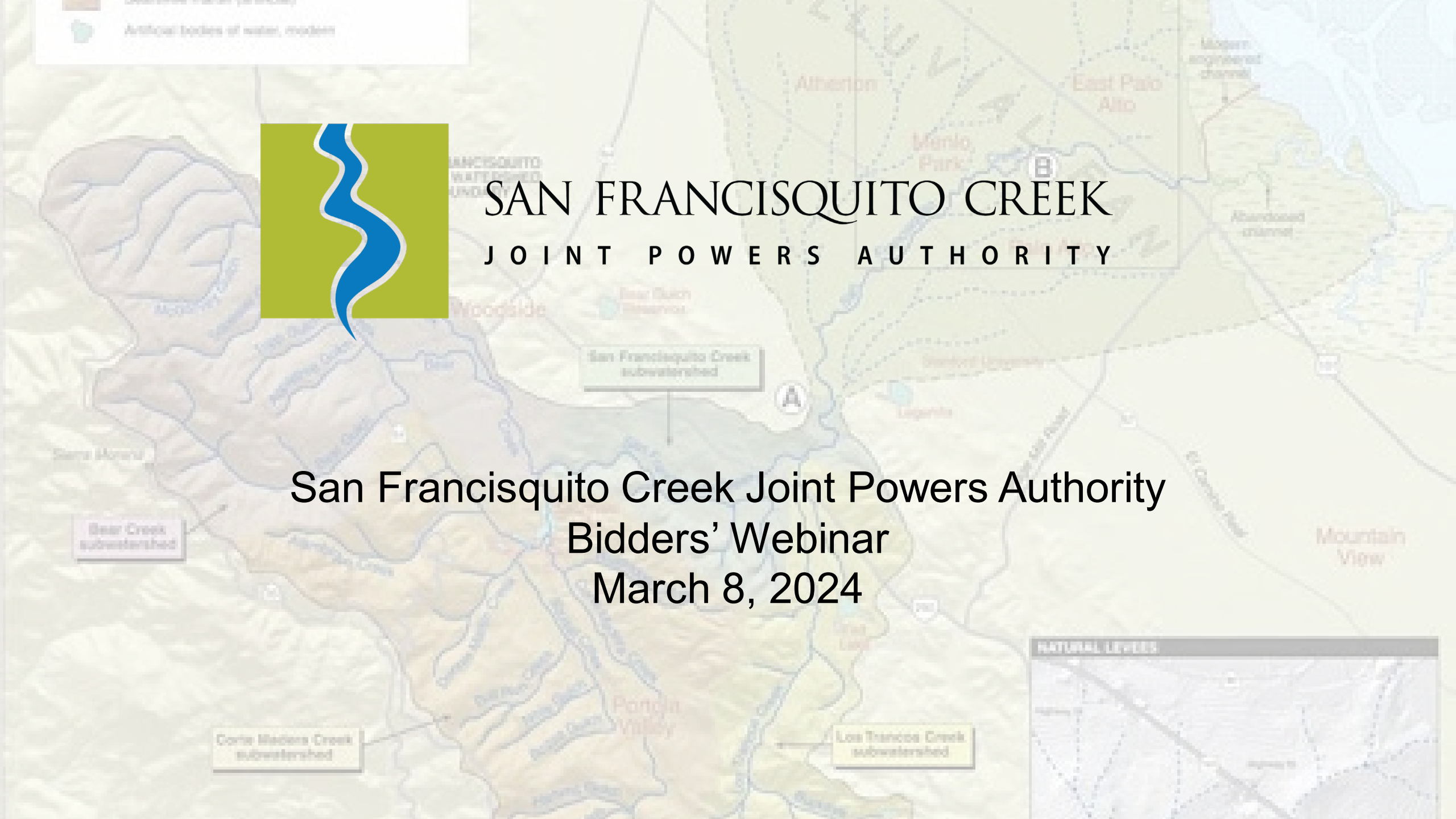


Artificial bodies of water, modern



SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

San Francisquito Creek Joint Powers Authority Bidders' Webinar March 8, 2024



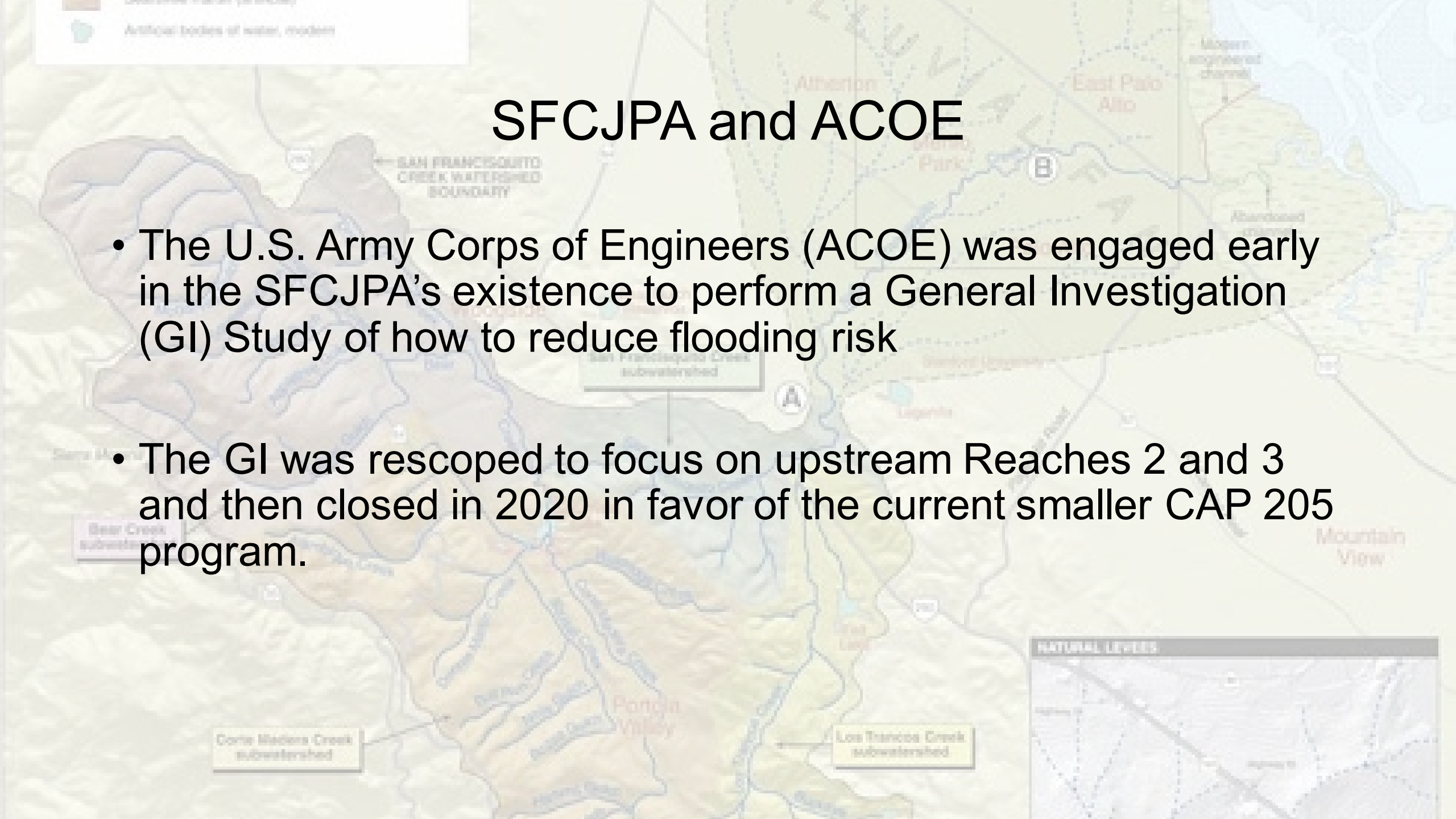
A topographic map of the San Francisco Peninsula. The map shows the San Francisco Bay Area with various cities and towns labeled, including Alhambra, East Palo Alto, Mountain View, and Palo Alto. It also shows the San Francisco Peninsula and San Francisco Bay. A legend in the top left corner indicates 'Artificial bodies of water, modern'. The map is overlaid with a semi-transparent text box containing the title and bullet points.

Agency Structure and Governance

- Five members: Santa Clara Valley Water District (Valley Water), the San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline), Palo Alto, Menlo Park, and East Palo Alto.
- Governed by Board – one elected representative is appointed from each member agency.
- Board typically meets monthly.
- Master Services Agreement and TO 1 must be approved by the Board- tentatively scheduled for the April board meeting.

SFCJPA and ACOE

- The U.S. Army Corps of Engineers (ACOE) was engaged early in the SFCJPA's existence to perform a General Investigation (GI) Study of how to reduce flooding risk
- The GI was rescoped to focus on upstream Reaches 2 and 3 and then closed in 2020 in favor of the current smaller CAP 205 program.





Artificial bodies of water, modern

Completed Reach 1 – Downstream Project



Completed in 2019, doubled creek capacity to 9,000+ cfs, created and improved 20+ acres of tidal marsh and created new trails on levee tops.

subwatershed

Los Francisco Creek subwatershed

NATURAL LEVELS



Reach 2 – Upstream Project Components

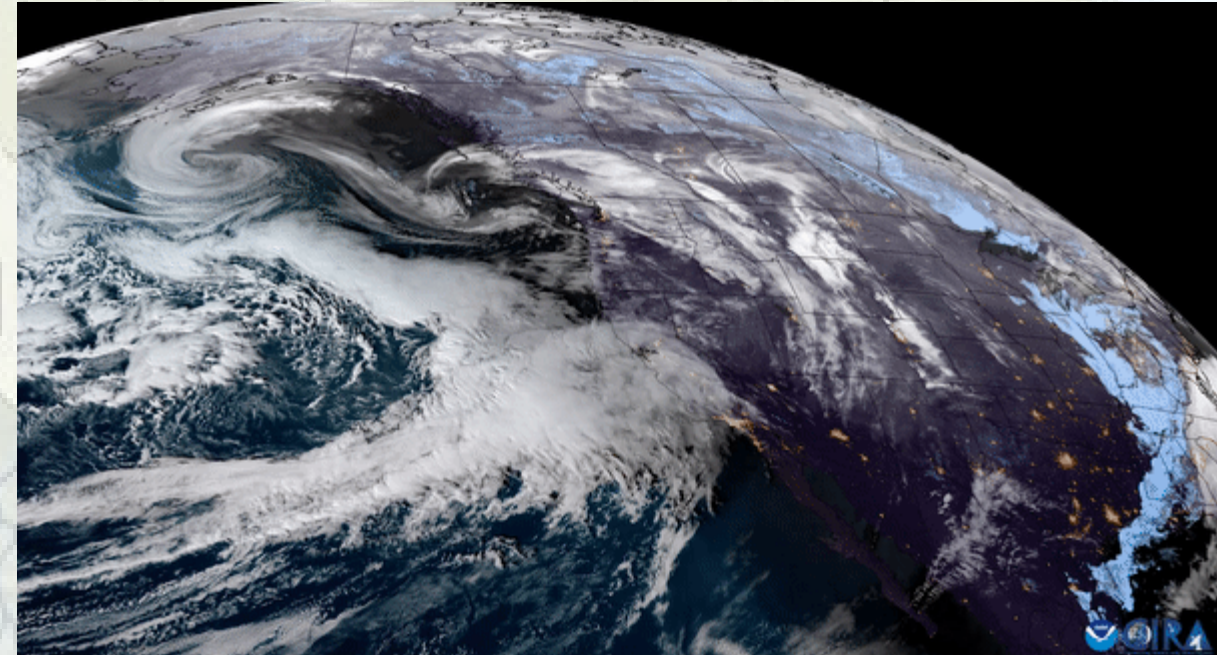
- Replacement of the Newell Road Bridge (Palo Alto)
- Replacement of the Pope/Chaucer Bridge (Valley Water)
- Channel Widening (ACOE CAP205 program)
- Top-of-Bank structures (Valley Water)

These were well underway ...
and then.....



Stormy weather

- There was this storm on New Year's Eve, 2022....
- What was learned about creek hydrology and capacity
- How updated information affects project



01-09-2023 | 00:10:21 UTC | GOES-18 | GeoColor

Artificial bodies of water, modern

SAN FRANCISCO CREEK WATERSHED BOUNDARY

San Francisco Creek subwatershed

Corte Madera Creek subwatershed

Los Trancos Creek subwatershed

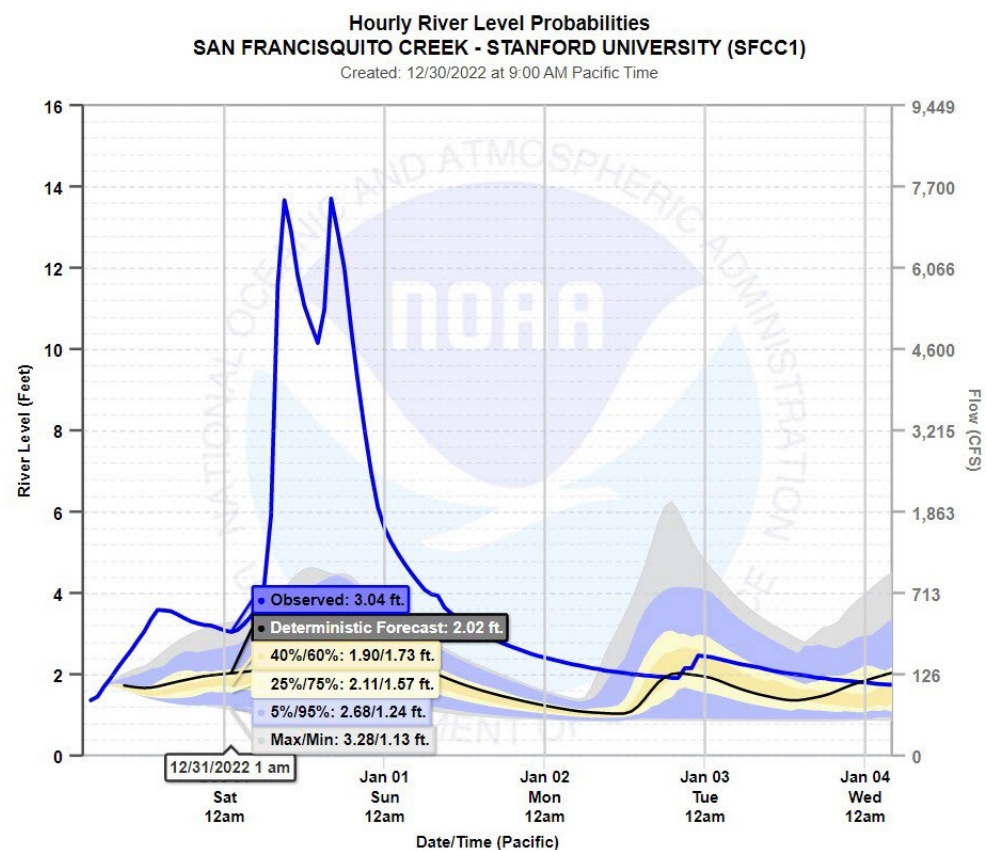
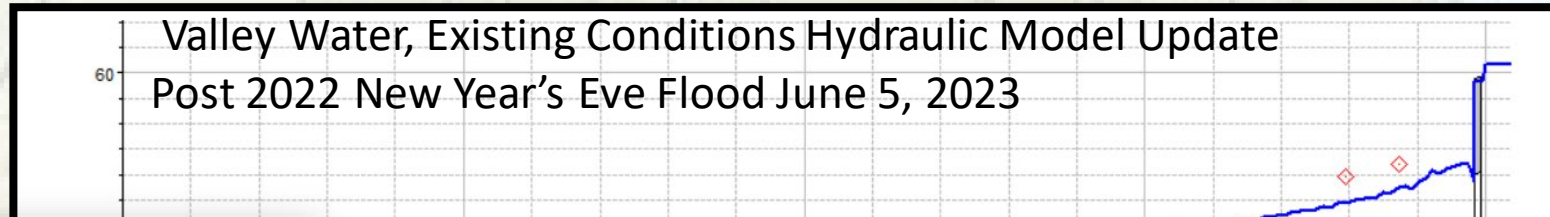




New Year's Eve – 2022 – What Happened?

FLOODING!

MODEL DISCREPENCY!



Chance of River Level Exceedance (Feet)
Forecast Period: 12/30/2022 4 am - 01/04/2023 4 am

| | |
|-----|------|
| Max | 6.24 |
| 5% | 4.60 |
| 10% | 4.39 |
| 25% | 3.77 |
| 50% | 3.35 |
| 75% | 2.83 |
| 90% | 2.40 |
| 95% | 2.09 |
| Min | 1.91 |

Custom Thresholds
Show: 5 Days 10 Days
Export Image
Export Chart Data (CSV)

- Observed
- Official Forecast (Deterministic)
- Ensemble Mean
- Model Traces
- Hourly Probabilities
 - 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance

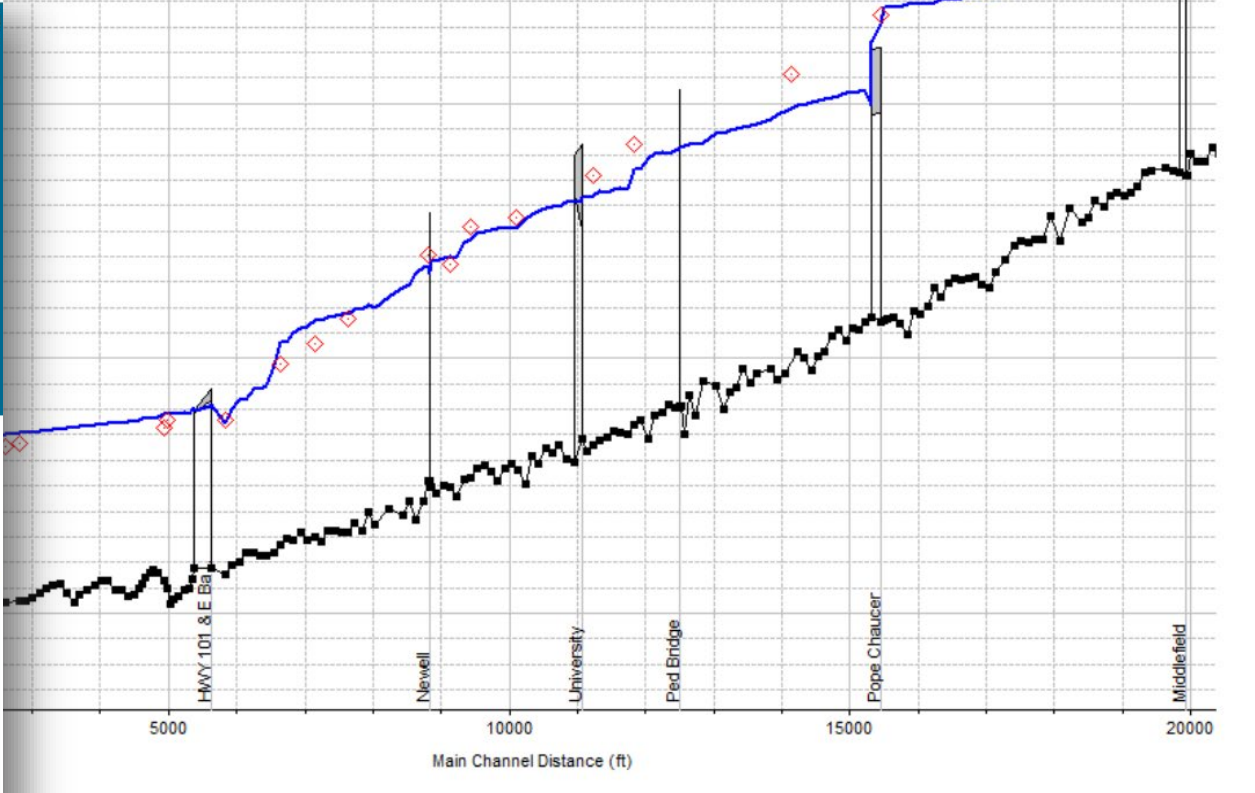
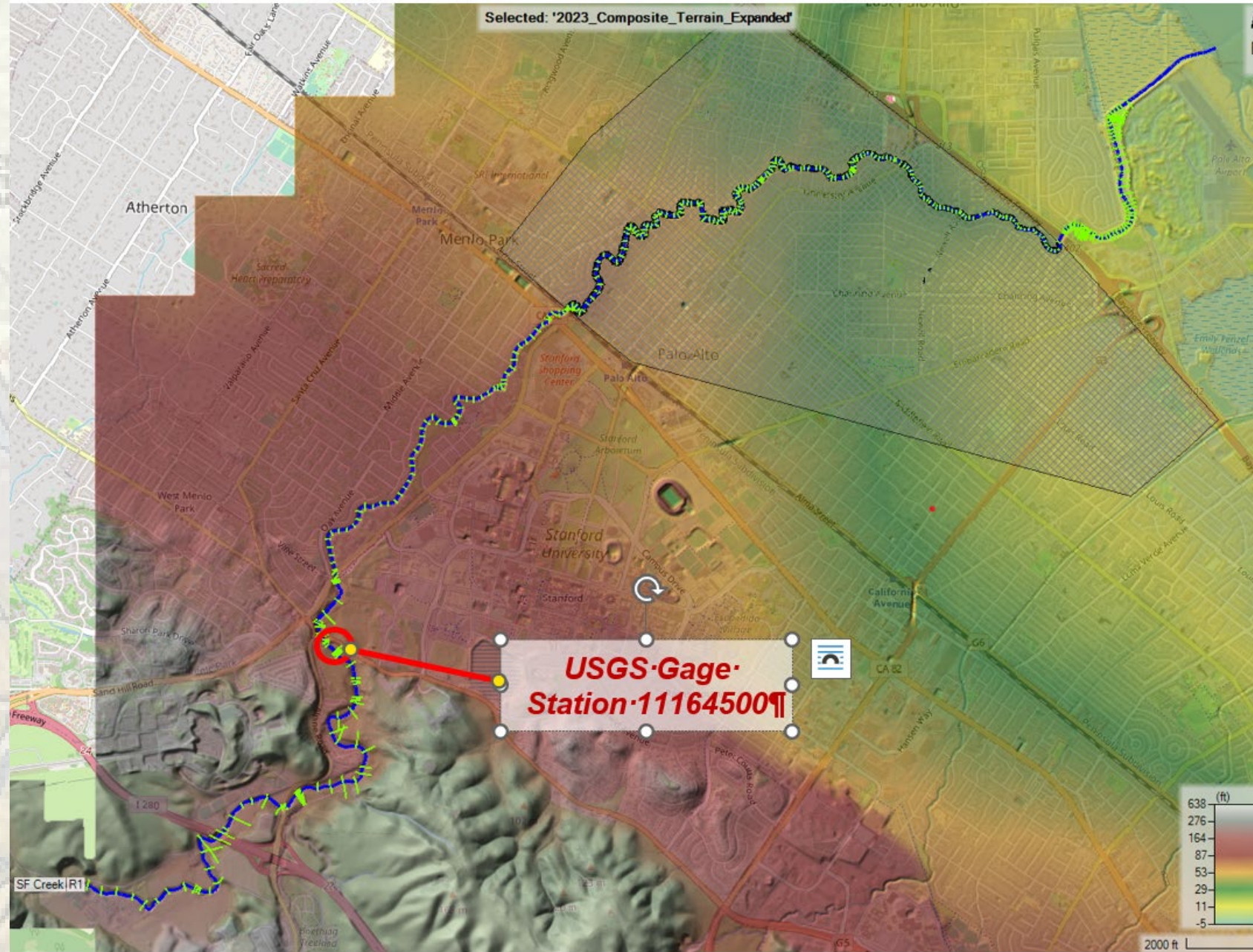


FIGURE 1: 2016 VW Model WSE (Blue) & Observed HWMs (Red) for NYE

What was done:

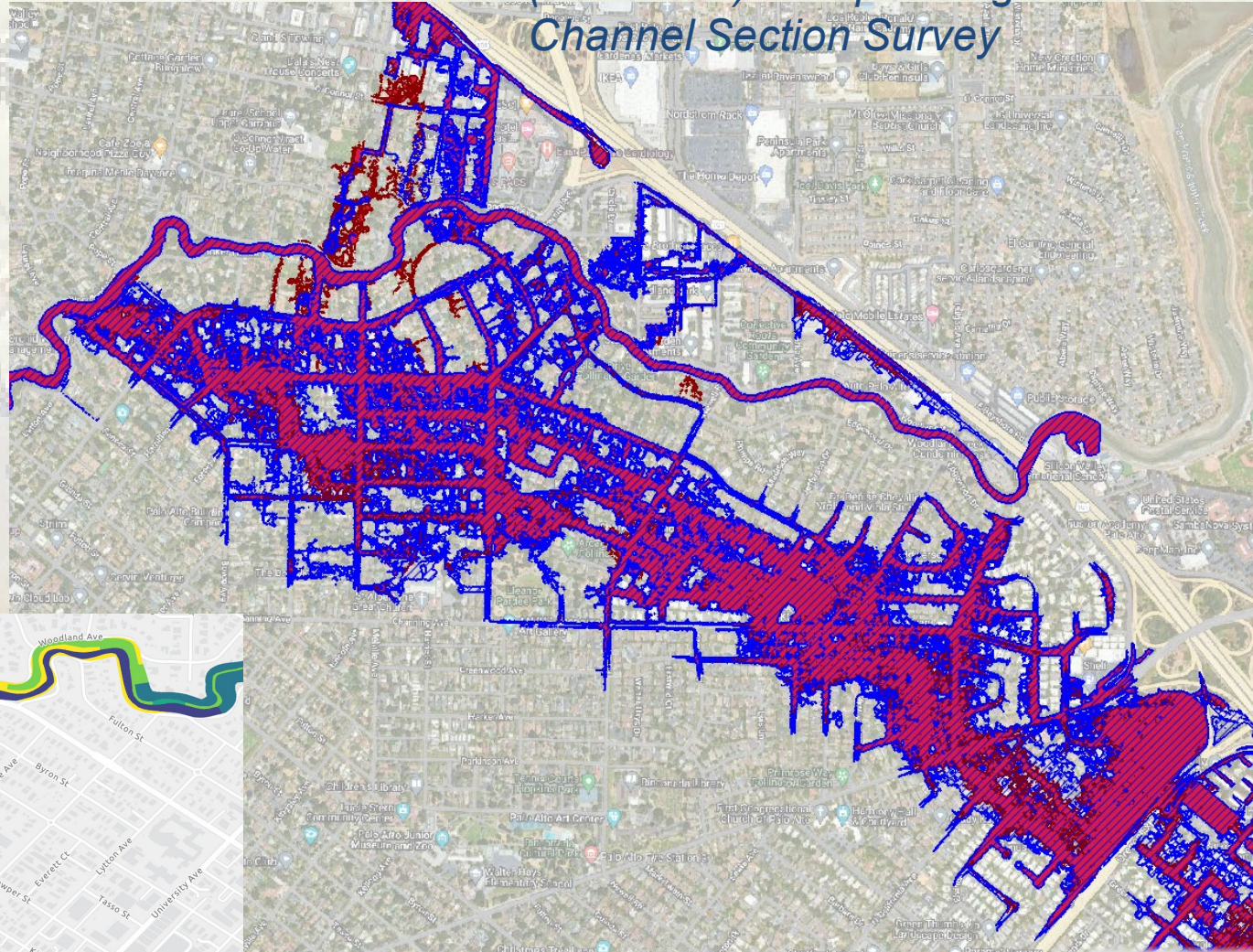
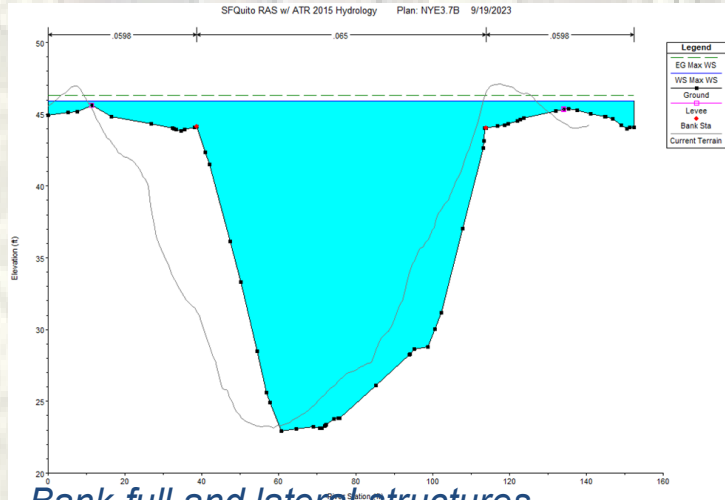
- Creek Channel and Bank survey
- Independent review of HEC-RAS model



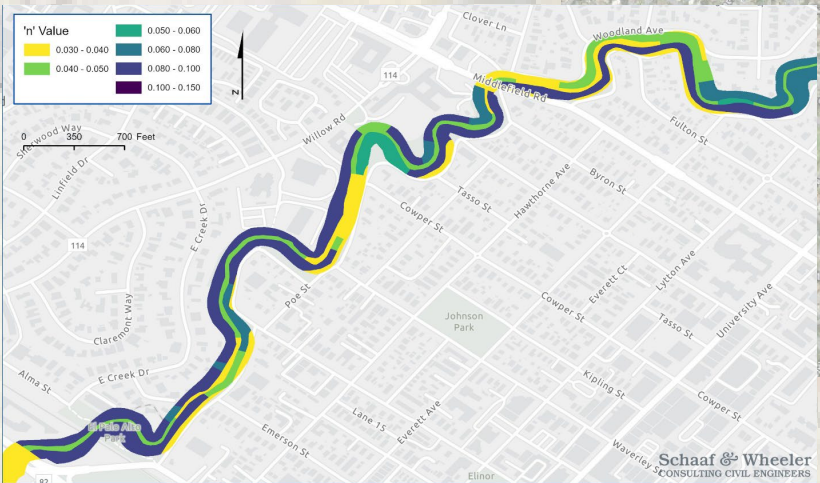
SFC Model Domain

What we learned -

Comparison of Model Results Before (Hatched Blue) and After (Solid Red) Incorporating New Channel Section Survey



Spatially Varied Roughness Assignment from Caltrain to Middlefield Road



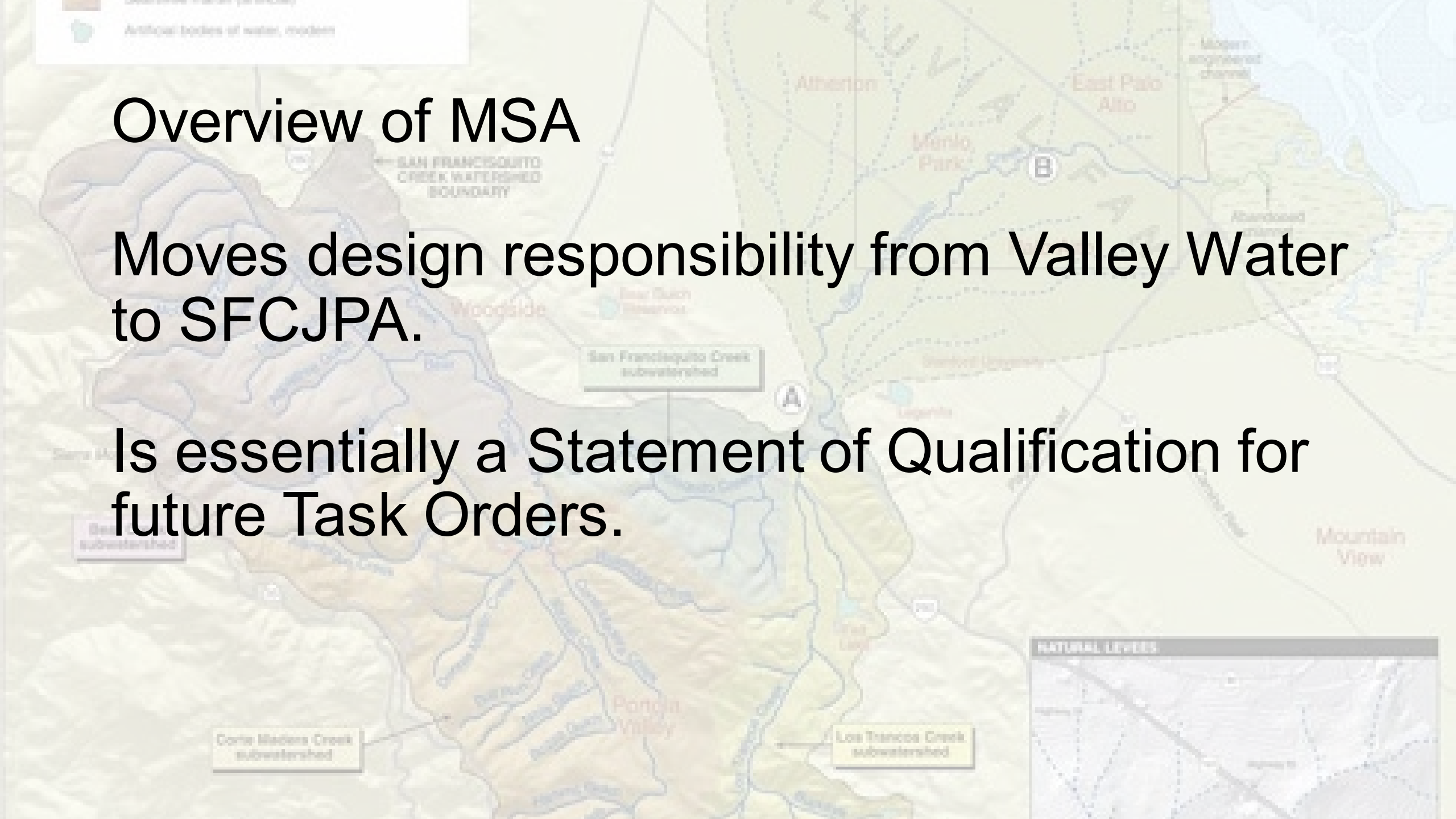
San Francisco Creek watershed

Mountain View

Overview of MSA

Moves design responsibility from Valley Water to SFCJPA.

Is essentially a Statement of Qualification for future Task Orders.



A topographic map of the San Francisco Creek Watershed. The map shows the watershed boundary in a dashed line, with several subwatersheds labeled: San Francisco Creek, Corte Madera Creek, and Los Trancos Creek. Other features include the Newell Road Bridge, Woodland Ave, and various creeks like Bear Creek and San Antonio. A legend in the top left corner identifies 'Artificial bodies of water, modern' with a blue icon. A 'NATURAL LEVELS' inset map is visible in the bottom right corner.

Overview of Task Order #1

Purpose: Develop viable alternatives for flood risk reduction in Reach 2 in addition to the following actions that are moving forward:

Replacement of the Newell Road Bridge

Removal of concrete structure in the creek along Woodland Ave and restoration of area (and possibly other actions consistent with EIR, including:

- Other widening areas
- Replacement of temporary wooden floodwall

A topographic map of the San Francisco Creek Watershed. The map shows the watershed boundary in a dashed line, with various subwatersheds labeled: Bear Creek, Corte Madera Creek, and Los Trancos Creek. Key locations include Atherton, Menlo Park, Palo Alto, East Palo Alto, Woodside, and Mountain View. Features like 'Modern engineered channel' and 'Abandoned channel' are also marked. A legend in the top left corner identifies 'Artificial bodies of water, modern'. Five task order tasks are listed on the left side of the map, with callout boxes 'A' and 'B' pointing to specific locations on the map.

Overview of Task Order #1

Task 1 – Administrative and Project Management

Task 2 – Alternatives Analysis

Task 3 – 30% Designs & Plans, Construction Estimates and Schedules for Preferred Alternative

Task 4 – Technical Requests

Task 5 - Optional Task for staff support for other SFCJPA projects not related to Reach 2

A topographic map of the San Francisco Quilto Creek Watershed. The map shows various subwatersheds: Bear Gulch, San Francisco Quilto Creek, Bear C, Corte Madera Creek, Portola Valley, and Los Trancos Creek. It also identifies features like Woodside, Atherton, Park, East Palo Alto, Mountain View, and the Bear Gulch Reservoir. A legend in the top left corner indicates 'Artificial bodies of water, modern'. A dashed line marks the 'SAN FRANCISCO CREEK WATERSHED BOUNDARY'. A 'Modern engineered channel' is shown near East Palo Alto, and an 'Abandoned channel' is shown further east. A 'NATURAL LEVELS' inset map is in the bottom right corner.

Task Order 1 – Generalized Project Schedule

This is a hypothetical schedule, based on an assertive by achievable timeline.

- MSA contract in place – By end of April 2024
- Evaluation and selection of Preferred Alternative(s) – Completed by August/September 2024.
- Supplemental EIR – Completed by February 2025.



Proposal Scoring

Responsive Proposal - contains all the following:

- **A cover letter with contact information**
- **Organizational chart of the project team**
- **Itemized fee schedule (including costs per unit or per hour for: HEC-RAS model runs, visualizations/renderings, workshop support, and meeting/workshop participation)**
- **Brief description of previously completed projects of similar scope,**
- **List of team members or subcontractors, their role, and personnel assigned to the project**
- **Designation of a project administrator who will be responsible for billing and accounting**
- **Description of any pending litigation or litigation against the firm, or any of its proposed sub-consultants that is active or has been settled in the past three (3) years**
- **Statement of acceptance of Consultant Agreement and Insurance Requirements**
- **Conflict of Interest Statement**
- **Statement regarding record of compliance with applicable laws, regulations, policies, guidelines, and orders governing prior or existing contracts**
- **Three references from work with similar type, scope, or complexity**

Y – N

“No” to any of the bullet point list disqualifies.

Responsive Proposal Scoring

| | |
|---|-----------------|
| Completeness of proposal | 1 - 15 |
| Quality of the solution, goods and/or services to be provided as demonstrated by a well-organized and clearly communicated proposal | 1 - 20 |
| Cost to the SFCJPA (Lower number for higher cost relative to other proposals) | 1 – 10 |
| References | 1 - 10 |
| Familiarity with the San Francisquito Creek Watershed, its human and natural history, communities, and circumstances. | 1 - 10 |
| Demonstrated and verifiable experience and expertise in flood control civil engineering, structural design, hydraulic modeling, geotechnical engineering, project permitting, restoration design, public outreach, project management, and construction plans and specifications preparation. | 1 - 15 |
| Experience and knowledge of green design and construction strategies and methods and Engineering with Nature. | 1 - 10 |
| Innovative concepts or services as provided by consultant in proposal | 1 - 10 |
| | 100 Points Max. |

Questions ?

We will keep track of questions and post Q&A to our website next week. As questions come in via email, we will add those to the list.



Photo Credit: M. Bruce
December 31, 2022