



Valley Water

Clean Water • Healthy Environment • Flood Protection



Coyote Creek Flood Protection Project

Problem Definition and Refined Project Objectives

May 21st, 2019 Public Meeting
San José Conservation Corps
1560 Berger Drive
6:30 – 8:30 pm

Agenda

3

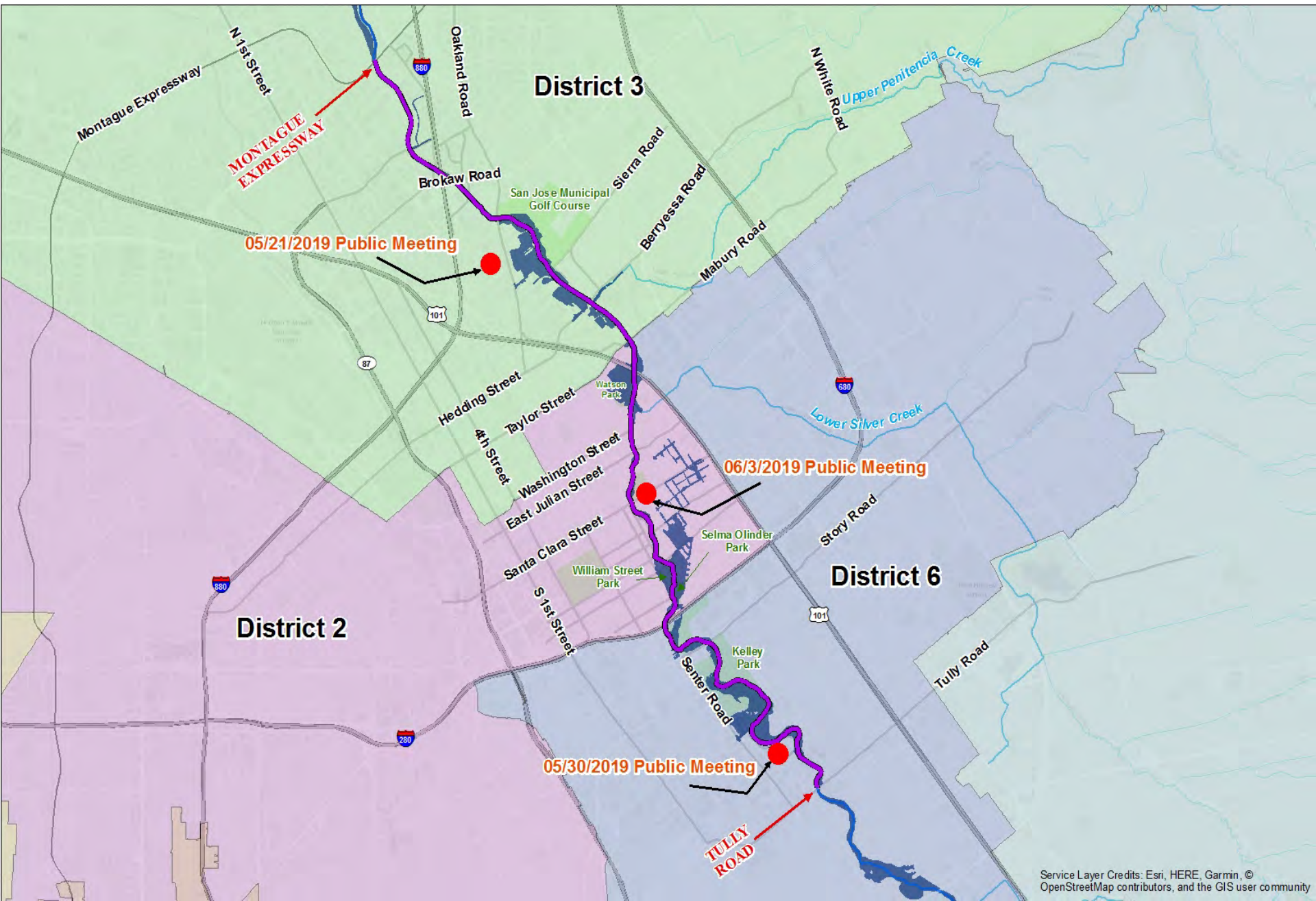
1. Project Setting

**2. Project History and
Description**

3. Project Status and Timeline

4. Conceptual Solutions

5. Next Steps



Flood Risk Reduction Work Since 2017



Floodwall and berm installation



Invasive vegetation Management and blockage removal



Installation of visible stream gauges



Levee Repair



MONTAGUE EXPRESSWAY

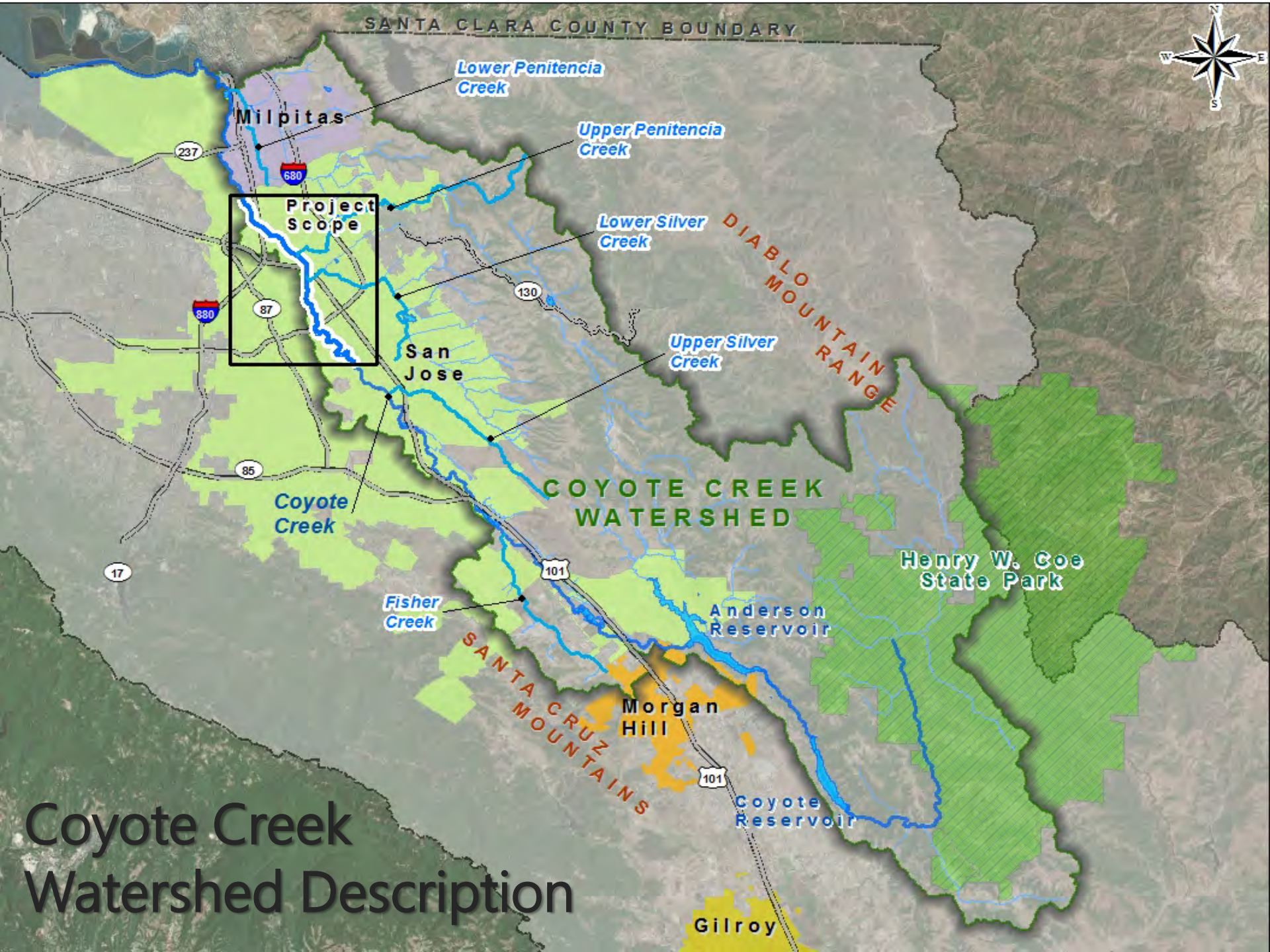
TULLY ROAD

City of Santa Clara

City of San Jose

Project Location





SANTA CLARA COUNTY BOUNDARY



Lower Penitencia Creek

Upper Penitencia Creek

Lower Silver Creek

Upper Silver Creek

DIABLO MOUNTAIN RANGE

COYOTE CREEK WATERSHED

Henry W. Goe State Park

Anderson Reservoir

SANTA CRUZ MOUNTAINS

Coyote Reservoir

Milpitas

San Jose

Morgan Hill

Gilroy

237

680

880

87

130

85

17

101

101

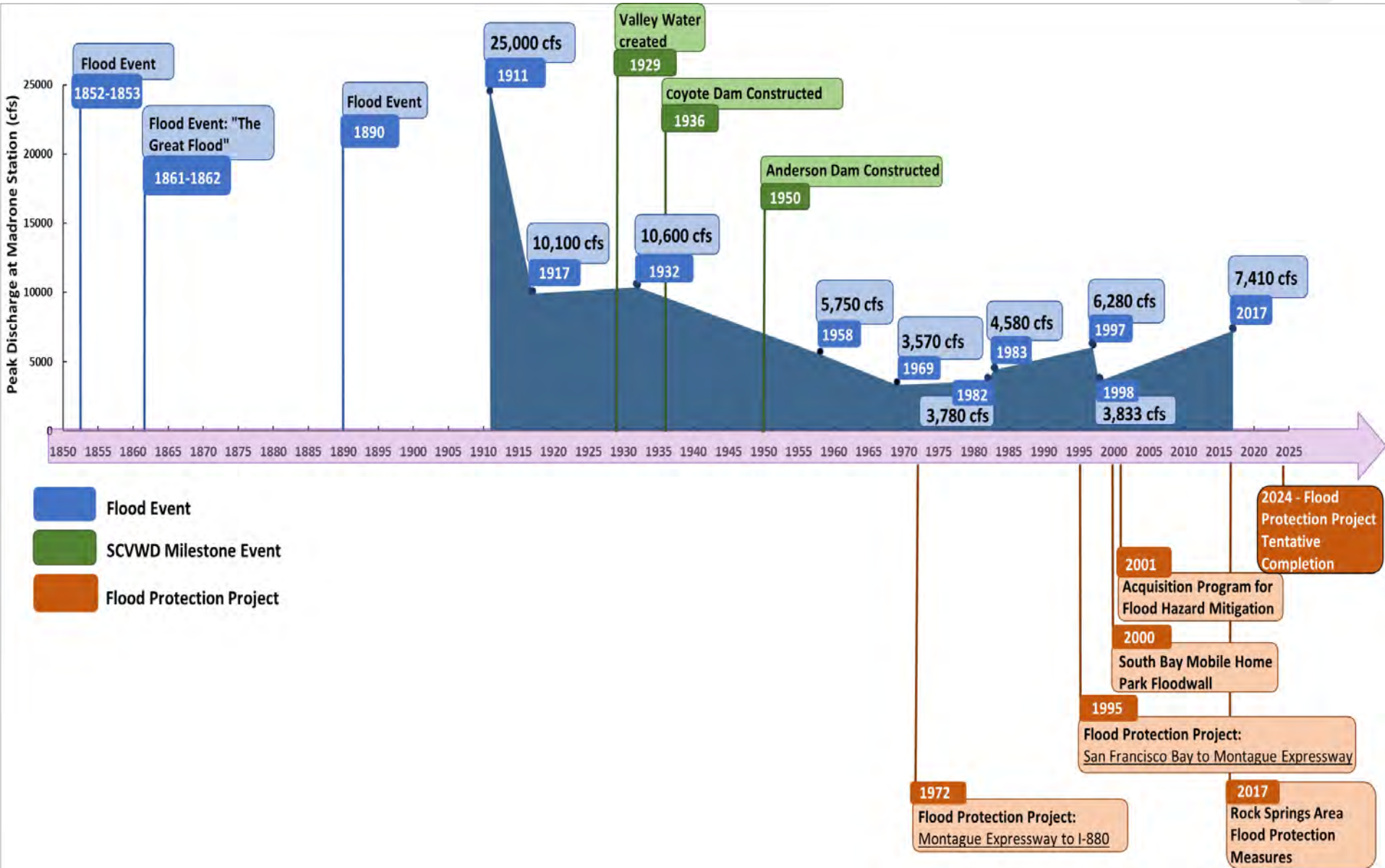
Coyote Creek

Fisher Creek

Coyote Creek Watershed Description

Project Scope

History of Coyote Creek Floods



Flooding History: Santa Clara Street, January 1890



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



Flooding History: Nordale Avenue, January 27, 1997



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

12



Photographer Richard Wisdom, San Jose Mercury News

Watershed Modifications - 1800s

13



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

14



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

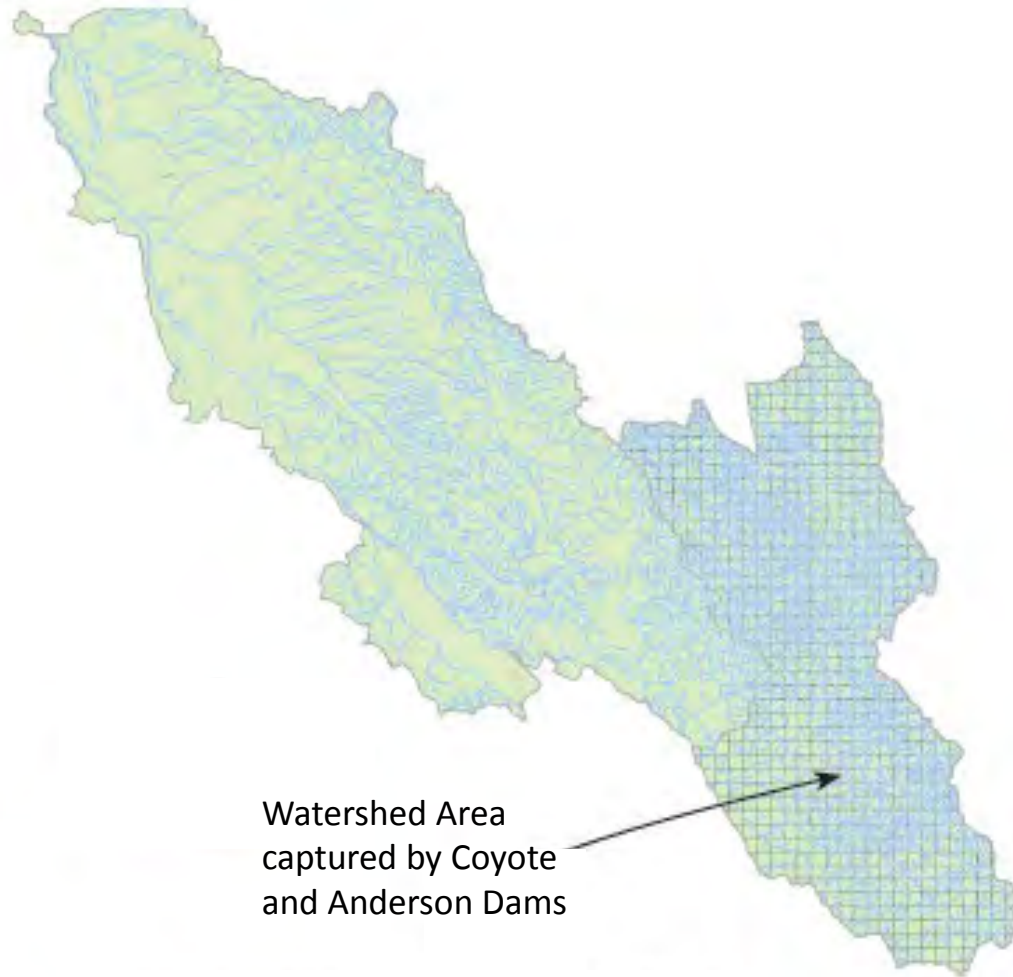
15



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

16

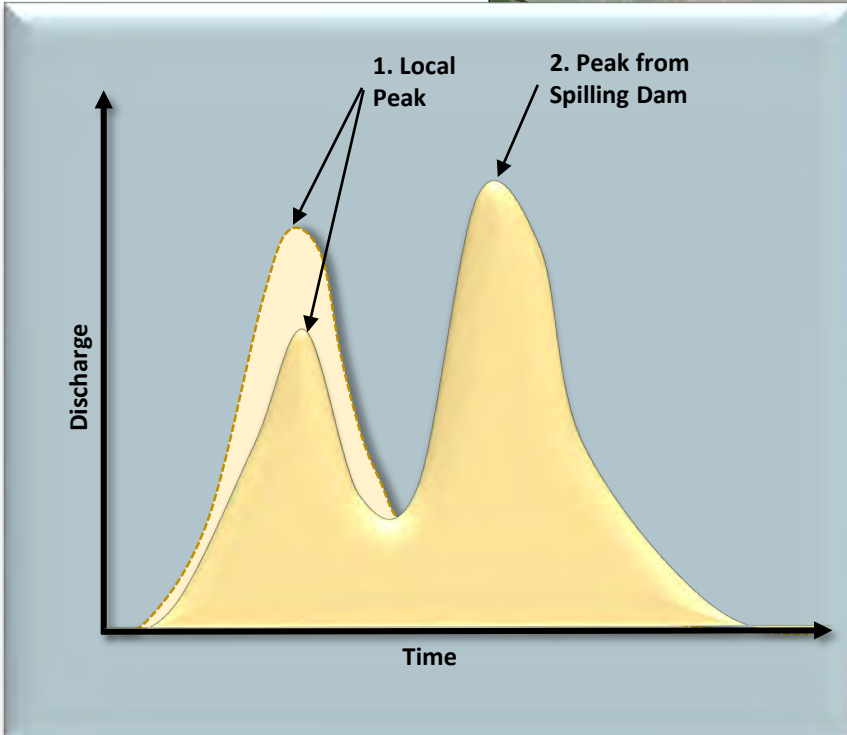
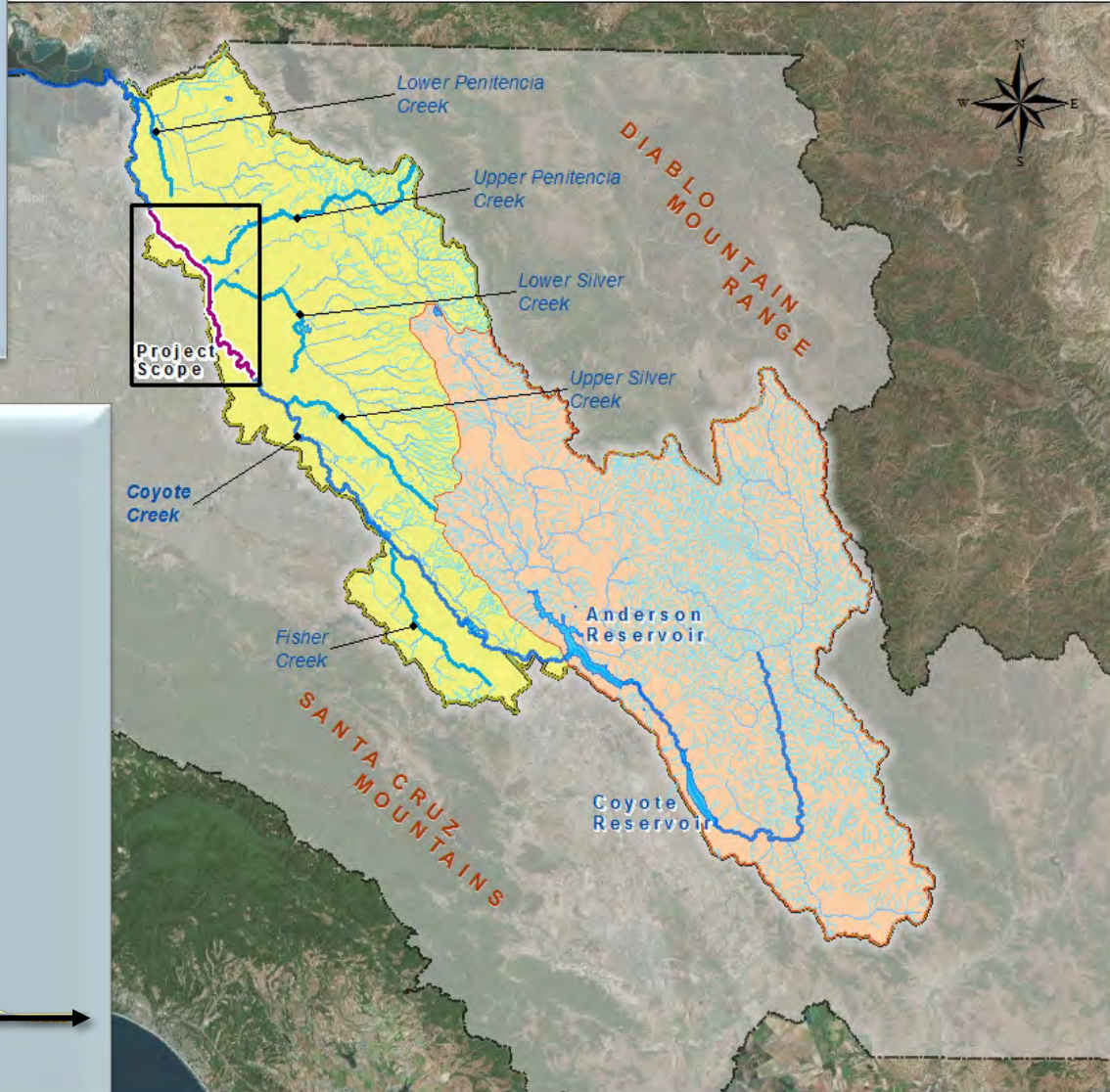


Source: Grossinger, Robin, et al., 2006. *Coyote Creek Watershed Historical Ecology Study: Historical Condition, Landscape Change, and Restoration potential in the Eastern Santa Clara Valley, California.*

Local Peak versus Upper Watershed Peak

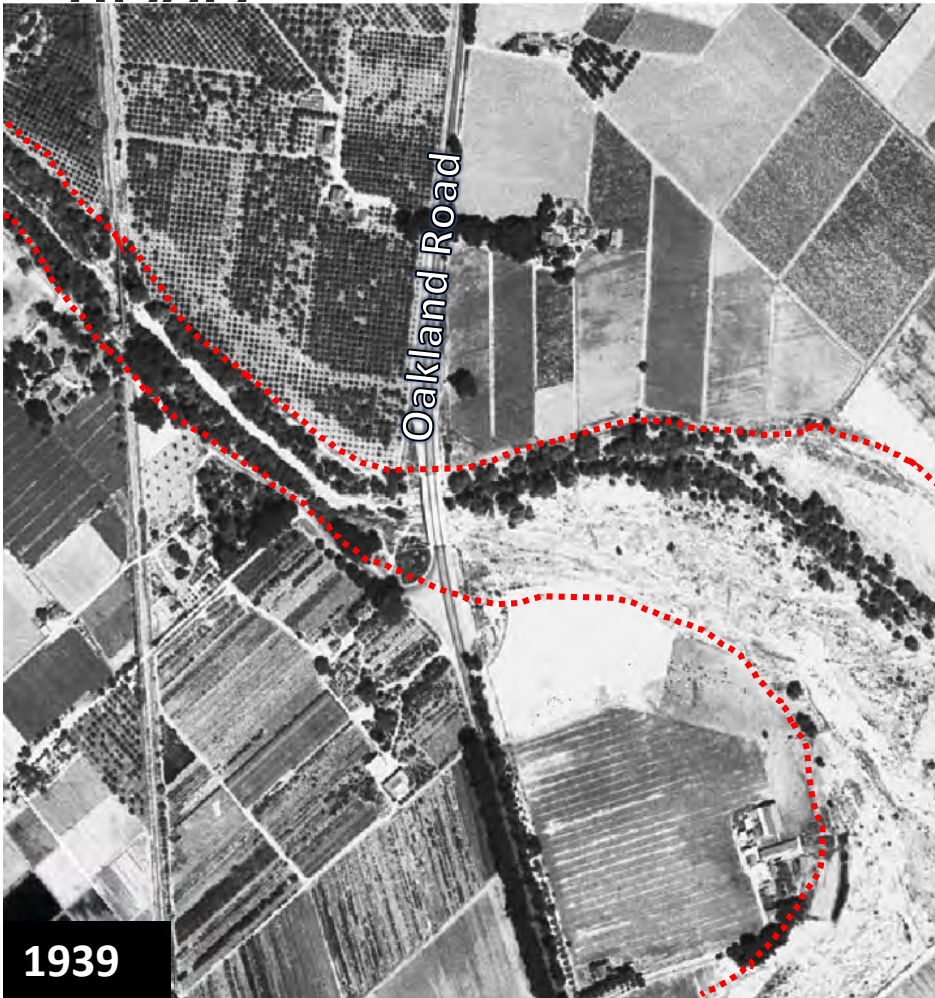
Two main flow contributions to Coyote Creek in response to a rainfall event:

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



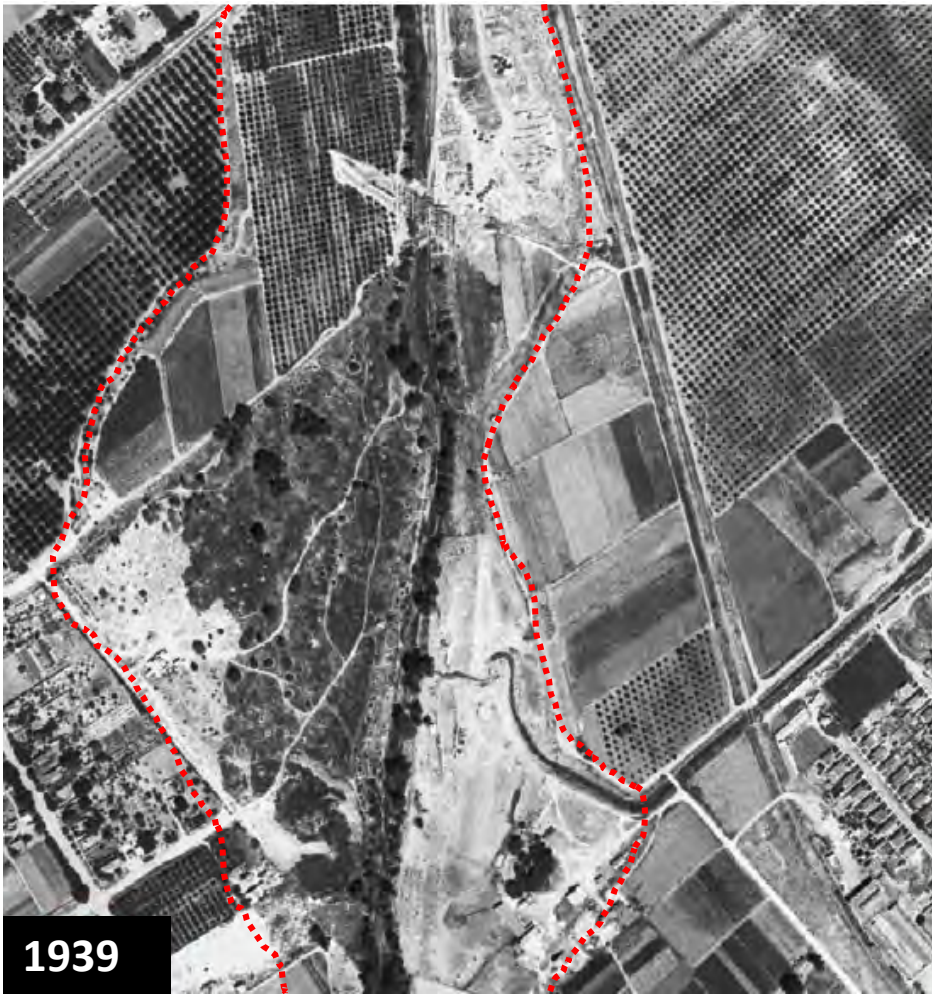
Historical Landscape Conditions – *Oakland*

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*

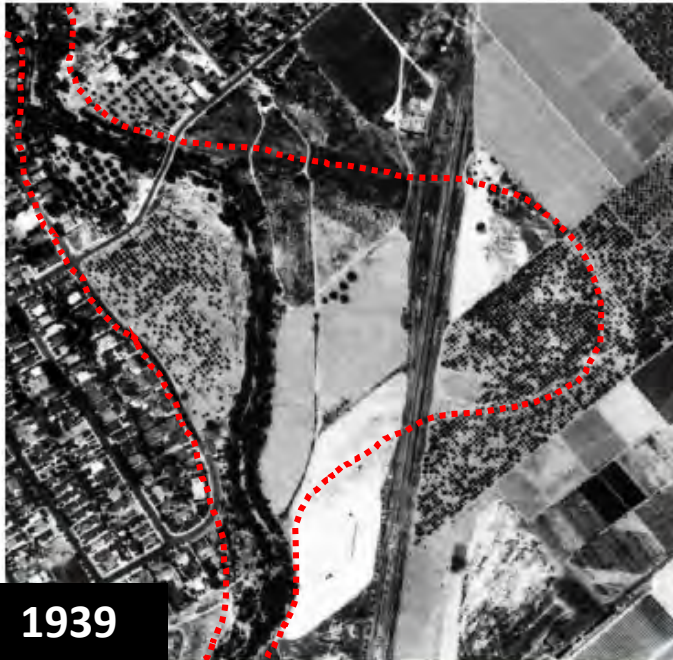


1939



2002

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 *William Street Park & 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, California.

Historical Landscape Conditions – *Kelley Park*



1939



2002

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

22

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

July 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

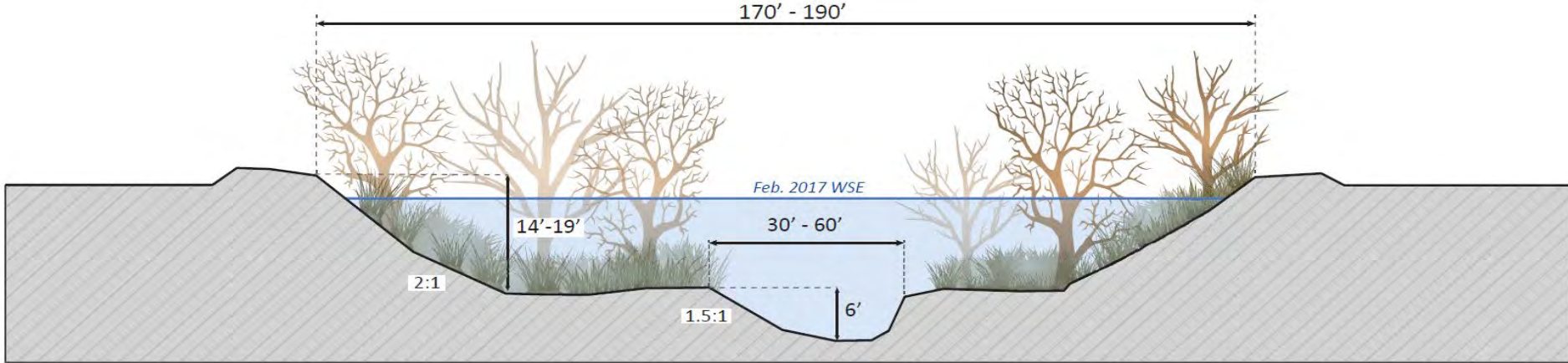
Additional Project goals:

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

Project Reaches

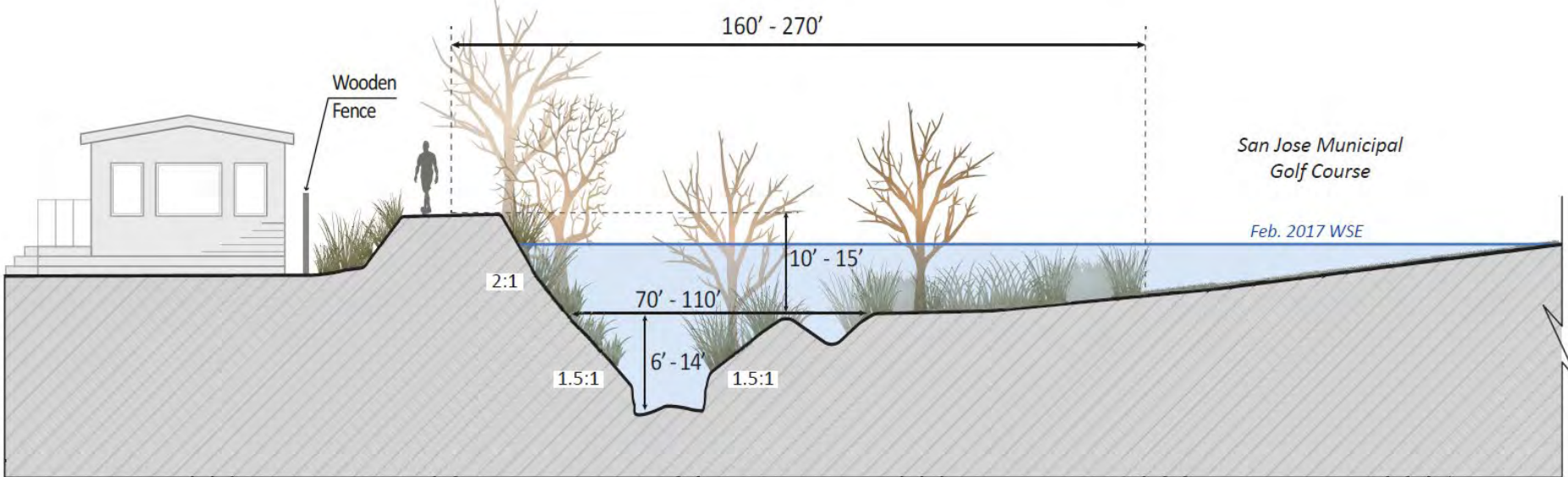


Reach 4: Montague Expressway to Old Oakland Road

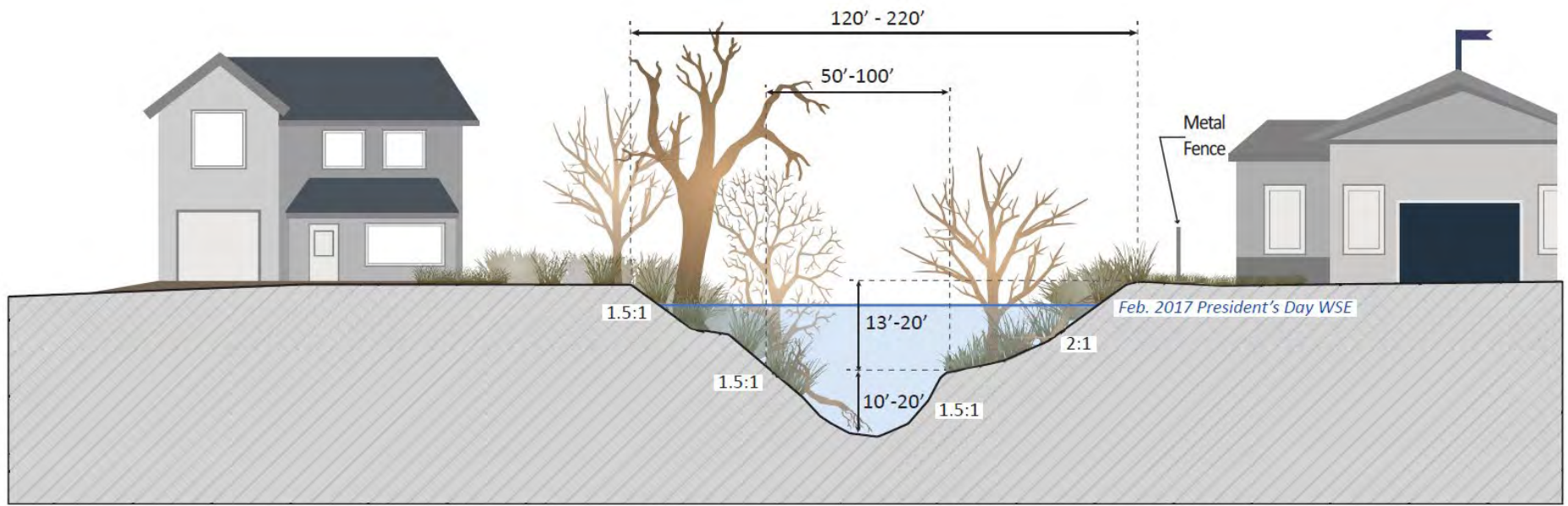


NOT TO SCALE

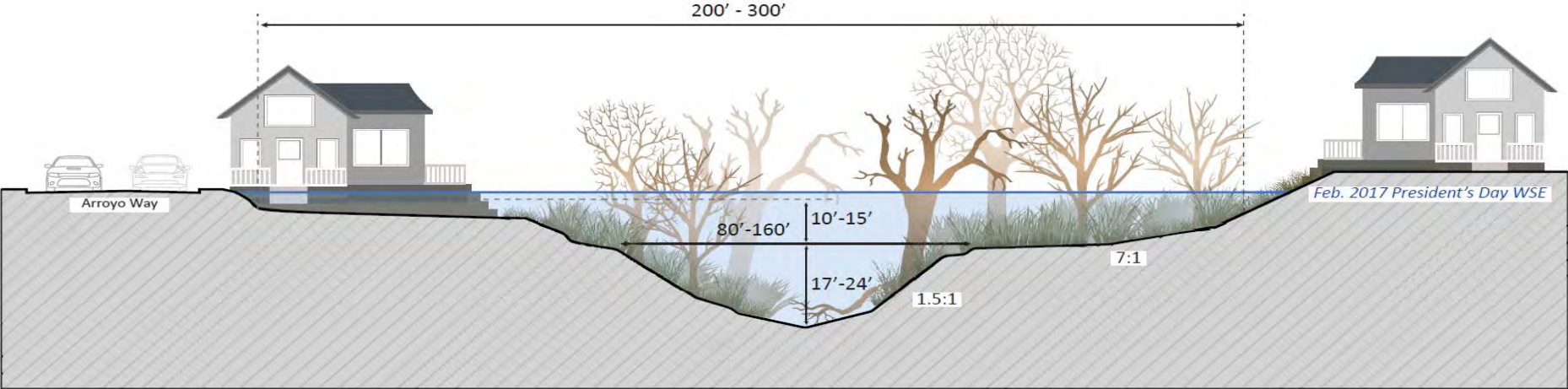
Reach 5: Old Oakland Road to Mabury Road



Reach 6: Mabury Road to East Santa Clara Street



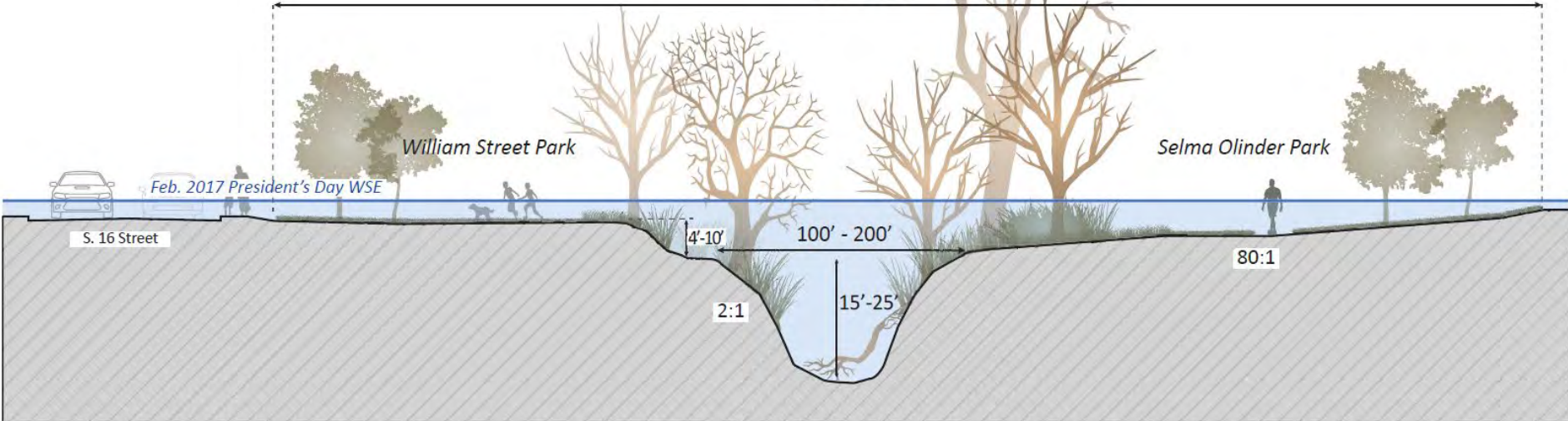
Reach 7: East Santa Clara Street to I-280



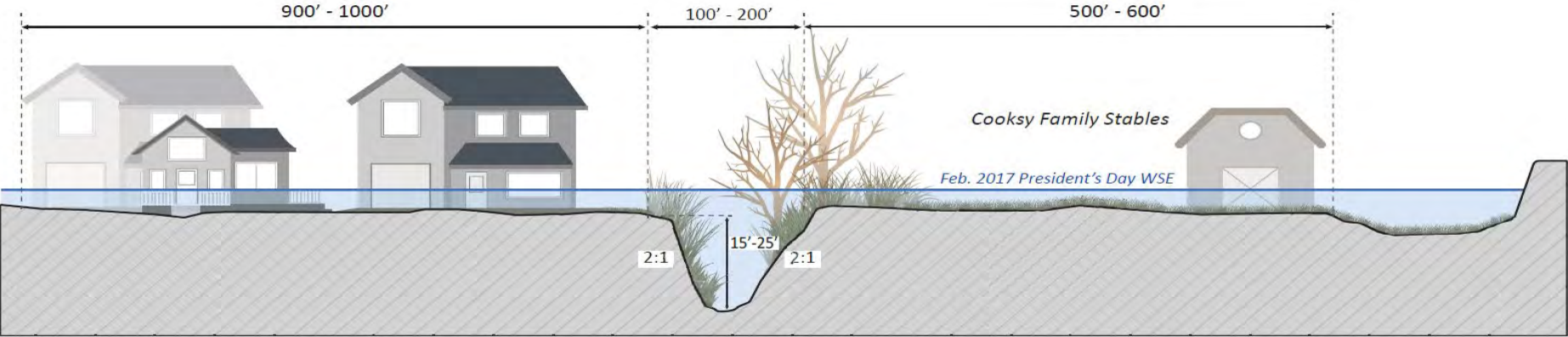
Reach 7: East Santa Clara Street to I-280



400' - 1000'



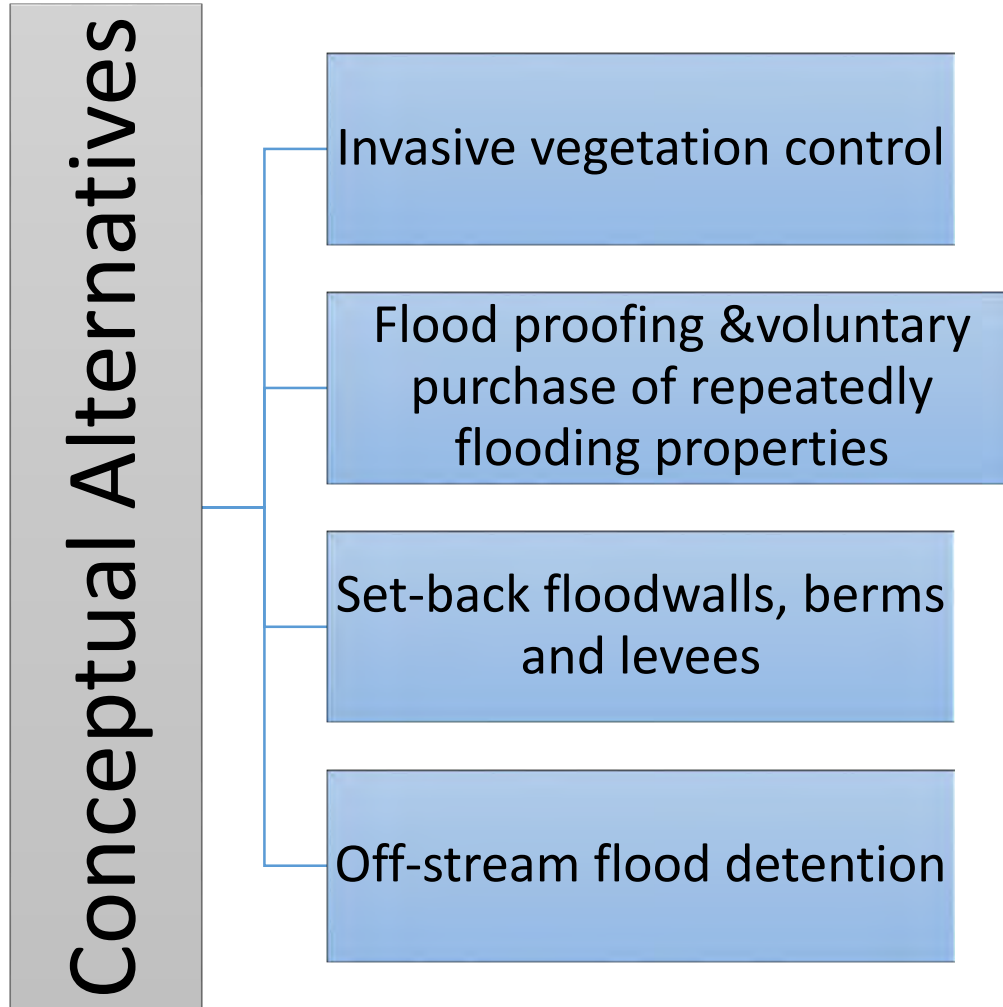
Reach 8: I-280 to Tully Road



Project Components, Status and Timeline

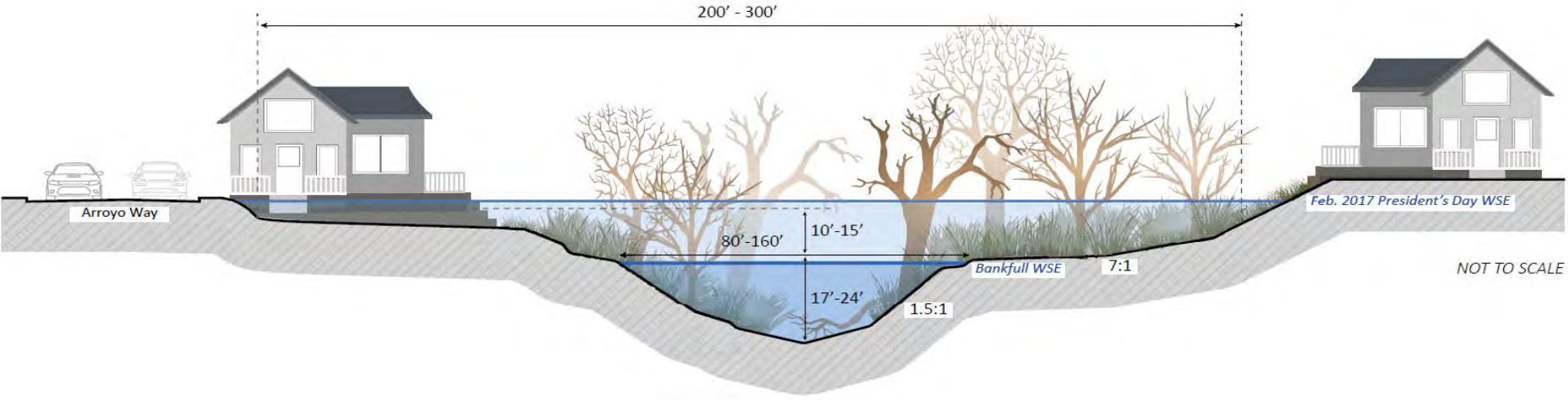
Expedited Project Timeline: Assumes project alternative selected for implementation does not require extensive permitting

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

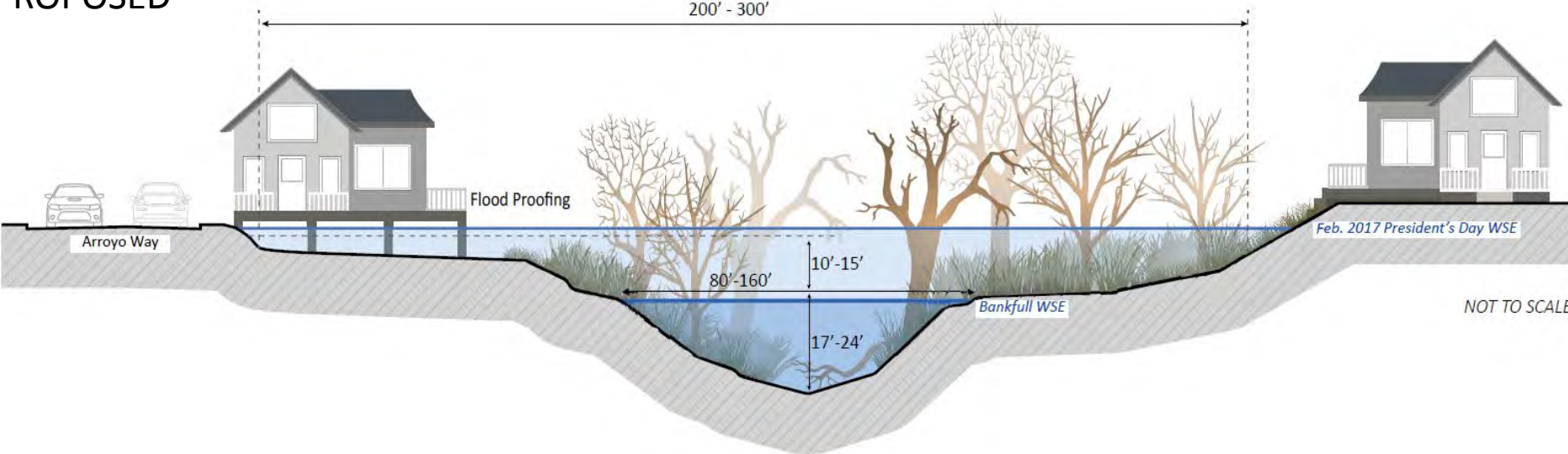


Flood Proofing

EXISTING

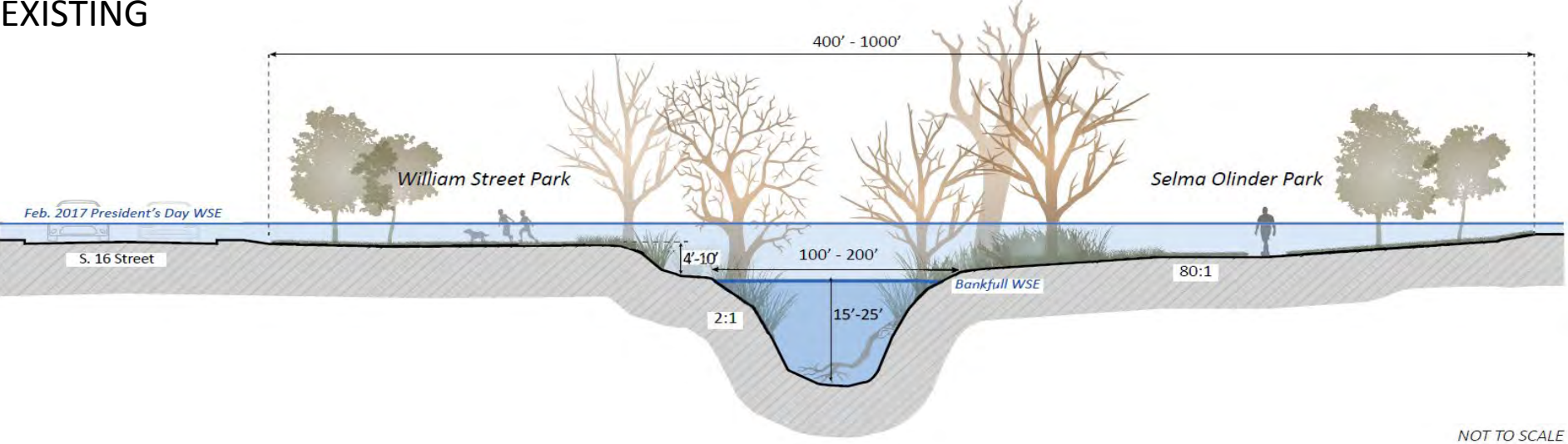


PROPOSED

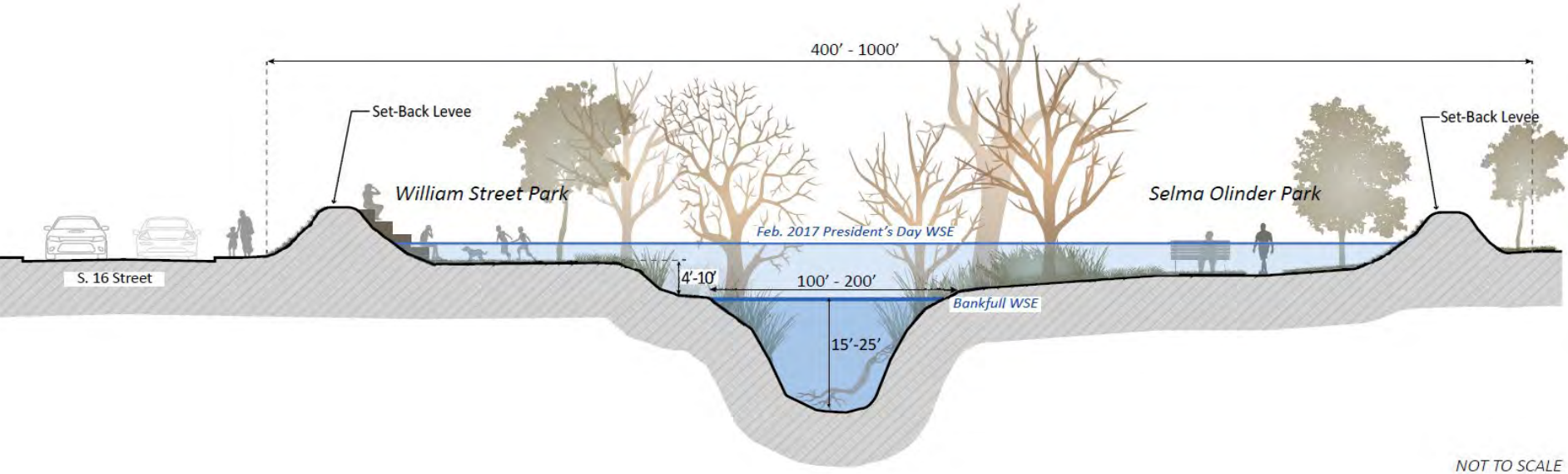


Set-back berms and levees

EXISTING

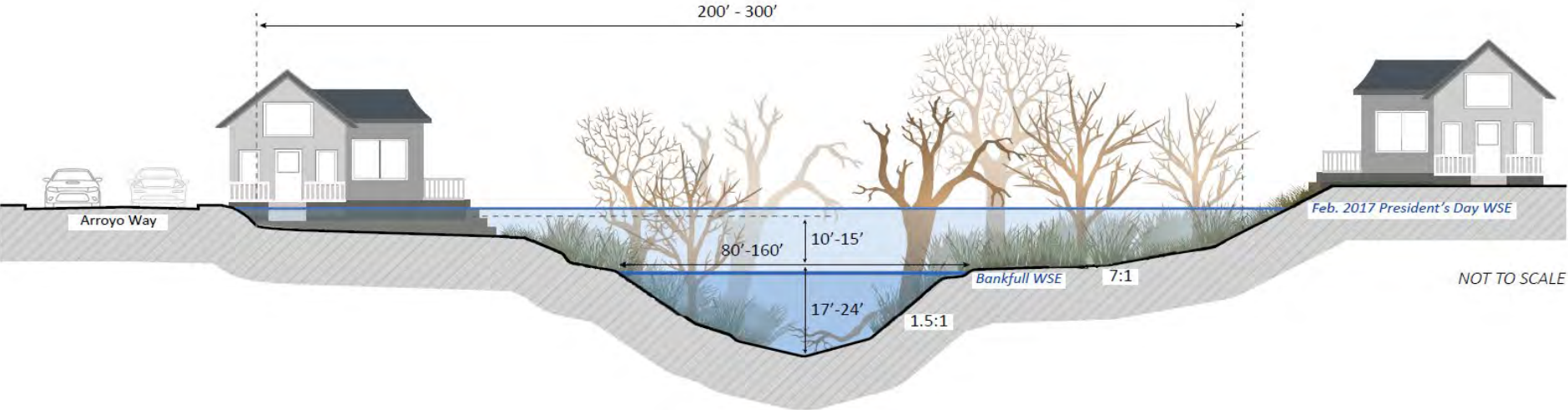


PROPOSED

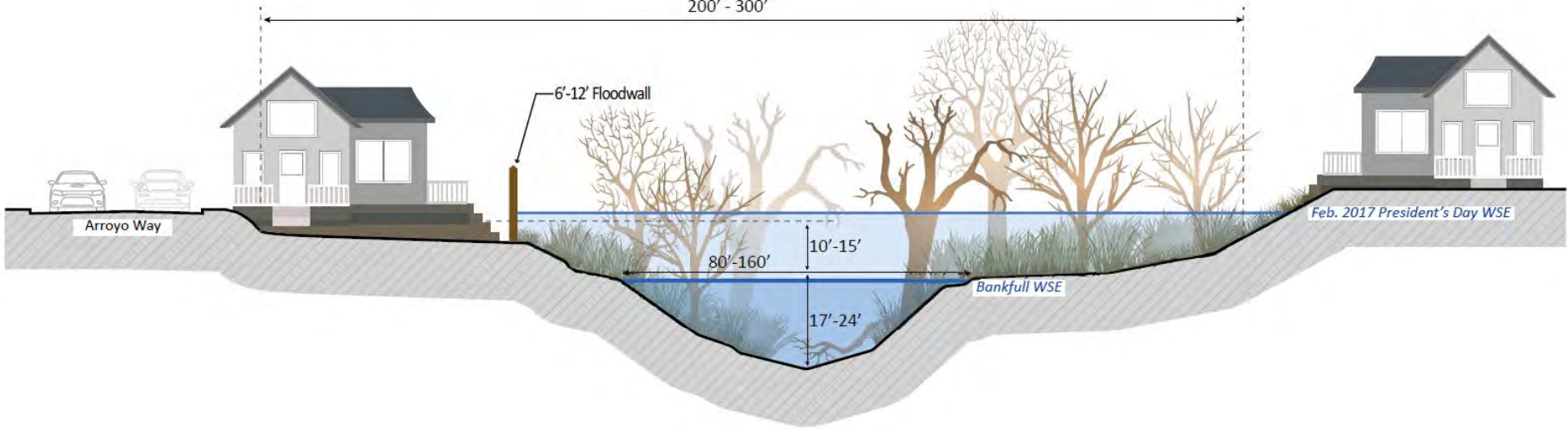


Floodwalls

EXISTING

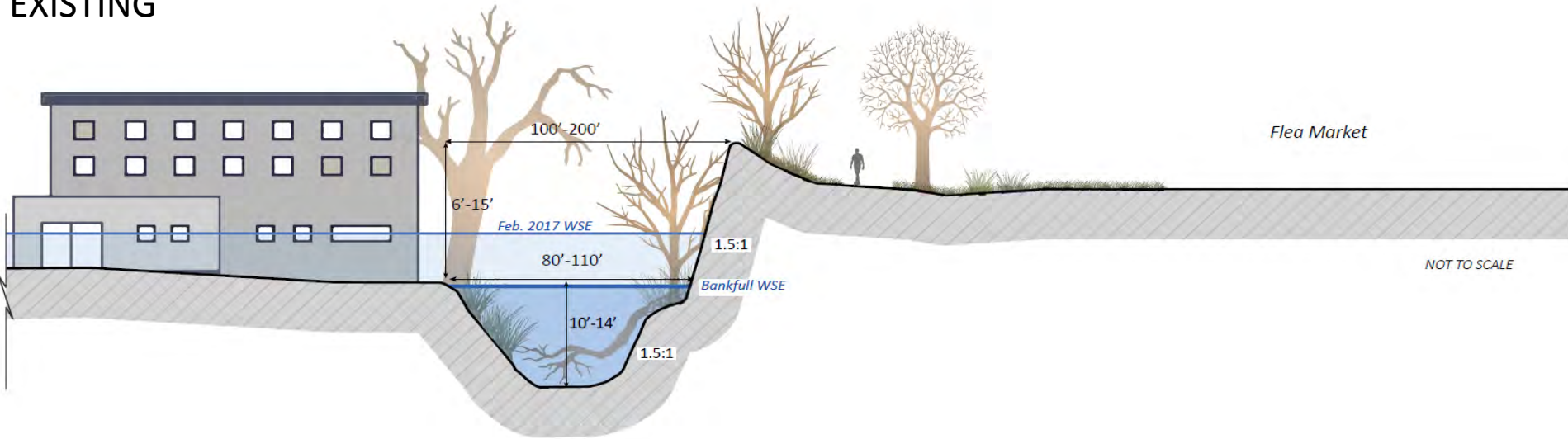


PROPOSED

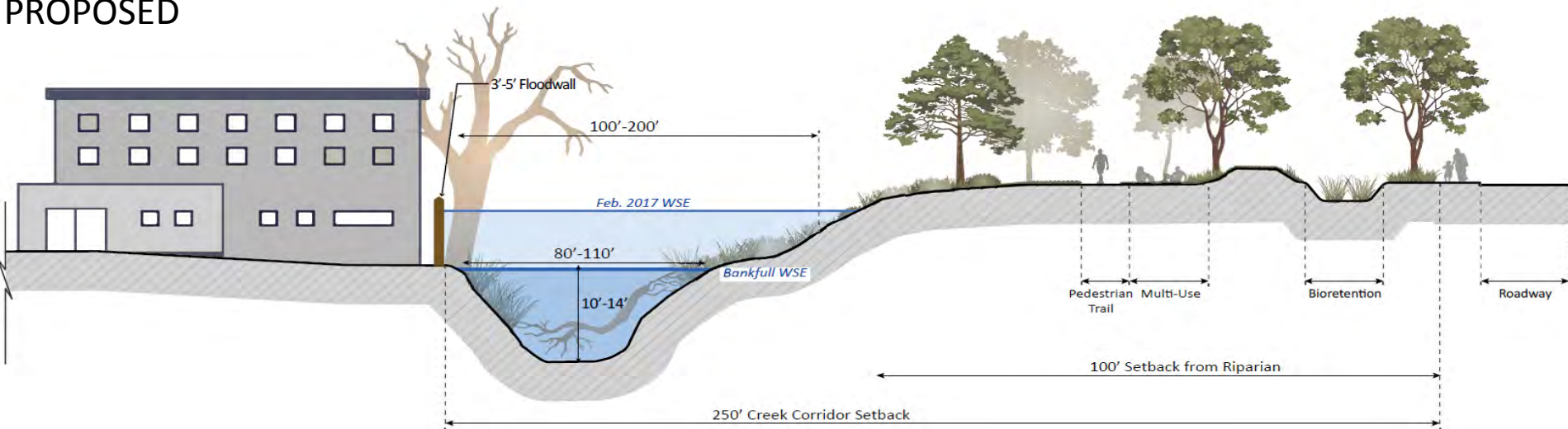


Flood protection and additional enhancements

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

Afshin Rouhani

ARouhani@valleywater.org

408-334-3646

Dámaris Villalobos-Galindo

DVillalobos-Galindo@valleywater.org

408-630-3165

Jose Villarreal

jvillarreal@valleywater.org

408-630-2879



Valley Water

Clean Water • Healthy Environment • Flood Protection

