



Valley Water

Clean Water • Healthy Environment • Flood Protection

Valley Water PPT Template
Version Release v.2.02



Guadalupe River – Tasman Dr. to 1880

Presented by: Katie Muller, Project Manager

Agenda

Guadalupe River Project – Tasman Dr. to 1880

- Project Background
- Recently Discovered Problem
- Interim & Permanent Solutions
- Next steps

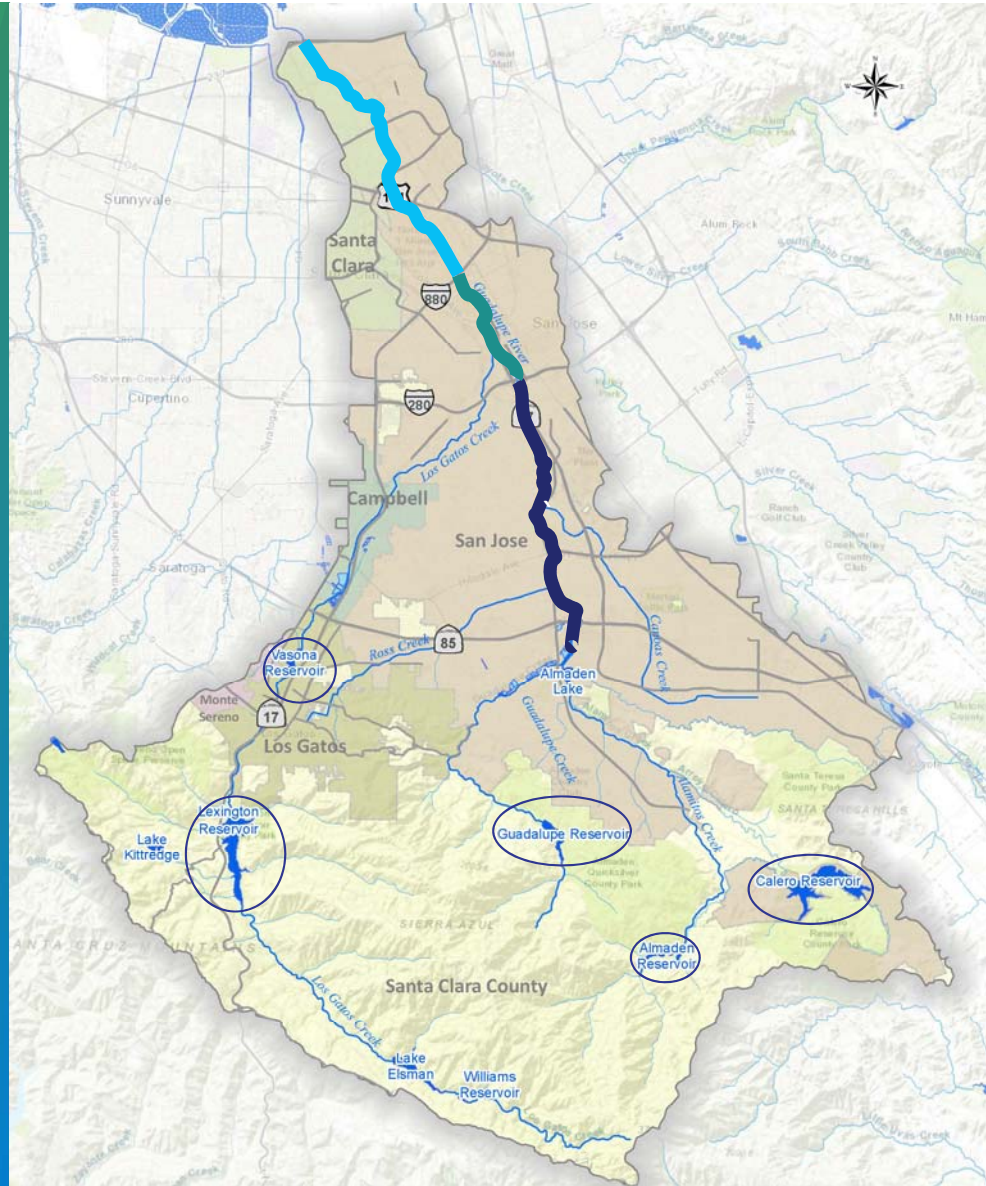
- Guided Table Discussions

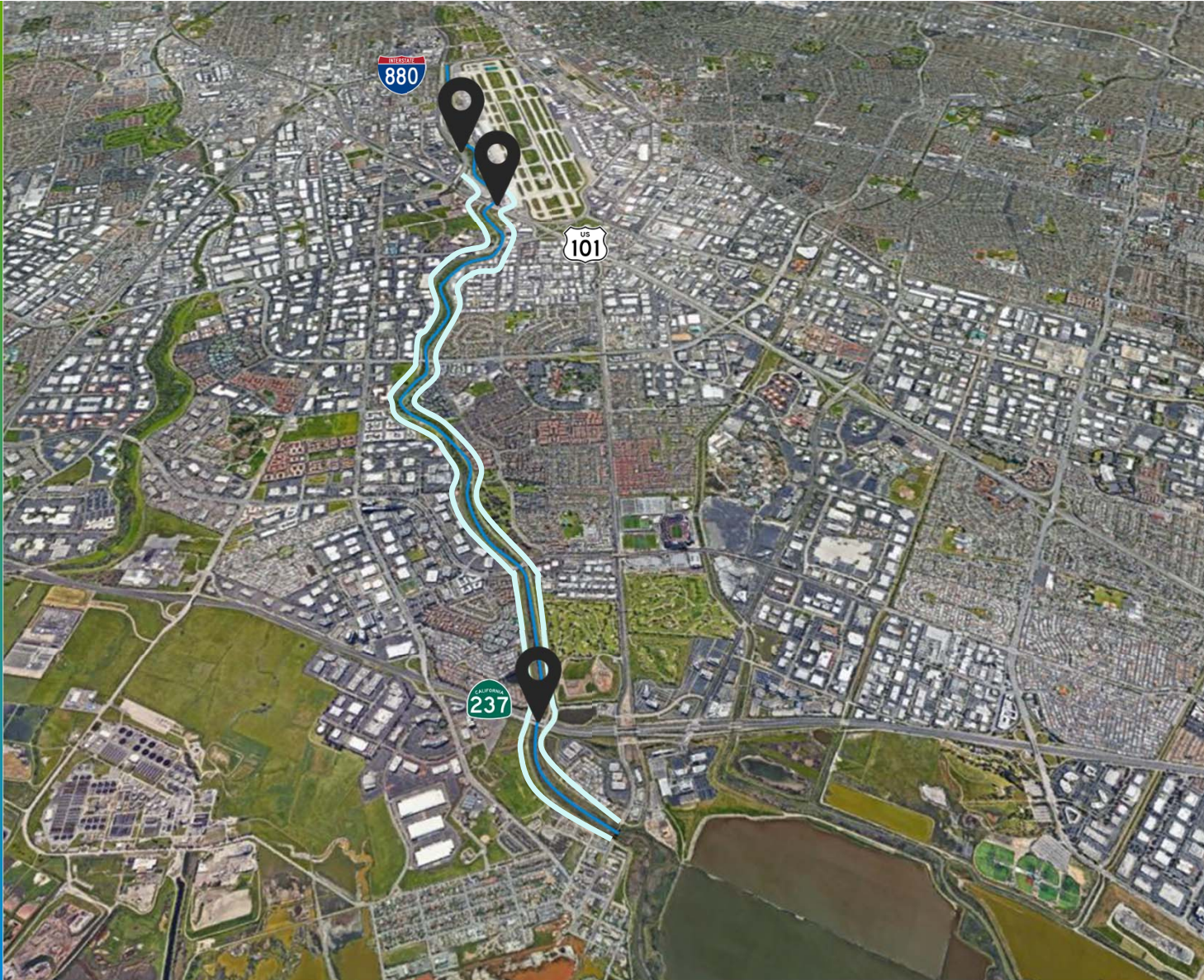


Guadalupe River Background

Guadalupe Watershed

- Upper Watershed Reservoirs
- Tributaries
- Upper Guadalupe River
- Downtown Guadalupe River
- Lower Guadalupe River





Lower Guadalupe River Project

- Completed 2004
- 100-Year flood protection
- Levees and Floodwalls
- Bridge Improvements



What is 100-Year?

1% probability of occurrence
in a given year

- 1 in 100 chance
- 26% chance over life of
30-year mortgage

Why 100-Year?

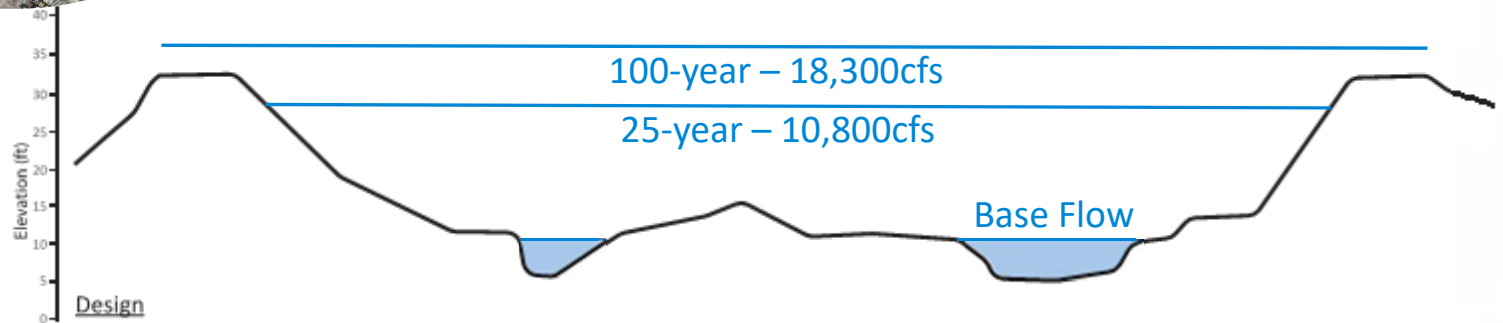
- FEMA National Flood
Insurance Program Maps
Note: Does not eliminate
all flood risk!



Recently Discovered Problem

Maintenance & Monitoring

- Annual maintenance
- High-water mark collection
- Hydraulic model calibration



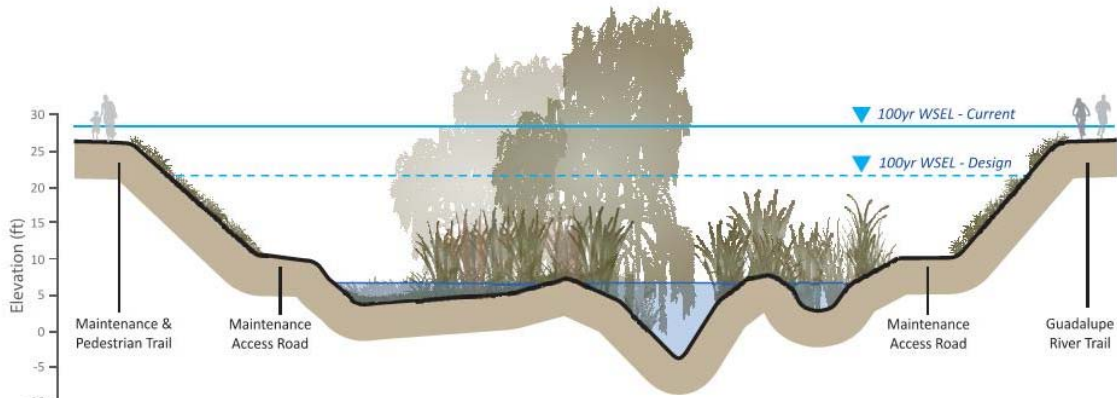
Causes

- High vegetation growth
- Permit Restrictions
- Mitigation Planting

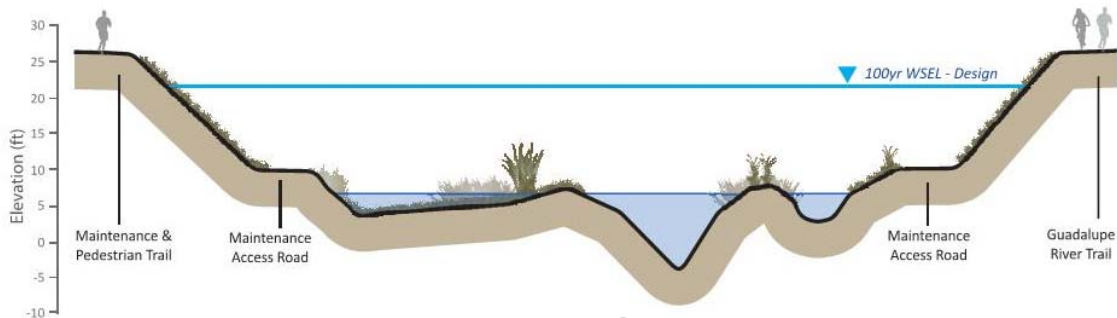


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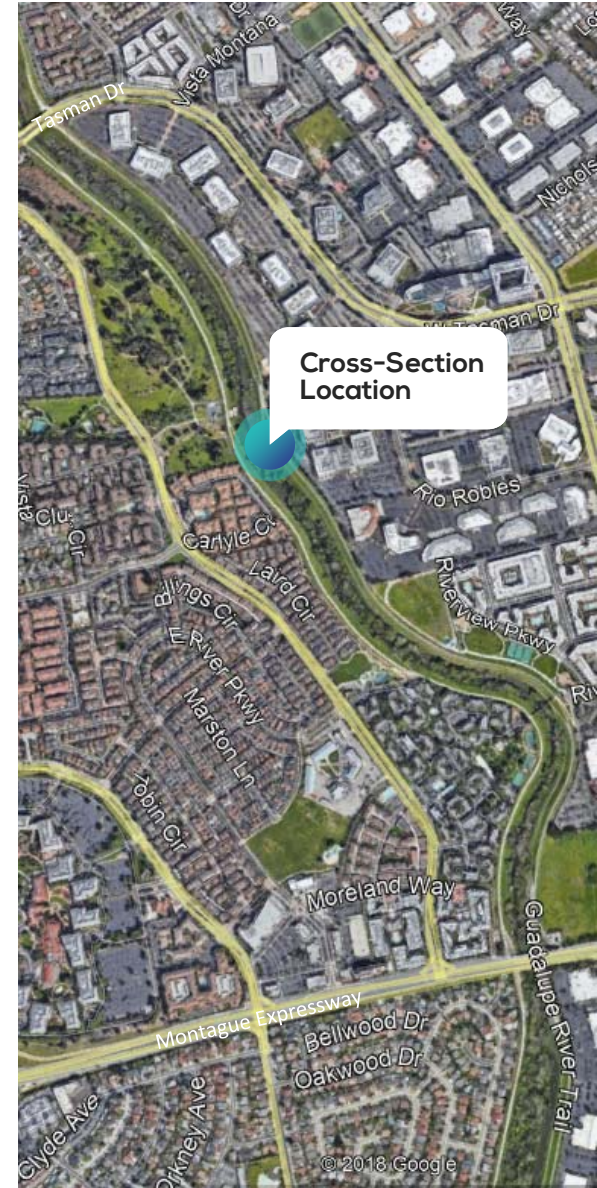
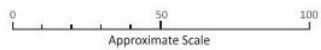
Typical Section: Montague Expressway to Tasman Drive
Facing Downstream to Tasman Drive



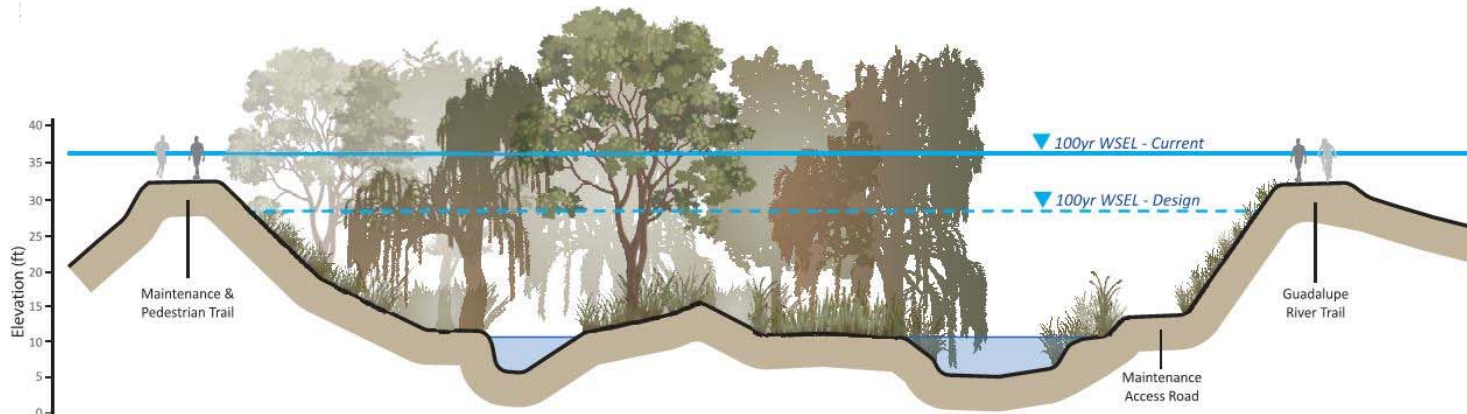
Current Condition



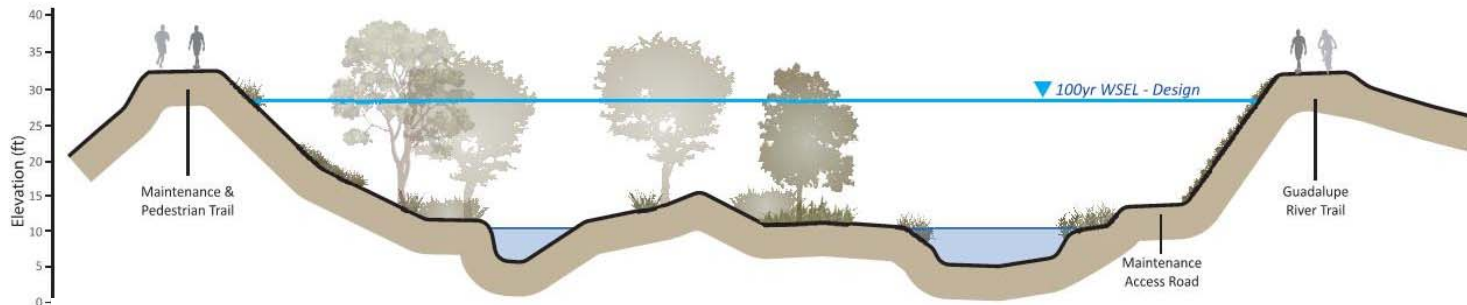
Design Condition



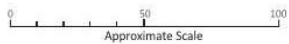
Typical Section: Trimble Road to Montague Expressway
Facing Downstream to Montague Expressway



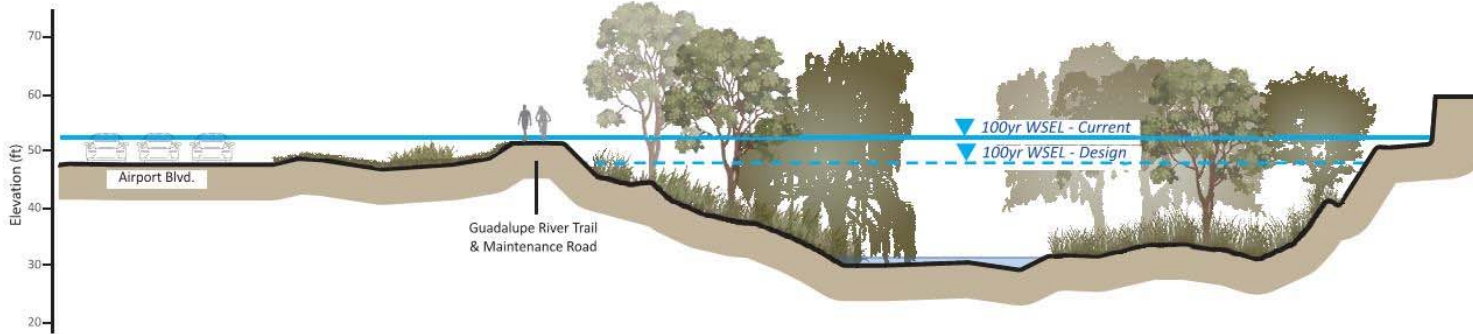
Current Condition



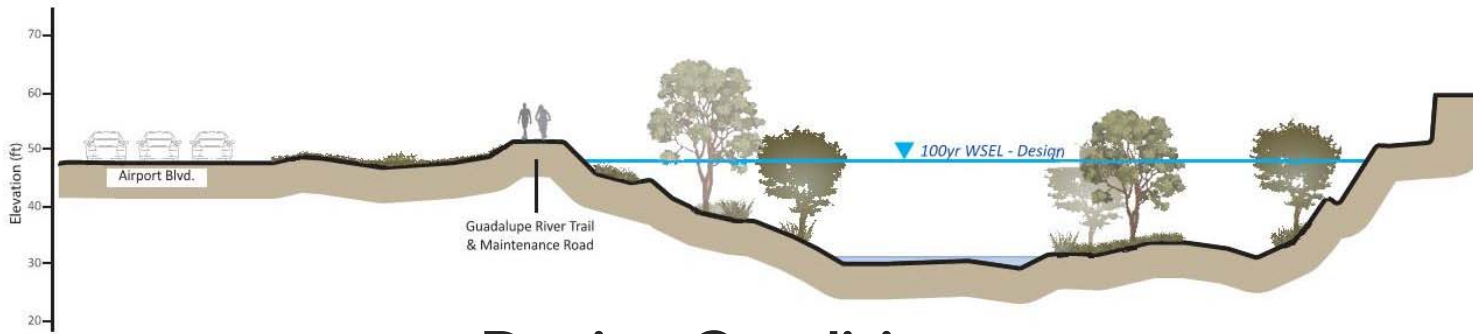
Design Condition



Typical Section: I-880 to Trimble Road Facing Downstream to Trimble Road



Current Condition



Design Condition

0 25 50
Approximate Scale





Interim Solutions

Preparations for This Winter



Vegetation Removal

Trees cleared from levees and 15 feet from levee toe



Sediment Removal

Sediment removed from side channels to return to design condition



Lexington Operations

Operate Reservoir for Flood Risk Reduction



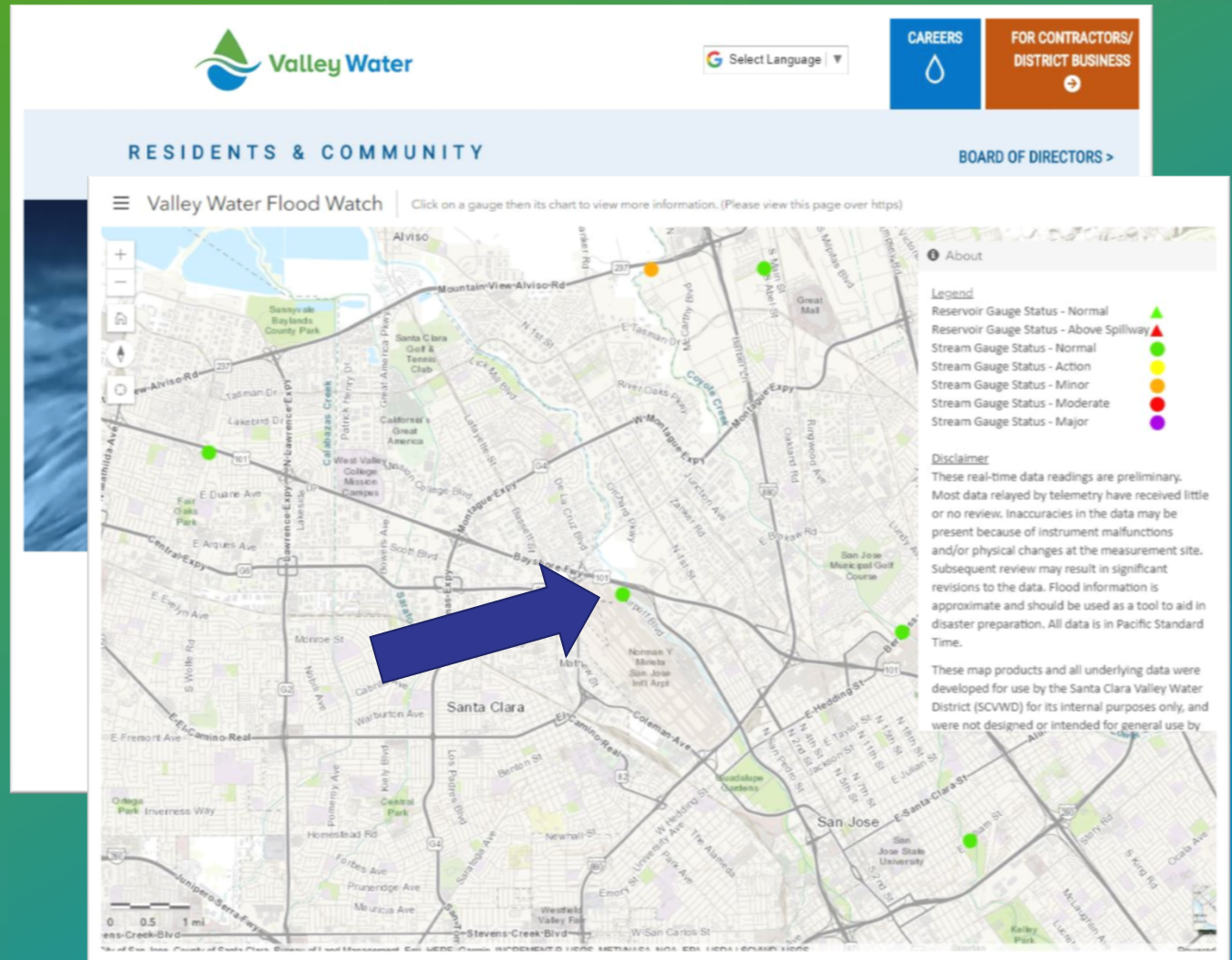
Storm Preparedness

Valley Water Field Information Teams (FIT), City Coordination, and Emergency Action Plans

Valley Water Flood Watch

[valleywater.org/
floodready](http://valleywater.org/floodready)

- Monitor stream gage levels
- Sandbag distribution sites
- Flood safety advice

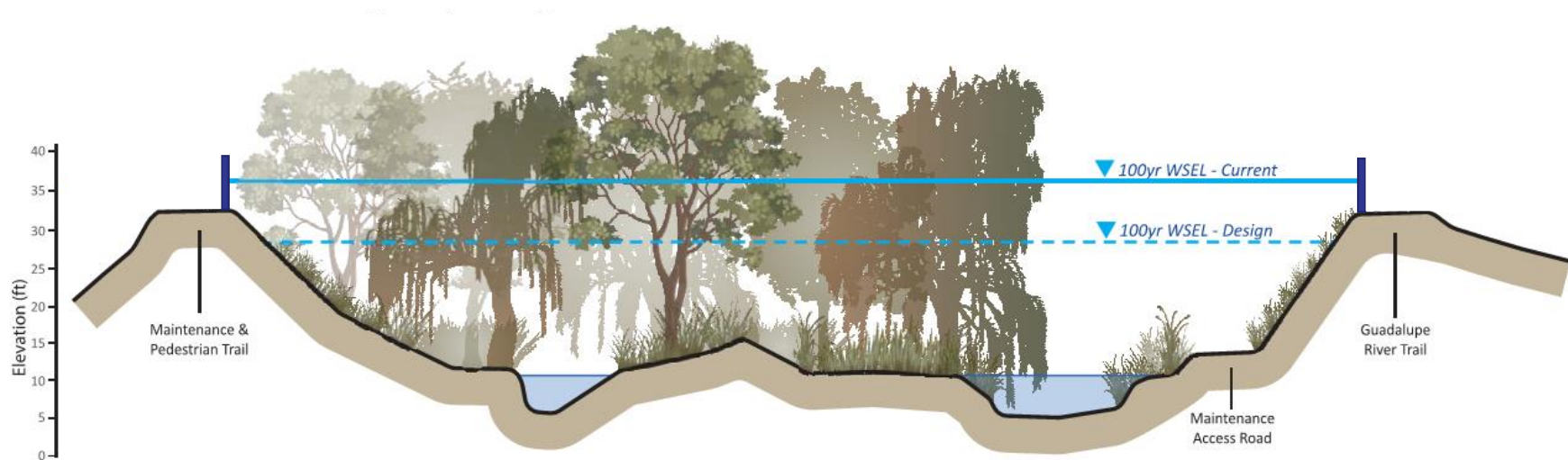




Permanent Solutions

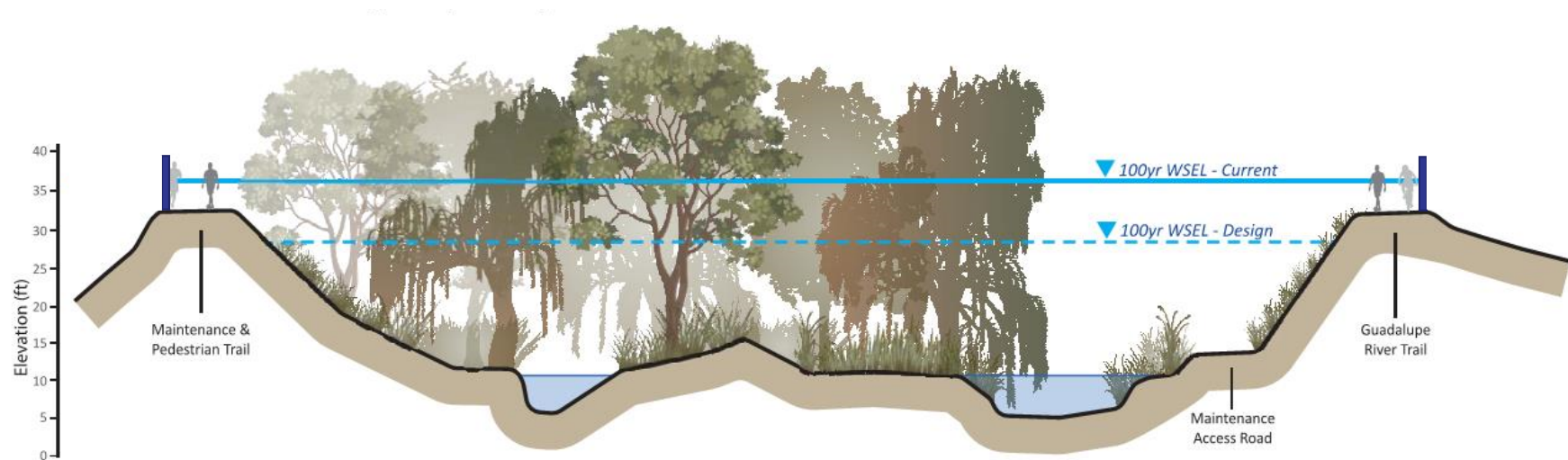
Conceptual Alternatives

Inboard Floodwalls – up to 6 feet



Conceptual Alternatives

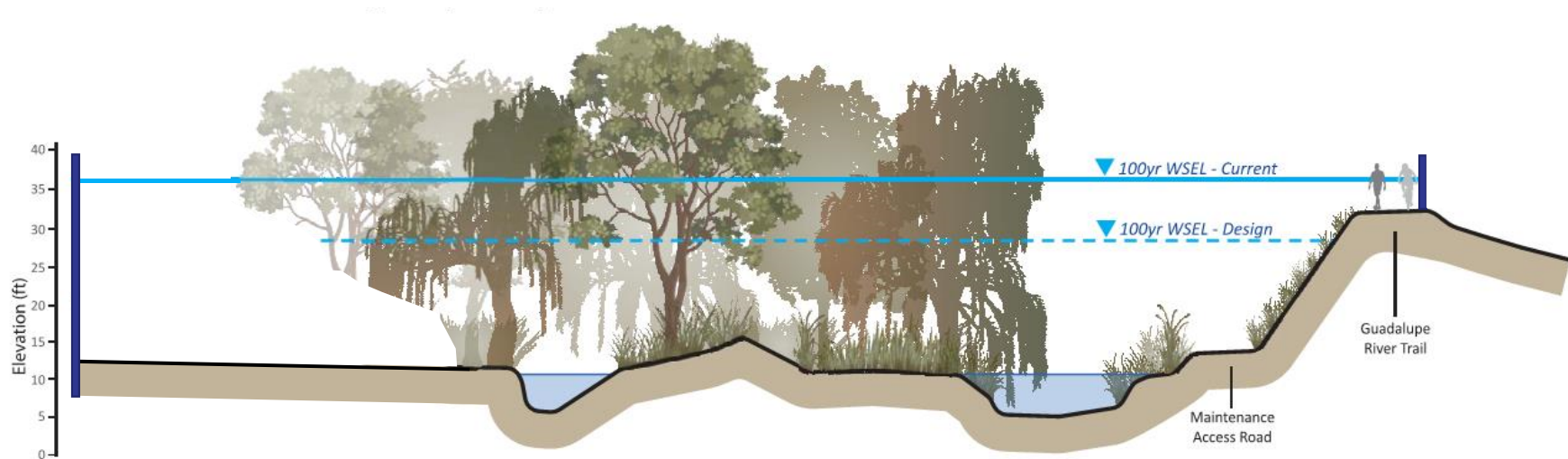
Outboard Floodwalls – up to 6 feet



Conceptual Alternatives

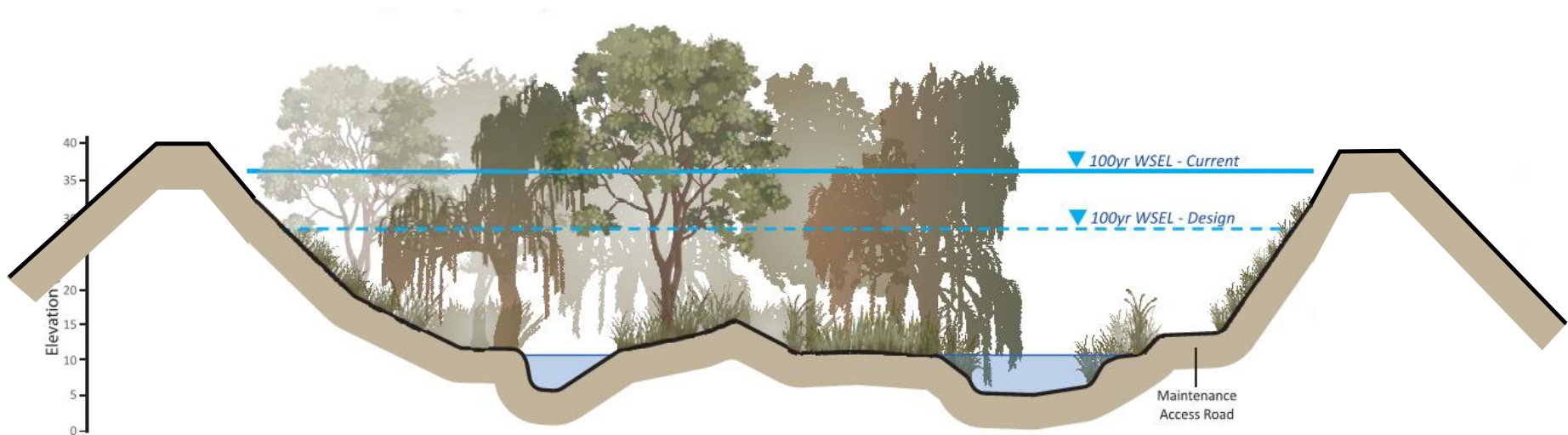
Replace Levee with Floodwall

20



Conceptual Alternatives

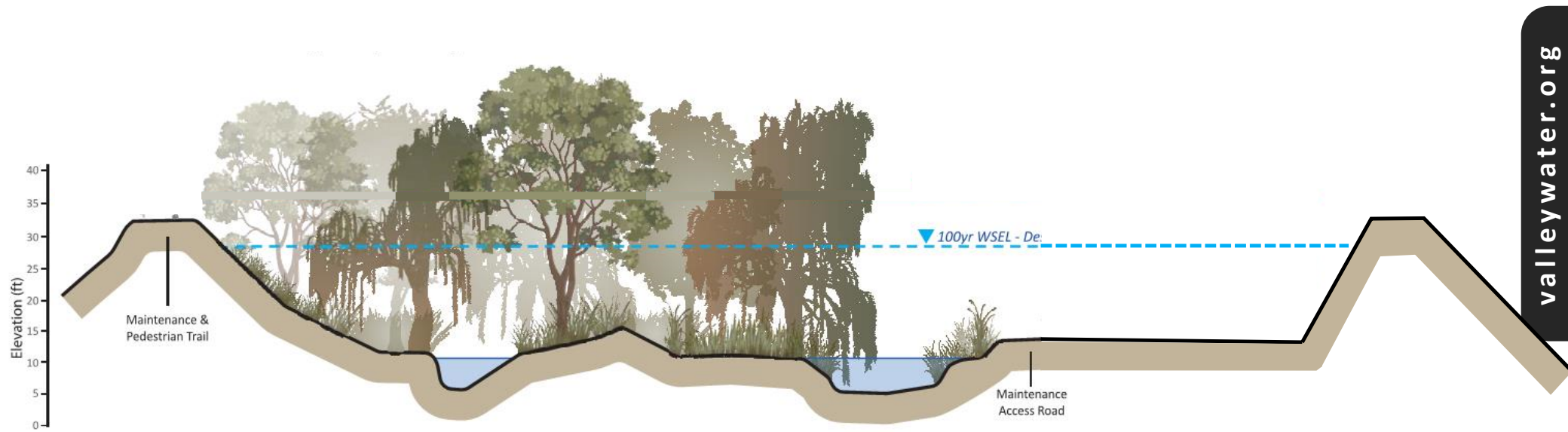
Raise Levees— up to 6 feet



Conceptual Alternatives

Widen River Channel/Setback Levee

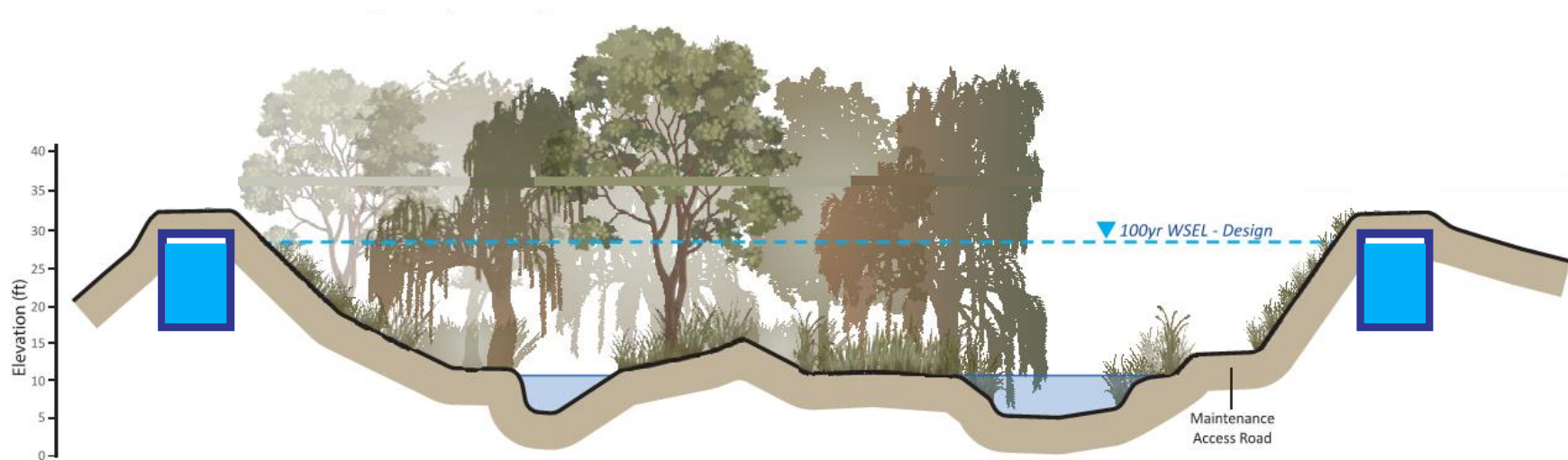
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Conceptual Alternatives

Bypass Channels

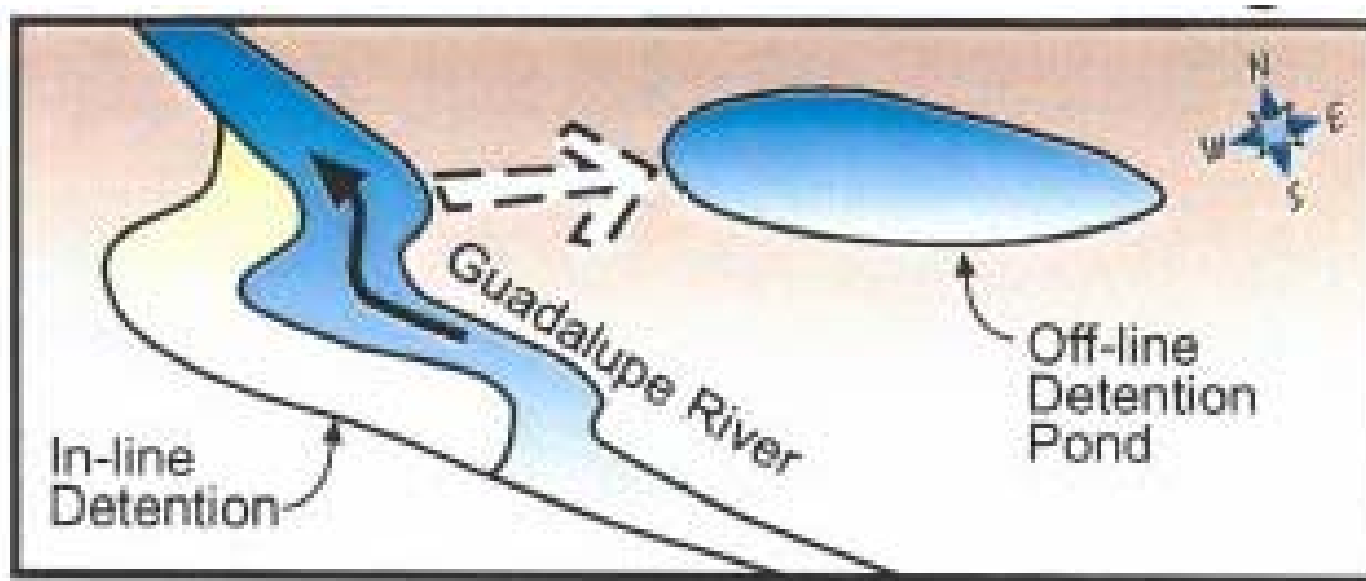
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Conceptual Alternatives

Off-Stream Detention

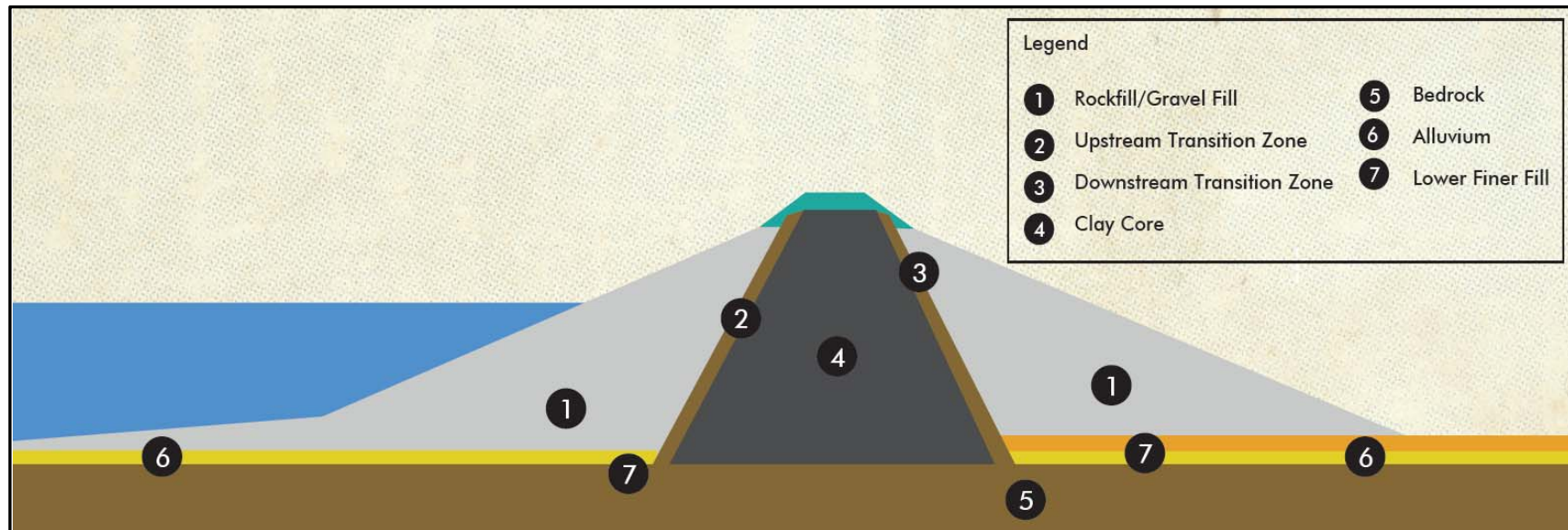
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Conceptual Alternatives

Raise or Re-Operate Dams

25



valleywater.org

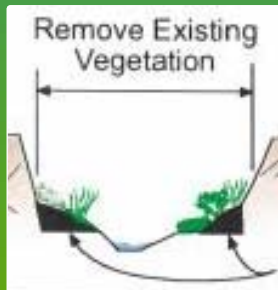
Planning Study Timeline

Start

March – May 2019

Problem Definition

Gather Information
Define Problem
Refine Objectives



Conceptual Alternatives

Identify Design Options
Initial Cost Estimate
Project Objectives

June – September 2019

October 2019 – March 2020

Feasible Alternatives

Refine Design
Refine Cost Estimate
NFP Analysis



Staff-Recommended Alternative

Best meets Project Objectives

April – June 2020

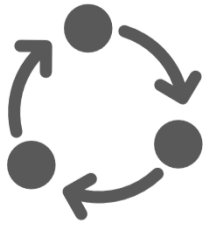
Start CEQA and other permits

June 2020

Board of Directors Approval

Proceed to Design Phase





Design Phase

30%, 60%, 90%, Final Design

Summer 2020 – Spring 2022

All environmental permits approved

Spring 2022–Spring 2024

Construction Phase



End

Guadalupe River
Planning Project

Next Steps:

Project team will gather all the information from this meeting and use it to guide the alternatives analysis



Public Meeting #2

Staff will present feasible alternatives



Public Meeting #3

Staff will present recommended alternative

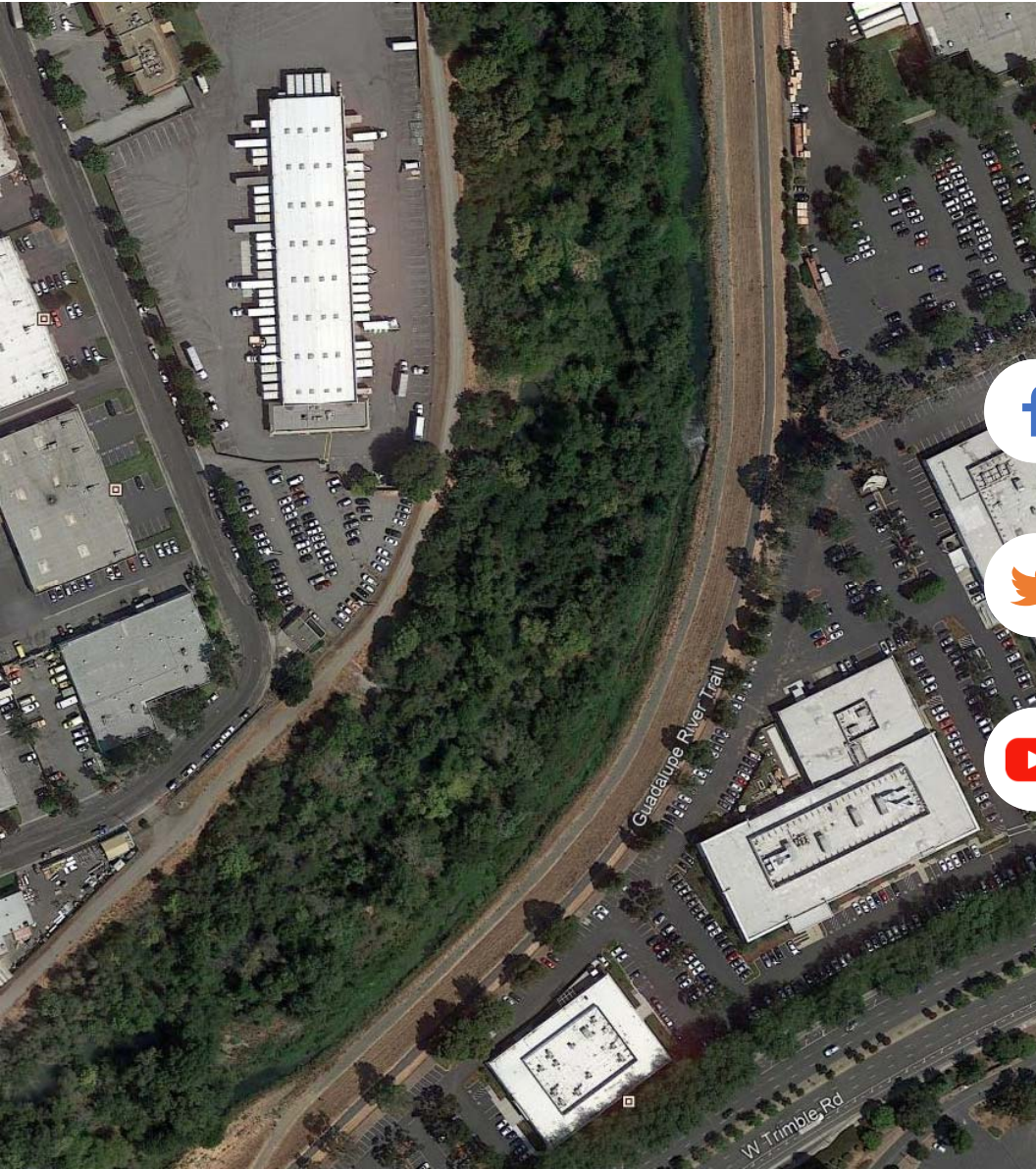


Planning Study Report and Board Approval

QUESTIONS



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