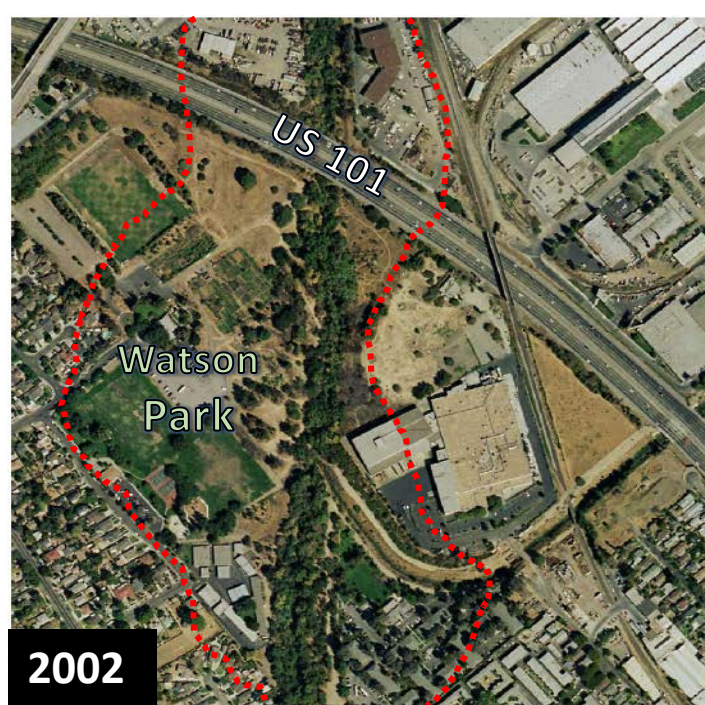
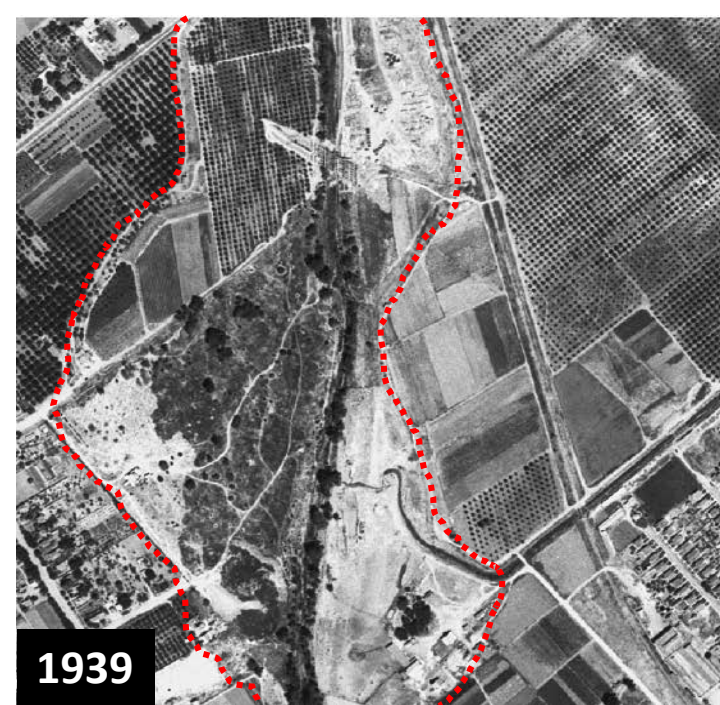
1. Direct watershed input from local tributaries, and/or
2. Upper watershed input





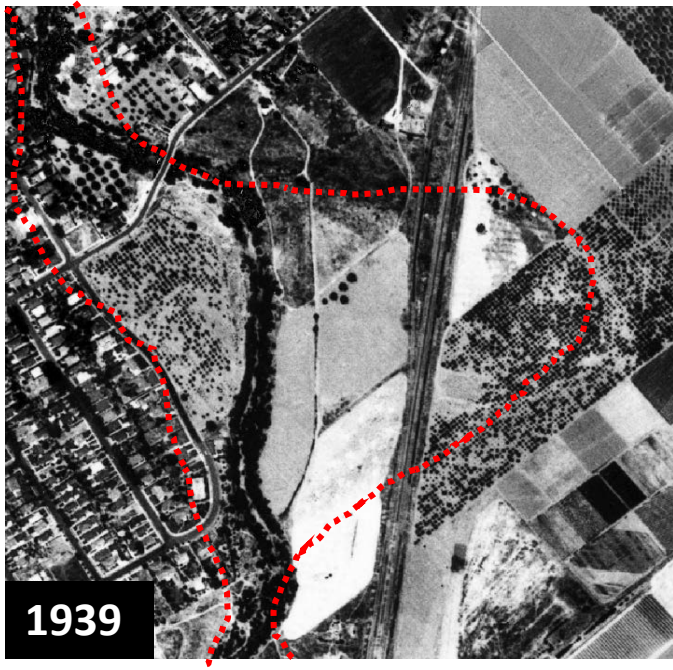
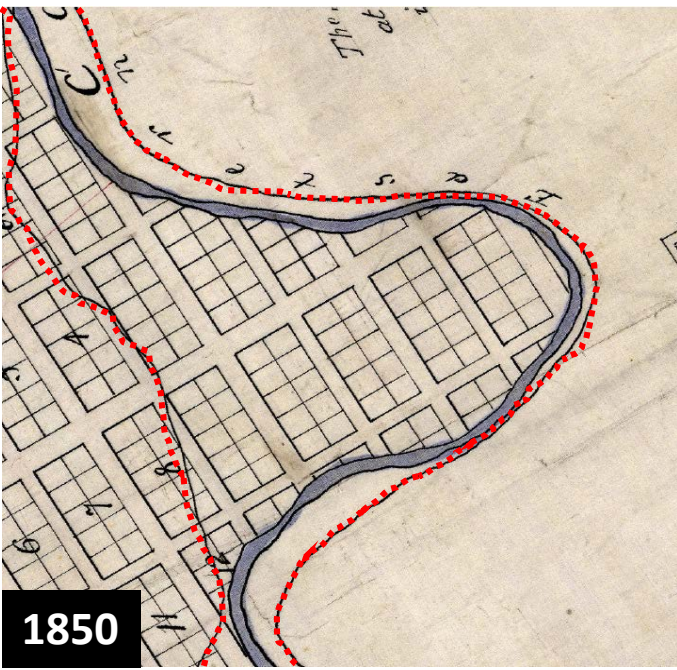
## Historical Landscape Conditions: *Oakland Road*

Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.



## Historical Landscape Conditions: *Watson Park*

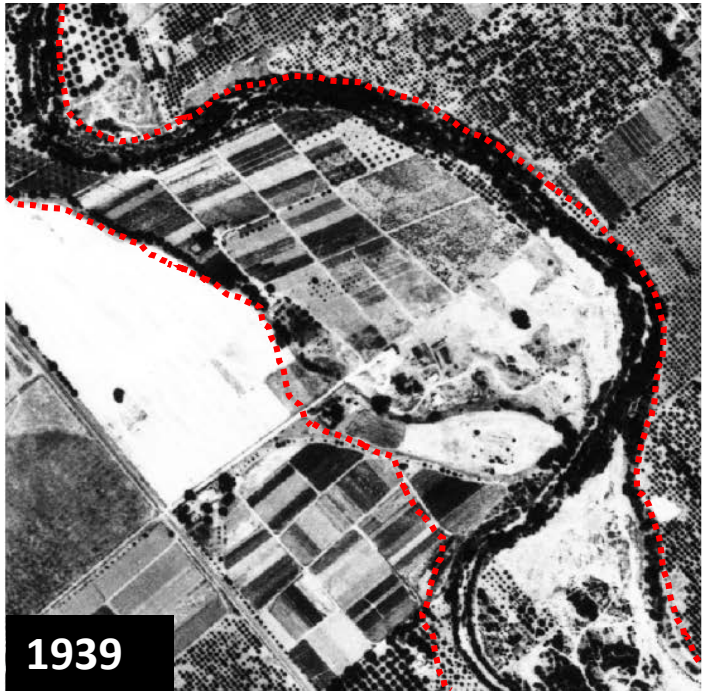
Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.



**William Street Park  
& Selma Olinder Park**

Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, CA.





## Historical Landscape Conditions: *Kelley Park*

Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.

# Peak Flows Summary Results

26

Location	February 2017 Observed Flows (cfs)	February 2017 if flows confined within channel (cfs)	Upper Watershed Peak Design Storm (cfs)	1% Local Peak Design Storm (cfs)
I-280	7,250	7,250	7450	3,590
East William Street	7,200	7,250	7450	3,630
Berryessa Road	7,550	7,600	8380	8,450
I-880	7,400	7,600	8400	8,570

# Project History

## Coyote Creek Flood Protection

\$32 Million allocated to Mid-Coyote Creek project, 100-year flood protection

**November 2000**  
Voters approve Clean, Safe Creeks and Natural Flood Protection Plan

**2006-2009**  
Search for additional funding and federal partnership

District attempted to obtain additional USACE funding but was not successful

Cost estimated between  
\$500 Million and \$1 Billion

**2011**

Mid-Coyote Creek Planning  
Study completed

**2011-2012**

Design for downstream  
reaches initiated

Design paused due to  
uncertainties of impacts from  
related projects

Project's remaining budget  
carries forward

**November 2012**

Voters approve Safe, Clean  
Water, and Natural Flood  
Protection Program

## 2016 -2017 Winter Season

California experienced precipitation at 190% of average

- Project scope extended
- Change of target protection
- Short-term relief solutions
- Use local funding to complete planning and design phases of near term project
- Identify additional partnerships

Coyote Creek overtopped its banks at several locations between Montague Expressway and Tully Road

## June 2017

Modification of original project goals and acceleration of project

Current Coyote  
Creek Flood  
Protection Project

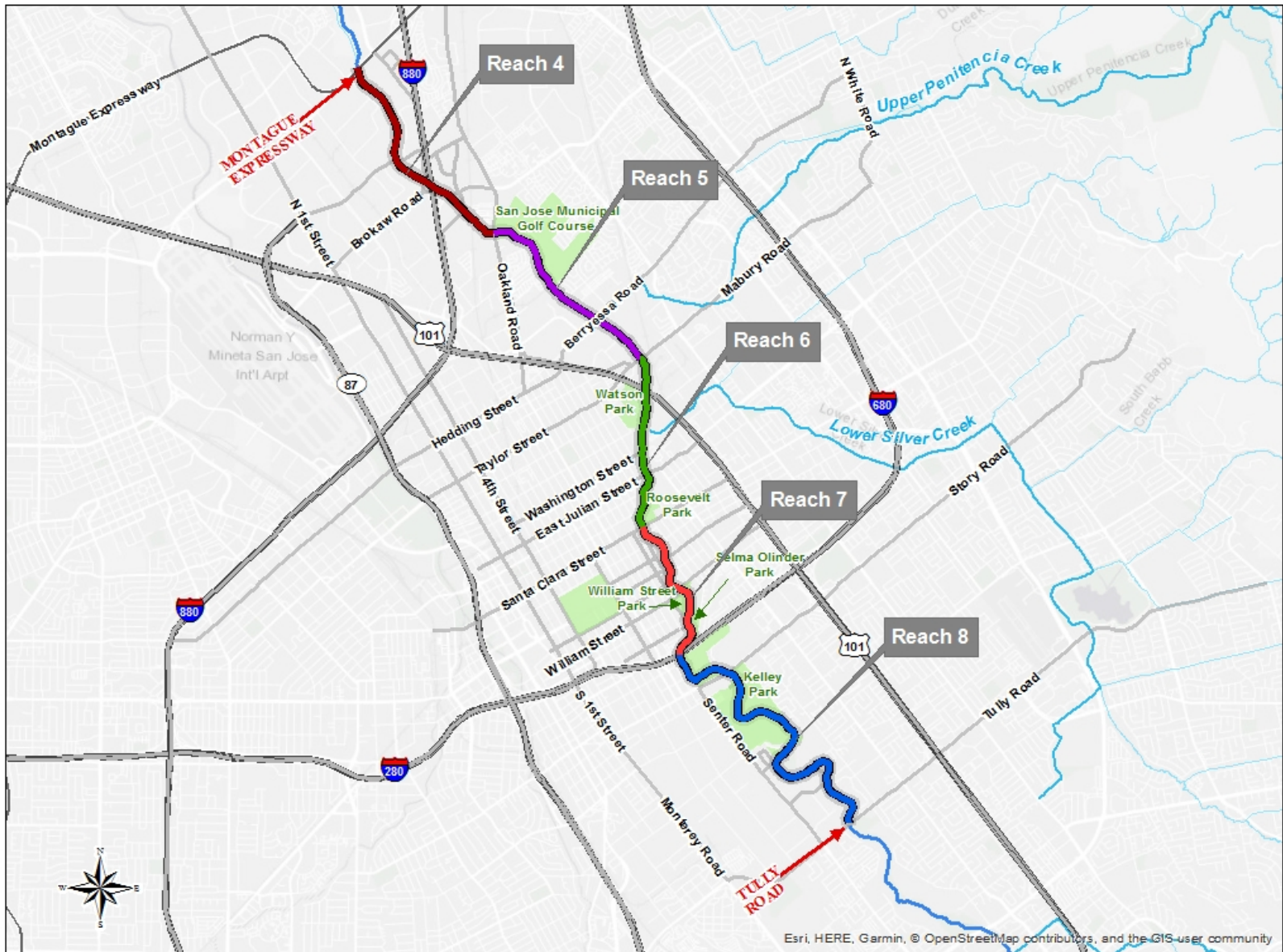
Project Objective:

# **Reduce Risk of Flooding from a flood event equivalent to the February 2017 event**

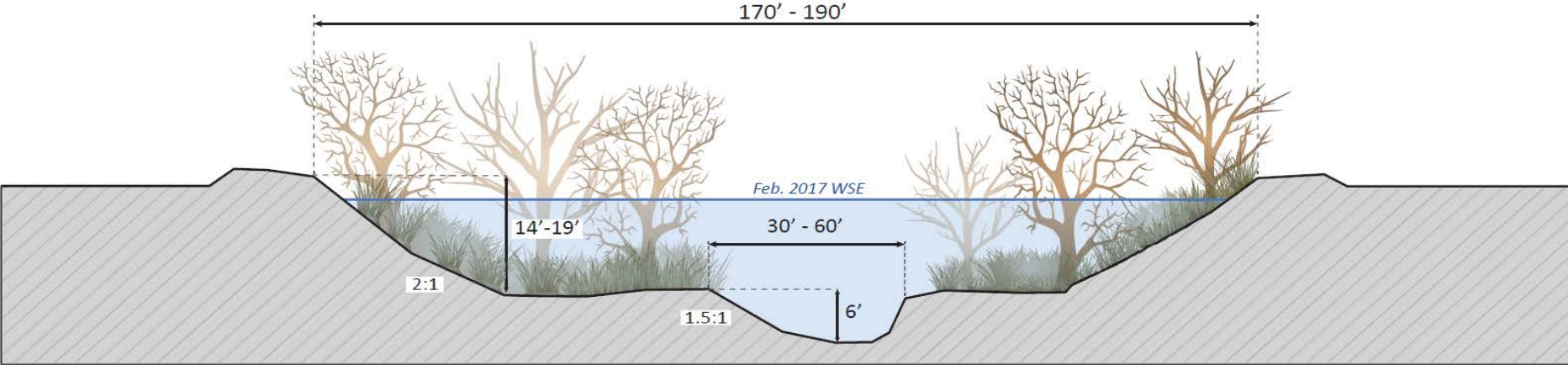
Additional Project goals:

- **Stream Habitat Enhancement**
- **Improve Water Quality**
- **Provide for Public Access and Recreation**
- **Minimize Need for Future Maintenance Activities**

# Project Reaches

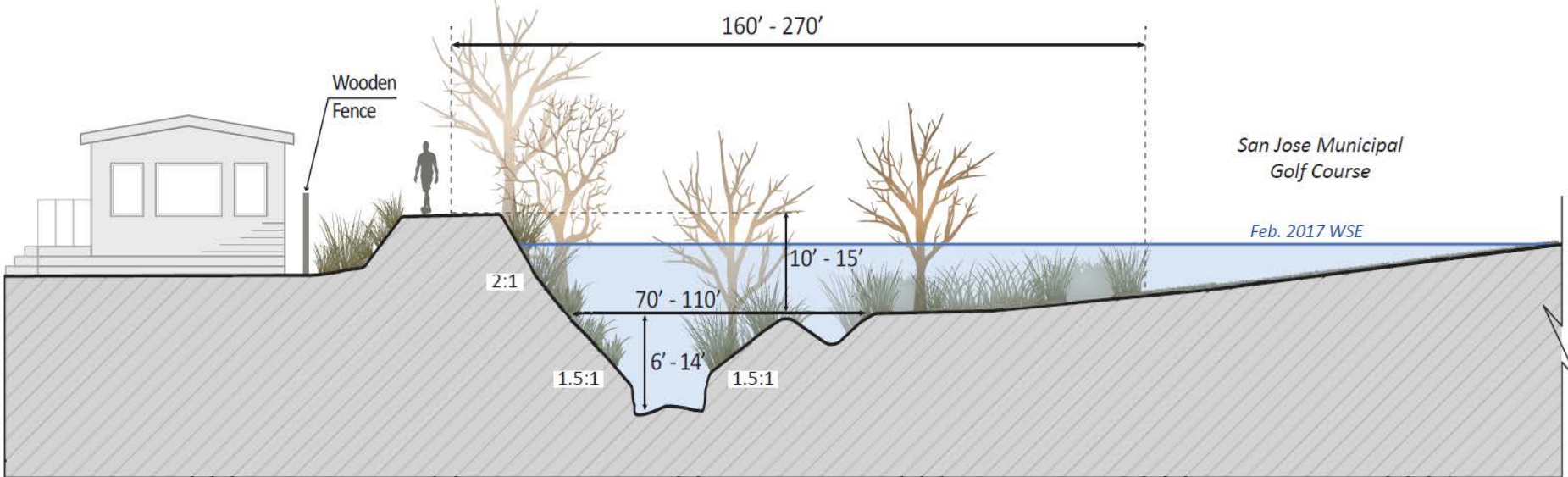


# Reach 4: Montague Expressway to Old Oakland Road



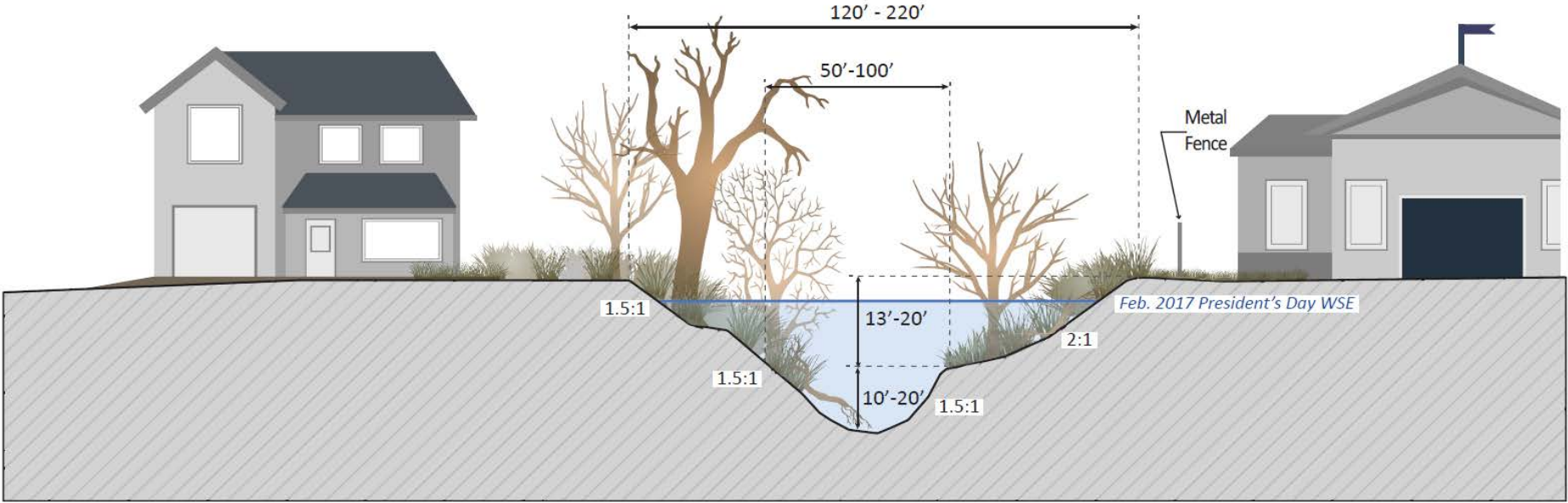


# Reach 5: Old Oakland Road to Mabury Road

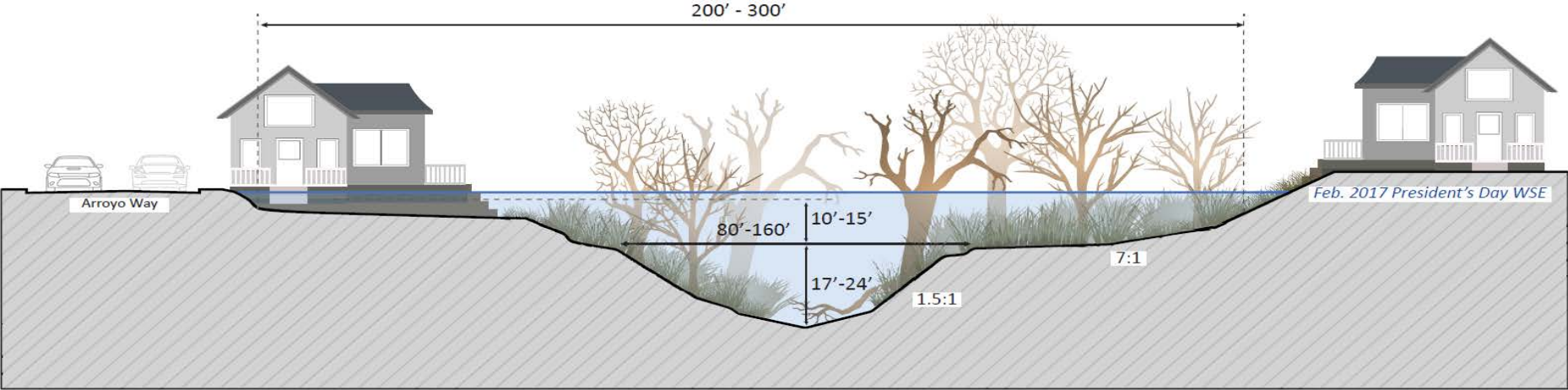
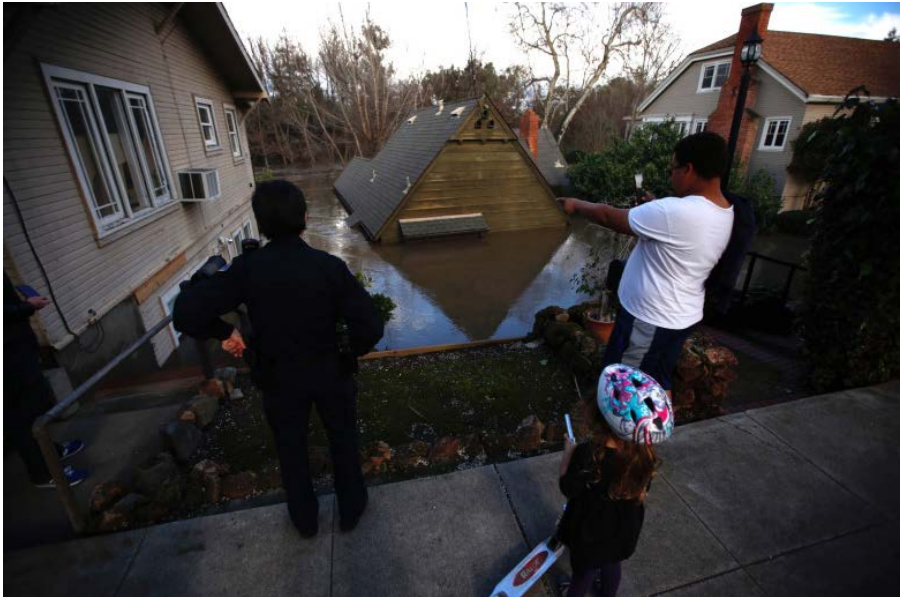


NOT TO SCALE

# Reach 6: Mabury Road to East Santa Clara Street



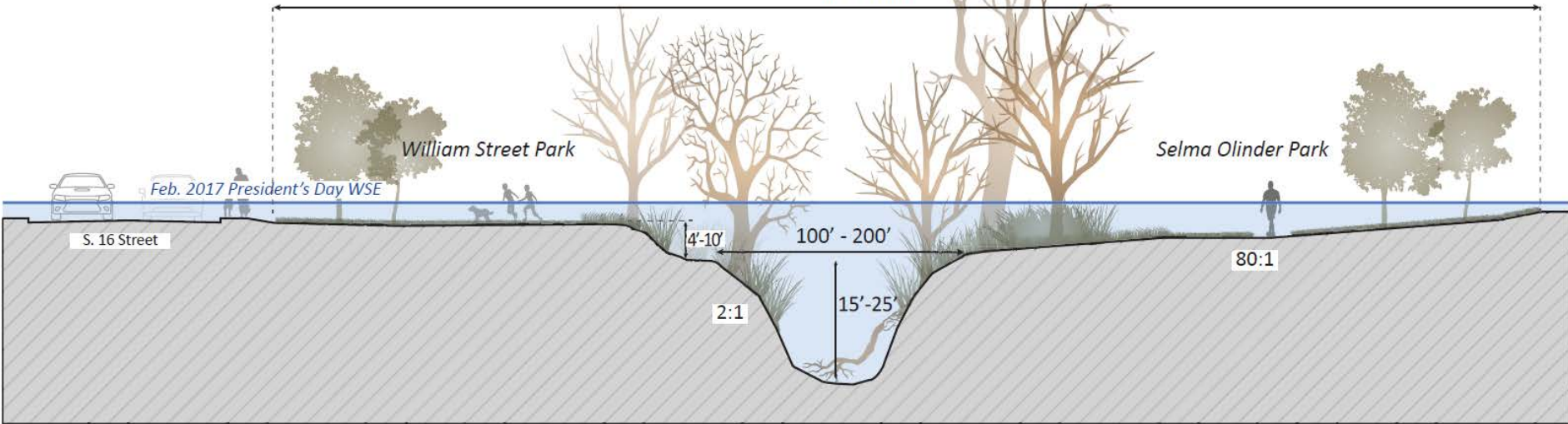
# Reach 7: East Santa Clara Street to I-280



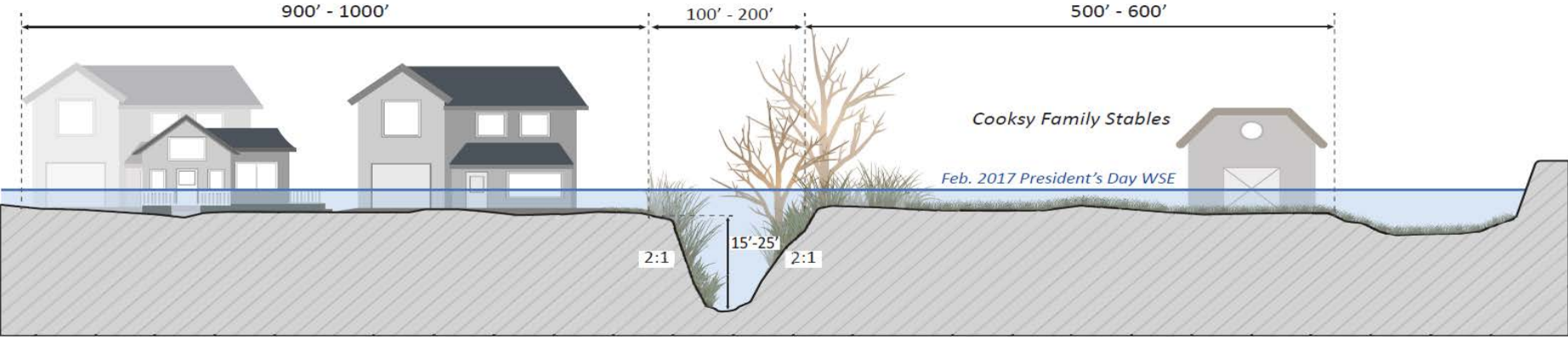
# Reach 7: East Santa Clara Street to I-280



400' - 1000'



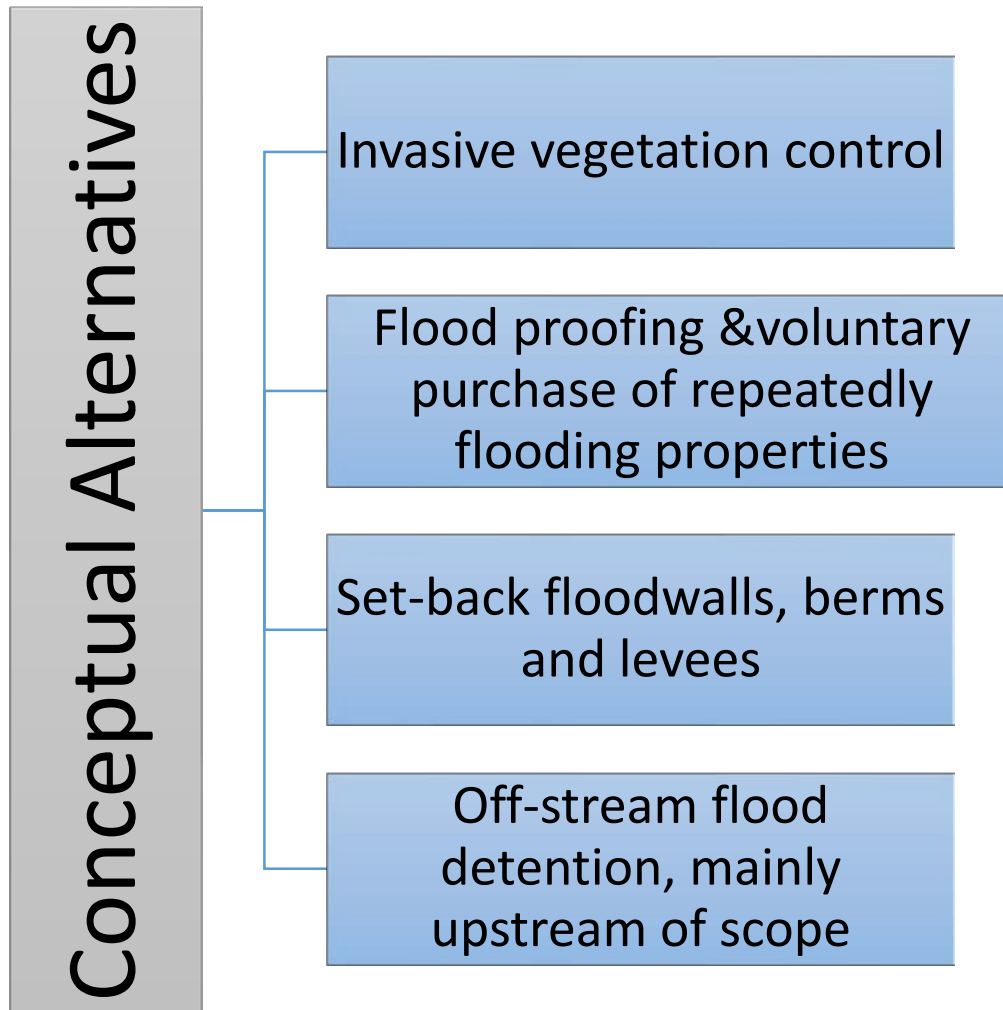
# Reach 8: I-280 to Tully Road



# Project Components, Status and Timeline

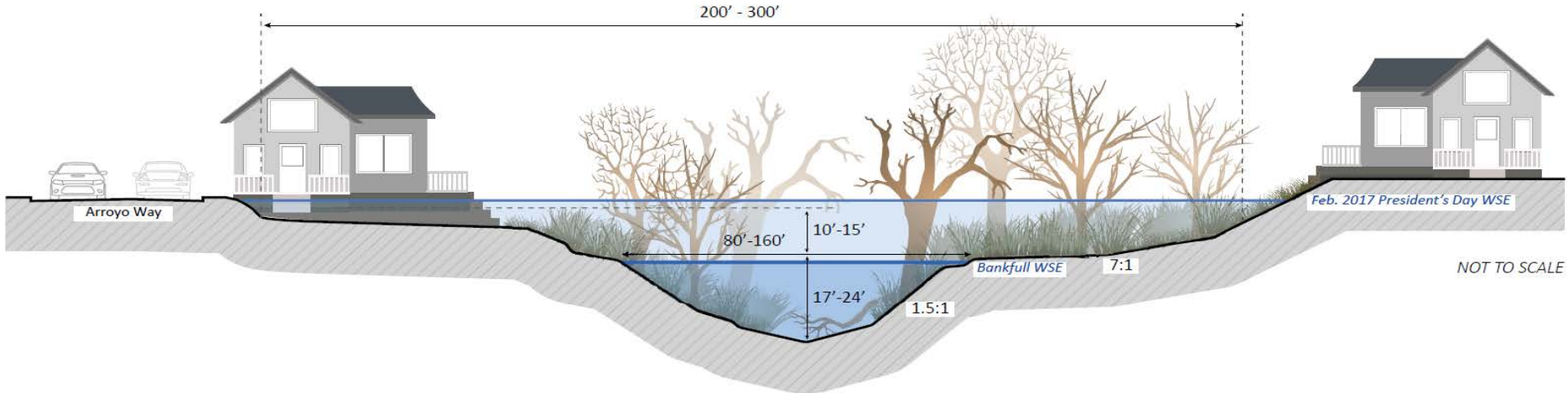
**Expedited Project Timeline:** Assumes project alternative selected for implementation does not require extensive permitting

Components	2017	2018	2019	2020	2021	2022	2023	2024
Problem Definition								
Conceptual Alternatives								
Feasible Alternatives								
Planning Study Report								
Design and Permitting								
Construction								

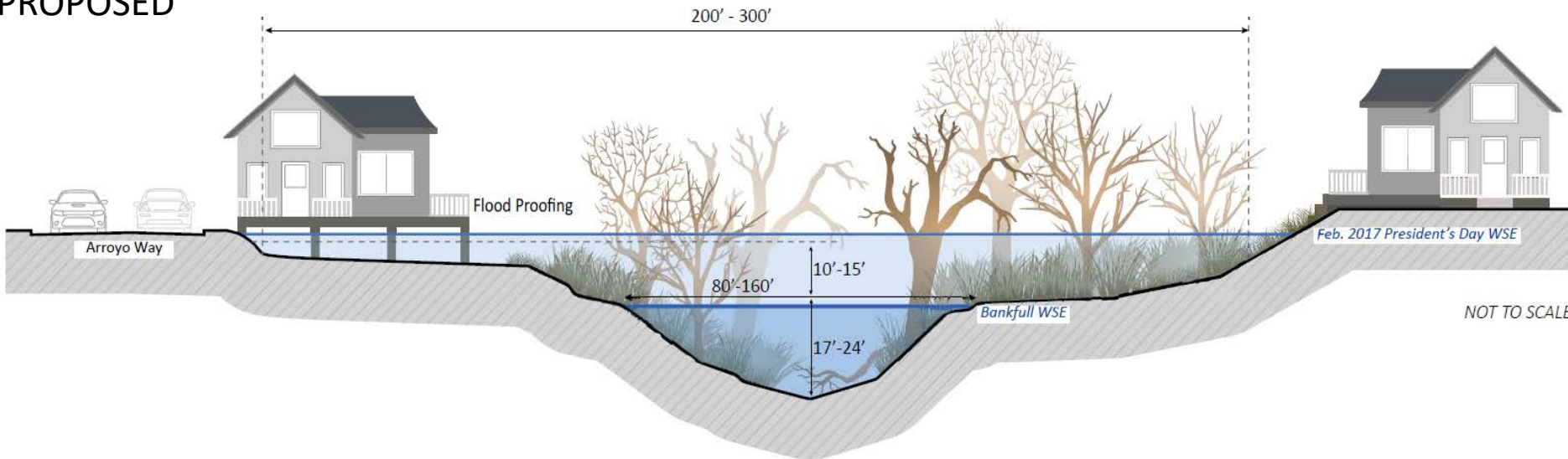


# Flood Proofing

## EXISTING



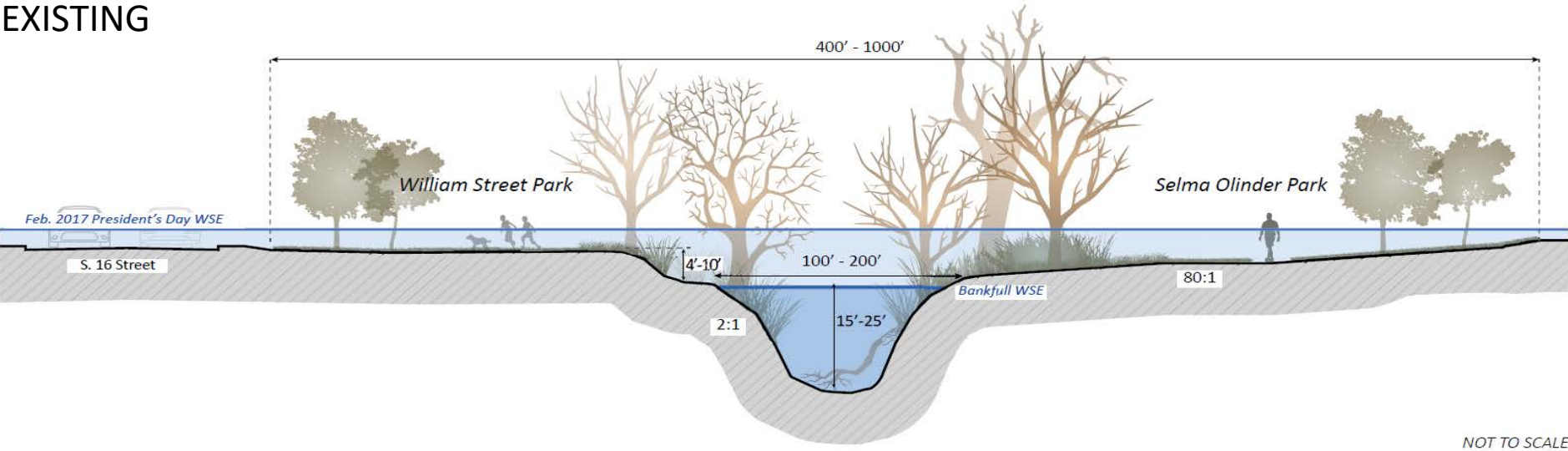
## PROPOSED



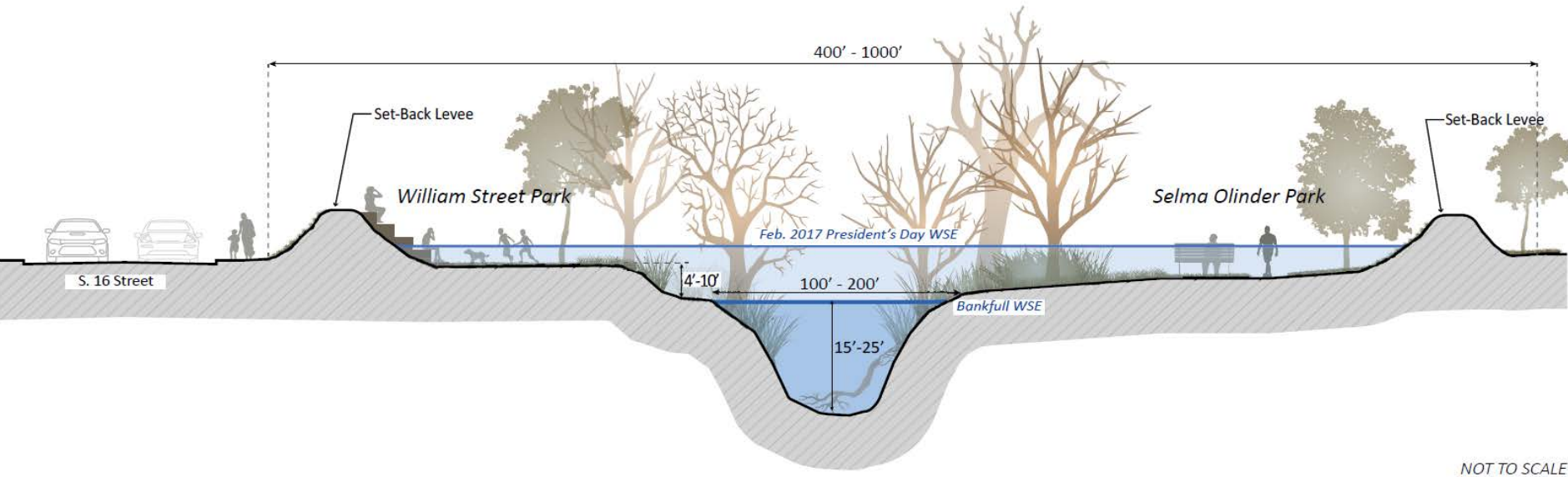


# Set-back berms and levees

## EXISTING

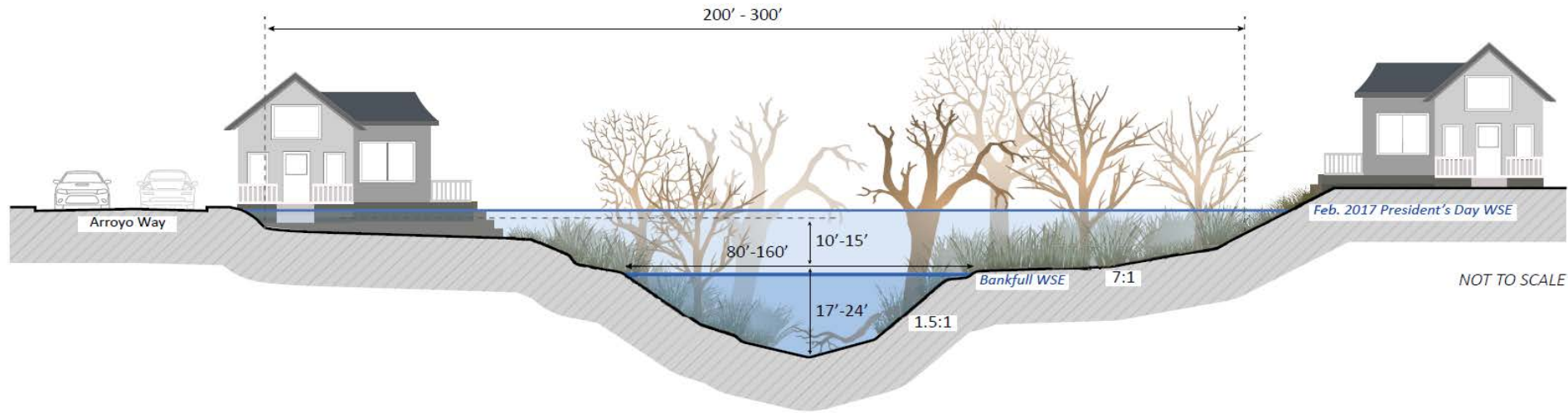


## PROPOSED



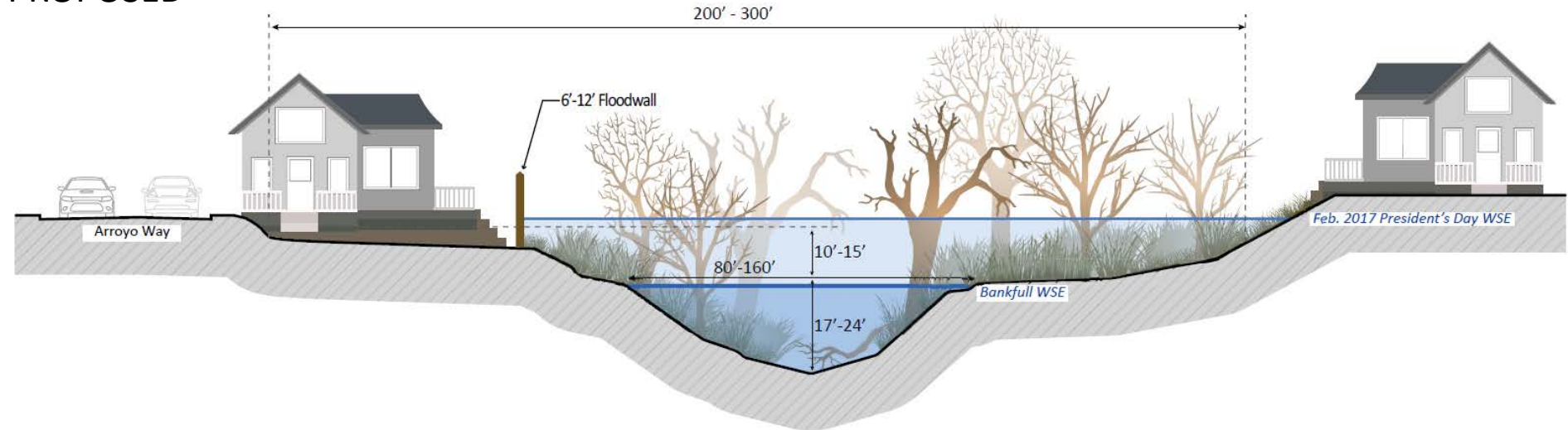
# Floodwalls

## EXISTING



NOT TO SCALE

## PROPOSED

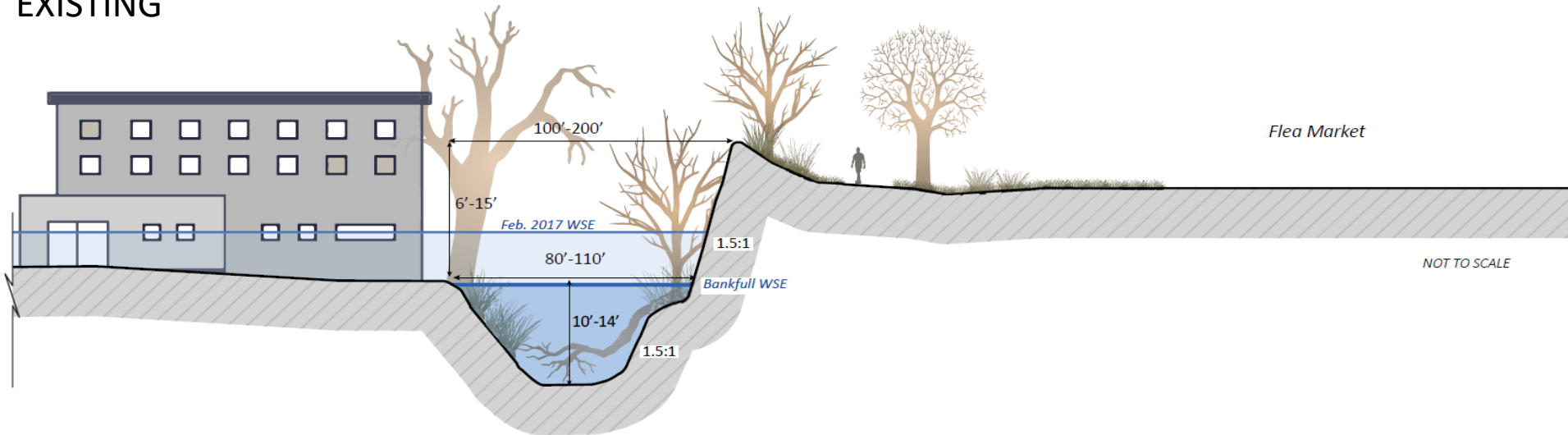


NOT TO SCALE

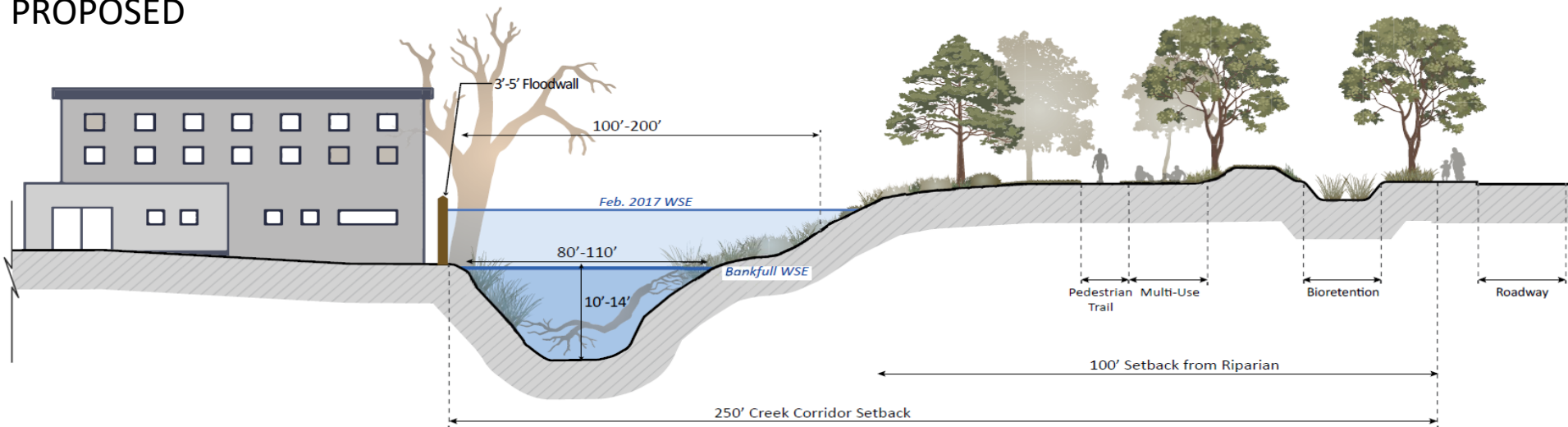
# Flood protection and additional enhancements

43

## EXISTING



## PROPOSED



NOT TO SCALE

# Next Steps

Problem Definition Report: Nov 2017 – Jan 2019 (Draft Completed)

- Public meetings scheduled for the end of May to incorporate public comments and finalize



Conceptual and Feasible Alternatives: Sep 2018 - Sep 2019

Planning Study Report: July 2019 – Jan 2020

Design, CEQA and Permitting: Jan 2020 – Dec 2021

Construction: Jan 2022 – Dec 2024

# For more information

Afshin Rouhani

[ARouhani@valleywater.org](mailto:ARouhani@valleywater.org)

408-334-3646

Dámaris Villalobos-Galindo

[DVillalobos-Galindo@valleywater.org](mailto:DVillalobos-Galindo@valleywater.org)

408-630-3165

Jose Villarreal

[jvillarreal@valleywater.org](mailto:jvillarreal@valleywater.org)

408-630-2879

# QUESTIONS





# Valley Water

Clean Water • Healthy Environment • Flood Protection

