

# Lower Peninsula Watershed Master Plan Stevens Creek

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**Valley Water**



# Agenda

- Watershed Master Plan Overview
- Settings/Background
- Example Metrics
- Example Priority Actions
- Discussion



The image is a circular graphic with a background photograph of a paved road leading to a stone bridge over a creek. The scene is surrounded by trees and a blue emergency call station is visible on the right. The text 'Stevens Creek Summit Ice Breaker' is overlaid in a large, bold, yellow font with a blue drop shadow.

*Stevens Creek*

*Summit*

*Ice Breaker*





**Merriam's Chipmunk**



**Western Skink**

***Which Stevens  
Creek critter  
would you like to  
be for a day?***



**American Dipper**



**Red-legged frog**



**A. 20 miles**

**B. 35 miles**

*Approximately  
how long is  
Stevens Creek?*

**C. 5 miles**

**D. 100 miles**



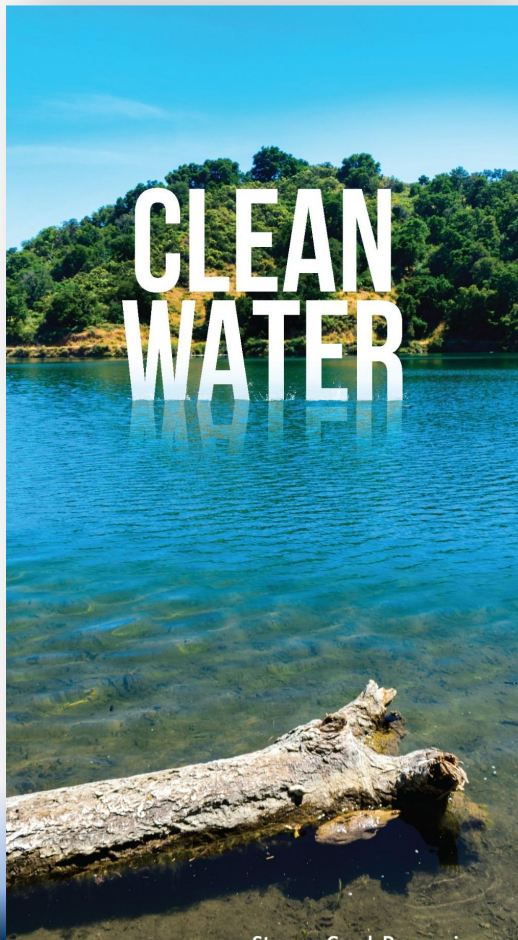


*What is your  
primary focus?*



# Valley Water: Who Are We?

- Wholesale water supply
- Groundwater management
- Flood protection
- Stream stewardship





# ***What is Watershed Master Planning?***

**Water Supply**



**Natural Ecosystems**



**Water Quality**



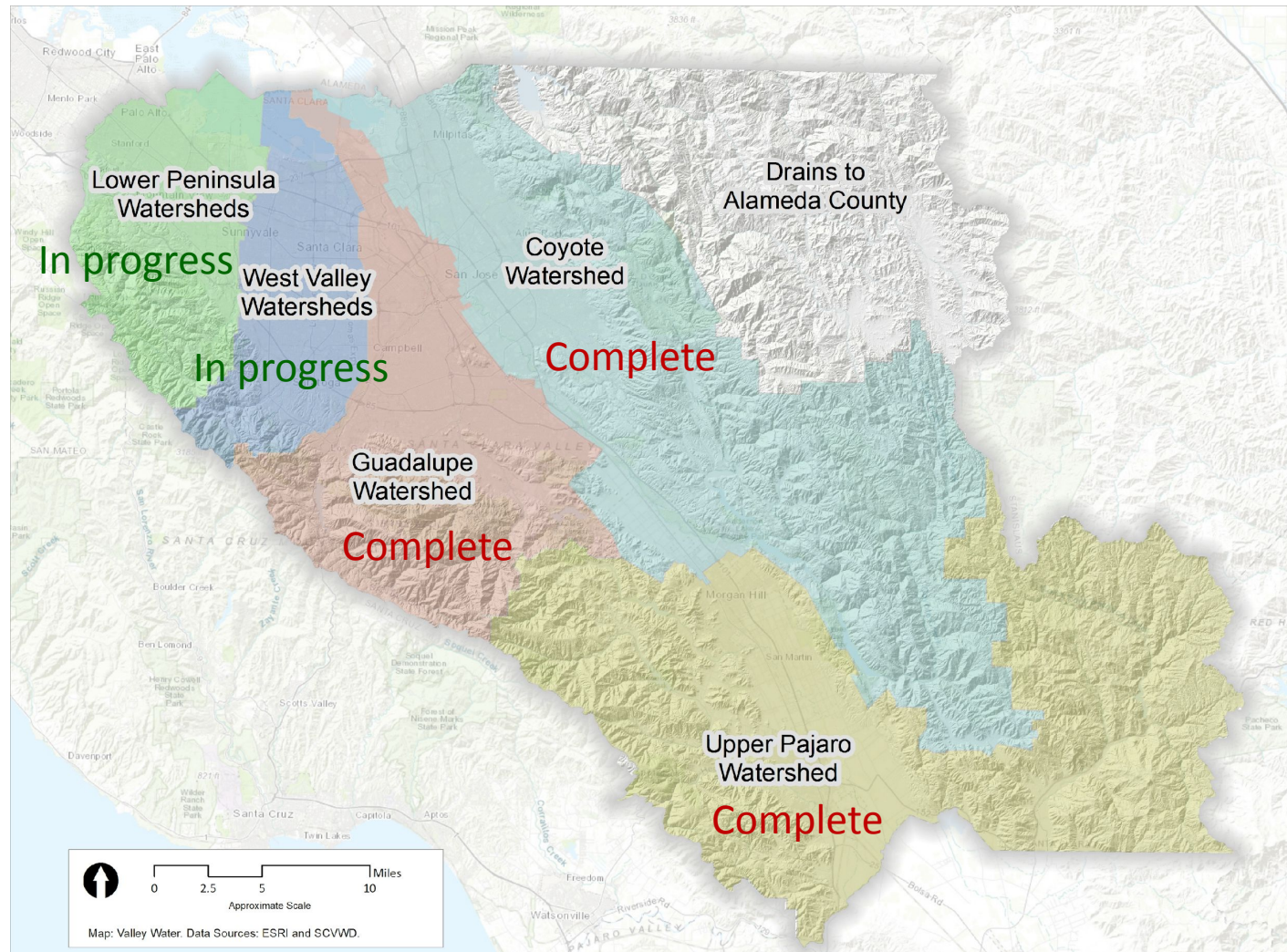
**Climate Change**



**Flood Risk Reduction**



# Watershed Master Plans



# Key Elements of Plan

Setting

+

Metrics

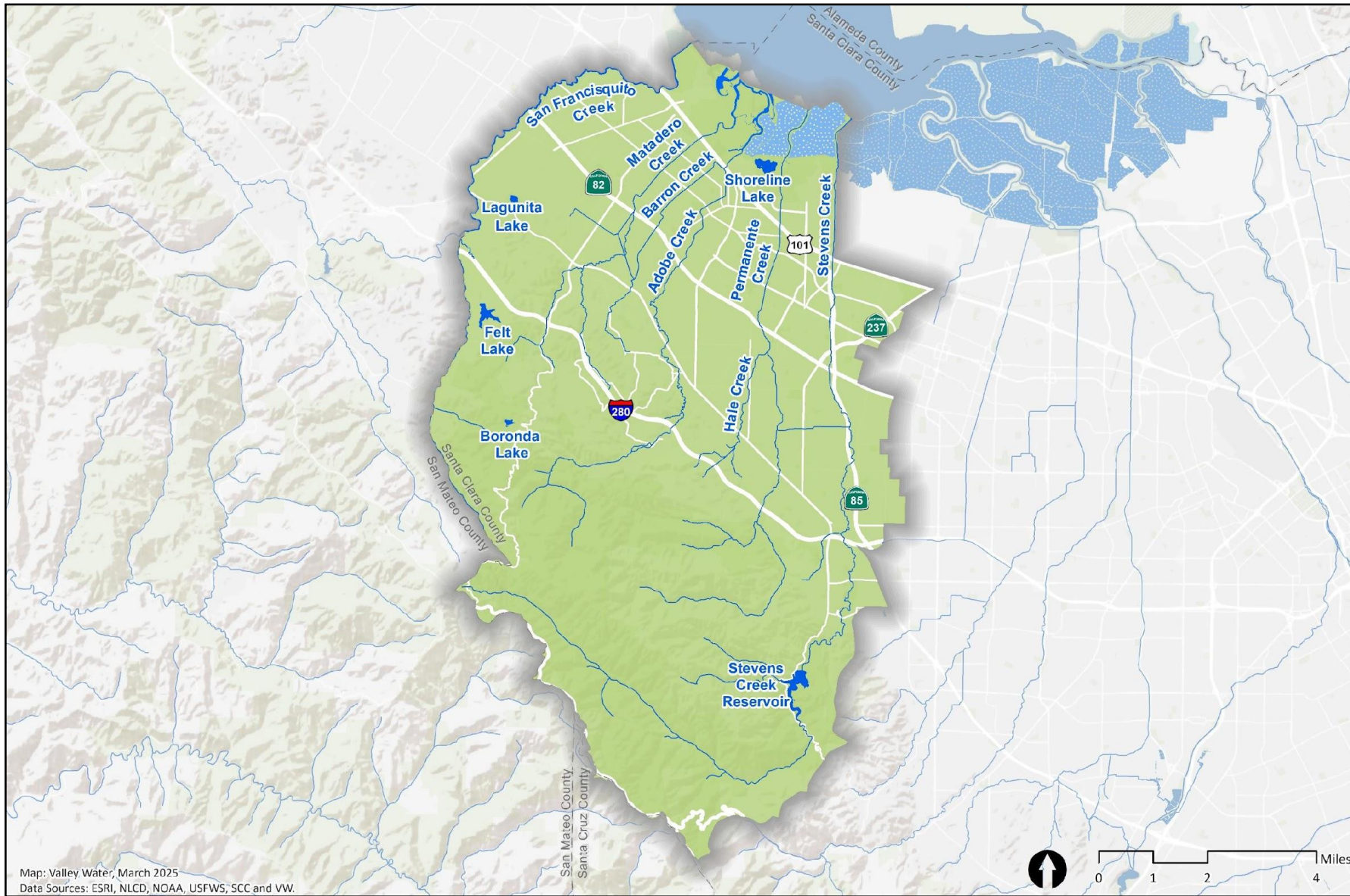
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Priority Actions



## Watershed Master Plan





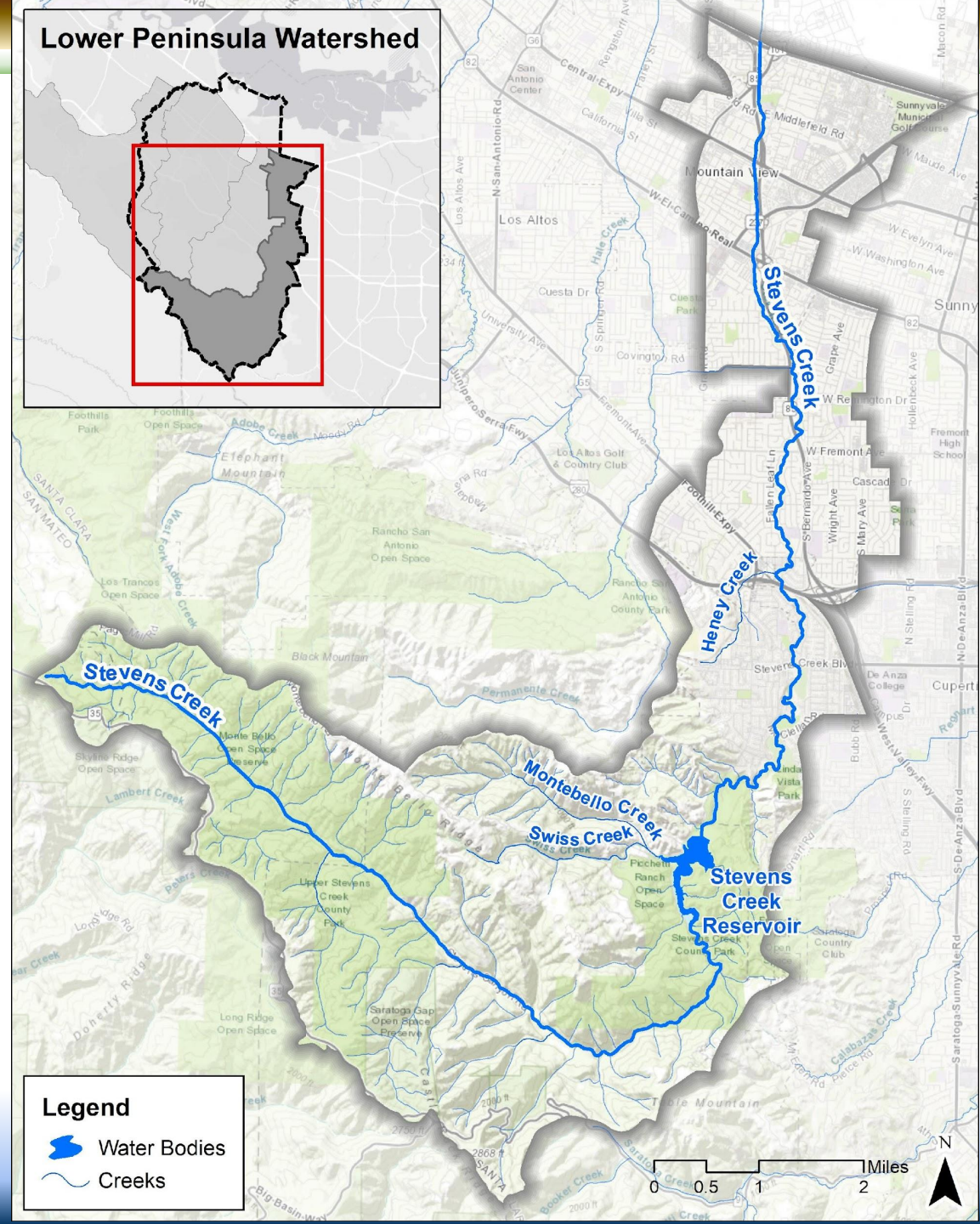
# Lower Peninsula Watershed

- 90 sq miles
- Highly developed and channelized
- Several streams supports native steelhead, including Stevens Creek



# Settings – Stevens Creek

- 23-mile system
  - ~9 miles managed by Valley Water
- Diverse channel configurations
- Contains levees near the Bay
- Drainage Area: (29 sq. miles)
- Stevens Creek Dam/Reservoir
- Permanente Diversion
- Contains endangered fish species



# Settings – Stevens Creek

## Field Observations

- **Erosion of Bed and Banks**
  - Bed scour up to 10 feet deep
  - Tall banks & steep slopes
  - Aging grade control structures
- **Flood Protection**
  - Dense vegetation
- **Fish Passage and Environmental Impact**
  - Fish Barriers / Drop Structures



# Settings – Stevens Creek

## Example Condition Assessment Overview:

- Reach between Perm. Diversion and Hwy 85 showing bank erosion and channel wear
- Opportunity to address early and explore multi-benefit projects
- Shared corridor across Mountain View, Sunnyvale, and Valley Water—opportunity for partnership



# Settings – Stevens Creek

- **Approx. 68% of creek in good condition**
- Stable banks and channel
- Routine maintenance keeps it functioning well



# Settings – Stevens Creek

- **Approx. 25% of creek signs of signs of wear**
- Areas that require monitoring and planned maintenance
- Good candidates to address in partnerships



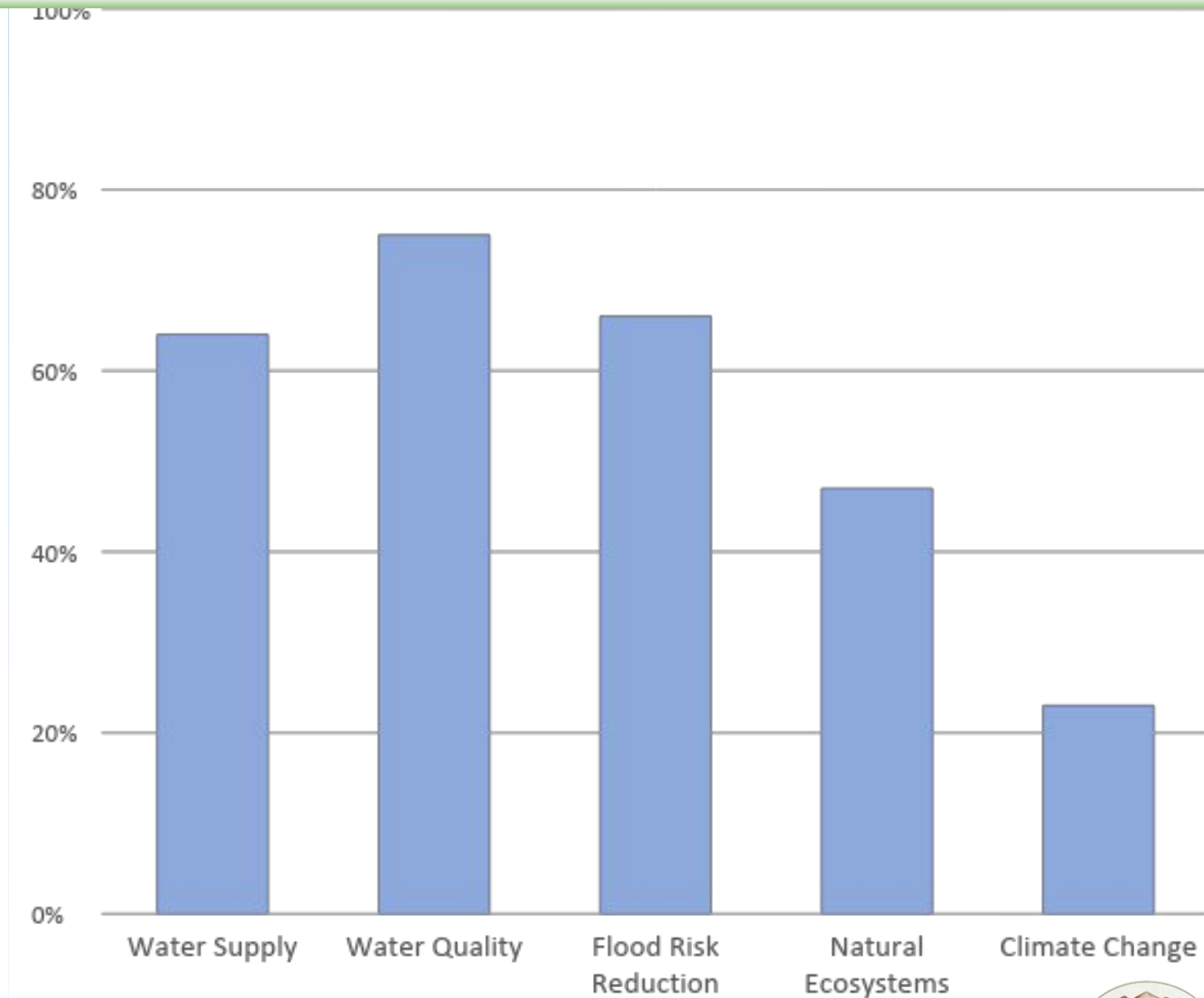
# Settings – Stevens Creek

- **Approx. 6% of creek in poor condition**
- ~0.5 mile
- Areas with high potential for impacts mainly due to erosion
- Priority areas for near-term actions



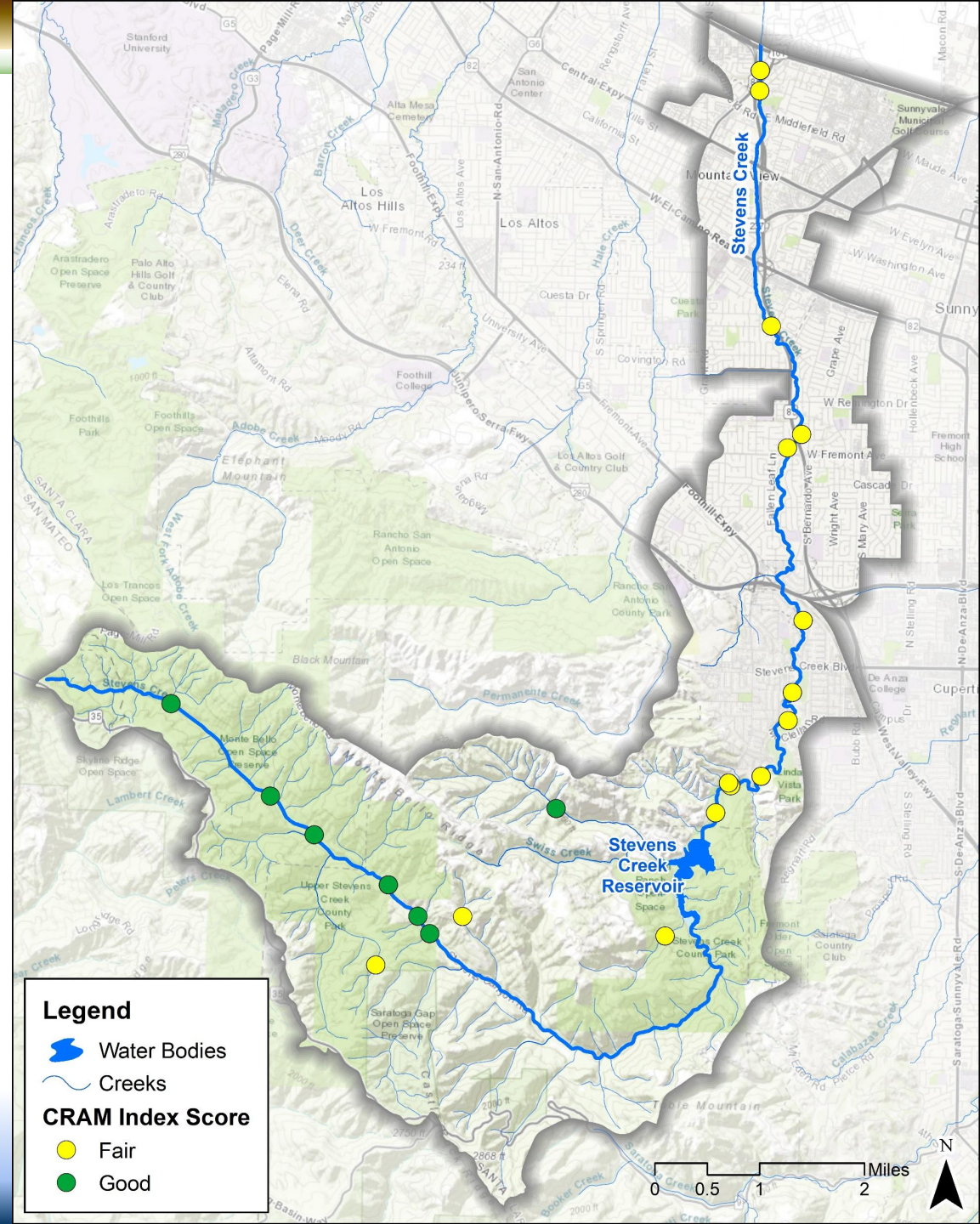
# Metrics

- Metrics set specific goals within each objective
- Identify gaps to address with priority actions



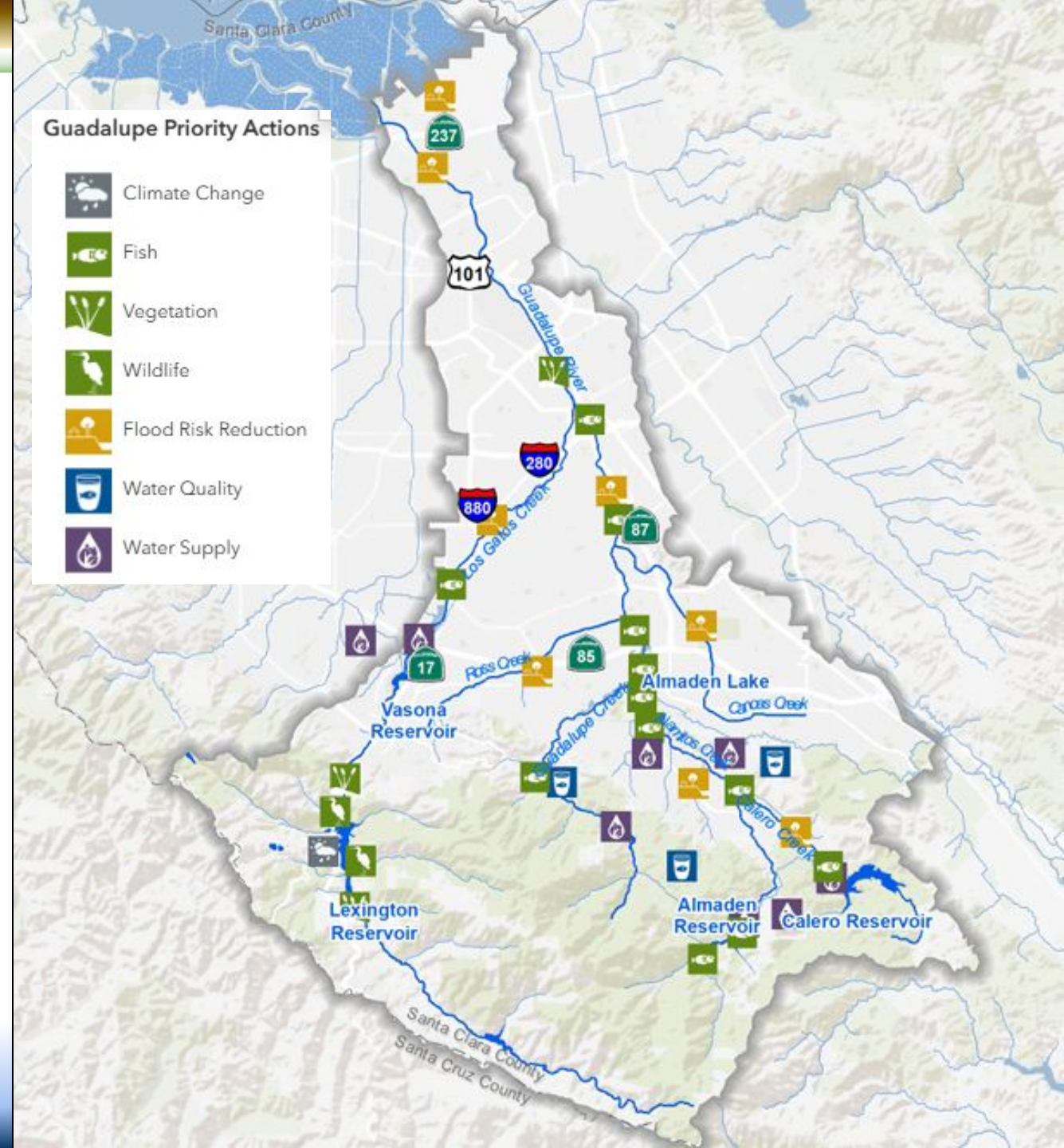
# Example Metric: California Rapid Assessment Method

- CRAM was used as a metric to indicate ecological condition of streams
- Of 22 assessments areas in Stevens Creek watershed:
  - 0 are in poor condition
  - 15 are in fair condition
  - 7 are in good condition



# Priority Actions

- Existing and potential future projects within the watershed
- Actions address priorities set by metrics and community input



*Example from Guadalupe  
Watershed Master Plan*

# Stevens Creek Draft Actions

- Fish Passage Improvement
- Aquatic Habitat Enhancement
- Rehabilitation of Existing Infrastructure
- Hydrology Studies
- Groundwater Management
- Water Quality Improvement

# Natural Ecosystems

## Fish Passage Improvements

Implementation of identified priority sites for fish passage improvements



## Aquatic Habitat Augmentation

Enhancing aquatic habitat with placement of gravel and large woody debris



# Water Quality

## Rehabilitation of Existing Infrastructure

- Alleviating turbidity issues, improve sediment transport, and addressing erosion concerns.
- Opportunity future for multi-benefit projects



# Flood Risk Reduction – In Progress

## Hydrology Studies

Estimating frequency, duration, and intensity of flood flows



## Emergency Response Upgrades

Improved forecasting and communications



# Public Engagement

- VW held a public meeting to gather challenges and opportunities in the watershed
  - 40+ attendees including residents, city and agency staff, community groups, & more
- **Next steps**: Priority Action workshops to refine watershed actions



# QUESTIONS?



*Project Website*

*For further questions or comments, please contact*

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# We want your thoughts!



- What are your priorities?
- What concerns need to be addressed?
- Are there opportunities for potential projects or partnerships?





# Valley Water

Clean Water • Healthy Environment • Flood Protection