



# Valley Water

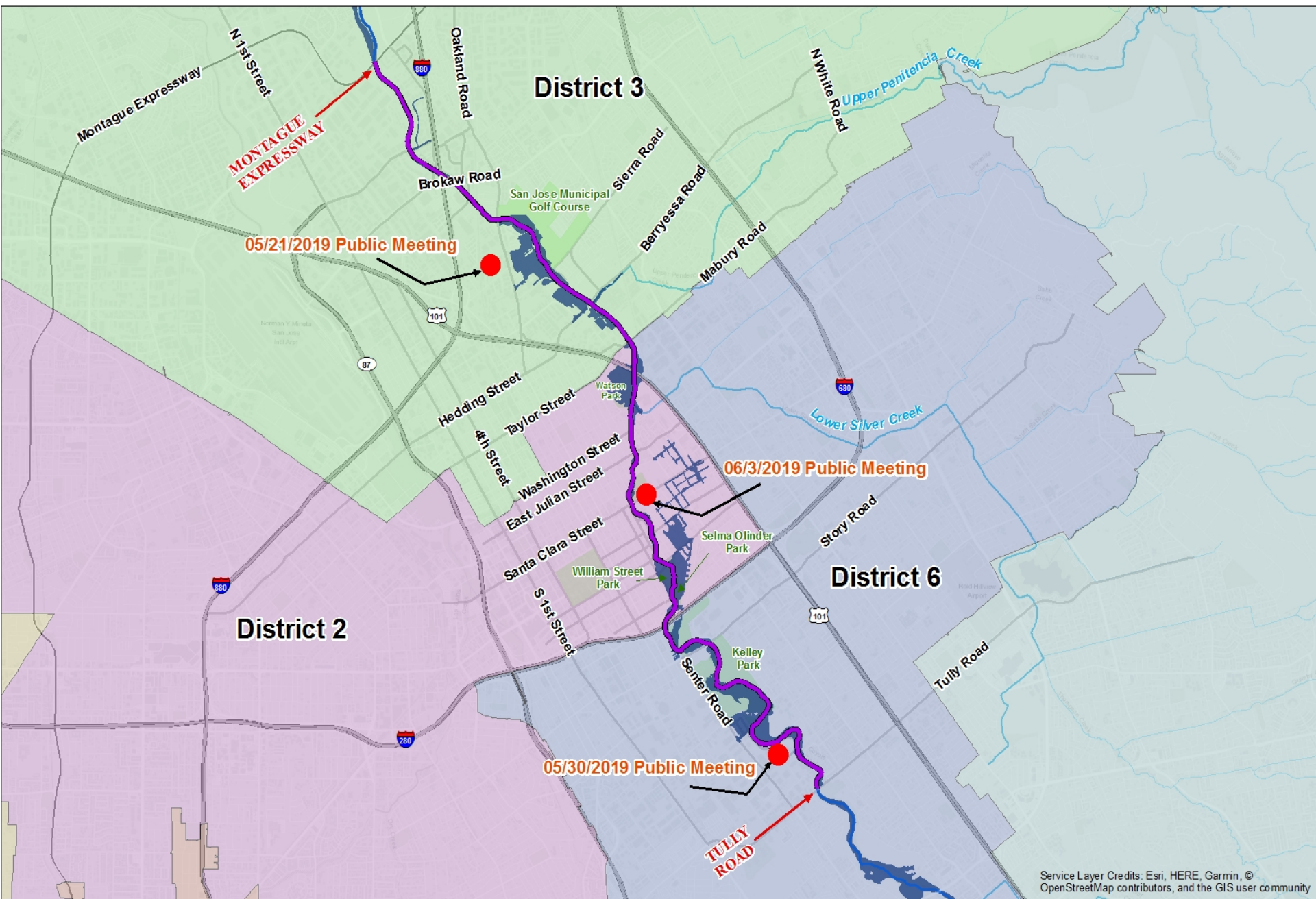
Clean Water • Healthy Environment • Flood Protection



# Coyote Creek Flood Protection Project

## Problem Definition and Refined Project Objectives

May 30<sup>th</sup>, 2019 Public Meeting  
Franklin-McKinley School District  
645 Wool Creek Drive  
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

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**1. Project Setting**

**2. Project History and  
Description**

**3. Project Status and Timeline**

**4. Conceptual Solutions**

**5. Next Steps**



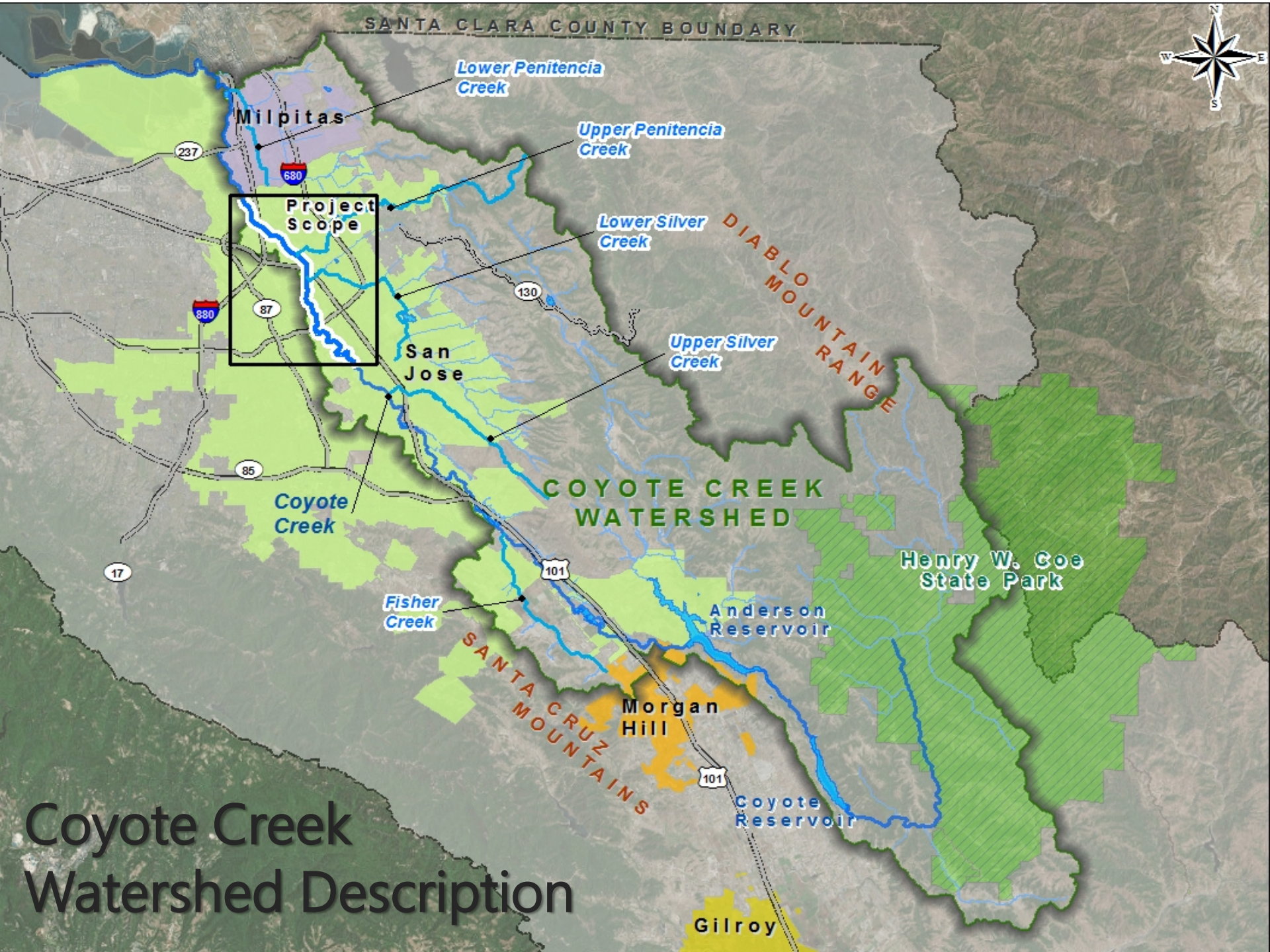


**MONTAGUE  
EXPRESSWAY**

**TULLY  
ROAD**

**Project Location**

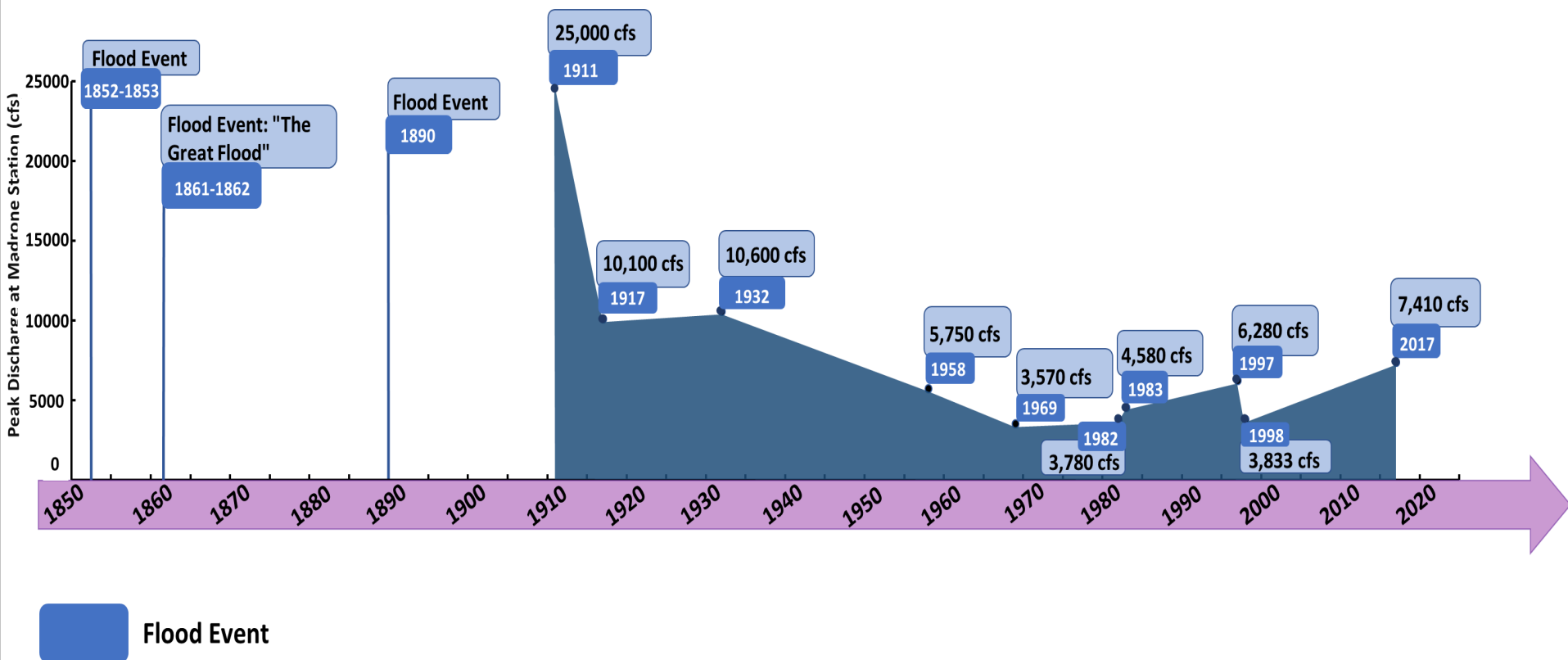




# Coyote Creek Watershed Description

# History of Coyote Creek Floods

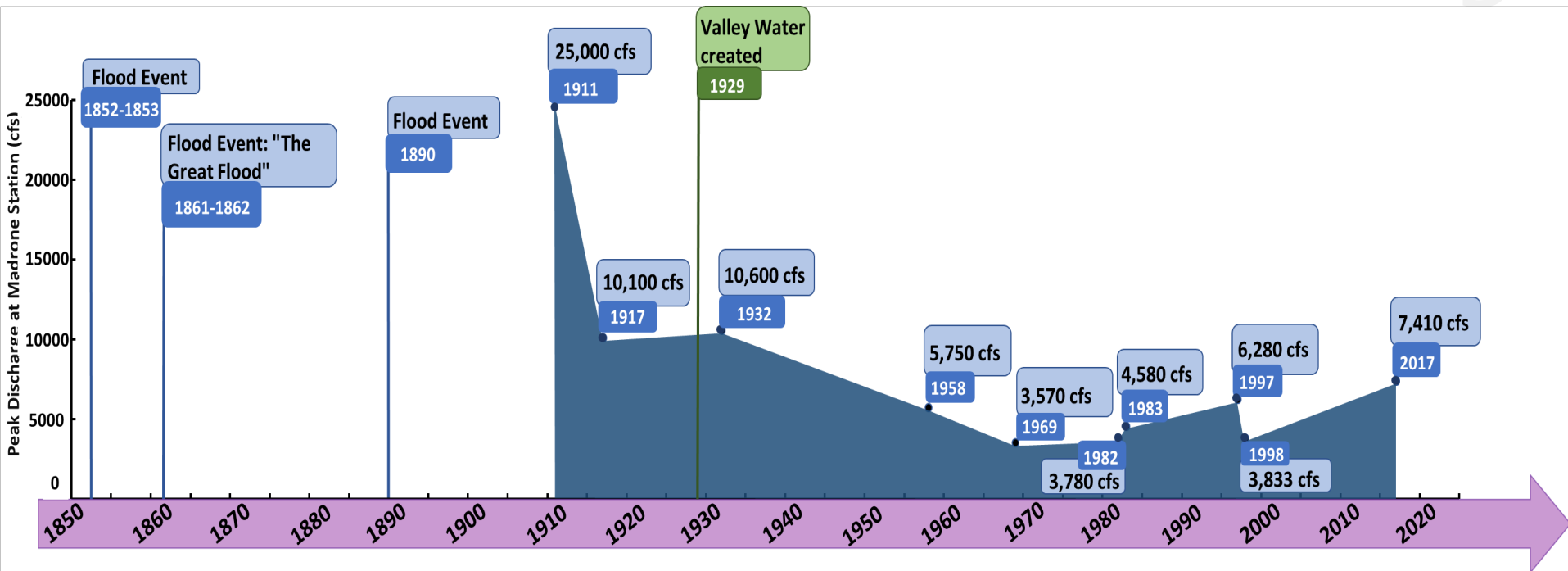
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# History of Coyote Creek Floods

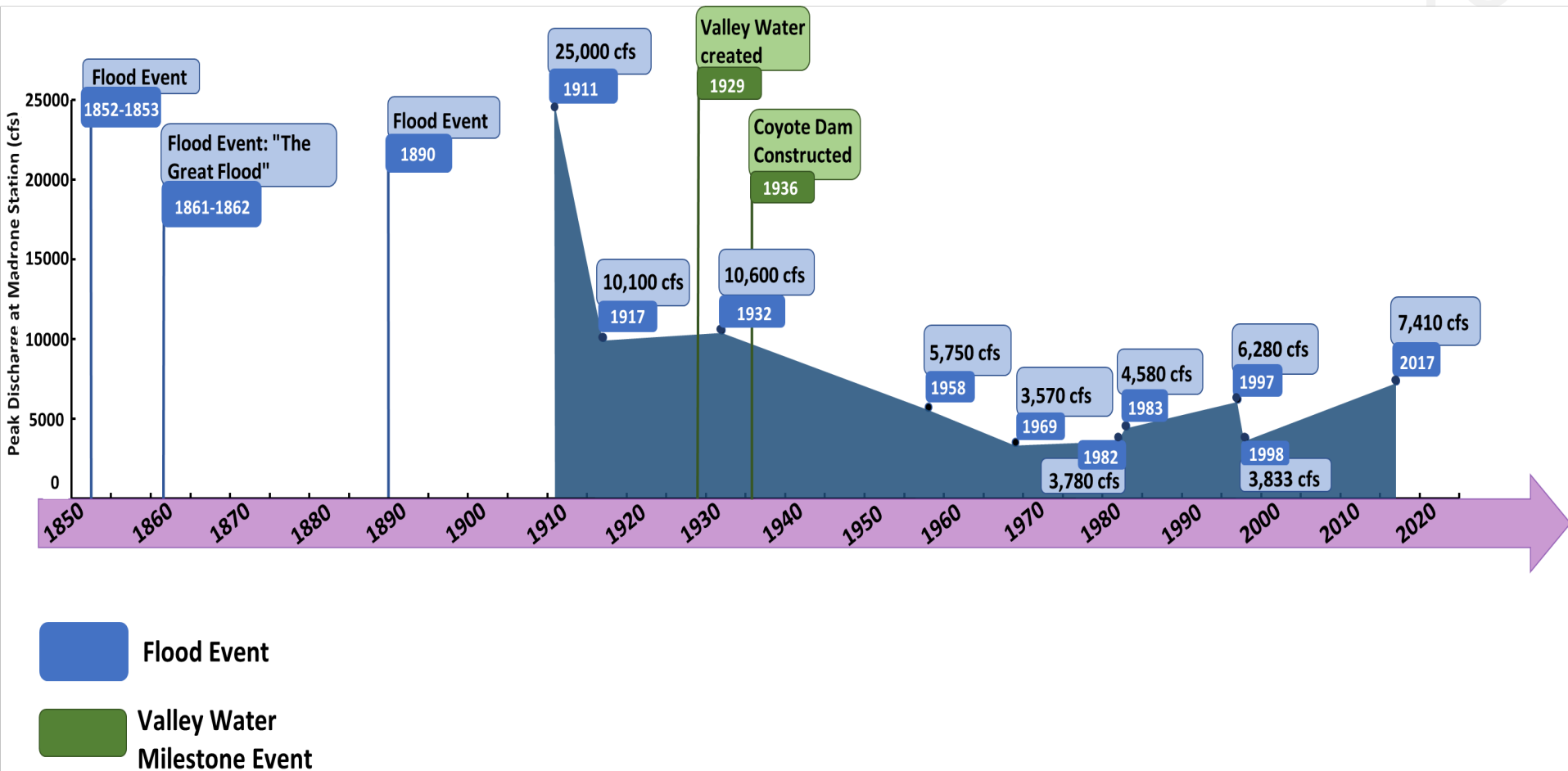
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- Flood Event
- Valley Water Milestone Event

# History of Coyote Creek Floods

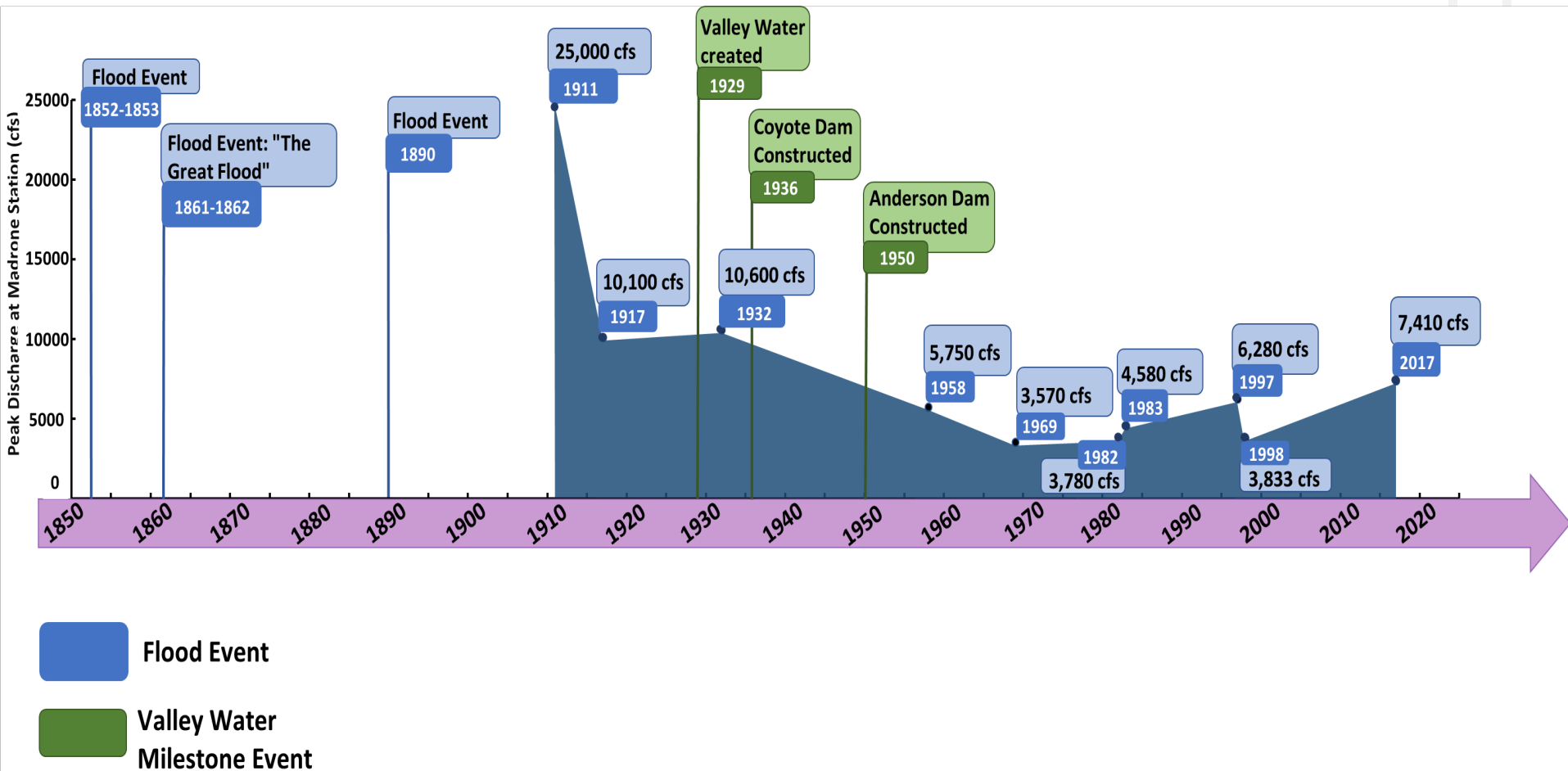
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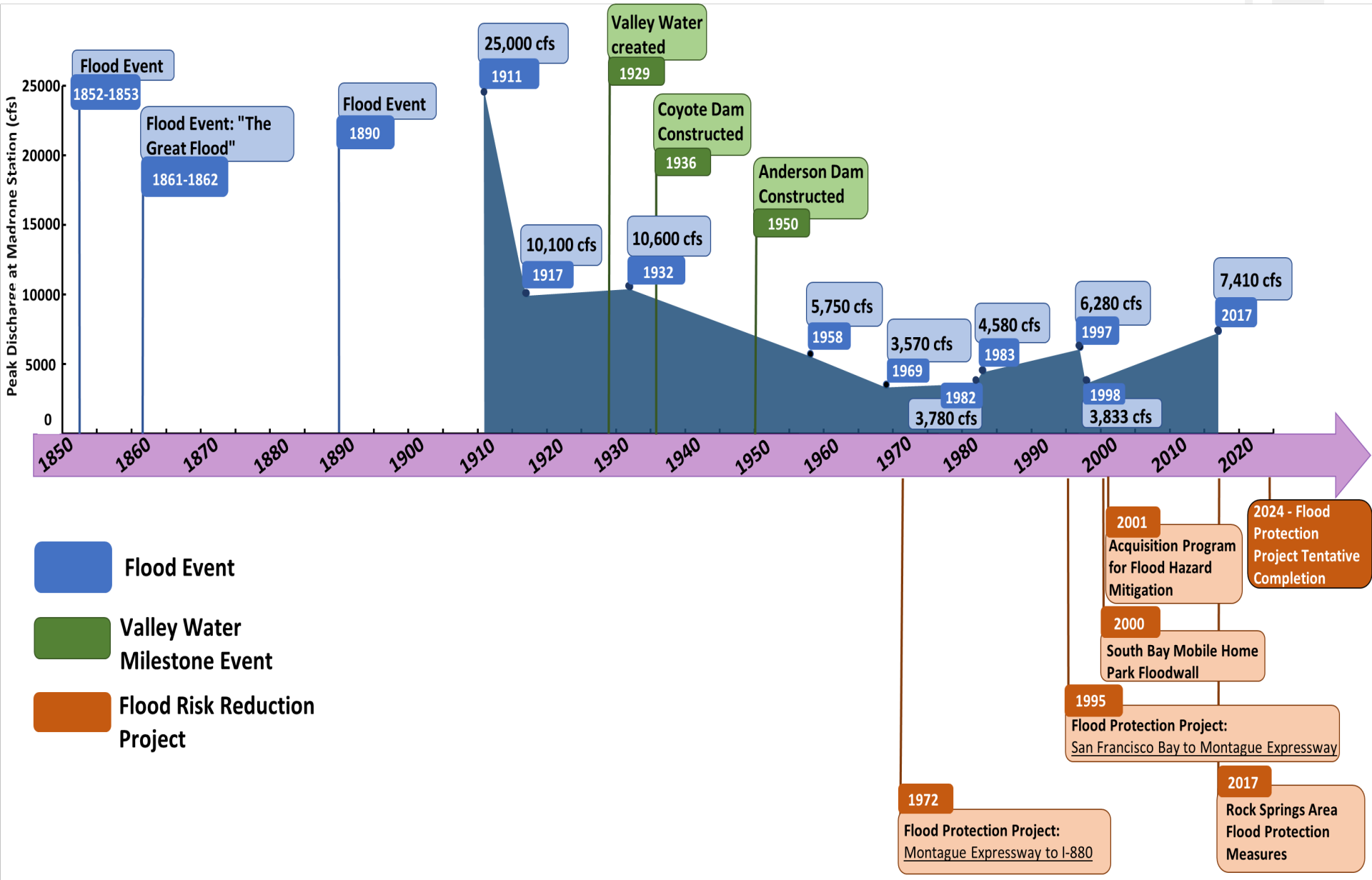


# History of Coyote Creek Floods

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# History of Coyote Creek Floods





# Flooding History: Santa Clara Street, January 1890

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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

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# Flooding History: Nordale Avenue, January 27, 1997

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

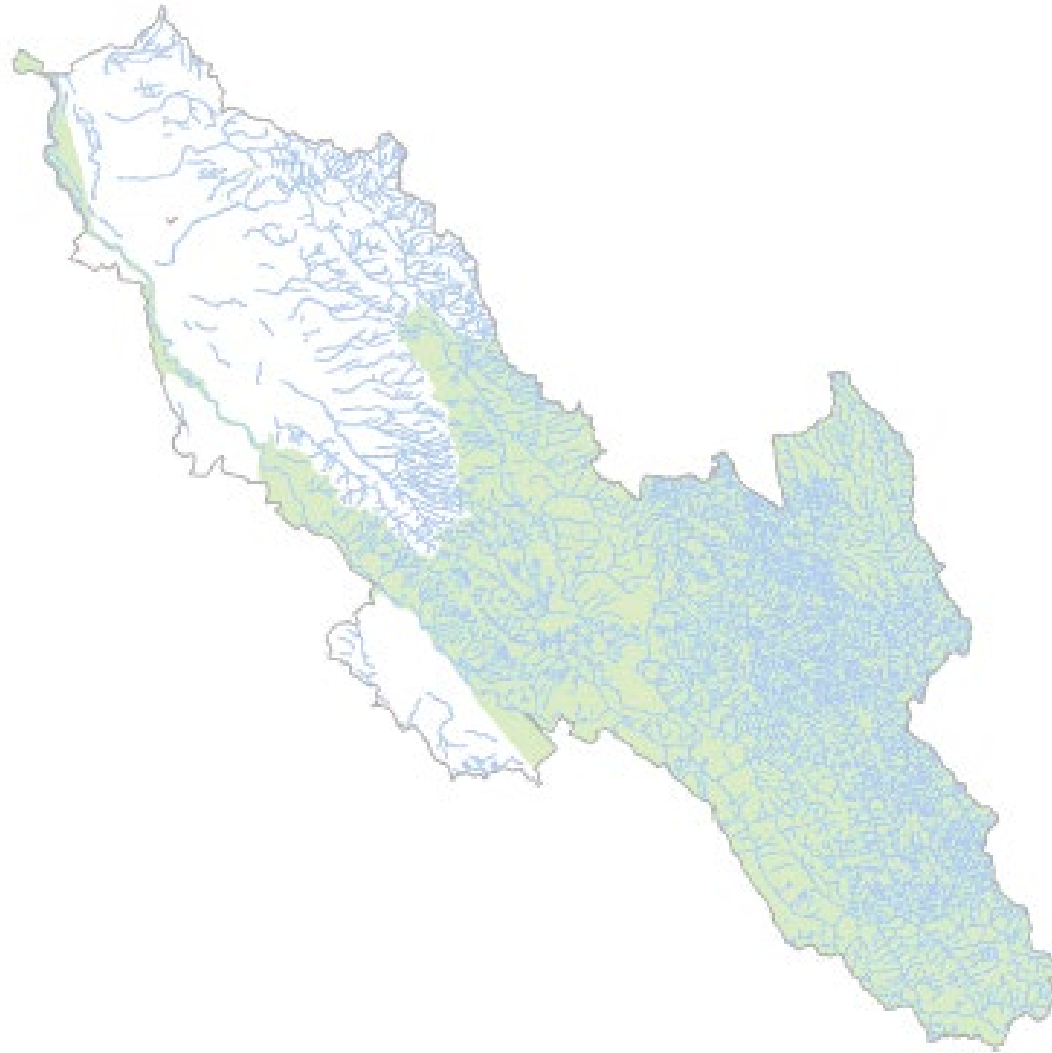
16



*Photographer Richard Wisdom, San Jose Mercury News*

# Watershed Modifications - 1800s

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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

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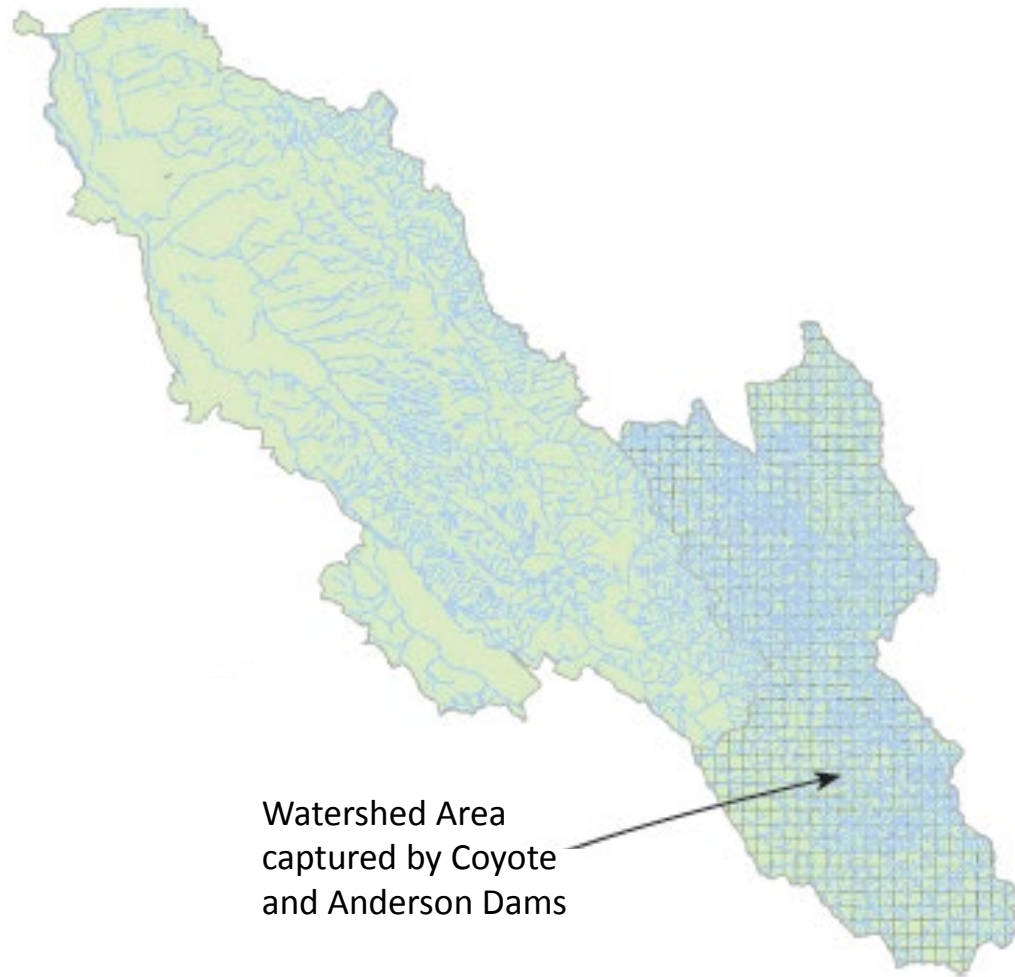


*Source: Grossinger, Robin, et al., 2006. Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.*



# Watershed Modifications - 1950

20



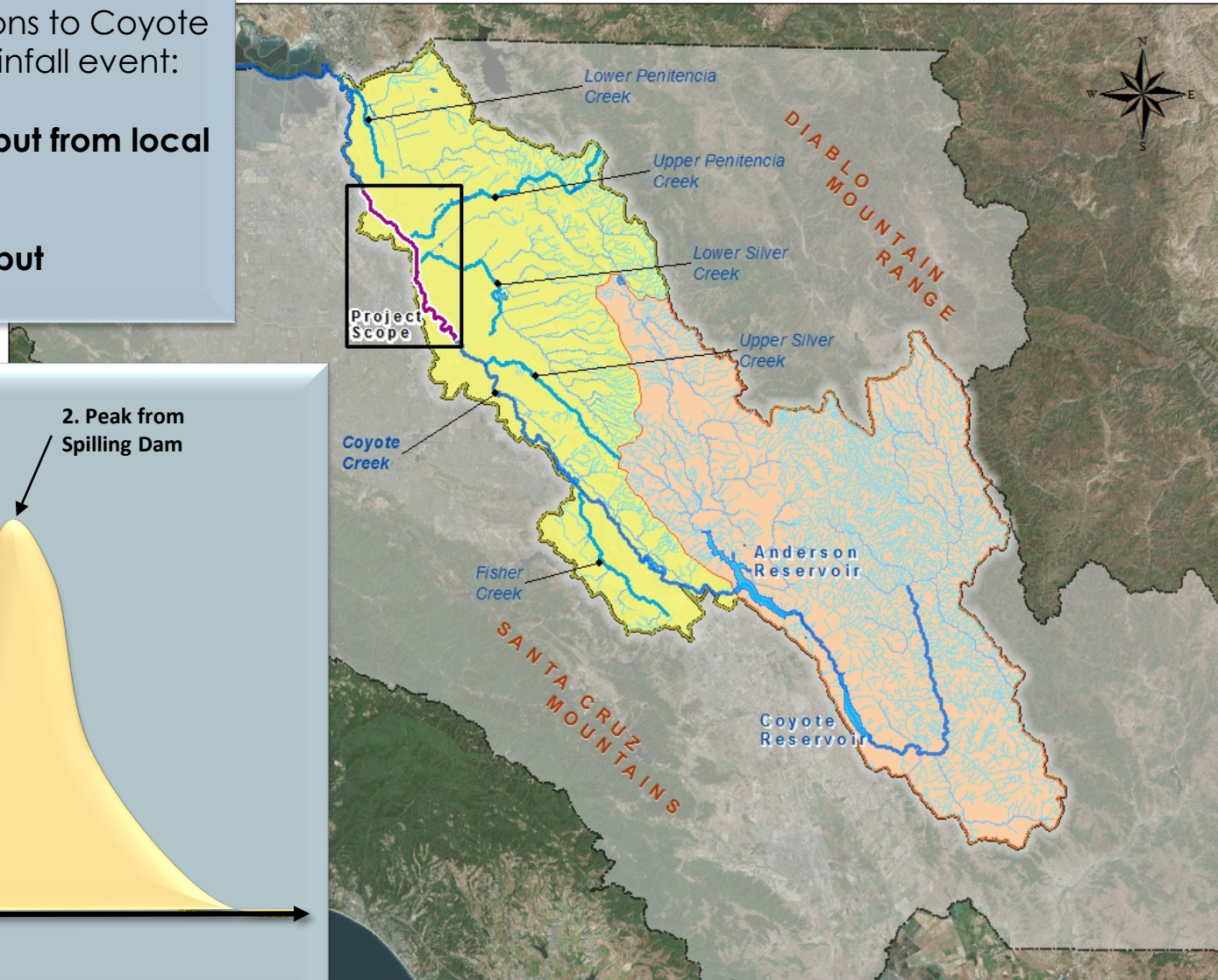
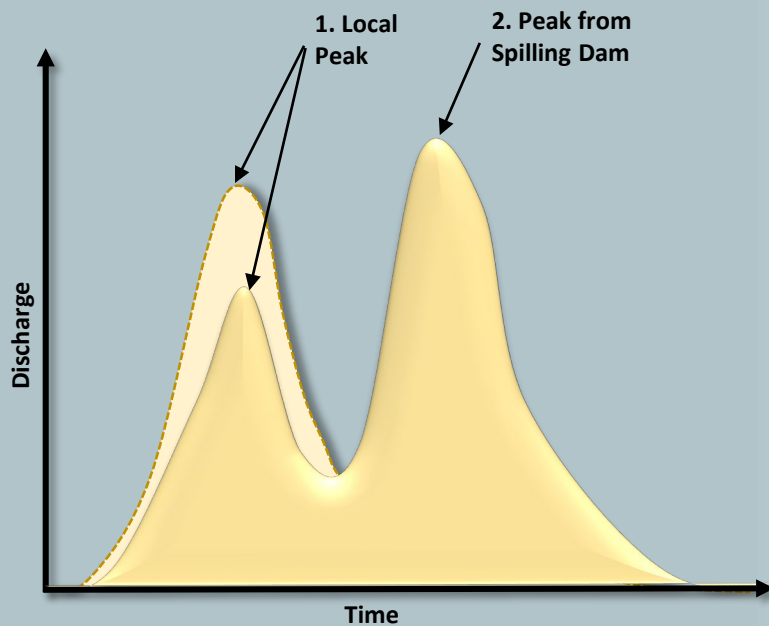
Source: Grossinger, Robin, et al., 2006. *Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.*

# Local Peak versus Upper Watershed Peak

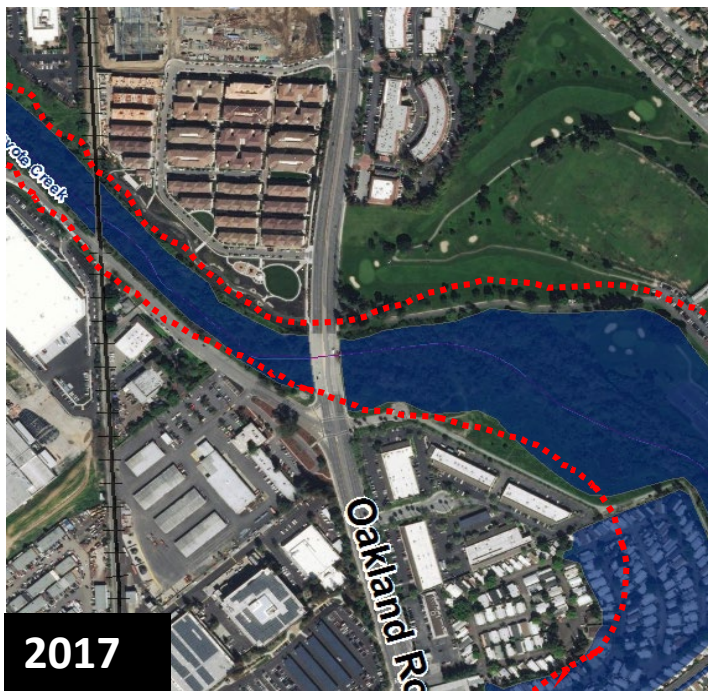
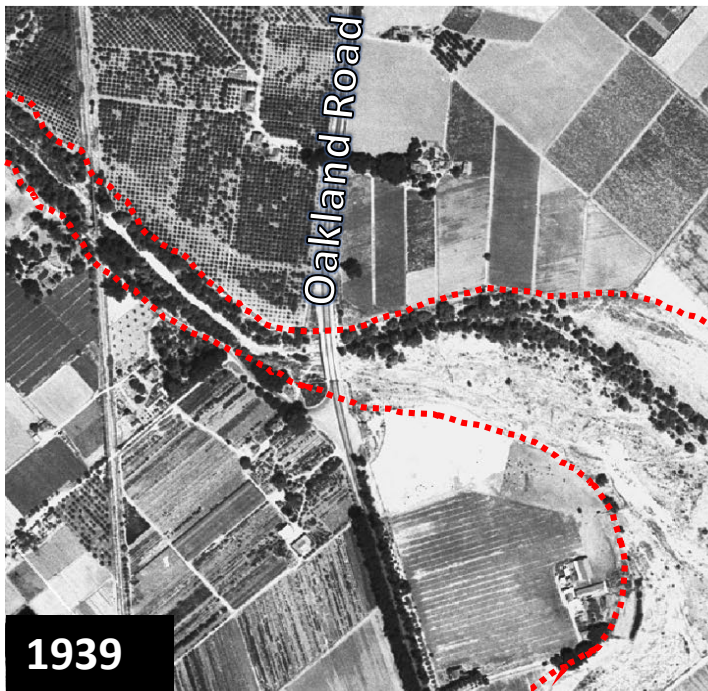
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Two main flow contributions to Coyote Creek in response to a rainfall event:

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



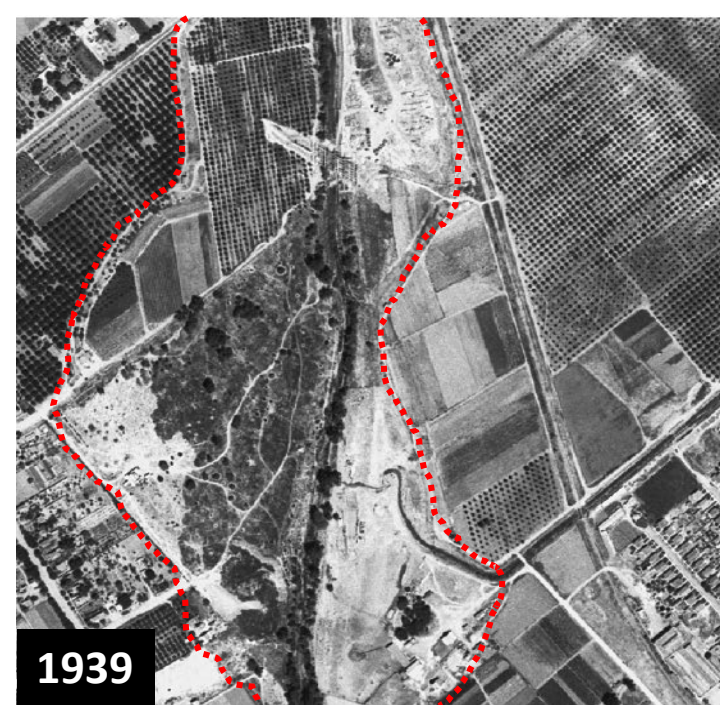




## Historical Landscape Conditions: *Oakland Road*

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.

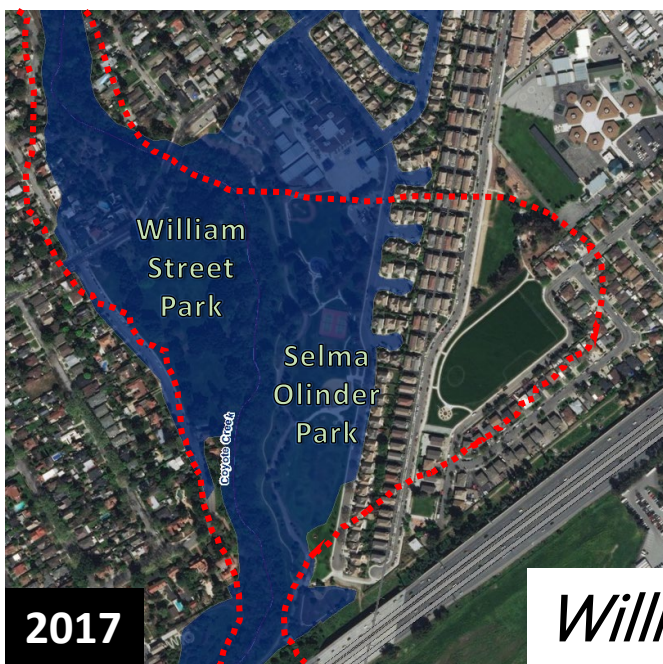
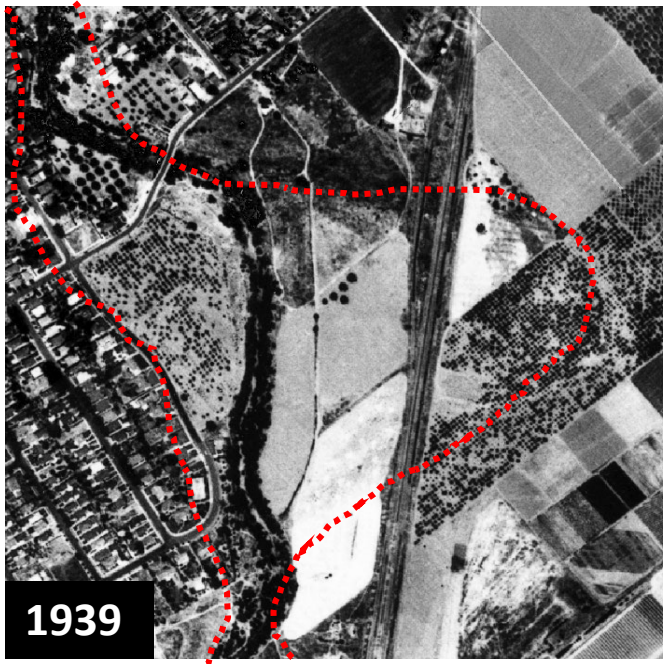
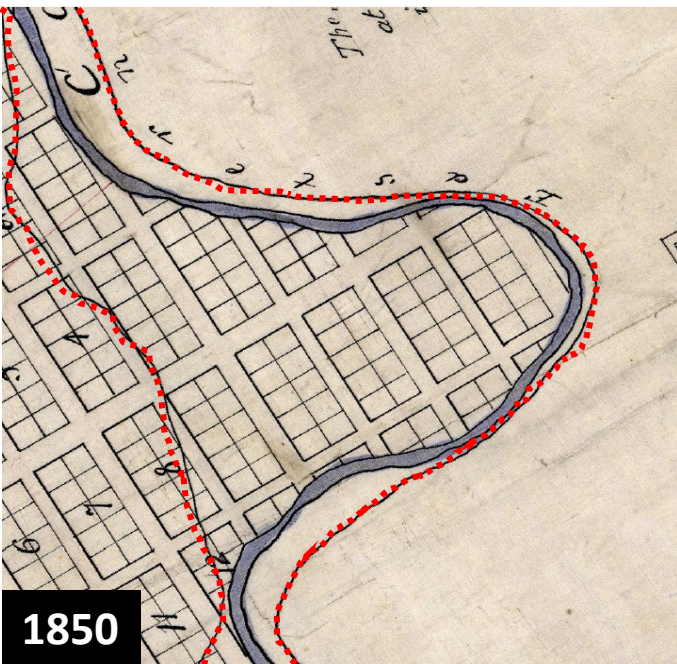




## Historical Landscape Conditions: *Watson Park*

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.

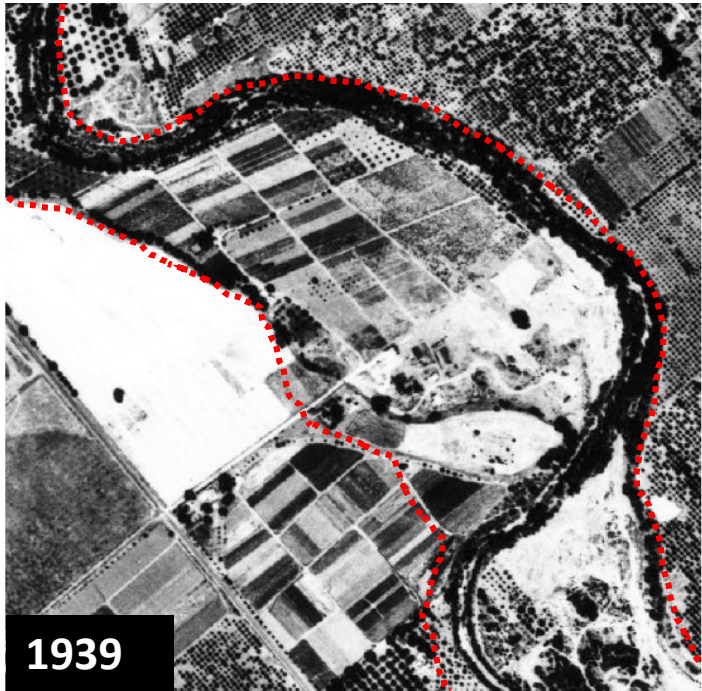




## *William Street Park & Selma Olinder*

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

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| Location            | February 2017<br>Observed Flows (cfs) | February 2017 if flows<br>confined within channel (cfs) | Upper Watershed Peak<br>Design Storm (cfs) | 1% Local Peak<br>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

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

- 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

## June 2017

Modification of original project goals and acceleration of project

Current Coyote  
Creek Flood  
Protection Project



Project Objective:

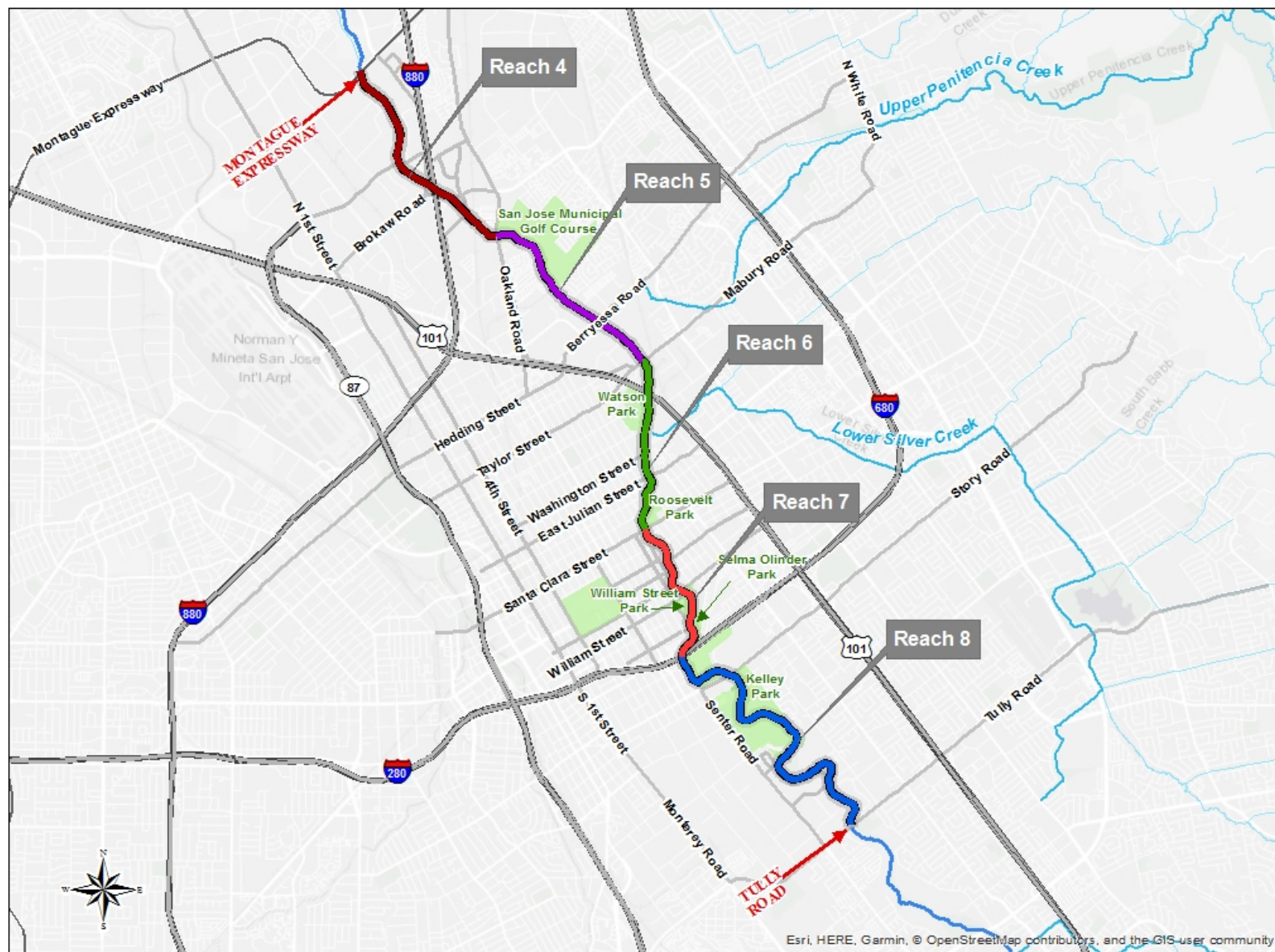
# **Reduce Risk of Flooding to a flood event equivalent to the February 2017 event**

Additional Project goals:

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

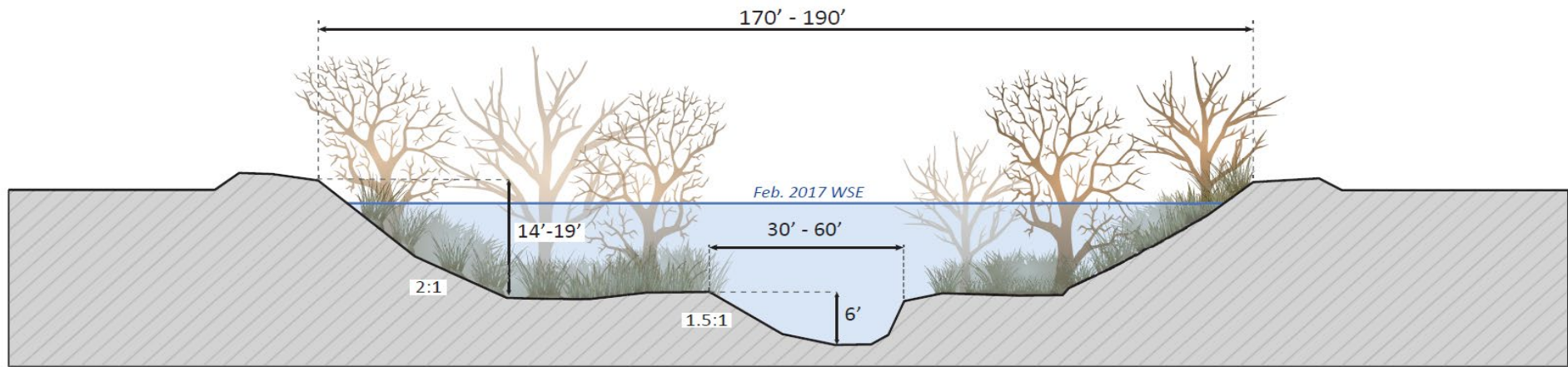
# Project Reaches

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# Reach 4: Montague Expressway to Old Oakland Road

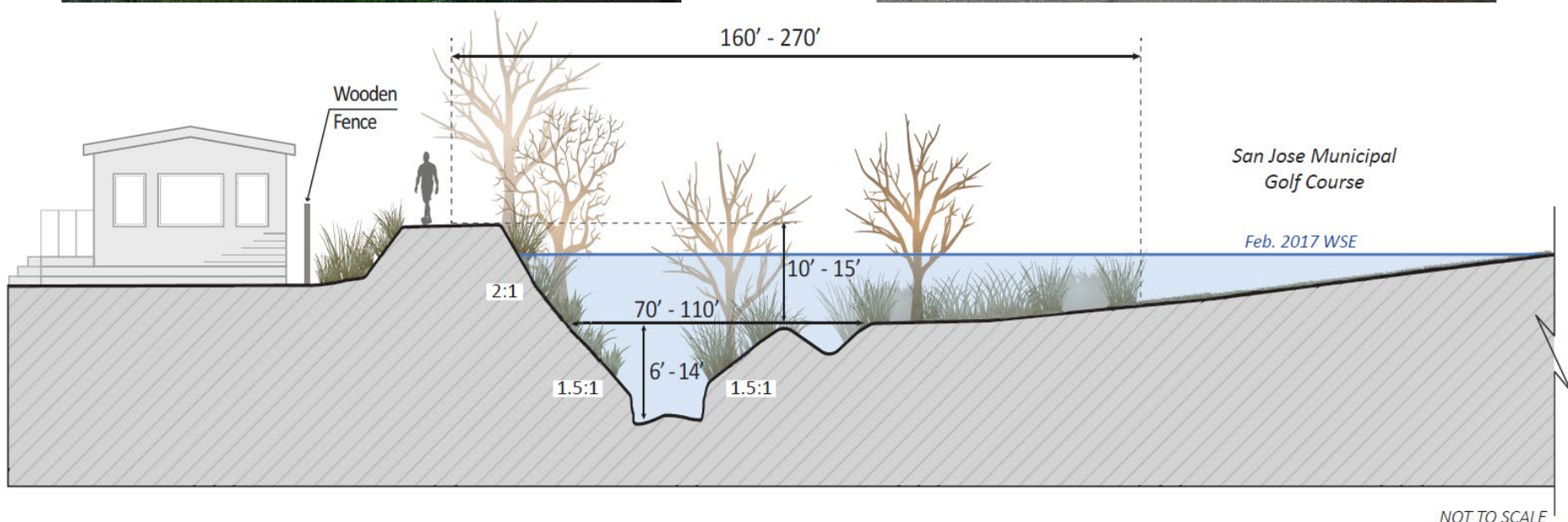


NOT TO SCALE



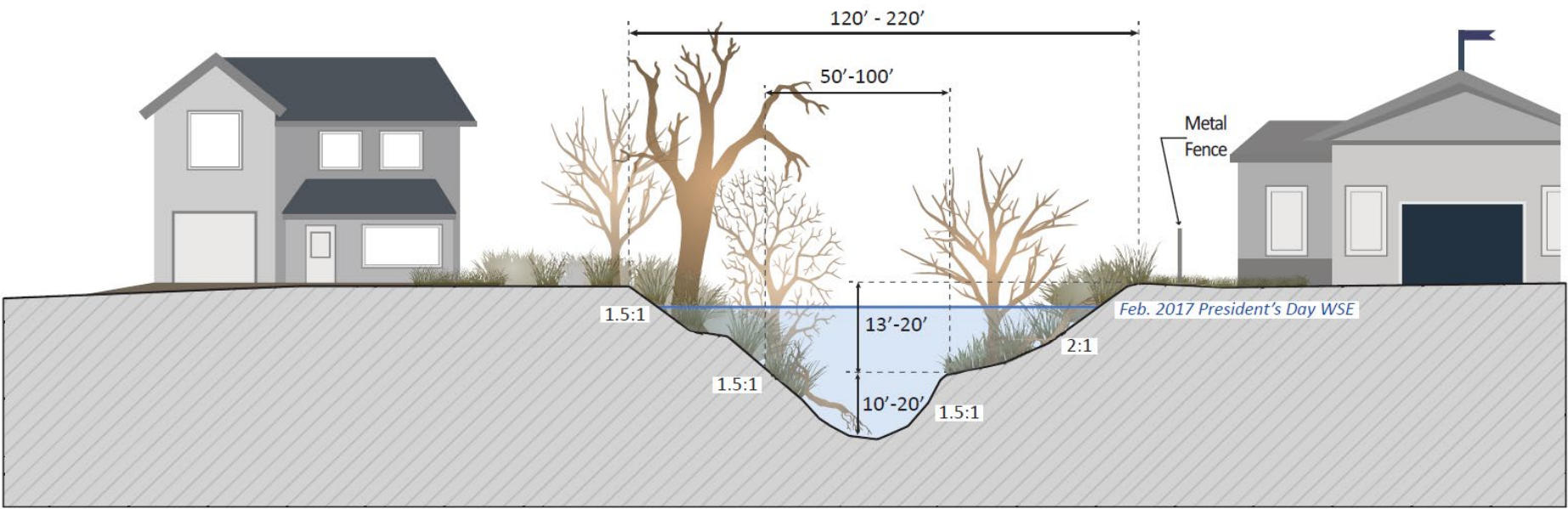
# Reach 5: Old Oakland Road to Mabury Road

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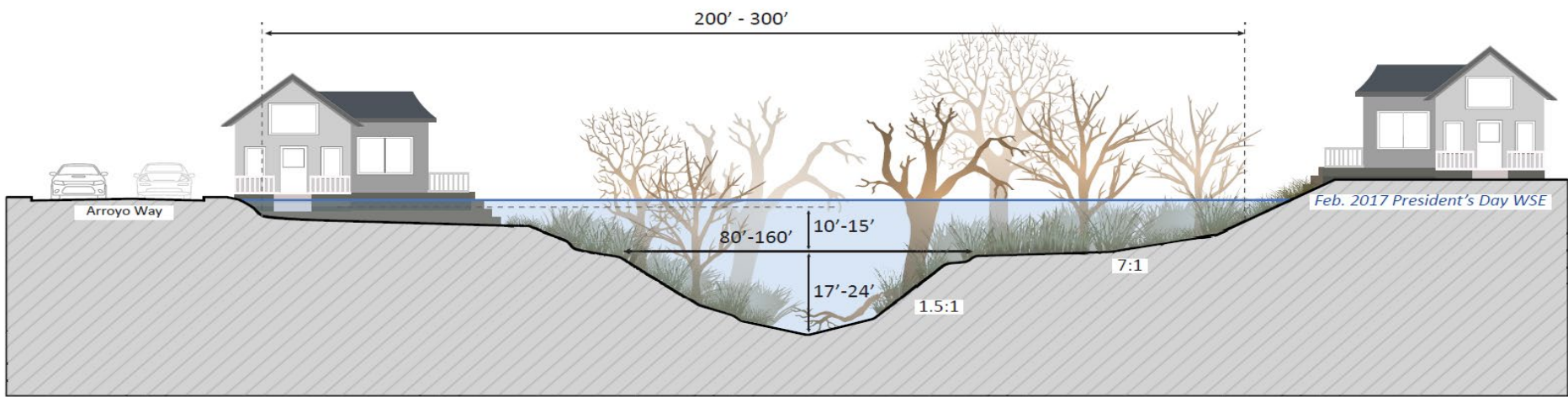
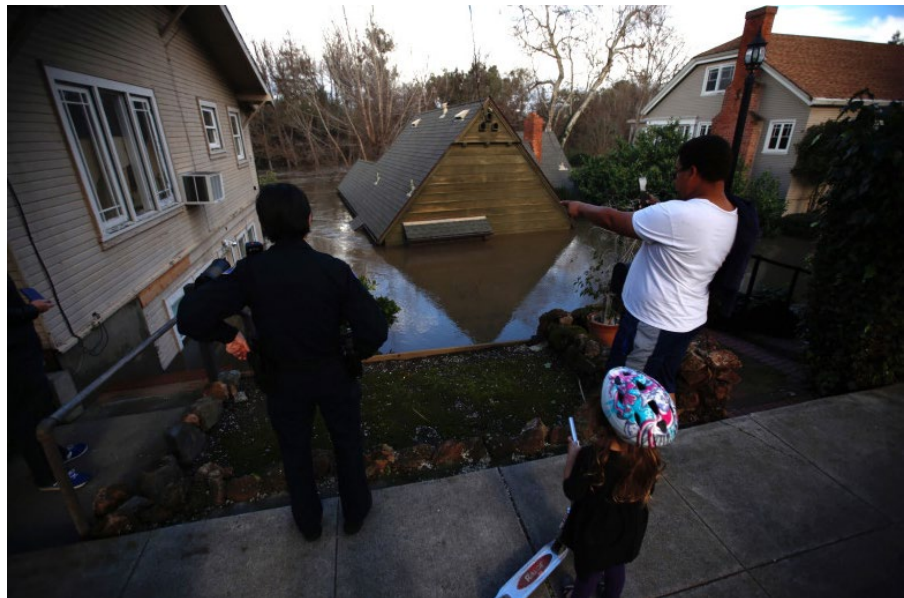
# Reach 6: Mabury Road to East Santa Clara Street





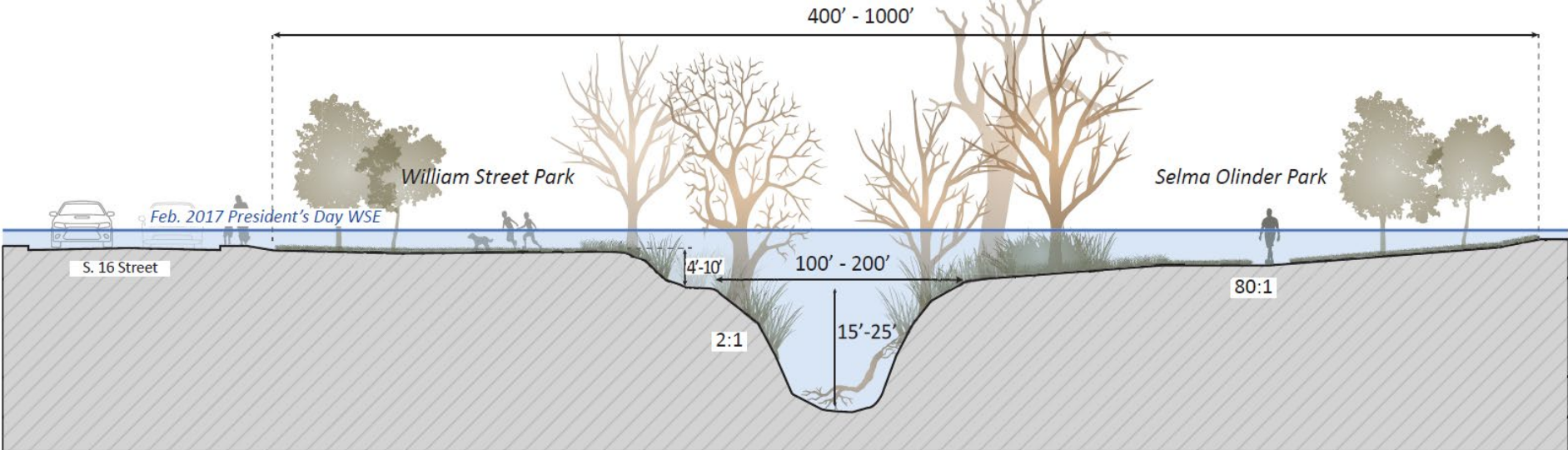
# Reach 7: East Santa Clara Street to I-280

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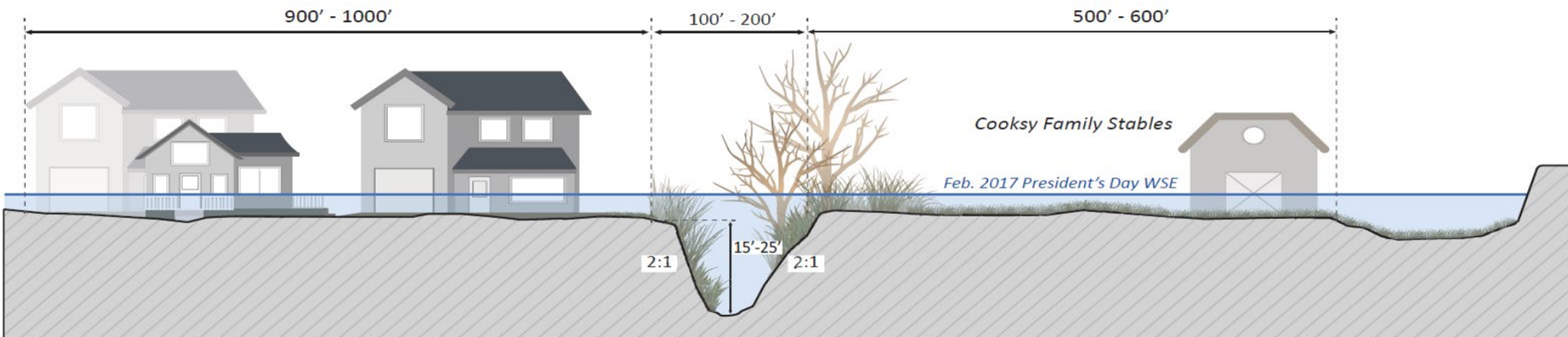


# Reach 7: East Santa Clara Street to I-280





# Reach 8: I-280 to Tully Road



NOT TO SCALE

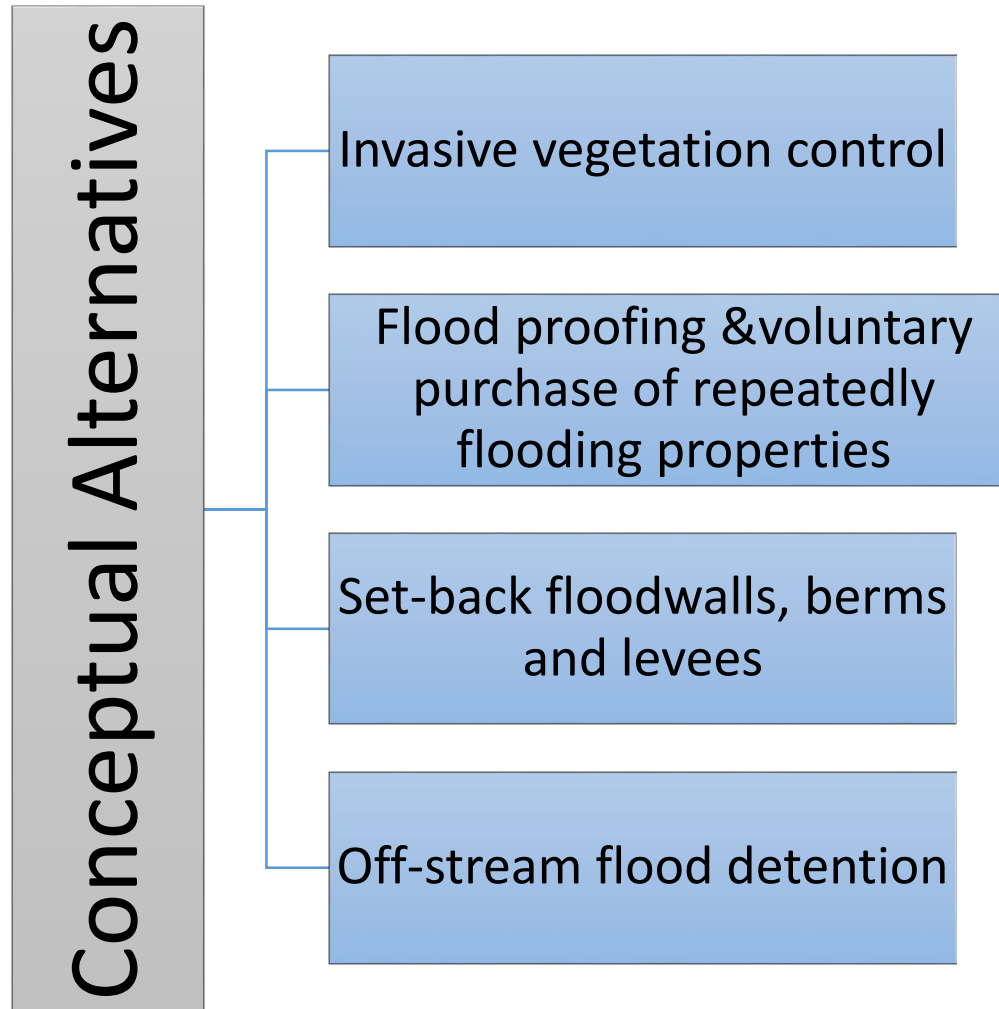
# Project Components, Status and Timeline

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**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            |      |      |      |      |      |      |      |      |

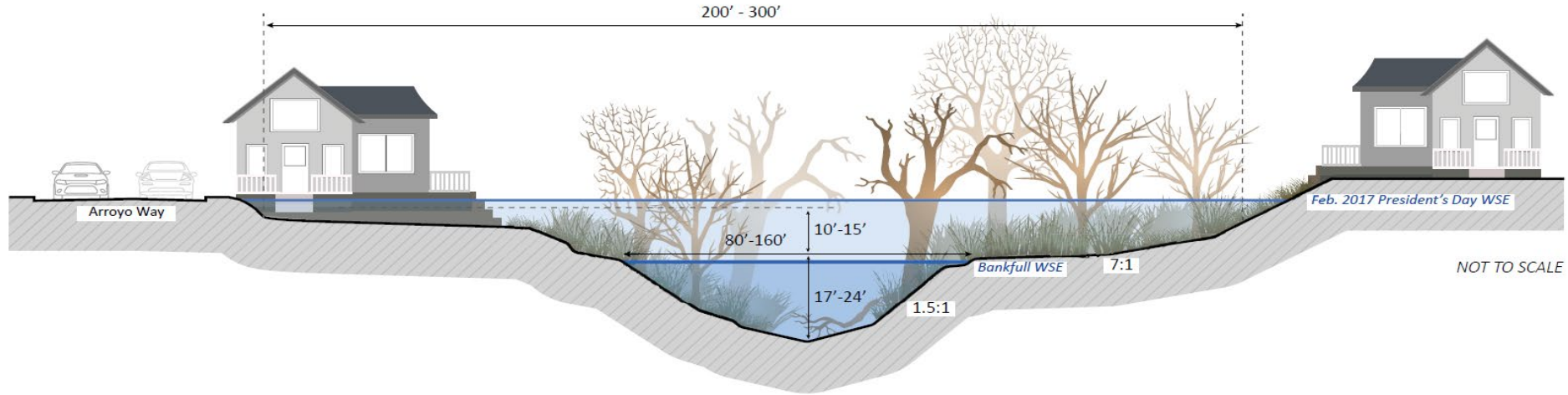




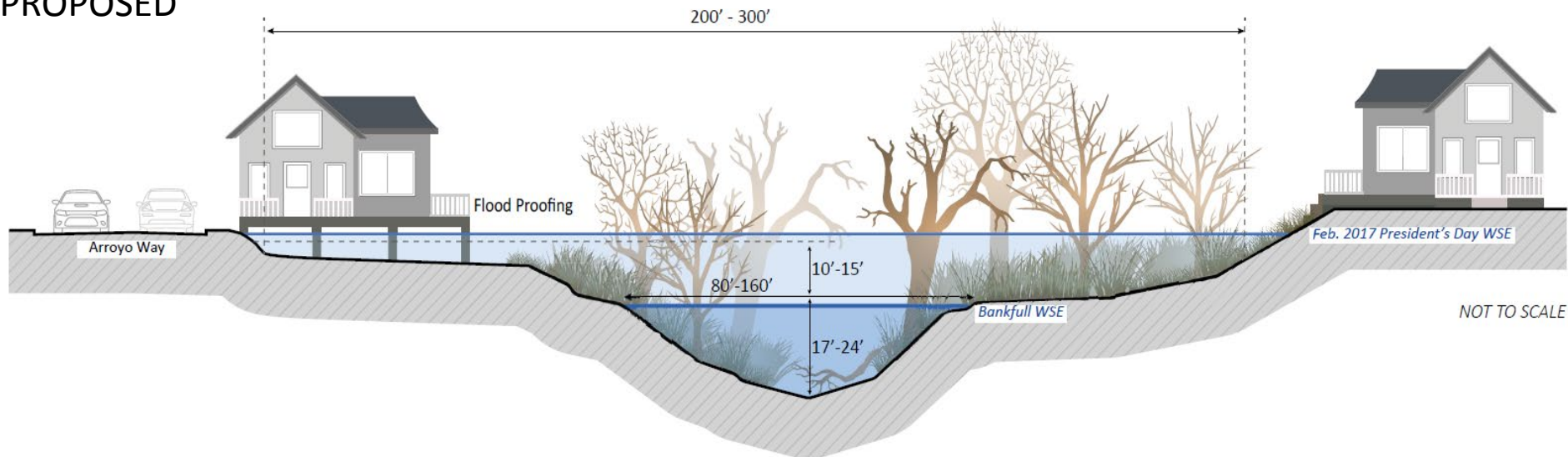
# Flood Proofing

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## EXISTING



## PROPOSED

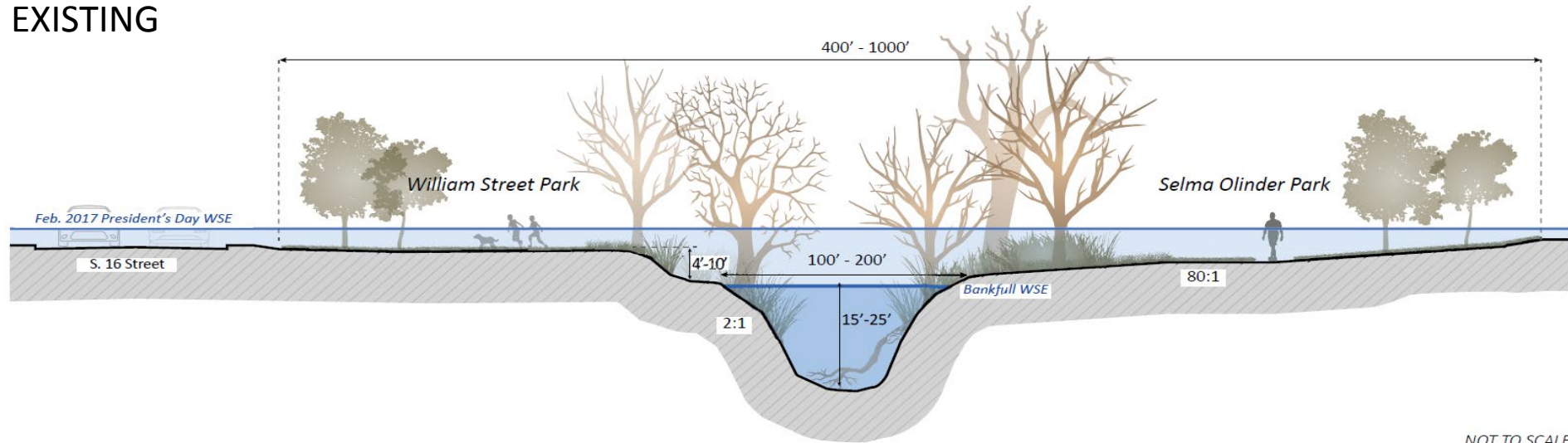




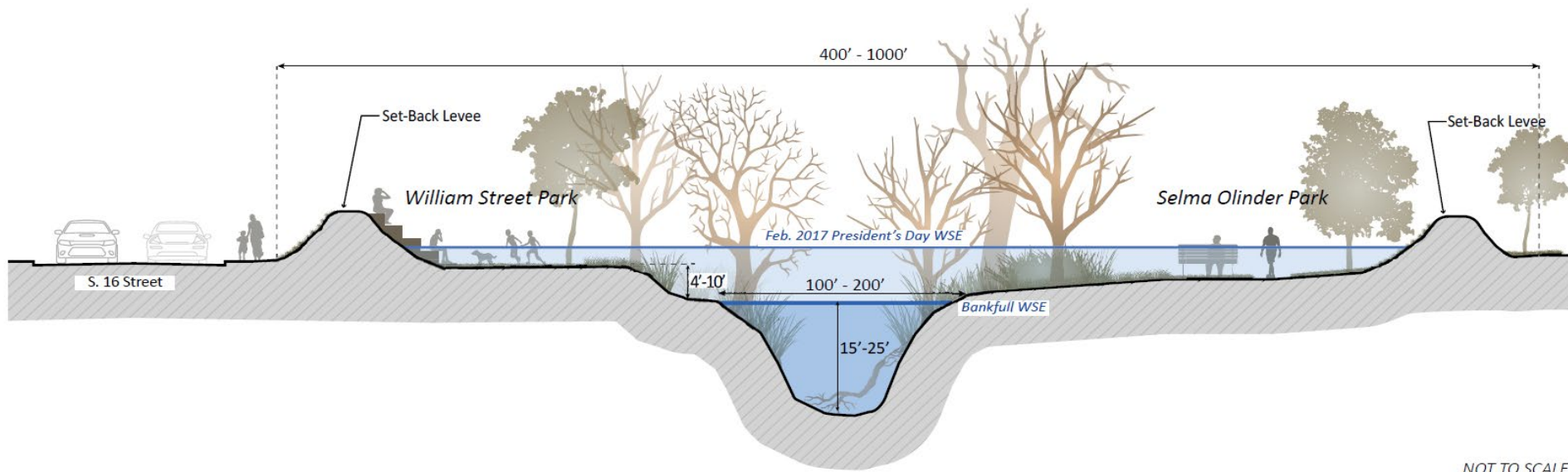
# Set-back berms and levees

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## EXISTING

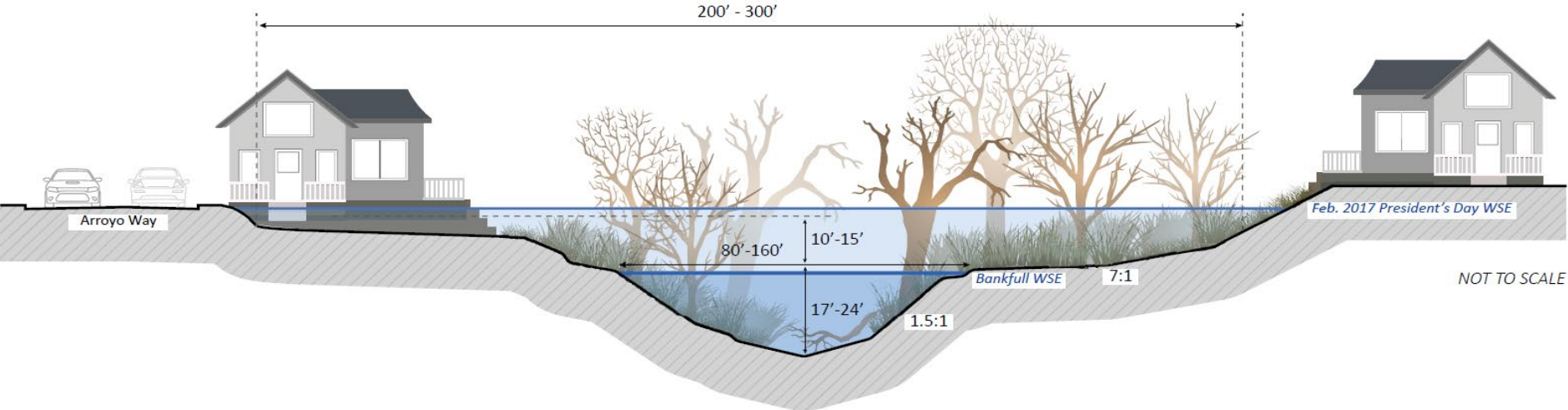


## PROPOSED

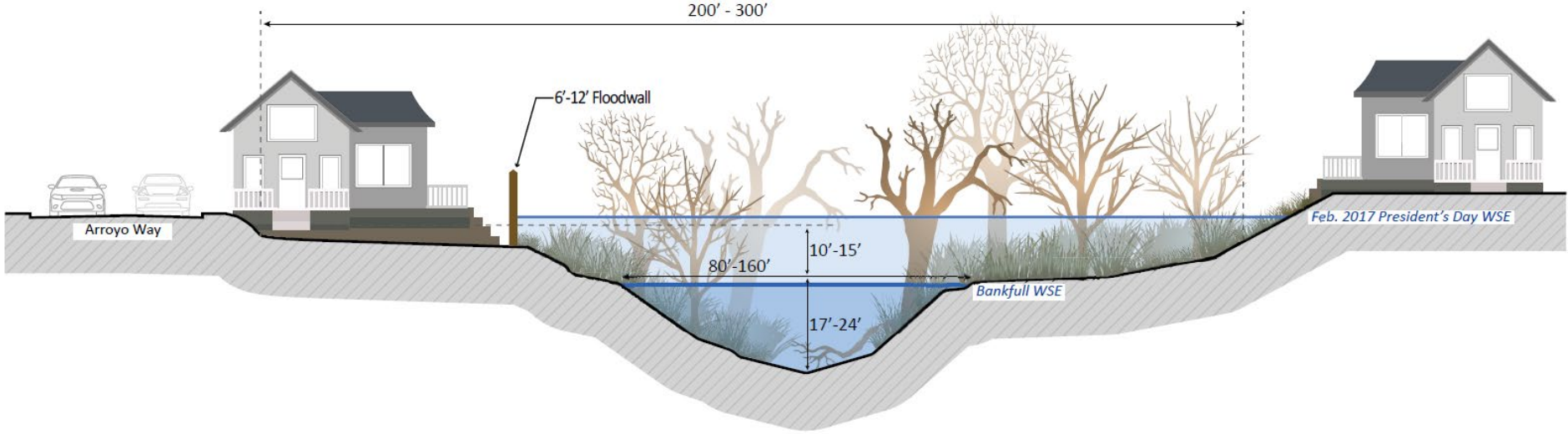


# Floodwalls

## EXISTING



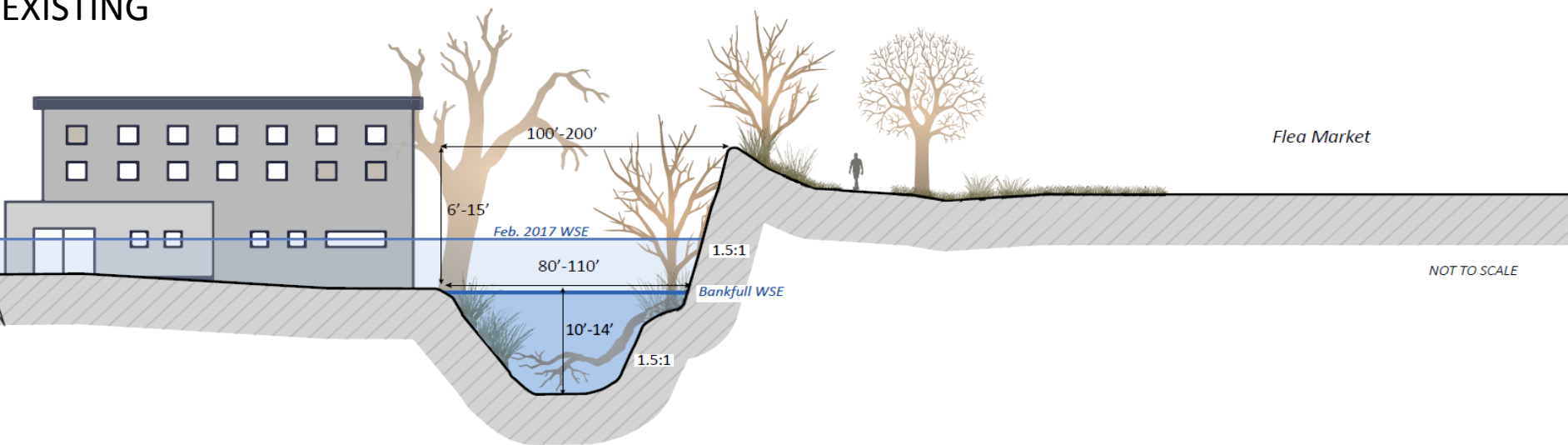
## PROPOSED



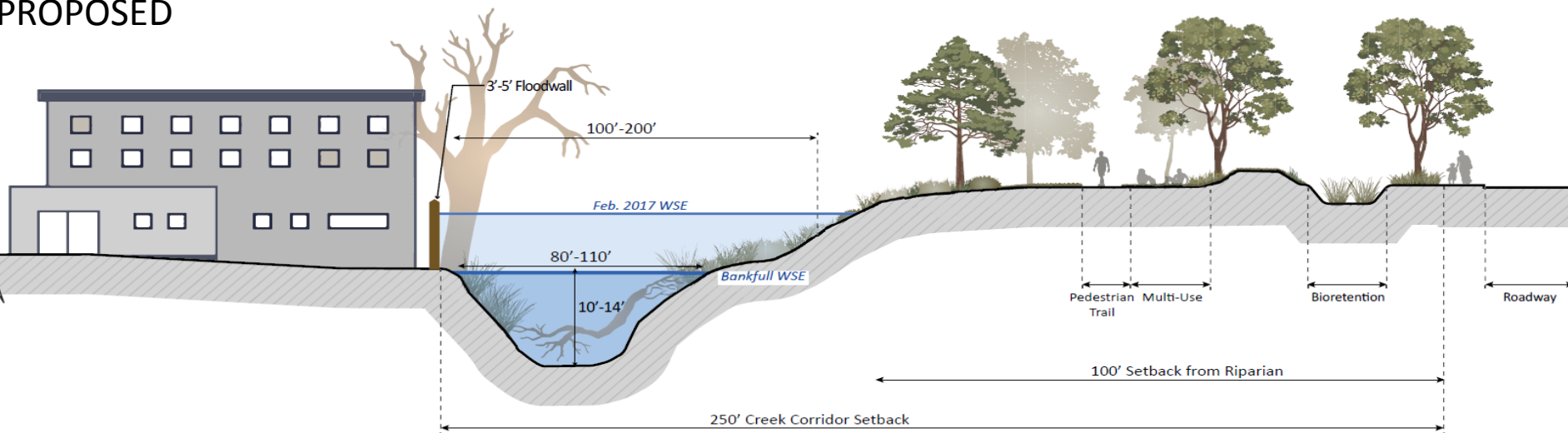


# Flood protection and additional enhancements

## EXISTING



## PROPOSED



# 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

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# QUESTIONS







# Valley Water

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